

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **November 12, 2021**

ACM Research, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-38273

(Commission File Number)

94-3290283

(IRS Employer Identification No.)

42307 Osgood Road, Suite I

Fremont, California

(Address of Principal Executive Offices)

94539

(Zip Code)

Registrant's telephone number, including area code: **(510) 445-3700**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading symbol</u>	<u>Name of each exchange on which registered</u>
Class A Common Stock, par value \$0.0001 per share	ACMR	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934: Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 8.01. Other Events.**STAR Listing and STAR IPO**

As previously announced, on November 18, 2021 we completed:

- a listing of shares of our subsidiary ACM Research (Shanghai), Inc., or ACM Shanghai, on the Shanghai Stock Exchange’s Sci-Tech innovAtion boARd, known as the STAR Market; and
- a concurrent initial public offering of ACM Shanghai shares in the Peoples Republic of China.

In connection with the above listing and offering, ACM Shanghai submitted an information document, or the ID, to the Shanghai Stock Exchange, or the SSE. The SSE posted the ID to the SSE’s website on November 12, 2021. A copy of the ID is included as Exhibit 99.01 to this report.

The ACM Shanghai shares referred to in the ID and this Item 8.01 have not been and will not be registered under the Securities Act of 1933 or any state securities laws and may not be offered or sold in the United States absent registration under the Securities Act of 1933 or an applicable exemption from the registration requirements of the Securities Act of 1933 and applicable state securities laws. This report is neither an offer to sell nor a solicitation of an offer to buy, nor shall there be any offer, solicitation or sale of these shares in any jurisdiction in which such offer, solicitation or sale would be unlawful.

STAR Market Record

In accordance with the SSE’s rules governing the STAR Market, ACM Shanghai filed with the SSE a Record of Investor Relation Activity (No. 2021-01), or the Record. The SSE posted the Record to the SSE’s website on December 1, 2021. A copy of the Record is included as Exhibit 99.02 to this report.

Item 9.01 Financial Statements and Exhibits.**(d) Exhibits.**

Exhibit	Description
<u>99.01*</u> [†]	Information Document of ACM Research (Shanghai), Inc. published by the Shanghai Stock Exchange on November 12, 2021
<u>99.02*</u>	Record of Investor Relation Activity (No. 2021-01) filed by ACM Research (Shanghai), Inc. with the Shanghai Stock Exchange on December 1, 2021
104	Cover Page Interactive Data File (embedded within the XBRL document)

* Unofficial English translation of original document prepared in Mandarin Chinese.

† Certain information redacted and replaced with “[***]”.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

ACM RESEARCH, INC.

By: /s/ Mark McKechnie

Mark McKechnie

Chief Financial Officer and Treasurer

Dated: December 10, 2021

The shares in the Offering intends to be listed on the STAR Market, which has high investment risks. The listed companies on the STAR Market have the characteristics of large investment in research and development, high risk of operation, unstable performance and high risk of delisting, where Investors are facing high market risks. Investors should fully understand the investment risks of the STAR Market and the risk factors disclosed by the Company, and make investment decisions prudently.



ACM Research (Shanghai), Inc.

(Building 4, No.1690 Cailun Road, China (Shanghai) Pilot Free Trade Zone)

An Initial Public Offering and Listing of Shares on the STAR Market

[***]

The application for the offering of the Company has yet not been approved by the Shanghai Stock Exchange or the CSRC. This [***] does not have the legal force for stock issue, which is used only for advance disclosure purpose. Investors shall make investment decisions based on the officially announced [***].

Sponsor (Lead Underwriter)

[***]

([***])

Joint Lead Underwriter

[***]

Issuer Statement

No decision or opinion issued by the China Securities Regulatory Commission (hereinafter referred to as the “CSRC”) or the Shanghai Stock Exchange represents any guarantee for authenticity, accuracy and completeness of the registration documents and the information disclosed, or any substantial judgment or guarantee on the profitability, the investment value of the Issuer or any returns to investors. Any statement to the contrary is false and untrue.

According to the provisions of *the Securities Law*, after the Offering of shares in accordance with the law, the Issuer shall be solely responsible for the changes in its operation and earnings; investors shall independently judge the investment value of the Issuer, make investment decisions independently, and bear the investment risks caused by changes in the Issuer’s operation and earnings or share price changes after the Offering of shares in accordance with the law.

The Issuer and all of its directors, supervisors and senior executives shall undertake that there are no false records, misleading statements or major omissions in the [***] and other information disclosure documents, and bear several and joint legal liabilities for their authenticity, accuracy and completeness.

The controlling shareholder and the de facto controller of the Issuer undertake that there are no false records, misleading statements or major omissions in the [***], and bear several and joint legal liabilities for its authenticity, accuracy and completeness.

The person in charge of the Company, the person in charge of the accounting work and the person in charge of the accounting institution shall ensure that the financial and accounting information in the [***] is true and complete.

The Issuer and all of its directors, supervisors and senior executives, its controlling shareholder, its actual controller, the Sponsor and the underwriting securities companies promise to compensate investors for their losses in the Offering and the transactions caused by any false records, misleading statements or major omissions in the [***] and other disclosure documents of the Issuer in accordance with the law.

The Sponsor and the securities service institutions promise to compensate investors for losses caused by any false records, misleading statements or major omissions in the documents prepared and issued by them for the Public Offering of the Issuer.

Overview of the Offering

Class of Shares	RMB-denominated Common Shares (A Shares)
Number of Shares in the Offering	The number of shares offered in the Public Offering shall be 43,355,753.00, accounting for 10.00% of the total share capital of the Company after the Offering. The Offering does not involve any public offering of shares by shareholders.
Par Value per Share	RMB 1.00 Yuan
Offering Price per Share	RMB 85.00 Yuan
Offering Date	November 8, 2021
The Stock Exchange and Board for Listing	the STAR Market of the Shanghai Stock Exchange
Total Share Capital after the Offering	433,557,100 shares
Participation of the Sponsor's Relevant Subsidiaries in Strategic Placement	[***], a subsidiary of [***], is arranged by the latter to participate in the strategic placement concerning the Offering, with the number of follow-up investment shares to be 1,176,470 accounting for 2.71% of the shares in the Offering. The said shares placed to [***] shall be subject to a lock-up period of 24 months from the date of the IPO and Listing of the Issuer.
Sponsor (Lead Underwriter)	[***]
Joint Lead Underwriter	[***]
Signing Date	November 12, 2021

Important Notice

The Company particularly prompts investors to read this [***] in full and pay special attention to the following major issues before they make investment decisions

I. The Issuer's Controlling Shareholder ACM Research, Inc. ("ACMR") is a NASDAQ-listed Company

ACMR, the controlling shareholder of the Company, was listed on NASDAQ in November 2017. As the parent company, ACMR carries out the substantial majority of its R&D, production and sales of special semiconductor equipment through ACMSH. The Offering and Listing of the Company on the Science and Technology Innovation Board of Shanghai Stock Exchange ("STAR Market") represents a sale of new primary shares by the Company, which will dilute the ACMR's ownership of its main assets.

As presented in the legal opinion on ACMR issued by the offshore lawyer, the Issuer's submission of the Offering and Listing application has been approved and authorized by the board of directors of ACMR, ACMR has made information disclosures with respect to the Offering and Listing of ACMSH in the documents filed by it with the US Securities and Exchange Commission ("SEC"), and no authorization, consent or approval of, or other action by, and no notice to or filing with any governmental authority or regulatory body of the State of Delaware having jurisdiction over ACMR, the NASDAQ, or the SEC is required to be obtained or made by ACMR in connection with the Offering and Listing.

According to the legal opinion on ACMR issued by the offshore lawyer, in general, under the Delaware's General Corporation Law ("DGCL"), a shareholder of ACMR who is unhappy with a decision taken by the board of directors in accordance with applicable governance practices has only the practical remedy of selling his/her/its stock. Any other remedy would require proof of improper or illegal practices. In addition, ACMR's directors owe shareholders certain fiduciary duties such as duties of care and loyalty. If there is a reason to believe that a fiduciary duty has been breached, shareholders who believe they have been harmed by the breach can initiate litigation. Therefore, the shareholders of ACMR may, to the extent they believe that the decisions made by the board of directors of ACMR as to the sale of shares by ACMSH for listing on the STAR Market are improper or illegal, or that the directors have breached their fiduciary duties on matters related to the Offering and Listing of ACMSH, resulting in damages to their interests, file a lawsuit against ACMR or its directors.

II. The Company Particularly Prompts Investors to Pay Attention to the Following Risk Factors

(I) Relevant risks of the Company and ACMR, the controlling shareholder, being listed on the STAR Market and the NASDAQ stock market respectively

After A-share stocks in this Offering are listed, the Company and ACMR, the controlling shareholder of the Company, will be listed on the STAR Market of Shanghai Stock Exchange and the NASDAQ Stock Market in the U.S. respectively. The Company and ACMR need to comply with laws and regulations and regulatory requirements on listing issued by regulatory authorities in both places at the same time, and shall simultaneously disclose information in both places which are required to be publicly disclosed according to laws.

Due to discrepancies in terms of laws and regulations and regulatory ideas in China and the United States, there are some discrepancies in terms of specific accounting treatment and financial information disclosure between the Company and ACMR as they are governed by different accounting standards. Meanwhile, the price of stocks of the Company listed on the STAR Market and the price of stocks of ACMR listed in NASDAQ stock market may be different due to differences in requirements of disclosing information on listed companies imposed by securities regulatory authorities, in language, culture and expression habit, in composition of investors in China and the United States and their investment ideas, and in specific situations of capital markets.

(II) Risks of technical innovation

The Company operates in the semiconductor special equipment industry, which involves many academic fields including microelectronics, electricity, mechanics, chemical engineering, fluid dynamics, automation, image recognition, communications, software system, among others, resulting in a high threshold in technical research and development. The vigorous development of the global semiconductor industry is accompanied by the constant technical innovations in the semiconductor industry that cleaning equipment has higher and higher requirements for the control of wafer surface pollutants to avoid impurities affecting chip yield and product performance. In addition, customers' demands for the types of surface pollutants to be cleaned, cleaning efficiency, number of cavities and applicable technical nodes of cleaning equipment are also changing. The Company has been adhering to the development strategy of differentiated competition and innovation for long. If the Company cannot continuously ensure sufficient research and development investment, or process nodes for chips are further reduced, or a new chip manufacturing technology comes out, the core technologies of the Company, including SAPS, TEBO, and Tahoe, and relevant products may become less advanced, which may cause adverse effects on the operating performance of the Company.

(III) Risks of market competition

The global market of the semiconductor special equipment industry is intensively competitive; since the market is dominated by international giants, the Company's products have to directly compete on the market with such international giants. Compared with semiconductor special equipment manufacturers in Mainland China, such international giants are stronger in funds, technical accumulation, sales team, manufacturing capability, sales channels, and market awareness, have relations with more customers and partners, and have longer operating histories, more abundant product portfolios, and wider geographical coverage, hence can identify and respond to changes in the market and customer demands in a better manner. Some international giants are capable of offering bundle discounts for customers purchasing multiple products at the same time.

With the constant growth of the semiconductor terminal application market in China, sub-industries, including semiconductor manufacturing, packaging, testing, material, and equipment, in China have been developing rapidly. During the third transition of the global semiconductor industry, it is estimated that the Mainland China market will become the main competition field for global semiconductor equipment manufacturers, hence the Company has to compete with both international giants and newcomers in China in the future. There are certain gaps in applicable technology nodes and market shares between international giants and the Company. If the Company cannot effectively handle the competition with such competitors, the operating incomes, results of operation, and financial conditions of the Company may be affected adversely.

(IV) Risks of reliance on suppliers of some key parts

At present, the Company relies on existing suppliers for some key parts used in the Company's equipment. For example, Product Systems, Inc. is the only supplier of megasonic wave generators, a key part for our wafer cleaning equipment; NINEBELL is the main supplier of robot arms used in the transport system of our wafer cleaning equipment; Advanced Electric Co., Inc. is the key supplier of valves in our wafer cleaning equipment. In the event of adverse changes in the cooperation between the Company and such suppliers, or such suppliers suffer difficulties in their operations, the production plans of the Company may be adversely affected; if the Company replaces the source of such key parts, the supply may be interrupted during the transition period, which may lead to delayed delivery of the Company's products and causing high expenses, hence causing adverse effects on the operating performance of the Company.

(V) Risks of losing key technical talents

Technical talents are a key factor of competitiveness in the semiconductor special equipment industry, which is a technology-intensive industry. The continuous development of the semiconductor special equipment industry in Mainland China will lead to more intensive competition for technical talents. If the Company loses substantial key technical personnel due to remuneration or other reasons, or the Company could not motivate existing technical talents or could not attract outstanding technical talents, the Company may be short-handed in the technical team, hence could not continue the research, development, and sales of new products, or provide quality services to customers; moreover, the Company may have higher recruitment and training costs, which may cause adverse effects on the technical research and development capability and operating performance of the Company.

III. Class Action against ACMR Acting as the Controlling Shareholder of the Company

1. Overview of the Class Action against ACMR acting as the controlling shareholder of the Company

On October 8, 2020, J Capital Research, a short seller, issued a Short-sell Report on ACMR as the controlling shareholder of the Issuer. At the end of December 2020, Jerry Kain filed a single class action lawsuit based on the contents of the Short-sell Report issued by J Capital, against ACMR, followed by press releases from additional U.S. law firms soliciting ACMR investors to join the class action and soliciting alternative lead plaintiff candidates (“Class Action against ACMR”).

The main issues involved in the Short-sell Report were made against the Issuer given the Issuer is the operating entity of ACMR and owns the core assets and all operating businesses of the latter. As such, the Issuer has conducted a self-inspection on the relevant challenges in the Short-sell Report one by one, forming the Verification Report in Response to Media Challenges Concerning the Initial Public Offering and Listing of Shares on the STAR Market (“Media Challenges-related Verification Report”) which has been verified by the Sponsor accordingly. Both the Issuer and the Sponsor consider the challenges in the Short-sell Report unsupported and to be against the facts. In December 2020, the Media Challenges-related Verification Report was published by the Issuer and ACMR in the SSE and the SEC respectively, after the disclosure of which, there was no further challenges on ACMR.

In connection with the Class Action against ACMR, as per the written documents issued by the U.S. lawyers engaged by ACMR for the present class action (“Responses from the U.S. Lawyers”): As of February 22, 2021 (the date on which the 60-day solicitation period expires), despite the many press releases by U.S. law firms that had been issued, there were only two of them (corresponding respectively to Jeffrey Kain and Karin Hiu Man Yeung as the plaintiffs) interested enough to seek to pursue the lawsuit.

According to the Responses from the U.S. Lawyers: Jeffrey Kain claims to have suffered minor losses: \$9,599. He did not purchase or sell any shares of ACMR stock. Rather, he traded in four option contracts for future purchases. Karin Hiu Man Yeung claims to have lost \$261,806.08 when she sold the shares of ACMR stock on September 8, 2020 (about one month before on the date when J Capital Research issued the Short-sell Report).

As per the Responses from the U.S. Lawyers, the progress of the Class Action against ACMR is as follows: On April 15, 2021, the Court conducted a lead plaintiff hearing. The Court denied the candidates’ stipulation to be appointed joint lead plaintiffs. The Court further rejected the lead plaintiff application of Karin Hiu Man Yueng, due to lack of standing. The Court appointed as lead plaintiff Jeffrey Kain, the initial plaintiff.

The lead plaintiff filed the first amended complaint on May 6, 2021. Defendants filed a motion to dismiss on May 27, 2021. Plaintiff filed his opposition to the motion to dismiss on June 10, 2021. Defendants filed their reply in support of their motion to dismiss on June 24, 2021. On September 9, 2021, the court conducted a hearing on the defendants’ motion to dismiss, upholding the defendants’ defenses and dismissing the first amended complaint filed by Jeffrey Kain. Jeffrey Kain filed the second amended complaint on October 7, 2021. Defendants filed a motion to dismiss the same on October 21, 2021.

As of the date hereof, the Class Action against ACMR as the controlling shareholder of the Issuer is still pending. The U.S. Lawyers would anticipate a ruling on the motion to dismiss by January 2022, and there is the possibility that the court might take longer to make the decision.

2. Effect of the Class Action on ACMR as the controlling shareholder of the Issuer

(1) Relevant defendants in the Class Action against ACMR are not subject to criminal liabilities

According to the Responses from the U.S. Lawyers: “The Class Action against ACMR is a civil case, by a private individual, trying to obtain purported monetary damages related to ACMR’s stock movement, and falls outside a criminal case which would be filed only by a U.S. government agency. ACMR’s litigation legal counsel and I have seen nothing in the allegations here that suggests any risk of criminal exposure, nor are we aware of any indication of interest in ACMR from any governmental authorities with criminal jurisdiction.”

Therefore, none of ACMR, the controlling shareholder of the Company, HUI WANG, the chairman of the Company and LISA YI LU FENG, the person in charge of financial matters of the Company, are involved in criminal liabilities, nor will their qualifications as director and senior executive of the Issuer be affected by the Class Action against ACMR.

(2) Estimation of possible damages amount and civil liability to be borne by ACMR

According to the Responses from the U.S. Lawyers: “In the United States legal system, in a civil lawsuit such as *Kain v. ACM Research, Inc.*, it is the plaintiff’s burden to prove, by a preponderance of the evidence, the facts necessary to establish the elements of his claim. Throughout this process, defendants have multiple opportunities to seek dismissal of the action for factual and legal deficiencies. If a qualified lead plaintiff is not able to substantiate, and ultimately prove the allegations in his complaint, a class action should normally be dismissed.”

“The complaint that has been filed is weak and it is vulnerable to be dismissed...Unless the consolidated amended complaint contains new information beyond the J Capital Research’s short-sell report, it should also be vulnerable to dismissal by the U.S. court.”

Even if the Class Action against ACMR is not dismissed, according to the Responses from the U.S. Lawyers: “Typically, shareholder class actions in the United States be settled within the available D&O insurance. Although one cannot guarantee the specific result at this early stage of the case, we view a dismissal or settlement within the D&O insurance amount as the most likely outcome under the parameters discussed above.”

(3) ACMR has made commitments on the class action

“The Issuer has not been listed as a defendant in the class action involving ACMR, nor has it received any notice on a claim against it or on the ACMR-related class action.

If the Issuer and some of its directors and senior executives are held by the U.S. court to be liable for damages in the future, thus causing any economic loss to the Issuer, ACMR will fully indemnify and hold the Issuer harmless from and against any direct economic loss thus incurred.”

In view of the above, the Class Action against ACMR will have no material adverse effect on the production and operation of the Issuer, which will not constitute an obstacle to this Offering and Listing.

IV. The Company particularly prompts investors to pay attention to the important commitments made by the relevant entities with respect to the Offering

The Company prompts investors to carefully read the important commitments made by the Company, its shareholders, directors, supervisors, officers, key technical personnel, and the sponsors and securities service providers of the Offering, the restraint measures for non-fulfillment, and the fulfillment of commitments triggering the fulfillment conditions. Please refer to “V. Important Commitments Made by Relevant Parties to the Offering and Their Fulfillment” in the “Section X Investor Protection” of this [***] for details.

V. State of Operation from Financial Report Audit Deadline to the Signing Date of this [***]

The Company’s financial report audit deadline is June 30, 2021. From the financial report audit deadline to the signing date of this [***], the Company’s operating conditions are good, and there have been no major changes in its business model, in the purchase scale and price of its main raw materials, revenue and sales price, in its customers and suppliers or in the overall operating environment.

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Section I Interpretations

In the [***], unless the context otherwise requires, the following terms have the following meanings:

I. Basic Terms		
Issuer, Company, the Company	means	ACM Research (Shanghai), Inc. and its predecessor ACM Research (Shanghai), Inc. (before restructuring)
Corporation, ACMSH	means	ACM Research (Shanghai), Inc.
ACMSH (before restructuring)	means	ACM Research (Shanghai), Inc., the predecessor of the Issuer
ACM Wuxi	means	ACM Research (Wuxi), Inc., a wholly-owned subsidiary of the Issuer
Shengwei Shanghai	means	Shengwei Semiconductor Equipment (Shanghai) Co., Ltd., a wholly-owned subsidiary of the Issuer
CleanChip HK	means	CleanChip Technologies Limited, a wholly-owned subsidiary of the Issuer
ACMKR	means	ACM Research Korea Co., Ltd., a wholly-owned subsidiary of CleanChip HK
ACM CA	means	ACM Research (CA), Inc., a wholly-owned subsidiary of CleanChip HK
Shengyi Technology	means	Shengyi Semiconductor Technology (Wuxi) Co., Ltd., an equity participation enterprise of the Issuer
Shixi Chanheng	means	Hefei Shixi Chanheng Integrated Circuit Venture Capital Fund (L.P.), an equity participation enterprise of the Issuer
Qingdao Juyuan	means	Qingdao Juyuan Xinxing Equity Investment Partnership (L.P.)
ACMR	means	ACM Research, Inc., a Nasdaq stock market listed company and the controlling shareholder of the Issuer
Xinwei Consulting	means	Xinwei (Shanghai) Management Consulting Partnership (L.P.), a shareholder of the Issuer
SICIF	means	Shanghai Integrated Circuit Industry Fund Co., Ltd., a shareholder of the Issuer
PDHTI	means	Shanghai Pudong High-tech Investment Co., Ltd., a shareholder of the Issuer
[***]	means	[***], a shareholder of the Issuer
Shangrong Innovation	means	Shangrong Innovation (Ningbo) Equity Investment Center (L.P.), a shareholder of the Issuer
Jinpu Investment	means	Shanghai Jinpu Lingang Intelligent Technology Private Equity Investment Fund (L.P.), a shareholder of the Issuer
Taihu Guolian	means	Wuxi Taihu Guolian Emerging Industry Investment Enterprise (L.P.), a shareholder of the Issuer
Xinshi Consulting	means	Xinshi (Shanghai) Management Consulting Partnership (L.P.), a shareholder of the Issuer
Yongkong Consulting	means	Shanghai Yongkong Business Information Consulting Partnership (L.P.), a shareholder of the Issuer
Hai Feng Investment	means	Hai Feng Investment Holding Limited, a shareholder of the Issuer

Runguang Investment	means	Hefei Runguang Equity Investment Partnership (L.P.), a shareholder of the Issuer
ZJTVC	means	Shanghai Zhangjiang Science and Technology Venture Capital Co., Ltd., a shareholder of the Issuer
SYEM	means	Shanghai Shanyi Enterprise Management Center (L.P.), a shareholder of the Issuer
Xingang Consulting	means	Xingang (Shanghai) Management Consulting Partnership (L.P.), a shareholder of the Issuer
SRJY	means	Shanghai Shangrong Juyuan Equity Investment Center (L.P.), a shareholder of the Issuer
Shengxin Shanghai	means	Shengxin (Shanghai) Enterprise Management Consulting Partnership (L.P.)
Zhangjiang Group	means	Shanghai Zhangjiang (Group) Co., Ltd.
Yangtze Memory	means	Yangtze Memory Technologies Co., Ltd., a customer of the Issuer
SMIC	means	Semiconductor Manufacturing International Corporation, a customer of the Issuer
Hynix	means	SK Hynix Inc., a customer of the Issuer
Hefei Changxin	means	Hefei Changxin Integrated Circuit Manufacture Co., Ltd., a customer of the Issuer
Huahong Group	means	Shanghai Huahong (Group) Co., Ltd., a customer of the Issuer
JCET	means	Jiangsu Changjiang Electronics Technology Co., Ltd., a customer of the Issuer
TFME	means	Tongfu Microelectronics Co., Ltd., a customer of the Issuer
Xiamen Tongfu	means	Xiamen Tongfu Microelectronics Co., Ltd.
SJsemi	means	SJ Semiconductor (Jiangyin) Limited, a customer of the Issuer
Nepes	means	Nepes corporation, a customer of the Issuer
Wafer Works	means	Wafer Works Corporation, a customer of the Issuer
JRH	means	Zhejiang QL Electronics Co., Ltd., a customer of the Issuer
ZING SEMI	means	Zing Semiconductor Corporation, a customer of the Issuer
PSI	means	Phoenix Silicon International Corporation, a customer of the Issuer
NCAP	means	National Center for Advanced Packaging Co., Ltd., a customer of the Issuer
ICRD	means	Shanghai IC R&D Center Co., Ltd., a customer of the Issuer
NINEBELL	means	NINEBELL Co., Ltd., a supplier of the Issuer
NOMURA	means	NOMURA MICRO SCIENCE CO., LTD., a supplier of the Issuer
Charter Base International	means	Charter Base International Logistics (Shanghai) Co., Ltd.
DNS	means	SCREEN Holdings Co., Ltd.
TEL	means	Tokyo Electron Ltd.
LAM	means	LAM Research Corporation

SEMES	means	SEMES Co. Ltd.
NAURA	means	NAURA Technology Group Co., Ltd.
KINGSEMI	means	KINGSEMI Co., Ltd.
PNC System	means	PNC Process System Co., Ltd.
AMEC	means	Advanced Micro-Fabrication Equipment Inc.
HZCCTECH	means	Hangzhou Changchuan Technology Co., Ltd.
ASML	means	ASML Holding N.V.
KLA	means	KLA Corporation
Applied Materials	means	Applied Materials, Inc.
MOST	means	Ministry of Science and Technology of the People's Republic of China
MIIT	means	Ministry of Industry and Information Technology of the People's Republic of China
NDRC	means	National Development and Reform Commission of the People's Republic of China
MOF	means	Ministry of Finance of the People's Republic of China
CSRC	means	China Securities Regulatory Commission
SASAC	means	State-owned Assets Supervision and Administration Commission of the State Council
<i>The Company Law</i>	means	<i>The Company Law of the People's Republic of China</i>
<i>The Securities Law</i>	means	<i>The Securities Law of the People's Republic of China</i>
<i>The Articles of Association</i>	means	<i>The Articles of Association of ACM Research (Shanghai), Inc.</i>
<i>The Articles of Association (Draft)</i>	means	<i>The Articles of Association of ACM Research (Shanghai), Inc. (Draft)</i> applicable to the Issuer after the Offering
NASDAQ	means	National Association of Securities Dealers Automated Quotations, the NASDAQ stock market
Sponsor, Lead Underwriter, [***]	means	[***]
Joint Lead Underwriter	means	[***]
Issuer's Lawyer; King & Wood	means	King & Wood Mallesons
Reporting Accountant, Lixin	means	BDO CHINA SHU LUN PAN Certified Public Accountants LLP
Appraisal Agency, China United Appraisal	means	China United Assets Appraisal Group Co., Ltd.
Offering	means	the public offering of 43,355,753 shares
Reporting Period	means	2018, 2019, 2020 and the 6-month period ending June 30, 2021
RMB 1 Yuan, RMB 10,000 Yuan	means	RMB 1 Yuan and RMB 10,000 Yuan

II. Technical Terms		
Semiconductors	mean	materials which have an intermediate conductivity between that of conductors and insulators at room temperature, which can be divided into integrated circuits (IC), discrete devices, optoelectronics and sensors in accordance with manufacturing technology. Semiconductors can be widely used in downstream communications, computers, consumer electronics, network technology, automobile, aerospace and other industries.
Silicon Slice	means	Silicon Wafer, a silicon slice of semiconductor used for the fabrication of semiconductor devices such as integrated circuits, discrete devices and sensors.
IC	means	Integrated Circuit, a circuit or system that uses a series of specific processing techniques to interconnect active components such as transistors and diodes and passive originals such resistors and capacitors, integrate them on a semiconductor wafer according to a certain circuit, and package them in a shell to achieve specific functions.
Wafer	means	the Silicon Slice during the specific processing such as oxidation/diffusion, photolithography, etching, ion implantation, film growth, cleaning and polishing, metallization, etc.
Fab	means	a manufacturer that produces semiconductor devices on silicon wafers through a series of specific processing techniques.
Chip	means	an IC carrier, and also the result of design, manufacturing, packaging, and testing of IC.
Graphic Wafer	means	a wafer with a patterned structure on its surface.
Wafer Fabrication, Chip Fabrication	means	the process of manufacturing semiconductor silicon wafers into chips through a series of specific processing technology, which are divided into front wafer manufacturing and back packaging testing.
IDM	means	Integrated Device Manufacture, i.e., an Integrated Device Manufacturer completes the entire industrial chain from integrated circuit design, wafer manufacturing to test and packaging.
Storage Device	means	a memory device in an electronic system for holding programs and data.
Sensor	means	a detection device, which can feel the information measured and convert it to an electrical signal or information output in any other required form according to a certain law, thus to meet the information transmission, processing, storage, display, record and control requirements.
Power Device	means	a large-power electronic device for power conversion and control circuits in power equipment.
Discrete Device	means	a semiconductor device having a fixed single characteristic and function.
NAND Flash Memory	means	flash memory/data storage type flash memory.
5G	means	5th-Generation, i.e., the Fifth Generation of Mobile Phone Mobile Communications Standards.
Photoetching	means	a process in which the circuit graphics are transferred to the surface of a single crystal or dielectric layer to form effective graphics windows or functional graphics by using the optical-chemical reaction principle and chemical and physical etching methods.

Etching	means	the process of selectively removing unwanted material from a silicon surface by chemical or physical means, which is one of the main processes for photolithographic processing and a key step in semiconductor manufacturing.
Gluing	means	the process of applying photoresist evenly to the surface of a wafer.
Developing	means	the process of imaging the exposed wafer, by which the graphics imaged on the optical resistance are displayed.
CVD	means	Chemical Vapor Deposition
PVD	means	Physical Vapor Deposition
LPCVD	means	Low Pressure Chemical Vapor Deposition
ALD	means	Atomic Layer Deposition, a method that can plate the substance layer by layer in the form of monatomic film.
DRAM	means	Dynamic Random-Access Memory
RAM	means	Random Access Memory, a semiconductor memory.
LCD	means	Liquid Crystal Display
MEMS	means	Mechanical System
MOCVD	means	Metal-organic Chemical Vapor Deposition.
CMP	means	Chemical Mechanical Polishing, to make the surface of a wafer completely flat or flattened.
SFP	means	Stress Free Polish, a technology that uses the principle of electrochemical reaction to abandon the mechanical pressure of the polishing process during the process of discarding the metal film on the surface of the wafer to eliminate the damage of the mechanical pressure on the metal wiring.
VOC	means	Volatile Organic Compounds.
Pa	means	The unit of pressure pascal, referred to as Pa.
Dielectric Substance	means	all materials that can be polarized under the action of an external electric field, which usually present their electrical properties in the form of induction rather than conduction in the electric field.
Precursor Chemicals	means	a chemical that can be mutated into another chemical or used to make another chemical.
Yield	means	the percentage of the number of circuits whose test results are good accounting for the total number of circuits under test after the circuits under test have gone through all test procedures.
Front-End, Back-End	means	the front-end process and the back-end process in the manufacture of the semiconductor devices, with the front-end process mainly including Photoetching, Etching, cleaning, ion implantation, chemical machinery flat etc. and the back-end process mainly including routing, Bonder, FCB, BGA reballing, inspection, testing etc.
Packaging	means	the process of wrapping a small piece of material (such as a Chip) in a support housing during the final phase of Semiconductor development to prevent physical damage and corrosion and to allow the Chip to be connected to a circuit board.

Advanced Packaging	means	cutting-edge Packaging forms and technologies. At present, Packaging with Flip Chip (FC) structure, Wafer Level Packaging (WLP), System in a Package (SIP), 2.5D Packaging and 3D Packaging etc. are considered to belong to the category of Advanced Packaging
FC	means	Flip Chip, a DFN structure generally containing circuit units, which is designed to be electrically and mechanically connected to a circuit by an appropriate number of solder balls on its surface (covered by a conductive adhesive).
WLP	means	Wafer Level Packaging, reducing the size of the Packaging to the size of an integrated circuit Chip and the fact that it can be made in batches as a wafer reduces the cost of the Packaging.
SIP	means	System in a Package, which integrates a variety of functional Chips, including processors, memory and other functional Chips in a package, so as to achieve a basic complete function.
3D Packaging	means	the Packaging technology in which more than two Chips are stacked vertically in the same packaging body without changing the size of the package body, with the main characteristics of multi-function, high efficiency, large capacity, high density, diploid increase of the functions and applications in unit volume and low cost.
Fan-out	means	a wafer reconstruction technology, by which the Chip is re-embedded on the wafer, and then the Packaging is carried out according to the steps similar to the standard WLP process. The actual package area is larger than the chip area, and other active devices and passive components can be added to form SIP when the area is expanded.
Under Bump Metal, UBM	means	the metal transition layer between the solder pad and the solder ball, which is located on top of the wafer passivation layer. There are very good adhesion characteristics between UBM and the metallized layer on the wafer and UBM also has good wetting characteristics with the solder ball, which acts as the diffusion layer of solder between the welding ball and IC metal welding pad. As an oxidation barrier layer, UBM also plays a role in protecting the Chip.
UBM/RDL Technology	means	the Under-Bump Metal/redistribution layer technology, by which the undercut can be minimized while removing the barrier layer and seed layer, and the time to complete the etching step can be controlled and accurately monitored thus to reduce the undercut and ensure the critical feature (line or bump) size.
Pillar Bump	means	pillar bumps.
FinFET	means	Fin Field-Effect Transistor, a new complementary metal-oxide semiconductor transistor, which can improve circuit control, reduce leakage current and shorten the gate length of the transistor.
SC-1 Solution	means	Standard Clean 1, a solution prepared by mixing a certain proportion of ammonia water, hydrogen peroxide and water and used for cleaning semiconductor silicon wafers.
ppm	means	Parts per million, a concentration expressed in parts per million of the mass of the solute in the total solution mass, also known as parts per million concentration.

IPA Drying	means	the process of using low surface tension and volatile characteristics of isopropyl alcohol (IPA) to replace the water with high surface tension on the surface of silicon wafers and then blowing dry with nitrogen to completely dry the silicon water film.
PTFE	means	Poly Tetra FluoroEthylene, with the characteristics of anti-acid, anti-alkali, anti-various organic solvents, high temperature resistance and very low friction coefficient.
TSV	means	Through Silicon Vias, a three-dimensional (3D) vertical integration with through silicon vias (TSV) copper interconnect, which is currently considered to be one of the most advanced technologies in the Semiconductor industry.
Bernoulli Chuck	means	a device that uses the Bernoulli aerodynamic suspension principle to suck the wafer on the chuck during wafer cleaning.
Robot Arm	means	an automatic operation device that can imitate some action functions of human hand and arm to grab and carry objects or to operate tools according to fixed procedures. The feature is that it can complete various expected tasks through programming. The structure and performance of the device have the advantages of both human and manipulator machines.
SAPS Cleaning Technology	means	Space Alternative Phase Shift technology, which utilizes megasonic alternating phases to provide megasonic energy to the flat and patterned wafer surfaces in a highly uniform manner at the microscopic level, effectively removing random defects throughout the wafer and reducing the use of chemicals.
TEBO Cleaning Technology	means	Timely Energized Bubble Oscillation technology, which enables damage-free cleaning of patterned Chips through the use of a series of rapid pressure changes forcing the bubbles to oscillate in the specific size and shape, precise and multiparameter control of cavitation of bubbles in the mega-frequency ultrasonic cleaning process, and avoidance of any damage to the patterns caused by transient cavitation in traditional supersonic cleaning.
Tahoe Technology	means	the cleaning technology independently developed by the Issuer, which integrates the tank module and the single-chip module in a single wet cleaning equipment and has the advantages of both; the cleaning effect and process applicability of the Tahoe cleaner can be compared with that of single-chip cleaner, can also greatly reduce the use of sulfuric acid, help customers reduce production costs and better comply with energy conservation and environmental protection policies.
Damascus Process	means	a technique derived from the ancient Damascus craftsman, in which the dielectric layer is first etched with a film of a metal conductor and then filled with metal, with the feature that the metal layer does not need to be etched.
Process, Node and Manufacturing Procedure	means	the size of the transistor gate width, used to measure the level of semiconductor chip manufacturing.
Moore's Law	means	the Moore's Law put forward by Gordon Moore, i.e., the number of transistors on an integrated circuit doubles every 18 months, the corresponding performance doubles, and the cost drops by half.
ECP	means	Electro Chemical Plating, the process of coating the surface of a wafer with a thin layer of other metals or alloys by using the electrolysis principle.
mm	means	Millimeter, 10^{-3} meter, a unit used to describe the diameter of a Semiconductor Wafer.

μm	means	Micrometer, 10 ⁻⁶ meter
nm	means	Nanometer, 10 ⁻⁹ meter
Gartner	means	a leading research and consulting company in the field of IT. Its research scope covers the entire IT industry from the upstream hardware design and manufacture and to the downstream terminal applications.
WSTS	means	World Semiconductor Trade Statistics, a data statistics company in the semiconductor industry whose members include the world's leading semiconductor manufacturers.
SEMI	means	Semiconductor Equipment and Materials International
VLSI Research	means	a leading research consultancy in the field of integrated circuits and pan-semiconductors, providing market research and economic analysis on technology, business and economics for the semiconductor industry chain. It rates and ranks the world's IC and pan-semiconductor manufacturing and equipment companies annually.
Yole	means	Yole Développement, which provides market research, technology analysis, strategy consulting, targeted media and financial advisory services.

As a result of rounding, there may be some differences in mantissas between the sum of some sums and the sum of the addends in the [***].

Section II Overview

This overview provides only a summary of the full [***]. Investors should read the full [***] carefully before making an investment decision.

I. Overview of the Issuer and the Intermediaries

(I) Overview of the Issuer			
Issuer's Name	ACM Research (Shanghai), Inc.	Date of Establishment	May 17, 2005
Registered Capital	RMB 390,201,300 Yuan	Legal Representative	HUI WANG
Registered Address	Building 4, No.1690 Cailun Road, China (Shanghai) Pilot Free Trade Zone	Main Production and Operation Premises	Building 4, No.1690 Cailun Road, China (Shanghai) Pilot Free Trade Zone
Controlling Shareholder	ACM Research, Inc.	Actual Controller	HUI WANG
Classification of Industry	Special Equipment Manufacturing (Classification Code: C35)	Status of Listing (Applying to List) on Another Exchange	None
(II) The Intermediaries for the Offering			
Sponsor	[***]	Lead Underwriter	[***]
Issuer's Lawyer	King & Wood Mallesons	Joint Lead Underwriter	[***]
Audit Institution	BDO CHINA SHU LUN PAN Certified Public Accountants LLP	Appraisal Agency	China United Assets Appraisal Group Co., Ltd.

II. Overview of the Offering

(I) Basic Information of the Offering			
Class of Shares	RMB-denominated Common Shares (A Shares)		
Par Value per Share	RMB 1.00 Yuan		
Number of Shares in the Offering	43,355,753 shares	Proportion in the Total Share Capital after the Offering	10.00%
Thereinto: Number of New Shares	43,355,753 shares	Proportion in the Total Share Capital after the Offering	10.00%
Number of Shares Offered by Shareholders	-	Proportion in the Total Share Capital after the Offering	-
Total Share Capital after the Offering	433,557,100 shares		
Offering Price per Share	RMB 85.00 Yuan		
Offering P/E	398.67 Times (offering price per share divided by earnings per share, of which, the earnings per share are calculated by dividing the lower of the audited net profits attributable to owners of the parent company before and after deducting non-recurring profit and loss in the year 2020 by the total share capital after the Offering)		

Net Asset Value per Share Prior to the Offering	RMB 2.94 Yuan/Share (calculated by dividing the audited shareholder's equity attributable to the parent company on the date of June 30, 2021 by the total share capital prior to the Offering)	Earnings per Share Prior to the Offering	RMB 0.24 Yuan/Share (calculated by dividing the lower of the audited net profits attributable to owners of the parent company before and after deducting non-recurring profit and loss in the year 2020 by the total share capital after the Offering)
Net Asset Value per Share after the Offering	RMB 10.68 Yuan (calculated by dividing the owner's equity attributable to the parent company after the Offering by the total share capital after the Offering, of which, the owner's equity attributable to the parent company after the Offering is calculated by the sum of the audited owner's equity attributable to the parent company as at June 30, 2021 and the net fund raised)	Earnings per Share after the Offering	RMB 0.21 Yuan (calculated by dividing the lower of the audited net profits attributable to owners of the parent company before and after deducting non-recurring profit and loss in the year 2020 by the total share capital after the Offering)
Offering P/B	7.96 Times (calculated by dividing the offering price per share by the net asset value per share after the Offering)		
Offering Mode	The combination mode of private placement to strategic investors, offline inquiry placing to qualified investors and online fixed-price offering to social public investors holding non-restricted A shares and non-restricted depositary receipts in Shanghai market will be adopted for the Offering.		
Offering Targets	Qualified strategic investors, inquiry objects and domestic natural persons, legal persons and other investors opening accounts of the SSE and enabling trading on the STAR Market (other than those prohibited by laws, regulations and the business rules of the SSE).		
Underwriting Mode	Stand-by Underwriting		
Name of Shareholders Proposing to Offer Shares to the Public	N/A		
Principle of Offering Expenses Sharing	-		
Total Fund Raised	RMB 3,685.239 million Yuan		
Net Fund Raised	RMB 3,481.2585 million Yuan		

Projects to be Invested by the Fund Raised	1. ACMSH equipment R&D and manufacturing center	
	2. ACMSH high end semiconductor equipment R&D project	
	3. Supplementing working capital	
Estimated Offering Expenses	Sponsor and underwriting fees	RMB 173.832 million Yuan (excluding tax)
	Accounting fees	RMB 12.467 million Yuan (excluding tax)
	Lawyer’s fees	RMB 10.9045 million Yuan (excluding tax)
	Information disclosure fees	RMB 4.5755 million Yuan (excluding tax)
	Offering service charges	RMB 2.2015 million Yuan (excluding tax)
	Note: The offering service charges amounted to RMB 1.331 million Yuan in the [***] disclosed last time, the difference between which and those in the [***] lying in the stamp tax of RMB 870,500 Yuan for the Offering. Except for such adjustment, there is no other adjustment to the offering expenses.	
(II) Important Dates for the Offering		
Date of Initial Bidding	November 3, 2021	
Date for Publication of Offering Notice	November 5, 2021	
Subscription Date	November 8, 2021	
Payment Date	November 10, 2021	
Listing Date	After the Offering, the Company will apply for listing on the STAR Market of SSE as soon as possible.	

III. Major Financial Data and Indicators for the Issuer's Reporting Period

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Total Assets (RMB 10,000 Yuan)	229,393.43	184,352.37	130,800.15	63,602.25
Owner's Equity Attributable to Parent Company (RMB 10,000 Yuan)	114,743.11	104,867.33	82,992.90	14,504.75
Debt Asset Ratio (Parent Company)	40.83%	35.60%	32.56%	76.34%
Item	From Jan. to Jun. 2021	2020	2019	2018
Operating Income (RMB 10,000 Yuan)	62,528.08	100,747.18	75,673.30	55,026.91
Net Profit (RMB 10,000 Yuan)	8,967.60	19,676.99	13,488.73	9,253.04
Net Profit Attributable to the Shareholders of the Issuer (RMB 10,000 Yuan)	8,967.60	19,676.99	13,488.73	9,253.04
Net Profit Attributable to the Parent Company after Deduction of Non-recurring Profit and Loss (RMB 10,000 Yuan)	4,885.66	9,243.78	13,047.50	7,140.06
Basic Earnings per Share (RMB 1 Yuan)	0.23	0.50	0.36	N/A
Diluted Earnings per Share (RMB 1 Yuan)	0.23	0.50	0.36	N/A
Weighted Average Return on Equity (%)	8.20	21.20	34.22	137.72
Net Cash Flow from the Operating Activities (RMB 10,000 Yuan)	4,093.21	-8,824.49	7,270.65	3,881.03
Cash Dividends (RMB 10,000 Yuan)	-	-	-	-
R & D Expenditure as a Percentage of Operating Income (%)	18.33	13.97	13.12	14.43

IV. Main Business and Operation of the Issuer

(I) Main Business

The Company is mainly engaged in the research and development, production and sales of semiconductor equipment, with the main products including semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet processing equipment. The Company insists on the development strategy of differentiation competition and innovation. Through independent research and development of single-wafer megasonic cleaning technology, single wafer wet bench combined cleaning technology, electro-plating technology, and stress-free polishing technology etc., it provides customers in the semiconductor industry with customized wet processing solutions such as semiconductor cleaning, semiconductor polishing and advanced packaging etc., effectively improving the production efficiency and yield of the customers and reducing their costs of production.

Based on independent innovation and research and development as well as many years of professional technique and technology accumulation, the Company has successfully developed the world's first SAPS/TEBO megasonic cleaning technology and single wafer wet bench combined cleaning technology applied to the wafer cleaning area with technology nodes 45 nm and below, which can effectively solve the cleaning problem of organic contamination and particles after etching and greatly reduce the usage of the chemical reagents such as sulfuric acid, helping customers reduce production costs while meeting the requirements of China's energy conservation and emissions reduction at the same time.

With its advanced technology and multiple product lines, the Company has developed into one of the few semiconductor equipment suppliers with certain international competitiveness in China, whose products have been recognized by many domestic and foreign mainstream semiconductor manufacturers and have gained a good reputation in the market. The Company's major customers are as follows:

No.	Field of the Customer	Names of Customers
1	Wafer Fabrication	Hynix, Huahong Group, Yangtze Memory, SMIC, Hefei Changxin
2	Advanced Packaging	JCET, TFME, SJsemi, Nepes
3	Semiconductor Wafer Manufacturing and Recycling	ZING SEMI, JRH, Wafer Works, PSI
4	Scientific Research Institutions	Institute of Microelectronics of the Chinese Academy of Sciences, Shanghai IC R&D Center Co., Ltd., NCAP

During the Reporting Period, the composition of the Company's main operating income by product category is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Semiconductor Cleaning Equipment	48,900.39	83.16%	81,627.25	83.69%	62,522.30	84.10%	50,135.96	92.91%
Including: Single-wafer Cleaning Equipment	43,884.74	74.63%	71,610.80	73.42%	55,099.52	74.12%	50,135.96	92.91%
Wet Bench Cleaning Equipment	5,015.65	8.53%	3,310.85	3.39%	4,801.36	6.46%	-	-
Single Wafer Wet Bench Combined Cleaning Equipment	-	-	6,705.60	6.88%	2,621.43	3.53%	-	-
Semiconductor Electro-plating Equipment	3,591.85	6.11%	5,290.13	5.42%	7,857.39	10.57%	1,191.13	2.21%
Advanced Packaging Wet Processing Equipment	6,312.54	10.73%	9,856.51	10.11%	3,961.12	5.33%	2,634.07	4.88%
Vertical furnace tube equipment	-	-	758.90	0.78%	-	-	-	-
Total	58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

During the Reporting Period, the Company's single-chip cleaning equipment accounted for a relatively high proportion and grew rapidly, and was the Company's main source of income.

(II) Competitive Status

The global market of semiconductor cleaning equipment is highly concentrated, especially in the field of single-wafer cleaning equipment. DNS, TEL, LAM and SEMES have a combined market share of over 90%, among which DNS has the highest market share, i.e., over 40%.

At present, there are only a few companies in Mainland China that can provide semiconductor cleaning equipment, mainly including ACMSH, NAURA, KINGSEMI and PNC System. Among them, ACMSH is a leading enterprise in the semiconductor cleaning equipment industry in China, with relatively rich product lines, mainly including single-wafer SAPS megasonic cleaning equipment, single-wafer TEBO megasonic cleaning equipment, single-wafer cleaning equipment, single-wafer backside cleaning equipment, single-wafer scrubbing equipment, Wet Bench Cleaning equipment, and single wafer wet bench combined cleaning equipment; the main cleaning equipment products of NAURA are single-wafer and Wet Bench Cleaning equipment, which are suitable for chip manufacturing with 65nm and 28nm technology nodes; PNC System has the relevant technology to produce 8-12 inch high-level single wafer wet cleaning equipment and Wet Bench cleaning equipment, which can cover the market needs of many downstream industries including wafer manufacturing, advanced packaging, and solar; and KINGSEMI's current products are used in the field of integrated circuit manufacturing for single-wafer physical scrubbing.

According to the *Shanghai IC Industry Development Report 2019* compiled by Shanghai Municipal Commission of Economy and Informatization and the Shanghai Integrated Circuit Industry Association, the China Semiconductor Industry Association ranked the revenues of manufacturers of special semiconductor equipment in Mainland China in the field of integrated circuit, based on industry quarterly statistical reports and statistics from various local associations (companies that have not completed the report or are not included in the statistical scope of the local association are not included in the ranking). Among the top 5 semiconductor equipment manufacturers in Mainland, China in 2018, ACMSH ranked the fourth. The details are as follows:

Ranking	Name of Enterprise
1	AMEC
2	NAURA
3	CETC Electronics Equipment Group Co., Ltd.
4	ACMSH
5	KINGSEMI

Source: *Shanghai IC Industry Development Report 2019*, Shanghai Municipal Commission of Economy and Informatization, Shanghai Integrated Circuit Industry Association.

V. Technology Advancement, R&D Technology Industrialization and Future Development Strategies of the Issuer

Further, focusing on independent innovation, research and development, it has successfully developed SAPS/TEBO megasonic cleaning technology and Tahoe single wafer wet bench combined cleaning equipment to be applied in the wafer cleaning field of 45 nm or below technology nodes by virtue of its professional technology and process accumulation over the past years. The above technology and equipment effectively solve the problem of organic contamination and particle cleaning after etching and greatly reduce the use of concentrated sulfuric acid and other chemical reagents. What's more, its technology and equipment meet the energy-saving and emission-reduction requirements of the State while helping customers reduce production costs.

The Company has reached the international leading or international advanced level in the field of single-wafer megasonic cleaning equipment, single wafer wet bench combined cleaning equipment and copper interconnect and electroplate processing equipment. As of June 30, 2021, the Company and its majority-owned subsidiaries had 322 main patents granted, comprising 152 patents authorized in China and 170 patents authorized abroad, including 317 invention patents, and won the title of "Shanghai Key Laboratory of Advanced Wet Process Equipment for Integrated Circuits". The Company has been the main responsible unit for the Chinese "02 Special" major scientific research projects, such as "R & D and application for 20-14nm copper plating equipment of copper interconnection" and "R & D for 65-45nm stress-free polishing equipment of copper interconnection". In December 2020, the Company's "SAPS (space alternating phase shift) megasonic cleaning technology" won the first prize of Shanghai Science and Technology Award.

Since its establishment, the Company has always focused on the field of semiconductor equipment, aiming to attract high-end professionals with continuous R&D team building and to improve the ability of scientific and technological innovation through independent research and development; to improve the market share through the powerful market development; to enhance its core competitiveness, to expand its revenue and profit scale, to create value for shareholders, and to continuously increase its market share by continuously introducing new products and technologies with differentiation.

The Company will strive to seize the opportunity for the rapid development of China's semiconductor industry, give full play to its current market position, technological advantages, process accumulation and industry experience, pay close attention to the cutting-edge technologies of the global semiconductor equipment industry, ensure the industry leading position of its product quality and core technologies, and strive to catch up with and surpass the global advanced level. The Company will implement product performance and technology upgrading on the basis of existing products, and continuously track the changes in emerging end markets, thus to ensure the effective integration of the Company's products with market demand.

VI . Listing Criteria Chosen by the Issuer

The listing criteria chosen by the Issuer are "the market value and financial indicators" stipulated in the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*: (IV) the expected market value shall not be less than 3 billion Yuan, and the operating income in the latest year shall not be less than 300 million Yuan.

VII. Description of the Issuer's Compliance with the Positioning of the STAR Market

(I) The Company meets the requirements of the industry field

Industry field of the Company	<input checked="" type="checkbox"/> Next-generation information and technology	The Company is in the "special equipment manufacturing industry" (C35) according to the <i>Guidelines for the Industry Classification of Listed Companies (2012 Revision)</i> issued by the CSRC and engaged in the "manufacturing of special equipment for semiconductor devices" (C3562) under the "special equipment manufacturing industry" according to the <i>Industrial Classification for National Economic Activities (GB/T 4754-2017)</i> issued by the National Bureau of Statistics. Pursuant to the <i>Classification of Strategic Emerging Industries (2018)</i> issued by the National Bureau of Statistics, the manufacturing of special equipment for semiconductor devices engaged by the Company is a strategic emerging industry, as follows: 1. new-generation information and technology industry - 1.2 electronic core industry - 1.2.1 new electronic components and equipment manufacturing - manufacturing of special equipment for semiconductor devices.
	<input type="checkbox"/> High-end equipment	
	<input type="checkbox"/> New materials	
	<input type="checkbox"/> New energy	
	<input type="checkbox"/> Energy saving and environmental protection	
	<input type="checkbox"/> Biomedicine	
	<input type="checkbox"/> Other fields in line with the positioning of the STAR Market	

(II) The Company meets the requirements of the science and technology innovation attributes

Criteria for evaluating the science and technology innovation attributes	Whether the criterion is met	Indicators
Its research and development investment accounts for 5% or more of operating income in the last three years, or its total research and development investment in the last three years exceeds RMB 60 million Yuan.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	In 2018, 2019 and 2020, the Company's research and development investment totals to RMB 319.4741 million Yuan, accounting for 13.80% of the total operating income of RMB 2,314.4738 million Yuan in the last three years, meeting the requirements defined in Article 1 (1) of the <i>Guidelines for the Evaluation of Science and Technology Innovation Attributes (for Trial Implementation)</i> .
Its research and development personnel account for 10% or more of the total number of its employees in the corresponding year.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	In 2020, the Company's research and development personnel accounted for 42.07% of the total number of its employees, meeting the requirements defined in Article 1 (2) of the <i>Guidelines for the Evaluation of Science and Technology Innovation Attributes (for Trial Implementation)</i> .
It has five or more patents for invention (including defense patents) generating main operating income.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	As of June 30, 2021, the Company has been granted 322 patents, including 317 invention patents, and in 2018, 2019 and 2020, its income from core technology products accounted for 98.06%, 98.24% and 96.81% of its operating income, respectively, thereby meeting the requirements defined in Article 1 (3) of the <i>Guidelines for the Evaluation of Science and Technology Innovation Attributes (for Trial Implementation)</i> .
The compound growth rate of its operating income in the last three years reaches 20%, or its operating income in the last year reaches RMB 0.3 billion Yuan.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	In 2018, 2019 and 2020, the Company's operating income was RMB 550,269,100 Yuan, RMB 756,733,000 Yuan and RMB 1,007,471,800 Yuan, respectively, with a compound growth rate of 35.31% in the last three years, meeting the requirements defined in Article 1 (4) of the <i>Guidelines for the Evaluation of Science and Technology Innovation Attributes (for Trial Implementation)</i> .

VIII. Special Arrangements on the Issuer's Corporate Governance

As of the date hereof, there are no special arrangements on the corporate governance structure of the Issuer.

IX . Use of the Fund Raised by the Issuer

According to the second extraordinary general meeting of shareholders of the Company in 2020 held on May 15, 2020, the fund raised from the Offering will be invested in the following projects after deducting the Offering fees:

In RMB 10,000 Yuan

No.	Investment Orientation of the Raised Fund	Total Investment	Amount of the Raised Fund to be Used
1	ACMSH Equipment R&D and Manufacturing Center	88,245	70,000
2	ACMSH High-end Semiconductor Equipment R&D Project	45,000	45,000
3	To Supplement Liquidity	65,000	65,000
Total		198,245	180,000

If the actual amount of fund raised in the Offering (after deducting the Offering fees) is lower than the fund demand of the proposed investment projects, the Company will arrange the fund raised according to the investment proportion of the projects, with the gap filled with self-raised funds. If the actual amount of fund raised in the Offering (after deducting the Offering fees) exceeds the above fund needs, the remaining part will be used for the development of the Company's main business according to its actual operation needs and the relevant regulations of the CSRC and the Shanghai Stock Exchange. The fund raised in the Offering will be invested according to the priorities of the projects. Before the fund raised is in place, the Company may use the self-raised funds to invest in the proposed investment projects, and then replace such self-raised funds with the raised funds after the fund raised is in place.

Section III Overview of the Offering

I. Basic Information of the Offering

(I) Class of Shares:	RMB-denominated Common Shares (A Shares)
(II) Par Value per Share:	RMB 1.00 Yuan
(III) Number of Shares in the Offering:	The number of shares offered in the Public Offering shall be 43,355,753.00, accounting for 10.00% of the total share capital of the Company after the Offering. The Offering does not involve any public offering of shares by shareholders.
(IV) Offering Price per Share:	RMB 85.00 Yuan/Share
(V) Participation of the Issuer's Senior Executives and Employees in Strategic Placement:	On November 4, 2020, the Company held the 9th session of the first board of directors, deliberating and passing the <i>Proposal on the Participation of Officers and Core Employees in the Strategic Placement of the Offering and Listing</i> , whereby some senior executives and core employees of the Company are allowed to participate in the strategic placement of the Offering and Listing by establishing a special asset management plan and to subscribe for up to 10% of the shares in the Offering. On August 27, 2021, the Company held the 12th session of the first board of directors, deliberating and approving the <i>Proposal on Adjusting the Company's Senior Executives and New Core Employees Participating in the Strategic Placement of the Offering and Listing</i> , pursuant to which the list of senior executives and core employees participating in the strategic placement of the Offering and Listing was adjusted, and finally no one other than those in the list would be permitted to actually participate therein. The number of shares participated by the aforementioned asset management plan in the strategic placement is 3,219,198, accounting for 7.43% of the total number of shares in the Public Offering. The Collective Asset Management Plan of CICC Wealth Management - ACMSH Employees Participating in the Strategic Placement Involving the STAR Market undertakes that the shares available to it in the placement will be subject to a lock-up period of 12 months from the date of the Issuer's IPO and Listing.
(VI) Participation of the Sponsor's Subsidiaries in Strategic Placement:	[***], a subsidiary of [***], is arranged by the latter to participate in the strategic placement concerning the Offering, with the number of follow-up investment shares to be 1,176,470 accounting for 2.71% of the shares in the Public Offering. The said shares placed to [***] shall be subject to a lock-up period of 24 months from the date of the IPO and Listing of the Issuer.
(VII) Offering P/E:	398.67 Times (calculated by the offering price dividing by the earnings per share; the earnings per share is calculated by dividing the lower of the audited net profits attributable to shareholders of the parent company before and after deducting non-recurring profit and loss in the year 2020 by the total share capital after the Offering)
(VIII) Net Asset Value per Share Prior to the Offering:	RMB 2.94 Yuan/Share (calculated by dividing the audited shareholder's equity attributable to the parent company on the date of June 30, 2021 by the total share capital prior to the Offering)
(IX) Net Asset Value per Share after the Offering:	RMB 10.68 Yuan/Share (calculated by dividing the sum of the audited shareholder's equity attributable to the parent company on the date of June 30, 2021 plus the net proceeds of the Offering by the total share capital after the Offering)
(X) Offering P/B:	7.96 Times (calculated by dividing the offering price per share by the net assets per share after the Offering)

(XI) Offering Mode:	The combination mode of private placement to strategic investors, offline inquiry placing to qualified investors and online fixed-price offering to social public investors holding non-restricted A shares and non-restricted depositary receipts in Shanghai market will be adopted for the Offering.	
(XII) Offering Targets:	Qualified strategic investors, inquiry objects and domestic natural persons, legal persons and other investors opening accounts of the SSE and enabling trading on the STAR Market (other than those prohibited by laws, regulations and the business rules of the SSE).	
(XIII) Underwriting Mode:	Stand-by Underwriting	
(XIV) Estimated Offering Fees:	Sponsor and underwriting fees	RMB 173.832 million Yuan (excluding tax)
	Accounting fees	RMB 12.467 million Yuan (excluding tax)
	Lawyer's fees	RMB 10.9045 million Yuan (excluding tax)
	Information disclosure fees	RMB 4.5755 million Yuan (excluding tax)
	Offering service charges	RMB 2.2015 million Yuan (excluding tax)
	Note: The offering service charges amounted to RMB 1.331 million Yuan in the [***] disclosed last time, the difference between which and those in the [***] lying in the stamp tax of RMB 870,500 Yuan for the Offering. Except for such adjustment, there is no other adjustment to the offering expenses.	

II. Relevant Parties in the Offering

(I) Issuer	
Name	ACM Research (Shanghai), Inc.
Legal Representative	HUI WANG
Domicile	Building 4, No.1690 Cailun Road, China (Shanghai) Pilot Free Trade Zone
Telephone	021-50808868
Fax	021-50808860
Contact Person	MINGZHU LUO
(II) Sponsor (Lead Underwriter)	
Name	[***]
Legal Representative	[***]
Domicile	[***]
Telephone	[***]
Fax	[***]
Sponsor Representatives	[***]
Project Co-organizer	
Project Managers	[***]

(III) Joint Lead Underwriter

Name	[***]
Legal Representative	[***]
Domicile	[***]
Telephone	[***]
Fax	[***]
Project Managers	[***]

(IV) Law Firm

Name	King & Wood Mallesons
Person in Charge	LING WANG
Domicile	17th & 18th Floors, East Tower, World Financial Center 1, No.1 Dongsanhuan Zhonglu, Chaoyang District, Beijing
Telephone	010-58785588
Fax	010-58785599
Responsible Lawyers	HUI XU, FUAN CHEN, ANRONG WANG

(V) Accounting Firm

Name	BDO CHINA SHU LUN PAN Certified Public Accountants LLP
Managing Partner	ZHIGUO YANG
Domicile	4 F, No.61 East Nanjing Road, Huangpu District, Shanghai
Telephone	0755-82584611
Fax	0755-82584611
Responsible Certified Public Accountants	YI TANG, JING Zhao

(VI) Asset Appraisal Agency

Name	China United Assets Appraisal Group Co., Ltd.
Legal Representative	ZHI HU
Domicile	F4, East Block, Kaichen World Trade Center, 28 Fuxingmennei Street, Xicheng District, Beijing
Telephone	010-88000066
Fax	010-88000066
Responsible Certified Appraisers	WEI LIU and QIQUAN GE

(VII) Stock Registrar

Name	China Securities Depository and Clearing Corporation Limited Shanghai Branch
Domicile	188 Yanggao South Road, China (Shanghai) Pilot Free Trade Zone
Telephone	021-58708888

(VIII) Recipient Bank	
Account Name	[***]
Opening Bank	[***]
Account Number	[***]
(IX) Stock Exchange Applied for Listing	
Name	Shanghai Stock Exchange
Domicile	Shanghai Stock Exchange Building, 528 Pudong South Road, Shanghai
Telephone	021-68808888

III. Relationship between the Issuer and Other Related Parties in the Offering

As of the signing date of the [***], [***], a wholly-owned subsidiary of the Sponsor, holds 19.39% of the partnership shares of [***] and serves as [***]'s general partner and managing partner. [***] holds 0.59% of the Company's shares, so the Sponsor indirectly holds 0.59% of the Company's shares.

Other than the above situations, the Issuer does not have any direct or indirect equity relationship or other rights and interests relationship with the intermediaries related to the Offering. The person in charge, senior executives and responsible personnel of each intermediary do not directly or indirectly hold the shares of the Issuer, nor do they have any other right and interests relationship.

IV. Important Dates for the Offering

Date of Initial Bidding	November 3, 2021
Date for Publication of Offering Notice	November 5, 2021
Subscription Date	November 8, 2021
Payment Date	November 10, 2021
Listing Date	After the Offering, the Company will apply for listing on the STAR Market of SSE as soon as possible.

V. The Strategic Placement

(I) Overall arrangement of this strategic placement

1. The strategic placement of the Offering will be involved by the follow-up investment of relevant subsidiaries of the Sponsor, the special asset management plan for senior executives and core employees of the Issuer and other strategic investors, with the follow-up investment institution to be [***] (relevant subsidiary of the Sponsor participating in the follow-up investment), the special asset management plan for the senior executives and core employees of the Issuer established for the strategic placement to be CICC Wealth Management - ACMSH Employees Participating in the Strategic Placement Involving the STAR Market, and other strategic investors to be Shanghai Guosheng Group Co., Ltd., Shanghai Pudong Technology Innovation Group Co., Ltd., Shanghai Science and Technology Venture Capital (Group) Co., Ltd., Shanghai Huali Microelectronics Corporation, Beijing Yitang Tongzhou Equity Investment Center (L.P.), Will Semiconductor CO., Ltd. Shanghai, and Shanghai Zhangjiang Science and Technology Venture Capital Co., Ltd.

The final status of the strategic placement of the Offering is as follows:

Name of Strategic Investor	Number of Placed Shares (10,000 Shares)	Placed Amount (RMB 1 Yuan)	Brokerage Commission for New Share Placement (RMB 1 Yuan)	Lock-up Period
[***]	117.6470	99,999,950.00	-	24 months
CICC Wealth Management - ACMSH Employees Participating in the Strategic Placement Involving the STAR Market	321.9198	273,631,830.00	1,368,159.15	12 months
Shanghai Guosheng Group Co., Ltd.	43.3558	36,852,430.00	184,262.15	12 months
Shanghai Pudong Technology Innovation Group Co., Ltd.	43.3558	36,852,430.00	184,262.15	12 months
Shanghai Science and Technology Venture Capital (Group) Co., Ltd.	65.0337	55,278,645.00	276,393.23	12 months
Shanghai Huali Microelectronics Corporation	70.2370	59,701,450.00	298,507.25	12 months
Beijing Yitang Tongzhou Equity Investment Center (L.P.)	43.3558	36,852,430.00	184,262.15	12 months
Will Semiconductor CO., Ltd. Shanghai	43.3558	36,852,430.00	184,262.15	12 months
Shanghai Zhangjiang Science and Technology Venture Capital Co., Ltd.	21.6750	18,423,750.00	92,118.75	12 months
Total	769.9357	654,445,345.00	2,772,226.98	-

(II) Size of participation

1. According to the requirements of the *Guidelines for the Offering and Underwriting of Stocks on the STAR Market of the Shanghai Stock Exchange*, the size of the Offering is RMB 3.685239 billion Yuan, and the number of follow-up investment shares placed to [***] is 1,176,470 accounting for 2.71% of the number of shares in the Public Offering.

2. The number of shares finally placed under CICC Wealth Management - ACMSH Employees Participating in the Strategic Placement Involving the STAR Market (“Special Asset Management Plan of ACMSH”) is 3,219,198, accounting for 7.43% of the number of shares in the Public Offering. The details are as follows:

Specific name	Actual dominant entity	Record No.	Date of establishment time	Size of raised funds (RMB 10,000 Yuan)	Upper limit of subscription size (including brokerage commission for placement of new shares) (RMB 10,000 Yuan)	Manager
CICC Wealth Management - ACMSH Employees Participating in the Strategic Placement Involving the STAR Market	CHINA CICC WEALTH MANAGEMENT SECURITIES COMPANY LIMITED	SSR594	September 24, 2021	27,500	27,500	CHINA CICC WEALTH MANAGEMENT SECURITIES COMPANY LIMITED

Note 1: The participation proportion of the above-mentioned special asset management plan is in line with Article 19 of the *Implementation Measures of the Shanghai Stock Exchange for the Issuance and Underwriting of Stocks on the STAR Market* specifying “Senior executives and core employees of the issuer may set up a special asset management plan to get involved in the strategic placement of the offering. The number of stocks placed under the aforesaid special asset management plan shall not exceed 10% of the stocks in the initial public offering”.

A total of 67 people participated in the Special Asset Management Plan of ACMSH. The names, positions, paid-in amounts, proportion of shares held under the asset management plan, and employee categories, etc. of the participants are as follows:

S/N	Name	Position	Paid-in amount (RMB 10,000 Yuan)	Proportion of shares held under the asset management plan (%)	Employee category
1	WANG HUI	Chairman	3,000	10.91	Core employee
2	WANG JIAN	General Manager	6,000	21.82	Senior executive
3	FUPING CHEN	Vice General Manager	3,600	13.09	Senior executive
4	MINGZHU LUO	Board Secretary	1,100	4.00	Senior executive
5	WANG JUN	Deputy General Manager of Engineering	900	3.27	Core employee
6	XUEJUN LI	Deputy General Manager of After- sales Service	825	3.00	Core employee
7	FENG LISA YI LU	Financial Director	600	2.18	Senior executive
8	XIAOYAN ZHANG	Process Director	571	2.08	Core employee
9	YAN LI	Purchasing Director	530	1.93	Core employee
10	GUANGYU XIA	After-sales Service Director	495	1.80	Core employee
11	JUN WU	Mechanical Director	460	1.67	Core employee
12	SHENA JIA	Mechanical Director	430	1.56	Core employee
13	XIAOFENG TAO	Mechanical Director	375	1.36	Core employee
14	YINUO JIN	Process Director	360	1.31	Core employee
15	XIAYUN YANG	HR Director	350	1.27	Core employee
16	ZHENMING CHU	Process Manager	345	1.25	Core employee
17	WENJUN WANG	Process Director	344	1.25	Core employee

18	HU ZHAO	After-sales Service Director	315	1.15	Core employee
19	SHU YANG	Process Manager	305	1.11	Core employee
20	LAN WANG	Chief Financial Officer	270	0.98	Core employee
21	FANGYONG ZHEN	After-sales Service Manager	245	0.89	Core employee
22	GUANGBO HAN	Marketing Manager	230	0.84	Core employee
23	ZHAOWEI JIA	Process Director	215	0.78	Core employee
24	SHAN ZHANG	Process Manager	210	0.76	Core employee
25	XI WANG	Marketing Director	195	0.71	Core employee
26	QIANG WANG	After-sales Service Manager	195	0.71	Core employee
27	HUI SHEN	Software Director	195	0.71	Core employee
28	ANYUN BI	Finance Manager	190	0.69	Core employee
29	YU NIE	Standardization Manager	180	0.65	Core employee
30	XIAOQUN WANG	Quality Manager	165	0.60	Core employee
31	WEI ZHANG	After-sales Service Manager	165	0.60	Core employee
32	DEYUN WANG	Software Director	158	0.57	Core employee
33	XINZHENG WANG	Project Director	155	0.56	Core employee
34	WENJUN HU	After-sales Service Manager	145	0.53	Core employee
35	XINPING DENG	Mechanical Manager	142	0.52	Core employee
36	DONGCHENG ZHOU	After-sales Service Manager	130	0.47	Core employee
37	HONGCHAO YANG	Mechanical Director	130	0.47	Core employee
38	YANLI HU	Patent Manager	130	0.47	Core employee

39	GUANZHONG LU	Technical Sales Director	130	0.47	Core employee
40	WENQING JI	Information Technology Manager	130	0.47	Core employee
41	LIU FENG	Sales Manager	130	0.47	Core employee
42	FEI HUO	Project Manager	130	0.47	Core employee
43	DANYING WANG	Sales Manager	125	0.45	Core employee
44	YULU HU	Electrical Director	120	0.44	Core employee
45	YU WANG	Software Manager	105	0.38	Core employee
46	CHUANYUN ZHU	Assembly Manager	105	0.38	Core employee
47	LEI WU	Mechanical Manager	105	0.38	Core employee
48	ZHENJIANG QIN	Mechanical Manager	105	0.38	Core employee
49	XIAOHUI ZHANG	HR Manager	105	0.38	Core employee
50	RONG XU	Process Manager	105	0.38	Core employee
51	YUNCHEN YU	Electrical Manager	105	0.38	Core employee
52	MINLI GU	Finance Manager	105	0.38	Core employee
53	LAN XI	Administrative Manager	105	0.38	Core employee
54	YUAN ZONG	Process Manager	105	0.38	Core employee
55	XIAOWEI DI	Test Manager	105	0.38	Core employee
56	RONG CAO	Laboratory Manager	105	0.38	Core employee
57	CHENHUA LU	Process Manager	105	0.38	Core employee
58	YINGWEI DAI	Safety Manager	105	0.38	Core employee
59	CHENG CHENG	Mechanical Manager	105	0.38	Core employee
60	XINXIN JIAO	Mechanical Manager	105	0.38	Core employee
61	XIAOCHENG GU	Sales Manager	105	0.38	Core employee
62	LEI GUAN	Planning Manager	100	0.36	Core employee

63	LING ZHU	After-sales Service Manager	100	0.36	Core employee
64	FENG WANG	Purchasing Manager	100	0.36	Core employee
65	YUN SUN	Assembly Manager	100	0.36	Core employee
66	QI ZHU	Project Manager	100	0.36	Core employee
67	JUNZHUO WU	Electrical Manager	100	0.36	Core employee
Total			27,500	100.00	-

Note 1: The difference in the mantissa between the total number and the sum of the number of each part is caused by rounding.

Note 2: 100% of the funds raised by ACMSH Special Asset Management Plan shall be used to participate in this strategic placement, that is, to pay the price of this strategic placement, the brokerage commission for new share placement and the related expenses.

3. Other strategic investors are Shanghai Guosheng Group Co., Ltd., Shanghai Pudong Technology Innovation Group Co., Ltd., Shanghai Science and Technology Venture Capital (Group) Co., Ltd., Shanghai Huali Microelectronics Corporation, Beijing Yitang Tongzhou Equity Investment Center (L.P.), Will Semiconductor CO., Ltd. Shanghai, and Shanghai Zhangjiang Science and Technology Venture Capital Co., Ltd., to whom an aggregate of 3,303,689 shares are placed, with the placed amount together with the amount of brokerage commission for the placement of new shares totaling RMB 282,217,600 Yuan.

4. There are a total of 9 investors participated in the strategic placement, and 8,671,150 shares issued in the initial strategic placement, accounting for 20% of the number of shares in the Offering, which are in line with requirements as to the Offering in the *Implementation Measures of the Shanghai Stock Exchange for the Issuance and Underwriting of Stocks on the STAR Market* and the *Guidelines for the Offering and Underwriting of Stocks on the STAR Market of the Shanghai Stock Exchange* that there shall be no more than 10 strategic investors, the total number of shares placed to the strategic investors shall not be more than 20% of the number of shares in the Public Offering, and the number of shares placed under the special asset management plan shall not be more than 10% of the number of shares in the initial public offering.

(III) Placing conditions

The strategic investors have entered into strategic placement agreements with the Issuer, who shall not participate in the initial bidding of the Offering, and undertake to subscribe for the number of shares as committed at the offering price fixed by the Issuer and the Lead Underwriter.

(IV) Lock-up period

ACMSH Special Asset Management Plan shall be subject to a lock-up period of 12 months commencing from the date when the shares in the Public Offering are listed in the SSE as to the shares placed thereunder.

[***] undertakes that the shares concerned placed thereto shall be subject to a lock-up period of 24 months from the date of the Issuer's IPO and Listing.

Other strategic investors undertake that the shares concerned placed thereto shall be subject to a lock-up period of 12 months from the date of the Issuer's IPO and Listing.

After the expiration of the lock-up period, the relevant provisions of the CSRC and the SSE on shareholding reduction shall apply to the reduction of holding of placed shares by the strategic investors.

Section IV Risk Factors

When assessing the shares issued by the Company in this Offering, investors should especially and carefully consider the following risk factors besides other information provided in the [*]. The risk factors below are sorted in the order of materiality and degree of possible impacts on decision-making by investors, but it does not necessarily mean that the risk factors will occur in such an order.**

I. Technical Risks

(I) Risks of technical innovation

The Company operates in the semiconductor special equipment industry, which involves many academic fields including microelectronics, electricity, mechanics, chemical engineering, fluid dynamics, automation, image recognition, communications, software system, among others, resulting in a high threshold in technical research and development. The vigorous development of the global semiconductor industry is accompanied by the constant technical innovations in the semiconductor industry that cleaning equipment has higher and higher requirements for the control of wafer surface pollutants to avoid impurities affecting chip yield and product performance. In addition, customers' demands for the types of surface pollutants to be cleaned, cleaning efficiency, number of cavities and applicable technical nodes of cleaning equipment are also changing. The Company has been adhering to the development strategy of differentiated competition and innovation for long. If the Company cannot continuously ensure sufficient research and development investment, or process nodes for chips are further reduced, or a new chip manufacturing technology comes out, the core technologies of the Company, including SAPS, TEBO, and Tahoe, and relevant products may become less advanced, which may cause adverse effects on the operating performance of the Company.

(II) Risks of losing key technical talents

Technical talents are a key factor of competitiveness in the semiconductor special equipment industry, which is a technology-intensive industry. The continuous development of the semiconductor special equipment industry in Mainland China will lead to more intensive competition for technical talents. If the Company loses substantial key technical personnel due to remuneration or other reasons, or the Company could not motivate existing technical talents or could not attract outstanding technical talents, the Company may be short-handed in the technical team, hence could not continue the research, development, and sales of new products, or provide quality services to customers; moreover, the Company may have higher recruitment and training costs, which may cause adverse effects on the technical research and development capability and operating performance of the Company.

(III) Risks of divulging core technologies

The Company *per se* does not operate part manufacturing, but organizes part procurement and outsourcing according to product designs. Despite its constant attention on the protection of core technologies, if the network security system of the Company or suppliers cannot prevent unauthorized access and complicated network attacks, or the employees and suppliers of the Company handle sensitive data improperly, which divulges the intellectual properties and core technologies of the Company, the Company may suffer major liability claims from customers. This may cause serious damages to the reputation and competitive position of the Company, hence causing adverse effects on the business development and results of operation of the Company.

(IV) Risks of technical research and development

To maintain its technical advancement, the Company needs to continuously develop new products and improve existing products in the future. It took 8 years for the Company to develop the TEBO technology, and it may take similar or even more time to develop any new technology in the future; meanwhile, the research and development of new products require a large amount of fund investment. If the direction of the Company's technical research and development cannot adapt to market demands, technical changes, and constantly developing standards, or new products developed by the Company cannot meet customer requirements on costs, dimensions, acceptance standards, specifications, performance, and delivery period, or no supplier is available to promptly supply key parts for new products developed by the Company, the Company may face risks of failing to achieve expected effects with the investment in technical research and development.

In addition, certain improvement made by the Company on equipment products may reduce the customer demands on existing equipment products. Moreover, customers may delay in making purchase in the hope of new products, resulting in less current orders for the Company, hence affecting the operating performance of the Company.

II. Operating Risks

(I) Risks of market competition

The global market of the semiconductor special equipment industry is intensively competitive; since the market is dominated by international giants, the Company's products have to directly compete on the market with such international giants. Compared with semiconductor special equipment manufacturers in Mainland China, such international giants are stronger in funds, technical accumulation, sales team, manufacturing capability, sales channels, and market awareness, have relations with more customers and partners, and have longer operating histories, more abundant product portfolios, and wider geographical coverage, hence can identify and respond to changes in the market and customer demands in a better manner. Some international giants are capable of offering bundle discounts for customers purchasing multiple products at the same time.

With the constant growth of the semiconductor terminal application market in China, sub-industries, including semiconductor manufacturing, packaging, testing, material, and equipment, in China have been developing rapidly. During the third transition of the global semiconductor industry, it is estimated that the Mainland China market will become the main competition field for global semiconductor equipment manufacturers, hence the Company has to compete with both international giants and newcomers in China in the future. There are certain gaps in applicable technology nodes and market shares between international giants and the Company. If the Company cannot effectively handle the competition with such competitors, the operating incomes, results of operation, and financial conditions of the Company may be affected adversely.

(II) Risks of reliance on suppliers of some key parts

At present, the Company relies on existing suppliers for some key parts used in the Company's equipment. For example, Product Systems, Inc. is the only supplier of megasonic wave generators, a key part for our wafer cleaning equipment; NINEBELL is the main supplier of robot arms used in the transport system of our wafer cleaning equipment; Advanced Electric Co., Inc. is the key supplier of valves in our wafer cleaning equipment. In the event of adverse changes in the cooperation between the Company and such suppliers, or such suppliers suffer difficulties in their operations, the production plans of the Company may be adversely affected; if the Company replaces the source of such key parts, the supply may be interrupted during the transition period, which may lead to delayed delivery of the Company's products and causing high expenses, hence causing adverse effects on the operating performance of the Company.

(III) Risks of escalated international trade dispute

The trade dispute between the US and China has escalated since 2018. The US government imposed additional custom duties on specific imported products originated from China in July, August, and September 2018, June and September 2019, and February 2020. For each round of changes in the custom duties imposed by the US, the Chinese government responded by imposing additional custom duties on specific products imported from the US. In the future, it is likely that the US and Chinese governments will continue to impose additional custom duties or set other trade barriers on specific products originated from each other.

The additional custom duties imposed by the US and Chinese governments, and the uncertainty in surrounding economies, could adversely affect the semiconductor industry, including the demands on semiconductor special equipment from wafer manufacturing, packaging, and testing enterprises. Further deterioration of trade policies, custom duties, additional taxes, export restrictions, or other trade barriers in the country of operation may adversely affect the production or sales capabilities of the Company's customers and harm the operating conditions of the Company's customers, leading to reduced demands of such customers for equipment products of the Company. In addition, if the Chinese government imposes additional custom duties on raw materials or parts purchased by the Company from the US, the operating costs of the Company may increase, leading to material adverse effects on the operating incomes, results of operation, or financial conditions of the Company.

(IV) Risks of fluctuation in the macro economy and industry

The Company operates in the semiconductor special equipment industry, a key supporting industry for the semiconductor industry chain, and the demands are directly subject to the impact of the chip manufacturing and packaging industry and the terminal application market.

In the event of violent fluctuation in the macro economy in the future, reducing the demands on terminal markets of 5G communication, computers, consumer electronics, network communications, automobile electronics, and Internet of Things, and causing surplus of capacity of wafer manufacturing and packaging enterprises, the sales volume and prices of chip products may decrease, hence reducing the operating incomes and profitability. Wafer manufacturing and packaging enterprises normally reduce their capital expenditures greatly during the recession of the industry, and the decrease of capital expenditures normally exceeds the decrease of their operating incomes; therefore, they may reduce the amounts of purchasing semiconductor special equipment. This will cause adverse effects on the business development and operating performance of the Company.

In the booming cycle of the semiconductor industry, the Company has to increase its production volume to meet customer demands, which requires the Company and suppliers to expand stock and improve their production capabilities. If the Company is unable to respond to a rapid increase in customer demands on a timely basis, or if the Company misjudges the timing, duration or magnitude of such an increase in demand, the Company may lose existing customers or incur increased costs disproportionate to any gains in revenue, which could have a material adverse effect on the business, results of operation, financial conditions, or cash flows of the Company.

(V) Risks of failure in market development

The Company has a market development strategy of attracting global leading semiconductor manufacturers first to have the Company's technologies and products accepted by such manufacturers on the basis of long-term research, development, and technical accumulation, so as to build up the Company's reputation on the market. Then, on the basis of the performance and reputation acquired in the international industry, continuously expand to emerging semiconductor markets including Mainland China. The Company presents the differentiated and innovative features of the SAPS, TEBO, Tahoe technologies, electroplating equipment, and stress-free polishing equipment, and the performance and reliability of vertical furnace tube serial products to customers, allowing global leading chip manufacturers to assess and verify the technologies and products of the Company. During the Company's efforts of market development, if such leading chip manufacturers do not accept and verify the equipment products of the Company, or despite the acceptance of the Company's technologies and equipment by such leading chip manufacturers, other chip manufacturers may not accept the Company's technologies and equipment, the market development for the Company's products may fail, which may cause material adverse effects on the business operation, results of operation, and financial conditions of the Company.

The sales cycle of the Company's products may be very long and uncertain. The typical sales cycle of the Company is 6 to 24 months or even longer from the initial contact with customers to the execution of purchase orders. The Company could hardly predict when or even whether a potential customer will purchase from the Company, and could hardly make accurate prediction on whether the Company will have additional sales to existing customers. During the sales cycle, the Company will devote a large amount of time and funds to marketing activities, which may cause certain adverse effects on the results of operation and financial conditions of the Company.

In addition, due to the small scale of business at the beginning stage of the Company, it is hard to cover all potential customers, hence the Company mainly relies on agencies for market development. The Company has started to expand its own sales team on the basis of the constant expansion in the Company's business scale. If the agencies and the Company's own sales team could not continuously develop new customers, or the agencies opt not to cooperate with the Company any longer, the business operation and results of operation of the Company may be adversely affected.

(VI) Risks of reliance on suppliers of some key parts

At present, the Company relies on existing suppliers for some key parts used in the Company's equipment. For example, Product Systems, Inc. is the only supplier of megasonic wave generators, a key part for our wafer cleaning equipment; NINEBELL is the main supplier of robot arms used in the transport system of our wafer cleaning equipment; Advanced Electric Co., Inc. is the key supplier of valves in our wafer cleaning equipment. In the event of adverse changes in the cooperation between the Company and such suppliers, or such suppliers suffer difficulties in their operations, the production plans of the Company may be adversely affected; if the Company replaces the source of such key parts, the supply may be interrupted during the transition period, which may lead to delayed delivery of the Company's products and causing high expenses, hence causing adverse effects on the operating performance of the Company.

(VII) Risks of high concentration of customers

The industry of semiconductor wafer manufacturing, packaging, and testing is a highly concentrated industry. During the Reporting Period, the total sales to top 5 customers of the Company amount for 92.49%, 87.33%, 83.36% and 78.96% respectively, in the total sales of the corresponding periods; moreover, the Company also has a highly concentrated customer base. Although the customers and products of the Company are becoming more diversified, incomes from a few major customers will still account for a high proportion in the Company's operating incomes in the future. The Company's incomes from existing major customers may not increase or continue, and the Company's results of operation may fluctuate in response to the purchase acts of major customers. In addition, the incomes of the Company may reduce if the Company loses any major customer, or the relation with any major customer changes. Moreover, our customers do not enter into long-term purchase commitments, and they may decrease, cancel or delay their purchase plans at any time.

In line with the industry practice, the sales of the Company are based on purchase orders from customers. The Company will not get binding purchase commitments before receiving formal purchase orders. Major customers of the Company may provide the Company with non-binding purchase predictions, but such predictions may be changed at any time without notifying the Company. However, due to the long delivery period up to 6 months for the Company's products, the Company may have to arrange the procurement and outsourcing of raw materials and parts based on non-binding purchase predictions, despite that there is no assurance that the customers may place orders at the time expected by the Company. Meanwhile, the customers of the Company may place orders exceeding the predicted quantities, resulting in loss of sales opportunities because the Company may not deliver the ordered products on time. Due to the high concentration of the Company's customers, if there is a major deviation in the Company's prediction of sales to major customers, or major customers have serious problems in their production and operation, or have their financial conditions deteriorated, the sales of our products and the prompt collection of accounts receivable may be adversely affected.

(VIII) Risks of product quality

The Company operates in the semiconductor special equipment industry, a key supporting industry for the semiconductor industry chain, for which the quality, technical indicators, and operation stability of semiconductor special equipment is crucial for the quality of chip products. The semiconductor special equipment products of the Company are complicated, may have defects in designing and manufacturing, and may fail to meet specific specification requirements of customers; the test procedures of the Company may be insufficient to detect quality problems in the products. This may result in delayed acceptance or rejection of the Company's equipment products by customers, or even result in returns. The Company may have negative comments from customers, negative news reports, and reputation damages, which may reduce orders from existing customers and affect the development of new customers by the Company. The Company may have additional warranty or service obligations due to product quality problems, leading to additional costs. Moreover, quality defects in the Company's products may cause losses to customers, causing liability claims or litigations from customers with respect to the Company's products, hence the Company may have to pay high litigation costs or be liable for making high compensation for damages. The occurrence of quality problems above in the Company's products may adversely affect the operating performance and market reputation of the Company.

(IX) Risks of long acceptance period for the Company's products

The equipment of the Company, being highly customized, has to be installed and commissioned on site at the customer's premise. The inspection and acceptance period of the equipment depends on a variety of factors including the maturity of the equipment and process, on-site preparation of customers, adjustment in customers' process requirements, customers' acceptance procedures, emergencies on site, and other accidental factors, hence may fluctuate to a large extent. In addition, the new products of the Company, including the stress-free polishing equipment and vertical furnace tube equipment may have a long period for inspection and acceptance. A long period of inspection and acceptance of the Company's products will lead to postponed recognition of revenues of the Company; meanwhile, the Company has risks of failing to pass equipment inspection and acceptance, delayed collection of payments, and increased stock of products, which may cause material adverse effects on the business operation, results of operation, and financial conditions of the Company.

(X) Risks of market reputation

The Company operates in the industry of semiconductor special equipment, which is characterized by high industry concentration and intense competition. The Company has to compete with a few of international giants of semiconductor special equipment having longer operating histories, more comprehensive product portfolios, and higher market awareness; under such a competition pattern, the value of conventional marketing is limited, while the market reputation is crucial. If the market reputation of the Company is affected due to product quality accidents, delay in delivery, lag in technology, and delayed services, etc., the results of operation and financial conditions of the Company may be adversely affected.

(XI) Risks of fluctuation in quarterly operating performance

The Company's revenues and operating performance vary from quarter to quarter in each of the reporting periods. The main reasons are as follows: the semiconductor industry is a cyclical industry, and chip manufacturers normally make equipment purchase plans in advance on their judgment of the industry cycles, resulting in uncertain purchase orders for equipment from customers; moreover, due to the high concentration of customers, the cancellation of orders from any major customer, or accelerated or postponed product inspection and acceptance by major customer may affect the current operating incomes of the Company; in addition, the plans of the Company or competitors for product upgrade may also result in changes in the time for customers to place orders; due to the small number of customers and relative high average prices of individual equipment products, the order for individual equipment may substantially affect the incomes of the Company. In addition, it takes certain time for the Company's suppliers to supply parts and for the Company to implement production and manufacturing, and a certain period is also required for the transportation, inspection, and acceptance of the Company's equipment products.

The factors above are beyond control of the Company, and may cause fluctuation in quarterly operating performance of the Company during the Reporting Period. Therefore, the Company could hardly predict its quarterly incomes accurately, and our results of operations for any quarter may not be indicative of results for future quarters. The Company has risks of quarterly fluctuation in its operating performance.

(XII) Risks of certain reliance on agents in the Company's new market development

During the Reporting Period, the sales revenue realized by the Company through agents was RMB 503,649,300 Yuan, RMB 690,022,100 Yuan, RMB 933,735,500 Yuan and RMB 587,831,000 Yuan respectively, accounting for 91.53%, 91.18%, 92.68% and 94.01% of the corresponding period's operating revenue respectively. The proportion of sales revenue realized by the Company through agents in the corresponding period's operating revenue is higher than that of comparable listed companies in the same industry. In terms of new market development in the future, the Issuer will still rely on the agents to a certain extent. The agents' failure to achieve the desired effect in developing new markets, if any, will affect the growth of the Company's revenue and the improvement of market share.

III. Risks of Management and Internal Control**(I) Risks of improper intervention by de facto controller**

Before the Offering, the Company's de facto controller HUI WANG controlled 91.67% of the Issuer's equity interests through ACMR; if 43,355,800 shares will be publicly offered in the Offering, the de facto controller HUI WANG will still control 82.50% of the Issuer's equity interests after the Offering. The de facto controller HUI WANG may use its controlling position in the Company to exert a decisive influence on major issues such as personnel, financial and operating decisions of the Company through the exercise of voting rights at the shareholders' general meeting. If the Company's governance structure is not sound enough, its operation is not standardized, and the Company fails to disclose information in a timely and comprehensive manner, the interests of small and medium shareholders would be damaged.

(II) Risks of management and internal control caused by expansion of the Company

During the Reporting Period, the Company's total assets were RMB 636,022,500 Yuan, RMB 1,308,001,500 Yuan, RMB 1,843,523,700 Yuan, and RMB 2,293,934,300, and the operating incomes were RMB 550,269,100 Yuan, RMB 756,733,000 Yuan, RMB 1,007,471,800 Yuan and RMB 625,280,800 Yuan respectively. Both the asset and revenue scales achieved rapid growth. During the development process, the Company has established a business model that conforms to the Company's own business characteristics, set up a relatively complete corporate governance structure, cultivated a management team with advanced concepts, broadened horizons, and rich management experience, and established a relatively sound management system.

However, with the further expansion of the Company's assets, business, institutions and personnel, there is a continuous increase in the complexity of resource allocation and internal control management of the Company in terms of R&D, procurement, production, sales and other links, which requires the Company to improve its organizational structure and operational management capabilities. However, the Company's internal control system and management level would not be adapted to the rapid expansion of the Company's size, which may lead to a decline in the Company's operating efficiency, result in the Company's cost and expense growth rate exceeding the revenue growth rate and thereby damage the Company's competitiveness. Therefore, the Company will face the management and internal control risks caused by its scale expansion.

(III) Risks of integration and management of subsidiaries

At the end of 2019, the Company merged CleanChip HK and its subsidiaries under the same control. CleanChip HK and its subsidiaries are mainly engaged in the development and sales of semiconductor special equipment. After the Company merged CleanChip HK, it has further conducted the integration in terms of operation management, R&D activities, etc. However, due to the short time for their inclusion in the Company's consolidated statements, if the Company's integration and management of its controlled subsidiaries cannot be effectively implemented, the Company's future business activities may be affected to a certain degree.

IV. Financial Risks

(I) Risks of receivables recovery

At the end of each Reporting Period, the Company's book value of accounts receivable was RMB 173,605,500 Yuan, RMB 209,896,400 Yuan, RMB 256,075,800 Yuan and RMB 307,582,600 Yuan, accounting for 27.30%, 16.05%, 13.89% and 13.41% of total assets respectively. During the Reporting Period, the Company's large amount of accounts receivable caused a certain working capital pressure on the Company. However, the Company's main customers are domestic and foreign mainstream semiconductor companies, and the overall credit status is good. The Company has made provision for bad debts based on the principle of prudence. If the Company's accounts receivable is improperly managed in the future or the client has major operational difficulties, it may result in the Company's accounts receivable not being recovered in time, which will adversely affect the Company's operating performance.

(II) Risks of decline in value of inventories

The Company's semiconductor special equipment needs to go through a long verification process to enter the market. The products need to be prepared in advance according to the order in the production stage, and the customers will complete the acceptance upon installation and commissioning after delivery. Therefore, the Company's raw materials and shipped commodities increase as the rapid expansion of the business, the rise in product types and the augmentation of orders in hand. At the end of each Reporting Period, the Company's inventory book value was RMB 264,159,900 Yuan, RMB 307,274,100 Yuan, RMB 614,869,400 Yuan and RMB 935,189,800 Yuan, accounting for 46.52%, 25.42%, 43.25% and 51.29% of current assets respectively. The shipped products are the most important component of the Company's inventory. At the end of each Reporting Period, the Company's book value of delivered goods was high, i.e. RMB 124,748,200 Yuan, RMB 137,624,600 Yuan, RMB 247,196,500 Yuan and RMB 464,348,200 Yuan, accounting for 47.22%, 44.79%, 40.20% and 49.65% of the inventory book value, respectively. With the Company's business development, the book value has increased year by year.

It is difficult for the Company to accurately predict customer demand. The Company's equipment demand forecast is based on multiple assumptions, including non-binding forecasts obtained from customers, but each assumption may make the Company's forecast incorrect, resulting in the inventory of raw materials and parts exceeding the customers' needs, or the change in the list of parts or raw materials due to the change in product design scheme or the reduction of customer orders may cause some of the Company's parts and raw materials to become outdated or surplus during the inventory period, which may lead to decline in value of inventories.

If there is a significant adverse change in the future sales price of the products or the shipped products are rejected due to failure to pass the check of customers, the net realizable value of the inventory may be lower than the net book value, and the inventory depreciation reserve needs to be accrued, thereby affecting the Company's profitability.

(III) Risks of government grant-related policy

During the Reporting Period, the amount of government grants included in other incomes of the Company was RMB 20.8234 million Yuan, RMB 26.6669 million Yuan, RMB 25.9298 million Yuan and RMB 27.9161 million Yuan respectively. If the support for the Company's industry is weakened in the future according to the government authorities' policies, or other subsidy policies are adversely changed, the amount of government grants obtained by the Company will be reduced, which will have a certain adverse effect on the Company's operating performance.

(IV) Risks of tax preference

During the Reporting Period, the Company was entitled to high-tech corporate income tax preference and extra tax deductions for research and development costs. If there are major adjustments to China's laws, regulations and policies on tax incentives, or the Company cannot continue to obtain the qualification of a Chinese high-tech enterprise in the future or meet the conditions for extra tax deductions for research and development costs, the Company's operating performance will be affected to a certain degree.

(V) Risks of exchange rate fluctuation

During the Reporting Period, most of the Company's product sales were denominated in U.S., some raw materials and parts were purchased in U.S. and KRW, while other raw materials, parts, employee compensation, and other costs were denominated in RMB. The exchange rate of RMB against U.S. and KRW will affect the Company's operating performance. During the Reporting Period, the exchange losses of the Company's financial expenses were RMB -7.1695 million Yuan, RMB - 9.2465 million Yuan, RMB 28.4184 million Yuan and RMB 2.8672 million Yuan (negative sign represents income), respectively. The RMB exchange rate fluctuates with changes in the international political and economic environment, and has certain uncertainties. As the Company's business scale continues to expand, if the exchange rate of RMB against the US dollar and KWR fluctuates sharply in the future, which will bring certain uncertainty to the Company's performance, lead to the exchange loss and adversely affect the operating performance and financial conditions.

(VI) Risks of fluctuation in gross profit margin

The Company provides semiconductor special equipment for the semiconductor companies including wafer manufacturing, advanced packaging, and semiconductor wafer manufacturing companies. The Company's products have significant customized characteristics. The different customers may have different product configuration, performance requirements and bargaining capabilities. The price of the first order and the repeat order for the same customer may also be different, resulting in a certain difference in the Company's product gross profit margin. During the Reporting Period, the Company's main business gross profit margins were 43.80%, 44.67%, 42.65% and 40.56% respectively, which was relatively stable. If there will be significant changes in the Company's operating scale, product structure, customer resources, cost control, technological innovation advantages and other aspects, or the industry competition will intensify, resulting in a decline in the Company's product sales price, an increase in costs, or greater changes in customer demand. Therefore, the Company will face the risks on fluctuations in the main business gross profit margin.

(VII) Risks of net assets income rate falling

At the end of each Reporting Period, the Company's net asset balances were RMB 145,047,500 Yuan, RMB 829,929,000 Yuan, RMB 1,048,673,300 Yuan and RMB 1,147,431,100 Yuan respectively. Since the Company and its subsidiaries leased office buildings and factories from others to operate, and there were unrecovered losses and small balance of net assets during the Reporting Period. In 2019, the Company raised two rounds and the scale of net assets has expanded. In 2020, the Company's weighted average return on net assets after being deducted non-recurring gains and losses was 9.96%. After the closing of the Offering, the Company's net assets will increase significantly in a short period of time, and the fund-raising investment project will take some time from construction to production. In the short term, the Company's net profit may be difficult to keep pace with net assets, so the Company has the risk of falling returns on net assets.

V. Legal Risks

(I) Risk of intellectual property disputes

The industry of special semiconductor equipment in which the Company is located is a typical technology-intensive industry, a leading enterprise with technical advantage in the industry needs to protect its own core technologies through applying for patents. The business results obtained by the Company, to some degree, rely on its own system of intellectual properties and the ability of the Company to maintain such intellectual properties and preserve confidential information, as well as the ability of the Company to engage in its business without infringing on any patent of others. As of June 30, 2021, the Company and its subsidiaries in which it owns controlling equity interest own 322 major patents which have been granted with patent rights, among which, 152 patents are domestic patents, 170 patents are foreign patents, and 317 patents are invention patents.

The Company attaches great importance to protecting intellectual properties, assisting technology research and development personnel in generating patentable technology results, and improving the awareness of non-infringing intellectual properties of others. If an intellectual property dispute is brought by the Company against a competitor, or any intellectual property of the Company is infringed by a competitor, the production and operation of the Company will be adversely affected.

(II) Risk of defects in title of certain leased premises

Main plant and land used by the Company for production and operation at present are acquired by the means of lease. Among which, the premise located at Building 4, No. 1690 Cailun Road, Zhangjiang Hi-tech Park, Shanghai leased by the Company from Zhangjiang Group, the total area of which is 5,900.28 m², has not obtained the certificate of property title, the area of such premise accounts for approximately 30% of main property area used for production and operation of the Company, such premise is mainly used for office, research and development and storage. The project of ACMSH high-end semiconductor equipment research and development, a project which will be invested by using funds raised in this Offering, will also be implemented on such premise. Zhangjiang Group, the lessor, has confirmed to the Company that it has the right to rent out such premise, the Issuer's lease and use of such premise will not be affected by the ownership of such premise.

In addition, the premise located at Buildings 2 and 4, No.365 Chuanhong Road, Shanghai leased by the Company from Shanghai Shengyu Culture Development Co., Ltd. has been mortgaged and gone through the mortgage registration. Shanghai Shengyu Culture Development Co., Ltd., the lessor, has issued the Commitment Letter to warrant that the right of using plant by the Issuer will not be interrupted or suspended due to the mortgage of the above premise; in the case of such circumstances, the lessor will bear corresponding defaulting liabilities or is liable to make compensation for damages.

However, if any adjustment in local regional overall planning of Shanghai or other reason results in the demolition of the above premises, such premises cannot continue to be leased to the Company, or the realization of mortgage of such premises during the term of lease results in the Company's inability to continue to lease and use such premises, the day-to-day production and operation of the Company and the implementation of the project which will be invested by using funds raised in this Offering will be adversely affected.

VI. Risks of Offering Failure

According to requirements of relevant regulations, if the number of investors providing valid offers or investors making off-line subscriptions is less than the number as required by laws, or the total market value at the time of the Offering fails to reach the expected market value, this Offering shall be suspended. If the listing approval process of the Company exceeds the time limit as provided for by the exchange, or the offering registration process is suspended for more than 3 months and fails to be resumed, or there is any other adverse circumstance affecting the Offering, then the Company will exist risk of offering failure.

VII. Risks of Investment Projects of Raised Funds

(I) Risk of failure of investment projects of raised funds to realize expected economic effect

The projects to be invested by using funds raised in this Offering are ACMSH equipment research and manufacturing center, ACMSH high-end semiconductor equipment research and development project and supplementary working capital project. Although investment projects of raised funds in this Offering have gone through feasibility study and market research, but such study and research are made on the basis of current market environment, technical capacity, development tendency and other factors. In the course of actually implementing projects, it will be confronted with uncertainties, such as in overall economical situation, industrial market environment and technical innovation, and failure to realize breakthrough of key technologies in the course of research and development or failure of performance of researched and developed products to reach the anticipated effect, which will have adverse effect on the implementation of projects to be invested by funds raised by the Company.

(II) Risk of newly increased depreciation and amortization of fixed assets affecting profitability

After investment projects of raised funds in this Offering are built up, the total amount of newly increased depreciation and amortization of fixed assets is RMB 28.554 million Yuan per year after they reach design capacity, which will result in a dramatic increase in fixed production costs and expenses of the Company. After investment projects of raised funds are completed, if such projects cannot bring benefits or actual benefits of them are lower than expected, then the newly increased depreciation and amortization of fixed assets will exacerbate operating risks of the Company, which will have adverse effect on profitability of the Company.

VIII. Risks of Adverse Effect on the Semiconductor Industry Caused by the Global COVID-19 Epidemic

Since early 2020, the COVID-19 epidemic breaks out globally. To handle such major epidemic, various provinces and cities in China launched the first-level reaction of serious and unexpected public health incident and take various measures, such as sealing off cities, quarantine and postponing start dates after Spring Festival. At present, China and other Asian countries have contained the COVID-19 epidemic to a great extent, but there remains risk of second outbreak of the epidemic due to persons entering China.

If a manager or employee of the Company is absent from work due to his/her infection of epidemic, or cannot carry out on-site works because of quarantine, or cannot visit clients to provide services for them due to quarantine or other restrictions imposed by governmental authorities, or journeys to or from Mainland China, the United States and other countries are limited for a long time, it may result in adverse situations, such as extending period of research and development or manufacturing.

Considering that the Company almost does not engage in the business of parts processing, main raw materials and parts are obtained through external purchase or external coordination, and suppliers of the Company are located in Mainland China, the United States, South Korea, Japan, China Taiwan and other countries and regions. If the epidemic lasts for a long term or continues to exacerbate, the supply capacity of major suppliers of the Company may be affected in the future, the Company may need to look for replacing suppliers, which may result in the increase in costs, or the Company may be unable to find replacing sources. It may also affect logistics transportation of raw materials and parts and result in the delay of shipment by suppliers to the Company, which may lead to the delay of shipment by the Company to clients. All of the above may affect business results of the Company.

If the COVID-19 epidemic affects for a long term or exacerbates, or cannot be effectively controlled in Europe, North America, Japan, South Korea and other countries and regions for a long term, it may adversely affect the R&D and production of the Company, the supply of raw materials and parts of the Company, the sales of the Company to clients and other aspects, as well as economical and financial markets of major countries in the world, resulting in the recession of global economy and changes in economic policies of various countries, which may lead to continuous depression of the semiconductor industry from the origin and have materially adverse effect on businesses, operating results and financial situations of the Company.

IX. Relevant Risks of the Company and ACMR, the Controlling Shareholder, being Listed on the STAR Market and the NASDAQ Stock Market Respectively

After A-share stocks in this Offering are listed, the Company and ACMR, the controlling shareholder of the Company, will be listed on the STAR Market of Shanghai Stock Exchange and the NASDAQ Stock Market in the U.S. respectively. The Company and ACMR need to comply with laws and regulations and regulatory requirements on listing issued by regulatory authorities in both places at the same time, and shall simultaneously disclose information in both places which are required to be publicly disclosed according to laws.

Due to discrepancies in terms of laws and regulations and regulatory ideas in China and the United States, there are some discrepancies in terms of specific accounting treatment and financial information disclosure between the Company and ACMR as they are governed by different accounting standards. Meanwhile, the price of stocks of the Company listed on the STAR Market and the price of stocks of ACMR listed in NASDAQ stock market may be different due to differences in requirements of disclosing information on listed companies imposed by securities regulatory authorities, in language, culture and expression habit, in composition of investors in China and the United States and their investment ideas, and in specific situations of capital markets. Such differences and fluctuation in stocks of ACMR may affect the price of stocks listed on the STAR Market.

X. Other Risks

(I) Risk of fluctuation in stock price

The fluctuation in market price of stocks is not only dependent on business results and development prospect of the Company, but affected by macroeconomic cycle, interest rate, capital supply and demand and other factors, and at the same time, such market price will fluctuate because of changes in international and domestic political and economic circumstances and psychological factors of investors. The fluctuation in price of stocks is a normal phenomenon. For this purpose, the Company specially reminds investors that they must have consciousness of risk in order to make correct investment decisions.

The market price of stocks of the Company may dramatically fluctuate due to various factors, many of which are beyond the control of the Company, mainly including: fluctuation in macroeconomy, fluctuation in business performance and its expectation of listed companies in the industry in which the Company is located and relevant industries and price of stocks in the secondary market; changes in financial forecast of the Company's businesses and suggestion on holding stocks made by securities analysts, or the failure of the Company to realize estimates of the above financial forecast; changes in forecast on chip manufacturing industry or special semiconductor equipment industry made by third-party research institutions; sales of stocks of the Company by shareholders of the Company in the secondary market; fluctuation in indexes and trading amount in the stock market of China, as a whole, and the STAR Market; litigations brought by clients, suppliers, competitors and employees against the Company; litigations, disputes or controversies on patents involving the Company; disposals or investigations made by China Securities Regulatory Commission, Shanghai Stock Exchange and other regulatory authorities; geopolitical events, such as wars or terrorism acts, etc.

In conclusion, investment return coexists with investment risks in the stock market, investors shall make adequate preparations for this.

(II) Risk of force majeure

In the day-to-day operation of the Company, damages caused to assets, personnel and suppliers or clients of the Company arising from force majeure events (including political factors, natural disasters, wars) cannot be excluded, which may have adverse effect on the production and operation of the Company.

Section V Overview of the Issuer

I. Overview of the Issuer

Name:	盛美半导体设备（上海）股份有限公司
English Name:	ACM Research (Shanghai), Inc
Legal Representative :	HUI WANG
Share Capital:	RMB 390,201,347 Yuan
Date of Establishment:	May 17, 2005
Date of Overall Change:	November 21, 2019
Domicile:	Building 4, No.1690 Cailun Road, China (Shanghai) Pilot Free Trade Zone
Post Code:	201203
Telephone:	021-50808868
Fax:	021-50808860
Internet Address:	www.acmrcsh.com.cn
Email Address:	ir@acmrcsh.com
Information Disclosure Department:	Board Office
Person in Charge of Information Disclosure:	MINGZHU LUO
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II. Establishment and Reorganization of the Issuer

(I) Establishment of ACM Research (Shanghai), Inc.

On April 25, 2005, Shanghai Songjiang Export Processing Zone Management Committee issued *the Approval for the Feasibility Study Report and the Articles of Association of the Wholly Foreign-Owned Enterprise ACM Research (Shanghai), Inc.* (Song Chu Pi Zi (2005) No.024), agreeing ACMR to establish ACM Research (Shanghai), Inc., with the registered capital of US\$1.2 million , the business scope of the design, production, processing of electronic special equipment and parts, sales of self-produced products, and provision of after-sales technical services and consulting services (for the above items subject to the administrative permits, relevant permits shall be obtained for operation).

On April 29, 2005, Shanghai Municipal People's Government approved and issued *the Certificate of Approval for Establishment of Enterprises with Foreign Investment* (Shang Wai Zi Hu Song Chu Du Zi Zi [2005] No.1229).

On May 17, 2005, ACMSH completed the industrial and commercial registration and obtained the business license issued by the Shanghai Administration for Industry and Commerce.

On August 15, 2005, Shanghai Shangzi Accounting Firm Co., Ltd. verified the paid-up status of the registered capital of ACMSH and issued *the Capital Verification Report* (Shang Zi Kuai Yan (2005) No. 101), verifying that up to August 9, 2005, ACMSH, had received the registered capital of US\$ 180,088 from the investors.

The equity structure of ACMSH upon establishment was as follows as of August 2005:

No.	Name of Shareholder	Subscribed Capital Contribution (Ten Thousand US)	Paid-up Capital Contribution (Ten Thousand US)	Proportion of Shareholding (%)
1	ACMR	120	18.0088	100
Total		120	18.0088	100

(II) Establishment of ACMSH

ACMSH is a joint stock limited company established by the overall change of ACMSH (before restructuring). On October 30, 2019, the board of directors of ACMSH passed a resolution that the Company's name should be changed to “盛美半导体设备（上海）股份有限公司 (ACM Research (Shanghai), Inc.)” and the Company should be changed into a joint stock limited company as a whole by taking August 31, 2019 as the base date for restructuring. On October 30, 2019, all shareholders of ACMSH, as the promoters, signed *the Promoters' Agreement*, agreeing that on the basis of the net assets as of August 31, 2019 audited by BDO China RMB 552,890,000 Yuan, it shall be converted to 372,649,808 shares at the rate of 1: 0.6740, with the remaining RMB 180,240,200 Yuan included in the capital reserves and the registered capital of ACMSH RMB 372,649,800 Yuan.

On November 15, 2019, the Company handled the registration of change of foreign-invested enterprises at the Management Committee of China (Shanghai) Pilot Free Trade Zone and obtained *the Receipt of Registration of Change of Foreign-invested Enterprises*.

On November 21, 2019, the Company obtained the business license issued by Shanghai Municipal Administration for Market Supervision (Unified Social Credit Code: 91310000774331663A).

BDO China verified the paid-up registered capital after the overall change and issued *the Capital Verification Report* (Xin Kuai Shi Bao Zi [2020] No. ZI10024)”, confirming that the promoters' capital contributions had been paid in full and on time as of November 14, 2019.

The equity structure of ACMR upon establishment was as follows:

No.	Name of Shareholders	Shares Held (Ten Thousand Shares)	Proportion of Shareholding (%)
1	ACMR	35,769.2308	95.99
2	Xinwei Consulting	475.6154	1.28
3	[***]	230.7692	0.62
4	Jinpu Investment	192.3077	0.52
5	Taihu Guolian	192.3077	0.52
6	Xinshi Consulting	178.1923	0.48
7	Hai Feng Investment	153.8462	0.41
8	Xingang Consulting	72.7115	0.20
Total		37,264.9808	100.00

1. The reason why the cumulative undistributed loss has been formed upon the establishment of the Company by the overall change

When ACMSH (before restructuring) was changed to ACMSH as a whole, the undistributed profit shown on the financial statements as of the base date for restructuring August 31, 2019 was RMB -14,168,800 Yuan. Such cumulative loss was mainly due to the facts that the Company had made large amount of investments in product technology research and development at the beginning of the business development and meanwhile the product development cycle was long while the Company obtained low sales income in the early market cultivation.

2. As of December 31, 2019, the Company's cumulative undistributed losses had been eliminated.

During the Reporting Period, with the continuous improvement of the Company's technical level, product maturity and market recognition of the Company's products, the Company's business was expanded rapidly, sales incomes continued to grow, and continuous profits were maintained during the Reporting Period. As of December 31, 2019, the Company's cumulative undistributed losses had been eliminated, and the Company's undistributed profits had amounted to RMB 65,594,700 Yuan.

The Company's earnings were as follows:

In RMB 10,000 Yuan

Item	2019/ December 31, 2019	2018/ December 31, 2018	2017/ December 31, 2017
Consolidated Financial Statements			
Operating Income	75,673.30	55,026.91	25,358.73
Net Profit	13,488.73	9,253.04	1,086.06
Undistributed Profit	6,559.47	-7,598.98	-16,852.02
Financial Statements of the Parent Company			
Operating Income	72,799.03	53,826.81	25,358.73
Net Profit	14,076.03	8,785.44	1,091.39
Undistributed Profit	6,724.45	-8,021.29	-16,806.73

3. Specific Plan of the Overall Change and the Corresponding Accounting Treatments

As of August 31, 2019, as audited by BDO CHINA SHU LUN PAN Certified Public Accountants LLP ("BDO China"), the paid-up capital of ACMSH was RMB 372,649,800 Yuan, the undistributed profit was RMB -14,168,800 Yuan, and the net asset was RMB 552,890,000 Yuan.

On the basis of the net assets of ACMSH RMB 552,890,000 Yuan as of August 31, 2019, it was converted to 372,649,808 shares at the rate of 1:0.6740, with the remaining RMB 180,240,200 Yuan included in the capital reserves and the registered capital of ACMR RMB 372,649,800 Yuan, which was established by overall change from ACMSH.

The Company adopted the following accounting treatments upon the overall change:

In RMB 10,000 Yuan

Debit/Credit	Accounting Name	Amount
Debit	Paid-up Capital	37,264.98
Debit	Undistributed Profit	-1,416.88
Debit	Capital Reserves	19,440.89
Credit	Share Capital	37,264.98
Credit	Capital Reserves - Share Premium	18,024.01

4. The Procedures Performed for the Overall Change, Legal Compliance and Legal Rights and Interests of Creditors in the Process of Restructuring

On October 30, 2019, the board of directors of ACMSH passed a resolution on its overall change to a joint stock limited company. BDO China audited the financial statements of ACMSH as of August 31, 2019 and issued *the Audit Report* (Xin Kuai Shi Bao Zi [2019] No. ZI10682). China United Assets Appraisal Group Co., Ltd. issued the *Asset Appraisal Report* (Zhong Lian Ping Bao [2019] No. 1812) taking August 31, 2019 as the base date of the asset appraisal. On October 30, 2019, all shareholders of ACMSH signed *the Promoters' Agreement*. On November 14, 2019, with the approval of the founding meeting of the Issuer and the first shareholders' meeting, the Company as a whole was changed into a joint stock limited company with the audited net assets as of August 31, 2019.

After the overall change and establishment of the joint stock limited company, the Company inherited all the assets and liabilities of ACMSH (before restructuring), and there was no circumstance that infringed the legitimate rights and interests of its creditors; as of the date of signing of the [***], the Issuer has not had any dispute with its creditors over the overall change.

As of the date of signing the [***], the Company has completed the procedures related to the industrial and commercial registration and tax registration of the overall change in accordance with *the Company Law* and other laws and regulations.

(III) Changes in the shareholders of the Issuer

During the Reporting Period, changes in the Issuer's share capital and shareholders were as follows:

1. Equity Structure of the Issuer at the Beginning of the Reporting Period

On January 1, 2017, the equity structure of the predecessor of the Company -ACMSH (before restructuring) was as follows:

No.	Name of Shareholder	Subscribed Capital Contribution (RMB 10,000 Yuan)	Paid-up Capital Contribution (RMB 10,000 Yuan)	Proportion of Shareholding (%)
1	ACMR	13,400.0000	13,400.0000	62.87
2	Shanghai Venture Capital Co., Ltd.	4,000.0000	4,000.0000	18.77
3	ZJTVC	1,615.1250	1,615.1250	7.58
4	PDHTI	2,297.3700	2,297.3700	10.78
Total		21,312.4950	21,312.4950	100.00

2. In August, 2017, the Second Equity Transfer of ACMSH

On January 4, 2017, the Office of Leading Group of Invigorating the City with Science and Education in Shanghai issued *the Reply to the Exit Plan of the Special Fund for Invigorating the City with Science and Education from ACM Research (Shanghai) Co., Ltd.* (Hu Tui Ban [2017] No.1), agreeing that Shanghai Venture Capital Co., Ltd. withdraws RMB 40 million Yuan Special Fund for Invigorating the City with Science and Education from ACMSH at its original value.

On March 23, 2017 and July 27, 2017, ACMR signed a *Share Subscription Agreement* and Supplementary Agreement respectively with Shanghai Science and Technology Venture Capital Co., Ltd., agreeing on matters including the subscription of ACMR by Shanghai Science and Technology Venture Capital Co., Ltd. Both Shanghai Science and Technology Venture Capital Co., Ltd. and Shanghai Venture Capital Co., Ltd. are wholly-owned subsidiaries of Shanghai Science and Technology Venture Capital (Group) Co., Ltd.

On May 2, 2017, Shanghai Venture Capital Co., Ltd. and ACMR signed a *Shanghai Assets and Equity Exchange Contract*, stipulating that Shanghai Venture Capital Co., Ltd. would transfer its 18.77% equity of ACMSH to ACMR for RMB 40 million Yuan.

On June 12, 2017, Shanghai United Assets and Equity Exchange issued *the Transaction Certificate (Type A2 - Unlisted)*, setting forth that with the approval of the Office of Leading Group of Invigorating the City with Science and Education in Shanghai, Shanghai Venture Capital Co., Ltd., as the transferor, transferred 18.77% equity of ACMSH held by it to the transferee ACMR, at the transfer price of RMB 40 million Yuan, which complied with the procedural provisions for the transaction.

On August 10, 2017, the board of directors of ACMSH passed the resolution on the above equity transfer. On the same day, ACMR, ZJTVC and PDHTI signed a new *Joint Venture Contract*.

On August 15, 2017, ACMSH handled the registration of change of foreign-invested enterprises at the Management Committee of China (Shanghai) Pilot Free Trade Zone and obtained *the Receipt of Registration of Change of Foreign-invested Enterprises*.

On September 28, 2017, ACMSH completed the industrial and commercial registration and obtained the business license issued by the Market Supervision Administration of China (Shanghai) Pilot Free Trade Zone. Upon completion of the change, the equity structure of ACMSH was as follows:

No.	Name of Shareholder	Subscribed Capital Contribution (RMB 10,000 Yuan)	Paid-up Capital Contribution (RMB 10,000 Yuan)	Proportion of Shareholding (%)
1	ACMR	17,400.0000	17,400.0000	81.64
2	ZJTVC	1,615.1250	1,615.1250	7.58
3	PDHTI	2,297.3700	2,297.3700	10.78
Total		21,312.4950	21,312.4950	100.00

3. In November, 2017, the Third Equity Transfer of ACMSH

On August 31, 2017, ACMR, ZJTVC and Zhangjiang AJ Company Limited, a wholly-owned subsidiary of ZJTVC signed a *Shares Subscription Agreement*, agreeing on matters including the transfer of whole shares of ACMSH held by ZJTVC to ACMR, and the issuance of Class A Common Shares to Zhangjiang AJ Company Limited by ACMR.

On the same day, ACMR, PDHTI and Pudong Science and Technology (Cayman) Co., Ltd., a wholly-owned subsidiary of PDHTI signed a *Shares Subscription Agreement*, agreeing on the transfer of whole shares of ACMSH held by PDHTI to ACMR, and the issuance of Class A Common Shares to Pudong Science and Technology (Cayman) Co., Ltd. by ACMR.

On November 2, 2017, ZJTVC and PDHTI signed a *Shanghai Assets and Equity Exchange Contract* with ACMR, which agreed that ZJTVC would transfer its 7.58% equity in ACMSH, and PDHTI would transfer its 10.78% equity in ACMSH, totaling 18.36% equity, to ACMR, for RMB 95,655,600 Yuan. The transfer price in this transaction was RMB 2.44 Yuan/unit registered capital, which had been determined according to the *Asset Appraisal Report* issued by Shanghai Orient Appraisal Co., Ltd. (Dong Zhou Ping Bao Zi (2017) No.0594). The appraisal value of ACMSH was RMB 521 million Yuan as of December 31, 2016.

On November 7, 2017, Shanghai United Assets and Equity Exchange issued the *Transaction Certificate of Shanghai United Assets and Equity Exchange (Type A1 - Listed)*, setting forth that ZJTVC and PDHTI, as the transferors, transferred 18.36% equity of ACMSH held by them to the transferee ACMR, at the transfer price of RMB 95,655,600 Yuan, which complied with the procedural provisions for the transaction.

On November 8, 2017, the board of directors of ACMSH passed the resolution on the above equity transfer.

On December 5, 2017, ACMSH handled the registration of change of foreign-invested enterprises at the Management Committee of China (Shanghai) Pilot Free Trade Zone and obtained the *Receipt of Registration of Change of Foreign-invested Enterprises*.

On May 3, 2018, ACMSH completed the industrial and commercial registration and obtained the business license issued by the Market Supervision Administration of China (Shanghai) Pilot Free Trade Zone. Upon completion of the change, the equity structure of ACMSH was as follows:

No.	Name of Shareholder	Subscribed Capital Contribution (RMB 10,000 Yuan)	Paid-up Capital Contribution (RMB 10,000 Yuan)	Proportion of Shareholding (%)
1	ACMR	21,312.4950	21,312.4950	100.00
Total		21,312.4950	21,312.4950	100.00

4. In May, 2019, the Fourth Capital Increase of ACMSH

On May 6, 2019, ACMR, the shareholder of ACMSH, made a shareholder's decision that the Company would increase the registered capital by RMB 144,567,357.69 Yuan, all of which would be subscribed by ACMR. The capital increase price would be RMB 1 Yuan/unit registered capital, which would increase the registered capital to RMB 357,692,307.69 Yuan.

On May 29, 2019, ACMSH completed the industrial and commercial registration and obtained the business license issued by the Market Supervision Administration of China (Shanghai) Pilot Free Trade Zone.

On June 14, 2019, ACMSH handled the registration of change of foreign-invested enterprises at the Management Committee of China (Shanghai) Pilot Free Trade Zone and obtained *the Receipt of Registration of Change of Foreign-invested Enterprises*.

On July 4, 2019, BDO China verified the paid-up status of the registered capital of ACMSH, and issued *the Capital Verification Report* (Xin Kuai Shi Bao Zi [2019] No. ZI10586). As of June 26, 2019, ACMSH had received the newly increased capital of RMB 144,567,357 Yuan paid by ACMR.

Upon completion of the change, the equity structure of ACMSH was as follows:

No.	Name of Shareholder	Subscribed Capital Contribution (RMB 10,000 Yuan)	Paid-up Capital Contribution (RMB 10,000 Yuan)	Proportion of Shareholding (%)
1	ACMR	35,769.2308	35,769.2308	100.00
Total		35,769.2308	35,769.2308	100.00

5. In June, 2019, the Fifth Capital Increase of ACMSH

On June 26, 2019, the board of directors of ACMSH passed the resolution that the registered capital of the Company increased from RMB 357,692,307.69 Yuan to RMB 372,649,807.69 Yuan. The newly increased registered capital would be subscribed in cash by seven new shareholders including Xinwei Consulting, [***], Taihu Guolian, Jinpu Investment, Xinshi Consulting, Hai Feng Investment and Xingang Consulting. In June 2019, the above shareholders signed *the Capital Increase Agreement* with ACMSH: Xinshi Consulting and Xingang Consulting were the employee stock ownership platforms, the capital increase price of which was RMB 10.40 Yuan/unit registered capital, while the other five new shareholders' capital increase price was RMB 13 Yuan/unit registered capital. On the same day, ACMR signed a new *Joint Venture Contract* with the above new shareholders, agreeing on the aforesaid capital contribution matters.

On July 22, 2019, ACMSH handled the registration of change of foreign-invested enterprises at the Management Committee of China (Shanghai) Pilot Free Trade Zone and obtained *the Receipt of Registration of Change of Foreign-invested Enterprises*.

On August 20, 2019, ACMSH completed the industrial and commercial registration and obtained the business license issued by the Market Supervision Administration of China (Shanghai) Pilot Free Trade Zone.

On August 29, 2019, BDO China verified the paid-up status of the registered capital of ACMSH, and issued *the Capital Verification Report* (Xin Kuai Shi Bao Zi [2019] No. ZI10620). As of August 22, 2019, ACMSH had received the newly increased capital of RMB 187,924,000 Yuan paid by the above shareholders, with RMB 14,957,500 Yuan included in the registered capital and RMB 172,966,500 Yuan included in the capital reserves.

Upon completion of the increase, the equity structure of ACMSH was as follows:

No.	Name of Shareholder	Subscribed Capital Contribution (RMB 10,000 Yuan)	Paid-up Capital Contribution (RMB 10,000 Yuan)	Proportion of Shareholding (%)
1	ACMR	35,769.2308	35,769.2308	95.99
2	Xinwei Consulting	475.6154	475.6154	1.28
3	[***]	230.7692	230.7692	0.62
4	Jinpu Investment	192.3077	192.3077	0.52
5	Taihu Guolian	192.3077	192.3077	0.52
6	Xinshi Consulting	178.1923	178.1923	0.48
7	Hai Feng Investment	153.8462	153.8462	0.41
8	Xingang Consulting	72.7115	72.7115	0.20
Total		37,264.9808	37,264.9808	100.00

6. In November 2019, the Overall Change of ACMSH to Establish a Joint Stock Company Limited

With respect to the overall change of ACMSH to establish a joint stock company limited, please refer to “II (II) Establishment of A Joint Stock Company Limited” in Section V “General Information of the Issuer” of the [***].

7. In November, 2019, the First Capital Increase of ACMSH

On November 29, 2019, the first extraordinary general meeting of ACMSH passed the resolution that the registered capital of the Company increased from RMB 372,649,808 Yuan to RMB 390,201,347 Yuan. The newly increased registered capital would be subscribed in cash by eight new shareholders including Yongkong Consulting, SYEM, Shangrong Innovation, SRJY, Runguang Investment, SICIF, PDHTI and ZJTVC. In November 2019, the above shareholders signed *the Capital Increase Agreement* with ACMSH, with the capital increase price of RMB 13.00 Yuan/Share.

On December 13, 2019, ACMSH completed the industrial and commercial registration and obtained the business license issued by the Market Supervision Administration of China (Shanghai) Pilot Free Trade Zone.

On December 18, 2019, ACMSH handled the registration of change of foreign-invested enterprises at the Management Committee of China (Shanghai) Pilot Free Trade Zone and obtained *the Receipt of Registration of Change of Foreign-invested Enterprises*.

BDO China verified the paid-up status of the registered capital of ACMSH and issued *the Capital Verification Report* (Xin Kuai Shi Bao Zi [2020] No. ZI10025). As of December 10, 2019, ACMSH had received the newly increased capital of RMB 228,170,000 Yuan paid by the above shareholders, with RMB 17,551,500 Yuan included in the registered capital and RMB 210,618,500 Yuan included in the capital reserves

Upon completion of the capital increase, the equity structure of ACMSH was as follows:

No.	Name of Shareholder	Quantity of Shares Held (Ten Thousand Shares)	Proportion of Shareholding (%)
1	ACMR	35,769.23	91.67
2	Xinwei Consulting	475.62	1.22
3	SICIF	461.54	1.18
4	PDHTI	461.54	1.18
5	[***]	230.77	0.59
6	Shangrong Innovation	207.69	0.53
7	Jinpu Investment	192.31	0.49
8	Taihu Guolian	192.31	0.49
9	Xinshi Consulting	178.19	0.46
10	Yongkong Consulting	176.92	0.45
11	Hai Feng Investment	153.85	0.39
12	Runguang Investment	153.85	0.39
13	ZJTVC	153.85	0.39
14	SYEM	116.69	0.30
15	Xingang Consulting	72.71	0.19
16	SRJY	23.08	0.06
Total		39,020.13	100.00

(IV) Material assets reorganization during the Issuer's Reporting Period

During the Reporting Period, no material assets reorganization of the Company has occurred.

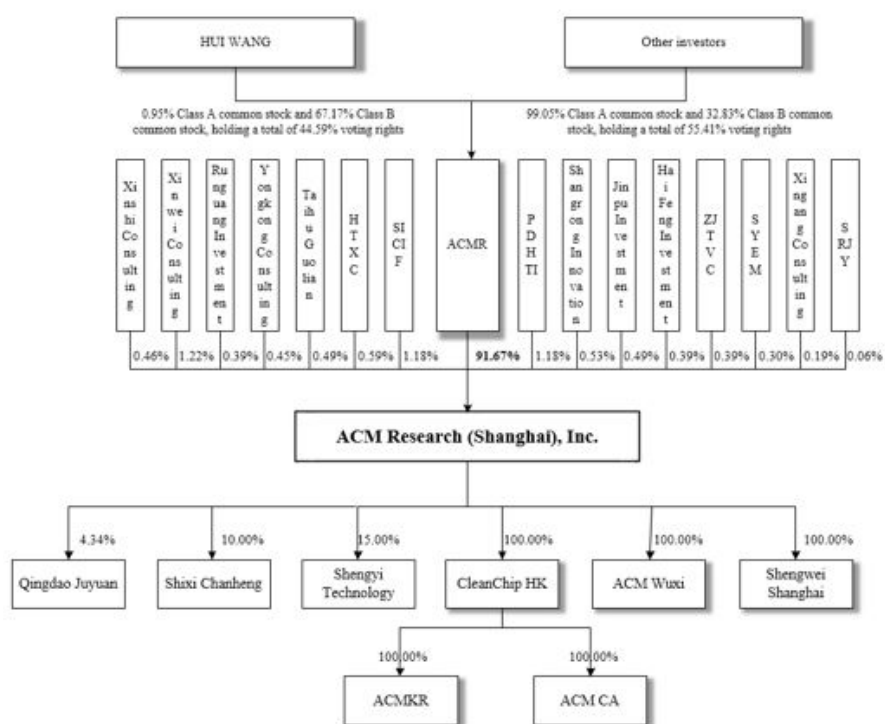
In November 2019, the Company acquired the 100% equity of CleanChip HK held by the controlling shareholder ACMR by way of equity transfer. For details, please refer to "IV (I) Majority Owned Subsidiaries" in this Section.

(V) Listing of the Issuer in other securities markets

Since its establishment, the Company has not been listed in other securities markets. The controlling shareholder of the Issuer, ACMR, was listed on NASDAQ stock market in 2017 under the stock code ACMR. The details of ACMR are set forth in "V (I) Controlling Shareholders and Actual Controller" in this Section.

III . Equity Structure of the Issuer

As of June 30, 2021, the equity structure of the Company is as follows:



IV. Majority Owned Subsidiaries and Equity Participation Companies of the Issuer

(I) Majority owned subsidiaries

As of the signing date of the [***], the Company has 5 majority owned subsidiaries, the details of which are as follows:

1. CleanChip HK

(1) Basic Information

Name	清芯科技有限公司
English Name	CleanChip Technologies Limited
Address	FLAT/RM K 15/F, MG TOWER, 133 HOI BUN ROAD, KWUN TONG KL, HONGKONG
Legal Representative	HUI WANG
Registered Capital	10 Hong Kong
Date of Establishment	June 9, 2017
Main Business and Its Relationship with Main Business of the Issuer	Sales of Special Equipment for Semiconductors; Sales Platform of the Issuer's Export Business
Shareholders	The Company holds its 100% equity interests.

CleanChip HK was established in June 2017 and it is mainly engaged in the sales of special semiconductor equipment. CleanChip HK was 100% owned by ACMR when it was established, and its equity structure had remained unchanged until the acquisition of CleanChip HK by ACMSH.

(2) Acquisition of CleanChip HK

On November 29, 2019, the Company's first extraordinary general meeting of shareholders in 2019 passed the resolution that ACMSH would acquire the 100% equity of CleanChip HK from ACMR in the form of cash. On the same day, ACMSH signed a *Share Transfer Agreement* with ACMR, under which ACMSH purchased all equities of CleanChip HK from ACMR for US\$3.5 million. The price of this transaction was determined by the Company based on the *Assets Appraisal Report for the Project that ACM Research (Shanghai), Inc. Intends to Acquire All Shareholders' Equities of CleanChip Technologies Limited* (Zhong Lian Ping Bao Zi [2019] No.1879) issued by China United Assets Appraisal Group Co., Ltd. The appraised net asset value of CleanChip HK was RMB 24.875 million Yuan as of June 30, 2019.

In December, 2019, the Company received the *Notice of Recordation of an Overseas Investment Project* (Hu Zi Mao Guan Kuo Jing Wai Bei [2019] No.276) and the *Enterprise Overseas Investment Certificate* (Jing Wai Tou Zi Zheng No. N3100201901015) issued by the Management Committee of China (Shanghai) Pilot Free Trade Zone.

On February 24, 2020, the Company completed the foreign exchange registration procedures related to the payment of the purchase price in the acquisition, and paid the equity transfer fund of US\$3.5 million to ACMR on the next day.

(3) Financial Data

The main financial data of CleanChip HK in the latest year audited by BDO China are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	52,291.91	44,261.03
Net Assets	-2,092.06	-1,570.57
Net Profit	-538.07	-1,028.28

Note: The above financial data comes from the separate financial statement of CleanChip HK.

2. ACM Wuxi

Name	ACM Research (Wuxi), Inc.
Unified Social Credit Code	91320214579450405R
Domicile	J1-6, Export Processing Zone, Wuxi New District
Legal Representative	HUI WANG
Registered Capital	RMB 5 million Yuan
Paid-in Capital	RMB 5 million Yuan
Date of Establishment	July 14, 2011
Type of Company	Limited Liability Company (Sole Proprietorship by Legal Person)
Business Scope	The design, production, processing of electronic special equipment and parts, sales of self-produced products, and provision of after-sales technical services and consulting services (for the above items subject to the administrative permits, relevant permits shall be obtained for operation)
Main Business and Its Relationship with Main Business of the Issuer	After-sales services for semiconductor equipment; providing after-sales services for some clients of the issuer
Shareholder	The Company holds its 100% equity interests.

ACM Wuxi is 100% owned by ACMSH and its equity structure has remained unchanged since its establishment. The main financial data of ACM Wuxi in the latest year audited by BDO China are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	205.27	81.33
Net Assets	-168.51	-205.64
Net Profit	37.13	-647.35

3. Shengwei Shanghai

Name	Shengwei Semiconductor Equipment (Shanghai) Co., Ltd.
Unified Social Credit Code	91310115MA1HAJFA8M
Domicile	Building C, No.888 Huanhu West II Road, Nanhui New Town, Lingang New Area, China (Shanghai) Pilot Free Trade Zone
Legal Representative	HUI WANG
Registered Capital	RMB 5 million Yuan
Paid-in Capital	RMB 1 million Yuan
Date of Establishment	March 25, 2019
Type of Company	Limited Liability Company (Sole Proprietorship by WFOE Legal Person)
Business Scope	The technology development, technical services, technical consulting and technology transfer in the field of semiconductor equipment technology, the design and sales of electronic equipment and its parts, the import and export of goods and technology. (for the above items subject to the administrative permits, relevant permits shall be obtained for operation)
Main Business and Its Relationship with Main Business of the Issuer	Intending to be engaged in research and development, production and sales of semiconductor special equipment; under construction, not yet carrying out any business.
Shareholder	The Company holds its 100% equity interests.

Shengwei Shanghai is 100% owned by ACMSH and its equity structure has remained unchanged since its establishment. The main financial data of Shengwei Shanghai in the latest year audited by BDO China are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	33,422.16	33,314.73
Net Assets	57.45	141.49
Net Profit	-84.03	-158.50

4. ACMKR

Name	ACM Research Korea Co., LTD.
Registration No.	134411-0078948
Registered Address	No.402, 2106 Gyeongchung-daero, Bubal-eup, Icheon-si, Gyeonggi-do (Modern City Plaza)
CEO	YOUNG YOUL KIM
Registered Capital	KRW 100 Million
Number of Issued Shares	20,000 shares
Date of Establishment	December 5, 2017
Main Business and Its Relationship with Main Business of the Issuer	Research and development, production and sales of semiconductor special equipment; conducting research and development of semiconductor special equipment and the spare parts for the Issuer, and at the same time, purchasing the spare parts of semiconductor special equipment for the Issuer
Shareholders	CleanChip HK holds its 100% equity interests.

ACMKR is 100% owned by CleanChip HK and its equity structure has remained unchanged since its establishment. The main financial data of ACMKR in the latest year audited by BDO China are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	5,112.69	4,211.31
Net Assets	610.88	335.57
Net Profit	197.19	3.29

5. ACM CA

Name	ACM Research (CA), Inc.
Address	42307 Osgood Road, Suite #I, ROOM B, Fremont, CA 94539
Director	JIAN WANG
Number of Shares Outstanding	10,000 shares
Main Business and Its Relationship with Main Business of the Issuer	Purchase and sales of the spare parts of semiconductor special equipment; purchasing the spare parts of semiconductor special equipment for the Issuer
Date of Establishment	April 5, 2019
Shareholder	CleanChip HK holds its 100% equity interests.

ACM CA is 100% owned by CleanChip HK and its equity structure has remained unchanged since its establishment. The main financial data of ACM CA in the latest year audited by BDO China are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	7,476.70	3,129.06
Net Assets	765.34	383.71
Net Profit	386.14	423.12

(II) Equity participation companies

As of the signing date of the [***], the Company has 3 equity participation companies, the details of which are as follows:

1. Shengyi Technology

Name	Shengyi Semiconductor Technology (Wuxi) Co., Ltd.
Unified Social Credit Code	91320214MA1XD32R1A
Domicile	F/7, China Internet of Things International Innovation Park, 200 Linghu Avenue, Xinwu District, Wuxi
Legal Representative	BEIYI WANG
Registered Capital	RMB 5 million Yuan
Type of Company	Limited Liability Company
Business Scope	Semiconductor technology development, technical services, technical consultation and technology transfer; Semiconductor equipment production, sales, installation, maintenance, testing; Sales of electronic products, electrical and mechanical equipment, mechanical equipment and accessories, instrumentation, chemical raw materials and products (with the hazardous chemicals business permit), metal materials, environmental protection equipment, metal products, rubber and plastic products, electrical and mechanical equipment, hardware and electrical equipment, building materials, chemical raw materials (except dangerous goods), fire-fighting equipment, packaging materials, furniture supplies, office supplies, articles of daily use, cleaning supplies; Import and export of all kinds of commodities and technologies on its own behalf or on behalf of others (except for commodities and technologies whose import and export are restricted or prohibited by the state). (For the above items subject to the administrative permits, relevant permits shall be obtained for operation)
Main Business	Production and sales of components and parts of semiconductor special equipment
Date of Establishment	October 29, 2018

As of the signing date of the [***], the equity structure of Shengyi Technology is as follows:

No.	Name of Shareholder	Subscribed Capital Contribution (RMB 10,000 Yuan)	Proportion of Contributions (%)
1	BEIYI WANG	425	85
2	ACMSH	75	15
Total		500	100

The main financial data of Shengyi Technology in the latest year are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	3,976.94	1,690.61
Net Assets	825.63	586.44
Net Profit	257.87	68.49

Note: the above data have not been audited.

2 . Shixi Chanheng

Name	Hefei Shixi Chanheng Integrated Circuit Venture Capital Fund (L.P.)
Unified Social Credit Code	91340111MA2U3KUJ5C
Domicile	Room 6103, Haiheng Building, No.6 Cuiwei Road, Hefei Economic and Technological Development Area, Anhui Province
Managing Partner	Beijing Shixi Qingliu Investment Co., Ltd.
Type of Enterprise	Limited Partnership
Business Scope	Venture project investment; Venture capital investment consulting; Provision of entrepreneurial management services for enterprises. (For projects subject to approval according to law, business activities can only be carried out after the approval of relevant departments)
Main Business	Venture capital investment, consulting and entrepreneurial management services
Date of Establishment	September 10, 2019

As of the signing date of the [***], the equity structure of Shixi Chanheng is as follows:

No.	Name of Partners	Subscribed Capital Contributions (RMB 10,000 Yuan)	Proportion of Contributions (%)
1	Hefei Tongyi Equity Investment Partnership (L.P.)	7,600	25.33
2	Hefei Economic and Technological Development Zone Industrial Investment Guide Fund Co., Ltd.	6,600	22.00
3	Infotech National Emerging Fund (L.P.)	6,500	21.67
4	Hefei Guozheng Assets Management Co., Ltd.	5,000	16.67
5	ACMSH	3,000	10.00
6	Shenzhen Waitan Technology Development Co., Ltd.	1,000	3.33
7	Beijing Shixi Qingliu Investment Co., Ltd.	300	1.00
Total		30,000	100.00

The main financial data of Shixi Chanheng in the latest year are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	29,644.41	29,908.96
Net Assets	29,344.41	29,608.96
Net Profit	-264.55	-322.91

Note: the above data have not been audited.

3. Qingdao Juyuan

Name	Qingdao Juyuan Xinxing Equity Investment Partnership (L.P.)
Unified Social Credit Code	91370214MA3T7CBF22
Domicile	302, Building 10, 89 Changcheng Road, Chengyang Street, Chengyang District, Qingdao, Shandong Province
Managing Partner	China Fortune-Tech Capital Co., Ltd.
Type of Enterprise	Limited Partnership
Business Scope	Equity investment with its own funds, asset management, investment management, equity investment management, venture capital and venture capital management (without the approval of the financial regulatory department according to law, it is not allowed to engage in financial services such as deposit absorption from the public, financing guarantee and financial management services for clients); Economic information consultation (excluding finance, securities, futures, financial management, fund-raising, financing and other related businesses). (For projects subject to approval according to law, business activities can only be carried out after the approval of relevant departments.)
Main Business	Equity investment and asset management
Date of Establishment	June 4, 2020

As of the date hereof, the equity structure of Qingdao Juyuan is as follows:

No.	Name of Partners	Subscribed Capital Contributions (RMB 10,000 Yuan)	Proportion of Contributions (%)
1	China Fortune-Tech Capital Co., Ltd.	500	0.22%
2	Advanced Micro-Fabrication Equipment Inc. China	30,000	13.02%
3	Shanghai Sinyang Semiconductor Materials Co., Ltd.	30,000	13.02%
4	Zing Semiconductor Corporation	20,000	8.68%
5	LanChi Investment Co., Ltd.	20,000	8.68%
6	Will Semiconductor CO., Ltd. Shanghai	20,000	8.68%
7	TIANJIN ZHONGHUAN SEMICONDUCTOR CO., LTD.	20,000	8.68%
8	Shenzhen Goodix Technology Co., Ltd.	20,000	8.68%
9	Giantec Semiconductor Corporation	10,000	4.34%
10	Allwinnertech Technology Co., Ltd.	10,000	4.34%
11	Anji Microelectronics Technology (Shanghai) Co., Ltd.	10,000	4.34%
12	ACMSH	10,000	4.34%
13	Shanghai Laimu Electronics Co., Ltd	10,000	4.34%
14	Konfoong Materials International Co., Ltd.	10,000	4.34%
15	PNC Process Systems Co., Ltd.	10,000	4.34%
Total		230,500	100.00%

Established in June 2020, Qingdao Juyuan has the main financial data in the last year as follows:

In RMB 10,000 Yuan

Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	481,326.60	425,041.61
Net Assets	481,326.60	425,041.61
Net Profit	56,284.99	198,041.61

Note: the above data have not been audited.

V. Basic Information of Major Shareholders Holding More than 5% of the Shares and the Actual Controller

(I) Controlling shareholder and actual controller

1. Controlling Shareholder

As of the signing date of the [***], ACMR holds 91.67% of the shares of the Company. ACMR is the controlling shareholder of the Company. ACMR exercises its shareholders' rights through the shareholder's meeting of the Company; the chairman and CEO of ACMR, HUI WANG, serves as the chairman of the Company, and ACMR nominates directors to the Company and promoting the Company's global development and implementation of business strategy through board of directors and shareholders' meeting.

(1) Basic Information

Name	ACM RESEARCH INC
Stock Code	ACMR
Listing Date	November 3, 2017
Date of Establishment	January 18, 1998
Corporate Website	www.acmrcsh.com
Chairman	David H. Wang
Registered Address	c/o Corporation Service Company, 251 Little Falls Drive, County of New Castle, Wilmington, Delaware 19808
Office Address	42307 Osgood Road, Suite # #I, ROOM A, Fremont, CA 94539

Note: The name of the registered chairman of ACMR is David H. Wang, the same natural person as HUI WANG, with the passport number 5458224 * * (the same as below).

According to Legal Opinions issued by overseas lawyers in relation to ACMR and information disclosure announcements of ACMR, ACMR was founded in California, the USA in January 1998. In November 2016, ACM Research, Inc. (a wholly-owned subsidiary of ACMR) registered in Delaware, the USA, reorganized, absorbed and merged ACMR. After the reorganization, the former California Company no longer exists and ACM Research, Inc. registered in Delaware, the USA, continues to exist. ACMR was listed on NASDAQ stock market in November 2017 under the stock code ACMR. ACMR is a holding company, which holds 91.67% of the equity rights of ACMSH and 100% of the equity rights of ACM Research (Cayman), Inc. ACMR is not actually engaged in any other business except for holding the equity rights of the above companies, and ACM Research (Cayman), Inc. is not actually engaged in any business.

(2) The Setting and Conversion of Class A, B Common Shares

① The Setting of Class A, B Common Shares

According to Legal Opinions issued by overseas lawyers in relation to ACMR and information disclosure announcements of ACMR, as of June 30, 2021, ACMR issued 19,376,014 common shares in total. The above common shares are made up of Class A common shares and Class B common shares. Thereinto, the total number of Class A common shares stands at 17,668,409 and that of Class B common shares is 1,707,605. Each Class A common share enjoys 1 vote and each Class B common share 20 votes. There are no differences between Class A common shares and Class B common shares other than the voting right.

② The Disclosure of Conversion of Class A, B Common Shares

The disclosure of conversion of Class A, B common shares made in [***] for public offering by ACMR is as follows:

“Each outstanding share of Class B common stock is convertible into one share of Class A common stock (a) at any time, at the option of the holder, or (b) upon any transfer of such share of Class B common stock, whether or not for value, except for certain transfers described in our restated Certificate of Incorporation, including transfers to family members, trusts solely for the benefit of the stockholder or their family members, and partnerships, corporations, and other entities exclusively owned by the stockholder or their family members.

In addition, on or after the date of this [***], all outstanding shares of Class B common stock will convert automatically into shares of Class A common stock, on a one for one basis, upon (a) the election of the holders of a majority of the then outstanding shares of Class B common stock or (b) on the first December 31 that occurs more than five years after the date of this [***] if the October Market Cap with respect to the month of October immediately preceding such December 31 exceeds \$1.0 billion, provided that the conversion provided by this clause (b) shall not apply and no automatic conversion of Class B common stock into Class A common stock will ever occur pursuant to this clause (b) if the October Market Cap for the month of October immediately preceding a December 31 exceeds \$1.0 billion prior to the fifth anniversary of the date of this [***].

“October Market Cap” means, with respect to any October throughout which Class A common stock is traded on a registered securities exchange, the product of the average of the daily volume weighted average trading prices of Class A common stock for each of the days in such month of October multiplied by the number of shares of common stock outstanding on the last trading day of such month of October.”

As presented in the legal opinion on ACMR issued by the offshore lawyer and the announcements on disclosure made by ACMR, the range of “family members” who are specifically excepted from entitlement to convert shares of Class B common stock into shares of Class A common stock is defined to mean the spouse, parents, grandparents, lineal descendants, siblings or lineal descendants of siblings, of the holder of shares of Class B common stock. A lineal descendant includes an adopted person, provided that he or she is adopted during minority.

As per the 2020 annual report disclosed by ACMR, the “October Market Cap” of ACMR in 2020 exceeded US \$1 billion, and accordingly no Class B common stock of it will be automatically converted into Class A common stock pursuant to relevant provisions.

③ Commitments made by the actual controller

HUI WANG, the actual controller, has issued a letter of commitment: “in order to ensure the stability of the issuer’s actual controller, I irrevocably undertake that from the date of the issuance of this letter to 36 months from the date of the issuer’s initial public offering of shares and listing on the STAR Market, I will not voluntarily convert Class B common shares of ACMR held by me to Class A common shares.”

④ The reasons for ACMR to create Class A and Class B shares and for the related conversion provisions

The reason why ACMR creates the disparate voting arrangements of Class A and Class B shares is that: HUI WANG may maintain control on ACMR through holding shares of Class B common stock with a higher proportion of voting rights in order to enhance the stability and continuity of the business strategy of ACMR as a semiconductor company.

ACMR discloses the provisions on the conversion of shares of Class B common stock into shares of Class A in its Prospectus, and the main reasons therefor are shown as follows:

No.	Circumstances for conversion	Reasons for creation of conversion provisions
1	“Each outstanding share of Class B common stock is convertible into one share of Class A common stock at any time, at the option of the holder”	To realize the liquidity of shares of Class B common stock
2	“Each outstanding share of Class B common stock is convertible into one share of Class A common stock upon any transfer of such share of Class B common stock, whether or not for value, except for certain transfers described in the Restated Certificate of Incorporation, including transfers to family members, trusts solely for the benefit of the shareholder or its family members, and partnerships, corporations, or other entities exclusively owned by the stockholder or their family members”	To maintain the stability of holders of shares of Class B common stock and their voting rights
3	“Upon the adoption by the holders of a majority of the then outstanding shares of Class B common stock”	To grant shareholders of Class B common stock the power to convert all shares of Class B common stock into shares of Class A common stock through majority voting
4	“On the first December 31 that occurs five years after the date of this Prospectus if the “October Market Cap” with respect to the month of October immediately preceding such December 31 exceeds US\$1.0 billion”	The shares of Class B common stock will not be automatically converted into shares of Class A common stock before the “October Market Cap” exceeds US\$ 1.0 billion, which can avoid ACMR being taken over hostilely during the period of the lower market value
5	“The above provision on conversion shall not apply and no automatic conversion of Class B common stock into Class A common stock will ever occur pursuant to the provisions above if the “October Market Cap” for the month of October immediately preceding a December 31 exceeds US\$1.0 billion prior to the fifth anniversary of the date of this Prospectus.	To motivate major holders of shares of Class B common stock of ACMR and its officer HUI WANG; if the “October Market Value” exceeds US\$ 1.0 billion within five years from the date of ACMR’s listing, no automatic conversion of Class B common stock into Class A common stock will ever occur, and HUI WANG may continue to maintain the control on the operation and management of ACMR

(3) Major Shareholders

① Top 5 Shareholders of Class A Common Shares

According to Legal Opinions issued by overseas lawyers in relation to ACMR and information disclosure announcements of ACMR, as of June 30, 2021, the top 5 shareholders of ACMR Class A common shares are as follows:

No.	Name of Shareholder	Quantity of Shares Held	Proportion of Shareholding
1	Shanghai Science and Technology Venture Capital Co., Ltd.	1,506,170	8.52%
2	Pudong Science and Technology (Cayman) Co., Ltd.	1,119,576	6.34%
3	Xinxin (Hongkong) Capital Co., Limited	833,334	4.72%
4	HAIPING DUN	285,030	1.61%
5	Shengxin (Shanghai) Management Consulting Limited Partnership	242,681	1.37%
Total		3,986,791	22.56%

As of June 30, 2021, HUI WANG held 168,006 Class A common shares of ACMR, accounting for 0.95% of total Class A common shares; David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust controlled by HUI WANG and his spouse JING CHEN held 206,667 Class A common shares and David Hui Wang & Jing Chen Irrevocable Trust held 60,000 Class A common shares respectively, accounting for 1.51% of total Class A common shares in total.

② Top 5 Shareholders of Class B Common Shares

According to Legal Opinions issued by overseas lawyers in relation to ACMR and information disclosure announcements of ACMR, as of June 30, 2021, the top 5 shareholders of ACMR Class B common shares are as follows:

No.	Name of Shareholder	Quantity of Shares Held	Proportion of Shareholding
1	HUI WANG	1,146,934	67.17%
2	BRIAN WANG	117,334	6.87%
3	SOPHIA WANG	117,334	6.87%
4	HAIPING DUN	100,000	5.86%
5	STEPHEN SUN-HAI CHIAO	69,815	4.09%
Total		1,551,417	90.85%

Note: HUI WANG and SOPHIA WANG are father and daughter, and HUI WANG and BRIAN WANG are father and son.

As of June 30, 2021, HUI WANG held 1,146,934 Class B common shares of ACMR, accounting for 67.17% of total Class B common shares; David Hui Wang & Jing Chen Irrevocable Trust controlled by HUI WANG and his spouse JING CHEN held 7,334 Class B common shares, accounting for 0.43% of total Class B common shares in total.

③ Whether there are existing or potential disputes among the relevant shareholders of ACMR

According to the legal opinion on ACMR issued by the offshore lawyer, the Statement Letter issued by ACMR, and the Statement and Commitment Letters issued by the top five shareholders holding Class A and B common stock shares, there are no existing or potential disputes between the aforesaid shareholders and other shareholders of ACMR with respect to this offering and listing of the Issuer.

The legal opinion on ACMR issued by the offshore lawyer reads, “there is no action, proceeding or litigation pending, contemplated or threatened by any of ACMR’s shareholders against the Company with respect to this offering and listing before any court or governmental or administrative agency or body.”

④ Shareholders of ACMR acting as trust funds

A. The basic information on David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust

Based upon the legal opinion on ACMR issued by the offshore lawyer and the Statement and Commitment Letters issued by de facto controller HUI WANG and his wife JING CHEN, the basic information on the above trust funds is shown as follows:

a. David Hui Wang & Jing Chen Family Living Trust

Title	David Hui Wang & Jing Chen Family Living Trust
Establishment Date	2001/2/28
Type of Trust	Living Trust
Term	Long-term
Settlor and Settlor’s Right and Obligation	Settlor: HUI WANG & JING CHEN The Grantors have no rights and bear no obligations with respect to the Trust Assets.
Trustee and Trustee’s Right and Obligation	Trustee: JING CHEN The Trustee has rights and bears obligations under the provisions of this Trust Agreement.
Beneficiary and Beneficiary’s Right and Obligation	Beneficiary: BRIAN WANG & SOPHIA WANG If JING CHEN shall die, BRIAN WANG and SOPHIA WANG will benefit 50% each. Prior to this, the Beneficiaries have no rights and bear no obligations with respect to the Trust Assets.
Actual Exercise of Trust Voting Rights Since Its Establishment	Trustee JING CHEN exercises voting rights over the Trust Assets under the provisions of this Trust Agreement.
Management of the Trust	The trustee is responsible for managing the Trust according to the trustee’s rights listed in the Trust Agreement.

As of June 30, 2021, David Hui Wang & Jing Chen Family Living Trust holds 206,667 shares of Class A common stock in ACMR, representing 1.17% of shares of Class A common stock in ACMR.

b. David Hui Wang & Jing Chen Irrevocable Trust

Title	David Hui Wang & Jing Chen Irrevocable Trust
Establishment Date	2000/1/29
Type of Trust	Irrevocable Trust
Term	Long-term
Settlor and Settlor's Right and Obligation	Settlor: HUI WANG & JING CHEN The Settlor have no rights and bear no obligations with respect to the Trust Assets. Trustee: JING CHEN
Trustee and Trustee's Right and Obligation	Except for the voting rights of the Trust, the trustee has no benefit rights over the Trust Assets under the provisions of this Trust Agreement. The trustee's obligation is to hold, manage and distribute the Trust Assets for the benefit of the Beneficiary under the provisions of this Trust Agreement.
Beneficiary and Beneficiary's Right and Obligation	Beneficiary: BRIAN WANG & SOPHIA WANG (Children of HUI WANG), 50% each. The Beneficiary has rights to the Trust Assets under the provisions of this Trust Agreement. The Beneficiary has no fiduciary obligation to the Trust Assets.
Actual Exercise of Trust Voting Rights Since Its Establishment	Trustee JING CHEN exercises voting rights over the Trust Assets under the provisions of this Trust Agreement.
Management of the Trust	The trustee is responsible for managing the Trust according to the Trustee's rights listed in the Trust Agreement.

As of June 30, 2021, David Hui Wang & Jing Chen Irrevocable Trust holds 60,000 shares of Class A common stock in ACMR, representing 0.34% of shares of Class A common stock in ACMR, and 7,334 shares of Class B common stock in ACMR, representing 0.43% of shares of Class B common stock in ACMR.

c. A relationship of acting in concert is established between David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust on one hand, and HUI WANG, the de facto controller, on the other hand

HUI WANG, the *de facto* controller of the Company, is the President of the Company; David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust, which are established by HUI WANG and his wife JING CHEN with JING CHEN acting as the Trustee, indirectly hold shares in the Issuer through ACMR, the controlling shareholder. In accordance with the provisions of Article 83 of the *Measures for the Administration of the Takeover of Listed Companies*, a relationship of acting in concert is established between David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust on one hand, and HUI WANG, the de facto controller, on the other hand under Chinese laws.

David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust, both persons acting in concert with HUI WANG, have issued the *Letter of Commitment on Share Lock-up*, *Letter of Commitment on Intention to Maintain/Reduce Shareholders*, *Letter of Commitment on Restraint Measures for Non-fulfillment*, *Letter of Commitment on Avoiding Horizontal Competition*, and *Letter of Commitment on Regulating and Reducing Related-party Transactions*, and the persons acting in concert above have made relevant commitments by reference to HUI WANG, the de facto controller. Please refer to “V. Important Commitments Made by Relevant Parties to the Offering and Their Fulfillment” in “Section X Investor Protection” of the [***] for the specific content of the commitments.

B. Whether there are any other trust holdings at the level of ACMR in addition to the above trust funds

Based upon the legal opinion on ACMR issued by the offshore lawyer and the Statement and Commitment Letters issued by HUI WANG (the de facto controller), his wife JING CHEN and his children BRIAN WANG and SOPHIA WANG, HUI WANG and his wife/children have no other trust holdings except for the above family trusts.

Given that ACMR is a NASDAQ-listed company, its stocks are publicly traded at NASDAQ and its equity frequently changes, the clear ownership of the shares held in the Issuer will not be affected by whether there are any other trust holdings at the level of ACMR.

C. Whether the ownership of the shares held by the controlling shareholder in the Issuer is clear

Family trusts are common property disposal arrangements and family wealth management methods overseas, and have a relatively mature operation mechanism. The de facto controller HUI WANG, his wife JING CHEN and his children BRIAN WANG and SOPHIA WANG are American citizens. They establish the family trusts for the purposes of family property management, inheritance and tax planning, and such family trusts hold a relatively low percentage of shares in ACMR. Therefore, such family trusts holding the shares in the Issuer indirectly through the controlling shareholder ACMR will not affect the clear ownership of the shares held in the Issuer.

At the same time, HUI WANG, his wife JING CHEN and his children BRIAN WANG and SOPHIA WANG have made commitment with respect to their holdings of ACMR: “The shares of ACMR that I hold are truly held by myself, and the ownership is clear; except for the above family trusts, I have no any other nominee holding, trust holding or other special arrangements.”

According to the Statement Letter issued by ACMR, the shares of the Issuer that ACMR hold are truly held by itself, the ownership is clear, and there is no share pledge, nominee holding, trust holding or other special arrangements.

To sum up, the ownership of the shares held by the ACMR being the controlling shareholder in the Issuer is clear.

(4) Information Disclosure and Corporate Governance of ACMR after its Listing on NASDAQ Stock Market

According to Legal Opinions issued by overseas lawyers in relation to ACMR and information disclosure announcements of ACMR, after ACMR listed on NASDAQ stock market, ACMR has not been subject to any penalty imposed by the regulators of US-listed companies for information disclosure in violation of the laws and regulations.

(5) Financial Data

The main financial data of ACMR in the latest year is as follows:

In US\$1,000		
Item	June 30, 2021/From Jan. to Jun. 2021	December 31, 2020/2020
Total Assets	418,958	341,257
Net Assets	229,556	208,170
Net Profit	13,156	21,677

Note: The financial data of ACMR in 2020 has been audited by BDO China Shu Lun Pan Certified Public Accountants LLP in accordance with US GAAP; the financial data for the period from January to June 2021 has not been audited.

(6) Relevant procedures for ACMR's carve-out of the Issuer for listing on the Science and Technology Innovation Board

① As to the examination and approval procedures of the governmental regulators and NASDAQ

As presented in the legal opinion on ACMR issued by the offshore lawyer:

A. ACMR has made information disclosures with respect to this offering and listing of ACMSH in the documents submitted by it to the SEC;

B. "This offering and listing application of ACMSH does not require any applicable authorization, consent, approval or other actions by any governmental authority or regulator in Delaware having competent jurisdiction over ACMR, NASDAQ and the SEC, or fulfill any notice, file and other procedures".

As a NASDAQ-listed company registered in Delaware, ACMR shall comply with the provisions of the US federal and Delaware laws. The website of the SEC (<https://www.sec.gov/>) lists and publishes The Laws That Govern the Securities Industry (<https://www.sec.gov/answers/about-lawsshtml.html>), including Securities Act of 1933, Securities Exchange Act of 1934, Trust Indenture Act of 1939), Investment Company Act of 1940, Investment Advisers Act of 1940, Sarbanes-Oxley Act of 2002, Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Jumpstart Our Business Startups Act of 2012 and Rules and Regulations for the Securities and Exchange Commission and Major Securities Laws (collectively, "the US Federal Securities Laws and Regulations"). Pursuant to the provisions of the US Federal Securities Laws and Regulations, the currently effective Delaware laws and NASDAQ rules and ordinances, if the Issuer, a controlled subsidiary of ACMR applies for initial public offering and listing of stocks on Science and Technology Innovation Board, ACMR needs to make information disclosures necessary for this offering and listing to the SEC, and this offering and listing application of the Issuer does not require any authorization, consent, approval or any other actions by the SEC and NASDAQ, nor fulfill any notice, filing and other procedures.

② As to approval procedures of the shareholders of ACMR

As presented in the legal opinion on ACMR issued by the offshore lawyer, this IPO of the Issuer does not require the approval by shareholders of ACMR with being shown as follows:

"A. Under DGCL, generally, stockholders of a Delaware corporation principally have a right to participate in the following types of decisions: a. election of directors (although the board of directors is typically authorized to elect additional directors in between annual stockholder meetings); b. approval or disapproval of amendments to the corporation's certificate of incorporation (which requires prior board approval) or bylaws (although the board is typically authorized to amend the bylaws without stockholder approval); c. approval or disapproval of fundamental changes to the corporation not made in the regular course of business, including mergers, dissolution, compulsory share exchanges, or disposition of substantially all of the corporation's assets; and d. authorization of additional shares for future issuance by the corporation (after which the board has discretion to determine when and how many shares to issue at any time).

B. The Restated Certificate of Incorporation provides holders of shares of Class A common stock ("Class A Shares") and Class B common stock ("Class B Shares") with voting rights relating to the following: a. a change in the number of authorized shares (requires vote of a majority of the outstanding Class A Shares and Class B Shares voting together); b. a dividend or distribution that treats shares of Class A common stock differently from shares of Class B common stock (requires vote of a majority of the outstanding Class A Shares and a majority of the outstanding Class B Shares, voting separately); c. a direct or indirect change in any of the provisions of the article of the Restated Certificate of Incorporation setting forth the rights of common stock (requires vote of a majority of the outstanding Class B Shares); d. until the date on which Class B Shares first represent less than 35% of the total voting power of the then outstanding shares of ACMR, a Change in Control Transaction (requires vote of a majority of the outstanding Class B Shares, but this is supplemental to the DGCL requirement); e. following the date on which Class B Shares first represent less than a majority of the total voting power of the outstanding shares of ACMR, removal of a director (requires vote of the holders of two-thirds of all outstanding capital stock, voting together); f. an amendment to ACMR's bylaws (requires vote of a majority of the outstanding Class A Shares and Class B Shares voting together, until the date on which Class B Shares first represent less than a majority of the total voting power of the outstanding shares of ACMR, after which approval of two-thirds is required); and g. an amendment to the Restated Certificate of Incorporation (requires, after the date on which Class B Shares first represent less than a majority of the total voting power of the outstanding shares of ACMR, approval of two-thirds of the total voting power of the outstanding shares of ACMR).

C. The continued listing rules of NASDAQ require stockholder approval be obtained prior to: a. any adoption of an equity compensation plan pursuant to which officers or directors may acquire stock, subject to limited exceptions; b. certain issuances of common stock to directors, officers, substantial security holders or their affiliates; c. issuance of common stock that will have voting power equal to or greater than 20 per cent of the voting power prior to such issuance or that will result in the issuance of a number of shares of common stock that is equal to or greater than 20 per cent of the number of shares of common stock outstanding prior to such issuance, subject to certain exceptions; and d. issuance of securities that will result in a change of control of the corporation.

In view of the foregoing, considering no provision of the DGCL, applicable NASDAQ rules or the Restated Certificate of Incorporation requires that the Listing of ACMSH be submitted to stockholders of ACMR for approval, no such approval is necessary”

③ As to approval procedures of the board of directors of ACMR

As presented in the legal opinion on ACMR issued by the offshore lawyer and ACMR’s Restated Certificate of Incorporation, the business and affairs of ACMR shall be managed by, or under the direction of, the board of directors of ACMR. This offering and listing of the Issuer has obtained the approval by the board of directors of ACMR, with being shown as follows:

ACMR, as a controlling shareholder of the Issuer, convened a meeting of the board of directors on May 6, 2019, consenting to and approving the actions taken by the officers of ACMR on its behalf with respect to this offering and listing of ACMSH, and authorizing HUI WANG to take actions pursuant to further approval and authorization by the board of directors;

ACMR, as a controlling shareholder of the Issuer, convened a meeting of the board of directors on May 19, 2020, authorizing and approving the Issuer to submit this offering and listing application, and consenting to and approving the actions taken so far by the officers of ACMR and the Issuer on behalf of ACMR with respect to this offering and listing of ACMSH.

④To sum up, this offering and listing application of the Issuer has obtained ACMR’s internal approval and authorization, ACMR has made information disclosures with respect to this offering and listing of ACMSH in the documents submitted by it to the SEC, and this offering and listing application of the Issuer does not require any applicable authorization, consent, approval or other actions by any governmental authority or regulator in Delaware having competent jurisdiction over ACMR, NASDAQ and the SEC, or fulfill any notice, file and other procedures.

(7) Relevant information disclosure obligations required by the NASDAQ to be fulfilled by ACMR for its carve-out of the Issuer for listing on the Science and Technology Innovation Board

Pursuant to the provisions of the Securities Exchange Act of 1934, each issuer who has filed and implemented the registration document containing valid undertakings prior to the enactment of the Amendment to Securities Act in 1964 and who has subsequently filed the registration documents that have come into effect pursuant to the Securities Act of 1933 shall submit to the SEC the supplementary and periodic information, documents and reports in connection with securities registration that would be required by the regulations formulated by SEC as it deems necessary or advisable in order to safeguard the public interest and protect investors.

Pursuant to the provisions of Regulation Fair Disclosure promulgated by the SEC, any issuer is prohibited from selectively disclosing information, and listed companies are required to not disclose important non-public information to specific securities market professionals, securities analysts, institutional investors and brokers before comprehensively disclosing financial information to the public.

Rule 5250 of NASDAQ Listing Rules provides that except in unusual circumstances, a NASDAQ-listed company shall make prompt disclosure to the public through any Regulation Fair Disclosure-compliant method (or combination of methods) of any material information that would reasonably be expected to affect the value of its securities or influence investors' decisions.

①As presented in the legal opinion on ACMR issued by the offshore lawyer and the information disclosure documents of ACMR, ACMR has made the written information disclosures as follows with respect to this offering and listing of the Issuer:

A. ACMR has made information disclosures with respect to this offering and listing of the Issuer in the documents submitted by it to the SEC with being shown as follows:

a. On June 17, 2019 (the US local time), ACMR submitted an interim report to the SEC, announcing that it intends to realize the Issuer's initial public offering and listing of stocks on the Science and Technology Innovation Board within the next three years, and issued a relevant press release as an Appendix attached to the said interim report.

b. On June 18, 2019 (the US local time), ACMR submitted an interim report to the SEC, announcing that in order to meet the relevant conditions for the issuer's initial public offering and listing of stocks on the Science and Technology Innovation Board, the Issuer introduces investors with respect to financing prior to this offering and listing, and executes the capital increase agreements and supplementary agreements with private equity funds, institutional investors and two ESOPs in China.

c. On December 6, 2019 (the US local time), ACMR submitted an interim report to the SEC, announcing that the Issuer, Shanghai Lingang Industrial Zone Economic Development Co., Ltd. and Management Committee of China (Shanghai) Pilot Free Trade Zone Lingang New Area sign an agreement which stipulates the bidding procedures for the target plot of the Lingang New Area, and the Issuer will build a new R&D center and production facility on this plot. This plot is the construction site of ACMSH's high-end semiconductor equipment R&D project invested by the funds raised by this offering and listing of the Issuer.

d. On December 17, 2019 (the US local time), ACMR submitted an interim report to the SEC, announcing that the Issuer introduces investors with respect to the financing prior to this offering and listing, and executes the capital increase agreements and supplementary agreements with original shareholders and eight new shareholders including SICIF and PDHTI.

e. On June 1, 2020 (the US local time), ACMR submitted an interim report to the SEC, announcing that the Issuer submitted to the SSE the application documents related to this offering and listing on May 27, 2020 Beijing time, and released an English translation of the Issuer's [***] (Declaration Version) in respect of this offering and listing as an Appendix attached to the interim report; at the same time, the said interim announcement explains two rounds of financing prior to this offering and listing, the nomination and composition of the Issuer's board of directors, and the Issuer's profit distribution plan prior to this offering and listing, the application of raised funds, the relevant undertakings signed by and between ACMR as the controlling shareholder of the Issuer and HUI WANG as the de facto controller of the Issuer with respect to this offering and listing, and the relevant risk factors of this offering and listing, etc.

f. In addition, ACMR disclosed the above matters in its 2019 third quarter report, 2019 annual report, and 2020 first quarter report and other documents.

B. ACMR issued the relevant press releases on the official website of ACMR (<https://www.acmrcsh.com/>, the same below) respectively on June 17, 2019, August 7, 2019, November 11, 2019, December 16, 2019, March 18, 2020, and May 6, 2020 (the U.S. local time), discussing or mentioning this offering and listing, including this listing plan and schedule of the Issuer and two rounds of equity financing prior to this offering and listing of the Issuer, among others.

C. This offering and listing plan and schedule are mentioned in the Investor Presentations published on the official website of ACMR.

To sum up, ACMR has made information disclosures with respect to this offering and listing of the Issuer in the documents submitted by it to the SEC. The legal opinion on ACMR issued by the offshore lawyer reads, “ACMR is not obliged to disclose information to NASDAQ with respect to this offering and listing, and it’s expected that ACMR will not need to assume any obligations of disclosure to NASDAQ. However, according to the NASDAQ Listing Rules, ACMR may be required to: a. make prompt disclosure to the public of the development of any material information that relates to this offering and listing and would reasonably be expected to affect the value of ACMR’s Class A common stock securities or influence investors’ decisions, and b. to notify NASDAQ before ACMR releases major news; up to now, ACMR is not obliged to notify NASDAQ of this offering and listing”.

Therefore, ACMR has made information disclosures with respect to this offering and listing in the documents submitted by it to the SEC, and does not need to fulfil the obligations of information disclosure to NASDAQ; there is no such above circumstance as specified in the NASDAQ Listing Rules under which ACMR needs to notify NASDAQ in advance, so ACMR does not need to notify NASDAQ in advance of this offering and listing.

② The legal opinion on ACMR issued by the offshore lawyer reads, “ACMR has made information disclosures following the listing on NASDAQ in accordance with the provisions of the relevant laws and regulations, and not been the subject of any governmental investigation, lawsuit, arbitration or administrative penalty or not received any inquiry from the SEC and NASDAQ as a result of this offering and listing”

(8) Specific impact of this offering and listing of ACMSH on minority investors of ACMR

① The shares issued by the Issuer this time represent no less than 10.00% of the total capital stock of the Company after this insurance. Prior to or following this offering and listing, the Issuer is a controlled subsidiary falling within consolidated statements of ACMR. The Issuer will effect this offering and listing after taking into account the results of the inquiry on this offering and listing and the impact on minority investors of ACMR.

② This offering and listing application of the Issuer has been approved and authorized by ACMR, and ACMR has made a written disclosure of information on this offering and listing of the Issuer, ensuring that ACMR’s investors have the right to know.

③ The sale of shares by the Issuer for listing on the Science and Technology Innovation Board is designed to raise funds for the Issuer’s proposed investment project, which is conducive to further regulating the Issuer’s internal governance, improving management, enhancing corporate and brand awareness, and promoting the Company’s sustainable and stable development.

④ This offering and listing of the Issuer does not affect the corporate governance structure and shareholder rights of ACMR.

⑤ This offering and listing application of the Issuer has been approved by the board of directors of ACMR. As noted in the legal opinion on ACMR issued by the offshore lawyer, in general, under the DGCL, a shareholder of ACMR who is unhappy with a decision taken by the board of directors in accordance with applicable governance practices has only the practical remedy of selling their stock. Any other remedy would require proof of improper or illegal practices. In addition, ACMR’s directors owe shareholders certain fiduciary duties such as duties of care and loyalty. If there is a reason to believe that a fiduciary duty has been breached, a shareholder who believes they have been harmed by the breach can initiate litigation.

To sum up, this offering and listing of the Issuer will not have material adverse impact on the legal rights and interests of minority investors of ACMR.

(9) Differences between this information disclosure made by the Issuer and the listing application documents as well as post-listing information disclosures made by ACMR, the reasons for the differences and the rationality therefor

① Non-financial information comparison

The differences are discovered as follows after reviewing the [***] disclosed by ACMR on the website of the SEC and information disclosure documents published after listing, including 2018, 2019 and 2020 annual reports, and comparing such information disclosures and the contents disclosed in the Issuer’s [***]:

Matters	Disclosed in the Issuer's [***]	Disclosed by ACMR on the website of the SEC
ACMR's shareholding ratio in the Issuer	Prior to this offering and listing of the Issuer, ACMR holds 91.67% of shares in the Issuer.	ACMR discloses in the "Risk Factors" of 2019 annual report that: "ACMSH is our major operating company, and prior to the listing on the Science and Technology Innovation Board, is a wholly-owned subsidiary of ACMR."
Labor Contract and Non-competition Agreement between the Issuer and its employees and officers and performance thereof	"As of the date of signing the [***], the Company has entered into the Labor Contract, the Non-competition Agreement and the Confidentiality and Intellectual Property Protection Agreement regarding horizontal competition and confidentiality matters with each director, supervisor, officer and key technician who works in and receives remuneration from the Company, and the Company and directors, supervisors, officers and key technicians are protected and bound by provisions of relevant labor contracts."	ACMR discloses in the "Risk Factors" of 2019 annual report that: "We have not signed any employee or retention agreements with any employee, or maintain any key personal insurance policy for any employee... Further, our senior executive may join any competitor or establish any competing company."
Shareholder Name of ACMSH (before restructuring)	"On May 2, 2017, Shanghai Venture Capital Co., Ltd. and ACMR signed a Shanghai Assets and Equity Exchange Contract, stipulating that Shanghai Venture Capital Co., Ltd. would transfer its 18.77% equity of ACMSH (before restructuring) to ACMR for a consideration of RMB 40 million Yuan."	ACMR discloses in the "Financial Statements and Supplementary Data" of 2019 annual report that: "In August 2017, ACMR acquired 18.77% of equity held by Shanghai Science and Technology Venture Capital Co., Ltd. in ACMSH."
Amount of funds raised by the Issuer through two rounds of equity financing	(1) "On August 29, 2019, BDO China verified the paid-up status of the registered capital of ACMSH (before restructuring), and issued the Capital Verification Report (Xin Kuai Shi Bao Zi [2019] No. ZI10620). As of August 22, 2019, ACMSH (before restructuring) had received the newly increased capital of RMB 187,924,000 Yuan paid by the above shareholders, with RMB 14,957,500 Yuan included in the registered capital and RMB 172,966,500 Yuan included in the capital reserves." (2) "BDO China verified the paid-up status of the registered capital of ACMSH and issued the Capital Verification Report (Xin Kuai Shi Bao Zi [2020] No. ZI10025). As of December 10, 2019, ACMSH had received the newly increased capital of RMB 228,170,000 Yuan paid by the above shareholders, with RMB 17,551,500 Yuan included in the registered capital and RMB 210,618,500 Yuan included in the capital reserves."	ACMR discloses in the "Financial Statements and Supplementary Data" of 2019 annual report that: "In order to obtain the qualifications for listing and for IPO on the Science and Technology Innovation Board, on June 12, 2019, ACMSH signed an agreement with seven investors ("Tranche 1 Investors"), upon which Tranche 1 Investors agree to pay ACMSH a total price of RMB 187,900,000 Yuan (equivalent to US\$ 27,300,000) to acquire 4.2% of the outstanding equity of ACMSH. And on November 29, 2019, ACMSH signed an agreement with eight investment entities in China ("Tranche 2 Investors"), upon which Tranche 2 Investors agree to acquire shares of ACMSH at the price of RMB 13 Yuan per share (same with the Tranche 1 Investors) and an aggregate value of RMB 228,200,000 Yuan (equivalent to US\$ 32,400,000)."

Date of incorporation of ACMSH (before restructuring) and ACM CA	<p>(1) ACMSH (before restructuring) was incorporated on May 17, 2005.</p> <p>(2) ACM CA was incorporated on April 5, 2019.</p>	<p>ACMR discloses in the “Financial Statements and Supplementary Data” of 2019 annual report that: “CleanChip established its wholly-owned subsidiary in California, being ACM Research (CA), Inc. (“ACM CA”) on June 2019, which provides the procurement services on behalf of ACMSH. ...ACM Research (CA), Inc. was incorporated in June 2019.”</p> <p>“ACM Research (Shanghai), Inc. was incorporated in May 2006.”</p>
Leased Premises of the Issuer	<p>(1) The Issuer leased from Zhangjiang Group the premises located at Building 4, No. 1690 Cailun Road, Zhangjiang Hi-tech Park, Shanghai, the total area of which is 5,900.28 m² and the lease term of which is from January 1, 2018 to December 31, 2024.</p> <p>(2) The Issuer leased from Shanghai Shengyu Culture Development Co., Ltd. the whole building located at Building 2, No. 365, Chuanhong Road, Shanghai, the total area of which is 9,629.87 m² and the lease term of which is from September 26, 2019 to January 15, 2023.</p>	<p>ACMR discloses in the “Financial Statements and Supplementary Data” of 2019 annual report that:</p> <p>“In 2007, ACMSH and Zhangjiang Group (a related party, see note 11) signed an operating lease with respect to appr. 63,510 square feet of manufacturing and office space located in Shanghai, China. The lease term and payment terms were amended and extended from time to time upon negotiation with Zhangjiang Group. The lease signed with Zhangjiang Group expired on December 31, 2017, and ACMSH leased premises on a monthly basis from January 1, 2018 to April 25, 2018. ACMSH and Zhangjiang Group signed the renewal lease on April 26, 2018, with the term being from January 1, 2018 to December 31, 2022. Pursuant to the aforesaid renewal lease, ACMSH shall pay a rental in an amount of RMB 366,000 Yuan (equivalent to US\$ 55,000) on a monthly basis. The required security deposit is RMB 1,077,000 Yuan (equivalent to US\$ 163,000). ... In January 2018, ACMSH signed an operating lease with respect to the No. 2 Factory located at Pudong District, Shanghai, with the term being from January 2018 to January 2023. This facility covers a total construction area of 50,000 square feet. The monthly rental may change within the lease term.”</p>
Public rental housing pre-sale contract	<p>In October 2020, Shengwei Shanghai and Shanghai Lingang Industrial Zone Public Rental Housing Construction Operation Management Co., Ltd. entered into an Overall Pre-sale Contract on Shanghai Public Rental Housing, whereby the former shall purchase from the latter 162 houses at No. 14, No. 21, No. 41 and No. 42, Lane 128, Qunfeng Road, with a predicted total area of 15,322.14 square meters at a predicted price totaling to RMB 257,303,200 Yuan.</p>	<p>ACMR discloses in the “Real Estate” of 2020 annual report that:</p> <p>“On October 28, 2020, Shengwei’s wholly-owned subsidiary and Shanghai Lingang Industrial Zone Public Rental Housing Construction Operation Management Co., Ltd. entered into an Overall Pre-sale Contract on Shanghai Public Rental Housing with a total price of about US\$40 million. According to the contract, as part of the pilot project on the “renting before selling” public rental housing in the Lingang Industrial Zone, Shengwei’s subsidiary will obtain the housing and corresponding land use rights by October 31, 2021.”</p>

The differences between the above contents disclosed by ACMR and those disclosed in the Issuer's [***] is mainly caused by the translation of ACMR documents, data rounding, and information understanding discrepancy. The relevant contents disclosed in the Issuer's [***] are accurate. The aforesaid differences do not constitute material adverse impact on the value judgment of investors of this offering and listing.

② Comparison of financial information differences between ACMR and the Company

ACMR, as the controlling shareholder of the Company, is a NASDAQ-listed company, and the Company is a subsidiary whose financial statements are consolidated with those of ACMR. The financial data of the Company are not separately disclosed in the ACMR's listing application documents and post-listing information disclosure documents. When the Company's financial data disclosed in the application documents of this offering and listing are directly compared with the financial data in the consolidated financial statements of the controlling shareholder ACMR for the corresponding period, the main reasons for those differences are shown as follows:

A. Different disclosure entities and scope of consolidation

Due to the differences in the disclosure entities and the scope of consolidation, the financial statements in the Issuer's information disclosure documents do not include the financial information of the controlling shareholder ACMR. Therefore, the bank deposits (including the raised funds obtained by the Company on the NASDAQ Global Market), inventories, long-term equity investments, taxes payable and accounts payable in the separate statements of ACMR are not included in the Company's statements. Accordingly, the costs and expenses for listing and financing in the US, listing maintenance, attorneys, intermediary agency, consulting, personnel compensation, office, leasing and taxes, among others, are not included in the Company's statements. The main items affected include bank deposits, long-term equity investments, accounts payable, capital reserves, administrative expenses, and income tax expenses.

B. Different accounting standards, accounting policies and preparation basis

ACMR is a US listed company, and its financial statements are prepared in accordance with the US GAAP and with reference to the practice of listed companies in the same industry in the US, while the Company implements the Chinese Accounting Standards for Business Enterprises and formulates accounting policies with reference to the practices of A-share listed companies in the same industry. Therefore, the different accounting policies and preparation basis result in differences in some accounting treatments and financial data, including:

a. The income recognition policies in the present financial statements are formulated on the basis of the Chinese Accounting Standards for Business Enterprises and with reference to the practice of A-share listed companies in the same industry, which are different from the income recognition policies formulated by ACMR in accordance with the US GAAP and with reference to the practice of US listed companies in the same industry. The main items affected include operating income, operating costs, accounts receivable, advance from customers, inventory and other reporting items.

b. In the present financial statements, the provision for impairment of accounts receivable and for decline in value of inventories are made in light of the principle of prudence and with reference to the practice of A-share listed companies in the same industry.

c. The present financial statements are prepared in accordance with the requirements of Chinese Accounting Standards for Business Enterprises on the item classification, presentation and disclosure of financial statements, which are different from the consolidated financial statements prepared by ACMR in accordance with the US GAAP. The main items affected include other current assets, fixed assets, other payables and other income, etc.

C. The main impact of the aforesaid differences on the financial statements is summarized as follows:

In: RMB 10,000 Yuan

Item	Issuer	ACMR	Difference	Percentage
2020/December 31, 2020				
Operating income	100,747.18	108,016.43	-7,269.25	-6.73%
Net profit	19,676.99	14,950.12	4,726.87	31.62%
Total assets	184,352.37	222,607.81	-38,255.44	-17.19%
Net assets	104,867.33	135,793.08	-30,925.75	-22.77%
2019/December 31, 2019				
Operating income	75,673.30	74,154.74	1,518.56	2.05%
Net profit	13,488.73	13,419.76	68.97	0.51%
Total assets	130,800.15	151,921.16	-21,121.01	-13.90%
Net assets	82,992.90	109,897.35	-26,904.45	-24.48%
2018/December 31, 2018				
Operating income	55,026.91	49,399.75	5,627.16	11.39%
Net profit	9,253.04	4,350.79	4,902.25	112.68%
Total assets	63,602.25	70,725.74	-7,123.50	-10.07%
Net assets	14,504.75	35,912.60	-21,407.85	-59.61%

Note: The original currency of the financial statements disclosed by ACMR adopts US\$, the operating income and net profit are converted into RMB at the average exchange rate of that year, and total assets and net assets are converted into RMB at the exchange rate at the end of that year.

The items with large differences in the aforesaid main financial indicators and the reasons therefore are shown as follows:

In 2020, the main reason for differences in net profit between the Company and ACMR lies in the change in the fair value of a financial liability in the single statement of ACMR leading to the reduction of its net profit without effect on the net profit of the Issuer. Therefore, the net profit of the Company was higher than that of ACMR. The main reasons for differences in net assets between the Company and ACMR are that: a. ACMR raised funds by issuing additional stocks on NASDAQ Global Market in 2019; b. ACMR's long-term equity investments in NINEBELL did not fall within the Company's scope of consolidation; c. the Company made the provision for impairment of accounts receivable, but ACMR did not make corresponding provisions.

In 2019, the main reasons for the differences in net assets between the Company and ACMR are that: a. ACMR raised funds by issuing additional stocks on NASDAQ Global Market in 2019; b. ACMR's long-term equity investments in NINEBELL did not fall within the Company's scope of consolidation; c. the Company made the provision for impairment of accounts receivable and for the decline in value of inventories, but ACMR did not make corresponding provisions.

In 2018, the main reason for differences in net profit between the Company and ACMR is that ACMR incurred higher operating expenses. Therefore, the Company's net profit is higher than that of ACMR. The main reasons for differences in net assets are that: a. ACMR raised funds on NASDAQ Global Market; b. ACMR's long-term equity investments in NINEBELL did not fall within the Company's scope of consolidation; c. the Company made the provision for impairment of accounts receivable and for the decline in value of inventories, but ACMR did not make corresponding provisions.

③To sum up, as of the signing date of the [***], there are no major differences between information disclosed by the Issuer in this offering and listing and the listing application documents as well as post-listing information disclosures made by ACMR.

2. De Facto Controller

As of the June 30, 2021, HUI WANG holds 168,006 Class A shares and 1,146,934 Class B shares of ACMR, aggregately holding 44.59% of the voting rights of ACMR and in turn controlling 91.67% of the shares of the Company through ACMR. HUI WANG is the de facto controller of the Company. As the chairman of the Company, HUI WANG is in charge of overall strategic planning and providing guidance and support for the Company's R&D direction as core technician.

HUI WANG, born in November 1961, is an American citizen with the right of permanent residence in China. His Chinese name on his permanent residence ID card (No.: USA31006111****) is 王晖. He is currently the chairman of the board of directors of the Company, and concurrently serves as the chairman and CEO of ACMR, the controlling shareholder of the Company. For details, please refer to "VII. (I) Members of the Board of Directors" in this Section.

(1) Basis for HUI WANG acting as the de facto controller of the Issuer

The basis for determining HUI WANG's control over ACMR leading in turn to his control over the Issuer is shown as follows:

① Distribution of voting rights held by shareholders in ACMR

As of December 31, 2018, HUI WANG holds 166,667 shares of Class A common stock and 1,146,934 shares of Class B common stock, representing 44.37% of all voting rights in ACMR in total.

As of December 31, 2019, HUI WANG's shareholding in ACMR and the (top five) distribution of voting rights of ACMR are shown as follows:

No.	Name of Shareholder	No. of Class A Shares (Share)	No. of Class B Shares (Share)	Percentage of voting rights
1	HUI WANG	168,006	1,146,934	43.24%
2	SOPHIA WANG	15,279	117,334	4.42%
3	BRIAN WANG	-	117,334	4.39%
4	HAIPING DUN	285,030	100,000	4.28%
5	Shanghai Science and Technology Venture Capital Co., Ltd	1,666,170	-	3.12%
Total		2,134,485	1,481,602	59.45%

As of June 30, 2021, HUI WANG's shareholding in ACMR and the (top five) distribution of voting rights of ACMR are shown as follows:

No.	Name of Shareholder	No. of Class A Shares (Share)	No. of Class B Shares (Share)	Percentage of voting rights
1	HUI WANG	168,006	1,146,934	44.59%
2	SOPHIA WANG	15,279	117,334	4.56%
3	BRIAN WANG	-	117,334	4.53%
4	HAIPING DUN	285,030	100,000	4.41%
5	Shanghai Science and Technology Venture Capital Co., Ltd	1,506,170	-	2.91%
Total		1,974,485	1,481,602	60.99%

To sum up, since January 1, 2018, the voting rights held by HUI WANG in ACMR in total have been not less than 35%. As of June 30, 2021, the percentage of voting rights held by HUI WANG in ACMR ranks first, while that of other shareholders is relatively scattered, significantly lower than that of HUI WANG.

② Agreements on concerted action with respect to ACMR

Based upon the Statement and Commitment Letters issued by the top five shareholders holding shares of Class A common stock and shares of Class B common, there is no concerted action agreement and arrangement with respect to ACMR, and the relationship of acting in concert with respect to ACMR is not established, among shareholders aforementioned.

③ Position of HUI WANG

Based upon the legal opinion on ACMR issued by the offshore lawyer, the Bylaws of ACMR and the Statement and Commitment Letters issued by HUI WANG, since January 1, 2018, HUI WANG has served as the board chairman, CEO and president of ACMR. HUI WANG has, subject to the supervision, direction and control of the board of directors of ACMR, the general powers and duties of supervision, direction and management of the daily affairs and business of ACMR, including all powers necessary to direct and control the organizational and reporting relationships within ACMR. These delegated powers should afford HUI WANG the authority to substantially affect ACMR's daily operation, production, and research and development activities and have significant impact on the business decisions of ACMR and the Issuer.

In addition, since the establishment of ACMSH (before restructuring), the predecessor of the Issuer, HUI WANG has served as the board chairman of the Issuer, responsible for the overall strategic planning of the Issuer, and as a key technician, responsible for offering guidance and support for the technology research and development direction of the Issuer.

To sum up, the basis for determining HUI WANG's control over ACMR leading in turn to his control over the Issuer is sufficient provided that he holds no less than 35% voting rights in ACMR.

(2) The basis that HUI WANG does not determine his wife/children as common de facto controllers

① HUI WANG and his wife/children constitute the statutory relationship of acting in concert under the PRC laws

Based upon the legal opinion on ACMR issued by the offshore lawyer and the Statement and Commitment Letters issued by HUI WANG and his wife JING CHEN and his children BRIAN WANG and SOPHIA WANG, HUI WANG and his wife/children respectively and indirectly make decisions with respect to ACMR, therefore there is no relationship of acting in concert with respect to ACMR. However, HUI WANG, the de facto controller of the Issuer, serves as the board chairman of the Issuer, and HUI WANG's wife JING CHEN and his children BRIAN WANG and SOPHIA WANG hold shares of the Issuer indirectly through ACMR, the controlling shareholder of the Issuer. In accordance with the provisions of Article 83 of *Measures on the Takeover of Listed Companies*, HUI WANG, JING CHEN, BRIAN WANG and SOPHIA WANG constitute the relationship of acting in concert under the PRC laws.

② The basis that his wife/children are not determined as common de facto controllers

Q5 "(II) Common De Facto Controllers" of the Questions and Answers by the Shanghai Stock Exchange on Review of the Offering and Listing of Stocks on the Science and Technology Innovation Board (II) ("Q & A (II)") provides that, "the spouse or a lineal relative of a de facto controller who holds 5% or more of the shares in a company, or who holds less than 5% of the shares, but serves as a director or officer of the company and plays an important role in company's decision-making, shall be determined as a common de facto controller in principle, absent evidence to the contrary."

JING CHEN, BRIAN WANG and SOPHIA WANG, acting as the wife and children of HUI WANG, the de facto controller, do not directly hold the shares in the Issuer within the Reporting Period. As of June 30, 2021, none of them holds more than 5% of the shares in the Issuer through ACMR, or serves as a director or officer of ACMR and the Issuer, or actually participates in the major business decisions of ACMR and the Issuer.

To sum up, the basis that the Issuer does not determine HUI WANG's wife/children as common de facto controllers is sufficient and complies with the relevant provisions of Article 5 of Q & A (II).

③ Commitments of HUI WANG's wife/Children as persons acting in concert

As of June 30, 2021, JING CHEN, the wife of HUI WANG, holds 33,334 shares of Class A common stock in ACMR, BRIAN WANG, the son of HUI WANG holds 117,334 shares of Class B common stock in ACMR, SOPHIA WANG, the daughter of HUI WANG, holds 15,279 shares of Class A common stock and 117,334 shares of Class B common stock in ACMR, David Hui Wang & Jing Chen Family Living Trust holds 206,667 shares of Class A common stock in ACMR, and David Hui Wang & Jing Chen Irrevocable Trust holds 60,000 shares of Class A common stock and 7,334 shares of Class B common stock in ACMR.

JING CHEN, BRIAN WANG and SOPHIA WANG, the wife and children of, and the persons acting in concert with, the de facto controller HUI WANG, have issued the *Letter of Commitment on Share Lock-up*, the *Letter of Commitment on Intention to Maintain/Reduce Shareholdings*, the *Letter of Commitment on Restraint Measures for Non-fulfillment* and the *Letter of Commitment on Regulating and Reducing Related-party Transactions*, by reference to those of HUI WANG. For details, please refer to "V. Important Commitments Made by Relevant Parties to the Offering and Their Fulfillment" in "Section X Investor Protection" hereof.

(3) The impact of the conversion of Class B shares into Class A shares on the de facto controller

As presented in the legal opinion on ACMR issued by the offshore lawyer and the announcements on disclosure made by ACMR, the shares of Class A common stock issued by ACMR total 17,668,409 and the shares of Class B common stock issued by ACMR total 1,707,605 (each share of Class A common stock has one vote while each share of Class B common stock have 20 votes) as of June 30, 2021. Among them, HUI WANG holds 168,006 shares of Class A common stock and 1,146,934 shares of Class B common stock in ACMR, representing 44.59% of the voting rights of ACMR in total.

On the basis of distribution of equity of ACMR as of June 30, 2021, if all such outstanding shares of Class B common stock of ACMR are converted into shares of Class A common stock, on a one for one basis, according to the provisions on conversion, then the (top five) distribution of equity and voting rights of ACMR will be shown as follows:

No.	Name of Shareholder	No. of Class A shares (Share)	Percentage of voting rights
1	Shanghai Science and Technology Venture Capital Co., Ltd.	1,506,170	7.77%
2	HUI WANG	1,314,940	6.79%
3	Pudong Science and Technology (Cayman) Co., Ltd.	1,119,576	5.78%
4	Xinxin (Hongkong) Capital Co., Limited	833,334	4.30%
5	HAIPING DUN	385,030	1.99%
Total		5,159,050	26.63%

As shown in the above table, if all shares of Class B common stock will be converted into shares of Class A common stock, then the percentage of voting rights held by shareholders of ACMR will be relatively scattered, and no single shareholder will hold more than 10% of the voting rights. In addition, the above shareholders have stated that there is no concerted action agreement or relationship of acting in concert with respect to ACMR among them.

To sum up, if all outstanding shares of Class B common stock of ACMR are converted into shares of Class A common stock, then ACMR will be changed to a company without de facto controller, indirectly resulting in the Issuer having no de facto controller.

3. Other Companies Controlled by the Controlling Shareholder

As of the signing date of the [***], in addition to the shares of ACMSH, ACMR also held 100% of the equity rights of ACM Research (Cayman), Inc. and ACM RESEARCH (SINGAPORE) PTE. LTD. The basic information of the said companies is as follows:

(1) ACM Research (Cayman), Inc.

Name	ACM Research (Cayman), Inc.
Address	Suite #4-210, Governors Square, 23 Lime Tree Bay Avenue, PO Box 32311, Grand Cayman KY1-1209, Cayman Islands
Director	HUI WANG
Number of Issued Shares	10,000 Shares
Main Business	No actual business carried out
Shareholders	100% equity rights held by ACMR

ACMR has obtained 100% of the equity rights of ACM Research (Cayman), Inc. since April 29, 2019.

(2) ACM RESEARCH (SINGAPORE) PTE. LTD.

Name	ACM RESEARCH (SINGAPORE) PTE. LTD.
Address	77 ROBINSON ROAD , #20-01 , ROBINSON 77 , SINGAPORE 068896
Director	HUI WANG , LIU JIA
Number of Issued Shares	100,000 Shares
Main Business	No actual business carried out
Shareholders	100% equity rights held by ACMR
Date of Establishment	August 17, 2021

(II) Major shareholders holding more than 5% Shares

As of the signing date of the [***], other than the controlling shareholder, the Company has no shareholders directly holding more than 5% of the shares of the Issuer.

(III) Pledge or other disputes over the shares of the Issuer

As of the signing date of the [***], there is no pledge or other disputes over the shares of the Company held by its shareholders.

VI. Share Capital of the Issuer

(I) Changes in the share capital before and after the Offering

The total share capital of the Company before the Offering is 390,201,300 shares, and the number of shares in the Public Offering is not more than 43,355,753 shares, all of which are new shares issued by the Company. After the completion of the Offering, the total share capital of the Company shall not exceed 433,557,100 shares, and the proportion of the shares issued in the Offering shall not be less than 10.00% of the total share capital of the Company after the Offering.

The changes in the share capital of the Company before and after the Offering are as follows:

No.	Name of Shareholder	Capital Structure before the Offering		Capital Structure after the Offering	
		Number of Shares Held (10,000 Shares)	Proportion of Shareholding (%)	Number of Shares Held (10,000 Shares)	Proportion of Shareholding (%)
1	ACMR	35,769.23	91.67	35,769.23	82.50
2	Xinwei Consulting	475.62	1.22	475.62	1.10
3	SICIF	461.54	1.18	461.54	1.06
4	PDHTI	461.54	1.18	461.54	1.06
5	[***]	230.77	0.59	230.77	0.53
6	Shangrong Innovation	207.69	0.53	207.69	0.48
7	Taihu Guolian	192.31	0.49	192.31	0.44
8	Jinpu Investment	192.31	0.49	192.31	0.44
9	Xinshi Consulting	178.19	0.46	178.19	0.41
10	Yongkong Consulting	176.92	0.45	176.92	0.41
11	Hai Feng Investment	153.85	0.39	153.85	0.35
12	Runguang Investment	153.85	0.39	153.85	0.35
13	ZJTVC	153.85	0.39	153.85	0.35
14	SYEM	116.69	0.30	116.69	0.27
15	Xingang Consulting	72.71	0.19	72.71	0.17
16	SRJY	23.08	0.06	23.08	0.05
Shares in the Offering		-	-	4,335.5753	10.00
Total		39,020.13	100.00	43,355.71	100.00

(II) Top 10 shareholders before the Offering

The shareholdings of the top 10 shareholders in the Company are shown in “VI (I) Changes in the Share Capital before and after the Offering” in the Section.

(III) Top 10 natural person shareholders and their positions in the Issuer before the Offering

As of the date of signing the [***], the Company has no natural person shareholders.

(IV) State-owned shares and foreign-owned shares

There are state-owned shareholders and foreign shareholders of the Company, the details of which are as follows:

1. State-owned Shareholders of the Issuer

As of the signing date of the [***], the Company has 3 state-owned shareholders, which respectively are SICIF, PDHTI and ZJTVC whose securities accounts should be marked “SS”. The specific shareholding information is as follows:

No.	Name of Shareholder	Time of Acquisition	Quantity of Shares Held (Ten Thousand)	Proportion of Shareholding
1	SICIF	December 13, 2019	461.54	1.18%
2	PDHTI	December 13, 2019	461.54	1.18%
3	ZJTVC	December 13, 2019	153.85	0.39%

(1) Progress of retroactive evaluation on increased investment from PDSTI in June 2008

On June 30, 2008, the board of directors of ACMSH (before restructuring) adopted a resolution on newly increased registered capital of RMB 22,973,700 Yuan; PDSTI subscribed RMB 25 million Yuan in cash, the capital increase price is RMB 1.088 per unit of registered capital, and the remaining RMB 2,026,300 is included in capital reserve. On February 1, 2010, ACMSH completed the formalities of industrial & commercial registration for this capital increase, and obtained the business license issued by Shanghai Administration for Industry and Commerce, Pudong New Area Branch. For this capital increase, PDSTI did not go through the procedure of assets evaluation and filing in accordance with relevant regulations such as Interim Regulations on Supervision and Management of Assessment of State-owned Assets of Enterprises.

On March 25, 2015, the board of directors of ACMSH (before restructuring) adopted a resolution on changing Company's shareholder PDSTI into PDHTI according to the splitting agreement of PDSTI; after change, PDHTI held 10.78% of equities of Company.

With respect to aforesaid matters, PDHTI has entrusted Shanghai Lixin Appraisal Co., Ltd. to conduct retroactive evaluation on the value of all equities of shareholders of ACMSH (before restructuring) involved in this capital increase. According to *Report on Retroactive Assets Evaluation of the Value of All Equities of Shareholders of Company Involved in PDSTI's Increase in Capital of ACM Research (Shanghai), Inc.* (Xin Zi Ping Bao Zi [2020] No. 10023) issued by Shanghai Lixin Appraisal Co., Ltd. on May 27, 2020, the value of all equities of shareholders of ACMSH on September 30, 2009, i.e. the evaluation benchmark date, was RMB 207 million Yuan.

On July 2, 2020, the State-owned Assets Supervision and Administration Commission of Pudong New Area, Shanghai issued *Opinions on Review of Retroactive Evaluation Report of ACM Research (Shanghai), Inc.* (Pu Guo Zi Lian (2020) No. 107), believing that “no major question of principle is found in the evaluation method and idea applied in such evaluation report affecting evaluation value, and the retroactive evaluation value at such evaluation benchmark date is basically reasonable.” Therefore, the retroactive evaluation involved in this capital increase has been completed.

(2) Progress of reply on arrangement of state-owned equities of the Issuer

On September 25, 2020, the Company has obtained *Reply on As to Matters Concerning State-owned Shareholder Identification Management of ACM Research (Shanghai), Inc.* (Hu Guo Zi Wei Chan Quan [2020] No. 257) issued by the Shanghai Municipal State-owned Assets Supervision and Administration Commission.

2. Foreign-owned Shares of the Issuer

As of the date of signing the [***], the foreign shareholders of the Company are ACMR and Hai Feng Investment, holding 91.67% and 0.39% of the Company's shares, respectively.

(V) New shareholders of the Issuer in the latest year before application

The new shareholders of the Company in the latest year before application are as follows:

No.	Name of Shareholder	Time of Acquisition	Method	Quantity of Shares Held (Ten Thousand)	Proportion of Shareholding	Capital Increase Price (Yuan/Share)	Pricing Basis
1	Xinwei Consulting	August 20, 2019	Capital Increase	475.62	1.22%	13.00	Negotiated Pricing
2	[***]	August 20, 2019	Capital Increase	230.77	0.59%	13.00	Negotiated Pricing
3	Taihu Guolian	August 20, 2019	Capital Increase	192.31	0.49%	13.00	Negotiated Pricing
4	Jinpu Investment	August 20, 2019	Capital Increase	192.31	0.49%	13.00	Negotiated Pricing
5	Xinshi Consulting	August 20, 2019	Capital Increase	178.19	0.46%	10.40	Negotiated Pricing
6	Hai Feng Investment	August 20, 2019	Capital Increase	153.85	0.39%	13.00	Negotiated Pricing
7	Xingang Consulting	August 20, 2019	Capital Increase	72.71	0.19%	10.40	Negotiated Pricing
8	SICIF	December 13, 2019	Capital Increase	461.54	1.18%	13.00	Negotiated Pricing
9	PDHTI	December 13, 2019	Capital Increase	461.54	1.18%	13.00	Negotiated Pricing
10	Shangrong Innovation	December 13, 2019	Capital Increase	207.69	0.53%	13.00	Negotiated Pricing
11	Yongkong Consulting	December 13, 2019	Capital Increase	176.92	0.45%	13.00	Negotiated Pricing
12	Runguang Investment	December 13, 2019	Capital Increase	153.85	0.39%	13.00	Negotiated Pricing
13	ZJTVC	December 13, 2019	Capital Increase	153.85	0.39%	13.00	Negotiated Pricing
14	SYEM	December 13, 2019	Capital Increase	116.69	0.30%	13.00	Negotiated Pricing
15	SRJY	December 13, 2019	Capital Increase	23.08	0.06%	13.00	Negotiated Pricing

In May, 2019, the registered capital of ACMSH increased from RMB 357,692,307.69 Yuan to RMB 372,649,807.69 Yuan. The newly increased registered capital was subscribed in cash by seven new shareholders including Xinwei Consulting, [***], Taihu Guolian, Jinpu Investment, Xinshi Consulting, Hai Feng Investment and Xingang Consulting. The capital increase prices were determined through mutual agreement. Thereinto, Xinshi Consulting and Xingang Consulting were the employee stock ownership platforms, the capital increase price of which was RMB 10.40 Yuan/unit registered capital, while the other five new shareholders' capital increase price was RMB 13 Yuan/unit registered capital. The Company has confirmed a fee of RMB 6,523,500 Yuan for the capital increase of the above employee stock ownership platforms.

In November 2019, the registered capital of ACMSH increased from RMB 372,649,808 Yuan to RMB 390,201,347 Yuan. The new registered capital was subscribed in cash by eight new shareholders including Yongkong Consulting, SYEM, Shangrong Innovation, SRJY, Runguang Investment, SICIF, PDHTI and ZJTVC. The capital increase price was RMB 13.00 Yuan/share.

1. Basic Information

The basic information of the above new shareholders is as follows:

(1) Xinwei Consulting

① Basic Information

Name	Xinwei (Shanghai) Management Consulting Partnership (L.P.)
Domicile	Room 4166, Building 1, No.63 Liantai Road, Baoshan District, Shanghai
Unified Social Credit Code	91310113MA1GNJQF9E
Executive Partner	Xinrun Management Consulting (Shanghai) Ltd.
Registered Capital	RMB 61.83 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Enterprise management consultancy; enterprise marketing planning; commercial information consultancy; market information consultancy and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll); conference services. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From June 11, 2019 to June 10, 2049

② As of the signing date of the [***], the shareholder structure of Xinwei Consulting is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
BAOMING LI	Limited Partner	1,200	19.41
DAQUAN YU	Limited Partner	1,000	16.17
BEIYI WANG	Limited Partner	900	14.56
ZHONGPING LUO	Limited Partner	500	8.09
HONG HU	Limited Partner	350	5.66
QUAN ZHANG	Limited Partner	300	4.85
SHU ZHU	Limited Partner	300	4.85
YUN MA	Limited Partner	300	4.85
JIANBO ZHANG	Limited Partner	220	3.56
GANG HUANG	Limited Partner	220	3.56
XIAOHONG WANG	Limited Partner	210	3.40
QIAN DONG	Limited Partner	200	3.23
YU HOU	Limited Partner	152.5	2.47
SHOULEI JIANG	Limited Partner	130	2.10
XIAOLAN SU	Limited Partner	130	2.10
JINSONG LE	Limited Partner	70	1.13
Xinrun Management Consulting (Shanghai) Ltd.	General Partner	0.5	0.01
Total	--	6,183	100.00

③ Basic Information of the General Partner

Name	Xinrun Management Consulting (Shanghai) Ltd.
Principal Place of Business	Room 239, 2/F, Whole Building, No.390-408 East Beijing Road, Huangpu District, Shanghai
Date of Establishment	May 22, 2019
Unified Social Credit Code	91310101MA1FPEW358
Legal Representative	GANG HUANG
Registered Capital	RMB 500,000 Yuan
Business Scope	Enterprise management consultancy; enterprise marketing planning; commercial information consultancy; market information consultancy and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll). [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]

(2) [***]

① Basic Information

Name	[***]
Domicile	[***]
Unified Social Credit Code	[***]
Executive Partner	[***]
Registered Capital	RMB 323.625 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Investment and investment management of non-securities businesses. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From January 24, 2018 to January 23, 2028

②As of the signing date of the [***], the shareholding structure of [***] is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Capital Proportion (%)
China Merchants Wealth	Limited Partner	25,890.00	80.00
[***]	General Partner	6,276.50	19.39
Jiaying Xiyue Investment Management Partnership (L.P.)	Limited Partner	196.00	0.61
Total		32,362.5	100.00

③ Basic Information of the General Partner

Name	[***]
Domicile	[***]
Date of Establishment	[***]
Unified Social Credit Code	[***]
Legal Representative	[***]
Registered Capital	RMB 7,500 million Yuan
Business Scope	Using self-owned funds or setting up direct investment funds to make equity investment or equity-related debt investment in enterprises, or investing other investment funds related to equity investment; providing investment consultancy, investment management, financial consultancy service related to equity investment; other businesses approved by the CSRC. (For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained)

④ Recordation of privately offered investment fund

[***] conducted the recordation of privately offered investment fund of securities company (No. SEH191) on September 29, 2018, and [***], the fund manager of [***], conducted the registration of privately offered fund manager (Registration No. P1012857) on May 8, 2015. As such, [***] has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(3) Taihu Guolian

① Basic Information

Name	Jiangsu Jiequan Taihu Guolian Emerging Industry Investment Enterprise (L.P.) (Formerly known as: Wuxi Taihu Guolian Emerging Industry Investment Enterprise (L.P.))
Domicile	5/F, Guolian Financial Building, No.8 Jinrongyi 1 st Street, Binhu District, Wuxi City
Unified Social Credit Code	91320200MA1Y27GM1N
Executive Partner	Wuxi Guolian Industry Investment Co., Ltd.
Registered Capital	RMB 5 billion Yuan
Type of Enterprise	Limited Partnership
Business Scope	Using self-owned funds to conduct foreign investment. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From March 13, 2019 to March 12, 2027

② As of the signing date of the [***], the shareholding structure of Taihu Guolian is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
Wuxi Guolian Financial Investment Group Co., Ltd.	Limited Partner	299,500	59.90
Wuxi Municipal Finance Bureau	Limited Partner	133,500	26.70
Jiangsu Provincial Government Investment Fund (L.P.)	Limited Partner	66,500	13.30
Wuxi Guolian Industry Investment Co., Ltd.	General Partner	500	0.10
Total		500,000	100.00

③ Basic Information of the General Partner

Name	Wuxi Guolian Industry Investment Co., Ltd.
Domicile	E1-202, China Sensor Network International Innovation Park, No. 200, Linghu Avenue, Xinwu District, Wuxi City
Date of Establishment	September 21, 2006
Unified Social Credit Code	9132021479331907XR
Executive Partner	HAIJIANG MA
Registered Capital	RMB 1.2 billion Yuan
Business Scope	Investment management; venture capital investment; industry investment (Except for sectors prohibited, restricted by the laws and regulations); high-tech industry investment and management. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]

④ Recordation of privately offered investment fund

Taihu Guolian conducted the recordation of privately offered fund (No. SGR243) on June 3, 2019, and Wuxi Guolian Industry Investment Co., Ltd., the fund manager of Taihu Guolian, conducted the registration of privately offered fund manager (Registration No. P1005001) on October 23, 2014. As such, Taihu Guolian has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(4) Jinpu Investment

① Basic Information

Name	Shanghai Jinpu Lingang Intelligent Technology Private Equity Investment Fund (L.P.)
Domicile	Room 865, No.888, West Huanhu'er Road, Nanhui New Town, Pudong New District, Shanghai
Unified Social Credit Code	91310000MA1FL3Q357
Executive Partner	Shanghai Jinpu Intelligent Technology Investment Management Co., Ltd.
Registered Capital	RMB 1.286 billion Yuan
Type of Company	Limited Partnership
Business Scope	Equity Investment, investment management, investment consultancy, asset management, industrial investment. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From March 27, 2017 to March 26, 2037

② As of the signing date of the [***], the shareholding structure of Jinpu Investment is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
Shanghai Lingang Zhiyao Equity Investment Fund Partnership (L.P.)	Limited Partner	20,000	15.55
Shanghai Huilin Enterprise Management Center (L.P.)	Limited Partner	18,800	14.62
Shanghai Guofang Master Fund Phase I Venture Vapital Partnership (L.P.)	Limited Partner	11,250	8.75
Shanghai Jinxin Enterprise Management Co., Ltd.	Limited Partner	10,000	7.78
Quzhou Green Development Group Co., Ltd.	Limited Partner	10,000	7.78
Zhenjiang Dantu Huajian Asset Investment Co., Ltd.	Limited Partner	10,000	7.78
Shanghai Tiantai Real Estate Co., Ltd.	Limited Partner	10,000	7.78

Zhenjiang High-tech Investment Co., Ltd.	Limited Partner	10,000	7.78
Gongqingcheng Pulian Investment Partnership (L.P.)	Limited Partner	5,500	4.28
Shanghai Lianming Investment Group Co., Ltd.	Limited Partner	5,000	3.89
Shanghai Lingang Fengxian Economic Development Co., Ltd.	Limited Partner	4,000	3.11
Shanghai Guofang Master Fund Phase II Venture Vapital Partnership (L.P.)	Limited Partner	3,750	2.92
Xiamen International Trust Co., Ltd.	Limited Partner	2,000	1.56
Xiamen Tiandi Equity Investment Co., Ltd.	Limited Partner	2,000	1.56
Zhenjiang Tuanshan Capital Management Co., Ltd.	Limited Partner	2,000	1.56
Shanghai Songjiang Chengqian Investment Co., Ltd.	Limited Partner	1,900	1.48
Shanghai Jieyue Enterprise Management Partnership (L.P.)	Limited Partner	1,200	0.93
Ningbo Enguang Venture Capital Investment Partnership (L.P.)	Limited Partner	1,000	0.78
Shanghai Xuanhong Enterprise Management Partnership (L.P.)	General Partner	100	0.08
Shanghai Jinpu Intelligent Technology Investment Management Co., Ltd.	General Partner	100	0.08
Total		128,600	100.00

③ Basic Information of the General Partner

A. Shanghai Xuanhong Enterprise Management Partnership (L.P.)

Name	Shanghai Xuanhong Enterprise Management Partnership (L.P.)
Domicile	Building 1, No.139 Rongmei Road, Songjiang District, Shanghai
Date of Establishment	March 17, 2017
Unified Social Credit Code	91310117MA1J21JHXM
Executive Partner	HUAFENG TIAN
Business Scope	Enterprise management consultancy; commercial information consultancy; exhibition services; enterprise marketing planning; enterprise image planning; cultural and art exchange activities planning; financial consulting; market information consulting and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll); the design and making of various advertisements; using self-owned media to publish advertisements. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]

B. Shanghai Jinpu Intelligent Technology Investment Management Co., Ltd.

Name	Shanghai Jinpu Intelligent Technology Investment Management Co., Ltd.
Domicile	Tower C, No.888 West Huanhu'er Road, Nanhui New Town, Pudong New District
Date of Establishment	March 15, 2017
Unified Social Credit Code	91310115MA1H8Q3H7H
Legal Representative	HOUJUN LV
Registered Capital	RMB5 million Yuan
Business Scope	Investment management; asset management; industrial investment. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]

④ Recordation of privately offered investment fund

Jinpu Investment conducted the recordation of privately offered fund (No. SY1807) on January 4, 2018, and Shanghai Jinpu Intelligent Technology Investment Management Co., Ltd., the fund manager of Jinpu Investment, conducted the registration of privately offered fund manager (Registration No. P1063908) on July 27, 2017. As such, Jinpu Investment has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(5) Xinshi Consulting

① Basic Information

Name	Xinshi (Shanghai) Management Consulting Partnership (L.P.)
Domicile	Room 4162, Building 1, No.63 Liantai Road, Baoshan District, Shanghai
Unified Social Credit Code	91310113MA1GNJDY1N
Executive Partner	Xindai Management Consulting (Shanghai) Ltd.
Registered Capital	RMB 18.532 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Enterprise management consultancy; enterprise marketing planning; commercial information consultancy; market consultancy and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll). [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From June 5, 2019 to June 4, 2049

② Xinshi Consulting is the Issuer's employee shareholding platform. As of the signing date of this [***], the shareholding structure and employees' positions of Xinshi Consulting are as follows:

Name of Partner	Category of Partner	Contribution Proportion	Capital Contributions (RMB 10,000 Yuan)	Position
JUN WANG	Limited Partner	5.40%	100.00	Core Technician
XUEJUN LI	Limited Partner	5.40%	100.00	Core Technician
HUI SHEN	Limited Partner	4.32%	80.00	Core Management Personnel
XIAYUN YANG	Limited Partner	4.32%	80.00	Core Management Personnel
YAN LI	Limited Partner	4.32%	80.00	Core Management Personnel
SHENA JIA	Limited Partner	4.32%	80.00	Core Management Personnel
DEYUN WANG	Limited Partner	4.32%	80.00	Core Management Personnel
XIAOYAN ZHANG	Limited Partner	4.32%	80.00	Core Management Personnel
XI WANG	Limited Partner	4.32%	80.00	Core Management Personnel
XIAOFENG TAO	Limited Partner	3.24%	60.00	Core Business Personnel
JUN WU	Limited Partner	3.24%	60.00	Core Management Personnel
HU ZHAO	Limited Partner	3.24%	60.00	Core Business Personnel
GUANGYU XIA	Limited Partner	3.24%	60.00	Core Business Personnel
GUANZHONG LU	Limited Partner	3.24%	60.00	Core Business Personnel
HONGCHAO YANG	Limited Partner	3.24%	60.00	Core Business Personnel
YULU HU	Limited Partner	3.24%	60.00	Core Business Personnel
ZHAOWEI JIA	Limited Partner	3.24%	60.00	Core Management Personnel
YINUO JIN	Limited Partner	3.24%	60.00	Core Management Personnel
WENJUN WANG	Limited Partner	3.24%	60.00	Core Business Personnel
XIAOQUN WANG	Limited Partner	2.16%	40.00	Core Business Personnel
GUANGBO HAN	Limited Partner	2.16%	40.00	Core Business Personnel
WENQING JI	Limited Partner	2.16%	40.00	Core Management Personnel
FENG LIU	Limited Partner	2.16%	40.00	Core Business Personnel
QIANG WANG	Limited Partner	2.16%	40.00	Core Business Personnel
YANLI HU	Limited Partner	2.16%	40.00	Core Business Personnel
FANGYONG ZHEN	Limited Partner	2.16%	40.00	Core Business Personnel
ANYUN BI	Limited Partner	2.16%	40.00	Core Management Personnel
XINZHENG WANG	Limited Partner	2.16%	40.00	Core Business Personnel
LAN WANG	Limited Partner	1.62%	30.00	Core Management Personnel

XIAOWEI DI	Limited Partner	1.62%	30.00	Core Business Personnel
CHUANYUN ZHU	Limited Partner	1.08%	20.00	Core Business Personnel
BINGGENG LONG	Limited Partner	0.81%	15.00	Core Business Personnel
DONGHUI LU	Limited Partner	0.54%	10.00	Core Management Personnel
HAILANG DUAN	Limited Partner	0.54%	10.00	Core Business Personnel
JUNZHUO WU	Limited Partner	0.43%	8.00	Core Business Personnel
FEI ZHOU	Limited Partner	0.43%	8.00	Core Business Personnel
WENJUN HU	Limited Partner	0.11%	2.00	Core Business Personnel
Xindai Management Consulting (Shanghai) Ltd.	General Partner	0.01%	0.20	-
Total	-	100.00%	1,853.20	-

③ Basic Information of the General Partner

Name	Xindai Management Consulting (Shanghai) Ltd.
Unified Social Credit Code	91310101MA1FPEW27D
Principal Place of Business	Room 240, 2/F, Whole Building, No. 390-408 East Beijing Road, Huangpu District, Shanghai
Registered Capital	RMB10,000 Yuan
Legal Representative	XIAYUN YANG
Date of Establishment	May 22, 2019
Business Scope	Enterprise management consultancy; enterprise marketing planning; commercial information consultancy; market information consultancy and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll). [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]

(6) Hai Feng Investment

Name	Hai Feng Investment Holding Limited
Address of Registered Office	Room 5301, 53/F, The Center, No.99 Queen's Road, Hong Kong
Company ID	2788115
Number of Issued Shares	1 share
Directors	CHONGJIU SHA, Youngjin KO
Composition of Shareholders	100% equity rights held by SL Capital Fund I, L. P.
De Facto Controller	The sole shareholder of Hai Feng Investment is SL Capital Fund I, L. P., and the general partner of SL Capital Fund I, L. P. is SLSF I GP Limited, with SK Investment Management Co., Ltd. and Legend Capital Management Co., Ltd. each having a 50% shareholding in SLSF I GP Limited.

(7) Xingang Consulting

① Basic Information

Nam	Xingang (Shanghai) Management Consulting Partnership (L.P.)
Domicile	Room 4163, Building 1, No.63 Liantai Road, Baoshan District, Shanghai
Unified Social Credit Code	91310113MA1GNJDX3U
Executive Partner	Xindai Management Consulting (Shanghai) Ltd.
Registered Capital	RMB7.562 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Enterprise management consultancy; enterprise marketing planning; commercial information consultancy; market information consultancy and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll); conference service. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From June 5, 2019 to June 4, 2049

②Xingang Consulting is the Issuer’s employee shareholding platform. As of the signing date of this [***], the equity structure and employees’ positions of Xingang Consulting are as follows:

Name of Partner	Category of Partner	Contribution Proportion	Subscribed Capital Contributions (RMB 10,000 Yuan)	Position
XUFENG MENG	Limited Partner	2.64%	20.00	Core Business Personnel
ZHENMING CHU	Limited Partner	2.64%	20.00	Core Business Personnel
YUN SUN	Limited Partner	2.64%	20.00	Core Business Personnel
WEI ZHANG	Limited Partner	2.64%	20.00	Core Business Personnel
XIAOHUI ZHANG	Limited Partner	2.64%	20.00	Core Management Personnel
RONG CAO	Limited Partner	2.64%	20.00	Core Business Personnel
SHILIANG CHEN	Limited Partner	2.64%	20.00	Core Business Personnel
LAN XI	Limited Partner	2.64%	20.00	Core Management Personnel
YINGWEI DAI	Limited Partner	2.64%	20.00	Core Business Personnel
JUAN LI	Limited Partner	2.64%	20.00	Core Business Personnel
LEI WU	Limited Partner	2.64%	20.00	Core Business Personnel
HAIBO HU	Limited Partner	2.64%	20.00	Core Business Personnel
YU NIE	Limited Partner	2.64%	20.00	Core Management Personnel

DING XU	Limited Partner	2.64%	20.00	Core Business Personnel
YI SHI	Limited Partner	2.64%	20.00	Core Business Personnel
DANYING WANG	Limited Partner	2.64%	20.00	Core Business Personnel
MINLI GU	Limited Partner	2.64%	20.00	Core Management Personnel
WEIZHAN CAI	Limited Partner	2.64%	20.00	Core Business Personnel
ZHENJIANG QIN	Limited Partner	2.64%	20.00	Core Business Personnel
XIAOCHENG GU	Limited Partner	2.38%	18.00	Core Business Personnel
CHUNYANG HAN	Limited Partner	1.98%	15.00	Core Business Personnel
YANPING WANG	Limited Partner	1.98%	15.00	Core Business Personnel
YANJUN QIAN	Limited Partner	1.98%	15.00	Core Business Personnel
HONGXIN ZHANG	Limited Partner	1.98%	15.00	Core Business Personnel
HE WANG	Limited Partner	1.98%	15.00	Core Business Personnel
SHU YANG	Limited Partner	1.98%	15.00	Core Business Personnel
SONG WANG	Limited Partner	1.98%	15.00	Core Business Personnel
QI LI	Limited Partner	1.98%	15.00	Core Business Personnel
YANG XIANG	Limited Partner	1.98%	15.00	Core Business Personnel
SHAOSHUAI ZHANG	Limited Partner	1.98%	15.00	Core Business Personnel
ZERAN LI	Limited Partner	1.98%	15.00	Core Business Personnel
LI SUN	Limited Partner	1.98%	15.00	Core Business Personnel
BO XIONG	Limited Partner	1.98%	15.00	Core Business Personnel
YuanYuan XU	Limited Partner	1.98%	15.00	Core Business Personnel
GUANGXU ZHOU	Limited Partner	1.98%	15.00	Core Business Personnel
ZHAOMING ZHONG	Limited Partner	1.98%	15.00	Core Business Personnel
YING WANG	Limited Partner	1.98%	15.00	Core Business Personnel
XINXIN JIAO	Limited Partner	1.98%	15.00	Core Business Personnel
JIAN CHEN	Limited Partner	1.72%	13.00	Core Business Personnel
BAIGANG ZHUANG	Limited Partner	1.32%	10.00	Core Business Personnel
YANG HAN	Limited Partner	1.32%	10.00	Core Business Personnel
YUNCHEN YU	Limited Partner	1.32%	10.00	Core Business Personnel
YANYAN WANG	Limited Partner	1.32%	10.00	Core Management Personnel
CHUNYING LIU	Limited Partner	1.32%	10.00	Core Business Personnel
XINPING DENG	Limited Partner	1.32%	10.00	Core Business Personnel
HUA CHEN	Limited Partner	0.93%	7.00	Core Business Personnel
CHENG CHENG	Limited Partner	0.66%	5.00	Core Business Personnel
CHENHUA LU	Limited Partner	0.40%	3.00	Core Business Personnel
Xindai Management Consulting (Shanghai) Ltd.	General Partner	0.03%	0.20	-
Total	-	100.00%	756.20	-

③ Basic Information of the General Partner

Xingang Consulting and Xinshi Consulting share the same general partner, i.e. Xindai Management Consulting (Shanghai) Ltd.

(8) SICIF

① Basic Information

Name	Shanghai Integrated Circuit Industry Fund Co., Ltd.
Domicile	Unit A, Room 1201, No.289 Chunxiao Road, China (Shanghai) Pilot Free Trade Zone
Unified Social Credit Code	91310000MA1FL3AW02
Executive Partner	HONGYAN FU
Registered Capital	RMB28.5 billion Yuan
Type of Enterprise	Joint Stock Company Limited
Business Scope	Equity investment; venture investment. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From December 7, 2016 to December 6, 2024

②As of the signing date of this [***], the shareholding structure of SICIF is as follows:

Name of Shareholder	Number of Shares (Ten thousand)	Percentage of Shares
Shanghai Science and Technology Venture Capital (Group) Co., Ltd.	875,000	30.70
SAIC Group Equity Investment Co., Ltd.	600,000	21.05
Shanghai International Trust Corp., Ltd.	180,000	6.32
National Integrated Circuit Industry Investment Fund Co., Ltd.	300,000	10.53
Shanghai International Group	262,500	9.21
Shanghai Pudong High-tech Investment Co., Ltd.	200,000	7.02
Shanghai Guosheng Group Co., Ltd.	262,500	9.21
Shanghai Jiading Venture Capital Co., Ltd.	50,000	1.75
PICC Qixin (Jiaxing) Integrated Circuit Industry Investment Co., Ltd.	120,000	4.21
Total	2,850,000	100.00

③ As of the date hereof, SICIF has no controlling shareholder, more than 50% of whose shares has been controlled by Shanghai State-owned Assets Supervision and Administration Commission.

④ Recordation of privately offered investment fund

SICIF conducted the recordation of privately offered fund (No. SEJ523) on November 26, 2018, and Shanghai Integrated Circuit Industry Fund Management Co., Ltd, the fund manager of SICIF, conducted the registration of privately offered fund manager (Registration No. P1068675) on July 17, 2018. As such, SICIF has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(9) PDHTI

① Basic Information

Name	Shanghai Pudong High-tech Investment Co., Ltd.
Domicile	4/F, No.416 Zhoushi Road, Pudong New District, Shanghai
Unified Social Credit Code	91310115320776596T
Legal Representative	YUN ZHU
Capital Contributions	RMB1,832.81 million Yuan
Type of Enterprise	Limited Company
Business Scope	Equity investment; industrial investment; investment management; investment consultancy; enterprise management consultancy; enterprise M&A consultancy (brokerage services not included in the above consultancy services). [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From October 24, 2014 to no fixed term

② As of the signing date of this [***], the shareholding structure of PDHTI is as follows:

Name of Shareholder	Capital Contributions (RMB 10,000 Yuan)	Percentage of Shareholding (%)
Shanghai Pudong Technology Innovation Group Co., Ltd.	183.281	100
Total	183.281	100

③ As of the date hereof, the de facto controller of PDHTI is State-owned Assets Supervision and Administration Commission of Pudong New District, Shanghai.

(10) Shangrong Innovation

① Basic Information

Name	Shangrong Innovation (Ningbo) Equity Investment Center (L.P.)
Domicile	A0006, Zone C, Room 401, Building 1, No.88 Meishanqixing Road, Beilun District, Ningbo City, Zhejiang Province
Unified Social Credit Code	91330206MA2AHTFM7E
Executive Partner	Beijing Shang Finance Corporation
Registered Capital	RMB 1 billion Yuan
Type of Enterprise	Limited Partnership
Business Scope	Equity investment and related consultancy services. (being prohibited from engaging in financial businesses such as deposit taking, financing guarantee, financial management for clients, raising capital (financing) from the public without the approval of financial regulators) [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From March 29, 2018 to March 28, 2028

② As of the signing date of the [***], the shareholding structure of Shangrong Innovation is as follows:

Name of Partner	Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
Ningbo HeYuan Holding Co., Ltd.	Limited Partner	91,000	91.00
Ningbo HeYuan Holding Co., Ltd.	Limited Partner	7,000	7.00
RUIHUA ZHENG	Limited Partner	1,000	1.00
Beijing Shang Finance Corporation	General Partner	1,000	1.00
Total		100,000	100.00

③ Basic Information of the General Partner

Name	Beijing Shang Finance Corporation
Domicile	A0002, Zone C, Room 401, Building 1, No.88 Meishanqixing Road, Beilun District, Ningbo City, Zhejiang Province
Date of Establishment	July 17, 2015
Unified Social Credit Code	9133020634047013XJ
Legal Representative	HONGJIAN XIAO
Registered Capital	RMB100 million Yuan
Business Scope	Asset management; investment management; investment consultancy, industrial investment; equity investment (being prohibited from engaging in financial businesses such as deposit taking, financing guarantee, financial management for clients, raising capital (financing) from the public without the approval of financial regulators) [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]

④ Recordation of privately offered investment fund

Shangrong Innovation conducted the recordation of privately offered fund (No. SGV057) on August 2, 2019, and Beijing Shang Finance Corporation, the fund manager of Shangrong Innovation, conducted the registration of privately offered fund manager (Registration No. P1028564) on December 2, 2015. As such, Shangrong Innovation has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(11) Yongkong Consulting

① Basic Information

Name	Shanghai Yongkong Business Information Consulting Partnership (L.P.)
Domicile	Room 402, No.2, Lane 180, Zhangheng Road, China (Shanghai) Pilot Free Trade Zone
Unified Social Credit Code	91310115MA1K4EMM7R
Executive Partner	Shanghai Jiuyou Chuangu Investment Management Co., Ltd.
Registered Capital	RMB23.2323 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Commercial information consultancy; enterprise management consultancy; marketing planning; enterprise image planning; exhibition services; etiquette services; graphic design; computer technology; technology development, technology consultancy, technology services, technology transfer and information technology consultancy services within the field of internet technology. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Business Term	From September 25, 2019 to September 24, 2049

②As of the signing date of the [***], the shareholding structure of Yongkong Consulting is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Capital Proportion (%)
Shanghai Shangguo Investment Asset Management Co., Ltd.	Limited Partner	1,400	60.26
Shanghai Jiushen Equity Investment Fund Partnership Enterprise (L.P.)	Limited Partner	800	34.43
FAN LIU	Limited Partner	100	4.30
Shanghai Jiuyou Chuangu Investment Management Co., Ltd.	General Partner	23.23	1.00
Total		2,323.23	100.00

③ Basic Information of the General Partner

Name	Shanghai Jiuyou Chuangu Investment Management Co., Ltd.
Domicile	Room 08, 5/F, No.2 Office Building, Lane 180, Zhangheng Road, China (Shanghai) Pilot Free Trade Zone
Date of Establishment	January 16, 2013
Unified Social Credit Code	91310115060900342P
Legal Representative	XIAOLONG LIU
Registered Capital	RMB10 million Yuan
Business Scope	Industrial investment; investment management; investment consultancy; business consultancy, enterprise management consultancy (brokerage services are not included in the above consultancy services); asset management (For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained)

④ Recordation of privately offered investment fund

Yongkong Consulting conducted the recordation of privately offered investment fund (No. SJM473) on April 27, 2020, and Shanghai Jiuyou Chuangu Investment Management Co., Ltd., the fund manager of Yongkong Consulting, conducted the registration of privately offered fund manager (Registration No. P1064039) on August 7, 2017. As such, Yongkong Consulting has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(12) Runguang Investment

① Basic Information

Name	Hefei Runguang Equity Investment Partnership (L.P.)
Domicile	Room 560, Fund Tower, Building E1, Innovation Industrial Park Phase II, No.2800 Innovation Avenue, High-tech Zone, Hefei City
Unified Social Credit Code	91340100MA2TER55XC
Executive Partner	Huaxin Yuanchuang (Qingdao) Capital Management Co., Ltd.
Registered Capital	RMB100 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Using self-owned funds to make equity investment; enterprise management consultancy services. (being prohibited from engaging in financial businesses such as deposit taking, financing guarantee, financial management for clients without the approval of financial regulators) (For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained)
Business Term	From January 23, 2019 to January 22, 2026

②As of the signing date of the [***], the shareholding structure of Runguang Investment is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
Shenzhen Xiaoyezitan Investment Partnership (L.P.)	Limited Partner	5,772	59.94
Hefei Huadeng Integrated Circuit Industry Investment Fund Co., Ltd.	Limited Partner	3,848	39.96
Huaxin Yuanchuang (Qingdao) Capital Management Co., Ltd.	General Partner	9.53	0.10
Total		10,000	100.00

③ Basic Information of the General Partner

Name	Huaxin Yuanchuang (Qingdao) Capital Management Co., Ltd.
Domicile	Room 2004, No.658, Jinggangshan Road, Huangdao District, Qingdao City, Shandong Province
Date of Establishment	September 20, 2016
Unified Social Credit Code	91370211MA3CH4UD45
Legal Representative	Hing Wong
Registered Capital	RMB 100 million Yuan
Business Scope	Entrusted to manage the investment business of investment enterprises; providing investment consultancy and investment management consultancy services; enterprise management consultancy. (The above services do not involve fund business; being prohibited from engaging in financial services such as deposit taking, financing guarantee, financial management for clients without the approval of financial regulators) (The above business scope does not include any project restricted, prohibited and ousted by state laws and regulations, and projects subject to approval according to law shall be approved by the relevant departments before carrying out business activities) (Projects subject to approval according to law shall be approved by the relevant departments before carrying out business activities)

④ Recordation of privately offered investment fund

Runguang Investment conducted the recordation of privately offered fund (No. SJK918) on March 4, 2020, and Huaxin Yuanchuang (Qingdao) Capital Management Co., Ltd., the fund manager of Runguang Investment, conducted the registration of privately offered fund manager (Registration No. P1060141) on November 11, 2016. As such, Runguang Investment has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(13) ZJTVC

① Basic Information

Name	Shanghai Zhangjiang Science and Technology Venture Capital Co., Ltd.
Domicile	Room 209, Building 1 Complex, No.3000 Longdong Avenue, China (Shanghai) Pilot Free Trade Zone
Unified Social Credit Code	913100007679066259
Legal Representative	HONGLIANG YU
Registered Capital	RMB1 billion Yuan
Type of Enterprise	Limited Company
Business Scope	Venture capital investment; providing agency services for other venture capital investment enterprises and other institutions or individuals as to their venture capital investment, venture capital investment consultancy businesses; providing venture capital management service business for venture capital enterprises; participating in the set up of venture capital investment enterprises and venture capital management consultancy institutions. (For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained)
Business Term	From October 9, 2004 to October 8, 2054

②As of the signing date of the [***], the shareholding structure of ZJTVC is as follows:

Name of Shareholder	Capital Contributions (RMB 10,000 Yuan)	Percentage of Shareholding (%)
Zhangjiang Group	100,000	100
Total	100,000	100

③ As of the date hereof, the de facto controller of ZJTVC is State-owned Assets Supervision and Administration Commission of Pudong New District, Shanghai.

④ Recordation of privately offered investment fund

ZJTVC conducted the recordation of privately offered fund (No. SD4346) as well as the registration of privately offered fund manager (Registration No. P1002239) on May 20, 2014. As such, ZJTVC has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

(14) SYEM

① Basic Information

Name	Shanghai Shanyi Enterprise Management Center (L.P.)
Domicile	Room 601-31, No.198 Wudong Road, Yangpu District, Shanghai
Unified Social Credit Code	91310110MA1G92DE5Y
Executive Partner	WEIWEI XU
Registered Capital	RMB15.17 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Enterprise management and consultancy; commercial information consultancy; financial consultancy. (For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained)
Business Term	From September 19, 2019 to September 18, 2029

Note: In January 2021, the general partner and managing partner of SYEM was changed from SULAN LV to WEIWEI XU.

②As of the signing date of the [***], the shareholding structure of SYEM is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
WEIWEI XU	General Partner	1,316.756	86.80
JUN JIANG	Limited Partner	100.122	6.60
XU LU	Limited Partner	100.122	6.60
Total	-	1,517.000	100.00

③ Basic Information of the General Partner

WEIWEI XU, female, a Chinese citizen, with ID Card No. 4107031973*****.

(15) SRJY

① Basic Information

Name	Shanghai Shangrong JuYuan Equity Investment Center (L.P.)
Domicile	Room 1206, 12/F, No.407-1 Yishan Road, Xuhui District, Shanghai
Unified Social Credit Code	91310000MA1FL3X64K
Executive Partner	Beijing Shang Finance Corporation
Registered Capital	RMB 460 million Yuan
Type of Enterprise	Limited Partnership
Business Scope	Equity investment; industrial investment; investment management; asset management. (For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained)
Business Term	From May 8, 2017 to May 7, 2027

② As of the signing date of the [***], the shareholding structure of SRJY is as follows:

Name of Partner	Category of Partner	Capital Contributions (RMB 10,000 Yuan)	Contribution Proportion (%)
Gongqingcheng Shangrong Investment Management Partnership (L.P.)	Limited Partner	45,100	98.04
Beijing Shang Finance Corporation	General Partner	450	0.98
Ningbo Ronghui Investment Center (L.P.)	Limited Partner	450	0.98
Total		46,000	100.00

③ Basic Information of the General Partner

Shangrong Innovation and SRJY share the same general partner, i.e. Beijing Shang Finance Corporation.

④ Recordation of privately offered investment fund

SRJY conducted the recordation of privately offered fund (No. ST7275) on September 29, 2017, and Beijing Shang Finance Corporation, the fund manager of SRJY, conducted the registration of privately offered fund manager (Registration No. P1028564) on December 2, 2015. As such, SRJY has duly accomplished the recordation for privately offered investment fund as per the procedures under the *Measures for the Administration of Privately Offered Funds* and the *Measures for the Registration of Managers of Privately Offered Investment Funds and the Recordation of Funds (for Trial Implementation)*.

2. Reasons for newly admitted shareholders

The Company newly admitted shareholders through the two capital increases for the purpose of attracting external investments to meet its needs for business development, and new shareholders recognized the [***] of the Issuer and purchased its newly issued shares to become its new shareholders; to allow its employees to share development results of Company, the Company established employee equity ownership platform Xinshi Consulting and Xingang Consulting, so that its employees can hold its shares voluntarily and bear their own risks.

3. Pricing basis

The prices and pricing basis for capital increase in recent one year before application are as follows:

No.	Shareholder	Date of capital increase	Price for capital increase (RMB/Share)	Pricing basis
1	Xinwei Consulting	August 20, 2019	13.00	The parties to capital increase confirm after negotiation based on Company's performance and future development
2	[***]	August 20, 2019	13.00	
3	Taihu Guolian	August 20, 2019	13.00	
4	Jinpu Investment	August 20, 2019	13.00	
5	Haifeng Investment	August 20, 2019	13.00	
6	Xinshi Consulting	August 20, 2019	10.40	The parties to capital increase confirm after negotiation by reference with prices of other external investors in the same capital increase for purpose of allowing the Issuer's employees to hold its shares
7	Xingang Consulting	August 20, 2019	10.40	
8	SICIF	December 13, 2019	13.00	The parties to capital increase confirm after negotiation based on overall assets evaluation value of the Issuer as well as Company's performance and future development
9	PDHTI	December 13, 2019	13.00	
10	Shangrong Innovation	December 13, 2019	13.00	
11	Yongkong Consulting	December 13, 2019	13.00	
12	Runguang Investment	December 13, 2019	13.00	
13	ZJTVC	December 13, 2019	13.00	
14	SYEM	December 13, 2019	13.00	
15	SRJY	December 13, 2019	13.00	

4. Whether there is any affiliation between the Issuer's new shareholders and its other shareholders, directors, supervisors and officers, and between the new shareholders and the intermediaries in the Offering as well as their principals, officers and handlers, and whether there is nominee shareholding on the part of the shareholders

Among the new shareholders, Xinshi Consulting and Xingang Consulting are employee equity ownership platforms composed of the Issuer's employees, and their executive partners are Xindai Management Consulting (Shanghai) Ltd.; Shangrong Innovation and SRJY's executive partner is Beijing Shang Finance Corporation; PDHTI holds 7.02% of the shares of SICIF; QIAN DONG, a limited partner of Xinwei Consulting, is the Issuer's supervisor and SHOULEI JIANG had been the Issuer's supervisor; the Issuer's director JIANG LI and CHEN HUANG are nominated by SICIF and PDHTI respectively; [***], the general partner and executive partner of [***], is a wholly-owned subsidiary of [***], the Issuer's Sponsor.

Other than the foregoing, there is no affiliation between the Issuer's new shareholders or its other shareholders, directors, supervisors and officers, or between the new shareholders and the intermediaries in the Offering or their principals, officers and handlers, nor is there any nominee shareholding on the part of the shareholders.

(VI) The relationship between the associated shareholders and their respective shareholding proportions before the Offering

Before the Offering, the association relationships between the shareholders are as follows:

1. Xinshi Consulting and Xingang Consulting

The managing partner of Xinshi Consulting and Xingang Consulting is Xindai Management Consulting (Shanghai) Co., Ltd. Xinshi Consulting and Xingang Consulting hold 0.46% and 0.19% of the Company's shares respectively.

2. SICIF and PDHTI

PDHTI holds 7.02% of SICIF's shares. SICIF and PDHTI hold 1.18% of the Company's shares respectively.

3. Shangrong Innovation and SRJY

The managing partner of Shangrong Innovation and SRJY is Beijing Shang Finance Corporation. Shangrong Innovation and SRJY holds 0.53% and 0.06% of the Company's shares respectively.

(VII) The influence of public offering of shares by the shareholders of the Issuer on the control, governance structure and production and operation of the Issuer

The Offering does not involve any public offering of shares by any shareholder of the Issuer.

(VIII) Commitment from the Company about shareholders

1. There has been no nominee shareholding, or obvious abnormalities in the price of shareholders' shares, or disputes or potential disputes over equity involving us since our establishment.

2. Our shareholders are qualified to hold the shares in us, and no shares of us are held, directly or indirectly, by anyone who is prohibited by laws and regulations to do so.

3. [***], the general partner and executive partner of [***], is a wholly-owned subsidiary of [***], the Issuer's sponsor. Except for such circumstance, there is no direct or indirect holding of our shares by the intermediaries in the Offering or their principals, officers and handlers, nor is there any kinship, affiliation, entrusted shareholding, shareholding on trust or other tunneling between holders directly or indirectly holding our shares, on one hand, and intermediaries in the Offering, as well as their principals, officers and handlers, on the other hand.

4. No shareholder of us has been engaged in any improper tunneling using our equity.

5. We have timely provided true, accurate and complete information to the intermediaries in the Offering, actively and comprehensively cooperated with them in conducting due diligence, truthfully, accurately and completely disclosed shareholder information in the application documents of the Offering according to law, and fulfilled the obligation of information disclosure.

6. We will, in case of breaching the above commitments, fully bear the legal liabilities arising therefrom.

VII. Brief Information of Directors, Supervisors, Senior Executives and Core Technicians

(I) Members of the board of directors

The Company's board of directors is composed of 11 directors, including 4 independent directors. The details are as follows:

No.	Name	Position	Nominator	Term of Office
1	HUI WANG	Chairman	ACMR	Nov. 14, 2019 - Nov.13, 2022
2	HAIPING DUN	Director	ACMR	Nov. 14, 2019 - Nov.13, 2022
3	STEPHEN SUN-HAI CHIAO	Director	ACMR	Nov. 14, 2019 - Nov.13, 2022
4	JIAN WANG	Director	ACMR	Jul. 8, 2020 - Nov. 13, 2022
5	Charles Law	Director	ACMR	Nov. 14, 2019 - Nov. 13, 2022
6	JIANG LI	Director	SICIF	Mar. 30, 2020 - Nov. 13, 2020
7	CHEN HUANG	Director	PDHTI	Mar. 30, 2020 - Nov. 13, 2020
8	DI ZHANG	Independent Director	Board of Directors	Nov. 14, 2019 - Nov. 13, 2022
9	MINGXIU PENG	Independent Director	Board of Directors	Nov. 14, 2019 - Nov. 13, 2022
10	ZHANBING REN	Independent Director	Board of Directors	Nov. 14, 2019 - Nov. 13, 2022
11	SUTONG ZHANG	Independent Director	Board of Directors	Jul. 8, 2020 - Nov. 13, 2022

The resumes of the board members are as follows:

HUI WANG, male, born in November, 1961, an American citizen with the permanent residency in China, PH.D. of Precision Engineering, winner of Shanghai Pujiang Talent Plan. From February, 1994 to November, 1997, Mr. WANG served as the research and development manager of Quester Technology Inc. in the USA. From May, 1998 to now, Mr. WANG has served as the chairman and CEO of ACMR and the chairman of ACMSH.

HAIPING DUN, male, born in December, 1949, a Chinese Taiwan citizen with the permanent residency in USA, Ph.D. in material science and engineering. From 1983 to 2004, Mr. DUN served as a senior director in Intel Corporation. From 2008 to 2018, Mr. DUN served as the president and executive director of Champion Microelectronic Corporation. From 2003 to now, Mr. DUN has served as a director of ACMR. From May, 2005 to now, Mr. DUN has served as a director of ACMSH.

STEPHEN SUN-HAI CHIAO, male, born in April, 1948, an American citizen without the permanent residency in other countries, Ph.D. in material science and engineering. From January, 1977 to July, 1980, Stephen served as a senior scientist of Varian Medical Systems. From July, 1980 to September, 1983, Stephen served as a project manager of Hewlett Packard Enterprise Development L.P. From September, 1983 to September, 1986, Stephen served as the manager of R&D Department of U.S. AMIS Company. From September, 1986 to June, 2015, Stephen served as a professor of San Jose State University. From September, 1989 to September, 2003, Stephen served as the vice president of the global enterprise development department of Mosel Vitelic Inc. From September, 1999 to now, Stephen has served as a manage director of Sycamore Management Corporation. From May, 2005 to now, Stephen has served as a director of ACMSH.

JIAN WANG, male, born in February 1965, a Chinese citizen without permanent residency in a foreign country. He is a master majoring in mechanics and computer science. He served as a technician of Hangzhou Xihu Television Factory from July 1986 to April 1987, as a technician of Japan Fuji Fine Printing Corporation from April 1996 to December 1999 and as a process engineer and deputy general manager of ACMSH from December 2001 to April 2019, and has served as General Manager of ACMSH from May 2019 and as a director of ACMSH since July 2020. Besides, he has successfully researched and developed stress-free copper polishing and electrochemical copper plating technology, participated in and applied for more than 100 patents, and been responsible for various significant scientific research projects.

Charles Law, male, born in December, 1959, a Chinese Taiwan citizen without the permanent residency in other countries, with Master of Laws degree. From November, 1992 to January, 2001, Charles served as a managing partner of U.S. Zhongzhi Law Firm. From January, 2001 to July, 2017, Charles served as a partner of King and Wood Mallesons. From July, 2017 to now, Charles has served as a partner of U.S. Sycamore Venture. From February, 2018 to now, Charles has served as the managing partner of Law & Law. From November, 2019 to now, Charles has served as a director of ACMSH.

JIANG LI, male, born in March, 1980, a Chinese citizen without permanent residency in a foreign country, master of management science and engineering. From September 2003 to August 2005, Mr. LI served as the sales manager of the foreign trade department of Shanghai Light Industrial International Development Corp., Ltd. From September 2005 to October 2010, Mr. LI served as the manager of the investment and development department of Shanghai Zhangjiang Medicine Public Service Platform Co., Ltd. From October 2010 to December 2016, Mr. LI served as the senior investment manager of the project investment department of Shanghai STVC (Group) Co., Ltd. From January 2017 till now, he has served as the investment director of Shanghai Integrated Circuit Industry Investment Fund Co., Ltd. From March, 2020 to now, Mr. LI has served as a director of ACMSH.

CHEN HUANG, male, born in January, 1991, a Chinese citizen without permanent residency in a foreign country, master of East Asian Development Studies, master of Business Administration. From August 2014 to August 2015, Mr. HUANG served as the assistant of the strategic department of Shanghai Pudong Financing Guarantee Co., Ltd. From September 2015 to October 2016, Mr. HUANG served as the risk control manager of Shanghai Pudong Financing Guarantee Co., Ltd. From October 2016 to May 2020, Mr. HUANG served successively as the manager of the strategic planning and information department, the investment manager of the second investment department, and the assistant to the general manager of the first investment department of SPINNOTECH Group Co., Ltd. From May 2020 to now, Mr. HUANG has served as the deputy general manager of the first investment department of SPINNOTECH Group Co., Ltd. From March 2020 till now, Mr. HUANG has served as a director of ACMSH.

DI ZANG, male, born in March, 1957, a Chinese citizen without permanent residency in a foreign country, Ph.D. in material science, winner of the National Natural Science Award (Second Class Prize), and winner of “May 1 Labor Metal” in Shanghai. From 1988 to now, Mr. ZHANG has served as a teacher in Shanghai Jiaotong University. In December, 1993, Mr. ZHANG served as a professor in Shanghai Jiaotong University. Currently he serves as a chair professor in Shanghai Jiaotong University, the director of the State Key Laboratory of Metal Matrix Composites and a distinguished professor of “Cheungkong Scholars” of the Ministry of Education. From June, 2019 to now, Mr. ZHANG has served as a director of ACMSH.

MINGXIU PENG, female, born in February, 1962, a Chinese Taiwan citizen, without the permanent residency in other countries, Master of Business Administration and EMBA. From January 1999 to July 2019, she served successively as the chief financial officer, deputy general manager, chairman, CEO of Champion Microelectronic Corporation. Currently she serves as the chairman of Haiye Investment Co., Ltd. From November, 2019 to now, she has served as a director of ACMSH.

ZHANBING REN, male, born in May, 1959, a Swiss citizen with the permanent residency in China, Doctor of Engineering, an academician of Swiss Academy of Engineering Sciences. From September, 1994 to September, 1996, Mr. REN served as a production engineer in Swiss Bobst. From October, 1996 to August, 2011, Mr. REN successively held the posts of the production manager (Shanghai), general manager (Shanghai), president (Greater China) and top management member, regional operations manager (Asia), and president (Great China and Southeast Asia) in Bobst Group. From September, 2011 to December, 2013, Mr. REN served as the president (Asia Pacific) in GF Piping Systems. From January, 2014 to now, Mr. REN has served as the managing director at Shanghai SinoSwiss International Trading Co., Ltd. From July, 2015 to October, 2017, Mr. REN served as the general manager of China Banknote SICPA Security Ink Co., Ltd. From January, 2018 to now, Mr. REN has served as the managing director of Shanghai Mengtebao International Trade Co., Ltd. From November, 2019 to now, Mr. REN has served as a director of ACMSH.

SUTONG ZHANG, male, born in October 1957, a Chinese citizen without permanent residency in a foreign country, PhD in management (accounting). He served as a professor, director of the accounting department, master tutor and MBA tutor of the School of Finance and Accounting of Shaanxi University of Finance and Economics from March 1989 to April 2000, as a professor, director of the accounting department, master tutor and MBA tutor of the School of Accounting of Xi'an Jiaotong University from April 2000 to June 2003, and as a professor, deputy director of the Tax and Finance Law Institute of the School of Civil and Commercial Economic Law of China University of Political Science and Law, and a director, professor and master tutor of the legal accounting research center of China University of Political Science and Law from June 2003 to December 2016. Since December 2016, he has been a professor of the finance and accounting department of the Business School of China University of Political Science and Law, a director of the senior executive education and training center of the Business School of China University of Political Science and Law, and a director of the legal accounting research center of China University of Political Science and Law. Since July 2020, he has served as a director of ACMSH.

(II) Members of the supervisory board

The Supervisory Board of the Company consists of three supervisors, among which, one supervisor is an employee representative supervisor, specifically:

No.	Name	Position	Nominator	Term of Office
1	TRACY DONG LIU	Supervisor	ACMR	Nov.14,2019 -Nov.13,2022
2	QIAN DONG	Supervisor	ACMR	Mar 30, 2020 -Nov.13,2020
3	QIAN LI	Employee Representative Supervisor	General Meeting of Employee Representative	Nov.14,2019 -Nov.13,2022

The resumes of the supervisory board members are as follows:

TRACY DONG LIU, female, born in November 1964, an American citizen without permanent residence of other countries. She has obtained an accounting master degree and registered as U.S. certified public accountant. She served as a Financial Controller of the San Jose Radisson Hotel in the U.S. from January 1994 to June 1995, as an Accounting Manager of KPMG from January 1996 to April 2000, as a Senior Accounting Manager of Deloitte from May 2000 to May 2005, and she has served as a Founder and Managing Partner of H&M Int'l CPAs, LLP from June 2005 to date, as a director of ACMR from September 2016 to date, and as a supervisor and president of the supervisory board of ACMSH from November 2019 to date.

QIAN DONG, female, born in March 1955, a Chinese citizen without permanent residency in a foreign country. She is a bachelor majoring in Chinese. She served as a worker of Shanghai Fengshou Tractor Factory from November 1972 to February 1979, as deputy secretary of Youth League Committee, HR head of Shanghai Light Industry School from March 1979 to March 1989, as general manager's assistant and office director of Shanghai Dongfang Storage Tank Ltd. from April 1989 to January 1997, as secretary of board of directors and office director of Shanghai Belling Co., Ltd. from February 1997 to October 2001, as deputy general manager of business development of Premier Devices Inc. from October 2001 to February 2004, as deputy general manager and office director of Spreadtrum Communications, Inc. from March 2004 to November 2014, and she has held the post of consultant of Ruizhang Technology Co., Ltd. from November 2014 to date, and of general manager of Yunnan Energy Investment Ruizhang Internet of Things Technology Ltd. from April 2019 to date. She has served as a supervisor of ACMSH from March 2020 to date.

QIAN LI, female, born in January 1995, a Chinese citizen without permanent residency in a foreign country. She is a bachelor majoring in management. She has served as an assistant of the chairman's office of ACMSH from July 2017 to date. She has served as a supervisor of ACMSH from November 2019 to date.

(III) Senior executives

The Company has 5 senior executives in total, including general manager, deputy general manager, person in charge of financial matters and secretary of board of directors, etc., specifically:

No.	Name	Position
1	JIAN WANG	General Manager
2	FUPING CHEN	Deputy General Manager
3	SOTHEARA CHEAV	Deputy General Manager
4	LISA YI LU FENG	Person in Charge of Financial Matters
5	MINGZHU LUO	Secretary of Board of Directors

The resume of each senior executive of the Company is as follows:

JIAN WANG, please refer to "VII (I) Members of the board of directors" in this Section for his resume.

FUPING CHEN, male, born in August 1981, a Chinese citizen without permanent residency in a foreign country. He is a master majoring in materials science. He successively served as an engineer and deputy manager of SK Hynix semiconductor (China) Co., Ltd. from April 2006 to January 2010, and as a project manager, technical manager, technical director and senior director of ACMSH from January 2010 to December 2017. He has served as Deputy General Manager of ACMSH from January 2018 to date, who has participated in and successfully researched and developed advanced packaging wet processing equipment, SAPS uniwafer cleaning equipment, TEBO uniwafer cleaning equipment, Tahoe uniwafer tank combined cleaning equipment and fully automatic tank cleaning equipment, he has published 5 academic papers and participated in and applied for more than one hundred patents.

SOTHEARA CHEAV, male, born in March 1952, an American citizen without permanent residency of other countries. He is a bachelor majoring in technology of electronics. He successively served as a manager of manufacturing department, director of manufacturing department from March 2007 to December 2014. He has served as deputy general manager of ACMSH from January 2015 to date.

LISA YI LU FENG, female, born in April 1958, an American citizen without permanent residency of other countries. She has obtained an accounting mater degree. She served as a regional financial director of Lumenis Inc. from January 2004 to August 2008, as financial director of Amlogic (CA) Co., Inc. from August 2008 to September 2017, as financial director of ACMR from September 2017 to November 2019, and has served as a person in charge of financial matters of ACMSH from May 2019 to date.

MINGZHU LUO, female, born in August 1983, a Chinese citizen without permanent residency in a foreign country. She is a bachelor majoring in veterinary medicine. She has successively served as assistant of president, manager of president office and director of president office of ACMSH from December 2006 to October 2019. She has served as secretary of board of directors of ACMSH from November 2019 to date.

(IV) Key technician

The Company determines key technicians based on the following standards: (1) responsible persons or core members of the Company and departments in connection with research and development; (2) relevant persons responsible for the direction of research and development and processing improvements which are significant to the business development and future development strategy of the Company; (3) relevant persons who have contributed to intellectual property rights and core technologies of the Company. The Company has 6 key technicians in total, specifically:

No.	Name	Position
1	HUI WANG	Chairman
2	JIAN WANG	Director, General Manager
3	FUPING CHEN	Deputy General Manager
4	SOTHEARA CHEAV	Deputy General Manager
5	JUN WANG	Vice President of Electrical Engineering
6	XUEJUN LI	Vice President of After-sale Services

The resume of each key technician of the Company is as follows:

HUI WANG, please refer to “VII (I) Members of Board of Directors” in this Section for his resume.

JIAN WANG, please refer to “VII (I) Members of the board of directors” in this Section for his resume.

SOTHEARA CHEAV, please refer to “VII (III) Senior executives” in this Section for his resume.

FUPING CHEN, please refer to “VII (III) Senior executives” in this Section for his resume.

JUN WANG, male, born in March 1984, a Chinese citizen without permanent residency in a foreign country. He is a master majoring in electronics and communication engineering. He successively served as an electrical engineering manager, senior executive and director of electrical engineering of ACMSH from May 2007 to April 2020, and has served as vice president of electrical engineering of ACMSH from May 2020 to date, being responsible for the design of all equipment and electrical control system and team building. He has participated in relevant patent applications of TEBO uniwafer cleaning equipment and Tahoe uniwafer tank combined cleaning equipment and been responsible for Chinese 02 Technology Significant Special Research and Development Projects-“Research and Development of 65-45nm Copper Interconnection Stress-free Polishing Equipment” and “Research, Development and Application of 20-14nm Copper Interconnection Copper Plating Equipment”, and the development of electronical control system of the project of “Research, Development and Industrialization of Uniwafer Tank Combined Cleaning Equipment” which is a Significant Project of Shanghai Strategic Emerging Industry.

XUEJUN LI, male, born in May 1970, being a Chinese citizen without permanent residency in a foreign country. He is a bachelor majoring in electric automatization. He successively served as a manager of after-sale services, senior executive, director of after-sale services from May 2009 to April 2020. He has served as vice president of after-sale services of ACMSH from May 2020 to date, being responsible for the provision of technical services to clients and the construction of after-sale service team. He has participated in the research and development and patent applications of technologies in connection with semiconductor cleaning equipment, provided product technical supports and solutions to main clients of the Company, and focused on the improvement of production efficiency and product yield of clients.

(V) Information on positions in other companies held by directors, supervisors, senior executives and key technicians of the Company

As of the date of signing the [***], positions in other companies held by the directors, supervisors, senior executives and key technicians of the Company are as follows:

Name	Position in the Company	Name of Employer	Position	Relationship with the Issuer
HUI WANG	Chairman	ACMR	Chairman, CEO	Controlling Shareholder
		ACM Research (Cayman)	Director	Related party
		ACM RESEARCH (SINGAPORE) PTE. LTD.	Director	Related party
		NINEBELL	Director	Related party
HAIPING DUN	Director	ACMR	Director	Controlling Shareholder
STEPHEN SUN-HAI CHIAO	Director	Sycamore Management Corporation	Managing Partner	Related party
		Silicon Technology Investment (Cayman) Corp.	Director	Related party
		Green Expedition LLC	Director	Related party
Charles Law	Director	Law and Law	Managing Partner	Related party
		Sycamore Management Corporation	Partner	Related party
		Nanjing Shuige Investment and Management Consultancy Co., Ltd.	Supervisor	None
CHEN HUANG	Director	Shanghai Pudong Technology Innovation Group Co., Ltd.	Investment I Department Deputy General Manager	None
		ASR Microelectronics (Shanghai) Co., Ltd.	Director	Related party
		Ideal Energy (Shanghai) Sunflower Thin Film Equipment Ltd.	Director	Related party
		RSIC Scientific Instrument (Shanghai) Co., Ltd.	Director	Related party
		Advanced Micro-Fabrication Equipment Inc. China	Supervisor	None

JIANG LI	Director	Shanghai Integrated Circuit Industry Investment Fund Management Co., Ltd.	Investment Director	None
		Shanghai Integrated Circuit Industry Investment Fund (Phase II) Co., Ltd.	Director	None
		SMIC Southern Integrated Circuit Manufacturing Co., Ltd.	Supervisor	None
		Shanghai Jita Semiconductor Co, Ltd.	Director	Related party
		EverDisplay Optonics (Shanghai) Limited	Director	Related party
		Shanghai Qiyuji Sports Technology Development Co., Ltd.	Supervisor	None
DI ZHANG	Independent Director	School of Materials Science and Engineering, Shanghai Jiao Tong University	Professor	None
MINGXIU PENG	Independent Director	Haihua Investment Co., Ltd.	Chairman	None
		Qifa Electronics Co., Ltd.	Director	None
		Mars Semiconductor Corp.	Independent Director	None
ZHANBING REN	Independent Director	Shanghai Mengtebao International Trading Co., Ltd.	Executive Director	None
		Shanghai Ruizhong International Trading Co., Ltd.	Executive Director	None
		Black Peony (Group) Co., Ltd.	Independent Director	None
Sutong Zhang	Independent Director	Finance and Accounting Department, Business School, China University of Political Science and Law	Professor	None
		Chang'an Bank Co., Ltd.	Independent Director	None
		Baoying Fund Management Co., Ltd.	Independent Director	None
		Beijing Huili Tongda Technology Co., Ltd.	Supervisor	None
TRACY DONG LIU	Supervisor	ACMR	Director	Controlling Shareholder
		H&M Int'l CPAs, LLP	Managing Partner	Related party
QIAN DONG	Supervisor	Yunnan Energy Investment Ruizhang Internet of Things Technology Ltd.	Director and General Manager	Related party
		Shanghai Viewnoon Information Technology Co., Ltd.	Director	Related party
		Shanghai Zhaonengkun Information Technology Co., Ltd.	Director	Related party
		Nanjing Oraro Technology Co., Ltd.	Director	Related party
		Shanghai Zhimeng Internet of Things Technology Co., Ltd.	Executive Director and General Manager	Related party
MINGZHU LUO	Secretary of Board of Directors	Shengyi Technology	Director	Shareholding Subsidiary

(VI) Family relation among directors, supervisors, senior executives and key technicians of the Company

As of the date of signing the [***], except for the brotherhood relation between the Chairman, HUI WANG, and the Director and General Manager, JIAN WANG, there is no family relation among directors, supervisors, senior executives and key technicians of the Company.

VIII. Agreements between the Company and any of Directors, Supervisors, Senior Executives and Key technicians and their Performance

As of the date of signing the [***], the Company has entered into the *Labor Contract, the Non-competition Agreement and the Confidentiality and Intellectual Property Protection Agreement* regarding horizontal competition and confidentiality matters with each director, supervisor, senior executive and key technician who works in and receives remuneration from the Company, and the Company and directors, supervisors, senior executives and key technicians are protected and bound by provisions of relevant labor contracts.

The first Extraordinary General Meeting of the Company in 2019 resolved to pass the *Proposal on 2019 Stock Option Incentive Plan (Draft) of the Company* on November 29, 2019, pursuant to which, the Company entered into the *Stock Option Grant Agreement* with its directors, senior executives, key technicians, key employees, etc.

Except for the above, none of director, supervisor, senior executive and key technician of the Company enters into any other contract or agreement with the Company. As of the date of signing the [***], the above contracts or agreements are performed normally without any default.

IX. Changes in Directors, Supervisors, Senior Executives and Key Technicians of the Company within the Last Two Years

(I) Changes in directors of the Company

The board of directors of ACMSH consisted of HUI WANG, HAIPING DUN, STEPHEN SUN-HAI CHIAO early 2018.

The board of directors of ACMSH resolved that Charles Law and DI ZHANG were elected as additional members of the board of directors of the Company on June 26, 2019.

The establishment meeting and the first general meeting of shareholders of the Company elected HUI WANG, HAIPING DUN, STEPHEN SUN-HAI CHIAO, Charles Law, DI ZHANG, MINGXIU PENG and ZHANBING REN as members of the first-session board of directors of the Company on November 14, 2019.

The first Extraordinary General Meeting of the Company in 2020 elected CHEN HUANG, JIANG LI as members of the first-session board of directors of the Company on March 30, 2020.

The third Extraordinary General Meeting of the Company in 2020 elected JIAN WANG and SUTONG ZHANG as members of the first-session board of directors of the Company on July 8, 2020.

In the last two years, the reasons for changes in directors of the Company are the nomination of newly elected directors after changes in shareholders of the Company and the establishment of independent director system after the Company is changed into a joint stock company in its entirety.

(II) Changes in supervisors of the Company

The supervisor of ACMSH was TRACY DONG LIU early 2018.

The establishment meeting and the first general meeting of shareholders of the Company elected TRACY DONG LIU and SHOULEI JIANG as members of the supervisory board of the Company, and the first-session supervisory board of the Company comprised the above two supervisors and QIAN LI, the employee representative supervisor elected by the general meeting of employees of the Company, on November 14, 2019.

SHOULEI JIANG, a supervisor of the Company, resigned as supervisor for personal reasons on March 30, 2020 and the first extraordinary general meeting of shareholders of the Company in 2020 elected QIAN DONG as a member of the first-session supervisory board.

In the last two years, the main reasons for changes in supervisors of the Company are the nomination of newly elected supervisors after changes in shareholders of the Company and further perfection of the governance structure of the Company and election of employee supervisor after the Company became a joint stock company.

(III) Changes in senior executives

The senior executives of the Company comprised HUI WANG. The board of directors of ACMSH resolved to pass the appointment of JIAN WANG as the general manager of the Company and LISA YI LU FENG as the person in charge of financial matters in May 2019.

In November 2019, the first meeting of the first-session board of directors of ACMSH resolved to approve the appointment of JIAN WANG as the general manager of the Company, FUPING CHEN and SOTHEARA CHEAV as deputy general managers, LISA YI LU FENG as the person in charge of financial matters and MINGZHU LUO as the secretary of board of directors.

In the last two years, HUI WANG, a senior manger of the Company, no longer held his position for personal reasons, and other senior executives were engaged by the board of directors after the Company was changed into a joint stock company in its entirety. All of the above persons hold positions in the Company during the Reporting Period, and there is no material change in senior executives of the Company.

(IV) Changes in key technicians

In the last two years, there is no change in key technicians of the Company.

X. External Investments Made by Directors, Supervisors, Senior Executives and Key Technicians of the Company

As of the date of signing the [***], external investments made by directors, supervisors, senior executives and key technicians of the Company are as follows:

Name	Position in the Company	Name of Investee	Shareholding Percentage	Relationship with the Issuer
STEPHEN SUN-HAI CHIAO	Director	Green Expedition LLC	100%	Related party
ZHANBING REN	Independent Director	Shanghai Mengtebao International Trading Co., Ltd.	50%	Related party
		Shanghai Ruizhong International Trading Co., Ltd.	30%	Related party
QIAN DONG	Supervisor	Shanghai Zhimeng Internet of Things Technology Co., Ltd.	60%	Related party
		Shanghai Lianwan Investment Management Center (Limited Partnership)	50%	Related party
		Shanghai Zhaonengkun Information Technology Co., Ltd.	11.29%	Related party
		Xinwei Consulting	3.23%	Shareholder
FUPING CHEN	Deputy General Manager	Shengxin Shanghai	2.94%	Related party
MINGZHU LUO	Secretary of Board of Directors		1.55%	

XI. Shares Held by Directors, Supervisors, Senior Executives and Key technicians of the Company and their Immediate Relatives

As of the date of signing the [***], none of director, supervisor, senior executive and key technician of the Company and their immediate relatives directly hold any share of the Company, information on shares of the Company indirectly held by the above persons is as follows:

Company holding the shares of the Company	Relationship with the Issuer	Name	Position/Family Relation	Information on Shareholding
ACMR	Holding 91.67% of shares in the Company	HUI WANG	Chairman	Holding 168,006 shares of Class A stock and 1,146,934 shares of Class B stock in ACMR
		JING CHEN	Spouse of HUI WANG	Holding 33,334 shares of Class A stock in ACMR, indirectly holding 206,667 shares of Class A stock and 60,000 shares of Class A stock in ACMR through David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust respectively, and indirectly holding 7,334 shares of Class B stock in ACMR through David Hui Wang & Jing Chen Irrevocable Trust
		BRIAN WANG	Son of HUI WANG	Holding 117,334 shares of Class B stock in ACMR
		SOPHIA WANG	Daughter of HUI WANG	Holding 15,279 Class A shares and 117,334 shares of Class B stock in ACMR
		HAIPING DUN	Director	Holding 285,030 Class A shares and 100,000 shares of Class B stock in ACMR
		STEPHEN SUN-HAI CHIAO	Director	Holding 69,815 shares of Class B stock in ACMR, indirectly holding 23,334 shares of Class A stock in ACMR through Green Expedition LLC, and indirectly holding 30,000 shares of Class B stock in ACMR through Stephen Sun-Hai And Mary Wu-Chun Chiao Revocable Trust
		Charles Law	Director	Holding 30,112 shares of Class A stock in ACMR
		ZHANBING REN	Independent Director	Holding 3,334 shares of Class B stock in ACMR
		TRACY DONG LIU	Supervisor	Holding 257 shares of Class A stock in ACMR
		JIAN WANG	Director, General Manager	Holding 84,386 shares of Class A stock and 50,001 shares of Class B stock in ACMR
		QIAN DONG	Supervisor	Holding 34,000 shares of Class A stock in ACMR
		SOTHEARA CHEAV	Deputy General Manager	Holding 43,334 shares of Class A stock in ACMR
		LISA YI LU FENG	Person in Charge of Financial Matters	Holding 6,943 shares of Class A stock in ACMR
		CHEN HUANG	Director	Holding 609 shares of Class A stock in ACMR
		JUN WANG	Key Technician	Holding 800 shares of Class A stock in ACMR
		XUEJUN LI	Key Technician	Holding 800 shares of Class A stock in ACMR

Xinwei Consulting	Holding 1.22% of shares in the Company	QIAN DONG	Supervisor	Holding 3.23% of shares in Xinwei Consulting
Xinshi Consulting	Holding 0.46% of shares in the Company	JUN WANG	Key Technician	Holding 5.40% of shares in Xinshi Consulting
		XUEJUN LI	Key Technician	Holding 5.40% of shares in Xinshi Consulting
Shengxin Shanghai	Holding 242,681 shares of common stock in ACMR	FUPING CHEN	Deputy General Manager	Holding 2.94% of the capital contribution of Shengxin Shanghai
		MINGZHU LUO	Board Secretary	Holding 1.55% of the capital contribution of Shengxin Shanghai
		JUN WANG	Key Technician	Holding 0.77% of the capital contribution of Shengxin Shanghai
		XUEJUN LI	Key Technician	Holding 0.77% of the capital contribution of Shengxin Shanghai
		LINLI YU	Wife of the Director and General Manager JIAN WANG	Holding 10.97% of the capital contribution of Shengxin Shanghai

Note: The data on the percentage of shares held by the above persons in ACMR is made as of June 30, 2021.

XII. Information on Remuneration of Directors, Supervisors, Senior Executives and Key Technicians of the Company

(I) Composition, basis of determination, procedures performed of remuneration and its percentage

The remuneration of directors, supervisors, senior executives and key technicians who hold positions responsible for specific business in the Company consists of basic salary, year-end bonus, etc. Based on the needs of each position, duties and working performance, the Company will pay equitable and reasonable salary in accordance with remuneration regulations and ensure that all of remuneration and benefits of employees are competitive in the same industry and market. The Compensation and Appraisal Committee of the Company formulates remuneration policies and plans of directors and senior executives, conducts appraisals on performance of duties of directors and senior executives and submits the results to the board of directors or the general meeting of shareholders for review and deliberation; independent directors of the Company receive fixed allowances.

During the Reporting Period, the total remuneration for directors, supervisors, senior executives and key technicians of the Company are RMB 4,467,700 Yuan, RMB 5,780,600 Yuan, RMB 8,782,500 Yuan and RMB 6,031,800 Yuan respectively, accounting for 4.34%, 3.76%, 3.94% and 6.47% of total profit of the Company for each period.

(II) Remuneration received by directors, supervisors, senior executives and key technicians from the Issuer in the latest year

Information on remuneration received by directors, supervisors, senior executives and key technicians from the Company in 2020 is as follows:

In RMB 10,000 Yuan			
No.	Name	Position	Remuneration in 2020
1	HUI WANG	Chairman	145.23
2	HAIPING DUN	Director	-
3	STEPHEN SUN-HAI CHIAO	Director	-
4	JIAN WANG	Director, General Manager	92.80
5	Charles Law	Director	-
6	CHEN HUANG	Director	-
7	JIANG LI	Director	-
8	DI ZHANG	Independent Director	15.14
9	MINGXIU PENG	Independent Director	11.30
10	ZHANBING REN	Independent Director	11.30
11	SUTONG ZHANG	Independent Director	4.82
12	TRACY DONG LIU	Supervisor	6.78
13	QIAN DONG	Supervisor	4.50
14	QIAN LI	Employee Representative Supervisor	14.45
15	FUPING CHEN	Deputy General Manager	110.88
16	SOTHEARA CHEAV	Deputy General Manager	91.43
17	LISA YI LU FENG	Person in Charge of Financial Matters	129.87
18	MINGZHU LUO	Secretary of Board of Directors	68.25
19	JUN WANG	Key Technician	87.44
20	XUEJUN LI	Key Technician	81.78

Note: 1. Certain directors of the Company do not receive any remuneration from the Company; 2. QIAN DONG and SUTONG ZHANG served as supervisor and independent director respectively in March 2020 and July 2020.

(III) Other treatments and pension plans for the above persons of the Company

As of the date of signing the [***], the Company has not formulated any other treatments, pension plans, etc. for its directors, supervisors, senior executives and key technicians.

XIII. Equity Incentives and Relevant Arrangements of the Issuer prior to this Offering

(I) Employee shareholding platform

As of the date of signing the [***], the Issuer has established two employee shareholding platforms prior to the submission and application of this Offering: Xinshi Consulting and Xingang Consulting, each of which holds 0.46% and 0.19% of shares of the Company respectively.

1. Basic Information on Employee Shareholding Platforms

(1) For basic information on Xinshi Consulting, please refer to “(5) Xinshi Consulting” of “VI(V) New Shareholders of the Issuer in the Latest Year” of this Section.

(2) For basic information on Xingang Consulting, please refer to “(7) Xingang Consulting” of “VI(V) New Shareholders of the Issuer in the Latest Year” of this Section.

2. Employee Shareholding Platforms’ Confirmation of Share-based Payment

The above employee shareholding platforms become shareholders of the Company by the means of increase in capital, the price at which the capital is increased is lower than the price in the same comparable transaction, and the Company has confirmed costs of share-based payment. For specific information on the increase in capital, please refer to “(4) the Fourth Increase in Capital of ACMSH in May 2019” of “II (III) Information on the Changes of Shareholders of the Issuer”.

3. Operation of Employee Shareholding Platforms Not Subject to the “Closed Loop Principle”

Pursuant to the partnership agreement of employee shareholding platforms, all or part of property shares in a partnership may be transferred among limited partners, and also may be transferred to a person other than partners. Therefore, such transfer has not been limited to internal transfer among specific employees only by shareholding platforms, operation of which does not conform to the “closed loop principle”.

4. Employee Shareholding Platforms Not Being Private Investment Funds

The above employee shareholding platforms have never raised funds from investors and formed in a non-public manner, and thus are not private investment funds under *the Interim Measures on the Supervision and Administration of Private Investment Funds*, there is no need to go through private investment fund filings in accordance with *the Measures on the Registration of Private Investment Fund Managers and Filing of Funds (Trial)* or other provisions.

5. Share Lock-up Commitments of Employee Shareholding Platforms

Each of the above employee shareholding platforms undertakes that:

(1) During 12 months as of the date on which stocks of the Issuer are listed, it will not transfer shares which are held by this enterprise and have been issued by the Issuer prior to this Offering and listing (hereinafter referred to as the “Pre-initial Offering Shares”), entrust others to manage such shares, or propose to repurchase such part of shares by the Issuer.

(2) If this enterprise decreases the Pre-initial Offering Shares held by it after the lock-up period expires, it will strictly comply with laws, administrative regulations, departmental rules, normative documents and relevant provisions of the Shanghai Stock Exchange and perform corresponding obligations of information disclosure.

(3) If this enterprise decreases its shares of the Issuer in violation of the above commitments, then actual proceeds (if any) received from the sale of such part of shares of the Issuer shall belong to the Issuer, and all losses and legal consequences resulting therefrom shall be borne by this enterprise.

(II) Option incentive plan made by the Issuer for employees

The Issuer has an option incentive plan which is formulated prior to the application of initial public offering and will be implemented after it is listed (hereinafter referred to as the “Incentive Plan”), the specific information of the plan is as follows:

1. Procedures of Formulating the Incentive Plan

On November 14, 2019, the Company held the first session of the first board of directors and resolved to pass *the Proposal on the Stock Option Incentive Plan of the Company in 2019 (Draft), the Proposal on Measures on Implementing Appraisal and Administration of the Stock Option Incentive Plan of the Company in 2019, the Proposal on the Submission and Application to the General Meeting of Shareholders for Authorizing the Board of Directors to Deal With Matters in connection with 2019 Stock Option Incentive* and other proposals. Independent directors issued their independent opinions consenting to the above proposals.

On November 14, 2019, the Company held the first session of the first supervisory board and resolved to pass *the Proposal on the Stock Option Incentive Plan of the Company in 2019 (Draft), the Proposal on Measures on Implementing Appraisal and Administration of the Stock Option Incentive Plan of the Company in 2019* and other proposals.

On November 15, 2019, the Issuer published name and position of each incentive object in the Company internally through on-site posting in the Company and other means, the period of publicity shall not less than 10 days.

On November 25, 2019, the Company held the second session of the first supervisory board and resolved to pass *the Proposal on the Supervisory Board's Explanation on Reviewing Opinions and Publicity of the List of Stock Option Incentive Objects*.

On November 29, 2019, the Company held the first-session extraordinary meeting of shareholders in 2019 and resolved to pass *the Proposal on the Stock Option Incentive Plan of the Company in 2019 (Draft), the Proposal on Measures on Implementing Appraisal and Administration of the Stock Option Incentive Plan of the Company in 2019, the Proposal on the Authorization to the Board of Directors to Deal With Matters in connection with 2019 Stock Option Incentive* and other proposals

On December 20, 2019, the Compensation and Appraisal Committee of the board of directors of the Company held the first-session extraordinary meeting in 2019 and resolved to pass *the Proposal on the Adjustment of Incentive Objects and Granting Amounts of Stock Option Incentive Plan, the Proposal on Granting Stock Options to Incentive Objects* and other documents, and submitted to the board of directors of the Company for review and deliberation.

On December 31, 2019, the Company held the second session of the first board of directors and the third session of the first supervisory board respectively, and resolved to pass *the Proposal on the Adjustment of Incentive Objects and Granting Amounts of Stock Option Incentive Plan, the Proposal on Granting Stock Options to Incentive Objects* and other proposals. Independent directors issued their independent opinions consenting to the above proposals.

In conclusion, the formulation of this incentive plan by the Issuer has performed necessary procedures.

2. Basic Content of the Incentive Plan

The basic content of this incentive plan is as follows:

(1) Incentive Objects

The number of incentive objects involved in this incentive plan is 88 in total, including directors, senior executives of the Company and middle-level management personnel and core business employees of the Company and its controlled subsidiaries. The above incentive objects shall not include any independent directors or supervisors of the Company. The directors and senior executives of the Company must be elected by the general meeting of shareholders of the Company or engaged by the board of directors of the Company. Each incentive object must enter into a labor contract or engagement contract with the Company or any of controlled subsidiaries of the Company within the appraisal period of this incentive plan.

Accordingly, incentive objects under the incentive plan do not exist any circumstance as described in paragraph 2 of Article 8 of *the Measures on the Administration of Equity Incentives of Listed Companies*, and comply with provisions of Article 10.4 of the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*.

(2) Relevant Clauses of the Incentive Plan

Article 1 of Chapter III of *the Incentive Plan* provides that “This Plan adopts stock options as tools of equity incentive. The source of stocks under this Plan shall be stocks issued by the Company specifically to incentive objects. Subject to conditions as provided for under this Plan, each stock option granted to an incentive object shall have the right to purchase one ordinary share from ACMSH at the exercise price within the exercisable period. None of stock options granted to incentive objects may be transferred or used for creating any security or repaying any debt.”

Chapter IV of *the Incentive Plan* provides for effective period, date of grant, waiting period and exercise arrangement of stock options, among which, Article 4 of Chapter IV provides that “The stock options will be exercised in two installments upon the expiration of 36 months after such options are granted, the exercisable options in each instalment shall account for 1/2 and 1/2 of the total amount of granted stock options respectively. Within exercisable days, subject to the fulfillment of conditions of exercise as stipulated under this Plan, each incentive object may exercise his/her stock options which have been granted to him/her in two installments in accordance with arrangements as stipulated in the table below. The period of exercise for exercisable options shall be 12 months, the beginning date of the next period of exercise shall not be earlier than the expiration date of the last period of exercise, and relevant interests shall not be deferred to the next period when conditions of exercise for stock options in each installment fail to be fulfilled.”

Chapter IX of *the Incentive Plan* provides for how to deal with special circumstances of the incentive plan and specifies circumstances under which the Company repurchases options or incentive objects terminate their exercise of options.

Chapter XII of *the Incentive Plan* provides for the formulation of this incentive plan, granting and exercising of options and other aspects.

In conclusion, the definitions of incentive tools, restrictions of rights, exercise arrangements, repurchasing or terminating exercise of options, procedures of implementation and other content involved in the incentive plan are formulated by reference to relevant provisions of *the Measures on the Administration of Equity Incentives of Listed Companies*.

(3) Exercise Price

The exercise price of this incentive plan is determined on the basis of the transaction price in the most recent increase in capital of ACMSH by investors, and thus the exercise price shall be RMB 13 Yuan per share.

At the time of grant, the price per share is RMB 0.66 Yuan on the basis of the audited net assets of ACMSH in the most recent one year, and the price per share is RMB 3.52 Yuan on the basis of the value as estimated in the most recent period. Accordingly, this incentive plan is not less than the audited net assets or estimated value in the most recent year.

(4) Total Amount of Granted Stock Options

The first Extraordinary General Meeting of the Issuer in 2019 reviewed and passed the *2019 Option Incentive Plan* and the *2019 Appraisal Administration Measures* and agreed to grant 5,677,500 stock options, representing 1.46% of the total amount of capital shares of the Company as of such grant, to 88 qualified incentive objects after adjustment. The effective period shall not exceed 72 months from the date on which stock options are granted to the date on which all stock options granted to incentive objects are exercised or cancelled.

Accordingly, the percentage of shares in connection with all of the Issuer’s option incentive plans which are within effective period to the total amount of capital shares of the Company immediately prior to the listing of the Company does not exceed 15%, and none of reserved interests is created.

(5) Waiting Period

The waiting period shall be 36 months as of the date on which stock options are granted. Within the waiting period, none of incentive objects shall exercise any of options which are granted in accordance with this plan.

(6) No Change in de facto controller will be Caused

According to the total amount of stock options granted under this incentive plan, the de facto controller of the Company will not be changed resulting from any exercise of options of the Issuer after the listing.

(7) Lock-up Commitments

According to Article 4 of Chapter IV of *the Incentive Plan*, if the time point of exercising stock options under this incentive plan is after the listing of the Company, then: (i) none of incentive objects shall decrease his/her stocks acquired resulting from his/her exercise of options after the Company is listed within 3 years; (ii) upon the expiration of the above lock-up period, each incentive object shall decrease his/her stocks by reference to relevant provisions of decreasing stocks by directors, supervisors and senior executives of the Company, and comply with then relevant laws, regulations, normative documents and rules of the stock exchange where the Company is listed.

3. Effects of the Equity Incentives on the Company

Through the formulation of this incentive plan, the Company is intended to motivate working enthusiasm of managers, key technicians, key employees of the Company, realize the unification of objectives of shareholders, the Company and employees and promote the operating efficiency of the Company.

After any grant is made under this incentive plan, the costs of share-based payment confirmed due to amortization of cost incurred by stock options will be increased, which will cause certain effect on the operational performance of the Company in the future.

Under the equity incentive plan of the Company, each incentive object who has received equity options will hold no more than 1% of stocks in the Company after his/her exercise, which will not cause any significant effect on the shareholding structure of the Company, and the equity incentives will not affect the controlling power over the Company.

4. Accounting Treatments of Equity Incentives

According to relevant provisions on the determination of fair value in *the Accounting Standards for Business Enterprises No.11-Share-based Payment* and *the Accounting Standards for Business Enterprises No.22-Determination and Measurement of Financial Tools* issued by the Ministry of Finance, it is necessary to select an appropriate valuation model to calculate the fair value of stock options. The cost of stock options granted under this incentive plan is estimated based on the Black-Scholes model.

The cost of stock options granted under this incentive plan shall be amortized before each instalment of options becomes exercisable, and the actual accounting cost shall be revalued based on such parameters as actual stock prices and volatility on the date of grant as determined by the board of directors. Therefore, the amortization of the cost of stock options will cause certain effect on the operational performance of the Company.

During the period from 2017 to 2019, the Company does not involve any share-based payment resulting from this incentive plan which will cause effect on the operational performance of the Company. In 2020 and the period from January to June 2021, the total share-based payment expenses recognized by the Company due to this incentive plan are RMB 2.2903 million Yuan and RMB 1.1171 million Yuan respectively.

5. Verification Opinions of Intermediary Agencies

Upon verification, the Sponsor and the Reporting Accountant consider that:

(1) The formulation and implementation of the above option incentive plan have performed necessary decision-making procedures, and incentive objects comply with provisions of Article 10.4 of *the Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*;

(2) The Issuer has fully disclosed relevant information of the option incentive plan in the [***];

(3) The measurement methods and results of fair value with respect to equity instruments in connection with share-based payment of the Issuer is reasonable;

(4) Relevant accounting treatments with respect to share-based payment of the Issuer comply with relevant provisions of *the Accounting Standards for Business Enterprises*.

(III) Stock options acquired by employees of the Issuer in the controlling shareholder of the Issuer

Since the establishment of ACMR, the controlling shareholder of the Company, has granted stock options of ACMR to certain employees in order to establish and perfect long-acting incentive mechanism, maintain stability of core team and fully motivate enthusiasm of core and key employees of the Company. As of June 30, 2021, HUI WANG, the de facto controller of the Company, held 1,328,733 stock options of ACMR, and other employees of the Company held 1,613,650 stock options of ACMR in total.

During the Reporting Period, the Company has confirmed costs of share-based payment for stock options of ACMR acquired by the above persons, the amount of which is RMB 3.9978 million Yuan, RMB 7.399 million Yuan, RMB 18.9184 million Yuan and RMB 8.0527 million Yuan respectively. The specific calculation process of the above share-based payments is as follows:

1. Valuation model and parameters selection

According to the annual reports of each year disclosed by ACMR, the fair value of the stock options granted by ACMR to the Issuer's employees is valued using the Black-Scholes model, with the relevant parameters during the Reporting Period being selected as follows:

In RMB 1 Yuan

Item	2020	2019	2018
Exercise price of the stock option	152.23-588.16	94.10-115.96	35.14-91.65
Fair value on the grant date	152.23-588.16	94.10-115.96	35.14-91.65
Expected life of the option	5.50-6.25	6.25	6.25
Expected volatility of ACMR stocks	42.17%-48.15%	39.91%-40.35%	39.14%-43.00%
Risk-free interest rate over the expected life of the option	0.44%-0.82%	1.69%-2.46%	2.55%-2.96%
Expected dividend yield of ACMR	0%	0%	0%

Of which: with respect to the stock option from ACMR, both the exercise price and the fair value on the grant date are the closing price of the stock on the grant date; The expected life is calculated according to the average of the vesting period and the validity period of each option in accordance with the provisions of Staff Accounting Bulletin No. 110; The expected volatility is calculated based on the historical volatility of companies comparable to ACMR during the period equivalent to the expected life of the option; The risk-free interest rate is calculated based on the yield of U.S. Treasury bonds effective at the time of option grant and with a life similar to the expected life of the option; Given ACMR has no history or expectation of paying dividends on its common stocks, the expected dividend yield is assumed to be 0%.

Since ACMR can grant options to such participants as may be designated by the board of directors at any time during the term of the incentive plan, the fair value of stock options acquired by each participant at a specific time point varies due to differences in exercise conditions, price on the grant date and other parameters.

2. Calculation process of share-based payments

Due to the different exercise conditions of different employees, resulting in different vesting periods, the Company recognizes the share-based payments according to the fair value of stock options acquired by each employee from ACMR during his/her service period respectively. Accordingly, the share-based payment amount actually recognized by the Company in each year is calculated as per the formula as follows:

The amount of share-based payment recognized in the current year = \sum the number of remaining equity incentive shares of the Issuer's employees who are in-service * the proportion of the exercisable number * the fair value of stock options on the grant date * the proportion of the amortization period of the current year (year-end date - grant date) to the whole vesting period * (1 - estimated turnover rate)

In the above formula, the expected turnover rate of HUI WANG is 0, and the expected turnover rate of other employees is calculated as 10%.

According to the above calculation, the share-based payment expenses recognized for the stock options acquired by the Company's employees from ACMR was RMB 3.9978 million Yuan, RMB 7.399 million Yuan, RMB 18.9184 million Yuan and RMB 8.0527 million Yuan respectively during the Reporting Period.

XIV. Employees of the Issuer and their Social Securities

(I) Employees

As at the end of each Reporting Period, the number of employees of the Company is 270, 358, 542 and 702 respectively. As of June 30, 2021, the professional structure, educational level and age distribution of employees of the Company are as follows:

Professional Structure of Employees	Headcount	Percentage of Total Number of Employees
Management Personnel	61	8.69%
Marketing Sales Personnel	14	1.99%
After-sales Service Personnel	163	23.22%
Production Personnel	153	21.79%
Finance Personnel	16	2.28%
Technology Research and Development Personnel	295	42.02%
Total	702	100.00%
Educational Level of Employees	Headcount	Percentage of Total Number of Employees
Master degree and above	124	17.66%
Bachelor degree	287	40.88%
College degree and below	291	41.45%
Total	702	100.00%
Age Distribution of Employees	Headcount	Percentage of Total Number of Employees
50 and above	15	2.14%
40-49	43	6.13%
30-39	241	34.33%
30 and below	403	57.41%
Total	702	100.00%

(II) Implementation of social security system by the Issuer

The Company and its domestic subsidiaries implement the system of labor contract, they enter into a labor contract with each employee in accordance with *the Labor Law*. The Company and its domestic subsidiaries have bought social insurances, such as pension insurance, medical insurance, unemployment insurance, employment injury insurance and maternity insurance, and contributed housing provident funds for their employees in accordance with national and local laws and regulations in connection with social security.

Each foreign subsidiary of the Company has entered into a labor contract with each foreign employee and implemented the system of social security in accordance with laws and regulations of the place where the subsidiary is located.

During the Reporting Period, there is no dispute or litigation of the Issuer and its subsidiaries arising out of the issue of payment of social insurance, nor is there any administrative punishment arising out of the issue of payment of social insurance premiums. As of the execution date of this [***], all of the number of employees, base number, percentage, etc. of social insurance premiums paid by the Issuer for employees comply with provisions of laws, regulations and normative documents. The Issuer has contributed housing provident funds for Chinese employees of the Company in accordance with provisions of national and local governmental authorities.

1. Contributions of social insurance premium and housing provident fund of the Issuer during the Reporting Period

At the end of each Reporting Period, the Issuer and its domestic holding subsidiaries paid social insurance premium and housing provident fund for their employees as follows:

Time	Number of employees (person)	Number of employees with payment (person)					
		Pension insurance	Medical insurance	Unemployment insurance	Maternity insurance	Employment injury insurance	Housing provident fund
End of 2018	253	214	214	214	214	214	213
End of 2019	328	270	270	270	270	270	270
End of 2020	483	436	436	436	436	436	436
End of June 2020	633	561	561	561	561	561	561

Note: The number of employees at the end of each year does not include the number of employees of the overseas subsidiaries of the Issuer, i.e. CleanChip HK, ACMKR and ACM CA.

At the end of each Reporting Period, there is difference between the number of employees with actual payment of social insurance premium and housing provident fund and the number of employees. The reasons are as follows:

Time	Category	Difference number (person)	Reasons for the difference between the number of employees with payment and the number of employees		
			Foreign employees	Third-party withholding	Outstanding or other
End of 2018	Social insurance premium	39	8	31	-
	Housing provident fund	40	8	31	1
End of 2019	Social insurance premium	58	9	49	-
	Housing provident fund	58	9	49	-
End of 2020	Social insurance premium	47	6	34	7
	Housing provident fund	47	6	34	7
End of June 2021	Social insurance premium	72	6	52	14
	Housing provident fund	72	6	52	14

Note: (1) For the period ending December 31, 2018, one employee's housing provident fund was paid by the original employer; (2) For the period ending December 31, 2020, the Issuer recruited 7 new employees, comprising 6 employees whose social insurance premium and housing provident fund payment procedures had not been completed in the same month of recruitment, and 1 employee whose social insurance premium and housing provident fund for the month of recruitment was contributed by the original employer; (3) For the period ending June 30, 2021, the Issuer, in May and June 2021, recruited 14 new employees whose social insurance premium and housing provident fund payment procedures had not been completed within June 2021.

As shown in the above table, regarding the payment of social insurance premium and housing provident fund of the Issuer and its domestic holding subsidiaries during the Reporting Period:

(1) A third party was entrusted to withhold social insurance premiums and housing provident funds. During the Reporting Period, the Issuer entrusted Shanghai Foreign Service Co., Ltd. to pay social insurance premiums and housing provident funds for some foreign employees due to the inconsistency between the registered residence or actual working place of some employees and the domicile of the Issuer or its domestic holding subsidiaries. Shanghai Foreign Service Co., Ltd. has certified by way of issuing a certificate that it has paid social insurance premiums and housing accumulation funds for relevant employees in full and on time in accordance with law, according to such payment base and at such proportion as required by relevant laws, regulations and normative documents, the payment of which is in a "normal" status without non-payment, arrears or need to make a supplementary payment, and has not been subject to punishment by relevant departments. As of the execution date of the [***], the social insurance premiums and housing provident funds of some employees withheld and remitted have been paid by the Issuer and its domestic holding subsidiaries.

(2) No social insurance premiums and housing provident fund were paid for foreign employees. According to the Circular of the Shanghai Municipal Bureau of Human Resources and Social Security on the Issues of Aliens, Overseas Permanent (Long-term) Residency Holders, and Residents from Taiwan, Hong Kong and Macao Who Are Working in Shanghai to Participate in the Urban Social Insurance Scheme (Urban Pension Policies Division, Shanghai Municipal Bureau of Human Resources and Social Security, Document [2009] No. 38), and the Circular of the Shanghai Municipal Housing Provident Fund Administration Commission on the Issues of Aliens, Overseas Permanent (Long-term) Residency Holders, and Residents from Taiwan, Hong Kong and Macao Who Are Working in Shanghai to Participate in the Housing Provident Fund System (Shanghai Municipal Housing Provident Fund Administration Commission, Document [2015] No. 10), foreigners who are employed in Shanghai are not subject to mandatory payment of social insurance premiums and housing provident funds, and employers and foreigners as legal employees may negotiate whether to participate in social insurance scheme and housing provident fund system. Therefore, it is not in violation of mandatory provisions of laws and regulations that the Issuer failed to pay social insurance premiums and housing provident funds for the above-mentioned foreign employees.

(3) At the end 2018, the Issuer failed to pay the housing provident funds for one employee, but had completed such payment subsequently in accordance with the procedures. For the period ending December 31, 2020, the Issuer recruited 7 new employees, comprising 6 employees whose social insurance premium and housing provident fund payment procedures had not been completed in the same month of recruitment, and 1 employee whose social insurance premium and housing provident fund for the month of recruitment was contributed by the original employer. Their social insurance premium and housing provident fund payments had been contributed by the Issuer either by the Issuer/its domestic holding subsidiaries or by a third party subsequently. For the period ending June 30, 2021, the Issuer recruited 14 new employees in May and June 2021, but failed to pay social insurance premiums and housing provident funds for them within June 2021. Nevertheless, the Issuer/its domestic holding subsidiaries have subsequently made such payments for those employees.

2. The Issuer's compliance with laws and regulations governing social security and housing provident fund

According to the replies issued by Huangpu Sub-center of Shanghai Social Insurance Administration Center dated May 20, 2020, September 3, 2020 and February 8, 2021 respectively, ACMSH has never failed to pay social insurance premiums during the period from January 1, 2017 to September 30, 2020.

As per the certificate issued by the 43rd Taxation Office of Shanghai Pudong New Area Tax Service, State Taxation Administration dated March 26, 2021, ACMSH has paid on time and in full according to the amount of the monthly social security bill in accordance with laws and regulations during the corresponding period from October to December 2020.

As per the certificate issued by the 43rd Taxation Office of Shanghai Pudong New Area Tax Service, State Taxation Administration dated October 20, 2021, ACMSH has made contributions to the social insurance premiums during the corresponding period from January to June 2021.

As per the Legal Person Labor Supervision Administrative Punishment Credit Report (Refs.: F (2020) 00023043, F (2021) 00027937 and F (2021) 00033265) provided by Credit Shanghai on June 24, 2020, January 26, 2021 and October 19, 2021, respectively, there is no credit record of labor supervision administrative punishment related to the Issuer from January 1, 2017 to June 30, 2021.

According to the certificates issued by the Human Resources and Social Security Bureau of Xinwu District, Wuxi City on April 24, 2020, October 13, 2020, March 3, 2021 and October 21, 2021, respectively, ACM Wuxi has not been found to violate any labor protection laws, regulations and rules, nor has it been recorded as being subject to any administrative punishment or administrative treatment by the labor administrative department for violation of law from January 1, 2017 to February 9, 2021.

As per the certificates issued by Shanghai Provident Fund Management Center on March 10, 2020, September 3, 2020, March 22, 2021 and October 22, 2021, respectively, ACMSH has established a housing provident fund account which is in the normal payment state, without administrative punishment record of the provident fund management center.

According to the certificates issued by Wuxi Provident Fund Management Center on April 13, 2020, September 7, 2020, February 3, 2021 and October 20, 2021, respectively, ACM Wuxi has not been subject to the recovery, fine or other forms of administrative punishment by such center due to violation of the provident fund laws and regulations from January 1, 2017 to the issuing date thereof.

Section VI Business and Technology

I. Main Business and Main Products of the Issuer

(I) Main business, main products and income component

1. Basic situation of main business

The company is mainly occupied in the research, development, production and sales of semiconductor special equipment. Its main products include semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet equipment. The company persists in the development strategy of differentiated competition and innovation. Through self-developed single-chip megasonic cleaning technology, single-chip slot-type combined cleaning technology, electroplating technology, stress-free polishing technology and vertical furnace tube technology, the Company provides customized equipment and process solutions to global wafer manufacturing, advanced packaging and other customers, effectively improving the customer's production efficiency, product yield and reduce production costs.

Based on independent innovation, the Company has successfully developed the world's first SAPS and TEBO megasonic cleaning technology and Tahoe single-chip slot-type combined cleaning technology through years of technological research and process accumulation. These technologies can be applied in the wafer cleaning field of 45nm and below technology nodes, which can effectively solve the cleaning problem of organic contamination and particle after etching, and significantly reduce the use of concentrated sulfuric acid and other chemical reagents. It helps customers reduce production costs while meeting the energy saving and emission reduction requirements.






With advanced technology and rich product lines, the Company has developed into one of the few semiconductor special equipment providers with certain international competitiveness in Chinese Mainland. The Company's products have been recognized by many mainstream semiconductor manufacturers at home and abroad, and have obtained good market reputation. The main customers of the Company are as follows:






Number	Field of Customer	Name of Customer
1	Wafer manufacturing	Hynix, Huahong Group, Yangtze Memory, SMIC, Hefei Changxin
2	Advanced Packaging	JCET, TFME, SJsemi, Nepes
3	Manufacturing and recycling of semiconductor silicon wafer	ZING SEMI, Wafer Works, Wafer Works, PSI
4	Research institutes	Institute of Microelectronics of Chinese Academy of Sciences, Shanghai Integrated Circuit, NCAP







The Company's technical level for the megasonic single-chip cleaning equipment, single-chip slot-type combined cleaning equipment and electroplating process equipment of copper interconnection, has reached international leading or international advanced level. As of June 30, 2021, the Company and its holding subsidiaries have 322 main licensed patents, including 152 domestic patents and 170 overseas patents. Among them, there are 317 invention patents. The company also won the title of "Shanghai Key Laboratory of Advanced Wet Process Equipment for Integrated Circuits". It is the main subject unit of major scientific research projects in China such as "Research and development and application for 20-14nm copper plating equipment of copper interconnection" and "Research and development for 65-45nm stress-free polishing equipment of copper interconnection", and other ("02 Special Project") major scientific projects in China. In December 2020, the Company's "SAPS (Space Alternated Phase Shift) megasonic cleaning technology" won the first award of Shanghai Science and Technology Awards.

2. Main products

After years of continuous research and development investment and technology accumulation, the Company has developed cleaning equipment for single-chip cleaning, slot-type cleaning, and single-chip slot-type combined cleaning and others, copper interconnection electroplating equipment for the front end of chip manufacturing, advanced packaging electroplating equipment for the back end, as well as the wet etching equipment, gumming equipment, developing equipment, degumming equipment, stress-free polishing equipment, vertical furnace tube serial equipment and other equipment for advanced packaging. At present, the Company's products are mostly used in the integrated circuit industry. The Company's main products are as follows:

Main products	Technical characteristics	Application field
Semiconductor cleaning equipment		
 <p>Single-chip cleaning equipment</p>	<p>The equipment can simultaneously clean the front and back of the wafer. Each equipment can be equipped with a variety of chemical liquids, which can be applied to single-chip wet cleaning and single-chip wet etching technology.</p>	<p>The equipment can be used for front and back cleaning of film deposition in chip manufacturing, cleaning after dry etching, cleaning after ion implantation ashing, cleaning after chemical mechanical grinding, cleaning after polishing and epitaxy, cleaning for chemical wet etching and other process.</p>
 <p>SAPS single-chip cleaning equipment</p>	<p>On the basis of the traditional single-chip cleaning equipment configuration, the equipment is equipped with the megasonic cleaning technology (SAPS) independently developed by the Company. The equipment is mainly aimed at the cleaning process of flat wafer surfaces and deep holes, focusing on the removal of small particles. In the process below 45nm, it effectively solves the cleaning problem of organic contamination and particles after etching, which greatly improves the cleaning efficiency.</p>	<p>The equipment can be used for front and back cleaning of film deposition in chip manufacturing, cleaning after dry etching, cleaning after ion implantation ashing, cleaning after chemical mechanical grinding, cleaning after polishing and epitaxy process and other process.</p>
 <p>TEBO single-chip cleaning equipment</p>	<p>On the basis of the configuration of the traditional single-chip cleaning equipment, the equipment is equipped with the megasonic cleaning technology of Timely Energized Bubble Oscillation (TEBO), which is independently developed by the Company, to provide efficient cleaning of 3D structure wafers. In the case where the high aspect ratio of 3D chip is gradually improved, TEBO technology can stabilize the bubble's oscillation to achieve low damage or even zero damage.</p>	<p>The equipment can be used for front cleaning of film deposition in chip manufacturing, cleaning after dry etching, cleaning after ion implantation ashing and other process.</p>
 <p>Single-chip slot-type combined cleaning equipment</p>	<p>Its integrated single-cavity cleaning module and slot-type cleaning module integrate the slot-type degumming process with the single-chip cleaning process. Compared with the traditional single-chip cleaning equipment, it can greatly save the amount of sulfuric acid, and the cleaning ability is comparable to the single-chip cleaning equipment.</p>	<p>The equipment can be used in photoresist stripping and cleaning of chip manufacturing, cleaning after dry etching, cleaning after ion implantation, cleaning after chemical mechanical grinding, metal film removal and other process.</p>
 <p>Single-chip back cleaning equipment</p>	<p>The equipment uses non-contact clamping method of Bernoulli suspension, which can effectively protect the surface of wafer device and perform the cleaning or wet etching for the spray chemical liquid on the back of the wafer. It can be used for ultra-thin wafers with large warping degree or bonded wafers with carriers.</p>	<p>It can be used for the cleaning and wet etching process of the wafer backside in chip manufacturing.</p>

 <p>Scrubbing equipment for front end</p>	<p>The equipment adapts a single-chip cavity to clean the front and back of the wafer according to the working procedure. It can perform cleaning process including wafer backside scrubbing, wafer edge scrubbing, front and back cleaning for two-phase fluid, etc.; the equipment occupies a small area with high productivity and strong stability. There are various cleaning methods to be flexibly selected.</p>	<p>It can be used in the scrubbing process from the front end to the last end in chip manufacturing.</p>
 <p>Slot-type cleaning equipment</p>	<p>The equipment uses pure water, alkaline and acidic liquids as cleaning agents, and is combined with cleaning methods such as spray, hot dip, overflow and bubbling, and is equipped with advanced IPA drying method to clean the wafers in batches.</p>	<p>It can be used for cleaning, wet etching, film stripping, photoresist removal and other processes in the field of chip manufacturing.</p>
Semiconductor electroplating equipment		
 <p>Copper interconnection electroplating equipment for the front end</p>	<p>Aiming at Ultra ECP map of the copper interconnection electroplating technology for the front end, which is the 55nm, 40nm, 28nm and below 20-14 nm technology nodes, the equipment mainly acts on the wafer to deposit a layer of dense and uniformly distributed copper without holes, gaps and other defects.</p>	<p>It can be used in the dual damascene electro-coppering process in logical circuits and memory circuits.</p>
 <p>Advanced packaging electroplating equipment for the back end</p>	<p>The equipment is developed in a differentiated manner to meet the needs of advanced packaging electroplating and can be used for high-current and high-speed electroplating applications. It adopts a modular design, which is convenient for maintenance and control, can shorten the maintenance time of equipment and improve the utilization rate of equipment.</p>	<p>It can be used in the advanced packaging Pillar Bump, RDL, HD Fan-out and TSV, and the electroplating processes, such as copper, nickel, tin, silver, gold, etc.</p>
Advanced packaging wet equipment		
 <p>Advanced packaging wet equipment</p>	<p>The equipment uses a single-chip cavity to perform wet etching on the wafer surface. It integrates all the chemical liquid, pure water and gas lines for drying in a complete process into a cavity. The equipment occupies a small area, consumes less chemicals and pure water with high flexibility in process adjustment.</p>	<p>It can be used for wet silicon etching of 12-inch and 8-inch wafers and UBM metal wet etching processes in advanced packaging, such as copper, titanium, nickel, tin, gold, etc.</p>

 <p>Gumming equipment</p>	<p>The equipment uses a single-chip cavity to perform the photoresist spin coating on the surface of the wafer, and completes the subsequent roasting and cooling working procedure in the hot and the cold plate. The equipment pioneers the self-cleaning function of the cavity, which replaces the traditional manual disassembly of the cavity for cleaning, avoiding the damage to the machine caused by frequent manual disassembly of the precision gumming machine. At the same time, the cleaning efficiency is greatly improved, the maintenance cost of the machine is reduced, and the service life of the machine is increased.</p>	<p>It can be used for the coating process of positive and negative glue and thin and thick glue for 12-inch and 8-inch wafers in advanced packaging.</p>
 <p>Ultra C dv Developing equipment</p>	<p>The equipment uses a single-chip cavity to spray the developing solution on the surface of the wafer, and cleans and dries the wafer after spraying the developing solution. The equipment combines the developing technology of Spray and puddle.</p>	<p>It can be used for the developing process of 12-inch and 8-inch wafers in advanced packaging.</p>
 <p>Degumming machine</p>	<p>The equipment integrates slot-type degumming with single-chip degumming, completes the soaking process in the slot, softens and removes most of the thick glue. The single-chip degumming can complete the subsequent removal of residual glue, contaminants and particles and make up for the shortcomings of insufficient capacity of single-chip equipment.</p>	<p>It can be used for the degumming process of 12-inch and 8-inch wafers in advanced packaging.</p>
 <p>Advanced packaging scrubbing equipment</p>	<p>The equipment uses a single-chip cavity to spray chemical liquid or deionized water on the front and back of the wafer to achieve the cleaning, and use the physical brush to clean the wafer.</p>	<p>It can be used for the scrubbing and cleaning process of 12-inch and 8-inch wafers in advanced packaging.</p>
 <p>Stress-free polishing equipment</p>	<p>Stress-free polishing machine (Ultra SFP) is based on the principle of electro-chemistry and integrates stress-free polishing, chemical mechanical polishing, and wet etching processes. In advanced packaging applications, it can greatly reduce the consumption of polishing solution and reduce chemical emissions.</p>	<p>It can be used for 3D TSV, 2.5D silicon interposer, RDL, HD Fan-out, and others in advanced packaging.</p>
Other equipment		
 <p>Vertical furnace tube equipment</p>	<p>The equipment can handle wafers process in batches to complete the deposition process of different types of non-metal thin films on the surface of wafers. It is mainly used for polycrystalline silicon, silicon nitride, silicon oxide and other thin films.</p>	<p>It can be used for the film deposition of polycrystalline silicon, silicon nitride, and silicon oxide in front end process of logical circuits and memory circuits.</p>

3. Composition of main business income

During the reporting period, the Company's main business income according to product composition is as follows:

In RMB 10,000 Yuan

Item	Jan. - Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Semiconductor cleaning equipment	48,900.39	83.16%	81,627.25	83.69%	62,522.30	84.10%	50,135.96	92.91%
Including: Single-wafer cleaning equipment	43,884.74	74.63%	71,610.80	73.42%	55,099.52	74.12%	50,135.96	92.91%
Wet bench cleaning equipment	5,015.65	8.53%	3,310.85	3.39%	4,801.36	6.46%	-	-
Single wafer wet bench combined cleaning equipment	-	-	6,705.60	6.88%	2,621.43	3.53%	-	-
Semiconductor electroplating equipment	3,591.85	6.11%	5,290.13	5.42%	7,857.39	10.57%	1,191.13	2.21%
Advanced packaging wet equipment	6,312.54	10.73%	9,856.51	10.11%	3,961.12	5.33%	2,634.07	4.88%
Vertical furnace tube equipment	-	-	758.90	0.78%	-	-	-	-
Total	58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

During the reporting period, the income from the single-chip cleaning equipment has accounted for a relatively high proportion and grew rapidly. This is the Company's main source of income.

(II) Main operation model

1. Profit model

The Company is mainly occupied in the research, development, production and sales of semiconductor special equipment. It achieves revenue and profits through selling customized semiconductor cleaning equipment, semiconductor electroplating equipment, stress-free polishing equipment, vertical furnace tube equipment and advanced packaging wet equipment to wafer manufacturing, advanced packaging, semiconductor silicon wafer manufacturing enterprises, research institutes and other customers, and providing services.

As a company specializing in semiconductor equipment that faces the forefront of international technology and adheres to independent innovation, the Company follows global industry practices. It is mainly focused on technology and process research and development, product design and manufacturing, and provides customers with equipment and process solutions. The Company hardly engages in the processing of parts and components. According to the product design, the Company has organized outsourcing of parts and external assistance, and has established a complete supply chain system in the United States, South Korea and Chinese Mainland, and has developed a close cooperative relationship with core suppliers to guarantee the supply of important parts. With the help of the technological advantages formed through long-term research and development accumulation, the Company maintains a higher product gross profit, and thus maintains a higher proportion for research and development investment and market development, and has achieved a higher profit margin during the reporting period.

2. Research and Development model

The Company mainly adopts the model of independent research and development. The research and development department of the Company is guided by the international technical tendency of semiconductor special equipment and customer demands, adopts a strategy of differentiated competition, and relies on the international research and development teams with rich experience to develop new process and technologies, complete the verification of technical solutions, and has applied for patent protection in the major semiconductor production countries and regions in the world, and has quickly industrialized research and development results and achieved a series of technological innovations and breakthroughs. Besides, the Company has established a professional research and development team in South Korea, relying on South Korea's advantages in the field of semiconductor machinery and electronics, to develop related technologies for the Company's products and improve the Company's product performance.

The "Management Measures for the Research and Development Project" formulated by the Company stipulates the procedures for establishment, approval, and execution of research and development projects. On the basis of functional categories, the Company divides research and development personnel into four categories: process development, mechanical design, electrical design, and software programming. Among them, the process development and mechanical design department is responsible for the process development and mechanical design of the process module, and the electrical design and software programming department is responsible for the automatic control design and control software programming of the equipment. The Company carries out specific R&D tasks to create mechanical, electrical, and other technical solutions after completing the project initiation and approval process of R&D projects. To test new technologies, the Company designs and manufactures a sample module, which is used as a physical carrier for implementing new functions and features. After the manufacturing and internal test completed on the sample module, it indicates that only partial functions of the sample module have been tested, while subsequent verification must be implemented on the actual production line of customers, so that the sample module may be verified with products actually produced by customers and pass the assessment for mass production by customers. For this purpose, the Company installs the sample module, free of charge, on the complete equipment sold to customers to verify the sample module under the actual production conditions at customers, and continuously makes modification in response to customer feedback. If the final test results reach the expectation, the sample module is finalized as a regular or optional configuration on the equipment. In addition, the Company pays development fees to customers for certain test tasks performed at customers.

3. Procurement model

There are many kinds of raw material purchased by the Company, and the main categories are gas circuit, materials conveying, machinery, the electrical, etc. The specific material includes robot arms, megasonic generators, filters, valves, sensors, etc.

In order to ensure the quality and performance of the product, the Company has established a complete procurement system, requiring suppliers to fill out the "Supplier Survey Table", establishing supplier files to figure out the situation of the supplier, such as personnel situation, production capacity, design capacity, financial situation, suppliers of key components, production and testing equipment, etc. And conduct comprehensive evaluation of the supplier's product technology and quality, capacity of delivery just-in-time and after-sales service, etc., and finally determine the qualified supplier and put them into the list of qualified suppliers. At present, the Company has established stable long-term cooperation with major suppliers.

The Company has organized procurement teams for raw material in South Korea and the United States, and established ACM KR and ACM CA. They rely on the relatively developed and complete semiconductor industry chains in South Korea and the United States, and are responsible for the overseas procurement of some of the Company's raw materials.

According to the customer demands, the performance and indicators of raw materials required by the products, the research and development and design engineers of the Company inquire with suppliers based on the design drawings, and sign the "Procurement Demand Sheet", and send it together with the supplier's offer and design drawings to the purchasing department. After comprehensively taking the Company's current production plans, sales orders, raw material inventory, and other factors into account, the purchasing department arranges procurement plans, conducts business negotiations with suppliers, and finally determines the purchase price and trade terms. After obtaining the approval of the research and development and design department, purchasing department and financial department, select the supplier from the list of qualified suppliers as required and conduct the procurement. After the purchased materials are delivered, the quality control department conducts the receiving inspection. After passing the inspection, the warehouse clerk will go through the storage procedures and complete the purchase.

4. Production model

The Company's products are all based on the customized design and manufacturing according to the customer's differentiated demands, and the Company mainly adopts the production model where the sales volume determines the production, and organizes production in line with customer orders.

On the basis of market forecasting and non-binding forecasting from the customers, the Company's manufacturing department prepares annual production plans, and formulates monthly production plans based on customer orders. The research and development and design engineers provide assembly drawings according to the customer orders and distribute them to warehouses and production workshops for warehouse picking, batching and assembly. After the pre-assembly and pre-examination, each module is handed over to the production line for assembly and functional testing. After passing the test, it will be off line and delivered.

The cavity frames of the Company's products mainly consist of a variety of plastic parts and is produced by outsourcing processing. According to the differentiated demands of customers, the Company hands over to outsourcing manufacturers for processing after completing the design. After passing the acceptance, the products are put into storage for production and assembly. The outsourcing manufacturers of the Company have independent and mature processing capabilities. Outsourcing processing adopts standardized technology, and is performed according to the product technical parameters listed in the agreement or order. The Company will strictly control the quality of outsourcing processing, and has established a stable cooperative relationship with outsourcing manufacturers for many years to ensure that it meets the differentiated needs of customers.

5. Sales model

Since its establishment, the Company has always adhered to the global development strategy. Customers are mainly located in Chinese Mainland, Taiwan, South Korea and other countries and regions. The Company's market development strategy is: first of all, to develop the global leading semiconductor enterprises, and obtain their recognition for the Company's technology and products through long-term research and development and technology accumulation to establish the Company's market reputation. Then, with its achievements and reputation in the international industry, the Company will continuously explore the emerging regional markets in the semiconductor industry, such as Chinese Mainland, etc. After years of hard work, the Company has established a relatively stable cooperative relationship with Hynix, Yangtze Memory, Huahong Group, SMIC, JCET and other domestic and foreign leading enterprises in the semiconductor industry.

The Company's sales department will jointly discuss the product program with the mechanical design department, process department, electrical department, software department and after-sales department after receiving the customer's order. The production department is responsible for organizing the production according to the design plan. After the product is qualified upon testing, it is shipped to the customer for installation, commissioning and acceptance. During the reporting period, the Company has provided products to customers for testing before signing a formal sales order in a few cases. After the product meets the technical specifications of the customers, both parties sign the official order.

During the Reporting Period, the ultimate customers in some overseas sales of the Company are Chinese mainland enterprises, including Yangtze Memory, Huahong Group, SMIC, JCET, and SK Hynix Semiconductor (China) Co., Ltd. Specific sales were implemented as follows: the Company handles export custom declaration formalities for the products, and transports the products to a bonded area for delivery to the customer or its designated third party; the customer or its designated third party handles import custom declaration formalities and transports the products to their factory in Chinese mainland.

The Company sells products through the direct selling model, and there is no distribution and dealer model. During the reporting period, the Company obtains orders through agent promotion, business negotiation with potential customers or bidding.

(1) Agency sales

The sales cycle of semiconductor special equipment industry is long and there is a lot of uncertainty. In the early stage of the development, the Company's business scale is too small to cover many potential customers. The Company mainly develops the market through agents. With the continuous expansion of the Company's business scale, the Company also begins to expand its sales team. Under the agent promotion, the Company signs a product sales agency agreement with the agent, and the agent is responsible for the marketing of related products in a specific region. The Company directly signs sales contracts with relevant customers, and directly sends the products to customers, and pays the commission charges to the agent in accordance with the types of the sold products and the commission rate agreed in advance.

During the Reporting Period, sales revenue realized by the Company assisted by agents is as follows:

In RMB 10,000 Yuan

Item	Jan. - Jun. 2021	2020	2019	2018
Sales revenue realized through agents	58,783.10	93,373.55	69,002.21	50,364.93
Revenue	62,528.08	100,747.18	75,673.30	55,026.91
Proportion	94.01%	92.68%	91.18%	91.53%

During the Reporting Period, the Company realized the sales revenue assisted by agents in the amount of RMB 503.6493 million, RMB 690.0221 million, RMB 933.7355 million, and RMB 587.8310 million, respectively, accounting for 91.53%, 91.18%, 92.68%, and 94.01% of the corresponding period, respectively.

During the Reporting Period, the Company has 5 sales agents. The Company pays agency commissions at the following specific rates:

Agent	Agency Commission Rate
TJM PARTNERS LTD.	3%, 5%
LIDA TECHNOLOGY CO., LIMITED	2.5%, 4%, 5%
MOTION ELECTRONICS CO., LTD	3%, 5%
ZAIN TECHNOLOGY CO., LTD	3%
HANWOOL SCIENTIFIC CO., LTD.	0.5%, 3%, 3.5%

① The proportion of sales revenue realized by the Company assisted by agents is greater than comparable companies in the industry

Among comparable listed companies in the industry, the sales realized by Kingsemi assisted by agents accounted for 0%, 1.04%, and 0% in 2017, 2018, and January to June, 2019. Listed companies in the semiconductor industry, like NSIG and Montage Technology disclosed sales commissions in their annual reports, but did not disclose the sales revenue assisted by agents. In 2018, 2019, and 2020, the comparison of sales commissions between the Company and other listed companies in the semiconductor industry is as follows:

In RMB 10,000 Yuan

Company Name	Item	2020	2019	2018
NSIG	Sales commission	829.82	837.74	382.39
	Proportion in revenue	0.46%	0.56%	0.38%
Montage Technology	Sales commission	293.70	542.24	7,268.71
	Proportion in revenue	0.16%	0.31%	4.14%
ACMSH	Sales commission	4,046.99	2,761.73	1,931.14
	Proportion in revenue	4.02%	3.65%	3.51%

Source: 1. Announcements of listed companies; 2. other listed companies in the industry, like AMEC, NAURA Technology, and CCTech, did not disclose relevant data.

According to the relevant materials disclosed by Kingsemi, with reference to the sales commissions and proportions thereof in the revenue disclosed by listed companies in the semiconductor industry, it can be determined that the proportion of sales revenue assisted by agents in the revenue is higher than comparable listed companies in the industry. The Company has chosen the market development mode primarily depending on agents based on the state of product and technology development; once the products are successfully accepted, in line with practices of the industry, the Company extends the cooperation with the agents, so that the agents will be continuously responsible for the agency business with corresponding customers, and the Company pays sales commissions for equipment sold to such customers.

② The Company will continue to rely on agents to a certain extent in terms of new market development

In the early stage of the development, with low reputation and little sales personnel, the Company's business scale is too small to cover many potential customers. The Company mainly develops the market through the use of agents. International semiconductor equipment manufacturers mostly adopted the agent mode in early market development. For example, TEL (Tokyo Electron) maintained agency cooperation with Hermes Epitek for 30 years for its business in Taiwan. With the continuous expansion of the Company's business scale, the Company also begins to expand its sales team.

The Company will gradually transform from the agency mode to an internal sales team as the revenue and repeated orders from customers increase. The specific planning is as follows:

A. Upon the expiration of agency agreements on product sales with agents, for existing stable customers, the Company's internal sales team will maintain and develop new orders.

B. For new markets, new customers, and new products, the Company will choose between the agency mode and internal sales team for market development with reference to the economical efficiency, effectiveness, and other indicators.

C. The Company will continuously educate and expand its internal sales team to develop and maintain customers.

Given the expansion of the Company's business operation, the deepening of cooperation with Hynix, and the establishment of the strategic layout of a global business system, the Company decided to set up a South Korean subsidiary to operate the South Korea market. Since the Company has been in a favorable cooperation with HANWOOL SCIENTIFIC CO., LTD. for a long period of time, the Company decides to invite the team into ACM Korea. From July 2019, the Company no longer has agency sales through HANWOOL SCIENTIFIC CO., LTD., reducing the cooperation agents from 5 to 4 agents.

Sales assisted by agents is an important mode for new market and new customer development in the semiconductor industry. As the Company's products and technologies become mature with a stable customer base, the sales mode will transform from agency sales to sales through the internal sales team.

In summary, the Company achieves market development mainly with the assistance of agents at the early stage of development. As the Company further increases its market shares on the Chinese mainland market of semiconductor equipment, expands its sales volume, and establishes the Issuer's own sales team, the reliance on agents will be reduced. However, the Company will continue to rely on agents to a certain extent in terms of new market development.

③ Sales realized without reliance on agents

During the reporting period, the Company realized the sales revenue assisted by agents in the amount of RMB 503.6493 million, RMB 690.0221 million, RMB 933.7355 million, and RMB 587.8310 million, respectively, accounting for 91.53%, 91.18%, 92.68%, and 94.01% of the corresponding period, respectively. After the Company's products are successfully accepted with the assistance of an agent, although the agent has no influence on subsequent sales of products, in line with practices in the industry, the Company continues the cooperation with the agent, so that the agent continues to take charge of the agency business with the customer, and the Company pays commissions for equipment subsequently sold to such customer. The Company collects statistics on revenue based on customers developed by agents, resulting in a high proportion of revenue realized through agents in the Company's revenue. Generally, the Company enters into a contract for agency sales for 1-5 years with an agent depending on the customers developed by the agent; upon the expiration of the contract, the Company renews the contract in accordance with the original agreement with the agent with reference to the maintenance of customers and the expansion of new products and new markets by the agent. If the agent plays a role in customer maintenance, the Company reduces the rate of agency commissions in the subsequent renewed contract, and along with the increase of the Company's sales volume and improvement of its own sales team, the role played by agents in customer maintenance will be reduced, and contracts with such agents will be terminated eventually; if the agent plays a role in developing new markets and new customers, the company will retain the established rate of agency commissions.

Despite the high proportion of revenue assisted by agents in the Company's revenue, the Company does not rely on agents for sales, mainly because:

A. For products sold with the assistance of agents, the Company enters into a sales agreement directly with the customer, and the customer makes payment directly to the Company without the involvement of a third party; moreover, the agent does not enter into agreements with customers. The sales revenue realized by the Company relies on the technology and quality of the Company's products and the results of verification at customers.

B. In essence, the services provided by agents are brokerage services for establishing a trust and business relationship between the Company and semiconductor manufacturers. At the early stage of market development, an agent mainly communicates with the technology, equipment, and engineering departments of customers to facilitate the acceptance of the Company's products by the customers, provide the Company with an opportunity of brining the first product into the production line, and cooperate to complete the verification of the Company's products. Generally, the agent neither participates in the negotiation with customers for specific purchases, including negotiations on prices and delivery conditions, nor takes charge in communicating with the procurement department of the customer; instead, the procurement department of the customer negotiate prices directly with the Company's sales personnel.

C. The internal control procedure for sales revenue realized by the Company with the assistance of agents is as follows:

a. Stage of product marketing

After the Company enters into an agency agreement with an agent, the agent operates under the obligations, tasks, and constraints specified in the agreement. The Company's sales personnel keep in touch with the agent to get updated about differential requirements of customers or potential customers and directs the process of equipment marketing; meanwhile, they may also get familiar with the business capabilities of the agent, check whether the agent operates under the conditions specified in the agreement, and supervise and urge the tasks performed by the agent.

b. State of agency commission payment

Under the agency agreement, the Company starts the procedure of agency commission payment after receiving the shipment payment or acceptance payment from the customer. The sales department of the Company submits an application; the financial department calculates the agency commission payable according to receipts under orders (under the agency agreement, the agency commission is calculated based on the sales price of equipment, net of relevant shipment, packaging, insurance, and other expenses provided in the agreement, multiplied by the commission rate), and sends the commission calculation statement to the agent, requiring confirmation and invoice from the agent; once the agent confirms, the Company pays commissions to the agent through bank transfer after receiving the invoice and obtaining the approval of the payment application.

In summary, despite the prominent role played by the agent at the stage of product marketing in the process of selling the Company's products, the sales revenue realized by the Company relies on the technology and quality of the Company's products and the results of verification at customers without relying on the agent.

(2) Sales realized with the assistance of import and export service providers

In 2017 and 2018, part of the Company's export business was carried out by the import and export service provider, Charter Base International. The specific method was to sell the product to Charter Base International at first, which would go through customs procedure and then Charter Base International would sell the products to the final customers at the same price. At the same time, the Company would pay Charter Base International for the agency fees of customs procedure. After June 2018, the Company's export business was carried out through the wholly-owned subsidiary, Hong Kong CleanChip, and the Company no longer had business with Charter Base International.

During the Reporting Period, the sales realized by the Company with the assistance of the import and export service provider Charter Base International were as follows:

In RMB 10,000 Yuan

Item	Jan. - Jun. 2021	2020	2019	2018
Amount of sales through Charter Base International	-	-	-	6,935.04
Revenue	62,528.08	100,747.18	75,673.30	55,026.91
Proportion	-	-	-	12.60%

During the Reporting Period, the import and export agency fees were settled by steps between the Company and Charter Base International:

Item	Amount of Export in a Year	Charging Standard
Level 1	US\$ 1-4,000,000	Calculated at 0.5% of the value of goods exported
Level 2	US\$ 4,000,001-8,000,000	Calculated at 0.45% of the value of goods exported
Level 3	US\$ 8,000,001-12,000,000	Calculated at 0.40% of the value of goods exported
Level 4	Over US\$ 12,000,001	Calculated at 0.35% of the value of goods exported

6. Reasons for adopting the current business model, key factors affecting the business model, changes and future trends of the business model and influencing factors during the Reporting Period

Combined with factors such as market supply and demand, upstream and downstream development status, industrial policies, the Company's main business, main products, core technologies, and its own development stage, the Company has formed its current business model. The business model is consistent with the practice in the same industry. The business model and its influencing factors of Company have not faced major changes during the reporting period, nor will there be major changes of business model in the foreseeable future.

(III) Evolution situation of the Company's main business, main products or services, main business model since its establishment

1. Evolution situation of the Company's main business and products

Since its establishment, the Company has always focused on the research and development, production and sales of semiconductor special equipment. The Company's controlling shareholder, ACMR, was established in 1998. Since its establishment, ACMR has been engaged in the research and development of semiconductor special equipment. In 2005, ACMR invested and set up the Company's predecessor, ACMSH, and put the right to use the technology related to semiconductor special equipment to ACMSH, which was formed from its previous research and development. On the basis of these technologies, the issuer carries out continuous technology development and innovation, and conducts technology research and development and technology accumulation of semiconductor special equipment.

Among the Company's technology and product lines, semiconductor cleaning equipment has achieved market breakthrough at first. In 2008, the SAPS technology of the Company was successfully developed. In 2009, the SAPS cleaning equipment entered the product verification of the world's top ten semiconductor companies and the global leading enterprise for memory, Hynix. In 2011, the Company got the official order from Hynix for the first time owing to the SAPS cleaning equipment for 12-inch 45nm process, and received repetitive orders of Hynix in 2013. In the field of semiconductor cleaning equipment, the Company has successfully entered the production line of the world's first-rate semiconductor manufacturing enterprises after more than ten years of research and development and technical accumulation.

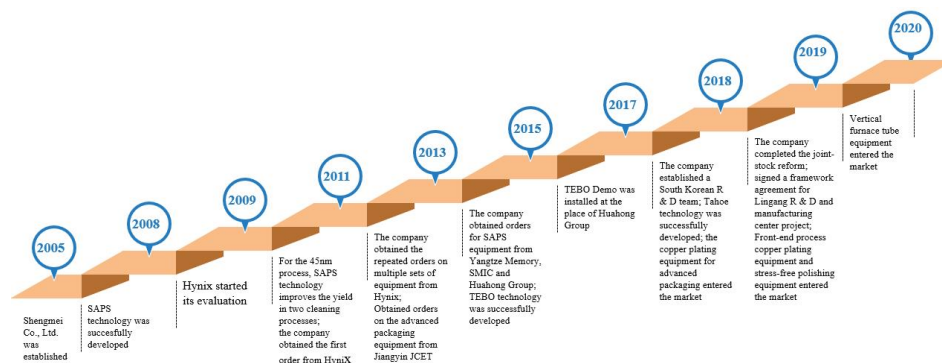
After 2015, the semiconductor industry in Chinese Mainland has entered a period of rapid development, and the demand for semiconductor special equipment has increased rapidly. Since the Company's production rate was firstly recognized by international advanced customers, the Company has successfully obtained orders from leading customers in Chinese Mainland after 2015 with its achievements and reputation in the international industry, such as Yangtze Memory, SMIC, and Huahong Group. In 2015 and 2018, the TEBO technology and Tahoe technology of the Company were successfully developed respectively, and the technology and product line in the field of semiconductor cleaning equipment were more colorful. During the reporting period, the Company firmly grasped the opportunities for the rapid development of the semiconductor industry in Chinese Mainland. The business scale of semiconductor cleaning equipment grows rapidly.

In the field of advanced packaging wet equipment, after years of technology accumulation, the Company obtained the order of JCET, which was the leading enterprise in the domestic packaging and testing field, in 2013.

Advanced packaging electroplating equipment for the back end and stress-free polishing equipment are one of the Company's early business directions. After years of research and development and marketing, the Company respectively obtained the orders of JCET in 2018 and 2019. The Company got the orders of Huahong Group in 2019 owing to the copper interconnection electroplating equipment for the front end.

In order to further expand the Company's market coverage of semiconductor special equipment, the Company began the research and development of dry equipment based on the wet process in 2018, and launched vertical furnace tube equipment in 2020, which further enriches the Company's product line and expands the market areas covered by the Company's products.

Since its establishment, the Company's main business has not changed. The evolution situation of the Company's main products is as follows:

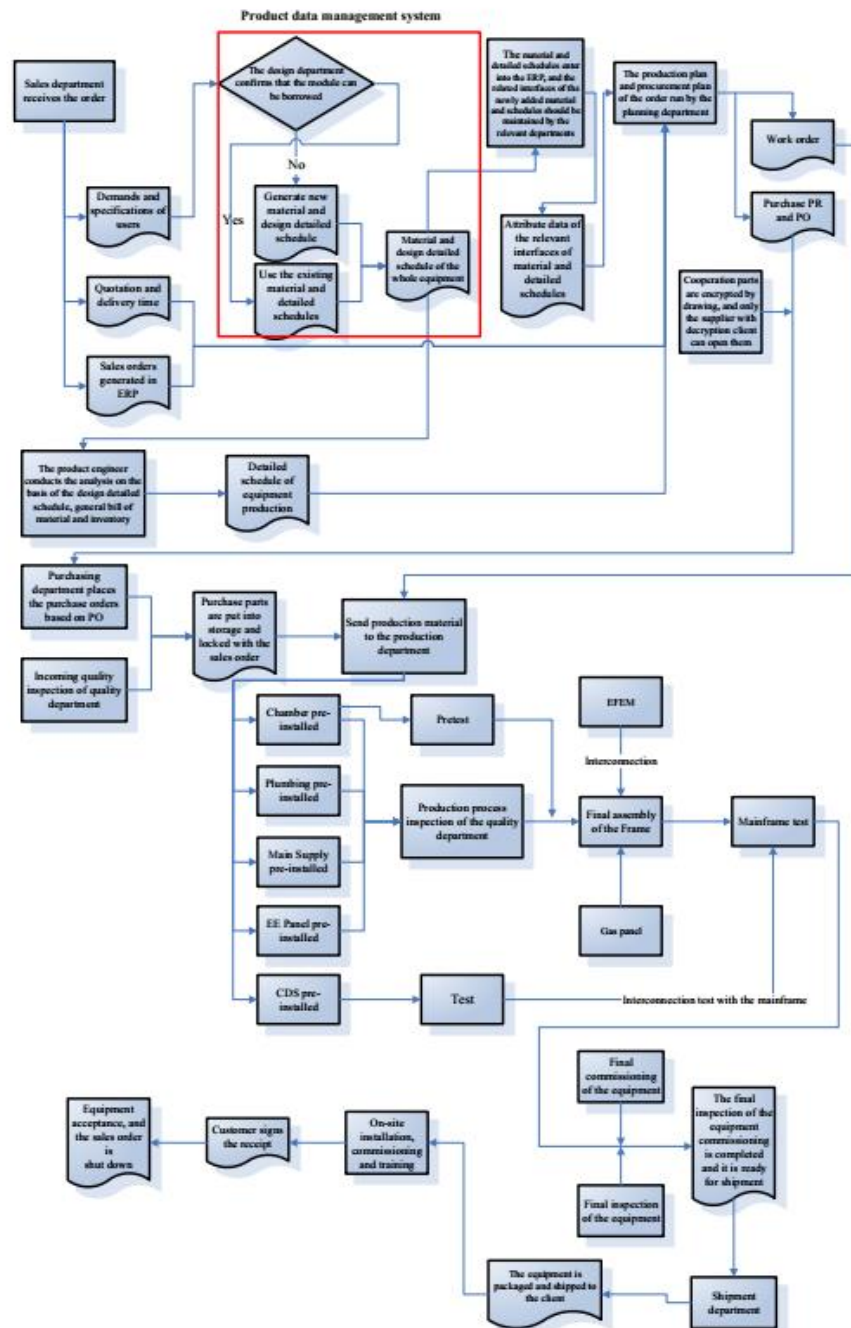


2. The evolution situation of the Company's main operation model

Since its establishment, the Company's operation model has not changed.

(IV) Process flow of main products

The industry of semiconductor special equipment is a technology-intensive industry, and the production technology involves the comprehensive application of multi-disciplinary and multi-domain knowledge such as microelectronics, electrical science, machinery, materials, chemical engineering, fluid mechanics, automation, image recognition, communication, and software systems. The production process flow of the Company's various products is similar in some places. The specific process flow is as follows:



(V) Main environmental pollutants, main treatment facilities and treatment capacity involved in production and operation

The Company is mainly engaged in the research, development, production and sales of semiconductor special equipment. The main production process is the assembly, detection and debugging of machinery equipment and modules, and there is no serious pollution.

At present, the main environmental protection measures taken by the Company in the process of research and development and production are as follows:

1. During the research and development period, there is a small amount of pollutants. The waste water with fluorine, acid, alkali and other components will be collected and entrusted to a qualified third-party company for transportation and disposal.
2. The Company's domestic sewage is directly discharged into the municipal sewage pipe network. After the collected water for cleaning equipment has passed through the recycling system and reached the standard, it will be directly discharged into the municipal sewage pipe network. Domestic waste is handled by the sanitation department. The solid wastes are collected in a unified manner, and then they are entrusted to professional units for disposal.
3. The Company's workshop is equipped with a ventilating system for exhausting air. The equipment has basic vibration reduction, noise elimination and sound insulation devices to reduce noise emissions.

II. The Basic Situation and Competition Condition of the Issuer's Industry

(I) The Company's industry and the basis for determining the industry

The Company is mainly occupied in the research, development, production and sales of semiconductor special equipment. According to the "Guidelines for the Industry Classification of Listed Companies (2012 Revision)" issued by the China Securities Regulatory Commission, the Company's industry is "Special Equipment Manufacturing" (C35); according to the "Classification of National Economy Industry" (GB/T4754-2017), the Company's industry is "Special Equipment Manufacturing for semiconductor devices" under "Special Equipment Manufacturing" (C3562).

(II) The competent authority of the industry, the supervision mechanism of the industry, the main laws, regulations and policies of the industry and its influence on the operation and development of the issuer

1. The competent authority and supervision mechanism of the industry

The competent authority of the semiconductor special equipment industry where the Company is located is the Ministry of Industry and Information Technology and the Ministry of Science and Technology. The industry's self-regulatory organizations are China Semiconductor Industry Association and China Electronic Production Equipment Industry Association.

The main responsibilities of the Ministry of Industry and Information Technology are as follows: put forward new industrialization development strategies and policies, coordinate and solve major problems in the process of new industrialization, formulate and organize the implementation of development plans for industry, communications industry and informatization, and promote strategic adjustment, optimization and upgrading of industrial structure; To formulate and organize the implementation of industry plans, plans and industrial policies for industry and communications; monitor and analyze the operation situation of the industry and communication industry, make statistics and release relevant information, and conduct forecast and warning and information guidance; formulate and organize the implementation of industry plans, programs and industrial policies for industry and communications; supervise and analyze the operation trend of industry and communication industry, carry on the statistics and release relevant information, and conduct prediction and early warning and information guidance; burden the responsibility for proposing opinions on the scale and direction of investment in fixed assets in industry, communications industry and informatization (including the utilization of foreign capital and overseas investment), and the arrangement ideas on fiscal construction funds from the central government, and reviewing and approving the fixed assets investment projects within Chinese planning and the annual planned scale in accordance with the limits of authority prescribed by the State Council; formulate and organize the implementation of plans, policies and standards related to the information industry in the high-tech industry, and guide the technological innovation and technological progress in the industry, and upgrade traditional industries with advanced and applicable technologies; burden the responsibility for the organization and coordination of the revitalization of the equipment manufacturing industry, organize and formulate plans and policies for major technological equipment development and independent innovation, rely on the construction of key national projects to coordinate the implementation of major special projects, promote the localization of major technical equipment and guide and introduce the learning and innovation of major technical equipment.

The main responsibilities of the Ministry of Science and Technology are as follows: formulate Chinese innovation-driven development strategy, scientific and technological development, introduce and implement the foreign intellectual planning and policies; be responsible for establishing a unified management platform of Chinese science and technology and the coordination, evaluation and supervision mechanism of the fund for scientific research project; formulate and carry out Chinese basic research plans, policies and standards; compile the major science and technology projects in China and supervise the implementation; formulate relevant policies and measures for the conversion of scientific and technological achievements and the cooperation of industry, university and research, and supervise the implementation.

China Semiconductor Industry Association and China Electronic Production Equipment Industry Association are mainly responsible for implementing government industrial policies; performing industry and market research and providing consulting services to member units and government authorities; self-discipline management of the industry; propose industrial development suggestions and opinions to government departments on behalf of the member units.

The Ministry of Industry and Information Technology, the Ministry of Science and Technology and industry associations constitute the management system of the semiconductor equipment industry. Under the macro control of the competent authority and the constraints of self-disciplining norms of the industry associations, enterprises in various industries runs independently in the market and assume market risks by themselves.

2. The main laws, regulations and policies of the industry and its influence on the operation and development of the issuer

The semiconductor special equipment industry of the Company is the key industry of which China focuses on encouraging development. In order to enhance the development, innovation capacity and international competitiveness of the semiconductor industry, promote the transformation of traditional industries and product upgrading and updating, and further propel the sustained, rapid and healthy development of the national economy, the central and local governments of China have launched a series of policies in recent years, such as “Development Guidelines for Information Industry” and “Several Measures for the Concentrated Development of Integrated Circuit Industry in Lingang New Area of China (Shanghai) Pilot Free Trade Zone”, to encourage and support the development of the semiconductor industry, which has created a good policy environment for the development of the semiconductor industry, and promoted the development of the semiconductor special equipment industry in Chinese Mainland.

(III) Development situation of the Issuer’s industry in terms of new technologies, new industries, new patterns, new models, etc. over the past three years and the future development trend

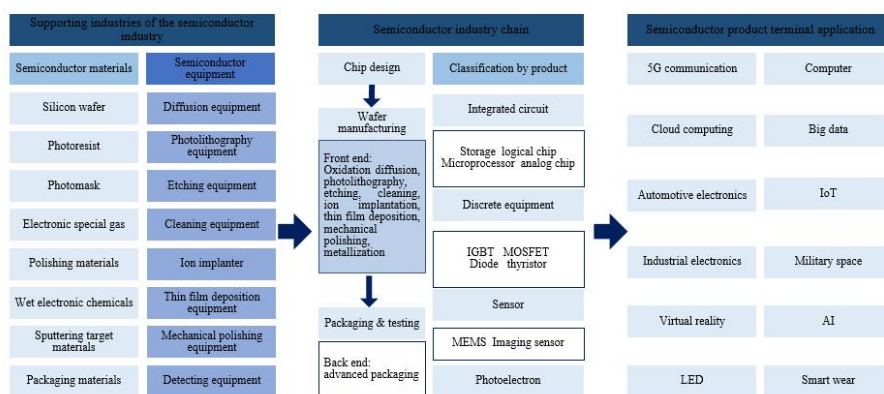
1. Overview of the semiconductor industry

Semiconductors refer to materials with conductivity ranking between conductors and insulators at room temperature and are widely used in various electronic products.

Semiconductor products can be divided into four categories: integrated circuits (IC), discrete devices, optoelectronic devices and sensors. As the core of the semiconductor industry, integrated circuits account for more than 80% of the scale of the semiconductor industry, and the subdivisions include logic chips, storage, microprocessors, analog chips, etc. Integrated circuits are widely used in 5G communication, computer, consumer electronics, network communication, automobile electronics, Internet of Things (IoT) and other industries, and are the core component of most electronic equipment.

From the perspective of the industry chain, the semiconductor industry chain involves supporting industries such as materials and equipment, chip design, wafer manufacturing, packaging & testing industry and semiconductor product terminal application industry. Semiconductor products represented by integrated circuits are widely used, and the demand growth in downstream application industries is the core driving force for the rapid development of the semiconductor industry.

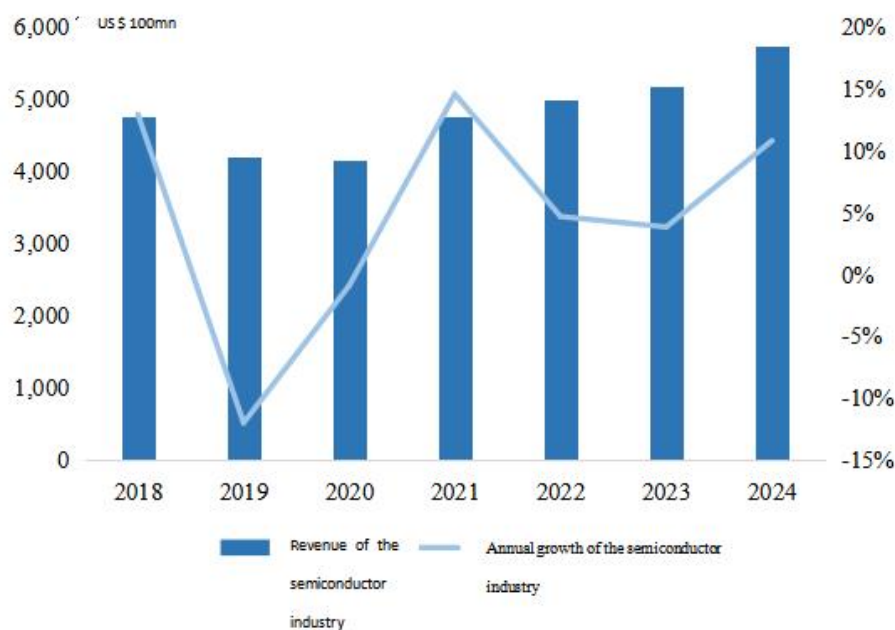
Semiconductor industry chain



(1) The market scale of the global semiconductor industry is large

With the rapid development of global informatization, networking and knowledge economy, especially driven by the strong demand of emerging application fields such as IoT, artificial intelligence (AI), automotive electronics, smartphones, smart wear, cloud computing, big data and security electronics, the revenue of the global semiconductor industry is enormous. In 2018, the revenue of the global semiconductor industry reached US\$476.151 billion. In 2019, due to the impact of the global macro-economic doldrums, the prosperity of the semiconductor industry declined, and the revenue of the global semiconductor industry fell to US\$419.148 billion, down 11.97% year on year. The semiconductor industry is expected to recover in 2021, and the revenue of the global semiconductor industry is expected to reach US\$572.788 billion in 2024. According to Gartner's statistics and forecasts, the revenues of the global semiconductor industry and annual growth rate from 2018 to 2024 are as follows:

Revenues and annual growth rates of the global semiconductor industry for 2018-2024

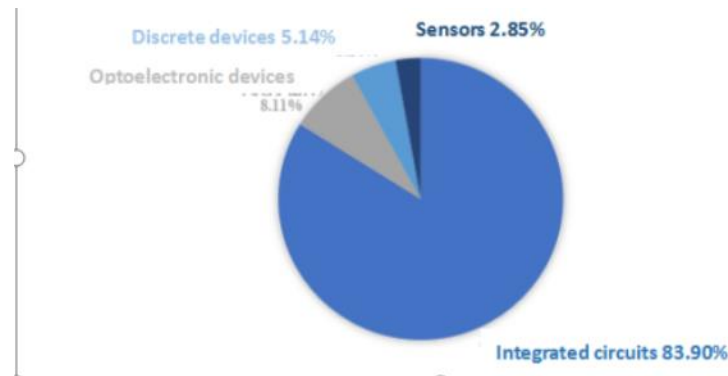


Data source: Gartner

(2) Integrated circuits are the most important component of the semiconductor industry.

The semiconductor industry can be divided into four product categories: integrated circuit, optoelectronic device, discrete device and sensor. In 2018, the global sales of integrated circuits, optoelectronic devices, discrete devices and sensors were US\$393.288 billion, US\$38.032 billion, US\$24.102 billion and US\$13.356 billion, respectively, up 14.60%, 9.25%, 11.32% and 6.24% from 2017, accounting for 83.90%, 8.11%, 5.14% and 2.85% in the global semiconductor industry. In terms of the product distribution of the semiconductor industry, the proportion of integrated circuits is the highest and the growth rate is the fastest. Integrated circuits are the most important component of the semiconductor industry.

Product distribution of the global semiconductor industry in 2018

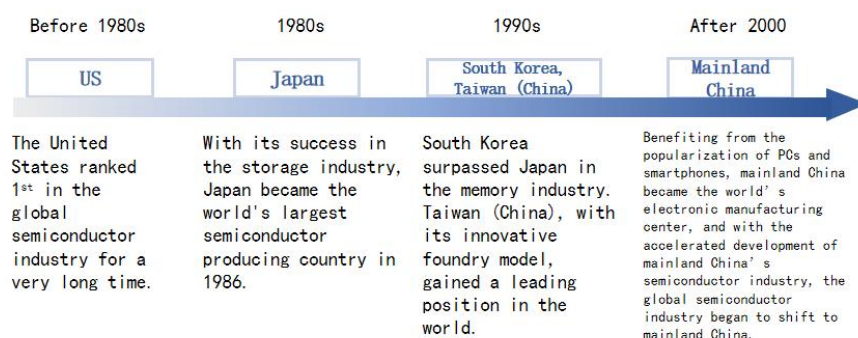


Data source: WSTS

(3) The global semiconductor industry is expected to continue to shift towards mainland China in the future

In the development history of the global semiconductor industry, we've seen several rounds of industrial transfer from the United States to Japan, South Korea, Taiwan (China), and mainland China. At present, mainland China is in the process of the rapid rise of the new generation of smartphones, IoT, AI, 5G communication and other industries, and has become one of the most important semiconductor application and consumer markets in the world. According to the statistical data from the Semiconductor Equipment and Materials International (SEMI), 62 new wafer factories will be put into operation in the world from 2017 to 2020, of which 26 will be located in mainland China, accounting for 42%. The period from establishment to production of new wafer plants is about 2 years, and the next few years will be the rapid development period of the semiconductor industry in mainland China.

History of Regional Transfer of the Global Semiconductor Industry



Against the backdrop of regional shift of the global semiconductor industry, according to WSTS statistics, in 2018, the global shares of semiconductor markets in Asia-Pacific (excluding Japan), the United States, Europe and Japan were 60%, 22%, 9% and 9% respectively; in 2018, the U.S. semiconductor market grew by 19.6%, Europe by 13.3%, Japan by 9.6% and Asia-Pacific by 16.0%, of which the growth rate in mainland China was 20%. With the rapid growth of China's semiconductor market, its global position is also rising rapidly. In 2019, while the growth rate of the global semiconductor market declined, the semiconductor market in mainland China still grew faster than the global market, thereby driving the Asia-Pacific region to become the fastest-growing semiconductor market in the world. In 2017-2019, the sales percentage and growth rates of semiconductor markets in all countries or regions in the world were as follows:

Country/Region	2019 (E)		2018		2017	
	Sales Percentage	Growth	Sales Percentage	Growth	Sales Percentage	Growth
US	21.90%	1.44%	22.14%	19.58%	21.47%	35.03%
Europe	9.02%	1.95%	9.08%	13.25%	9.29%	17.13%
Japan	8.39%	2.52%	8.39%	9.58%	8.88%	13.33%
Asia-Pacific	60.69%	3.06%	60.39%	16.00%	60.36%	19.40%
Including: Mainland China	32.37%	3.50%	32.08%	16.60%	31.90%	22.10%
Total	100.00%	2.55%	100.00%	15.94%	100.00%	21.62%

Data source: *Shanghai IC Industry Development Report 2019*, Economic and Information Technology Commission of Shanghai, Shanghai Integrated Circuit Industry Association

(4) China's semiconductor industry continues to grow rapidly

Relying on the enormous market demand of terminal applications in China, the scale of the semiconductor industry in mainland China continues to grow rapidly, especially the development of the integrated circuit industry. According to data released by China Semiconductor Industry Association (CSIA), the sales scale of the integrated circuit industry in mainland China was RMB 250.85 billion Yuan in 2013, RMB 653.20 billion Yuan in 2018 (up by 20.71% year-on-year), and RMB 756.23 billion Yuan in 2019 (up by 15.77% year-on-year). From 2013 to 2019, the annual compound growth rate of the sales scale of the integrated circuit industry in mainland China was 20.19%, developing rapidly.¹

Sales and growth rates of China's IC industry for 2013-2019



In the industry chain structure of the integrated circuit industry in mainland China in 2019, the sales revenue of the chip design industry was RMB 306.350 billion Yuan, up by 21.60% year-on-year; the sales revenue of the wafer manufacturing industry was RMB 214.910 billion Yuan, up by 18.20% year-on-year; the sales revenue of the packaging & testing industry was RMB 234.970 billion Yuan, up by 7.10% year-on-year. In each link of the above semiconductor industry chain, the rapid growth of wafer manufacturing sales revenue is mainly attributed to China's a batch of 12-inch and 8-inch wafer manufacturing production lines put into production in recent years. Besides, with the development of the chip design industry at home and abroad, the wafer manufacturing industry in Chinese Mainland has been growing fairly fast.²

Sales and growth rates of China's IC industry chain structure for 2014-2019

In RMB 100mn Yuan

Item		2019	2018	2017	2016	2015	2014	2014-2019 Compound Growth
Chip design	Sales	3,063.50	2,519.3	2,073.5	1,644.3	1,325.0	1,047.4	23.94%
	Growth	21.60%	21.5%	26.1%	24.1%	26.5%	29.5%	
Wafer manufacturing	Sales	2,149.10	1,818.2	1,448.1	1,126.9	900.8	712.1	24.72%
	Growth	18.20%	25.6%	28.5%	25.1%	26.5%	18.5%	
Packaging & testing	Sales	2,349.70	2,193.9	1,889.7	1,564.3	1,384.0	1,255.9	13.35%
	Growth	7.10%	16.1%	20.8%	13.0%	10.2%	14.3%	
Total	Sales	7,562.30	6,531.4	5,411.3	4,335.5	3,609.8	3,015.4	20.19%
	Growth	15.78%	20.7%	24.8%	20.1%	19.7%	20.2%	

¹ Data source: *Shanghai IC Industry Development Report 2019*, Economic and Information Technology Commission of Shanghai, Shanghai Integrated Circuit Industry Association, and China Semiconductor Industry Association

² Data source: *Shanghai IC Industry Development Report 2019*, Economic and Information Technology Commission of Shanghai, Shanghai Integrated Circuit Industry Association, and China Semiconductor Industry Association

2. Overview of the semiconductor special equipment industry

(1) Classification of semiconductor special equipment

Semiconductor special equipment generally refers to the production equipment required for the production of various semiconductor products. It is part of the supporting link of the semiconductor industry chain. Semiconductor special equipment is the technical leader of the semiconductor industry. Chip design, wafer manufacturing and packaging & testing need to be designed and manufactured within the scope allowed by equipment technologies. The technological progress of equipment in turn promotes the development of the semiconductor industry. Take the integrated circuit, which is of the greatest technological difficulty, the most added value, and the most complex technology in the semiconductor industry chain as an example, the production equipment used for integrated circuits can be divided into two categories, the front-end process equipment (wafer manufacturing) and the back-end process equipment (packaging & testing). Among them, there are seven process steps in the front-end wafer manufacturing, including thermal process, photo-lithography, etch, ion implantation, dielectric and metal deposition, cleaning & CMP, and metallization. The corresponding dedicated equipment mainly includes oxidation/diffusion equipment, photolithography equipment, etching equipment, cleaning equipment, ion implantation equipment, film deposition equipment, mechanical polisher, etc.

The main types of equipment used for integrated circuit manufacturing are as follows:

Semiconductor equipment classification						
Oxidation/diffusion	Photolithography	Etching	Cleaning equipment	Ion implantation	Thin film growing	Polishing
Diffusion furnace	Film lamination developing equipment	Medium etching equipment	Single-wafer cleaning equipment	Ion implanter	Metal deposition equipment	Mechanical polisher
Oxidation furnace	Photolithography equipment	Metal etching equipment	Tank cleaning equipment		Dielectric layer deposition equipment	
Annealing furnace	Alignment detector	Edge etching equipment	Combined cleaning equipment		Atomic layer deposition equipment	
Single-wafer oxidation equipment					Electroplating equipment	

(2) Characteristics of the semiconductor special equipment industry

① A. Semiconductor special equipment plays an important role in the semiconductor industry chain

Semiconductor special equipment plays an important role in the semiconductor industry chain. The technology of semiconductor special equipment is complex, and customers have strict requirements on the technical parameters and operation stability of the equipment in order to ensure the production efficiency, quality and yield. According to Moore’s law, when the price remains unchanged, the number of components that can be accommodated on an integrated circuit will double every 18 to 24 months, and the performance will also double. Accordingly, the equipment supplier in the integrated circuits industry must also introduce more advanced manufacturing processes every 18 to 24 months; the technological progress of the integrated circuit manufacturing process in turn promotes the semiconductor special equipment enterprises to continuously pursue technological innovation. In the meantime, the technology update iteration of the integrated circuit industry also brings continuous demand for equipment investment, and the technological improvement of semiconductor special equipment also boosts the sustained and rapid development of the integrated circuit industry.

- ② The technical barriers for semiconductor special equipment are high, and it is hard to pass customer verification

The industry of semiconductor special equipment is a technology-intensive industry, and its production technology involves the comprehensive application of knowledge in numerous disciplines and fields, such as microelectronics, electric, mechanical, material, and chemical engineering, fluid mechanics, automation, image recognition, communication, software system, etc. Global giants in the semiconductor special equipment industry have a rather high market share, especially in photolithography equipment, detection equipment, ion implanter, and other fields, where they enjoy monopoly. Moreover, they have taken intellectual property protection measures in most technical fields. Therefore, the technical barriers for semiconductor special equipment industry are very high. A small number of enterprises in Chinese mainland have made technological breakthroughs and innovations in some fields after more than ten years of technology R&D and process accumulation, and have successfully launched differentiated products on the premise of avoiding intellectual property disputes, which have been recognized by customers at home and abroad and have gradually entered the international market.

Semiconductor special equipment has high value and complex technology, which has a huge impact on the product quality and production efficiency of downstream customers. Customers in the semiconductor industry have strict requirements for the quality, technical parameters and stability of semiconductor special equipment, and they are also very cautious in selecting new equipment suppliers. Usually, they select suppliers with a certain level of market reputation and market share in the industry, and carry out a long-cycle equipment verification process. Generally, customers in the semiconductor industry require equipment suppliers to provide products for testing, and then they will be included in the list of qualified suppliers after passing their internal verification; some customers still need to send the semiconductor products produced by using such equipment to their downstream customers, and only after obtaining the approval of their customers can equipment suppliers be included in the list of qualified suppliers. Therefore, semiconductor special equipment enterprises face a long-time cycle and great difficulty in customer verification and market exploration.

(3) Upstream and downstream industries of the semiconductor special equipment industry

The upstream industry of the semiconductor special equipment industry is the electronic component and machining industry. The raw materials purchased are mainly robot arms, megasonic generators, filters, valves, sensors, etc. Because of the characteristics of high precision and high reliability of semiconductor special equipment, the requirements for raw materials and parts are correspondingly high.

The downstream industries of the semiconductor special equipment industry are mainly wafer manufacturing, packaging & testing industries, etc. In particular, integrated circuit products have high technology content and complex processes, and technological updates and process upgrades rely on the development of special equipment; in turn, the continuous development of new products and processes in the downstream industries provides new demand and market space for the equipment industry. Taking wafer manufacturing as an example, manufacturing equipment applicable for 8-inch wafer cannot be used to process 12-inch wafer. Therefore, when the integrated circuit industry enters the 12-inch era, the manufacturing equipment applicable for 8-inch wafer needs to be completely updated. Additionally, as the wafer manufacturing technology and process continuously develop towards high precision and high integration, more advanced technologies and processes also require improvement and upgrading of the equipment technology, which in turn will bring incremental space for the equipment industry.

(4) Situation of the semiconductor special equipment industry

- ① Downstream market demand drives the continuous scale growth of the global semiconductor special equipment industry

The market of semiconductor special equipment is closely related to the prosperity of the semiconductor industry, among which the chip manufacturing equipment is the field with the most demand in the semiconductor special equipment industry. According to Gartner's statistics, the total equipment expenditure of chip manufacturers in the world in 2018 reached US\$58.944 billion, and it is expected to decline slightly to US\$55.480 billion in 2019 as a result of the global macroeconomic downturn. The semiconductor industry is expected to recover in 2021, and will grow to US\$60.214 billion in 2024. From 2020 to 2024, the compound annual growth rate is expected to be 6.27%.

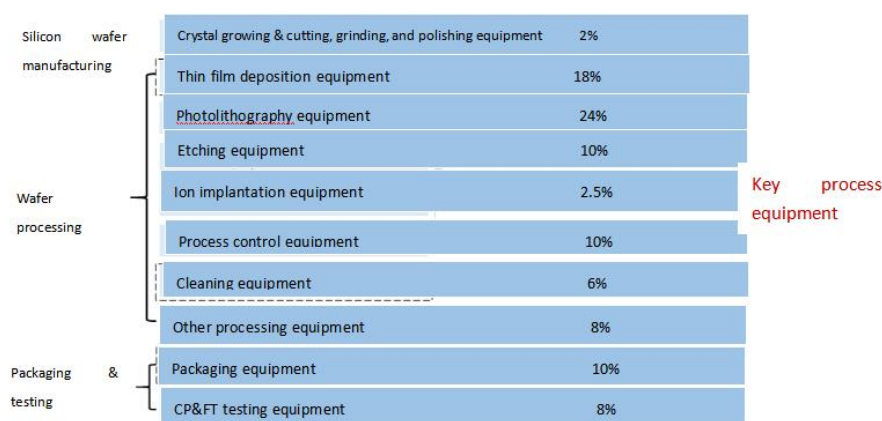


Data source: Gartner

In the future, with the steady growth of downstream industries such as 5G communication, computers, consumer electronics, network communications, etc., as well as the rapid development of emerging industries such as IoT, AI, automotive electronics, smart phones, smart wearables, cloud computing, big data and security electronics and other emerging fields, the integrated circuit industry will face the demand for capacity expansion of new chips or advanced processes, which will bring broad market space for the semiconductor special equipment industry.

In integrated circuit equipment, chip manufacturing equipment is the core equipment with the highest technical requirements, the most difficult manufacturing and the highest value. The technical difficulty, value and market share of semiconductor special equipment are in direct proportion. According to statistics from SEMI, from previous sales, the front-end manufacturing equipment accounts for about 80% of the market of semiconductor special equipment, and the back-end packaging & testing equipment accounts for about 20%. Photolithography, etching and cleaning, film deposition, ion implantation, process control and detection devices are the key process equipment. The value of these process devices accounts for a relatively high proportion of the cost of a single production line in the wafer factory.

Investment proportions for main IC devices



Data source: SEMI, *Issue 4 of the Semiconductor Equipment Topic: The Year of Deployment –Looking for Invisible Leaders*, GF Securities, April 2018

② Foreign manufacturers dominate the global semiconductor special equipment market, and the degree of industrial concentration is high

The semiconductor special equipment industry has high technical barriers, market barriers and customer recognition barriers. After years of development, well-known global enterprises such as Applied Material (US), ASML (the Netherlands), LAM (US), TEL and DNS (Japan), and KLA (US) have occupied the main share of the global semiconductor special equipment market by virtue of their advantages in capital, technology, customer resources, brand, etc. According to statistics from VLSI Research, the total sales volume of the top 5 semiconductor special equipment manufacturers in the world in 2018 was US\$52.784 billion, with a year-on-year growth of 17.73%.³

In 2018, the market share of the top 10 semiconductor special equipment companies in the world reached 81%, and the market share of the top five semiconductor special equipment companies reached 71%, showing a high degree of market concentration.⁴

Rankings of Top 5 Semiconductor Equipment Manufacturers in the World for 2018

In US\$100mn			
Ranking	Manufacturer	Main Product Fields	Sales
1	Applied Material	Deposition, etching, ion implantation, grinding, etc.	140.16
2	ASML	Photolithography equipment	127.72
3	TEL	Deposition, etching, developing, cleaning, etc.	109.15
4	LAM	Etching, deposition, cleaning, etc.	108.71
5	KLA	Detecting and measurement equipment	42.10
Total			527.84

Globally, Applied Materials, a US company, as the largest supplier of semiconductor special equipment, leads the world in heat treatment, coating equipment, ion implantation equipment and other key links of wafer manufacturing equipment; Japanese semiconductor companies do a better job at manufacturing etching equipment, cleaning equipment, coating equipment, developers, testing equipment and other products; ASML, a Dutch company, is in the leading position in the field of high-end photolithography equipment; LAM, a US company, has advantages in the field of etching, cleaning and electroplating equipment; as for semiconductor special equipment enterprises in mainland China, after years of rapid development, they are now capable of competing against global leading enterprises in the fields of etching equipment, cleaning equipment, packaging & testing equipment, etc.

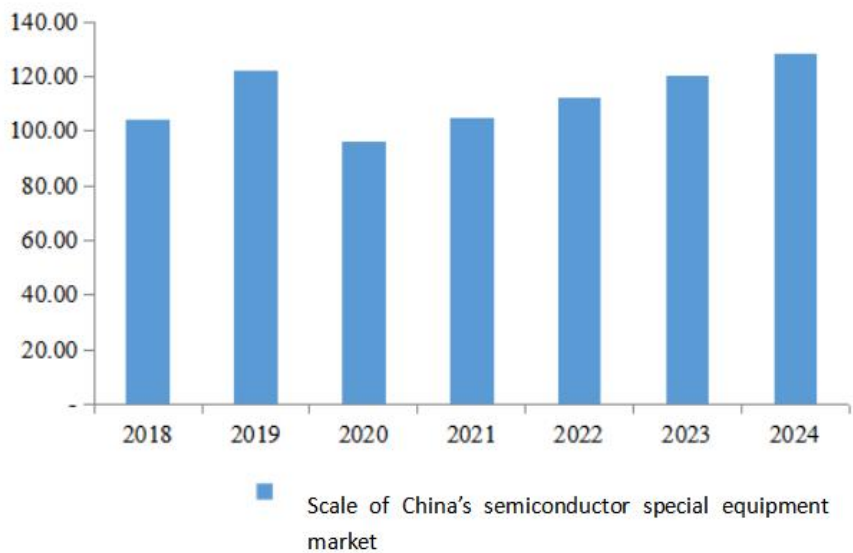
③ The scale of the semiconductor special equipment market in mainland China is growing very fast

With the continuous shift of global semiconductor industrial chain to mainland China, the Chinese integrated circuit industry has been growing rapidly on a continuous basis. According to Gartner's statistics, in 2018, China's chip manufacturers' equipment expenditure reached US\$10.434 billion, and in 2019 it was US\$12.244 billion. It is expected that in 2020, affected by the global semiconductor industry's recession transmission, it will decline to US\$9.628 billion, with the global semiconductor industry gradually recovering in 2021. In 2024, it will increase to US\$12.842 billion. From 2020 to 2024, the compound annual growth rate is expected to be 7.47%.

³ Data source: *Shanghai IC Industry Development Report 2019*, Economic and Information Technology Commission of Shanghai, Shanghai Integrated Circuit Industry Association

⁴ Data source: *Strategies for the Semiconductor Equipment Industry for 2020*, BOCI Securities, Dec. 2019

Scale of China’s semiconductor special equipment market for 2018-2024



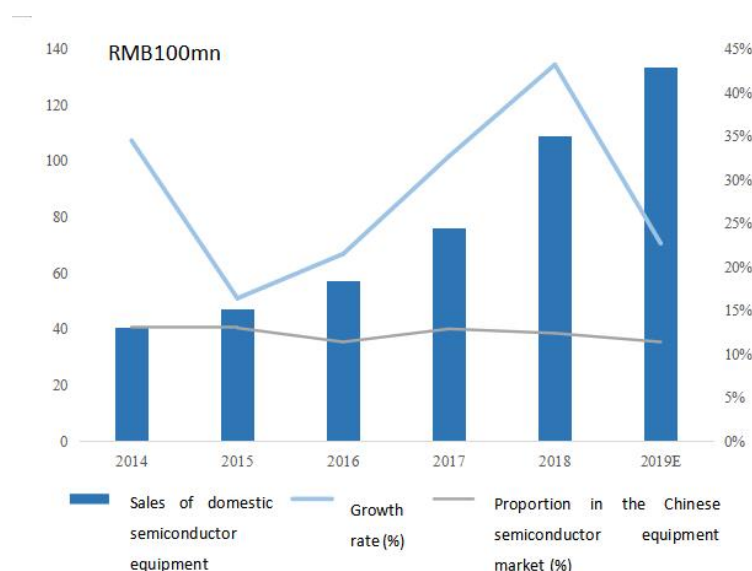
Data source: Gartner

④ The development of semiconductor special equipment made in China is accelerating

The chip manufacturing industry, especially the wafer manufacturing industry, often has a large scale of equipment investment. At present, the investment of 12-inch wafer manufacturing projects is billions or ten billion of US dollars. The technology of wafer manufacturing is complex, involving many process steps, and there are many kinds of equipment needed for production. The efficiency and reliability of a single piece of equipment will directly affect the work efficiency of the whole production line and the yield of chip products. Therefore, wafer manufacturing enterprises are very cautious about the selection of new equipment, requiring a long verification cycle. First, they want to ensure that the equipment is technically advanced and reliable, and then they will consider commercial conditions such as economy and decide whether to purchase the equipment or whether to apply the equipment in production.

In recent years, as China attaches great importance to the semiconductor industry, some Chinese semiconductor special equipment enterprises have made breakthroughs in some technical fields after more than ten years of technology research and development and accumulation, and have successfully passed the verification of some integrated circuit manufacturing enterprises, becoming equipment suppliers of manufacturing enterprises.

Sales and growth rates of China's domestic semiconductor special equipment for 2014-2019



Data source: *2019 Shanghai Integrated Circuit Industry Development Research Report*, Shanghai Economic and Information Technology Commission, Shanghai Integrated Circuit Industry Association.

Although the sales volume of Chinese semiconductor special equipment enterprises keeps growing, the overall domestic production rate is still relatively low. At present, China's semiconductor special equipment mainly relies on imports. According to statistics from China Electronic Production Equipment Industry Association (CEPEA), the sales volume of domestic semiconductor special equipment in 2018 was RMB 10.9 billion Yuan, with a self-sufficiency rate of about 13%. The self-sufficiency rate in the field of integrated circuit manufacturing equipment is even lower, so the development potential of Chinese semiconductor special equipment companies is enormous.

According to the statistics of equipment purchase of mainland China's major wafer factories, the localization of mainland China's major wafer factories is as follows:

SN	Equipment	Localization Rate	Major Domestic Manufacturers
1	Film stripping equipment	Above 90%	Beijing E-Town Semiconductor Technology Co., Ltd.
2	Cleaning equipment	About 20%	ACMSH, NAURA
3	Etching equipment	About 20%	AMEC, NAURA, Beijing E-Town Semiconductor Technology Co., Ltd.
4	Heat processing equipment	About 20%	NAURA, Beijing E-Town Semiconductor Technology Co., Ltd.
5	PVD equipment	About 10%	NAURA
6	CMP equipment	About 10%	Tianjin Hwatsing Electromechanical Technology Co., Ltd.
7	Film lamination and developing equipment	Breakthrough of zero	KINGSEMI
8	Photolithography equipment	Breakthrough of zero expected	Shanghai Micro Electronics Equipment (Group) Co., Ltd. ("SMEE")

Data source: *Strategies for the Semiconductor Equipment Industry for 2020*, BOCI Securities, Dec. 2019

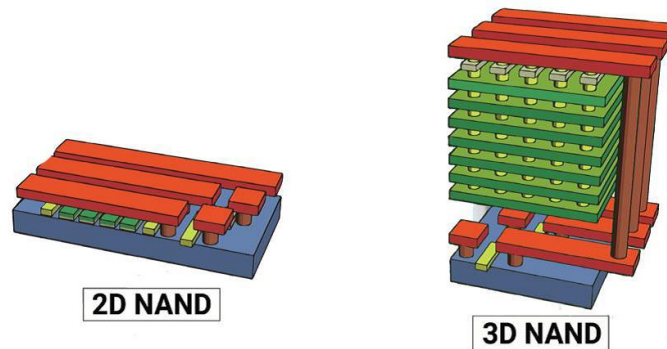
To sum up, with the technological breakthroughs of some enterprises in China's semiconductor special equipment industry, the development of this industry is expected to accelerate.

(5) Future development trend of the semiconductor special equipment industry

① A. Semiconductor special equipment will develop towards high precision and high integration

With the continuous advance of semiconductor technology, the integration degree of semiconductor devices is increasing. On one hand, the chip process nodes are shrinking, from 12 μm -0.35 μm (1965-1995) to 65 nm-22 nm (2005-2015), and they are still developing towards more advanced dimensions; on the other hand, the size of semiconductor wafer is expanding; the mainstream wafer size has developed from 4 inches and 6 inches to 8 inches and 12 inches at the current stage. In addition, the structure of semiconductor devices tends to be complex. A case in point is the NAND flash memory in the field of memory. According to the international semiconductor technology roadmap, when the process size reaches 14nm, the current flash memory technology will reach the limit of size reduction, and the memory technology will change from two-dimensional to three-dimensional architecture and enter the 3D era. In the manufacturing process of 3D NAND, the main task is to change the two-dimensional horizontal series storage units in 2D NAND into vertical ones. By increasing the number of 3D layers, we can solve the process problem of difficulty in 2D scale-down. The number of stacking layers is also developed from 32 and 64 layers to 128 layers. These requirements for the precision and stability of semiconductor special equipment are becoming higher and higher. In the future, semiconductor special equipment will develop towards high precision and high integration.

2D NAND and 3D NAND structure diagram



② Coexistence and joint development of equipment of different technical grades

Given that the application of semiconductor chips is extremely wide, and the performance requirements and technical parameters vary widely, for example, SoC logic chips used in mobile phones often require 12-inch wafers and 7nm advanced processes. For industrial, automotive, and power electronics chips, 6-inch and 8-inch wafers and μm -level processes are still used in large numbers. The demand for chips of different technical levels coexists in large numbers, which also determines that there are market demands for semiconductor special equipment of different technical levels. With the continuous development of the semiconductor industry technology in the future, the demand for the semiconductor special equipment suitable for 12-inch wafers and with more advanced technology will grow at a faster speed, but the equipment of high, medium and low technological levels has their corresponding market space and will continue to coexist in the near future.

3. Introduction to the market segment of the issuer's main products

(1) Cleaning equipment

① Importance of semiconductor cleaning in the chip manufacturing process

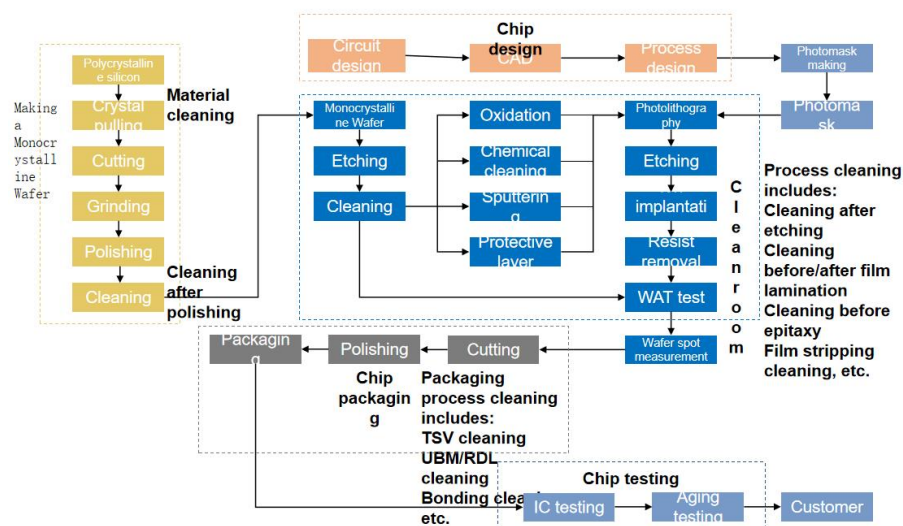
Cleaning is an important process link throughout the semiconductor industry chain. It is used to clean the impurities that may exist in each step of semiconductor silicon wafer manufacturing, wafer manufacturing, and packaging & testing in order to prevent impurities from affecting the high-yield rate of chips and the performance of chips. At present, with the chip manufacturing process becoming more and more advanced, the requirements for the control of wafer surface pollutants are getting higher, and after each repetitive process such as photolithography, etching, and deposition, a cleaning process is required.

Semiconductor cleaning refers to the non-destructive cleaning of the wafer surface to remove particles, natural oxide layers, metal pollution, organic matters, sacrificial layers, polishing residues and other impurities in the semiconductor manufacturing process. The categories, sources and main harm of pollutants in semiconductor cleaning are as follows:

Pollutant	Source	Main Harm
Particles	Environment and other engineering processes	Affect the subsequent photolithography and dry etching processes, causing device short circuit.
Natural oxidation layer	Environment	Affect the subsequent oxidation and deposition processes, causing the electrical property to fail.
Metal pollution	Environment and other engineering processes	Affect the subsequent oxidation process, causing the electrical property to fail.
Organic matters	Dry etching byproducts and environment	Affect the subsequent deposition process, causing the electrical property to fail.
Sacrificial layer	Oxidation/deposition process	Affect specific subsequent processes, causing the electrical property to fail.
Polishing residues	Grinding fluid	Affect specific subsequent processes, causing the electrical property to fail.

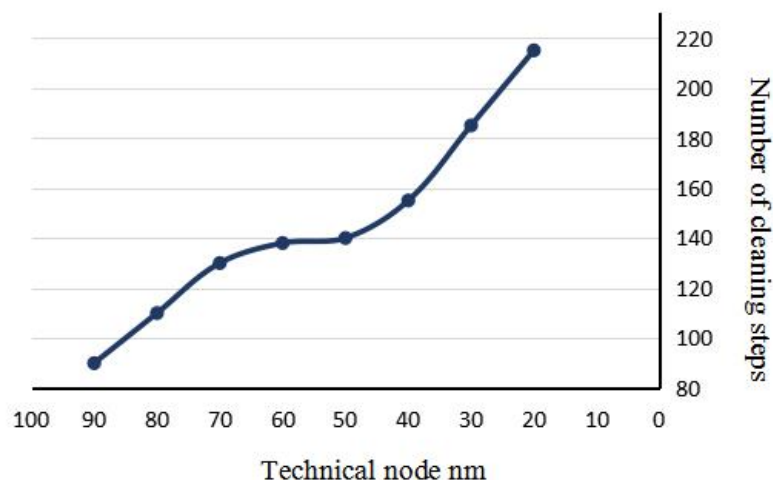
In order to ensure the yield and performance of the chip, the above-mentioned various contaminants on the surface of the wafer need to be controlled within the range of process requirements during the wafer manufacturing process. All wafer manufacturing processes must be carried out in a strictly controlled purification environment. At the same time, it is necessary to evaluate whether the surface characteristics of the wafer meet the requirements of the process before each step. Currently, chip technology nodes are constantly improving, from 55nm, 40nm, 28nm to 14nm, 7nm and below, the requirements for the control of contaminants on the wafer surface are becoming higher and higher, and a cleaning process is required before and after repetitive processes such as photolithography, etching, and deposition Process.

In the semiconductor silicon wafer manufacturing process, the polished silicon wafer needs to be cleaned to ensure its surface smoothness and performance, thereby improving the yield in the follow-up process; in the wafer manufacturing process, it needs to be cleaned before and after photolithography, etching, deposition and other key processes to remove polluting chemical impurities on the wafer and reduce the defect rate; in the packaging stage, it needs to go through TSV cleaning, UBM/RDL cleaning, etc. based on the packaging process. The technical requirements of the aforementioned cleaning process are one of the most important factors affecting the chip yield, quality and reliability.



As wafer manufacturing process continues to develop towards higher precision, the complexity of the chip structure is increasing, and the sensitivity of chips to impurity content is also increasing accordingly. Small impurities will directly affect the yield of chip products. In the hundreds of chip manufacturing processes, a large number of small pollutants will inevitably be generated or contacted. In order to minimize the impact of impurities on chip yield, the current chip manufacturing process has set up a cleaning process after repeated processes such as photolithography, etching, deposition, etc. The number of cleaning steps accounts for over 30% of all chip manufacturing process steps, the highest proportion among all chip manufacturing process steps. And as the technology node continues to progress, the number and importance of cleaning processes will continue to increase, and the demand for cleaning equipment will increase accordingly when the same chip manufacturing capacity is achieved.

Technological progress brings increased cleaning steps



Data source: *Rising Star in the International Semiconductor Cleaning Equipment Industry – the Success of ACMSH*, BOCI Securities

② Semiconductor cleaning technology and equipment classification

According to the differences of cleaning media, the current semiconductor cleaning technology is mainly divided into wet cleaning and dry cleaning. Wet cleaning is to clean the wafer surface without damage by using specific chemical solutions and deionized water according to different process requirements, so as to remove particles, natural oxide layers, organic matters, metal pollution, sacrificial layers, polishing residues and other substances in the wafer manufacturing process. At the same time, ultrasonic, heating, vacuum and other auxiliary technical methods can be used. Dry cleaning refers to cleaning technologies that do not use chemical solvents. Such technologies include plasma cleaning, supercritical gas cleaning, beam cleaning and so on. In dry cleaning, the gaseous hydrofluoric acid is used to etch the wafer silicon dioxide layer with structures distributed irregularly. Despite the advantages of a high selection ratio regardless of the film, it can be employed to clean only individual pollutants, hence is used in logic products and storage products with technology nodes at and below 28 nm. Wafer manufacturing lines mostly employ wet cleaning, supplemented by combined wet and dry cleaning for a few specific steps, to create a cleaning solution. In the future, the wet process and dry process for cleaning equipment will still exist at the same time, and develop towards more advanced technology nodes, diversified functions, small volume, high efficiency, and low power consumption in their respective fields, hence there is no trend of substitution between the wet process and dry process in the short term. At present, wet cleaning is the mainstream cleaning technology, accounting for more than 90% of the chip manufacturing cleaning steps.⁵

Category	Cleaning Method	Cleaning Medium	Process Introduction	Application Characteristics
Wet cleaning	Solution immersion	Chemical solution	It is mainly used for tank cleaning equipment. The wafer to be cleaned is put into the solution to be soaked. Through the chemical reaction between the solution and the surface of the wafer and impurities, the pollutant can be removed.	This method is widely used. Different chemical solutions can be selected for different impurities; its productivity is high, and multiple wafers can be immersed at the same time; the cost is low, and the chemical consumption allocated to each wafer is small; it can easily cause cross-contamination between wafers, though.
	Mechanical scrubbing	Deionized water	The main configuration includes a special brush. With deionized water, this method utilizes the friction between the brush head and the wafer surface to achieve the effect of cleaning and particle removal.	Its advantages are low cost, simple process and good removal effect for micron sized particles. The cleaning medium is generally water, so its application is limited. It can easily damage the wafer, though. It's generally used for the removal of large particles and back particles after mechanical polishing.
	Double-fluid cleaning	SC-1 solution, deionized water, etc.	A refined water-gas double-fluid atomizing nozzle is used. On both ends of the nozzle, liquid medium and high-purity nitrogen are respectively injected; the high-purity nitrogen is used as the power to assist micro-atomization of the liquid into extremely fine liquid particles which are sprayed to the surface of the wafer, so as to achieve the effect of particle removal.	This highly efficient method is widely used to assist particle-removal cleaning. There are risks of damage to the exquisite graphic structure of wafers, and the effect of removing small-sized particles may not be sufficient.
	Ultrasonic cleaning	Chemical solution + ultrasonic assistance	During cleaning under 20-40kHz ultrasonic waves, cavity bubbles are formed inside, and when the bubbles disappear, the impurities on the surface will be desorbed.	It can remove the big pollutants and particles on the surface of the wafer, but it is easy to damage the graphic structure of the wafer.
	Megasonic cleaning	Chemical solution + megasonic assistance	This method is similar to ultrasonic cleaning, but it uses megasonic wave with 1-3MHz process frequency.	The removal effect of small particles is great, and it has obvious advantages in high-aspect-ratio structure cleaning. After the cavity bubbles are accurately controlled, the megasonic wave can also be applied to the cleaning of exquisite graphic structures of wafers; the cost is high, though.
	Batch rotary spray cleaning	High-pressure spray deionized water or cleaning solution	The cleaning chamber is equipped with a rotary table, which can load at least two wafer boxes at a time. During the rotation process, the liquid spray spout continuously sprays liquid to the surface of the wafer to remove the impurities on the surface of the wafer.	Compared with the traditional tank cleaning, this method uses less chemical solution; the area occupied by the machine is small; however, there is the risk of cross-contamination between chemical solutions, if a single wafer generates debris, all wafers in the entire cleaning chamber are at risk of being scrapped.
Dry cleaning	Plasma cleaning	Oxygen plasma	Under the action of strong electric fields, oxygen generates plasma, which makes photoresist vaporize rapidly and become volatile gas substance to be extracted.	The process is simple, the operation is convenient and environment-friendly, and the surface will be clean without scratches. It is difficult to control such process and the cost is high.
	Gas phase cleaning	Gas equivalents of chemical reagents	The vapor equivalent of the corresponding substance in the liquid process is used to interact with the contaminating substance on the surface of the wafer.	Its chemical consumption is small, and its cleaning efficiency is high. But it cannot effectively remove metal contaminants. It is difficult to control such process and the cost is high.
	Beam cleaning	High-energy beam-like material	The impurities on the wafer surface can be removed through their interaction with the	This technology is relatively novel, and it consumes less cleaning solution. It can also

			high-energy beam-like material flow.	prevent secondary pollution. It is difficult to control such process and the cost is high.
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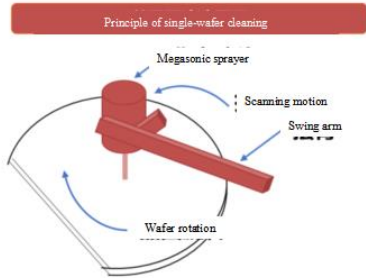
5 Data source: *Semiconductor Equipment Series Report III – Cleaning*, China Merchants Securities, March 2020

In the process of wet cleaning, the mainstream cleaning equipment includes single-wafer cleaning equipment, wet bench cleaning equipment, combined cleaning equipment and batch rotary spray cleaning equipment, among which single-wafer cleaning equipment accounts for the largest market share. There are differences in terms of advancement in mainstream cleaning equipment applying the wet cleaning process, reflected by the size of particles to be cleaned, metal pollution, uniform corrosion, and drying technologies. The table below lists various cleaning equipment:

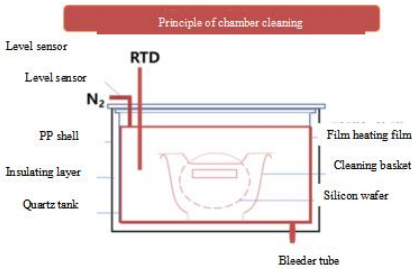
Equipment Type	Cleaning Mode	Application Characteristics	Advancement	Comparison with Foreign Leading Competitors
Single-wafer cleaning equipment	Rotary spray, megasonic cleaning, double-fluid cleaning, mechanical scrubbing, etc.	It has extremely high process environment control ability and particle removal ability and can effectively solve the problem of cross-contamination between wafers; each cleaning chamber can only clean a single wafer at a time, and the equipment capacity is low	Very high	There is no obvious difference in the level of technology of the SAPS/TEBO megasonic wave cleaning equipment; other single-wafer cleaning equipment is inferior to foreign leading competitors in terms of the level of technology
Wet bench cleaning equipment	Solution immersion, megasonic cleaning, etc.	The cleaning capacity is high, so the equipment is suitable for batch production, but the control of particles and wet etching speed is poor, and the risk of cross-contamination is high	High	Inferior to foreign leading competitors in terms of the level of technology
Combined cleaning equipment	Solution immersion + rotary spray combined cleaning	Its capacity is relatively high; so is the cleaning precision. It can greatly reduce the consumption of concentrated sulfuric acid; The product price is relatively high, though	Very high	Foreign competitors do not have such products
Batch rotary spray cleaning equipment	Rotary spray	Compared with the traditional wet bench cleaning equipment, the batch rotary equipment can achieve the process requirements of sulfuric acid with a temperature of 120°C or even 200°C; the control of various process parameters is difficult, and all the wafers in the whole cleaning chamber are at risk of being scrapped after wafer fragmentation	High	The Company does not have such products

The cleaning principles of the above cleaning equipment are as follows:

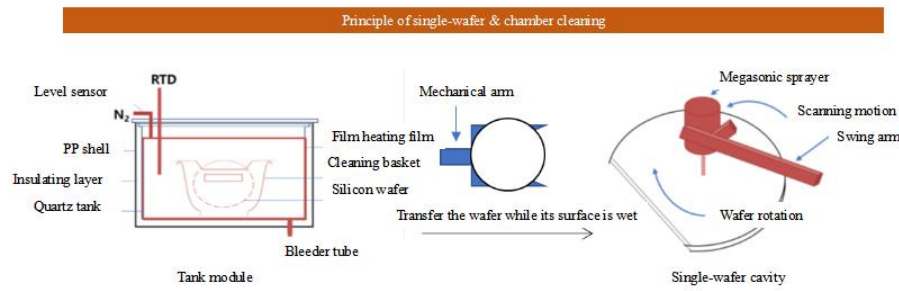
Principle of single-wafer cleaning:



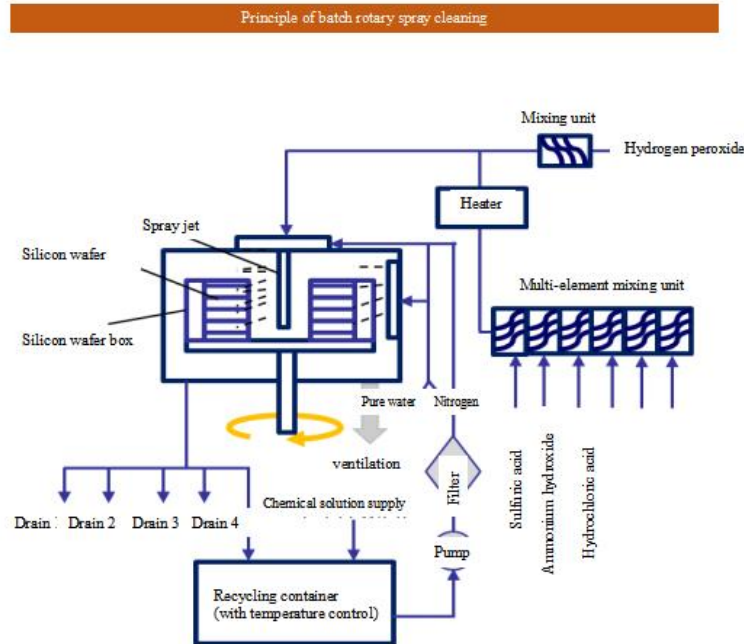
Principle of wet bench cleaning:



Principle of single-wafer & chamber combined cleaning:



Principle of batch rotary spray cleaning:



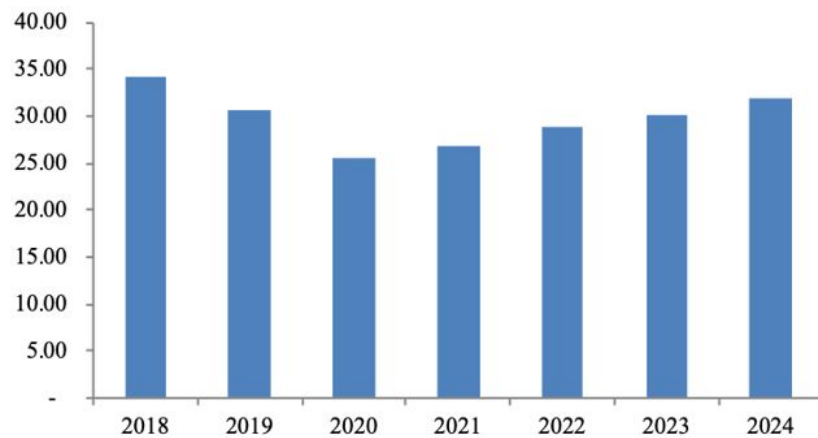
In the advanced process of integrated circuit manufacturing, single-wafer cleaning has gradually replaced wet bench cleaning as the mainstream choice. Firstly, single-wafer cleaning can provide better process control in the whole manufacturing cycle, improve the uniformity between a single wafer and different wafers, and improve the yield of products; secondly, larger wafers and more advanced process design are more sensitive to impurities, and the cross-contamination effect of wet bench cleaning will be greater, thus endangering the yield of the whole batch of wafers and incurring high expenses on core rework. In addition, the introduction of single-wafer & tank combined cleaning technology can integrate the advantages of single-wafer cleaning and wet bench cleaning, improve cleaning capacity and efficiency, reduce the use of sulfuric acid, help customers reduce costs, and meet the national policy requirements of energy conservation and emission reduction.

③ Situation of the semiconductor cleaning equipment industry

In recent years, the development of chip manufacturing technology has been the driving force of the development of semiconductor cleaning equipment. With the continuous development of chip process, the frequency of cleaning process needs to be greatly increased, and the number of cleaning equipment required will continue to grow, which brings huge new market demand for cleaning equipment. In addition, in order to further improve the performance of integrated circuits, the chip structure begins to transform towards 3D. At this time, on the basis of cleaning the wafer surface, the cleaning equipment also needs to clean internal pollutants without damage. This brings higher technical requirements for cleaning equipment. Advances in chip technology and the complexity of chip structures have led to the continuous increase in the value of cleaning equipment.

According to Gartner's statistics, the global semiconductor cleaning equipment market size was US\$3.417 billion in 2018. In 2019 and 2020, as affected by the downturn in the global semiconductor industry, it was reduced by US\$3.049 billion and US\$2.539 billion, respectively. As the global semiconductor industry recovers in 2021, the global semiconductor cleaning equipment market will grow year by year, and the global semiconductor cleaning equipment industry is expected to reach US\$ 3.193 billion in 2024. According to Gartner's statistics and forecasts, the global semiconductor cleaning equipment industry from 2018 to 2024 is as follows:

2018-2024 global semiconductor cleaning equipment market (US\$ 100mn)



Global semiconductor cleaning equipment market (US\$ 100mn)

Data source: Gartner

④ The global semiconductor cleaning equipment market is highly concentrated

In the global cleaning equipment market, Japanese companies are dominant, with DNS occupying a market share of over 40%; TEL, LAM, etc. also have large market shares, so the degree of market concentration is high.

⑤ Despite the rapid growth of semiconductor cleaning equipment enterprises in mainland China, the localization rate is still not high

At present, Chinese mainland's leading cleaning equipment manufacturers are ACMSH, NAURA, KINGSEMI, and PNC, with different focus areas. Among them, the main products of ACMSH are single-wafer cleaning equipment in the field of integrated circuits, including single-wafer SAPS megasonic cleaning equipment, single-wafer TEBO megasonic cleaning equipment, single-wafer back cleaning equipment, single-wafer front scrubbing equipment, wet bench cleaning equipment and single-wafer & chamber combined cleaning equipment, etc., with a very rich product line. As for NAURA, after it acquired US semiconductor equipment manufacturer Aktron Systems LLC, its main products are single-wafer and wet bench cleaning equipment. KINGSEMI's products are currently mainly used in the single-wafer cleaning in the integrated circuit manufacturing field. PNC has the relevant technology to produce 8-12 inch high-end single-wafer wet cleaning equipment and trough wet cleaning equipment, which can cover the market demand for many downstream industries including wafer manufacturing, advanced packaging, and solar energy.

Amid the wave of semiconductor factory construction in mainland China, investment in the Chinese semiconductor industry has been soaring. Chinese mainland semiconductor equipment manufacturers have made technological breakthroughs, and have entered the mainstream production lines of wafer manufacturers at home and abroad in the field of cleaning equipment. According to the *Strategies for the Semiconductor Equipment Industry for 2020* issued by BOCI Securities in December 2019, domestic cleaning equipment has occupied over 20% of the Chinese mainland market, and the market share of China's semiconductor cleaning.

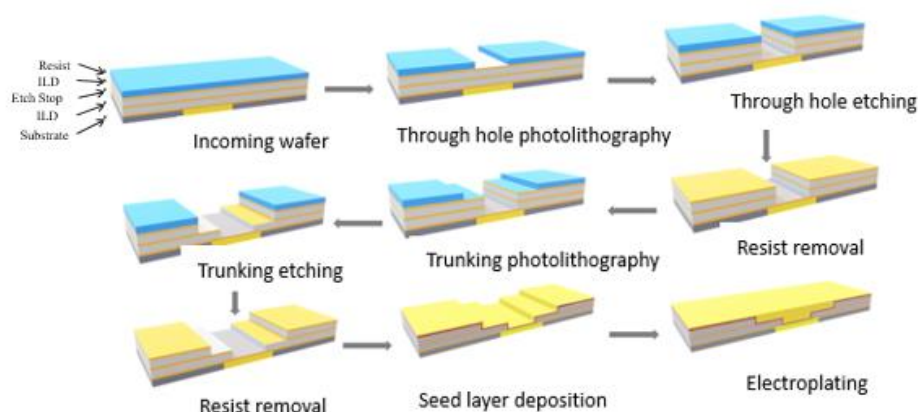
(1) Semiconductor electroplating equipment

① Semiconductor electroplating and electroplating equipment

Semiconductor electroplating refers to the electroplating of metal ions in the plating solution onto the wafer surface to form metal interconnection during the chip manufacturing process. With the chip manufacturing technology becoming more and more advanced, the interconnection wires in the chip begin to change from the traditional aluminum materials to copper materials, and semiconductor copper plating equipment is widely used. At present, the semiconductor electroplating is not limited to the deposition of copper wires; there are tin, tin silver alloy, nickel and other metals, but the deposition of copper is still dominant. Copper conductor can reduce the interconnection impedance, reduce the power consumption and cost of the device, and improve the speed, integration, device density, etc. of the chip.

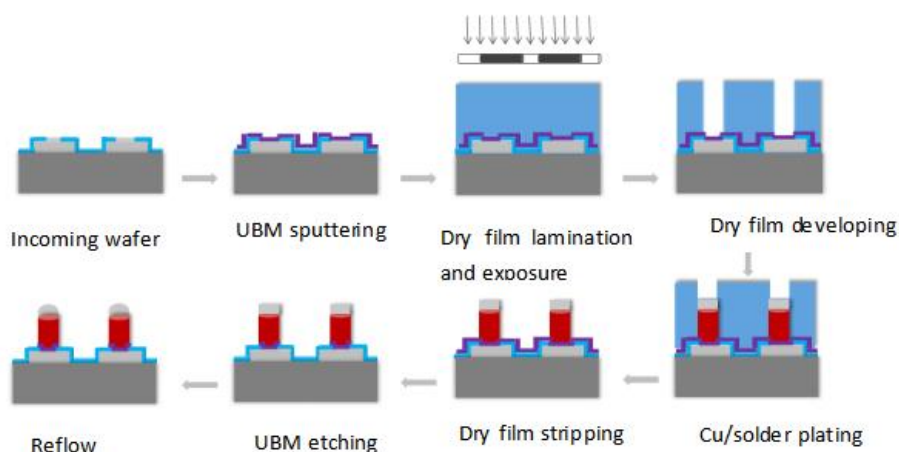
The semiconductor electroplating equipment deposits a layer of copper on the silicon wafer, which is dense, free of holes, gaps and other defects, and evenly distributed. Then, it is coupled with vapor deposition equipment, etching equipment, cleaning equipment, etc. to complete the copper interconnection process.

Diagram on the front-end copper interconnect electroplating process in the chip manufacturing



In semiconductor electroplating, with the development of wafer-level packaging technology, the deposition process of metallized film is needed in three-dimensional silicon through-holes, rewiring and bumping process. The electroplating process is used to deposit copper, nickel, tin, silver, gold and other metals.

Diagram for the back-end advanced packaging electroplating process in chip manufacturing



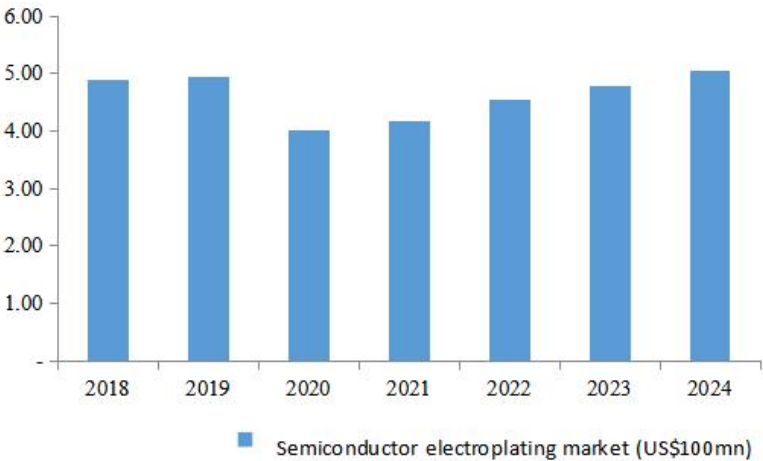
② Situation of the semiconductor electroplating equipment market

The field of electroplating equipment for front-end wafer manufacturing is currently dominated by LAM worldwide. Besides LAM, ACMSH is one of the few companies around the world that have mastered and industrialized the core patent of copper plating technology for chip interconnection. It has independently developed the Ultra ECP map technology, a copper interconnection plating technology for front-end chip manufacturing for 20-14nm and more advanced technology nodes, and a new current control method of multi-anode local plating technology is used to realize fast switching (millisecond-level) between different anodes, and the hole-free filling is completed on the ultra-thin seed crystal layer; at the same time, by adjusting the current of different anodes, it ensures that the evenness of deposited copper film thickness is better after the hole-free filling. At present, ACMSH has received semiconductor electroplating equipment orders from customers on a continuous basis.

In the field of back-end advanced packaging and electroplating equipment, major equipment manufacturers in the world include Applied Materials and LAM (US), EBARA Corporation (Japan), ASM Pacific Technology Limited (Singapore), etc.; in domestic enterprises, ACMSH carried out differentiated development for advanced packaging process, and solved the problem of achieving stable electroplating under a larger flow of electroplating solution. Through its unique second-anode control technology, the film thickness uniformity control of the wafer flat edge or notch area can be better achieved at the process recipe level, and the yield of the packaging process is improved.

According to Gartner’s statistics, the global semiconductor electroplating market in 2018-2024 is as follows:

2018-2024 global semiconductor electroplating market (US\$ 100mn)



Data source: Gartner

(3) Advanced packaging equipment

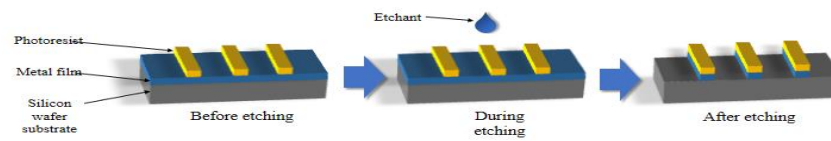
① Introduction to advanced packaging and equipment

Semiconductor packaging is to connect the circuit pins on the wafer with wires to the external connector to facilitate connection with other devices. It plays a role in fixing, sealing, and protecting the chip and enhancing the electric heating performance, as well as in the connection between the internal chip and the external circuit.

Advanced packaging refers to the more advanced packaging form and technology at that time. At present, packages with flip chip (FC) structure, wafer level packages (WLP), 2.5D packages, 3D packages, fan-out packages, etc. are considered as advanced packages. The functions of advanced packaging include chip support and mechanical protection, electrical signal interconnection and extraction, power distribution and thermal management. According to the process of semiconductor packaging, semiconductor packaging equipment mainly includes wet etching equipment, wafer scrubbing equipment, film lamination equipment, developing equipment, film stripping equipment, thinning equipment, cutting equipment, electroplating equipment, cutting forming equipment, etc.

A. Wet etching equipment

Wet etching is a very important step in the semiconductor advanced packaging manufacturing process, and it is a main process of graphic processing associated with photolithography. Wet etching mainly uses the chemical reaction between the solution and the pre-etching materials to remove the part unshielded by the shielding film material. The wet etching equipment is the main equipment used in the wet etching process. Its working principle is as follows:

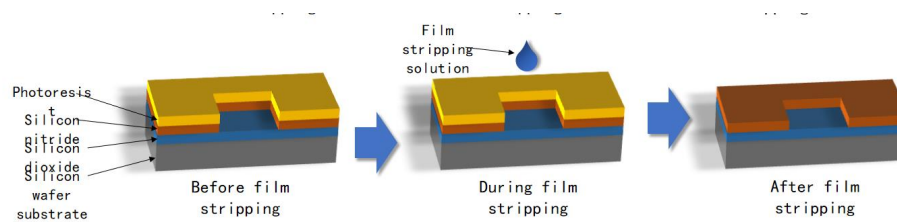


B. Film lamination/developing equipment

In the advanced semiconductor packaging process, the input (photoresist coating before exposure) and output (graphics development after exposure) of the photolithography equipment and the film lamination/developing equipment are mainly through transfers and processes of the wafer among various systems with a robot arm, thus completing the process of photoresist coating, curing, developing, film firming and other processes of the wafer, affecting the formation of fine exposure patterns in the photolithography process.

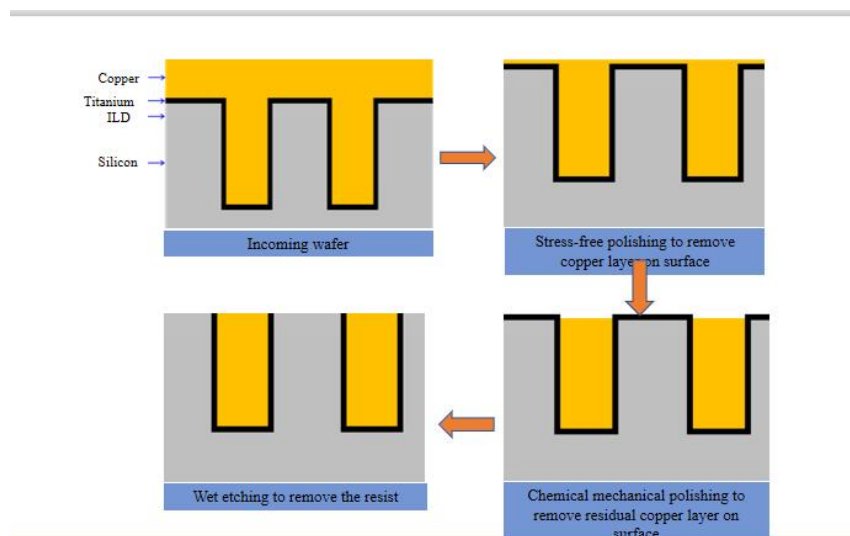
C. Film stripping equipment

In the advanced semiconductor packaging process, the film stripping equipment is used to remove the photoresist on the wafer surface as a barrier layer after the wafer is etched to avoid the residual photoresist from affecting the quality of subsequent processes. Its working principle is as follows:



D. Stress-free polishing equipment

In the advanced semiconductor packaging process, the stress-free polishing process is an innovative solution, which integrates stress-free polishing, chemical mechanical grinding and wet etching processes. Before the chemical mechanical grinding and wet etching processes, the electrochemical method is used to remove the copper layer on the wafer surface without stress and release the stress of the wafer. It can significantly reduce the use of chemicals and consumables, protect the environment while reducing equipment costs. The equipment is mainly applied to 3DTSV, 2.5D silicon intermediate layer, RDL, HD fan-out packaging, etc. Its working principle is as follows:



② Situation of the advanced packaging market

Semiconductor advanced packaging is a back-end link in the chip manufacturing process. Its market demand is closely related to the demand for downstream chip applications. In the background of the continuous growth of consumer electronics, IoT, 5G, and other product demand, the market demand of semiconductor advanced packaging is expected to continue its sustained rapid growth.

The global packaging & testing technology is undergoing transformation from traditional packaging to advanced packaging (FC, WLC, fan-out, etc.). According to Yole's statistics, in 2017, the global advanced packaging output value exceeded US\$ 20 billion, accounting for about 38% of the global total output value. It is estimated that by 2020, it will exceed US\$ 30 billion, accounting for 44%. From the perspective of the growth rate of advanced packaging, from 2017 to 2023, the revenue of the entire semiconductor packaging market will grow at a compound growth rate of 5.2%, in which the growth rate of the advanced packaging market will be 7%, while that of the traditional packaging market will be 3.3%.⁶

⁶ Data source: 2019 Research Report on Shanghai's Integrated Circuit Industry Development, Economic and Information Technology Commission of Shanghai, Shanghai Integrated Circuit Industry Association

According to Gartner's statistics, the global advanced packaging equipment market demands and predictions are as follows:



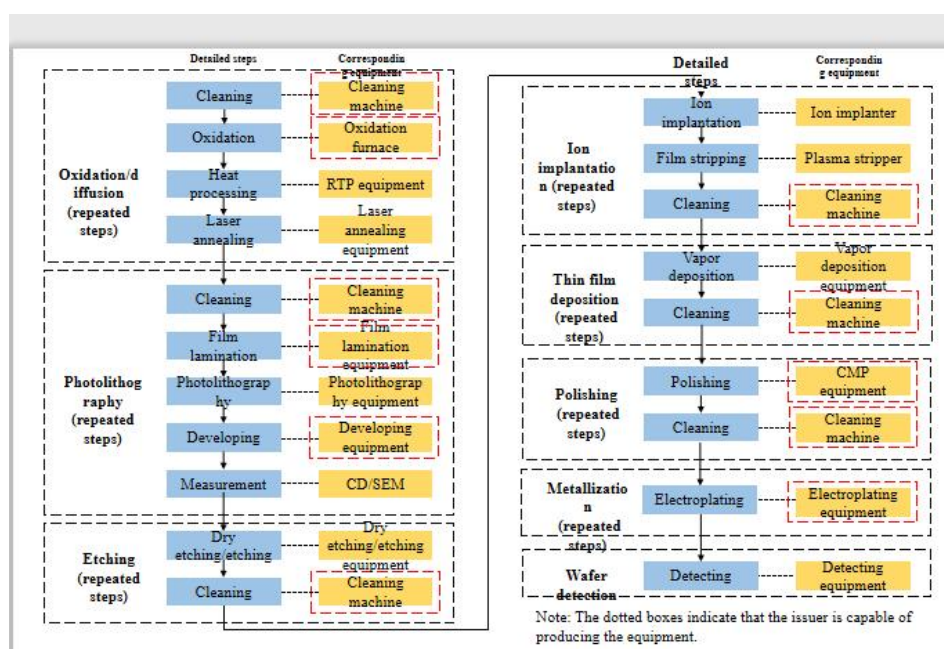
Data source: Gartner

(IV) Issuer's Technological Level, Characteristics, Sci-Tech Achievements, and Deep Integration with the Industry

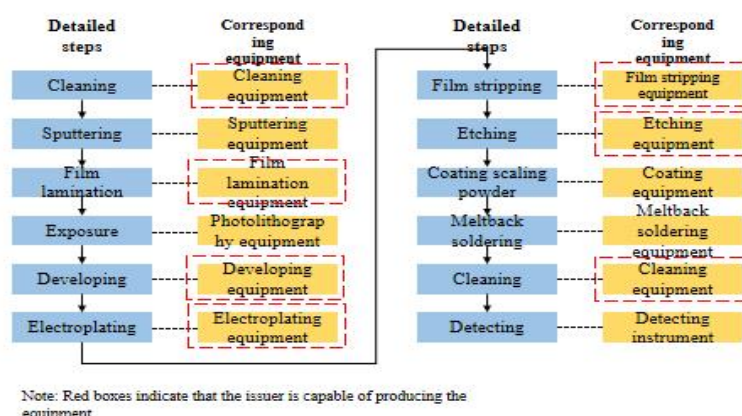
Through continuous R&D investment and long-term technology and process accumulation, the Company has accomplished a series of scientific and technological achievements in new product development and production process improvement, which plays a key role in continuously improving product quality and enriching product layout. The scientific and technological achievements of the Company are an important part of the Company's competitiveness, and also the basis for the sustainable growth of the Company's product sales scale.

During the Reporting Period, the Company's sales revenue was RMB 550.2691 million Yuan, RMB 756.7330 million Yuan, RMB 1,007.4718 million Yuan, and RMB 625.2808 million Yuan, respectively, showing a continuous growth trend. The large-scale sale of the Company's products is a concrete indication of the deep integration of the Company's scientific and technological achievements with the industry. The Company's main products are semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet equipment, covering wafer manufacturing, advanced packaging and other fields.

Application of the Company's products in front-end wafer manufacturing processes of IC manufacturing



Application of the Company's products in back-end advanced packaging processes of IC manufacturing



1. Semiconductor cleaning equipment

Semiconductor cleaning equipment is the core product of the Company, accounting for 92.91%, 84.10%, 83.69%, and 83.16%, respectively, of the Company's main business revenue in the report period.

(1) Single-wafer cleaning equipment

The Company has independently developed the SAPS and TEBO megasonic cleaning technology with global intellectual property rights protection, which solves the global problem of the uniform distribution of megasonic energy on the wafer and realizes the damage-free megasonic cleaning of graphic structures when the megasonic technology is applied to the integrated circuit monolithic cleaning equipment. In order to maximize productivity, the Company's single-wafer cleaning equipment can be configured with multiple process chambers according to the customer's needs, up to 18 chambers can be configured in a single unit, which can effectively improve the production efficiency of customers.

- ① SAPS megasonic cleaning equipment is mainly used to clean flat wafer surfaces and high-aspect-ratio throughhole internal structures

The distance between the wafer surface megasonic energy and the wafer and the megasonic generator changes periodically. In traditional megasonic cleaning process, the distance from different points on the wafer to the megasonic generator is different because of the warpage of the wafer caused by the stress following different processes. Therefore, the megasonic energy at different positions on the wafer is also different. It is impossible to achieve the even distribution of the megasonic energy on the wafer surface. Moreover, because of the error of hardware position control, the distribution of megasonic energy on the wafer surface is not uniform.

The SAPS megasonic technology independently developed by the Company adopts a sector megasonic generator. By accurately matching the wafer rotation speed, liquid film thickness, the location of the megasonic generator, alternative displacement and energy and other key process parameters, this technology controls the relative motion of the half wavelength range between the megasonic generator and the wafer in the process, so that the megasonic energy received at each point on the wafer within the process time is the same. In this way, the uniform distribution of the megasonic energy on the wafer surface is under good control.

In order to meet the increasingly stringent requirements of the semiconductor industry, based on the megasonic cleaning technology, the Company brought in the hydrogen function water process, in which it mixes extremely diluted cleaning agents of hydrogen, ppm orders of magnitude of nitrogen and other special gas in deionized water. The process is supplemented by megasonic, and it performs well in the removal of small particles. This minimizes environmental pollution and material loss.

SAPS megasonic cleaning equipment not only provides good effects on removing small particles, but also has a certain technical advantage on deep-hole cleaning with a high aspect ratio. When the deep hole of a wafer surface has a high aspect ratio, especially in the cleaning of TSV structure, the material exchange of cleaning chemical compositions in the groove can only be determined by diffusion. When the depth of the deep hole is large, the diffusion path becomes very long and the cleaning efficiency becomes lower and lower. In the traditional cleaning process, the thickness of the cleaning fluid boundary layer on the wafer surface is relatively large, and the liquid movement on the surface cannot affect the interior of the deep hole, thus forming convection. Under the megasonic action, the thickness of the boundary layer on the wafer surface becomes very thin. The liquid can enter into the deep hole by convection and cavitation vibration, creating the effect of agitation, which then accelerates the exchange of cleaning chemical compositions and improves cleaning efficiency.

The SAPS technology can improve the cleaning effect and better eliminate residuals and other random defects in the interconnection structure during chip manufacturing:

After contact/through-hole etching: the wet etching process is usually used to create patterns with high contact and through-hole density. After the etching process, the SAPS technology can be used to eliminate the random defects that may cause electric short circuit.

Before the deposition of barrier layer metal: for copper wiring, a metal diffusion barrier layer should be set at the top of the through-hole to prevent electricity leakage; before the deposition of barrier layer metal, the SAPS technology can be used to eliminate the residual copper oxide to prevent poor adhesion between the residual copper oxide and the barrier layer, which could damage the performance.

- ② TEBO megasonic equipment is mainly applied to the cleaning of graphic wafers, including advanced 3D wafer structures

With the further reduction of the chip technology node and the further increase of the aspect ratio, the difficulty in cleaning graphic wafers has increased. After the chip technology node is further extended to below 50nm, and the graphics structure is developed to multi-layer 3D, the traditional megasonic cleaning technology can hardly control the steady-state cavitation effect of bubbles, resulting in bubble breakage, which then causes high-energy microjet damage to the graphics structure on the wafer surface.

The TEBO cleaning equipment independently developed by the Company is applicable to the cleaning of graphic wafers of 28nm and below. Through a series of rapid (frequency up to one million times per second) pressure changes, the bubble maintains its size and shape oscillation under the controlled temperature. In this way, the bubble is controlled in a stable shaking state without implosion, thus preventing the wafer microstructure from being damaged while enabling cleaning of the graphic structure of the wafer surface without damage. During the technical transfer of device structures from 2D to 3D, the TEBO cleaning equipment of the Company can be applied to FinFET, DRAM, emerging 3D NAND and other more sophisticated products with 3D structures, as well as new nano devices and quantum devices in the future. It plays an increasingly important role in improving the product yield of customers.

The TEBO technology can be used in multiple steps to achieve effective, non-destructive cleaning:

A. Memory chip: in the process of manufacturing DRAM chips, the TEBO technology can be applied to up to 50 steps.

B. Logic chip: in the manufacturing process of a logic chip with the FinFET structure, the TEBO technology can be applied to 15 or more cleaning steps.

(2) Single-wafer & tank combined cleaning equipment

With the continuous improvement of the advanced degree of the chip manufacturing process, tank cleaning equipment can no longer meet the technical requirements of 28nm and below, and the cleaning technology gradually changes from tank cleaning to single-wafer cleaning. This change greatly increases the consumption of sulfuric acid, which causes a series of safety problems and environmental issues.

The Tahoe cleaning equipment independently developed by the Company with global intellectual property protection integrates two modules in a single wet cleaning device: tank module and single-wafer module. In the tank module, it is equipped with sulfuric acid hydrogen peroxide mixture (SPM) cleaning and quick dump rinsing (QDR), and the SPM process solution is recycled in the independent tank module; after the tank cleaning, the wafer will be transferred to the single-wafer module in the wet state for further single-wafer cleaning processes; the single-wafer cleaning chamber can be flexibly configured according to the customer's needs, such as the standard cleaning solution (SC-1), hydrofluoric acid (HF), ozone water (DI-O3), and other process solutions. The single-wafer cleaning chamber can be equipped with up to 4 swing arms, each of which can provide up to 3 process pharmaceutical solutions, and the system can also provide the IPA drying function required for graphic wafers. The Tahoe cleaning equipment can be used in dozens of key cleaning processes, such as photoresist removal, cleaning after etching, cleaning after ion implantation, cleaning after mechanical polishing, etc.

The cleaning effect and process applicability of Tahoe cleaning equipment can be comparable to that of single-wafer cleaning equipment. In addition, compared with single-wafer cleaning equipment, Tahoe cleaning equipment can significantly reduce the consumption of sulfuric acid, and help customers reduce the production cost and better comply with the policy of energy conservation and emission reduction.

(3) Single-wafer back cleaning equipment

The back cleaning equipment is usually used for back film removal, polycrystalline silicon wet etching on the back of a wafer, wafer back thinning, and back metal pollution removal. With the decrease of chip thickness, the requirement of wafer back thinning becomes higher and higher. When the wafer thickness is less than 300 μ m, the traditional mechanical clamping method can easily cause wafer warping, deformation and even fracture. Besides, some processes require to protect the wafer front with nitrogen atmosphere during the wafer back process, in order to prevent the solution, steam, chemical contact, and mechanical scratches from damaging the wafer front.

The single-wafer back cleaning equipment developed by the Company adopts the Bernoulli chuck and applies the principle of aerodynamics suspension. After the wafer is fed into the cavity by the manipulator, the back of the wafer is facing up and the front of the wafer is facing down. In the process, high-purity nitrogen with precise flow control is continuously input into the gap between the wafer and the chuck through the gas pipeline beneath the chuck and the ring hole on the chuck surface. The equipment can be used for back metal pollution cleaning, back etching, and other core processes.

(4) Front-end scrubbing equipment

The single-wafer cavity is used to clean the front and back of the wafer according to specific processes. This equipment can perform processes such as wafer back cleaning, wafer edge cleaning, front-back double-fluid cleaning, etc.; the equipment covers a small area, has high production capacity and strong stability, and provides a variety of cleaning methods for flexible choices. It can be used in each cleaning process from the front-end stage to the back-end stage of the IC manufacturing process.

(5) Fully automatic tank cleaning equipment

The fully automatic tank cleaning equipment developed by the Company is widely applied in cleaning, etching, photoresist removal and other processes in the field of integrated circuit and advanced packaging. It uses pure water, alkaline solutions and acid solutions as cleaning agents, combined with spray, hot dip, overflow, bubbling, and other cleaning methods. It's also paired with advanced IPA drying method, capable of cleaning 50 wafers at the same time. The equipment features a high degree of automation, good stability, high cleaning efficiency and low cross-contamination of metals, materials and particles. This equipment is mainly used in the cleaning process of 40 nm and above technical nodes.

2. Semiconductor electroplating equipment

The electroplating equipment independently developed by the Company with international intellectual property protection has been verified by downstream customers and its electroplating equipment for back-end advanced packaging has entered the market and obtained repeated orders.

(1) Front-end copper interconnection copper electroplating equipment

The Company is currently one of the few companies in the world that have mastered and industrialized the core patent of chip copper interconnection copper electroplating technology. The Company has independently developed Ultra ECP map for IC front-end copper interconnection copper plating technology node for 28-14nm and below. The Company also provides the multi-anode local plating technology, which adopts a new current control method to realize the fast switching (millisecond-level) between different anodes, and the hole-free filling is completed on the ultra-thin seed crystal layer. At the same time, by adjusting the current of different anodes, it can achieve better uniformity of deposited copper film thickness after the hole-free filling.

(2) Back-end advanced packaging electroplating equipment

The Company has carried out differentiated development in the field of semiconductor advanced packaging, solved the problem of realizing stable electroplating under a larger flow of electroplating solution, and adopted its unique second-anode control technology to better control the high uniformity near wafer flat edges or notch areas, thus achieving better uniformity within the wafer and realizing electroplating under the condition of high current density; all metrics of bumping products meet customers' requirements. In the field of electroplating for high-density packaging, it can realize the electroplating of 2um ultra-fine RDL lines and various metal layers including copper, nickel, tin, silver and gold. The patented sealing technology of rubber ring sealing independently developed by the Company can achieve better sealing effects and prevent leakage of plating solution and overplating.

3. Semiconductor copper polishing equipment

(1) Front-end copper interconnection copper polishing equipment

With the continuous improvement of the advanced degree of chip manufacturing process, the size of the metal Cu wiring inside the chip, as a conductive connecting device, is becoming smaller and smaller. At present, the Damascene process is mainly used for inter-layer wiring inside the chip. Chemical Mechanical Polishing (CMP) technology is used to grind and remove the Cu layer on the surface of each layer after wiring, leaving the copper in the dielectric layer as the wire. CMP technology is widely used because of its high flatness and global flattening effect. However, in the CMP process, a certain amount of pressure is needed to act on the wafer, which can easily cause scratches on the wafer surface, or even the loss of copper wire at the graphic edges.

In order to resolve the defects brought by CMP technology, the Company has put forward the concept of Stress Free Polish (SFP) technology for the first time in the world. By using the principle of electrochemical reaction, in the process of polishing the metal film on the wafer surface, the mechanical pressure in the polishing process is completely abandoned, thus eliminating the damage of the mechanical pressure on the metal wiring. The advantage of SFP stress-free electrochemical polishing is that it will not cause mechanical damage to the wafer surface, thus ensuring the quality of the final copper interconnections.

With the development of key dimensions of integrated circuits towards the technical nodes of 7nm and below, ruthenium is gradually replacing Ta/TaN as the barrier layer of copper wiring because of its good conductivity, low leakage rate, immiscibility with copper and good combination with copper. However, as ruthenium has very stable chemical properties, is not easy to oxidize, and has high hardness, the CMP process has a relatively low removal rate of ruthenium, and the stress generated in the mechanical polishing process will cause the micro copper wires to break and damage the surrounding dielectric materials. After research, the Company found that the SFP process can be used for electrolytic oxidation of the ruthenium surface, and then DHF etching can be used to achieve a good removal effect of ruthenium metal layers without mechanical stress. This solves the problem of damage of micro copper wires and surrounding dielectric materials. This technology can be used in copper interconnection process for technical nodes under 5nm and 3nm. Meanwhile, because there is no mechanical stress, it is easier to integrate ultra-low k dielectric ($k < 2$) with copper wires, so as to improve the operation speed of the chip.

(2) Back-end advanced packaging stress-free copper polishing equipment

With regard to the flattening application of 3D TSV, 2.5D silicon intermediate layer, RDL, HD fan-out and other metal layers in advanced packaging, the Company has independently developed the stress-free polishing equipment with global intellectual property protection, which features stress-free process, recyclable chemicals, lower costs of consumables, environmental protection and emission reduction, etc..

4. Advanced packaging wet cleaning equipment

The Company adheres to the strategy of differentiated competition, and based on the advanced technology of integrated circuit front-end wet cleaning equipment, it expands product application to the advanced packaging application field. Taking the typical process of bumping packaging as an example, the single-wafer wet process equipment involved in the whole process includes cleaning equipment, film lamination equipment, developing equipment, film stripping equipment, wet etching equipment, stress-free polishing equipment, etc.

At present, the Company's products for the advanced packaging industry cover the entire range of single-wafer wet process equipment and have entered the production lines of enterprises and scientific research institutes, such as JCET, Fujitsu, SMIC Long Power, Nepes, NCAP China, the Institute of Microelectronics (IME) of the Chinese Academy of Sciences (CAS), etc.

① Advanced packaging scrubbing equipment

It is used in the process of 12-inch and 8-inch wafer incoming material cleaning, cleaning before plasma pretreatment, cleaning after UBM layer titanium wet etching, scaling powder cleaning after reflow, etc. In addition to the conventional rotary spray method, according to different customer needs, the Company has developed SAPS megasonic, double-fluid nano spray, brush scrubbing, high-pressure liquid spray, and other auxiliary cleaning methods.

② Single-wafer film lamination equipment

It can be applied to the film lamination process of positive and negative glue and thin thick glue of 12-inch and 8-inch wafers. The chamber self-cleaning function, invented by the Company with global intellectual property protection, replaces the traditional manual chamber removal and cleaning method, thus preventing damage to the equipment caused by the frequent manual removal of the sophisticated film lamination equipment, and the harm to the human body when cleaning the glue chamber. In the mean time, it also greatly improves the cleaning efficiency, reduces the maintenance cost, and improves the service life of the equipment.

③ Single-wafer developing equipment

The Company's single-wafer developing equipment adopts a development mode that combines spray and puddle and is compatible with the development process of 12-inch and 8-inch wafers.

④ Single-wafer & tank combined film stripping equipment

The single-wafer & tank combined film stripping equipment, independently developed by the Company with intellectual property protection, is applied to the wet etching process of 12-inch and 8-inch wafers. The equipment combines tank film stripping with single-wafer film stripping, and the immersion process is completed in the tank to soften and remove most of the thick glue. The subsequent removal of residual glue, pollutants and particles is completed by single-wafer film stripping, which can make up for the shortage of capacity of single-wafer film stripping equipment.

⑤ Single-wafer wet etching equipment

It is used in wet etching of 12-inch and 8-inch wafers and UBM of copper, titanium, nickel, tin, gold and other metals. The single-wafer wet etching equipment integrates all the pharmaceutical solution, pure water and the gas pipeline used for drying in a complete process into a cavity, featuring small equipment area occupation, low consumption of chemicals and pure water, and high flexibility of process adjustment.

5. Vertical furnace tube equipment

The vertical furnace is one of the key process equipment in the manufacturing process of integrated circuits. It can process wafers in batches. According to process pressure and application, it can be divided into two types: atmospheric pressure furnace and low pressure furnace. The atmospheric pressure furnace mainly completes thermal diffusion doping, thin film oxidation, and high temperature annealing; while the low pressure furnace mainly realizes the deposition process of different types of thin films on the wafer surface, mostly polysilicon, silicon nitride, silicon oxide and other thin films.

The vertical furnace tube equipment developed by the Company is mainly composed of wafer transfer module, process cavity module, gas distribution module, temperature control module, exhaust gas processing module and software control module. It is designed and manufactured for different applications and process requirements. It first concentrated on LPCVD equipment, and then developed to oxidation furnace and diffusion furnace, and finally entered the application of ALD equipment.

(V) Market Positions of the Issuer's Products or Services and Major Enterprises in the Industry

1. Market positions of the issuer's products or services

The global market of semiconductor cleaning equipment is highly concentrated, especially in the field of single-wafer cleaning equipment. The total market share of DNS, TEL, LAM and SEMES is over 90%, of which the DNS's market share is the highest (> 40%).

At present, in mainland China, only a few enterprises can provide semiconductor cleaning equipment. They mainly include: ACMSH, NAURA, Kingsemi, and PNC.

According to the annual report disclosed by PNC, its revenue from the sales of semiconductor equipment in 2019 is RMB 81.6624 million Yuan and RMB 217.8495 million Yuan in 2020; according to the annual report disclosed by Kingsemi, its revenue from the sales of single-wafer wet equipment (including degluing equipment) in 2019 is RMB 95.4448 million Yuan and RMB 76.1045 million Yuan in 2020; while ACMSH achieved the revenue from the sales of cleaning equipment of RMB 625.2230 million Yuan in 2019 and RMB 816.2725 million Yuan in 2020.

According to the *Report on the Intelligent Manufacturing Industry (8) Semiconductor Cleaning Equipment: Ensuring Chip Yields by Differentiated Competition of Domestic Manufacturers* released by Ping An Securities in August 2020, ACMSH and NAURA Technology are the representative domestic cleaning equipment manufacturers, accounting for 3% and 1%, respectively, on the global market in 2019.

In summary, ACMSH is the leading enterprise in China's semiconductor cleaning equipment industry. Its main products are monolithic cleaning equipment in the field of integrated circuits, including single-wafer SAPS megasonic cleaning equipment, single-wafer TEBO megasonic cleaning equipment, single-wafer back cleaning equipment, single-wafer scrubbing equipment, tank cleaning equipment, single-wafer & tank combined cleaning equipment, etc.. Its product line is relatively diverse. Main cleaning equipment products of NAURA are single-wafer and tank cleaning equipment, which can be applied to the chip manufacturing with 65nm and 28nm technology nodes; PNC has the relevant technology to produce 8-12 inch high-end single-wafer wet cleaning equipment and trough wet cleaning equipment, which can cover the market demand for many downstream industries including wafer manufacturing, advanced packaging, and solar energy. Kingsemi's current products are used in the field of single-wafer cleaning in the integrated circuit manufacturing field.

According to the *2019 Research Report on the Development of Integrated Circuit Industry of Shanghai* published by the Economic and Information Technology Commission of Shanghai and Shanghai Integrated Circuit Industry Association, China Semiconductor Industry Association ranked semiconductor special equipment manufacturers in Chinese mainland according to the revenues of such manufacturers with reference to the quarterly statistics statements of the industry and statistics of local associations (enterprises that do not fill in the statements, or that are not included in the statistics of local associations, are not included in the ranking).

In the 2018 rankings of the top 5 dedicated semiconductor equipment manufacturers in mainland China, ACMSH ranked 4th. The details are as follows:

Ranking	Enterprise
1	AMEC
2	NAURA
3	CETC Electronics Equipment Group Co., Ltd.
4	ACMSH
5	Kingsemi

Data source: *2019 Research Report on Shanghai's Integrated Circuit Industry Development*, Economic and Information Technology Commission of Shanghai, Shanghai Integrated Circuit Industry Association.

2. Major enterprises in the industry

At present, the major enterprises in the global dedicated semiconductor equipment industry are as follows:

(1) Overseas enterprises in the industry

① Applied Materials (Applied Materials, Inc.)

Founded in 1967, the company is a world-leading manufacturer of dedicated semiconductor equipment. Headquartered in the United States, the company provides manufacturing equipment, services and software to semiconductor, display and related industries. Its main products in the semiconductor field are various manufacturing equipment for chip manufacturing, including epitaxy, ion implantation, oxidation and nitridation, rapid heat treatment, physical vapor deposition, chemical vapor deposition, chemical mechanical flattening, electrochemical deposition, atomic layer deposition, etching, measuring and inspection tools. Its business presence is mainly in the US, mainland China, South Korea, Taiwan (China), Japan, Southeast Asia and Europe.

② ASML (ASML Holding N.V.)

Founded in 1984 and headquartered in the Netherlands, the company is one of the world's leading manufacturers of photolithography equipment in the semiconductor industry. Its EUV photolithography equipment is in a global monopoly position.

③ KLA (KLA CORPORATION)

Founded in 1976 and headquartered in the United States, the company is a leading equipment supplier in the world, providing process control and yield management solutions for semiconductor, data storage, LED and other related nano electronic industries. Its main products are detection, testing and data analysis equipment used in wafer manufacturing, packaging, and testing fields.

④ DNS (SCREEN Holdings Co., Ltd.)

Founded in 1943, the company is a Japanese dedicated semiconductor equipment and LCD production equipment company with customers in Japan, South Korea and Taiwan (China). The main products of DNS are cleaning equipment, etching equipment, film lamination/developing equipment, etc., among which its cleaning equipment has a high market share in the semiconductor industry, accounting for more than 40% of the global semiconductor cleaning equipment market.

⑤ TEL (TOKYO ELECTRON LTD.)

Founded in 1963, the company is one of the world's leading manufacturers of semiconductor manufacturing equipment and LCD manufacturing equipment. The company's main products mainly include vapor deposition equipment, film lamination/developing equipment, heat treatment and film forming equipment, dry etching equipment, CVD, wet cleaning equipment, testing equipment and flat LCD display equipment.

⑥ LAM (LAM RESEARCH CORPORATION)

Founded in 1980 and headquartered in Fremont, California, the company is one of the major suppliers of wafer manufacturing equipment and services to the global semiconductor industry. The company's main products include etching equipment, vapor deposition equipment, electroplating equipment, cleaning equipment and other semiconductor processing equipment for manufacturing integrated circuits.

(2) Domestic enterprises in the industry

① AMEC (Advanced Micro-Fabrication Equipment Inc. China)

Founded in 2004, the company is a high-end semiconductor micro-processing equipment company based in China and oriented towards the whole world. It is a leading enterprise in China's integrated circuit equipment industry. AMEC focuses on the R&D, production and sale of plasma etching equipment, deep silicon etching equipment, MOCVD equipment and other key equipment used in micro device fields such as integrated circuits, LED chips, etc. It got listed on the STAR Market of Shanghai Stock Exchange in July 2019, and its operating income was RMB 2.273 billion Yuan in 2020.

② NAURA (NAURA Technology Group Co., Ltd.)

Founded in 2001, the company was formed through strategic restructuring between Beijing Sevenstar Electronics Co., Ltd. and Beijing North Microelectronics Co., Ltd. in 2016. Headquartered in Beijing, the company is engaged in the R&D, production, sale and technical services of basic electronic products. Its main products are dedicated semiconductor equipment, such as etching equipment, PVD equipment, vertical tempering furnace equipment and cleaning equipment, vacuum equipment, new-energy lithium battery equipment and precision components, as well as solutions for semiconductors, new energies, new materials and other fields. It got listed in Shenzhen Stock Exchange in March 2010, and its operating income was RMB 4.058 billion Yuan in 2019.

③ Kingsemi (Shenyang XinYuan Microelectronic Equipment Co., Ltd.)

Founded in 2002, the company is mainly engaged in the R&D, production and sale of dedicated semiconductor equipment. Its products include photoresist film lamination development equipment (film lamination/developing equipment and glue spraying equipment) and single-wafer wet process equipment (cleaning equipment, film stripping equipment, and wet etching equipment), which can be used for single-wafer processing of 6-inch wafers and below (for example, during LED wafer manufacturing) and 8/12-inch wafers (for example, for wafer manufacturing and advanced packaging). It got listed on the STAR Market of Shanghai Stock Exchange in December 2019, and its operating income was RMB 329 million Yuan in 2020.

④ Changchuan Technology (Hangzhou Changchuan Technology Co., Ltd.)

Founded in 2008, the company is a high-tech enterprise committed to improving the technical level of China's dedicated IC equipment and actively promoting the upgrade of the IC equipment industry. Since its establishment, Changchuan Technology has been focused on independent R&D and innovation of integrated circuit testing equipment. Its main products include testing equipment and sorting equipment. It got listed on the GEM of Shenzhen Stock Exchange in April 2017, and its operating income was RMB 399 million Yuan in 2019.

(VI) Issuer's Competitive Advantages and Disadvantages

1. Competitive advantages

(1) Technological advantage

Since its founding, the Company has adhered to the development strategy of differentiated competition and innovation, established a relatively sound intellectual property system through independent R&D, and formed a product line at the internationally leading or advanced level in semiconductor cleaning equipment, semiconductor electroplating equipment, advanced packaging wet-process equipment, stress-free polishing equipment, vertical furnace tube equipment and other product lines by virtue of rich technology and process accumulation. It is committed to providing advanced equipment and process solutions for global IC manufacturing industry.

The Company mainly adopts the mode of independent R&D. The R&D department is guided by the international technical trends and customer demands of dedicated semiconductor equipment and adopts the strategy of differentiated competition. In the R&D process, relying on the Company's R&D team with rich experience both home and abroad, the Company develops new processes and technologies, completes the verification of technical solutions, and applies for patent protection in major semiconductor production countries and regions to rapidly industrialize its R&D achievements.

The Company's core technologies, such as SAPS and TEBO megasonic cleaning, single-wafer & tank combined cleaning, advanced electroplating, stress-free polishing, etc. are independently developed and have built intellectual property protection. SAPS and TEBO cleaning equipment products of the Company have solved, for the first time ever in the world, two major global problems in the application of megasonic cleaning technology in single-wafer cleaning equipment: the problem of uneven distribution of surface megasonic energy caused by wafer warpage and the problem of chip structure damage caused by megasonic cavitation breakage on the surface of graphic wafers. SAPS technology of the Company has been successfully applied to the manufacturing of DRAM, 3D NAND and logic circuit chips to help customers improve product yield effectively. Meanwhile, SAPS technology is also used for final cleaning after polishing of the semiconductor silicon wafer. The equipment has entered many 8-inch and 12-inch semiconductor silicon wafer manufacturers in mainland China and Taiwan (China). TEBO technology has been preliminarily verified in the logic chip factory. It can realize non-destructive cleaning on graphic chips, and its performance is especially remarkable in the cleaning efficiency of small particles.

The Company has launched the Tahoe single-wafer & tank combined cleaning equipment with global intellectual property rights protection, as the first one in the world. The equipment has been preliminarily verified by large domestic clients. It can greatly save sulfuric acid consumption compared with the existing single-wafer cleaning equipment. In the next few years, it will solve the global semiconductor chip industry problems that have plagued integrated circuit manufacturers for many years, such as large sulfuric acid consumption and difficult processing.

In the field of semiconductor electroplating equipment, in 2018, the Company's advanced packaging and electroplating equipment entered the market. This equipment adopts the Company's unique patented technology to solve the uniformity problem of the plating film of wafer flat edges or notched area. With its technical innovation, it has broken up the market monopoly of global giants. In 2019, the first front-end copper interconnection electroplating equipment successfully entered the client. The equipment adopts the core technology of multi-anode local copper electroplating, independently developed by the Company with global intellectual property protection, which can realize uniform plating on ultra-thin seed crystal layers and greatly improve the process window of cavitation-free plating in small holes.

The stress-free copper polishing and chemical mechanical polishing (CMP) integrated equipment, independently developed by the Company with global intellectual property protection, also entered the advanced packaging client in 2019 for process testing. The equipment adopts the patented technology of stress-free electropolishing independently developed by the Company. It can greatly save the cost of polishing process consumables, compared with the traditional CMP equipment. The Company will apply the stress-free polishing technology to the copper interconnection process under the technical nodes of 5nm and 3nm. At the same time, because there is no mechanical stress, it is easier to integrate the ultra-low k dielectric ($k < 2$) with the copper wires, so as to improve the operation speed of the chip.

The Company has also developed a series of wet process equipment for advanced packaging, including scrubbing, wet etching, film lamination, developing, film stripping equipment, etc. These devices have successfully entered the main production lines of domestic advanced packaging clients, and combined with copper plating and stress-free polishing equipment, they can provide a complete set of wet process equipment and solutions for advanced packaging clients.

The Company's technical level for the megasonic single-chip cleaning equipment, single-chip slot-type combined cleaning equipment and electroplating process equipment of copper interconnection, has reached international leading or international advanced level. As of June 30, 2021, the Company and its holding subsidiaries has 322 main licensed patents, including 152 domestic patents and 170 overseas patents. Among them, there are 317 invention patents. The Company also won the title of "Shanghai Key Laboratory of Advanced Wet Process Equipment for Integrated Circuits". It is the main subject unit of major scientific research projects in China such as "Research and development and application for 20-14nm copper plating equipment of copper interconnection" and "Research and development for 65-45nm stress-free polishing equipment of copper interconnection", and other ("02 Special Project") major scientific projects in China.

Through continuous R&D investment and technology and process accumulation, the Company boasts certain technological advantages in industrial competition with its development strategy of differentiated competition and innovation.

(2) Technical R&D team advantage

The Company attaches great importance to the development and training of its technology R&D team, and encourages independent innovation and independent R&D. Since its founding, the Company has continuously trained and brought in professional talents in the global industry. After years of accumulation, the Company now has an international professional technology R&D team. Dr. Hui Wang is the core leader of this core R&D team. Most of the main R&D personnel have overseas study or practice experience, with global vision and thinking, which is conducive to learning and mastering international advanced technologies. In addition, the Company has established a professional R&D team in South Korea, and by relying on South Korea's technical personnel in the field of mechanical and electronic, such team and the Mainland China's R&D team learn from each other. By establishing an international and professional technical R&D team and adhering to differentiated technological innovation and competitive strategies, the Company ensures that it can continuously launch new products and continuously improve existing products to consolidate and enhance the Company's technological research and development capabilities. As of June 30, 2021, the Company has 293 technical R&D personnel, accounting for 42.02% of the Company's employees. During the reporting period, the Company's core technology R&D team is stable and has a strong team advantage in technical R&D.

(3) Customer verification advantage

Integrated circuit manufacturing enterprises have strict requirements for the technical standards and reliability of all kinds of equipment, and they are very cautious in the selection of equipment suppliers. Usually, integrated circuit manufacturers will require equipment suppliers to provide equipment product for testing, and only after passing the internal verification (some need to obtain the verification of their downstream customers), can they formally sign a purchase contract, and once the equipment is verified and actually entered the production line, it will become the first choice for customers to build the next production line, and will not be easily replaced. After years of efforts, by virtue of our technical and service advantages in the field of cleaning equipment and semiconductor electroplating equipment, some equipment having passed the verification, and the Company has become the certified supplier of well-known semiconductor companies in the industry, such as Hynix, Yangtze Memory, Huahong group, SMIC, etc., and entered multiple production lines of these customers, achieved good market reputation, and established a good trust relationship with these customers. Through the cooperation with the above-mentioned integrated circuit manufacturing enterprises, the Company has a deeper understanding of customers' core needs and technical trends, which helps the Company get closer to customers' needs when choosing the R&D directions. Therefore, the Company currently has certain advantages in customer verification.

(4) Global procurement system advantage

As a company specializing in semiconductor equipment that faces the forefront of international technology and insisting on independent innovation, the Company is mainly engaged in technology and process R&D, design of equipment product, and providing equipment and process solutions to customers, with no engagement in parts processing business through following the global industry practice. Considering the precision of the semiconductor special equipment, the Company has strict requirements on the quality of raw materials and components. High-precision, high-quality, high-reliability raw materials and components are important guarantees for the Company's equipment performance and stability.

The Company has established a global procurement system and a stable cooperative relationship with major suppliers. The Company has established ACM South Korea and ACM California branches to build a procurement team for raw materials and components. Relying on the relatively developed and sound semiconductor industry chains in these two countries, the Company finishes procurement of some key components overseas. At the same time, the Company actively cooperates with local raw material and parts suppliers in mainland China, while gradually improving the diversification of procurement channels for key parts, such efforts can also shorten the procurement cycle of raw materials and parts and reduce the procurement cost.

(5) Operation cost advantage

In the field of semiconductor cleaning equipment, the Company's main competitors are in the United States and Japan, where the R&D and production staff costs are high, and the cost of serving customers in mainland China is rather high. The Company's R&D and production are mainly located in mainland China, where the labor costs are relatively low. The Company has established a global procurement system and cultivated some suppliers in mainland China. Through close cooperation with suppliers in product design, the Company's products are modular and easy to maintain, which reduces the Company's raw material procurement costs. Compared with the Company's main competitors, the Company has certain advantages in operating costs.

(6) Quick response advantage

The production bases of the Company's main customers are all located in mainland China. Compared with its international competitors, the Company is closer to the main customers geographically and can provide faster and more economic technical support and customer maintenance. The Company has established a technical team and after-sales service team, made up of well-experienced veteran staff, in the production bases of main customers. In this way, the Company can understand the needs of customers in real time, respond to customers' requirements quickly, and troubleshoot and solve problems in time, so as to ensure the normal, stable and continuous operation of the Company's equipment on the customers' production lines. Compared with major competitors, the Company has the advantages in quick response.

(7) Location advantage

The Company's main R&D and production base is located in Shanghai. Shanghai, as an important leading city of the integrated circuit industry in mainland China, has formed a complete integrated circuit industry chain which integrates design, manufacturing, packaging, measurement, materials, equipment and other supporting services. The city's industrial structure is the most complete and most balanced in the domestic IC industry chain.

Besides, as an integrated circuit industry cluster area with early development and the most complete industry chain in China, Shanghai has established a relatively complete integrated circuit talent education and training system. There are many institutions of higher learning and scientific research institutes in Shanghai, which not only provide talents to integrated circuit enterprises, but also provide the basis for the combination of production, learning and research.

With Shanghai being an international financial center and a leading IC city, the Yangtze River Delta region, which centers around Shanghai, has gathered many leading enterprises from the integrated circuit industry chain, such as Hynix, HLMC, Huahong Group, SMIC, etc. In addition, the presence of many supporting industries such as machining, production accessories, electronic information, etc. also gives Shanghai's dedicated semiconductor equipment enterprises obvious location advantages in terms of customer resources, supplier procurement, talent training and introduction, compared with domestic competitors.

(8) First mover advantage

ACMR, the controlling shareholder of the Company, was founded in Silicon Valley in 1998, the Company has been engaged in the R&D of special semiconductor equipment ever since. In 2005, ACMR invested in Shanghai to set up the Company's predecessor, Shengmei Co., Ltd., and invested the right to use the technology for semiconductor special equipment formed by its previous R&D into Shengmei Co., Ltd., and continued to carry out continuous research and technology accumulation with the Company as the subject.

The Company was one of the earliest enterprises to enter the field of semiconductor cleaning equipment and semiconductor electroplating equipment in mainland China. When its domestic competitors appear, the Company has formed a series of core technologies with independent intellectual property rights through long-term R&D and technology accumulation, and effectively reduced costs through large-scale procurement and production. Therefore, the Company has formed a strong first-mover advantage in the competition with domestic enterprises, it has become a leading company in the field of semiconductor cleaning equipment, and has the technical strength to compete with international giants.

2. Competitive disadvantages

(1) Its market position and market reputation needs improving

In recent years, by virtue of stable and reliable quality and excellent after-sales service, the Company's equipment has gradually entered the production lines of many domestic and foreign leading manufacturing enterprises, and has obtained a certain market share. With the Company's continuous investment in R&D and market exploration, the Company has achieved a certain market position and market reputation in the mainland China market. However, in the international market, international semiconductor special equipment giants have the advantages of long time to market, large scale, prominent market position and complete international layout. Compared with these international giants, the Company still has certain disadvantages in market position and market reputation.

(2) Its scale is small compared with that of international giants

Currently, the semiconductor professional equipment industry is highly concentrated. In 2018, the market share of the top five semiconductor special equipment companies in the world reached 71%, with the total sales of US\$ 52.784 billion. During the reporting period, the Company's main business revenue was RMB 539.6117 million Yuan, RMB 743.4081 million Yuan, RMB 975.3278 million Yuan, and RMB 588.0477 million Yuan, respectively. Despite the trend of sustained and rapid growth, the Company's business scale is relatively small compared with that of global industry giants, and there are certain disadvantages in the bargaining power and risk resistance ability of raw material procurement.

(3) There are certain gaps in its product portfolio and level of technology compared with international leading players

International leading players, including DNS, TEL, and LAM, have engaged in the research, development, and production in the field of semiconductor special equipment for tens of years, and built up a long-term basis in talents, technologies, industrial resources, and customers. There are certain gaps between the Company and such international leading players in terms of its product portfolio and level of technology.

Besides cleaning equipment, such international leading players, including DNS, TEL, and LAM, also provide etching equipment, film lamination/developing equipment, vapor deposition equipment, heat treatment and film forming equipment, electroplating equipment, and other semiconductor special equipment, hence providing "one-stop" procurement services for customers. The product portfolio of the Company is less diversified compared with such international leading players.

In addition, such international leading players, including DNS, TEL, and LAM, hold monopoly market positions in semiconductor special equipment with their semiconductor special equipment wide used in semiconductor production lines with different technical processes and process nodes around the globe, and different equipment under continuous test and application on different production lines, hence driving the constant improvement, advancement, and innovation of their technologies. At present, most customers of the Company are located in Chinese mainland. Considering that the semiconductor industry in Chinese mainland lags behind relatively, there is a lack of opportunities for test and application of the Company's technologies and equipment in advanced semiconductor production lines, hence there are certain gaps between the Company and international leading players in the level of technology applied in advanced processes.

3. Difference and core competitiveness of the Issuer in terms of applicable technology nodes, wafer sizes, downstream industries covered, and market shares compared with major enterprises in the industry

The Company mainly engages in the research, development, production, and sales of semiconductor special equipment. Major enterprises in the industry are: Chinese enterprises including NAURA Technology, Kingsemi, and PNC, and international leading players including Applied Materials, LAM, TEL, and DNS. The table below lists the differences and core competitiveness of the Company's megasonic wave single-wafer cleaning equipment, single wafer wet bench combined cleaning equipment, and copper interconnection electroplating process equipment:

Item	ACMSH	Chinese Enterprises in the Industry	International Players
Megasonic wave single-wafer cleaning equipment			
Technology characteristics	Control the half-wavelength relative movement between the megasonic wave generator and the wafer to achieve uniform distribution of megasonic energy on the wafer surface, which solves the problem of uneven megasonic cleaning caused by wafer warpage during conventional megasonic cleaning; precisely control the output mode of megasonic waves so that bubbles oscillate at certain sizes and shapes under controlled temperatures, in which the bubble oscillation is controlled in a stable cavitation state to prevent imploding or collapse, which solves the problem of pattern damages caused by bubble imploding during conventional megasonic cleaning.	Mostly second-class fluid cleaning technology	Mostly cleaning with chemical fluid together with physical cleaning using nitrogen atomizing water
Technology node and downstream industries covered	The SAPS technology has been applied in logic 28 nm technology node and DRAM 19 nm technology node, and may be expanded to logic chip 14 nm, DRAM 17/16 nm technology nodes, 32/64/128-layer 3D NAND, high-aspect ratio power devices, and TSV deep hole cleaning applications. It may be applied in over 70 steps for DRAM and closely 20 steps for cleaning of logic circuit FinFET structures. The TEBO technology is mainly applied in damage-free cleaning of 45 nm and below pattern wafers. It has been applied to logic chip 28 nm technology nodes, is under assessment for cleaning of 16-19 nm DRAM process pattern wafers, and may be expanded to 14 nm logic chip and nm-level 3D FinFET structure, high-aspect ratio DRAM products, multiple-layer 3D NAND products. It may be applied in over 70 steps for DRAM and over 10 steps for cleaning logic circuit FinFET structures.	Compared with the Issuer, their cleaning equipment lags behind in technology nodes and has a narrower scope of application	Compared with the the Issuer, the cleaning equipment they sold is applied to 5 nm and below production lines with a broader scope of application
Wafer size	Mostly 12-inch; also available for deep-trench cleaning of 8-inch power devices	No obvious difference	No obvious difference
Market Share	High on Chinese market but low on the international market	Relatively low on Chinese market	High on Chinese market and dominating the international market
Single wafer wet bench combined cleaning equipment			
Technology characteristics	Compared with current mainstream single wafer equipment, the consumption of sulphuric acid may be reduced greatly; wafers may be transported to the single wafer cleaning module with the humidity and certain water film retained; wafers are finally cleaned in the single-wafer cleaning equipment with superior cleaning capability over conventional wet bench cleaning equipment and comparable with single-wafer cleaning equipment.	-	-
Technology node and downstream industries covered	It is applicable for removing polymer and residue glue after previous dry etching, removing residue mill liquid after polishing, removing photoresist after ion injection, and removing organic residues prior to through holes. By now, the technology has been verified for production lines of logic chip 40 nm and 28 nm technology nodes; it may be expanded to 14 nm logic chip, 20 nm and below DRAM technology nodes, and 60-layer and above 3D NAND. It may be applied in over 20 steps for high-temperature sulphuric acid and high-temperature phosphoric acid cleaning.	No such product	No such product

Wafer size	Mainly 12-inch	No such product	No such product
Market Share	Relatively low on Chinese market	No such product	No such product
Copper interconnection electroplating process equipment			
Technology characteristics	Make use of the multi-anode partial plating technology, in which millisecond-level controllable power source is used to power on each anode, hence achieving partial plating. This technology is applicable for ultra-thin seed-layer holes and cavity-free plating filling for trench structures; an independent plating fluid flow field control system separately controls the plating fluid provided to each anode, hence precisely controlling the fluid field in each plating chamber; the plating jig sealing technology protects contact electrodes with a fully sealed ring, which improves the process performance, extends the service life of contact electrodes, and reduces the cost of process consumables. modular designing is applied for process chambers to improve the effective operating time of the equipment.	-	The virtual cathode plating technology is applied to overcome the edge effects on wafers, hence improving the plating uniformity within wafers; work together with the constant-potential water injection function to reduce the defect of plating deposit caused by water injection.
Technology node and downstream industries covered	Dual damascene copper interconnection plating chemical deposition process; applicable to 55 nm to 14 nm and below technology nodes; advanced packaging for bumping, re-wiring, silicon through holes, fanout process for copper, nickel, tin, silver, and gold electroplating.	No such product	Dual damascene copper interconnection plating chemical deposition process; applicable to 55 nm to 7 nm and below technology nodes; supporting electroplating deposition of copper on other materials for 5 nm and below technology nodes.
Wafer size	Mostly 12-inch; also available for 8-inch copper process applications	No such product	No obvious difference
Market Share	Low on Chinese market	No such product	Market monopoly

As described in the table above, the Company is inferior to international leading players in the industry, like Applied Materials, LAM, TEL, and DNS, in terms of market shares, reputation, and comprehensive strength; however, with differential innovation and competition, the Company has successfully developed the first SAPS/TEBO megasonic cleaning technology and single wafer wet bench combined cleaning technology. At present, the Company's semiconductor cleaning equipment is mostly applied to the cleaning process of 12-inch wafer manufacturing, indicating no competition gap compared with similar products of international leading players in terms of applicable sizes of semiconductor cleaning equipment.

(VII) Development Situation, Opportunities, and Challenges of the Industry

1. Development situation and opportunities of the industry

(1) The market demand for semiconductor application and consumption will continue to grow for the long term

In recent years, with the rapid development of electronic information technology, all types of intelligent, networked and mobile portable consumer electronic products have emerged one after another, and new-generation network communication, IoT, cloud computing, energy conservation and environmental protection, and other emerging industries have become the new driving force for the development of the semiconductor industry, jointly promoting the sustained, rapid and vigorous development of the global semiconductor industry. With China becoming one of the most important production bases of electronic information products in the world, more and more international semiconductor enterprises are transferring production capacity to China. The continuous production capacity transfer not only promotes the overall industrial scale and technical level of the domestic semiconductor industry, but also provides huge market space for the dedicated semiconductor equipment manufacturing industry, and promotes the cultivation of professional talents in mainland China's semiconductor industry as well as supporting industries. The healthy development of the semiconductor industry provides opportunities for the expansion and upgrading of China's dedicated semiconductor equipment manufacturing industry.

(2) Regional transfer of the global semiconductor industry

The semiconductor industry involves many production technology processes, many product types, rapid technological upgrades, high investment risks, wide downstream applications, etc.. With the continuous emergence of downstream emerging application markets, the trend of the semiconductor industry chain transforming from integration to vertical division of labor is becoming clearer and clearer. At present, the global semiconductor industry is starting its third industrial transfer, this time to Chinese mainland. In history, the first industrial transfer to Japan and the second industrial transfer to South Korea and China Taiwan have driven the development of local industries, the advancement of vertical division of labor and the optimization of resource allocation. For the target countries and regions of industrial transfer, the local semiconductor industry tends to extend from packaging & testing to wafer manufacturing and chip design, to semiconductor materials and equipment, and ultimately to realization of the overall development of the entire industry chain. Compared with developed countries and regions, the division of labor in the semiconductor industry chain in mainland China is still in the early stage, and the dedicated semiconductor equipment industry will become the focus of future growth.

The accelerated transfer of the semiconductor industry towards mainland China brings direct benefits to China, which is the largest semiconductor terminal consumer market in the world. The scale of China's semiconductor industry is expanding. With the continuous transfer of international capacity to China, semiconductor enterprises are investing in mainland China to build new plants. It is expected that the demand for dedicated semiconductor equipment in mainland China will continue to grow.

2. Challenges

(1) Lack of high-end technology and talent

The dedicated semiconductor equipment industry is a typical technology-intensive industry, which has high requirements for the knowledge background, R&D ability and operation experience accumulation of technical personnel. As R&D in China began very late, the industry still lacks talents and technology, which restricts the rapid development of the industry to a certain extent.

(3) Weak supporting capacity for domestic core components

The overall scale of domestic dedicated semiconductor equipment is not large enough, the pulling time of the parts market is short, and the matching capacity of parts of dedicated semiconductor equipment is weak. Consequently, the manufacturing cost of dedicated semiconductor equipment is high.

III. Issuer's Sales and Main Customers

(I) Output and Sales of Main Products

The Company designs its production process according to modularization. In the production process, the cavity, liquid supply system and electronic control module are pre-assembled before the whole equipment is assembled. The production process is relatively simple, and the pre-job training is fast. The Company can flexibly adjust the number of workers according to the actual order. Most parts of the Company's products are mainly procured through outsourcing. The assembly and inspection cycle in the factory is short, and the production process occupies only small numbers of fixed assets.

All in all, the Company's production capacity is flexible to a certain extent, and it can flexibly arrange manual production according to specific orders. Due to the fluctuation of the semiconductor industry demand, the investment expansion of downstream customers may be relatively concentrated, resulting in the sudden large order demand of equipment manufacturers. The Company's short-term labor force and assembly and testing equipment will limit the Company's production to a certain extent, and the short-term supply capacity of upstream suppliers' raw materials will also limit the production in response to the sudden demand. These factors restrict the Company's production capacity to some degree.

1. Output and sales of main products

(1) Output and sales of main products

During the reporting period, the Company's output and sales were as follows:

					Unit: piece
Product Category	Item	Jan. - Jun. 2021	2020	2019	2018
Semiconductor cleaning equipment	Output	37	45	28	22
	Sales	24	35	26	21
	Output/sales ratio	64.86%	77.78%	92.86%	95.45%
Semiconductor electroplating equipment	Output	5	8	4	-
	Sales	2	4	4	1
	Output/sales ratio	40.00%	50.00%	100.00%	-
Advanced packaging wet equipment	Output	27	21	9	13
	Sales	14	20	7	6
	Output/sales ratio	51.85%	95.24%	77.78%	46.15%
Vertical furnace tube equipment	Output	2	2	-	-
	Sales	-	1	-	-
	Output/sales ratio	-	50.00%	-	-

2. Sales revenue of main products

During the reporting period, the revenue of the Company's main business was as follows:

In RMB 10,000 Yuan

Item	Jan. - Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Semiconductor cleaning equipment	48,900.39	83.16%	81,627.25	83.69%	62,522.30	84.10%	50,135.96	92.91%
Including: Single-wafer cleaning equipment	43,884.74	74.63%	71,610.80	73.42%	55,099.52	74.12%	50,135.96	92.91%
Wet bench cleaning equipment	5,015.65	8.53%	3,310.85	3.39%	4,801.36	6.46%	-	-
Single wafer wet bench combined cleaning equipment	-	-	6,705.60	6.88%	2,621.43	3.53%	-	-
Semiconductor electroplating equipment	3,591.85	6.11%	5,290.13	5.42%	7,857.39	10.57%	1,191.13	2.21%
Advanced packaging wet equipment	6,312.54	10.73%	9,856.51	10.11%	3,961.12	5.33%	2,634.07	4.88%
Vertical furnace tube equipment	-	-	758.90	0.78%	-	-	-	-
Total	58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

The Company's main customers are as follows:

SN	Customer's Field	Customer Name
1	Wafer manufacturing	Hynix, Huahong Group, Yangtze Memory, SMIC, Hefei Innotron
2	Advanced packaging	JCET, Fujitsu, SMIC Long Power, Nepes
3	Semiconductor silicon wafer manufacturing and recycling	Shanghai ZINGSEMI, JRH, Taiwan Wafer Works Corporation, Taiwan Phoenix Silicon
4	Scientific research institutes	Institute of Microelectronics of the Chinese Academy of Sciences, Shanghai IC, NCAP China

3. Overall changes in sales prices

During the reporting period, the Company's main products were all customized. According to the different needs of customers, the average sales price of the products varies as follows:

In RMB 10,000 Yuan/piece

Item	Jan. - Jun. 2021		2020		2019		2018
	Average Price	Growth	Average Price	Growth	Average Price	Growth	Average Price
Semiconductor cleaning equipment:							
Single-wafer cleaning equipment	2,089.75	-9.54%	2,310.03	-7.77%	2,504.52	4.90%	2,387.43
Wet bench cleaning equipment	1,671.88	0.99%	1,655.43	3.43%	1,600.45	-	-
Single wafer wet bench combined cleaning equipment	-	-	3,352.8	27.90%	2,621.43	-	-
Semiconductor electroplating equipment	1,795.93	35.80%	1,322.53	-32.67%	1,964.35	64.91%	1,191.13
Advanced packaging wet equipment	450.90	-8.51%	492.83	-12.91%	565.87	28.90%	439.01
Vertical furnace tube equipment	-	-	758.90	-	-	-	-

(II) Sales to Top Five Customers

During the reporting period, the Company's sales to the top five customers were as follows:

In RMB 10,000 Yuan

Jan. - Jun. 2021				
No.	Name	Amount	Proportion	Equipment Name
1	Yangtze Memory	22,748.37	36.38%	Single-wafer cleaning equipment
2	Huahong Group	14,869.12	23.78%	Single-wafer cleaning equipment, wet bench cleaning equipment, advanced packaging wet equipment
3	Hynix	6,321.85	10.11%	Single-wafer cleaning equipment
4	JCET Semiconductor Integration (Shaoxing) Co., Ltd.	2,896.37	4.63%	Semiconductor electroplating equipment, advanced packaging wet equipment
5	Beijing E-Town Technology Co., Ltd.	2,536.75	4.06%	Single-wafer cleaning equipment
Total		49,372.47	78.96%	
2020				
No.	Name	Amount	Proportion	Equipment Name
1	Huahong Group	33,708.94	33.46%	Single-wafer cleaning equipment, wet bench cleaning equipment, single wafer wet bench combined cleaning equipment, advanced packaging wet equipment, vertical furnace tube equipment
2	Yangtze Memory	22,302.58	22.14%	Single-wafer cleaning equipment
3	SMIC	12,749.31	12.65%	Single-wafer cleaning equipment, advanced packaging wet equipment
4	Hynix	9,992.88	9.92%	Single-wafer cleaning equipment
5	JCET	5,230.64	5.19%	Semiconductor electroplating equipment, advanced packaging wet equipment
Total		83,984.34	83.36%	-

2019				
No.	Name	Amount	Proportion	Equipment Name
1	Yangtze Memory	21,888.34	28.92%	Single-wafer cleaning equipment
2	Huahong Group	20,734.59	27.40%	Single-wafer cleaning equipment, wet bench cleaning equipment, single wafer wet bench combined cleaning equipment, semiconductor electroplating equipment
3	Hynix	15,193.35	20.08%	Single-wafer cleaning equipment
4	JCET	5,620.56	7.43%	Semiconductor electroplating equipment, advanced packaging wet equipment
5	SMIC	2,649.74	3.50%	Single-wafer cleaning equipment, advanced packaging wet equipment
Total		66,086.58	87.33%	-
2018				
No.	Name	Amount	Proportion	Equipment Name
1	Huahong Group	12,667.23	23.02%	Single-wafer cleaning equipment
2	Yangtze Memory	12,653.88	23.00%	Single-wafer cleaning equipment
3	Hynix	12,117.32	22.02%	Single-wafer cleaning equipment
4	Charter Base International	6,935.04	12.60%	Single-wafer cleaning equipment, semiconductor electroplating equipment
5	ACMR	6,081.94	11.05%	Single-wafer cleaning equipment
Total		50,455.41	91.69%	-

Note: 1. Yangtze Memory includes Yangtze Memory Technologies Co., Ltd. and Wuhan Xinxin Semiconductor Manufacturing Co., Ltd. 2. Huahong Group includes Huahong Semiconductor (Wuxi) Co., Ltd., Shanghai Huahong Hongli Semiconductor Manufacturing Co., Ltd., Shanghai Huali IC Manufacturing Co., Ltd., Shanghai Huali Microelectronics Corporation, and Shanghai IC R&D Center. 3. Hynix includes SK Hynix Inc. and SK Hynix Semiconductor (China) Co., Ltd. 4. SMIC includes Semiconductor Manufacturing North China (Beijing) Corporation, SMIC IC Manufacturing (Shanghai) Co., Ltd., Semiconductor Manufacturing South China Corporation, and SMIC Long Power Semiconductor (Jiangyin) Co., Ltd.

In 2018, part of the Company's export business was carried out through Qianjing International, an import and export service provider. Specifically, the Company first sold the products to Qianjing International, which subsequently went through the customs declaration formalities. Qianjing International sold the products to the final customers at the same price, and the Company paid the export customs declaration agency fee to Qianjing International. After June 2018, the Company's export business was carried out through Hong Kong CleanChip, a wholly-owned subsidiary in Hong Kong. The Company no longer has business with Qianjing International.

In 2018 and 2020, some customers of the Company placed orders with ACMR, and the Company sold the products to ACMR, which then sold them to final customers. In 2019, the Company did not sell products to final customers through ACMR.

During the reporting period, the Company's top 5 final customers were as follows:

In RMB 10,000 Yuan, set

Jan. - Jun. 2021				
No.	Name	Amount	Proportion	Equipment Name
1	Yangtze Memory	22,748.37	36.38%	Single-wafer cleaning equipment
2	Huahong Group	14,869.12	23.78%	Single-wafer cleaning equipment, wet bench cleaning equipment, advanced packaging wet equipment
3	Hynix	6,321.85	10.11%	Single-wafer cleaning equipment
4	JCET Semiconductor Integration (Shaoxing) Co., Ltd.	2,896.37	4.63%	Semiconductor electroplating equipment, advanced packaging wet equipment
5	Beijing E-Town Technology Co., Ltd.	2,536.75	4.06%	Single-wafer cleaning equipment
Total		49,372.47	78.96%	
2020				
No.	Name	Amount	Proportion	Equipment Name
1	Huahong Group	33,708.94	33.46%	Single-wafer cleaning equipment, wet bench cleaning equipment, single wafer wet bench combined cleaning equipment, advanced packaging wet equipment, vertical furnace tube equipment
2	Yangtze Memory	22,302.58	22.14%	Single-wafer cleaning equipment
3	SMIC	12,749.31	12.65%	Single-wafer cleaning equipment, advanced packaging wet equipment
4	Hynix	9,992.88	9.92%	Single-wafer cleaning equipment
5	JCET	5,230.64	5.19%	Semiconductor electroplating equipment, advanced packaging wet equipment
Total		83,984.34	83.36%	-
2019				
No.	Name	Amount	Proportion	Equipment Name
1	Yangtze Memory	21,888.34	28.92%	Single-wafer cleaning equipment
2	Huahong Group	20,734.59	27.40%	Single-wafer cleaning equipment, wet bench cleaning equipment, single wafer wet bench combined cleaning equipment, semiconductor electroplating equipment
3	Hynix	15,193.35	20.08%	Single-wafer cleaning equipment
4	JCET	5,620.56	7.43%	Semiconductor electroplating equipment, advanced packaging wet equipment
5	SMIC	2,649.74	3.50%	Single-wafer cleaning equipment, advanced packaging wet equipment
Total		66,086.58	87.33%	-
2018				
No.	Name	Amount	Proportion	Equipment Name
1	Yangtze Memory	18,735.81	34.05%	Single-wafer cleaning equipment
2	Huahong Group	15,314.19	27.83%	Single-wafer cleaning equipment
3	Hynix	12,117.32	22.02%	Single-wafer cleaning equipment
4	JCET	2,536.22	4.61%	Advanced packaging wet equipment, semiconductor electroplating equipment
5	SMIC	2,188.16	3.98%	Single-wafer cleaning equipment
Total		50,891.71	92.49%	-

Note: 1. Yangtze Memory includes Yangtze Memory Technologies Co., Ltd. and Wuhan Xinxin Semiconductor Manufacturing Co., Ltd. 2. Huahong Group includes Huahong Semiconductor (Wuxi) Co., Ltd., Shanghai Huahong Hongli Semiconductor Manufacturing Co., Ltd., Shanghai Huali IC Manufacturing Co., Ltd., Shanghai Huali Microelectronics Corporation, and Shanghai IC R&D Center. 3. Hynix includes SK Hynix Inc. and SK Hynix Semiconductor (China) Co., Ltd. 4. SMIC includes Semiconductor Manufacturing North China (Beijing) Corporation, SMIC IC Manufacturing (Shanghai) Co., Ltd., Semiconductor Manufacturing South China Corporation, and SMIC Long Power Semiconductor (Jiangyin) Co., Ltd.

During the reporting period, the total sales of the Company's top five end customers accounted for 92.49%, 87.33%, 83.36%, and 78.96% of the total sales of the current period respectively. The Company did not encounter situations where the proportion of sales to a single end customer exceeds 50% of the Company's total sales in the current year or relies heavily on a few customers. Except ACMR and Huahong Group's subsidiary, Shanghai IC, during the reporting period, the Company has no relationship with the top five customers and the top five end customers.

(III) Trial run of equipment

During the Reporting Period, the semiconductor special equipment sold by the Company has been put into trial run as follows:

Jan. - Jun. 2021			
Need Trial Run	Product Category	Revenue (RMB 10,000 Yuan)	Corresponding Customer
No	Single-wafer cleaning equipment	41,470.76	Huahong Group, Yangtze Memory, Beijing U-PRECISION TECH CO., LTD., Hynix, JRH, Sino ICT (Shaoxing) Co., Ltd., Beijing E-Town Technology Co., Ltd.
	Wet bench cleaning equipment	5,015.65	Huahong Group
	Semiconductor electroplating equipment	3,591.85	JCET, JCET Semiconductor Integration (Shaoxing) Co., Ltd.
	Advanced packaging wet equipment	6,312.54	Xiamen Tongfu, Huahong Group, JCET Semiconductor Integration (Shaoxing) Co., Ltd., Jiangsu Silicon Integrity Semiconductor Technology Co., Ltd.
	Subtotal	56,390.80	-
Yes	Single-wafer cleaning equipment	2,413.98	Xiamen Silan Microchip Manufacturing Co., Ltd., Shanghai Xinsheng Semiconductor Technology Co., Ltd.
	Subtotal	2,413.98	-
Total		58,804.78	-
2020			

Need Trial Run	Product Category	Revenue (RMB 10,000 Yuan)	Corresponding Customer
No	Single-wafer cleaning equipment	68,891.08	Huahong Group, Yangtze Memory, Semiconductor Manufacturing North China (Beijing) Corporation, Semiconductor Manufacturing South China Corporation, Taiwan Wafer Works Corporation, Beijing U-PRECISION TECH CO., LTD., Anji Microelectronics (Shanghai) Co., Ltd., Hynix, Xiamen Silan Microchip Manufacturing Co., Ltd., ACMR
	Wet bench cleaning equipment	3,310.85	Huahong Group
	Single wafer wet bench combined cleaning equipment	6,705.60	Huahong Group
	Semiconductor electroplating equipment	5,290.13	JCET, JCET Semiconductor Integration (Shaoxing) Co., Ltd., Shenzhen Institute of Advanced Technology of China Academy of Sciences
	Advanced packaging wet equipment	9,856.51	SJ Semiconductor (Jiangyin) Co., Ltd., Semiconductor Manufacturing Electronics (Shaoxing) Corporation, Xiamen Tongfu, Jiangsu Zhongke Intelligence Chips Integrated Technology Co., Ltd., Huahong Group, JCET, Nepes Hayyim Corporation, Raytron Technology Co., Ltd., Xiamen Silan Microchip Manufacturing Co., Ltd.
	Vertical furnace tube equipment	758.9	Huahong Group
	Subtotal	94,813.07	-
Yes	Single-wafer cleaning equipment	2,719.72	Innotron Memory Co., Ltd.
	Subtotal	2,719.72	-
Total		97,532.79	-
2019			
Need Trial Run	Product Category	Revenue (RMB 10,000 Yuan)	Corresponding Customer
No	Single-wafer cleaning equipment	55,099.52	Huahong Group, Yangtze Memory, JRH, Taiwan Phoenix Silicon, Hynix, Semiconductor Manufacturing South China Corporation, Taiwan Wafer Works Corporation, Fujian Jinhua Integrated Circuit Co., Ltd.
	Wet bench cleaning equipment	4,801.36	Huahong Group
	Single wafer wet bench combined cleaning equipment	2,621.43	Huahong Group
	Semiconductor electroplating equipment	7,857.39	Huahong Group, JCET
	Advanced packaging wet equipment	3,016.02	JCET, SJ Semiconductor (Jiangyin) Co., Ltd., Ningbo Semiconductor International Corporation
	Subtotal	73,395.72	-
Yes	Advanced packaging wet equipment	945.09	TFME, Xiamen Tongfu
	Subtotal	945.09	-
Total		74,340.81	-
2018			
Need Trial Run	Product Category	Revenue (RMB 10,000 Yuan)	Corresponding Customer
No	Single-wafer cleaning equipment	48,064.72	Huahong Group, JRH, Hynix, Taiwan Wafer Works Corporation, Yangtze Memory
	Semiconductor electroplating equipment	1,191.13	JCET
	Advanced packaging wet equipment	2,634.07	Nepes, JCET, Xiamen Tongfu
	Subtotal	51,889.92	-
Yes	Single-wafer cleaning equipment	2,071.25	Semiconductor Manufacturing North China (Beijing) Corporation
	Subtotal	2,071.25	-
Total		53,961.17	-

Note: 1. SMIC includes Semiconductor Manufacturing North China (Beijing) Corporation, Semiconductor Manufacturing North China (Shanghai) Corporation, Semiconductor Manufacturing South China Corporation, and SJ Semiconductor (Jiangyin) Co., Ltd. These subsidiaries are counted separately because the equipment sold by the Company to different subsidiaries of SMIC were put into trial run under different conditions; 2. Taiwan Wafer Works Corporation includes Wafer Works Corporation, Shanghai Jingmeng Silicon Materials Co., Ltd., and Zhengzhou Konggang Hejing Technology Co., Ltd.

During the Reporting Period, the Company sold a total of 165 set of equipment, where only 6 sets were subject to trial run.

IV. Issuer's Procurement and Main Suppliers

(I) Issuer's Procurement

1. Procurement of main raw materials

(1) Procurement amounts of main raw materials

During the reporting period, the main raw materials procured by the Company included categories of gas circuit, material transport, machinery, electric components, etc. The composition of each category of raw materials is as follows:

SN	Category	Content
1	Gas circuit	Valve, contact, filter, pump, flowmeter, gas control module pneumatic components, cylinder, sensor, etc.
2	Material transport	Robot arm, wafer transport platform, etc.
3	Machinery	Cavity parts, cavity cabinet, rack, etc.
4	Electric components	Electronic components, sensor, programmable control module, DC power supply, circuit breaker, etc.
5	Special apparatus	Heater, functional water, ozone generator, CO ₂ mixing generator, cooler, hydrogen generator, megasonic generator, etc.
6	Drives	Motor and driver, guide rail, etc.
7	Others	Software, trunking, chemicals, procurement fees, etc.

During the Reporting Period, the procurement amounts of the Company's main raw materials and the proportions in the total raw material procurement amount were as follows:

In RMB 10,000 Yuan

No.	Item	Jan. - Jun. 2021		2020		2019		2018	
		Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
I. Gas circuit products									
1	Valve	8,533.50	10.16%	4,275.84	5.36%	3,538.90	7.85%	3,541.02	8.13%
2	Connector	7,465.36	8.89%	1,467.07	1.84%	1,932.78	4.29%	2,311.47	5.31%
3	Filter	3,741.79	4.45%	3,554.41	4.46%	1,790.03	3.97%	1,528.20	3.51%
4	Pump	3,389.89	4.04%	3,866.70	4.85%	1,578.02	3.50%	1,741.01	4.00%
5	Flowmeter	1,988.27	2.37%	3,040.52	3.81%	1,366.91	3.03%	1,429.32	3.28%
6	Others	4,560.39	5.42%	5,550.37	6.96%	2,668.42	5.92%	1,762.56	4.05%
Subtotal		29,679.20	35.33%	21,754.92	27.27%	12,875.05	28.55%	12,313.58	
II. Mechanical products									
1	Chamber parts	10,081.33	12.00%	12,635.22	15.84%	5,801.98	12.87%	4,647.12	10.67%
2	Chamber cabinet	3,686.13	4.39%	4,599.46	5.77%	2,306.51	5.12%	1,902.72	4.37%
3	Rack	3,971.59	4.73%	4,755.05	5.96%	1,356.39	3.01%	923.24	2.12%
4	Others	195.80	0.23%	308.11	0.39%	303.26	0.67%	7.30	0.02%
Subtotal		17,934.85	21.35%	22,297.83	27.95%	9,768.14	21.66%	7,480.38	
III. Material transfer products									
1	Robot arm	16,074.18	19.13%	12,219.40	15.32%	7,280.47	16.15%	5,951.56	13.67%
2	Others	514.37	0.61%	70.03	0.09%	415.73	0.92%	110.03	0.25%
Subtotal		16,588.54	19.75%	12,289.43	15.41%	7,696.20	17.07%	6,061.59	
IV. Electrical products									
1	Electronic parts and components	3,053.27	3.63%	3,049.33	3.82%	2,089.10	4.63%	660.90	1.52%
2	Sensor	3,368.58	4.01%	2,930.92	3.67%	1,944.46	4.31%	2,547.59	5.85%
3	Programmable control module	1,612.80	1.92%	2,522.98	3.16%	1,179.77	2.62%	2,465.20	5.66%
4	Others	1,781.37	2.12%	1,889.81	2.37%	855.83	1.90%	2,611.14	6.00%
Subtotal		9,816.01	11.68%	10,393.03	13.03%	6,069.17	13.46%	8,284.83	
V. Special device products									
1	Heater	2,259.55	2.69%	3,231.22	4.05%	2,086.26	4.63%	1,097.89	2.52%
2	Functional water	451.87	0.54%	449.35	0.56%	1,002.58	2.22%	993.18	2.28%
3	Generator	3,548.61	4.22%	3,731.56	4.68%	2,805.47	6.22%	4,945.97	11.36%
4	Others	776.44	0.92%	1,510.24	1.89%	578.93	1.28%	212.74	0.49%
Subtotal		7,036.47	8.38%	8,922.37	11.19%	6,473.24	14.36%	7,249.78	

VI. Drive products									
1	Motor and driver	1,983.09	2.36%	3,159.10	3.96%	977.53	2.17%	497.65	1.14%
2	Others	160.22	0.19%	163.98	0.21%	98.47	0.22%	51.29	0.12%
Subtotal		2,143.32	2.55%	3,323.08	4.17%	1,076.00	2.39%	548.94	
VII. Other products									
Subtotal		810.24	0.96%	787.83	0.99%	1,135.28	2.52%	1,598.08	3.67%
Total		84,008.63	100.00%	79,768.50	100.00%	45,093.08	100.00%	43,537.19	100.00%

(2) Procurement prices of main raw materials

Based on the different needs of customers, the Company carries out professional customization and purchase raw materials accordingly. There are many kinds and models of raw materials required by the Company, and the procurement unit prices are not comparable. During the reporting period, the price index changes of the procurement prices of some categories of main raw materials of the Company were as follows:

Raw Material Category and Model	Price Index			
	Jan. - Jun. 2021	2020	2019	2018
Robot arm (8-chamber)	87.85	93.36	95.94	95.94
Robot arm (12-chamber)	94.18	94.77	95.79	95.79
Valve (402-1231)	95.00	96.74	100.00	100.00
Valve (402-1210)	91.08	95.28	100.00	100.00
Connector (400-1048)	104.35	103.02	103.02	102.89
Connector (400-1449)	105.15	102.99	102.99	102.65
Electronic parts and components (413-1165)	93.97	96.55	97.05	99.50
Megasonic generator (319-1073)	94.66	93.72	94.94	87.81
Megasonic generator (319-1047)	96.26	94.36	97.97	88.14
Chamber parts (110-6519)	89.59	91.46	93.69	96.28
Chamber cabinet - pipe cabinet	229.29	228.10	197.40	187.10
Chamber cabinet - chemical fluid cabinet	139.86	146.57	147.69	130.36

Note: It is assumed that the 2017 price index is set as 100, and the 2018, 2019, and 2020 price indexes are calculated based on the average purchase price in 2017.

During the reporting period, the procurement price indexes of major raw materials of the Company remained stable. In 2020, the average price of pipe cabinets increased because the Company produced more semiconductor electroplating equipment, which used pipe cabinets with a higher price than other semiconductor cleaning equipment.

2. Procurement of main energies and relevant price change tendencies

The issuer consumes small amounts of water, electricity and other energies in the production and R & D process. All the water and electricity are from the local water supply and power grid, and the supply is stable. The specific situation of the issuer's water and electricity consumption during the reporting period is as follows:

Energy	Item	Jan. - Jun. 2021	2020	2019	2018
Water	Amount (RMB 10,000)	13.09	31.61	17.16	10.78
	Unit price (RMB Yuan/ton)	5.06	4.95	4.95	4.92
Electricity	Amount (RMB 10,000)	102.66	177.85	161.91	150.15
	Unit price (RMB Yuan/kWh)	0.69	1.08	1.02	1.03

Since January 2021, the Issuer installed time-sharing ammeters to charge electricity at peak and valley prices, which reduced the average electricity price from January to June 2021.

(II) Procurement from Top 5 Suppliers

During the reporting period, the amounts and proportions of the Company's procurement from the top 5 suppliers were as follows:

In RMB 10,000 Yuan

Jan. - Jun. 2021				
No.	Name	Amount	Proportion	Procured Items
1	NINEBELL	9,321.12	11.10%	Robot arms, etc.
2	Advance Electric America Co., Inc.	3,416.08	4.07%	Values, etc.
3	Nippon Pillar Corporation of America	2,587.53	3.08%	Connectors, etc.
4	Goodwill Precision Machinery (SuZhou) Co., Ltd.	2,118.60	2.52%	Chamber parts, etc.
5	HORIBA (China) Trading Co., Ltd.	2,057.73	2.45%	Flowmeters, concentration meters, sensors, etc.
Total		19,501.06	23.21%	
2020				
No.	Name	Amount	Proportion	Procured Items
1	NINEBELL	10,546.98	13.22%	Robot arms, etc.
2	DOUBLE MERITS HOLDINGS LIMITED	3,429.92	4.30%	Heaters, etc.
3	Goodwill Precision Machinery (SuZhou) Co., Ltd.	3,382.09	4.24%	Chamber parts, etc.
4	Shanghai Molan Electromechanical Equipment Co., Ltd.	3,004.15	3.77%	Programmable control modules, etc.
5	Wuxi PSK Technology Co., Ltd.	2,708.31	3.40%	Chamber cabinets, etc.
Total		23,071.45	28.92%	

2019				
No.	Name	Amount	Proportion	Procured Items
1	ACMR	7,354.82	16.31%	Serving as an agent to procure valves, connectors, etc.
2	NINEBELL	5,955.30	13.21%	Robot arm
3	Goodwill Precision Machinery (SuZhou) Co., Ltd.	1,718.10	3.81%	Chamber parts, etc.
4	Shanghai Molan Electromechanical Equipment Co., Ltd.	1,419.04	3.15%	Programmable control modules, etc.
5	Wuxi PSK Technology Co., Ltd.	1,235.90	2.74%	Chamber cabinets, etc.
Total		17,683.16	39.22%	
2018				
No.	Name	Amount	Proportion	Procured Items
1	ACMR	10,393.20	23.87%	Serving as an agent to procure valves, connectors, etc.
2	NINEBELL	5,201.20	11.95%	Robot arms, etc.
3	MKS Instruments (HK) Company Ltd.	1,849.24	4.25%	Ozone generator, etc.
4	Shanghai Molan Electromechanical Equipment Co., Ltd.	1,648.57	3.79%	Programmable control modules, etc.
5	Goodwill Precision Machinery (SuZhou) Co., Ltd.	1,392.46	3.20%	Chamber parts, etc.
Total		20,484.67	47.05%	

Note: The procurement data of Goodwill Precision Machinery (SuZhou) Co., Ltd. also includes that of Changshu Zhaoheng Zhongli Precision Machinery Co., Ltd.

ACMR, as the Company's controlling shareholder, is a NASDAQ listed company. The supplier market of the American semiconductor industry chain is relatively mature. ACMR has certain market and price advantages in overseas raw material procurement. From the beginning of the reporting period to September 2019, ACMR was responsible for purchasing some overseas raw materials for the Company. During the reporting period, the top five final suppliers of the Company are as follows:

In RMB 10,000 Yuan

Jan. - Jun. 2021				
No.	Name	Amount	Proportion	Procured Items
1	NINEBELL	9,321.12	11.10%	Robot arms, etc.
2	Advance Electric America Co., Inc.	3,416.08	4.07%	Values, etc.
3	Nippon Pillar Corporation of America	2,587.53	3.08%	Connectors, etc.
4	Goodwill Precision Machinery (SuZhou) Co., Ltd.	2,118.60	2.52%	Chamber parts, etc.
5	HORIBA (China) Trading Co., Ltd.	2,057.73	2.45%	Flowmeters, concentration meters, sensors, etc.
Total		19,501.06	23.21%	
2020				
No.	Name	Amount	Proportion	Procured Items
1	NINEBELL	10,546.98	13.22%	Robot arms, etc.
2	DOUBLE MERITS HOLDINGS LIMITED	3,429.92	4.30%	Heaters, etc.
3	Goodwill Precision Machinery (SuZhou) Co., Ltd.	3,382.09	4.24%	Chamber parts, etc.
4	Shanghai Molan Electromechanical Equipment Co., Ltd.	3,004.15	3.77%	Programmable control modules, etc.
5	Wuxi PSK Technology Co., Ltd.	2,708.31	3.40%	Chamber cabinets, etc.
Total		23,071.45	28.92%	

2019				
No.	Name	Amount	Proportion	Procured Items
1	NINEBELL	5,955.30	13.21%	Robot arms, etc.
2	Advance Electric America Co., Inc.	2,442.60	5.42%	Valves, flow meters, etc.
3	Goodwill Precision Machinery (SuZhou) Co., Ltd.	1,718.10	3.81%	Chamber parts, etc.
4	Harrington Industrial Plastics	1,438.74	3.19%	Connectors, etc.
5	Shanghai Molan Electromechanical Equipment Co., Ltd.	1,419.04	3.15%	Programmable control modules, etc.
Total		12,973.78	28.77%	
2018				
No.	Name	Amount	Proportion	Procured Items
1	NINEBELL	5,201.20	11.95%	Robot arms, etc.
2	Advance Electric America Co., Inc.	2,579.86	5.93%	Valves, flow meters, etc.
3	Product Systems Inc	2,520.36	5.79%	Megasonic wave generator, etc.
4	MKS Instruments (HK) Company Ltd.	1,849.24	4.25%	Ozone generator, etc.
5	Harrington Industrial Plastics	1,783.41	4.10%	Connectors, etc.
Total		13,934.07	32.00%	

During the reporting period, the total purchase amount of the Company's top five final suppliers accounted for 32.00%, 28.77%, 28.92%, and 23.21% of the total purchase amount of the current period, respectively. The Company did not purchase from a single supplier more than 50% of the Company's total purchase in the current year or rely heavily on a few suppliers.

During the reporting period, NINEBELL, one of the top five final suppliers of the Company, was the main supplier of the Company's key parts -- robot arm. ACMR, the controlling shareholder of the Company, holds a 20% stake, and Hui Wang, the chairman of the Company, also serves as its director, so NINEBELL is a related party of the Company. Apart from that, there was no relationship between the top five final suppliers and the Company during the reporting period.

V. Situation of Key Resource Elements, Such as Fixed Assets, Intangible Assets, ETC. That Have a Major Impact on Main Business

(I) Main Fixed Assets

As of June 30, 2021, the Company's fixed assets are as follows:

In RMB 10,000 Yuan

Category	Original Value	Book Value	Newness Rate
Machines and equipment	4,124.75	2,321.62	56.29%
Means of transport	139.69	62.35	44.63%
Computers and electronic devices	614.67	358.78	58.37%
Office equipment	242.12	174.37	72.02%
Total	5,121.22	2,917.12	56.96%

1. Issuer's equipment

As of June 30, 2021, the Company's main R&D and production equipment is as follows:

In RMB 10,000 Yuan

No.	Equipment Name	Original Value	Book Value	Newness Rate
1	Ultra-pure water system in the clean room, IDS01 R&D system	978.01	861.83	88.12%
2	Double-beam system electron microscope FEI	726.13	290.16	39.96%
3	PO-36963 coating developer (clean track)	351.81	312.90	88.94%
4	Wafer surface particle scanning device	300.53	86.95	28.93%
5	Bench prototype Module (300mm Wet station (SPM+HQDR Module)	246.26	182.06	73.93%
6	Silicon wafer stress and thickness measuring instrument FSM	125.07	54.92	43.91%
7	Hitachi Ion Milling Equipment	72.90	46.41	63.66%
8	POGD-0220 shape measuring instrument	67.19	52.33	77.88%
9	Scanning electron microscope, 2 sets	65.75	3.29	5.00%
10	ECI Qualilab QL-10EZ copper plating solution analyzer	58.94	31.94	54.19%

2. Issuer's house ownership status

As of the signing date of this [***], the Company has no house ownership.

On October 28, 2020, Shengwei Shanghai entered into the *Overall Preliminary Sales Contract of Shanghai Public Rental Housing* with Shanghai Lingang Industry Area Public Rental Housing Construction and Operation Management Co., Ltd. to purchase the public rental housing in the phase 3 lease-before-sales public rental housing of Lingang Industry Area (lot H26-01) located at No. 14, 21, 41, and 42, Lane 128, Qunfeng Road. As of this [***], such properties have not been delivered.

(II) Leased Houses, Buildings, and Land

As of October 21, 2021, the houses and buildings leased by the Company for production and operation are as follows:

No.	Lessee	Lessor	Location	Leased Area (m ²)	Term of Lease	Rent	Use
1	Issuer	Zhangjiang Group	Floors 1-5, Building 4, No. 1690, Cailun Road, Zhangjiang Hi-Tech Park, Shanghai	5,900.28	2018.1.1-2024.12.31	RMB 2 Yuan per day per building square meter (Jan. 1, 2018 to Dec. 31, 2022); RMB 2.7 Yuan per day per building square meter (Jan. 1, 2023 to Dec. 31, 2024)	Production and operation
2	Issuer	Shanghai Shengyu Culture Development Co., Ltd.	Whole building of Building 2, No. 365, Chuanhong Road, Shanghai	9,629.87	2019.9.26-2023.1.15	RMB 389,824 Yuan per month (Since Jan. 16, 2020, the rent has increased by 5% every year on the basis of the previous year)	Assembly, warehousing, and office
3	Issuer	Wu *	Room 302, Building 15, Hailan Famous Garden, No. 35, Yanling Road, Jiangyin City, Jiangsu Province	179.5	2021.4.25-2022.4.24	RMB 3,800 Yuan per month	Residence
4	Issuer	Xiang **	Room 403, Building 26, Xinhua Third Village, Jiangyin City, Jiangsu Province	132.61	2020.12.22-2021.12.21	RMB 3,650 Yuan per month	Residence
5	Issuer	Shen **	Room 406, Building 29, Xinhua Third Village, Jiangyin City, Jiangsu Province	111.73	2021.9.23-2022.9.22	RMB 3,800 Yuan per month	Residence
6	Issuer	Cheng **	Room 2602, Building 45, Shangdong YaYuan, Xincheng District, Xinwu District, Jiangsu Province	82	2020.12.01-2021.11.30	RMB 3,675 Yuan per month	Residence
7	Issuer	Cui **	12-1-301, Tianbao Sili, Beijing Economic and Technological Development District, Beijing	137.1	2021.4.15-2022.4.14	RMB 7,000 Yuan per month	Residence
8	Issuer	Yan **	Room 2204, Unit 1, Building 3, Baihu Community, Zuoling New Town, East Lake High-tech District, Wuhan	100	2021.5.4-2022.5.4	RMB 42,000 Yuan per month	Residence

9	Issuer	Luo *	No. 2601, Unit 2, Building 13, Community 3, Zuoling New Town, East Lake High-tech District, Wuhan	100	2020.11.12-2021.11.11	RMB 35,400 Yuan per month	Residence
10	Issuer	Hu **	Room 804, Unit 1, Building 13, Yuquan Community, Huangbeiling Community, Zuoling New Town, East Lake High-tech District, Wuhan	100	2021.01.06-2022.01.05	RMB 3,000 Yuan per month	Residence
11	Issuer	Wang *	No. 01, Floor 1, Unit 2, Building 3, District 8, Modern International Garden, 106 Guanggu Avenue, East Lake New Technology Development District, Wuhan	145.7	2021.9.10-2022.9.10	RMB 6,500 Yuan per month	Residence
12	Issuer	Wang **	Room 604, No. 6, Alley 346, Hejie Road, Pudong New District, Shanghai	90	2021.6.6-2022.6.5	RMB 4,300 Yuan per month	Residence
13	Issuer	Wang **	Room 502, No. 25, Alley 346, Hejie Road, Pudong New District, Shanghai	90	2021.6.6-2022.6.5	RMB 4,000 Yuan per month	Residence
14	Issuer	Wang **	Room 401, No. 35, Alley 346, Hejie Road, Pudong New District, Shanghai	90	2021.6.12-2022.6.11	RMB 4,300 Yuan per month	Residence
15	Issuer	Li **	Room 506, No. 282 Dangui Road, Shanghai	108.35	2020.12.16-2021.12.15	RMB 6,500 Yuan per month	Residence
16	Issuer	Guo **	Parking Spaces 7 and B3F, No. 27, 5th Floor, No. 27, Guanxin Road, Hsinchu City, Taiwan (No. 281, No. 282)	79.88	2019.10.1-2021.9.30	NTD 42,000 per month	Office, warehousing
17	ACM Wuxi	Wuxi Xingzhou Industrial Park Development Co., Ltd.	33-1-601-04-01 & 02 (IC Design Building B604-1 & 2), Xinda Road, Xinwu District, Wuxi	148.55	2020.4.1-2022.3.31	RMB 33 Yuan per month per square meter	Office
18	ACM California	ACMR	42307 Osgood Road, Room B, Suite #I, Fremont CA 94539	1,500 square feet (about 139.35 square meters)	2021.4.1-2023.03.31	US\$ 3,600 per month	Office, warehouse

19	ACM South Korea	Jeong **	Room 402, Floor 4, Modern City Plaza, Outer Section 3, 726-9 Ami-ri Bubal-up, Icheon-si, Gyeonggi-do	164.55	2019.12.1-2021.12.1	KRW 1,280,000 per month	Business facilities
20	ACM South Korea	Kim **	Rooms 101, 102, and 103, Floor 1, Sicox Tower, Sangdaewon-dong 517-14, Jungwon-gu, Seongnam-si, Gyeonggi-do	448.47	2019.3.31-2024.3.30	KRW 5,000,000 per month	Factory
21	ACM South Korea	Aggregate Corporation of Seongnam Industry Park Management Community	Rooms 1204&1205, Sicox Tower, No. 484 Dunchon-daero (Sangdaewon-dong 517-14), Jungwon-gu, Seongnam-si, Gyeonggi-do	342.97	2021.5.1-2023.4.30	KRW 2,600,000 per month	Research institute
22	ACM South Korea	Aggregate Corporation of Seongnam Industry Park Management Community	Room 1206, Sicox Tower, No.484 Dunchon-daero (Sangdaewon-dong 513-14), Jungwon-gu, Seongnam-si, Gyeonggi-do	188.78	2021.5.1-2023.4.30	KRW 1,200,000 per month	Research institute
23	Issuer	Huang **	Room 102, No. 15, Lane 848, Chiyue Road, Nicheng Town, Pudong New District, Shanghai	101	2021.06.20-2022.06.19	RMB 3,600 Yuan per month	Residence
24	Issuer	Liu **	Room 1001, Unit 1, Building A5, Zhongjian Guanggu Star, Wuhan	166.9	2021.06.10-2022.06.09	RMB 5,000 Yuan per month	Residence
25	Issuer	Wuhan Institute of Geological Resources and Environmental Industry Technology Co., Ltd.	Room 601, Building 1, IGE Industry Incubation Base Phase I, East to the Weilai Third Road and South to the Keji Fifth Road, Wuhan East Lake New Technology Development Zone	448	2020.08.01-2025.07.31	RMB 48 Yuan per month per square meter	Office
26	Issuer	Shanghai Shengyu Culture Development Co., Ltd.	Whole building of Building 4, No. 365, Chuanhong Road, Shanghai	9,854.76	2021.02.01-2023.01.15	RMB 1.5 Yuan per day per building square meter, RMB 449,623 Yuan per month	Semiconductor equipment assembly, warehousing, and office

27	Issuer	Jiangyin Tian'an Cyber City Real Estate Co., Ltd.	Tian'an Cyber City Industrial Office Building, No. 55 Changshan Avenue, Jiangyin City	711.32	2021.04.01-2024.03.31	RMB 8,807 Yuan per month	Office
28	Issuer	AVIC Yifa Investment Co., Ltd.	Unit 905, 9/F, D East, AVIC Plaza	240	2020.12.18-2022.12.17	RMB 26,280 Yuan per month	Office
29	Issuer	Zhang **	Room 201, Building 30, Xinhua Third Village, Jiangyin City, Jiangsu Province	147.45	2021.10.16-2022.10.15	RMB 3,800 Yuan per month	Residence
30	Issuer	Yu *	Room 901, Building 17, Ruicheng Garden, Xinwu District, Wuxi City, Jiangsu Province	115	2021.09.26-2022.09.26	RMB 3,650 Yuan per month	Residence
31	Issuer	Xia **	Room 1102, Building 49, Ruicheng Garden, Xinwu District, Wuxi City, Jiangsu Province	100	2021.09.26-2022.09.26	RMB 3,600 Yuan per month	Residence
32	Issuer	Chen **	Room 3301, Building 21, International Garden, Xinwu District, Wuxi City, Jiangsu Province	144.93	2020.11.29-2021.11.28	RMB 3,800 Yuan per month	Residence
33	Issuer	Zhang **	Unit 402, 4/F, Unit A, Building 43, Tianbao Sixth Lane, Beijing Economic and Technological Development Area	134.52	2020.12.01-2021.11.30	RMB 8,600 Yuan per month	Residence
34	Issuer	Wu **	Unit 301, Unit 3, Building 712, Tianbaoyuan Third Lane, Beijing Economic and Technological Development Area	138.55	2020.11.22-2021.11.21	RMB 9,000 Yuan per month	Residence
35	Issuer	Zhangjiang Hi-Tech Park Development Co., Ltd.	Room 1001, Building 15, Lane 1433, Cailun Road, Pudong New District, Shanghai	63.14	2021.08.19-2022.08.18	RMB 5,200 Yuan per month	Residence
36	Issuer	Yang *	Room 01, 24/F, Unit 2, Building A3, Zhongjian Guanggu Star, Wuhan	140.86	2021.01.22-2022.01.21	RMB 5,000 Yuan per month	Residence
37	Issuer	Tang *	Room 1401, No. 31, Binhu First Lane, Haicang District, Xiamen	112.87	2021.09.20-2022.09.19	RMB 3,850 Yuan per month	Residence

38	Issuer	Zhang **	Room 301, No. 118, Jianmei Lane, Haicang District, Xiamen	128.13	2020.12.01-2021.11.30	RMB 3,300 Yuan per month	Residence
39	Issuer	Liu *	Room 301, Unit 1, Building A6, Phase II, Guanggu International Community 188, Wuhan	126.56	2021.3.13-2022.3.12	RMB 4,100 Yuan per month	Residence
40	ACM South Korea	Han **	163-2 Mok-dong, Gwangju, Gyeonggi-do (204 Gwangnam-an-ro (Mok-dong), Gwangju, Gyeonggi-do)	559.43	2020.10.08-2022.10.08	KRW 4,500,000 per month	Factory
41	ACM South Korea	Zhang **	163-8, 162-3 Mok-dong, Gwangju, Gyeonggi-do (198 Gwangnam-an-ro (Mok-dong), Gwangju, Gyeonggi-do)	541.45	2021.04.12-2023.04.11	KRW 3,500,000 per month	Factory
42	Issuer	He **	Room 2217, No. 315, West Renmin Road, Jiangyin City, Jiangsu Province	53.19	2021/6/25-2022/6/24	RMB 2,000 Yuan per month	Residence
43	Issuer	Zheng **	Room 402, Yujinxiang Building 7, Tianbaoyuan Sixth Lane, Beijing Economic and Technological Development Area	156.6	2021/7/5-2022/7/4	RMB 9,300 Yuan per month	Residence
44	Issuer	Yang **	Unit 202, Unit A, Building 25, Tianbaoyuan Sixth Lane, Beijing Economic and Technological Development Area	132.56	2021/8/11-2022/8/10	RMB 9,200 Yuan per month	Residence
45	Issuer	Yang **	Unit 302, 3/F, Unit 3, Building 4, Tianbaoyuan Second Lane Area 2, Beijing Economic and Technological Development Area	153.74	2021/8/15-2022/8/14	RMB 9,300 Yuan per month	Residence
46	Issuer	Yu *	Room 2202, Unit 2, Building 16, Guanggu International Community 188, Wuhan	109.9	2021/9/2-2022/9/1	RMB 4,000 Yuan per month	Residence

47	Issuer	Zhao	Room 2702, No. 45, Lane 99, Jinhe Road, Pudong New District, Shanghai	143	2021/5/16-2024/5/15	RMB 16,000 Yuan per month	Residence
48	Issuer	Wang **	Room 1001, No. 53, Lane 389, Hangrui Road, Hangtou Town, Pudong New District, Shanghai	95	2021/2/27-2022/2/26	RMB 4,300 Yuan per month	Residence
49	Issuer	Wang **	Room 601, No. 11, Heshahangcheng Hemeiyuan, Shanghai	92	2021/7/12-2022/7/11	RMB 4,600 Yuan per month	Residence
50	Issuer	Shanghai Di'ai Hotel Management Co., Ltd.	Room 401 and 421, Building 33, No. 300, Chuantu Road, Pudong New District, Shanghai	56	2021/4/6-2022/4/5	RMB 1,800 Yuan/room/month	Residence
51	Issuer	Pei **	Room 126, 228, 230, 232, 238, 328, 330, 336, 528, 532, Building 6, No. 300, Chuantu Road, Pudong New District, Shanghai	300	2021/7/22-2022/7/21	RMB 20,000 Yuan per month	Residence
52	Issuer	Shi *	Room 401, No. 62, Lane 3885, Huyi Highway, Jiading District, Shanghai	129.3	2021/8/15-2022/8/14	RMB 5,300 Yuan per month	Residence
53	Issuer	Cai **	Room 505, No. 24, Binhu First Lane, Haicang District, Xiamen	124.83	2021/5/20-2022/5/19	RMB 3,800 Yuan per month	Residence
54	Issuer	Zheng **	Room 1001, No. 27, Binhu First Lane, Haicang District, Xiamen	134.38	2021/8/14-2022/8/13	RMB 4,280 Yuan per month	Residence
55	Issuer	Liu **	Room 401, Building 27, Qihang North Area, Gaoliu Community, Hefei	125	2020/11/08-2021/11/07	RMB 3,000 Yuan per month	Residence
56	Issuer	Ye **	Room 406, Building 3, Lianhuan New Village, Gaoliu Community, Hefei	115	2020/11/08-2021/11/07	RMB 2,500 Yuan per month	Residence
57	Issuer	Han *	Room 1803, Building 15, Nanzhuang Area, Gaoliu Community, Hefei	105	2020/12/5-2021/12/4	RMB 2,800 Yuan per month	Residence
58	Issuer	Wu **	Room 606, Building 38, Wenyi Taochong Lake City Plaza, Xinzhan District, Hefei	98.23	2021/5/25-2022/5/24	RMB 2,400 Yuan per month	Residence

59	Issuer	Fan *	Room 302, Unit 2, Building 8, No. 67, Taibaishan Road, Huangdao District, Qingdao	154.1	2021/6/1-2022/5/31	RMB 4,000 Yuan per month	Residence
60	Issuer	Guo **	Room 403, Unit 2, Building 10, Inner No. 27 Taibaishan, Qingdao Development Zone	108.85	2021/8/5-2022/8/4	RMB 3,100 Yuan per month	Residence
61	Issuer	Zheng **	7B, Building 10, Lanfeng City Garden, Jinjiang City	132.34	2021/7/1-2022/6/30	RMB 3,000 Yuan per month	Residence
62	Issuer	Hong **	7B, Building 11, Phase IV, Lanfeng City Garden, Jinjiang City	129.43	2021/7/6-2022/7/5	RMB 3,000 Yuan per month	Residence
63	Issuer	Chen **	Room 704, Unit 2, Building 14, Lanqiaoyaju, No. 19 Dangui Road, Pukou District, Nanjing	116.45	2021/8/4-2022/8/3	RMB 3,500 Yuan per month	Residence
64	Issuer	Tan **	Room 601, Unit 1, Building 12, Poly East Bay, Hangzhou	138.75	2021/9/5-2022/9/4	RMB 5,800 Yuan per month	Residence
65	Issuer	Wang **	Room 202, Unit 1, Building 4, Junchen Mansion, Qujiang District, Quzhou	114.93	2021/10/4-2022/10/3	RMB 3,400 Yuan per month	Residence

Note: Items 25, 40, and 41 in the table above have been pledged. The entire building 2 and 4 located at 365 Chuanhong Road, Shanghai leased by the Issuer from Shanghai Shengyu Culture Development Co., Ltd. have been pledged, for which the pledge formalities have been completed.

The land certificate for the houses of Floors 1-5, Building 4, No. 1690, Cailun Road, Zhangjiang Hi-Tech Park, Shanghai, which was leased by the issuer from Zhangjiang Group, with a total area of 5,900.28 square meters, has been obtained. The land certificate currently indicates that the rights owner is Shanghai Zhangjiang ChuangyeYuan Technology Development Co., Ltd..

In 2007, Zhangjiang Group signed a house purchase contract with Zhangjiang ChuangYuan, and Zhangjiang Group has fulfilled the obligations of payment and other obligations according to the house purchase contract. However, due to the fact that the records of the land contract, detailed control planning and land use purposes on relevant certificates are not completely consistent, it is estimated that it will take a long time for Zhangjiang ChuangyeYuan to issue the property ownership certificate. At present, the property right of Building 4, No. 1690, Cailun Road has not been transferred to Zhangjiang Group. Zhangjiang Group promises that it has the right to sign a house lease contract with the issuer, and will not affect the issuer's lease of such houses due to the above house ownership.

The issuer and its holding subsidiaries have no disputes in leasing the above-mentioned real estate; nor have they been investigated or punished by the government, and the actual use by the issuer and its holding subsidiaries has not been affected. The above-mentioned houses are mainly used for office, R&D and warehousing, and there are enough houses in the area to rent. The production and operation of the issuer and its holding subsidiaries are not significantly impacted by the house property right certificate not obtained.

ACMR, the controlling shareholder of the issuer, has made a commitment on the lease of the above property from Zhangjiang Group with respect to the issuer: during the validity of the lease contract, if for any reason the issuer is unable to renew the lease or use the above-mentioned property, ACMR is willing to unconditionally bear the costs and expenses incurred by the issuer due to the relocation (deducting the actual amount of insurance company claims).

(III) Main Intangible Assets

1. Land use rights

As of the date of this [***], the Company owns the following land use right:

No.	Right Holder	Real Estate Certificate No.	Co-ownership	Location	Nature of Right	Use	Area (m ²)	Term of Use
1	Shengwei Shanghai	Hu [2020] Bu Dong Zhan Quan No. 000721	Sole ownership	Mound 16/65, Street Place 9, Luchaogang Town	Granted	Land for scientific research and designing, industrial land	42,786.30	2020/7/9-2070/7/8

2. Patents

As of June 30, 2021, the Company and its subsidiaries in which it owns controlling equity interest own 322 major patents which have been granted with patent rights, among which, 152 patents are domestic patents, 170 patents are foreign patents, and 317 patents are invention patents. There is no restriction on the rights such as pledge, judicial seizure and so on in the authorized patents in China. Please refer to “Schedule I -- Important Patents” in this [***] for details of patents that have a significant impact on the main business of the issuer and its subsidiaries.

3. Trademarks

As of June 30, 2021, the issuer and its subsidiaries owned 17 trademarks registered in China, 22 trademarks registered overseas, and the trademarks registered in China are not subject to pledge, judicial seizure, or other restrictions of rights. For the details of the trademarks that have an important impact on the main business of the issuer and its subsidiaries, please refer to “Schedule II: Important Trademarks” of this [***].

(IV) Sharing of Key Resources with Other Parties

1. Technology License Agreement signed by the issuer and ACMR

On September 30, 2006, Shanghai Venture Capital, ACMR and ACMSH signed the Capital Increase Agreement, stipulating that Shanghai Venture Capital invested registered capital cash of RMB 40 million Yuan to ACMSH, and that ACMR invested registered capital of RMB 124 million Yuan to ACMSH, including RMB 40 million Yuan of fixed assets and RMB 84 million Yuan of an intellectual property exclusive license.

On January 31, 2007, ACMR and ACMSH signed the Technology License Agreement, stipulating that ACMR would grant the license of the intellectual property owned or controlled by ACMR to ACMSH globally, which means the permission to use, reproduce, modify, make derivative works of, or improve the licensed technologies for the purpose of processing, manufacturing, importing, exporting, selling or marketing or otherwise distributing products, or commercializing them. Such licensed intellectual property rights refer to any intellectual property rights owned or controlled by ACMR from the effective date of the agreement (that is, Ultra ECPTM and Ultra SFPTM licensed by ACMR), including but not limited to 45 patents and 62 patents under application; the validity of the agreement is 20 years from the date of signing the agreement, and the agreement will be automatically extended and continue to be valid at the end of the period, unless and until ACMR is no longer a shareholder of ACMSH; even if ACMR is no longer a shareholder of ACMSH, upon termination of this agreement, ACMSH shall still have the right to use the licensed technologies agreed in this agreement, unless ACMR pays ACMSH RMB 84 million Yuan.

According to the legal opinion on ACMR issued by foreign lawyers, as of June 30, 2021, the patents that are still valid among the above technology-licensed patents are as follows:

SN	Patentee	Patent Name	Patent Type	Application No./Patent No.	Application Date	Registration Place
1	ACMR	Electropolishing components and methods of electropolishing conductive layers	Invention	028225864	2002.11.13	China
2	ACMR	ADAPTIVE ELECTROPOLISHING USING THICKNESS MEASUREMENTS AND REMOVAL OF BARRIER AND SACRIFICIAL LAYERS	Invention	1020057001191	2003.7.22	South Korea
3	ACMR	Controlling the uniformity of removal rate of electropolishing in IC manufacturing	Invention	094105429	2005.2.23	Taiwan (China)
4	ACMR	The method and system of monitoring electropolishing process of metal layers, the system and monitoring methods and system of metal layers formed by electropolishing on wafers	Invention	093136793	2004.11.26	Taiwan (China)
5	ACMR	Electropolishing metal layers on wafers having trenches or vias with dummy structures	Invention	10/108614	2002.3.27	US

2. Patent Common Application Contract signed by the issuer and NOMURA, HJS Eng CO., LTD.

In 2016, the issuer and NOMURA and HJS Eng CO. LTD. signed a *Patent Common Application Contract*, which stipulates that the three parties jointly own the patent “WASHING HYDROGEN WATER PRODUCING METHOD AND PRODUCING APPARATUS” And “FUNCTIONAL WATER PRODUCING APPARATUS AND FUNCTIONAL WATER PRODUCING METHOD”, each party’s share is one third; the three parties share the patents of the above inventions in mainland China, South Korea, and Taiwan, and the patent rights obtained based on this, each party’s share is one-third; the three parties share the patent rights of the above inventions in the United States and the patent rights obtained based on this, and their shares are one-half for either of NOMURA and the issuer.

Except for the above circumstances, as of the signing date of this [***], the Company does not share resource elements with others, or use them as licensed resource elements. There is no dispute or potential dispute over the resource elements owned or used by the Company.

VI. Core Technologies of the Issuer

(I) Core technologies

The Company’s main products include semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet process equipment, through years of technical research and development, the Company has mastered the relevant core technologies in the above-mentioned product fields, and has been continuously innovating in continuously improving equipment technological performance, production capacity, improving customer product yield and reducing customer cost. All of these core technologies are continuously applied in the products sold by the Company and form the competitiveness of the Company’s products.

1. Core technologies of the Issuer

The core technologies owned by the Company are as follows:

Core Technology Name		Source of Technology	Patented or Protected by Other Measures	Technology Advancement	Technology Maturity
Cleaning equipment	SAPS Megasonic Cleaning Technology	Self-developed	Patented	International Advanced	Mass production
	SAPS Hydrogen-Functional Water Technology	Self-developed	Patented	International Advanced	Mass production
	Separate Discharge and Recovery System of Chemical Solution	Self-developed	Patented	Domestic leading	Mass production
	On-line high-temperature SPM mixing and temperature control system	Self-developed	Patented	Domestic advanced	Mass production
	Wafer Pattern Recognition and Position Monitoring System	Self-developed	Patented	Domestic advanced	Mass production
	Intelligent Exhaust Device with Automatic Cleaning	Self-developed	Patented	Domestic advanced	Mass production
	TEBO Megasonic Cleaning Technology	Self-developed	Patented	International leading	Mass production
	TEBO and Gas Atomizing Two-Fluid Integrated Cleaning Device	Self-developed	Patented	International leading	Mass production
	Wet bench Tahoe combined high temperature sulfuric acid cleaning technology for single wafer	Self-developed	Patented	International leading	Mass production
	Wafer Moisturizing System for Interaction Zone of wet bench and single wafer Based on Tahoe Equipment	Self-developed	Patented	International leading	Mass production
	Fully automatic wet bench cleaning equipment	Self-developed	Patented	Domestic leading	Mass production
	Single wafer Backside Cleaning Technology	Self-developed	Patented	Domestic leading	Mass production
	Design of Double-gas Bernoulli Chuck and Labyrinth Bearing Based on single wafer Backside Cleaning Equipment	Self-developed	Patented	Domestic leading	Mass production
Semiconductor electroplating equipment	Multi-anode Electroplating Technology	Self-developed	Patented	International Advanced	Mass production
	Sealing Technology of Electroplating Fixture	Self-developed	Patented	International Advanced	Mass production
	Multi-anode Flow Field Distribution Control Technology	Self-developed	Patented	Domestic leading	Mass production
	Gas Flow Distribution Technology in Annealing Cavity	Self-developed	Patented	Domestic leading	Mass production
	Modular layout of electroplating equipment	Self-developed	Patented	Domestic leading	Mass production
	Automatic rotation spray head technology for edge cleaning	Self-developed	Patented	Domestic leading	Mass production

Advanced packaging equipment	SFP Technology	Self-developed	Patented	International leading	Mass production
	SFP Liquid Electrode Technology	Self-developed	Patented	International leading	Mass production
	SFP Fixture Technology	Self-developed	Patented	International leading	Mass production
	Application Technology of SFP Double Damascus Process	Self-developed	Patented	International leading	Mass production
	Application Technology of SFP Advanced Packaging Process	Self-developed	Patented	International leading	Mass production
	Hot gas phase etching technology	Self-developed	Patented	Domestic leading	Mass production
	Gluing cavity with automatic cleaning function	Self-developed	Patented	International leading	Mass production
	Nitrogen assisted heat treatment unit	Self-developed	Patented	Domestic advanced	Mass production
	Optimized secondary rotation gluing process for thick glue	Self-developed	Patented	Domestic advanced	Mass production
	Compact and high yield structure of wet process equipment	Self-developed	Patented	Domestic advanced	Mass production
	Wet bench single wafer combined equipment based on degluing process of packaging equipment	Self-developed	Patented	Domestic leading	Mass production
	Wet cleaning equipment suitable for TSV process	Self-developed	Published Paper of the International Conference	Domestic leading	Mass production
	Wet TSV backside outcrop process and device	Self-developed	Patented	Domestic advanced	Mass production
	Wet Etching Equipment with Automatic Coating Thickness Adjustment Function	Self-developed	Patented	Domestic leading	Mass production

National Integrated Circuit Innovation Center and Shanghai Integrated Circuit R&D Center Co., Ltd. assessed the Company's core technologies on June 20, 2020, and issued the *Assessment on Core Technologies of ACM Research (Shanghai), Inc.* *ACMSH's core technologies are mostly applied to semiconductor cleaning equipment, stress-free polishing equipment, and copper-plating equipment.* These core technologies were acquired by ACMSH through independent research and development. Compared with domestic and internationally leading equipment manufacturers, some core technologies have reached the internationally leading or internationally advanced level, which is specifically described as follows:

Name of Core Technology		Technology Advancement
Cleaning equipment	I. SAPS Megasonic Cleaning Technology	Internationally advanced
	II. TEBO Megasonic Cleaning Technology	Internationally leading
	III. Single wafer wet bench combined Tahoe high-temperature sulphuric acid cleaning technology	Internationally leading
Polishing equipment	IV. SFP polishing technology	Internationally leading
Copper-plating equipment	V. Multi-anode plating technology	Internationally advanced

2. Technical advancement and specific representation of the issuer

(1) SAPS megasonic cleaning technology

In view of the problem that the energy of megasonic wave cannot be controlled uniformly in the traditional megasonic cleaning process, the Company developed SAPS megasonic cleaning technology, of which the megasonic frequency range is 1-3MHz and the maximum power is up to 3W/cm². By controlling the relative motion between the megasonic generator and the wafer during the process, the megasonic energy received at each point on the wafer during the process time is the same, is not affected by the warpage of the wafer, and ensure that the energy sustained at each point on the wafer is within the safe energy range of the process. The experimental results show that the energy non-uniformity of the SAPS megasonic cleaning technology on the controllable wafer surface is within 2%, which achieves the safe control of the megasonic wave energy.

(2) SAPS hydrogen-functional water technology

When the chip manufacturing process is developed to 14 / 16 nm and below, the sidewall loss in FinFET, channel and through-hole becomes an important factor affecting the characteristic process, and the cleaning with diluted solution becomes a new trend in the process development. However, for diluted chemical solution the cleaning effect is usually not ideal.

SAPS hydrogen-functional water cleaning technology developed by the Company decomposes water molecules into H radicals and OH radicals under the action of megasonic waves, and OH radicals can react with H₂ molecules dissolved in ultrapure water in hydrogen-functional water generating water molecules and H radicals, and the H radicals will gradually accumulate to excess. Excess H radicals have a strong reactivity, and by reacting with dangling bonds on the surface of the substrate, the bonding between the substrate surface and the contamination particles can be disrupted, resulting in a reduction in the likelihood of bonding, and as well excess H radicals can replace the terminal groups of bondings such as SI-H, SI-O-H to prompt the contamination particles away from the substrate surface.

(3) Separate discharge and recovery system of chemical solution

There are strict requirements on the discharge and recovery of chemical solution for the production process of special semiconductor equipment. The discharge pipelines of water, waste acid liquid, waste alkaline liquid and waste organic liquid shall be completely separated; for saving cost, some high-value chemical liquid needs to be recovered for reuse after the single wafer cleaning process is completed, but the cross-contamination of chemical solution recovered for reuse must be controlled within acceptable limits.

The separate discharge and recovery system of chemical solution developed by the Company for the advanced process can achieve the recovery or discharge of up to five kinds of chemical solutions by raising or lowering the position of the shutter in combination with the rotation of the solution recovery plate to align the discharge port with different solution receiving port. Also the cross contamination can be controlled within the < 10 ppm/wafer, which adequately meets the customer's needs for cleaning complex processes.

(4) On-line high-temperature SPM mixing and temperature control system

High-temperature SPM (Sulfuric Peroxide Mixture), as a common chemical solution for removing photoresist, is usually used in wet bench cleaning equipment, but rarely used in single wafer cleaning equipment, mainly because of its high process temperature which makes it difficult to ensure that the temperature and concentration of the SPM solution supplied to each wafer in each processing chamber are uniform.

The on-line high temperature SPM acid mixing temperature control system developed by the Company for single wafer cleaning machine can preheat the chemical solution to a preset temperature by a preheating device, and accurately control the amount of injected sulfuric acid and hydrogen peroxide through the fluid control device, and transmits the high-temperature SPM cleaning solution in the mixing container to the wafer surface in each cavity by gas pressurization after sufficient mixing, so as to realize instant using after mixing supplying fresh SPM cleaning solution for each wafer during that process. The system has low application cost and can achieve the control of key process parameters such as chemical freshness, temperature and active ingredient yield of wafer surface using points via simple fluid control device to successfully maintain SPM solution property between wafers and between cleaning chambers in a high degree of consistency.

(5) Wafer pattern recognition and position monitoring system

In the manufacture process of special semiconductor equipment, the wafer is usually placed on the wafer holder in the process chamber by the manipulator for processing, and whether the wafer can be accurately placed on the preset position of the wafer holder will have a great impact on process effect.

The wafer pattern recognition and position monitoring system developed by the Company is a simple, low cost, stable and reliable wafer position detection device, which includes an industrial camera, a conversion unit, a comparison unit and a decision unit. The camera captures the edge of the wafer in rotation to obtain pattern data; the conversion unit receives the pattern data from the camera and converts the received pattern data into several pixel values; and the comparison unit converts compare the pixel values converted by the conversion unit with a predetermined reference pixel value to obtain a comparison result; the determination unit determines whether or not the position of the wafer is correct according to the comparison result of the comparison unit.

(6) Intelligent exhaust device with automatic cleaning

The main pollutants in the chip manufacturing process are acid gas, alkaline gas, combustible gas, etc. generated in processes such as etching, cleaning and the like, which need to be discharged, collected and treated separately due to different treatment methods. The conventional semiconductor manufacturing equipment is usually provided with three exhaust devices, each of which has a gas inlet and a gas outlet, and its disadvantages are those the volume of the exhaust device is too large and the utilization rate of the exhaust device is low.

A set of self-cleaning intelligent exhaust devices developed by the Company includes outer pipe, inner pipe, actuator and flushing liquid inlet, a plurality of exhaust ports are provided on the side wall of the outer pipe, and the inner pipe is accommodated in the outer pipe with one end open while the other end closed, the side wall of which is provided with a TSV; the actuator is connected with the closed end of the inner pipe to drive the inner pipe to rotate, and make the TSV of the inner pipe aligned with the outer pipe exhaust port, and different rotation positions correspond to different exhaust ports to achieve the separate exhaust of various gases. In the meantime, the rest exhaust ports will be closed by the side wall of the inner pipe when one kind of gas is exhausted, and the exhaust device is provided with a flushing liquid inlet to convey the flushing liquid into the gap between the outer pipe and the inner pipe to remove the crystal on the outer wall of the inner pipe, and the residual liquid of the flushing liquid can be discharged smoothly through the liquid discharge port provided on the intake pipe, thus it can greatly save the maintenance time of the equipment and help improve the production efficiency.

(7) TEBO megasonic cleaning technology

As the chip technology node is further developed to a smaller dimension and the aspect ratio is further increased, the difficulty of pattern wafer cleaning becomes greater. When the chip technology node extends to below 20nm and the pattern structure develops to multi-layer 3D, it is difficult for the traditional megasonic cleaning to control the bubble to make steady cavitation effect, which causes the bubble to break and consequently produce the high energy microstream to damage the wafer surface pattern structure.

The TEBO cleaning equipment, self-developed by the Company, is suitable for pattern wafer cleaning at 28nm or below, which allows bubbles to oscillate with steady size and shape at controlled temperatures through a series of rapid (frequency up to one million times per second) pressure changes, in this way the bubble can be controlled in a stable oscillation state without imploding, so that the wafer microstructure can be kept from being destroyed, and the surface pattern structure of the wafer can be cleaned without damage. The TEBO cleaning equipment of the Company, in the technology transfer of the device structure from 2D to 3D, can be applied to more fine products with 3D structure such as FinFET, DRAM, emerging 3D NAND, etc., as well as new nano-devices, quantum devices and the like in the future, playing an increasingly important role in improving the yield of customers' products.

(8) TEBO and Gas Atomizing Two-Fluid Integrated Cleaning Device

Compared with the traditional megasonic cleaning process, TEBO megasonic cleaning process has a shorter action period and a better removal effect for small particles, but for the particles of big size, the removal effect is bad because there is no shock wave microstream generated by instantaneous cavitation. The gas atomizing two-fluid cleaning technology, which use gas atomizing device to carry chemical solution or pure water to clean the wafer surface, has a good removal effect for large-size particle, but a bad removal effect for particles or particles in the wet bench and TSV.

The TEBO and gas atomizing two-fluid integrated cleaning device by the Company combines the advantages of the above two technologies, which cleans with the medium flow of nitrogen gas atomizing device before the megasonic acts to improve the particle removal effect of the TEBO megasonic cleaning. This device can make large particles removed, loosened, or broken up into small particles on the premise of ensuring the safety of the pattern. In conjunction with the subsequent TEBO megasonic cleaning, it can achieve a good removal effect for both large and small particles without damage to the pattern.

(9) Wet bench Tahoe combined high temperature sulfuric acid cleaning technology for single wafer

The Wet bench Tahoe combined high temperature sulfuric acid cleaning equipment for single wafer developed by the Company integrates a single-cavity cleaning module and a wet bench cleaning module, which can be used in front end and back end processes of 12-inch wafer production line, especially applicable to high-temperature sulfuric acid processes. Based on the advantages of wet bench cleaning and single wafer cleaning technology, the cleaning processes of this two technologies are completed separately in the same equipment, which not only saves the sulfuric acid consumption, but also guarantees the good cleaning effect, and it is a great technology breakthrough of green process in cost saving, environmental protection, which solves the excessive consumption of sulfuric acid and treatment problems in large amount of industry for many years.

(10) Moisturizing system during wafer transfer based on Tahoe equipment

In the single wafer wet bench combining Tahoe high temperature sulfuric acid cleaning equipment, after the wet bench soaking and photoresist removing process of wafer completes, the process problems such as water marks or adhesion particles are likely to occur when the wafer surface becomes dry or semi-dry, so the wafer transfer between wet bench module and the cavity modules is the most difficult part for the entire photoresist removing process. In viewing of this problem, the Company has designed a wafer moisturizing system in the buffer loading unit of the wet bench module and the cavity module completely ensuring that the wafer surface in well moisturized conditions during the whole transfer process and ensure that final particle cleaning efficiency.

(11) Automatic wet bench cleaning equipment

The automatic wet bench cleaning equipment developed by the Company is widely used in cleaning, etching, photoresist removal and other processes in the field of chip manufacturing and advanced packaging. The equipment has high automation degree, good equipment stability, high productivity and low cross-contamination risk, and has made innovations and improvements on the basis of conventional wet bench cleaning process, and as compared with the conventional method, the IPA drying section has added a wafer guide groove to prevent debris caused in the wafer pulling process.

(12) Single wafer backside cleaning technology

The backside cleaning equipment is generally used for backside coating removal, polysilicon etching and wafer backside thinning, as well as removal of backside metal contamination. As the thickness of the chip is trending to be thinner and thinner, the requirements on backside thinning of the wafer is higher and higher. when the thickness of the wafer is less than 300um, the conventional mechanical clamping method is no longer applicable because it easily causes the wafer to warp, deform or even crack, besides, some processes, for example, requires the wafer front surface protected by nitrogen atmosphere during the processing of the wafer back to prevent damage to the wafer front surface caused by solution, vapor or chemical contact and mechanical scratch.

The single wafer backside cleaning equipment developed by the Company adopts the Bernoulli chuck of the aerodynamic suspension principle, use the manipulator to send the wafer into the cavity, with the backside of the wafer faces upward and the front side of the wafer faces downward. During the process, highly pure nitrogen gas with precisely controlled flow rate is continuously fed into the gap between the wafer and the fixture through the gas pipe under the fixture and the annular small hole on the surface of the chuck. When the gap between the chuck and the wafer is small, the reduced gas flow results in a greater pressure to the front surface of the wafer, and when the gap between the chuck and the wafer is large, a greater gas flow rate results in a smaller pressure to the front surface of the wafer. During the process, only the flow rate and pressure of the gas source need to be precisely maintained, and the wafer will be maintained in an equilibrium position.

(13) Design of double-gas-path Bernoulli chuck and labyrinth bearing based on single wafer backside cleaning equipment

The Backside cleaning equipment of the Company adopts double nitrogen gas path chuck design with an annular Bernoulli nitrogen gas path at the periphery of the chuck, which is always in the open state during the process to keep the wafer in a stable suspension state. In addition, the interior area of the chuck near the center also involves a ring-shaped lift-up nitrogen gas path, the opening of lift-up nitrogen gas can increase the balance space between the wafer and the chuck, and by precise control of the flow rate of the lift-up nitrogen gas path, the precise spacing control between the wafer and the chuck can be achieved. The addition of nitrogen gas path can protect the front surface of the wafer from the risk of contact with the bottom of the fixture due to deformation caused by the Bernoulli effect, and can also guarantee the etching uniformity.

Based on the backside cleaning equipment, the Company adopts a labyrinth bearing design, which includes a hollow shaft and a rotating shaft, the rotating shaft is configured in the hollow shaft, and the outer wall of the rotating shaft is spaced apart from the inner wall of the hollow shaft. The hollow shaft is set with a gas groove for supplying gas to the front surface of the wafer, and the particles in the space between the outer wall of the rotary shaft and the inner wall of the hollow shaft is prevented by the retaining wall and the groove provided on the outer wall of the rotary shaft from entering the gas groove on the hollow shaft, so as to avoid contaminating front surface of the wafer.

(14) Multi-anode local electroplating technology

The multi-anode local electroplating technology developed by the Company can independently control the working voltage and working time zone of each anode, and thereby control the electric field and current distribution on the surface of the wafer, which improves the control response of electroplating power supply up to the millisecond level and enhances the uniformity of the electroplated copper coating on the thin subcrystalline layer, and realize the hole-free filling electroplating of nano-level pores. In that technology, the independent electroplating flow field control system is set to separately control the supply of the electroplating solution to each anode, precisely controls the fluid field in the electroplating chamber, independently controls the wafer cut-in system, controls the angle and speed of the wafer entering the electroplating solution, and decreases gas bubbles adhered to the wafer surface, so as to reduce defects generated during electroplating. It realizes intelligent current protection when entering electroplating solution in combination with multi-anode pulse power supply.

(15) Sealing technology of electroplating fixture

The electroplating fixture sealing technology developed by the Company wraps the flank and bottom side of the contact electrode through the outer sealing ring, so as to avoid exposure of the contact electrode to the electroplating solution on the premise that the contact electrode of the wafer is in good contact, and further enhance process performance as well as prolong the service life of the contact electrode, and also reduce the consumable cost of the fixture.

(16) Multi-anode flow field distribution control technology

The multi-anode flow field distribution control technology developed by the Company adopts multi-direction electrolyte circulation system to control local fluid field, multi-concentric annular insulation electrolyte inlet/outlet channels, electrolyte flow from the annular anode to the cathode, and then flow out from the annular insulation ring walls between the anodes, this circulation controls the fluid field distribution on the wafer surface and inside the electroplating chamber. Local fluid field control technology may maintain freshness of the electrolyte mixture in the area near the electroplating surface, thereby affect electroplating rate, filling capacity and defects on the electroplating coating. This technology may adjust the electrolyte flow control device to obtain a uniform fluid field across the electroplating substrate to ensure that there are equal exchange rate of fresh organic additives and reaction by-products both in area near the center and edge area of the electroplating substrate and to ensure the compositional uniformity of the final electroplated coating throughout the electroplating substrate range.

(17) Gas flow distribution technology of annealing chamber

The annealing chamber is mainly composed of gas inlet, hot plate, cold plate, manipulator arm and gas outlet. It is mainly a mixed gas of hydrogen used in the annealing chamber, and the wafer after copper electroplating is to be annealed to make the copper coating in large grain size, low resistance, uniform atoms. With the application of gas flow distribution technology of annealing chamber, aided by the simulation design, it can form uniform and stable gas flow directly above the hot plate to ensure that the surface copper oxide layer of the wafer on the hot plate is sufficiently reduced during the annealing process.

(18) Modular layout of electroplating equipment

The multi-anode electroplating equipment developed by the Company adopts the dry-wet separation module layout, which can effectively reduce the damage of the corrosive liquid in the electroplating chamber and the cleaning chamber on the other modules of the equipment. This equipment also adopted the modular design, each module has an independent control system to ensure that other modules can also run normally in the case of failure of one module, reducing the influence of cavity alarm on the overall productivity of the equipment. Each module can be maintained separately to improve the effective operation time of the equipment, and enhance the capacity of the equipment.

(19) Automatic rotation spray head technology for edge cleaning

The automatic rotation spray head technology of edge cleaning developed by the Company can automatically rotate the spray head according to the shift of rotation direction during the process to keep the angle between the spray head and the wafer rotation direction constant, and effectively improve the efficiency of edge cleaning and the control accuracy of the edge scope.

(20) SFP technology

The SFP technology developed by the Company designs the cathode as an inert metal electrode, connects the wafer with the metal copper coating to the anode, through the electrolysis reaction process, the copper coating on the wafer loses electrons, and forms copper ions into the electrolyte solution (polishing liquid), hydrogen gas will be generated in the cathode area. As the progress of the electrolysis process, the copper coating on the wafer surface gradually dissolves into the polishing solution, thus achieving the polishing effect to the surface copper coating.

(21) SFP liquid electrode technology

In the SFP liquid electrode technology developed by the Company, the anode is the polishing liquid ejected by the anode spray head in contact with the edge of the wafer, and the anode spray head is stationary with respect to the center of the wafer during the entire polishing process. The area of contact between the polishing liquid sprayed by the cathode spray head and the front surface of the wafer is limited. when the fixture is stationary with respect to the cathode spray head, it can only polish the local area of contact. The polishing liquid sprayed by the cathode spray head intersects the edge of the wafer, and the main contact surface is on the plastic ring of the fixture. When the anode spray head is in the starting position, its center point coincides with the center point of the fixture. In that polishing process, the fixture is kept rotating all the time, and the cathode spray head can move along its diameter of the fixture in the horizontal direction.

(22) SFP Fixture Technology

The SFP fixture technology developed by the Company fixes the wafer by vacuum adsorption in the process of polishing, and is equipped with an inner and outer double-ring vacuum adsorption rings to ensure that the wafer remains steady in pre-wetting, polishing, and spin-drying processes, thereby ensuring the uniformity of the edge polishing removal rate of the wafer with assistance of the liquid electrode.

(23) Application technology of SFP double damascus process

The application technology SFP double-damascus process developed by the Company adopts combined process of chemical mechanical grinding, SFP, and hot gas phase etching for the pattern wafer in the dual-damascus copper interconnection planarization application, which combines the respective advantages of chemical mechanical grinding process and SFP process.

(24) Application technology of SFP advanced packaging process

The application technology of SFP advanced packaging process developed by the Company is derived from the SFP technology of the Company, which integrates SFP, chemical mechanical polishing and wet etching processes. Before the chemical mechanical grinding and wet etching process, it uses the electrochemical method to removes the copper layer on the surface of the wafer in a stress-free way, releases the stress of the wafer, and also achieves the recovery and reuse of the electrochemical polishing solution. The SFP advanced packaging process application technology can remarkably reduce the use of chemical and consumables, save the cost of equipment and benefit the environment protection.

(25) Hot gas phase etching technology

The hot gas phase etching technology developed by the Company can meet the requirements under high vacuum environment and high temperature conditions, the process gas chemically react with the layer to be etched on the wafer surface to form gaseous products; use the vacuum pump to expel the vapour reactants after etching so as to achieve the surface etching of wafer.

(26) Automatic cleaning function of glue coater

During the process of gluing and evening up, as the rotation speed of the wafer chuck is enhanced, the photoresist may be ejected from the surface of the wafer and contaminate the inner wall of the gluing chamber, which will cause the wafer to be contaminated and adversely affect the effects of the gluing process. As a result, the chamber will need to be disassembled and cleaned regularly.

The gluing chamber with automatic cleaning developed by the Company can lower the chuck to the lowest position driven by the motor during automatic cleaning, and open the cleaning liquid valve to fill up the glue chamber, and dissolve the photoresist in the cleaning liquid. After the cleaning, the cleaning liquid discharge valve opens, the cleaning liquid will be discharged out of the cavity. The whole process is controlled by the computer program, which improves the use efficiency of the equipment and reduces the uncertainty caused by manual disassembly and cleaning.

(27) Nitrogen assisted heat treatment device

In the heat treatment of the gluing process, it is very important to ensure the uniformity of the heating of the wafer for the effect of gluing process.

The nitrogen-assisted heat treatment device developed by the Company includes an exhaust system and a heating chamber. In the device, when the heated nitrogen gas flows through the surface of the wafer, the temperature unevenness of the wafer due to warpage and the like can be compensated; the nitrogen gas assisted heating can form an insulating layer on the surface of the wafer. The heated nitrogen gas flows through the gap between the wafer and the heat shield to the wafer, and flows out through the exhaust port above the wafer, which forms a heated nitrogen protective layer over the wafer, provide good thermal insulation and reduce heat loss over the wafer, thereby maintaining the uniformity of surface temperature of the wafer; the nitrogen assisted heating can also remove the exhaust gas, prevent the liquid glue on the wafer surface from flowing to the back side. The nitrogen gas can take away the volatilized vapour of residual glue when flowing over the wafer through the gap between the wafer and the insulating chamber wall. In addition, since the gap is small and the nitrogen flow rate is large, a protective layer can be formed to prevent the glue from flowing to the Backside of the wafer, thereby avoid causing structural damage of wafer.

(28) The optimized secondary rotation gluing process of thick glue

The rotation gluing process of thick glue usually needs a secondary gluing to meet the requirements of the process for the thickness of the glue coating.

The gluing method of thick glue developed by the Company, has innovated on the basis of the existing gluing technology, by setting the glue dropping position of the glue head and add the thinning step of wafer edge glue coating before the secondary gluing, which solves the problem of greater thickness at the wafer center and edge in the existing glue coating technology and meet the technological requirements on the uniformity of the thickness of the glue coating,

(29) Compact and high yield structure of wet process equipment

The chip manufacturing enterprises need to organize the production in a high standard clean room, thus has strict requirements on semiconductor special equipment preferring compact structure and small floor area as well as high productivity.

In the stack layout of wet process equipment developed by the Company, multiple process chambers are stacked and symmetrically arranged forming a compact and high-yield semiconductor special equipment. In this model, two processing robots are used to realize the transfer and pick&place of the wafer, so that the efficiency and floor area of the wafer can be optimized.

(30) Wet bench single wafer combined device based on degluing process of packaging equipment

The degluing equipment used in the semiconductor packaging industry is usually wet bench degluing equipment with completely independent solution wet bench and pure water wet bench, which occupies a large area, consume a large amount of chemicals and pure water, and has the risk of cross-contamination between wafers. However, the single wafer wet process degluing combined device occupies a smaller floor area, consumes less pure water and has higher flexibility in process adjustment, but for many products requiring thick glue, it needs a longer time to peel off, so the single wafer de-gluing equipment will result in low overall production efficiency.

The single wafer wet bench process and single wafer cavity-type process integrated de-gluing equipment applicable for advanced packaging developed by the Company can be applied to wet degluing process of 12-inch and 8-inch wafers. The equipment integrates the advantages of wet bench degluing device with the single wafer degluing device, the soaking process is completed in the wet bench, most of the thick glue is softened and removed, and subsequently remove the residual glue, contaminants and particles by the single wafer degluing process, which can solve the shortage of the capacity of the single wafer cleaning equipment.

(31) Wet cleaning equipment suitable for TSV process

As the TSV aspect ratio increases (the mainstream TSV aspect ratio has reached 10: 1, and the 3D Integrated Circuit aspect ratio is expected to reach 15: 1 or even higher in the future), the difficulty of TSV cleaning process rises up rapidly.

The wet cleaning equipment developed by the Company which is suitable for TSV processing can be used in 12-inch and 8-inch wafer TSV deep hole cleaning process. The device is equipped with the Company SAPS (space alternating phase shift) megasonic cleaning technology, under the action of megasonic wave, the boundary layer thickness of the wafer surface cleaning solution becomes very thin, and the solution can enter the pattern by convection stirring and expediting the cleaning. In addition, megasonic cleaning technology can also reduce the thickness of the viscous lay of the cleaning solution on the silicon surface, and increase the lateral pulling force on the residue, thereby acting as a simulated wiping. The mechanical and chemical cleaning of the equipment is enhanced at the same time, so that the cleaning efficiency is greatly improved.

(32) Wet TSV backside outcrop process and device

In a conventional 3D TSV fabrication process, the conductor is exposed from the back side of the silicon substrate, and in the CMP process, the copper layer polishing rates are relatively high and the hot oxygen layer grinding rates are relatively low, which may cause conductive materials, such as copper and tungsten, to contaminate the silicon layer resulting in reduced device reliability, or resulting in defects like scratches, depressions, and corrosion, etc.

The wet TSV backside outcrop process and device developed by the Company uses two kinds of silicon etchants with different etching rates one after another, and first rotates the wafer and sprays high etching rate etchant onto the Backside of the wafer, stop etching before the TSV is exposed from the back of the wafer; then spray a low etching rate etchant to the back of the wafer until the TSV is exposed from the back of the wafer. This technology adopts two-step wet etching to realize the backside exposure and outcrop of the through-silicon visa. Compared with the traditional CMP method, it has a high etching selection ratio on silicon and silicon dioxide and avoids the copper contamination to the silicon substrate.

(33) Wet etching equipment with automatic coating thickness adjustment function

In the traditional wet etching process, chemical liquid is sprayed onto the surface of the wafer, and the etching process of the coating layer or silicon material is completed by chemical reaction between the chemical liquid and the wafer.

The wet etching equipment and etching method with automatic adjustment function of coating thickness developed by the Company are equipped with optical centering and notch aligner to accurately position the wafer, and the on-line silicon thickness measuring instrument non-contact is also provided to monitor the coating thickness before and after the process. The equipment software system can automatically calculate the etching rate of the wafer in current process according to the thickness data recorded by the thickness gauge, and automatically calculate the processing time of the wafer according to the set target value of the etching thickness.

3. Application and contribution of core technologies in main business and products or services

The core technology of the Company is widely used in the main business. During the reporting period, the ratio of core technology product income to operating income is as follows:

In RMB 10,000 Yuan

Project	Jan.-Jun. 2021	2020	2019	2018
Income from core technology products	58,804.77	97,532.78	74,340.81	53,961.17
Operating income	62,528.08	100,747.18	75,673.30	55,026.91
Proportion of income from core technology products	94.05%	96.81%	98.24%	98.06%

4. Protection measures for core technologies

(1) Patent protection

The core technology owned by the Company is critical to the long-term development of the Company. The Company attaches great importance to the protection of the core technology, and in order to strengthen the unified management of the confidentiality of technical materials and prevent technology leakage, the Company has established the intellectual property management system and standardized the patent application process to guaranteed the Company's technical research and development achievement can be timely, efficiently applied for intellectual property protection. At present, the Company has applied for a number of patents for core technologies, for details, please refer to "Attachment 1 List of Important Patent" in this [***].

(2) System of confidentiality and prohibition of competition

The Company has established a strict confidentiality system, and core employees have signed the Confidentiality and Intellectual Property Protection Agreement and the Non-compete Agreement to clarify the relevant confidentiality matters, confidentiality period, confidentiality scope and liability for illegal disclosure. It stipulates that the employee shall not work in the Company of same industry within a certain period of time after his / her departure.

(3) Equity incentives and option incentives

At present, all the major technical R & D personnel of the Company indirectly hold the shares of the Company. In addition, in order to establish a long-term incentive mechanism, fully mobilize the enthusiasm of technical R & D personnel, attract and retain excellent professionals, effectively combine the interests of shareholders, the Company and the personal interests of the technical R & D personnel, make all parties work together and focus on the long-term development of the Company, the Company granted stock options to some technical R & D personnel. For the implementation of the stock option incentive plan of the Company, please refer to "XIII Equity Incentives and Relevant Arrangements of the Issuer prior to this Offering" of "Section V Overview of the Issuer" in this [***].

(II) Scientific research strength and achievements

1. Important awards received by the Company

The details of important awards granted to the Company are as follows:

SN	Name of Award	Awarding time	Awarding body
1	“SAPS (Space Alternated Phase Shift) megasonic cleaning technology” won the first award of Shanghai Science and Technology Awards	December 2020	Shanghai Municipal Government
2	Shanghai Key Laboratory of Advanced Wet Process Equipment for Integrated Circuits	January 2020	Shanghai Municipal Commission of Science and Technology
3	China’s Top Five Semiconductor Equipment Enterprises in 2018	May 2019	China Semiconductor Industry Association
4	Top 10 Units in China Semiconductor Equipment Industry in 2017	May 2018	China Electronics Special Equipment Industry Association
5	The TEBO megasonic wave non-damage cleaning technology won the twelfth (2017) China semiconductor innovative products and technologies award	April 2018	China Semiconductor Industry Association, China Electronics Materials Industry Association, China Electronics Special Equipment Industry Association, China Electronics Daily
6	Advanced packaging electroplating equipment Ultra ECP ap Tool won the 12th China Semiconductor Innovation Product and Technology Award (2017)	April 2018	China Semiconductor Industry Association, China Electronics Materials Industry Association, China Electronics Special Equipment Industry Association, China Electronics Daily
7	Megasonic single wafer cleaning equipment won Innovation Award of Integrated Circuit Industry Technological Innovation Alliance: Achievement Industrialization Award	March 2018	Strategic Alliance of Technology Innovation in Integrated Circuit Industry
8	Shanghai Patent Work Pilot Enterprise	September 2017	Shanghai Intellectual Property Office
9	Top 10 Units in China’s Semiconductor Equipment Industry in 2016	May 2017	China Electronics Special Equipment Industry Association
10	The development and application of single wafer gluing equipment won the third prize of Shanghai Pudong New Area Science and Technology Award	January 2017	Shanghai Pudong New Area People’s Government
11	China’s Top 10 Semiconductor Equipment Units in 2015	May 2016	China Electronics Special Equipment Industry Association
12	Ultra C SAPS Megasonic single wafer Cleaning Equipment won the Bronze Medal of the Fifteenth China International Industrial Expo:	November 2013	Organizing Committee of China International Industrial Expo
13	The development and application of 45nm-22nm single wafer wafer cleaning equipment won the second prize of Pudong New Area Science and Technology Award	October 2013	Shanghai Pudong New Area People’s Government
14	The Superior Winning Enterprise of start-up group in second China Innovation and Entrepreneurship Competition (Shanghai Competition Region) in 2013	September 2013	The organizing committee of the second China Innovation and Entrepreneurship Competition (Shanghai Competition Region) in 2013, Shanghai Science and Technology Entrepreneurship Center and Shanghai University Student Science and Technology Entrepreneurship Foundation
15	Ultra C 45nm-12 inch-Single Wafer Cleaning Equipment obtained the fourth (2009) China Semiconductor Innovation Products and Technologies Award	March 2010	China Semiconductor Industry Association, China Electronics Materials Industry Association, China Electronics Special Equipment Industry Association, China Electronics Daily

SN	Name of Award	Awarding time	Awarding body
16	The 12-inch 65-nm single wafer cleaning equipment won the 2008 China International Industrial Expo Innovation Award	November 2008	Organizing Committee of China International Industrial Expo

2. Major scientific research projects undertaken by the Company

Serial Number	Project name		Department	Project Category	Implementation cycle	Budget (RMB10,000 Yuan)	Progress	Field of Technology
1	Development and Industrialization of Copper electroplating Equipment (Ultra ECPTM) and SFP Equipment (Ultra SFP TM) in Semiconductor Copper Manufacturing Process		The promotion office of Shanghai leading group of prospering the city with science and education	Key Industry Science and Technology Tackling Project in prospering the city with science and education plan in 2005	From January 2006 to August 2009	22,000.00	Post-assessment Completed, and the project has been finalized	Copper electroplating, SFP, cleaning
2	Development of 65-45nm SFP Equipment for Copper Interconnect	Development of SFP Subsystem and Process for SFP	Ministry of Science and Technology	China 02 Major Science and Technology Special Project	October 2008 to September 2016	34,538.00	Inspected and accepted; project completed	SFP, copper electroplating
		Integrated Alpha-Tool and Process Development						
		Integrated Beta-Tool and Process Optimization						
		Industrialization						
3	Development and Application of 20-14nm Copper Interconnect Copper Electroplating Equipment	Development and Application of 45-14nm Copper Interconnect Copper Electroplating Equipment	Ministry of Science and Technology	China 02 Major Science and Technology Special Project	January 2014 to December 2019	18,444.50	Inspection and acceptance completed	Electroplating
4	ACM Research (Shanghai), Inc.		Shanghai Municipal Commission of Science and Technology	Small Giant Project of Science and Technology	From January 1, 2017 to December 31, 2018	5,967.00	Inspection and acceptance completed	Wet-process equipment
5	Topic 1: A Study of PTFE Molding and Sintering Technology of Development and Industrialization of Polytetrafluoroethylene Cavity Manufacturing Technology for Semiconductor Equipment		Shanghai Municipal Commission of Science and Technology	Action Plan for Scientific and Technological Innovation	From July 1, 2018 to June 30, 2020	450.00	Application for inspection and acceptance has been submitted	Verify PTFE material

Serial Number	Project name	Department	Project Category	Implementation cycle	Budget (RMB10,000 Yuan)	Progress	Field of Technology
6	Shanghai enterprise and public institution patent work pilot unit project	Shanghai Intellectual Property Office	Pilot Enterprise of Patent Work	September 2017 to August 2019	80.00	Inspection and acceptance completed	Wet-process equipment
7	R & D and Industrialization of Single wafer wet bench Combined Cleaning equipment	Shanghai Development and Reform Commission, Shanghai Economic and Credit Commission	Major Project of Strategic Emerging Industry in Shanghai	May 2019 to December 2021	11,276.00	In implementation	Wet-process equipment
8	Shanghai enterprise and public institution patent work model unit project	Shanghai Intellectual Property Office	Model Enterprise of Patent Work	August 2020 to July 2022	120.00	Under implementation	-

The Company is the major research units of “20-14nm copper interconnection copper electroplating equipment R & D and application” and “65-45nm copper interconnection SFP equipment R & D” projects, with the leader of both projects being HUI WANG.

(III). R & D projects

The basic information of the main projects in research and development by the Company is as follows:

Serial Number	Project name	Research content and objectives to be achieved	Corresponding personnel	The stage and progress of the project	Comparison with the technology level in the industry
1	SAPS Megasonic Cleaning Technology	Develop cleaning processes for flat wafer surface and deep hole, such as cleaning before and after thin coating deposition, cleaning after dry etching, cleaning after ion implantation ashing, cleaning after chemical mechanical polishing, etc. Focusing on the removal of small particles, the process below 45 nm effectively solves the organic contamination and cleaning of the particles after etching, and the cleaning efficiency is greatly improved; and develop the cleaning process applied to the polishing and epitaxial processes of the wafer manufacturing process.	Independent research and development	Process Verification Stage	Having reached the international advanced level

2	ECP Electrochemical Electroplating Technology	<p>Application 1: Logic and storage products: ECP map developed by the Company can be applied to 12-inch wafer fabrication at 28 nm and above nodes, as well as more advanced technology nodes; in terms of application breadth, The ECP map device can be applied to products with 3D structure such as FinFET, DRAM and 3D NAND, as well as metal line interconnections of new nano devices and quantum devices in the future.</p> <p>Application 2: Wafer-level advanced packaging: The advanced package plating equipment ECPap developed by the Company can be mainly applied to copper, nickel, tin, silver and gold plating processes in advanced Pillar Bump, RDL, HD Fan-Out and TSV packaging.</p> <p>Application 3: 3D stacking: The 3D stacking plating equipment ECP 3d developed by the Company can be applied to high-aspect ratio deep hole copper plating in the 3D TSV and 2.5D Inteposer process.</p> <p>Application 4: third-generation semiconductor plating process and equipment. It can be applied to SiC and GaN third-generation semiconductor and other chemical semiconductor metal deposition, and advanced packaging for gold plating, deep hole gold plating, and plating of Cu, Ni, Sn, Ag, and other metals.</p>	Independent research and development	Process Verification Stage	Having reached the international advanced level
3	Wet Bench Slot-type Cleaning Technology	Through the study of wet bench treatment process, we master the influence of wet bench cleaning process on relevant parts, the performance of parts at high temperature, and the optimization of parameters of the process.	Independent research and development	Process Verification Stage	Having reached the domestic leading level
4	Backside cleaning technology	Develop the technology of removing back surface coating, etching of polysilicon on back surface of wafer and coating reduction on back surface of wafer, and the main performance indexes are up to the international advanced level, which is suitable for 55nm and above, 40nm and 28nm technology nodes	Independent research and development	Process Verification Stage	Having reached the domestic leading level

5	TEBO Megasonic Cleaning Technology	Aiming at the difficulties of future cleaning technologies, such as micro-fragile structure cleaning, high aspect ratio structure cleaning, micro-particle removal and material loss control, based on the current TEBO megasonic cleaning technology, Develop applications to extend to smaller size and higher aspect ratio structures, as well as acoustic wave control models for different sizes and different structures, in conjunction with TEBO cleaning processes for extremely dilute liquids, to control less material loss.	Independent research and development	Process Verification Stage	Having reached the international advanced level
6	Research & Development and Industrialization of Tahoe Single wafer wet bench Combined Cleaning Equipment	The equipment includes modules such as wet bench cleaning and single wafer cleaning cavities, which can be used in front end and back end processes of 12-inch wafer production line: (1) Reduce operating costs: compared to current single wafer high-temperature sulfuric acid cleaning equipment it largely reduces the amount of high-temperature sulfuric acid used; (2) reduce the emission, which is beneficial to environmental protection; (3) integrate the wet bench and single wafer cleaning process, reduce the process steps, improve the process performance, and shorten the product production cycle..	Independent research and development	Process validation of 40 nm and 28 nm	First innovation in the world, preliminary data show that cleaning efficiency is equivalent to single wafer high-temperature sulfuric acid cleaning equipment, which can greatly save the amount of sulfuric acid
7	SFP Copper Polishing Technology	Application 1: Front end interconnects planarization: Integrated SFP copper polishing Ruk process and wet etching process, applicable for Copper interconnects structure ruthenium barrier layer removal of 5 nm process of 12 inch wafer production line: (1) solve the problem of low rate of removal of ruthenium barrier layer by chemical mechanical grinding; (2) reduce environmental pollution, The electrochemical polishing solution and wet etching solution can be recycled to reduce emission and process cost. Application 2: Advanced packaging metal layer planarization: SFP ap copper polishing equipment process combined with wet etching process, which can be used in RDL, HD Fan-Out, TSV structure metal copper layer and its barrier layer planarization process: (1) Process no stress (2) reduces the amount of CMP used, reduces the emission, reduces the process cost, and protects the environment.	Independent research and development	Process verification of 5 nm below progress	The innovation technology line is waiting to be verified; meet the same level of international industry enterprises

8	Fully Automatic wet bench phosphoric acid cleaning technology	The apparatus can be used in the front end hot phosphate nitride thin coating wet etching process of 12-inch wafer production line: (1) the phosphoric acid temperature is generally above 160 centigrade, Select appropriate equipment materials and exhaust capacity; (2) ensure the heating capacity of phosphoric acid and the stability of hot phosphoric acid temperature during the process; (3) increase of phosphoric acid concentration at high temperature will lead to decrease of silicon nitride etching rate, How to maintain the concentration of water in the hot phosphoric acid solution is the key to maintain a stable etch rate of silicon nitride; (4) How to control the Si content of the hot phosphoric acid solution.	Independent research and development	Engineering design phase	Meeting the same level of international industry enterprises
9	Vertical Furnace Tube Technology	The apparatus can be used in a 12-inch wafer production line to mainly implement different types of thin coating deposition processes on the wafer surface: (1) wafer automatic transfer module; (2) process cavity module, including a vacuum chamber, a heating furnace, (3) a reaction gas path control and distribution module, (4) a temperature control module, (5) an exhaust gas treatment module, and (6) a software control module, and the field of application will be developed to oxidation and diffusion furnaces, and finally to ALD applications.	Independent research and development	The device has entered the client and is being installed	Waiting for process and reliability results
10	Research & Development and Industrialization of Polytetrafluoroethylene Cavity Manufacturing Technology for Semiconductor Equipment	By developing and optimizing the molding, sintering and machining process, realize the PTFE material production process which can be applied to the products and parts of the Company.	Co-developed with Shanghai Sanaifu New Materials Technology Co., Ltd and Yixun Automobile Equipment (Shanghai) Co., Ltd	Process validation	Having reached the advanced level of the industry

11	Vertical Furnace Tube ALD Film Deposition Equipment and Technology	This equipment may be used in 12-inch wafer production lines. It mainly achieves atomic-layer deposition of SiO ₂ and SiN film on wafer surfaces to meet the ultra-high requirements on the film quality in advanced chip production process. (1) wafer automatic transfer module; (2) process cavity module, including a vacuum chamber, a heating furnace; (3) a reaction gas path control and distribution module; (4) a temperature control module; (5) an exhaust gas treatment module; and (6) software control module. Eventually, various ALD dielectric and metal deposition may be achieved.	Independent research and development	Engineering design phase	meet the same level of international industry enterprises
12	Research and Development of Edge Cleaning and Etching Equipment and System	This equipment may be used in 12-inch wafer production lines to remove edge photoresist film, edge pollutant, and edge oxide: (1) wafer automatic transfer module; (2) process chamber module, including an aligned nozzle at a controllable position; (3) fluid pipe control and distribution module; (4) a gas control module; (5) a software control module. (6) edge width removal monitoring module.	Independent research and development	The device has entered the client and is being installed	Waiting for process and reliability results
13	Research and Development of Single Wafer High-temperature SPM Cleaning Equipment	This equipment may be used in 12-inch wafer production lines to remove organic matters, like photoresist and metal residues: (1) wafer automatic transfer module; (2) Brush chamber module, including the wafer clamping and rotating mechanism, and a brush arm scan mechanism; (3) fluid pipe control and distribution module; (4) a gas control module; (5) a software control module. (6) cleaning chamber module.	Independent research and development	Process validation	meet the same level of international industry enterprises
14	Research and Development of Supercritical CO ₂ Drying Equipment and System	This equipment may be used in 12-inch wafer DRAM or advanced logic production lines for the cleaning and dry processes of high-aspect ratio pattern: (1) wafer automatic transfer module; (2) supercritical drying chamber module; (3) fluid pipe control and distribution module; (4) a gas control module; (5) a software control module. (6) cleaning chamber module.	Independent research and development	Design phase	meet the same level of international industry enterprises

(IV). Investment in R & D

During the Reporting Period, the Company's R & D input was as follows:

In RMB 10,000 Yuan

Project	Jan.-Jun. 2021	2020	2019	2018
R & D input	11,460.28	14,079.11	9,926.80	7,941.50
Operating income	62,528.08	100,747.18	75,673.30	55,026.91
Ratio	18.33%	13.97%	13.12%	14.43%

(V) Cooperation in R & D

In February 2017, the Company signed the Technical Cooperation Agreement with Shanghai Sanaifu New Material Technology Co., Ltd. and Automobile Equipment (Shanghai) Co., Ltd., with project name "The R & D and industrialization of PTFE cavity manufacturing process for semiconductor equipment", all parties agree to cooperate in R&D to realize the application of large-size PTFE parts in ACMSH products.

In addition, the Company did not carry out cooperative R & D projects during the reporting period.

(VI) R & D personnel

As of June 30, 2021, the Company had 295 technical R & D personnel, accounting for 42.02% of the total employees of the Company. The Company has signed the Confidentiality and Intellectual Property Protection Agreement and the Non-compete Agreement with the key technician, and granted the equity incentive & option incentive to the core technician to motivate their R & D work. During the Reporting Period, the staff of core technology teams of the Company remained stable without material adverse changes.

(VII) Mechanism of technological innovation, technical reserve and arrangement of technological innovation

Since its establishment, the Company has always adhered to a differentiated innovation and competition strategy, established a relatively perfect technological innovation mechanism, and reasonably arranged future technological reserves and technological innovation, mainly including the following aspects:

1. Establish and improve the R & D system, promote independent R & D and pay attention to intellectual property protection

The Company pays special attention to technology R & D, establishes innovation mechanism and innovation system, encourages the R & D team to develop products suitable for market demand, and promotes the combination of scientific research, development, production and market. The Company attached great importance to the protection of intellectual property, and formulated the Workflow Regulations for Intellectual Property Rights, the Control Procedure for Intellectual Property Risk Management, the Strategic Planning for Intellectual Property Rights, the Early Warning Mechanism for Intellectual Property Rights, etc, to encourage employees, especially technical R & D personnel, to apply for patents and protect patented technological achievements while raising awareness of non-infringement of intellectual property rights of others. For the R & D projects of major new technologies and new products, or the technological innovation achievements requiring application for foreign patents with major market prospects, the Company will also conduct project patent strategy research and put forward a patent strategy analysis report. The Company also will organize experts to conduct technical review on the innovative points of patent application, and conduct review on the patent application according to the search results to determine the feasibility of patent application. At the same time, the Company also set up appropriate incentive mechanism to enhance the enthusiasm of technical personnel, for patent application or patented achievement, the relevant patent inventor will be awarded performance incentive according to the Patent Management Code.

2. Increase investment in R & D to ensure the operation of innovation mechanism

During the Reporting Period, the amount of R & D investment of the Company was RMB 79.4150 million Yuan, RMB 99.2680 million Yuan, RMB 140.7911 million Yuan, and RMB 114.6028 million Yuan, respectively, showing a steady upward trend. In the future, the Company will continue to increase its R & D investment according to its own development, and build a good material foundation for the Company's innovation mechanism such as technological innovation and personnel training.

3. Build a fair and effective incentive mechanism to enhance the enthusiasm of R & D personnel

The Company has established a fair and effective incentive mechanism, deeply understood the needs of employees, and provided rewards and incentives to employees, especially technology R & D personnel, through performance evaluation, so as to broaden the promotion route of technology R & D personnel and make technology R & D personnel continuously motivated in innovation practice. At the same time, by implementing equity incentive and option incentive to core employees, the Company further enhanced the stability and enthusiasm of core R & D team.

4. Strengthen the personnel training system and strengthen the development of R & D teams

(1) Cultivation and introduction of technology R & D talents: technology R & D talents are the core competitiveness of scientific and technological innovative enterprises. The Company regularly organizes employees to participate in technical exchanges, improves the knowledge structure and professional skills of technology R&D personnel, and in the meantime of cultivating interior technology R & D talents, the Company also established the basic talent structure with the graduates of college and universities as the important reserve force for the technology R&D team.

(2) Establish system of technology leaders: In order to mobilize the enthusiasm of professional technology managers and production technology backbone, promote the scientific research progress and development of enterprises, and form the corporate cultural atmosphere of "respect for knowledge, respect for talents and respect for technology", the Company establishes system of professional technology leader to collect a professional technology core team and improve the technical innovation ability of production and R&D in an all-round way.

(3) Assessment and incentive mechanism: The Company has established an innovative incentive system, linking R & D tasks, achievements and inputs with the performance assessment, remuneration reward and promotion of employees and their departments, effectively stimulated the independent innovative actions by of the technology R&D personnel.

VII. Overseas Operation of the Issuer

As of the date of signing of this [***], the Issuer has three controlled subsidiaries abroad, including Hong Kong CleanChip, ACMR Korea and ACMR CA. Hong Kong CleanChip is mainly engaged in the sales of its products; ACMR Korea is mainly engaged in the research and development of semiconductor special equipment and spare parts; ACMR CA is mainly engaged in the overseas procurement of some parts and components required for semiconductor special equipment. For details, please refer to "IV. (1) Information of the Controlled Subsidiaries" of Section V Overview of the Issuer of this [***].

Section VII Corporate Governance and Independence

During the Reporting Period, the Company was normatively operated as a foreign-invested enterprise in accordance with *the Company Law, the Law on Sino-foreign Equity Joint Ventures, the Law on Foreign-invested Enterprises* and other laws and regulations, as well as then effective *Articles of Association* and other provisions before it was changed into a joint stock company in its entirety. Since the establishment of the joint stock company, the Company further perfected its governance structure, passed the new Articles of Association, formulated a system of rules (including the Rules on Procedures of General Meeting of Shareholders, the Rules on Procedures of Meeting of Board of Directors, the Rules on Procedures of Meeting of Supervisory Board, the Working Rules of Independent Directors, the Working Rules of Secretary of Board of Directors, the Rules for the Administration of External Investments, the Rules for the Administration of External Securities, the Administrative Measures on Related Transactions), built a relatively perfect internal governance structure, and formed a coordinated and balanced mechanism among body of power, decision-making body, supervisory body and management personnel, providing powerful security for the normative development of the Company.

I. Establishment, Perfection and Operation of Systems of General Meeting of Shareholders, Board of Directors, Supervisory Board, Independent Directors, Secretary of Board of Directors, Special Committees of Board of Directors

(I) Establishment, perfection and operation of the system of general meeting of shareholders

On November 14, 2019, the establishment meeting and the first session general meeting of shareholders of the Company deliberated and adopted the Articles of Association, the Rules on Procedures of General Meeting of Shareholders and other documents as required by the Company Law, the Securities Law and other relevant laws, regulations and normative documents. The above constitutional documents and rules formulated by the Company specifically govern the convening, proposal, notification, holding, voting, resolution and other aspects of a general meeting of shareholders.

Since the incorporation of the joint stock company, the general meeting of shareholders has always operated normatively in accordance with provisions of the Articles of Association, the Rules on Procedures of General Meeting of Shareholders and other documents. As of the execution date of this [***], the general meeting of shareholders has been held for 9 times, persons attending the general meeting of shareholders comply with relevant provision, and means of convening, procedures of discussion, voting methods and content of resolutions of meetings are lawful and effective. The information on all previous general meetings of shareholders is as below:

Serial Number	Reference Number of Meeting	Time of Holding	Attendees
1	Establishment Meeting	November 14, 2019	All shareholders or shareholder representatives
2	First-session Extraordinary General Meeting of Shareholders in 2019	November 29, 2019	All shareholders or shareholder representatives
3	First-session Extraordinary General Meeting of Shareholders in 2020	March 30, 2020	All shareholders or shareholder representatives
4	Second-session Extraordinary General Meeting of Shareholders in 2020	May 15, 2020	All shareholders or shareholder representatives
5	Annual General Meeting of Shareholders in 2019	June 29, 2020	All shareholders or shareholder representatives
6	Third-session Extraordinary General Meeting of Shareholders in 2020	July 8, 2020	All shareholders or shareholder representatives
7	Fourth-session Extraordinary General Meeting of Shareholders in 2020	July 31, 2020	All shareholders or shareholder representatives
8	Fifth-session Extraordinary General Meeting of Shareholders in 2020	November 19, 2020	All shareholders or shareholder representatives
9	Annual General Meeting of Shareholders in 2020	June 9, 2021	All shareholders or shareholder representatives

(II) Establishment, perfection and operation of the system of board of directors

The Company has established the board of directors in accordance with the *Company Law, Articles of Association and other provisions*, which is accountable to the general meeting of shareholders. The board of directors consists of 11 directors, including, among others, 1 chairman and 4 independent directors. On November 14, 2019, the establishment meeting and the first session general meeting of shareholders of the Company deliberated and adopted the Rules on Procedures of Meeting of Board of Directors as required by the Company Law, the Securities Law and other relevant laws, regulations and normative documents, specifically governing the convening, proposal, holding, reviewing, voting, resolution, meeting records and other aspects of a meeting of board of directors.

Since the incorporation of the joint stock company, the board of directors has always operated normatively in accordance with provisions of the Articles of Association, the Rules on Procedures of Meeting of Board of Directors and other documents. As of the execution date of this [***], the meeting of board of directors has been held for 13 times, persons attending each meeting of board of directors comply with relevant provision, and means of convening, procedures of discussion, voting methods and content of resolutions of meetings are lawful and effective. The information on all previous meetings of board of directors is as below:

Serial Number	Sequence Number of Meeting of Board of Directors	Time of Holding	Attendees
1	First Session of the First Board of Directors	November 14, 2019	All directors
2	Second Session of the First Board of Directors	December 31, 2019	All directors
3	Third Session of the First Board of Directors	March 13, 2020	All directors
4	Fourth Session of the First Board of Directors	April 30, 2020	All directors
5	Fifth Session of the First Board of Directors	June 9, 2020	All directors
6	Sixth Session of the First Board of Directors	June 23, 2020	All directors
7	Seventh Session of the First Board of Directors	July 16, 2020	All directors
8	Eighth Session of the First Board of Directors	October 9, 2020	All directors
9	Ninth Session of the First Board of Directors	November 4, 2020	All directors
10	Tenth Session of the First Board of Directors	April 13, 2021	All directors
11	Eleventh Session of the First Board of Directors	May 20, 2021	All directors
12	Twelfth Session of the First Board of Directors	August 27, 2021	All directors
13	Thirteenth Session of the First Board of Directors	October 26, 2021	All directors

(III) Establishment, perfection and operation of the system of supervisory board

The Company has established the supervisory board in accordance with the *Company Law, Articles of Association and other provisions*, which is accountable to the general meeting of shareholders. The supervisory board consists of 3 supervisors, among which, 1 supervisor is the president of the supervisory board, and 1 supervisor is an employee representative supervisor. On November 14, 2019, the establishment meeting and the first session general meeting of shareholders of the Company deliberated and adopted the *Rules on Procedures of Meeting of Supervisory Board* as required by the Company Law, the Securities Law and other relevant laws, regulations and normative documents, specifically governing the authority, procedures of discussion and other matters of a meeting of supervisory board.

Since the incorporation of the joint stock company, the supervisory board has always operated normatively in accordance with provisions of *the Articles of Association, the Rules on Procedures of Meeting of Supervisory Board* and other documents. As of the execution date of this [***], the meeting of supervisory board has been held for 12 times, persons attending each meeting of supervisory board comply with relevant provision, and means of convening, procedures of discussion, voting methods and content of resolutions of meetings are lawful and effective. The information on all previous meetings of supervisory board is as below:

Serial Number	Sequence Number of Supervisory Board	Time of Holding	Attendees
1	First Session of the First Supervisory Board	November 14, 2019	All supervisors
2	Second Session of the First Supervisory Board	November 25, 2019	All supervisors
3	Third Session of the First Supervisory Board	December 31, 2019	All supervisors
4	Fourth Session of the First Supervisory Board	March 13, 2020	All supervisors
5	Fifth Session of the First Supervisory Board	April 30, 2020	All supervisors
6	Sixth Session of the First Supervisory Board	June 9, 2020	All supervisors
7	Seventh Session of the First Supervisory Board	October 9, 2020	All supervisors
8	Eighth Session of the First Supervisory Board	November 4, 2020	All supervisors
9	Ninth Session of the First Supervisory Board	April 13, 2021	All supervisors
10	Tenth Session of the First Supervisory Board	May 20, 2021	All supervisors
11	Eleventh Session of the First Supervisory Board	August 27, 2021	All supervisors
12	Twelfth Session of the First Supervisory Board	October 26, 2021	All supervisors

(IV) Establishment, perfection and operation of the system of independent directors

To further prefect corporate governance structure of the Company, improve structure of the board of directors, strengthen restrictive and supervisory mechanism against internal directors and managers, protect interests of minority shareholders and creditors and promote normative operation of the Company, the Company has established working rules of independent directors in accordance with the Guiding Opinions on the Establishment of System of Independent Directors in Listed Companies, the Governance Standards of Listed Companies, the Articles of Association and other relevant provisions. On November 14, 2019, the establishment meeting and the first session general meeting of shareholders of the Company deliberated and adopted the *Working Rules of Independent Directors*, explicitly specifying qualification, nomination, election and change, special duty, independent opinion, safeguarding exercise of authority, etc. of independent directors in detail.

Since the engagement of independent directors of the Company, all of them are able to be diligent and responsible, fully take advantage of their roles in the operation of the Company, make decisions on material matters and related transactions of the Company, and play a positive role in perfecting the corporate governance structure of the Company. The abundant professional knowledge and professional ethics of due diligence owned by independent directors play a positive role in the formulation of development strategies, development plans, operation decisions and other aspects by the board of directors, effectively safeguard the scientificity and fairness of operation decisions made by the Company.

(V) Establishment, perfection and operation of the system of secretary of board of directors

On November 14, 2019, the first session of the first board of director of the Company deliberated and adopted the *Working Rules of Secretary of Board of Directors*. The board of directors has established 1 secretary of board of directors, who shall be engaged or dismissed by the board of directors. The secretary of board of directors shall be a senior executive of the Company, who shall be accountable to the Company and the board of directors and perform his/her duties faithfully and diligently.

Since the engagement of the secretary of board of directors of the Company, he/she has diligently and responsibly performed his/her duties in accordance with relevant requirements of the *Company Law, the Article of Association, the Working Rules of Secretary of Board of Directors* and other documents.

(VI) Special committees of board of directors

The board of directors of the Company has established four special committees, i.e. Strategy Committee, Audit Committee, Nomination Committee and Compensation and Appraisal Committee, and each committee shall carry out its works in accordance with *the Working Rules of Strategy Committee, the Working Rules of Audit Committee, the Working Rules of Nomination Committee and the Working Rules of Compensation and Appraisal Committee* respectively. The special committees shall be accountable to the board of directors and provide advisory opinions to the board of directors for its decision-making. Each committee shall all consist of directors, among which, independent directors shall account for the majority of the Audit Committee, the Nomination Committee and the Compensation and Appraisal Committee, and the convener of each of the above committees shall be served by an independent director. One independent director of the Audit Committee shall be an accounting professional.

The composition of each special committee of board of directors of the Company is as below:

Committee	Convener	Members
Strategy Committee	HUI WANG	HUI WANG, HAIPING DUN, STEPHEN SUN-HAI CHIAO
Audit Committee	SUTONG ZHANG	SUTONG ZHANG, MINGXIU PENG, ZHANBING REN
Nomination Committee	DI ZHANG	DI ZHANG, MINGXIU PENG, CHARLES LAW
Compensation and Appraisal Committee	ZHANBING REN	ZHANBING REN, DI ZHANG, HAIPING DUN

Since the establishment of each special committee of board of directors, each special committee of board of directors and its members have diligently and responsibly performed their duties in accordance with provisions of the *Article of Association, the Working Rules of Board of Directors* and the working rules therefor.

(VII) Defects and improvements in the corporate governance of the Issuer

Since the incorporation of the joint stock company, the Company has gradually established and perfected systems of general meeting of shareholders, board of directors, supervisory board, independent directors, secretary of board of directors and special committees, formulated a series of rules, such as the *Rules on Procedures of General Meeting of Shareholders, the Rules on Procedures of Meeting of Board of Directors, the Rules on Procedures of Meeting of Supervisory Board, the Working Rules of Independent Directors, the Working Rules of Strategy Committee, the Working Rules of Audit Committee, the Working Rules of Nomination Committee, the Working Rules of Compensation and Appraisal Committee, the Rules for the Administration of External Securities, the Rules for the Administration of External Investments, the Measures for the Administration of Related Transactions, the Rules for the Administration of Preventing the Controlling Shareholder and Related Parties from Occupying and Using Funds of the Company*, in accordance with relevant laws, regulations and the Articles of Association, and is able to effectively implement and enforce the above rules and normatively operate according to laws.

II. Shares with Special Voting Rights of the Issuer

As of the execution date of this [***], the Issuer does not have any share with special voting rights or any other similar arrangement. ACMR, the controlling shareholder of the Company, is a listed company of the NASDAQ stock market in the U.S., which has shares with special voting rights. As presented in the legal opinion on ACMR issued by the offshore lawyer and the announcements on disclosure of ACMR, the details of shares having special voting rights of ACMR are shown as follows:

(I) Resolutions of shareholders' general meeting creating special voting rights arrangement

ACM Research, Inc. (California), the predecessor of ACMR, was incorporated in the State of California, the USA in January 1998; and in September 2016, ACM Research, Inc. (Delaware), a wholly-owned subsidiary of ACM Research, Inc. (California), was incorporated in the State of Delaware, the USA; and in November 2016, ACM Research, Inc. (Delaware) reorganized, absorbed and merged ACM Research, Inc. (California). After the reorganization, the former California Company no longer exists and ACM Research, Inc. registered in Delaware, the USA, continues to exist.

The special voting rights on shares of Class A common stock and Class B common stock are provided in the Certificate of Incorporation approved by the shareholders when ACM Research, Inc. (Delaware) was incorporated. In October 2017, ACMR's shareholders approved and consented to the restatement and amendment to the Certificate of Incorporation, and thereafter the contents of ACMR's Certificate of Incorporation have not changed.

(II) Operating term of special voting rights arrangement

ACMR's special voting rights arrangement begins to operate after the Certificate of Incorporation of ACM Research, Inc. (Delaware) comes into effect, and has no specified operating term.

(III) Qualifications for holders

After ACM Research, Inc. (Delaware) reorganized, absorbed and merged ACM Research, Inc. (California), each share of common stock issued by ACM Research, Inc. (California) prior to merger will be converted into a share of Class B common stock.

According to the Restated Certificate of Incorporation of ACMR, subject to certain permitted transfers of shares of Class B common stock by existing holders of Class B common shares, no shareholders are eligible to receive shares of Class B common stock. "Permitted Transfer" shall mean any transfer of a share of Class B common stock:

1. by a Qualified Shareholder to one or more Family Members or Permitted Entities of such Qualified Shareholder;
2. by a Permitted Entity of a Qualified Shareholder to such Qualified Shareholder or one or more Family Members or other Permitted Entities of such Qualified Shareholder; or
3. by a Qualified Shareholder to a natural person or entity that both: are always the sole equity owner of such Qualified Shareholder from the date when such Qualified Shareholder becomes a Qualified Shareholder until the date of such transfer.

"Qualified Shareholder" shall mean: with respect to a share of Class B common stock, the holder of such share of Class B common stock as of the filing date (November 7, 2017) of Restated Certificate of Incorporation, or a transferee shareholder of such share of Class B common stock pursuant to a Permitted Transfer after the Filing Date.

"Permitted Entity" shall mean, with respect to a Qualified Shareholder: 1. a bona fide trust for which (1) the trustee is such Qualified Shareholder, the trustee of such Qualified Shareholder, a Family Member of such Qualified Shareholder, or a professional in the business of providing trustee services (including a private professional fiduciary, trust company or bank trust department) and (2) the beneficiaries are comprised solely of such Qualified Shareholder, one or more Family Members or trust beneficiaries of such Qualified Shareholder, or one or more other Permitted Entities of such Qualified Shareholders; or 2. a general partnership, limited partnership, limited liability company, corporation or other entity owned exclusively by such Qualified Shareholder or one or more Family Members or other Permitted Entities of such Qualified Shareholder.

(IV) Arrangement on the percentage between the number of voting rights for each special voting share and the number of voting rights for each share of common stock

As of June 30, 2021, the shares of common stock issued by ACMR total 19,376,014. The common stock is divided into Class A common stock and Class B common stock, among which the shares of Class A common stock total 17,668,409 and the shares of Class B common stock total 1,707,605. Each share of Class A common stock has one vote, and each share of Class B common stock has 20 votes.

(V) The scope of matters at the shareholders' general meeting that can be voted by holders with special voting rights

1. General matter vote

Unless otherwise required by the laws of Delaware, holders of shares of Class A common stock and Class B common stock shall vote together as one class at the annual general meeting or extraordinary general meeting. Under the laws of Delaware, holders of shares of Class A common stock and Class B common stock shall vote separately as single classes in the following circumstances:

(1) if ACMR seeks to amend the Restated Certificate of Incorporation to increase the number of authorized shares of a class of stock, or to increase or decrease the par value per share of a class of stock, then that class will be required to vote separately to approve the proposed amendment;

(2) if ACMR seeks to amend the Restated Certificate of Incorporation in a manner that will alter or change the powers, preferences or special rights of a class of stock which will adversely affect the holders of that class, then that class will be required to vote separately to approve the proposed amendment; and

(3) if ACMR seeks to declare a dividend or distribution that will be disparate as between the two classes, then each class would be required to vote separately to approve the dividend or distribution.

The holders of shares of Class A common stock and Class B common stock shall be entitled to share any dividend or distribution on a fair, equal and pro rate basis for each share, except the declaration of a dividend or distribution that would be disparate as between Class A common stock and Class B common stock is approved by the holders of a majority of outstanding shares of Class A common stock and Class B common stock, in which case, holders of each class shall be required to vote separately.

2. Change of Control Vote

Until the first date on which the outstanding shares of Class B common stock represent less than 35% of the total voting power of the then-outstanding capital stock of ACMR then entitled to vote generally in the election of directors, ACMR shall not consummate a change in control transaction without first obtaining the affirmative vote (or written consent if action by written consent of shareholders is permitted at such time under this Restated Certificate of Incorporation) of the holders of a majority of the then outstanding shares of Class B common stock, voting as a separate class, in addition to any other vote required by applicable law, the Restated Certificate of Incorporation or the bylaws of ACMR. For the foregoing purposes, each of the following events shall be considered a “change in control transaction”:

(1) A merger or consolidation in which

① ACMR is a constituent party or ② a subsidiary of ACMR is a constituent party and ACMR issues shares pursuant to such merger or consolidation.

Except any such merger or consolidation involving the ACMR or a subsidiary in which the shares of capital stock of ACMR outstanding immediately prior to such merger or consolidation continue to exist, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of the surviving or resulting corporation or if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation.

(2) The sale, leasing, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by ACMR or any of its subsidiaries of all or substantially all the assets of ACMR and its subsidiaries taken as a whole.

Except where such sale, leasing, transfer, exclusive license or other disposition is to a wholly owned subsidiary of ACMR.

(VI) Lock-up arrangements and transfer restrictions for shares having special voting rights

The shares of Class B common stock of ACMR have no lock-up arrangements but transfer restrictions, the details of which are shown in “(III) Qualifications for Holders” in this Section. In addition, ACMR provides for the conversion of shares of Class B common stock into shares of Class B common stock in its Certificate of Incorporation, and discloses the provisions on such conversion in its Prospectus regarding IPO:

“Each outstanding share of Class B common stock is convertible into one share of Class A common stock: (a) at any time, at the option of the holder, or (b) upon any transfer of such share of Class B common stock, whether or not for value, except for certain transfers described in the Restated Certificate of Incorporation, including transfers to family members, trusts solely for the benefit of the shareholder or their family members, and partnerships, corporations, and other entities exclusively owned by the shareholder or their family members.

In addition, on or after the date of this Prospectus, all outstanding shares of Class B common stock will be automatically converted into shares of Class A common stock, on a one for one basis, upon: (a) the adoption of the holders of a majority of the then outstanding shares of Class B common stock, or (b) on the first December 31 that occurs five years after the date of this Prospectus if the October Market Cap with respect to the month of October immediately preceding such December 31 exceeds US\$1.0 billion, provided that the conversion above shall not apply and no automatic conversion of Class B common stock into Class A common stock will ever occur pursuant to the provisions above if the October Market Cap for the month of October immediately preceding a December 31 exceeds US\$1.0 billion prior to the fifth anniversary of the date of this Prospectus.

“October Market Cap” means, with respect to any October throughout which Class A common stock is traded on a registered securities exchange, the product of the average of the daily volume weighted average trading prices of Class A common stock for each of the days in such month of October multiplied by the number of shares of common stock outstanding on the last trading day of such month of October.”

As per the 2020 annual report disclosed by ACMR, the “October Market Cap” of ACMR in 2020 exceeded US\$1 billion, and accordingly no Class B common stock of it will be automatically converted into Class A common stock pursuant to relevant provisions.

(VII) The potential risks caused by the disparate voting arrangements, their impacts on the corporate governance and the relevant investor protection measures

1. The potential risks caused by creation of Class A and Class B shares by ACMR and the investor protection measures

Under the special voting rights mechanism, HUI WANG holds more than 35% of the voting rights of ACMR, and can play a decisive role at the shareholders’ general meeting of ACMR with the largest voting right status to a certain degree, leading in turn to his decisive influence on the personnel, financial, business decisions and other major issues of ACMSH through ACMR acting as the controlling shareholder of ACMSH. Therefore, the ability of ACMR or other shareholders of ACMSH to nominate and elect directors and participate in decision-making of the Company would be subject to certain limitations.

The Company has made a warning prompt about “Risks of Improper Intervention by De Facto Controller” in “Section IV Risk Factors” in the [***].

Since the incorporation of the joint stock company, ACMSH has gradually established and perfected systems of shareholders’ general meeting, board of directors, supervisory board, independent directors, secretary of board of directors and special committees, formulated a series of corporate governance rules in accordance with relevant laws, regulations and the Articles of Association, and is able to effectively implement and enforce the above rules and normatively operate according to laws.

2. The potential risks caused by the provisions on conversion of shares of Class B common stock into shares of Class A common stock of ACMR and the investor protection measures

According to the provisions of ACMR on conversion of shares of Class B common stock into shares of Class A common stock, if all outstanding shares of Class B common stock of ACMR are converted into shares of Class A common stock, on a one for one basis, then Hui WANG will hold less than 10% of voting rights in ACMR, and may lose the largest voting right status such that ACMR will be changed to a company without controlling shareholder and de facto controller, indirectly resulting in ACMSH having no de facto controller.

HUI WANG, the de facto controller of the Company, holds more than 50% of the total shares of Class B common stock in ACMR, and HUI WANG has issued the letter of commitment with respect thereto which reads: “to ensure the stability of the de facto controller of the Issuer, I irrevocably make commitment that I will not voluntarily or actively convert shares of Class B common stock held by me in ACMR into shares of Class A common stock within 36 months from the date of this letter until the date of the IPO and listing of issuer’s stocks on the Science and Technology Innovation Board.” Therefore, if ACMR’s Class B shares have not undergone a mandatory conversion due to market value, the Class B shares held by HUI WANG will not be voluntarily converted into Class A shares within 36 months from the date of the IPO and listing of ACMSH’s stocks on the Science and Technology Innovation Board, accordingly the Issuer will not have a change in the de facto controller because of the provision on conversion of Class B shares into Class A shares of ACMR.

In addition, as per the 2020 annual report disclosed by ACMR, the “October Market Cap” of ACMR in 2020 exceeded US\$1 billion, and accordingly no Class B common stock of it will be automatically converted into Class A common stock pursuant to relevant provisions. As such, the Issuer will not be exposed to risks of the de facto controller losing control due to the market capitalization of ACMR.

III. Structure of Contractual Control of the Issuer

As of the execution date of this [***], the Issuer does not have any structure of contractual control.

IV. Self-appraisal of the Management and Certification Opinions of Certified Public Account on Internal Control

(I) Self-appraisal opinions on the completeness, reasonableness and effectiveness of internal control

The Company has maintained effective internal control of financial reports in all material respects as required by the normative system of enterprise internal control and relevant provisions.

According to rules on the determination of major deficiencies in internal control of non-financial reports, as of the base date of the appraisal report on internal control, the Company has not found any major deficiencies in internal control of non-financial reports.

During the period commencing from the base date of the appraisal report on internal control to the date on which the appraisal report on internal control is issued, no factor affecting appraisal conclusion on the effectiveness of internal control occurs.

(II) Evaluation of the accounting firm on the system of internal control of the Company

According to the Certification Report of Internal Control issued by BDO China SHU LUN PAN Certified Public Accountants LLP with respect to the internal control of the Company, “as of June 30, 2021, ACMSH maintains effective internal control in connection with financial reports in all material respects in accordance with the Basic Rules on Enterprise Internal Control and relevant provisions.”

V. Funds Occupancy and External Securities of the Issuer

During the Reporting Period, the Company exists fund transactions with the controlling shareholder, ACMR, please refer to “(II) Non-recurrent Related Transactions” of “X Related Transactions” of this Section for details.

Except for the above, during the Reporting Period, the Company does not exist any occupancy of funds by the controlling shareholder, the de facto controller or any other enterprise controlled by it, nor does it exist any security created for the controlling shareholder, the de facto controller or any other enterprise controlled by it.

VI. Violations of Laws or Regulations by the Issuer

During the Reporting Period, the specific circumstances under which the Company and its subsidiaries are subject to administrative punishments are as follows:

1. In December 2017, the Company received the Decision on Administrative Punishment (Hu Guan Ji Wei Zi (2017) No.36) issued by the customs authority of Shanghai Pudong because the Company had successively applied to the customs authority for tax exemption of 458 pieces of various imported equipment in the trading means of “joint-venture equipment” or “foreign-invested equipment and items” for 16 times during the period commencing from April 30, 2008 to June 10, 2009. After imported, the Company arbitrarily disposed of the above tax-exempted equipment or used them for other purposes without the consent of the customs authority, and a fine of RMB 582,000 Yuan was thereby imposed on the Company according to provisions of the Customs Law of the People’s Republic of China and the Implementation Regulations on Customs Administrative Punishments of the People’s Republic of China. The above disposal or change of use for other purposes was the export of sample cleaning equipment for research and development which were assembled and completed by using tax-free parts subject to the regulation of customs to Korean clients beyond the jurisdiction of Chinese customs for research, development and testing under the circumstances that the Company fails to apply to the customs. As of the execution date of this [***], the above fine has been paid in full.

Article 86 of the *Customs Law* stipulates: “Anyone who violates the provisions of this law and commits one of the following acts may be fined, and if there are illegal gains, the illegal gains shall be confiscated: ... (X) the goods under supervision of the customs are opened, picked up, delivered, shipped, exchanged, refitted, mortgaged, pledged, lien created, transferred, marks changed, transferred to other uses or otherwise disposed without the permission of the customs ...”; Article 18 of the *Regulations on the Implementation of Customs Administrative Penalties* stipulates: “Anyone who commits one of the following acts shall be fined 5% to 30% of the value of the goods. If there are illegal gains, the illegal gains shall be confiscated: (1) the goods under supervision of the customs are opened, picked up, delivered, shipped, exchanged, refitted, mortgaged, pledged, lien created, transferred, marks changed, transferred to other uses or otherwise disposed without the permission of the customs...”.

Article 12 of the *Measures for Enterprise Credit Management by the Customs Administration of the People’s Republic of China* stipulates that, “In any of the following circumstances, an enterprise shall be determined as discredited: 1. Committing the crime of smuggling or conducting an act of smuggling; 2. For enterprises other than Customs brokers, the number of violation against Customs regulatory provisions within one year exceeding 0.1% of the total number of the declarations, entry-exit filing lists, and manifests of the inbound and outbound conveyance of the previous year, and administrative sanctions amounted to more than RMB 1 million cumulatively; for Customs brokers, the number of violation against customs regulatory provisions within one year exceeding 0.05% of the total number of the declaration forms and entry-exit filing lists and manifests of the inbound and outbound conveyance of the previous year, and administrative sanctions amounted to more than RMB 300,000 Yuan cumulatively. 3. In arrears with payable taxes and/or fines and confiscated illegal gains due; 4. Meeting the second circumstance indicated in the second paragraph, Section I, Article 8 hereof and listed in the directory of enterprises with abnormal credit information for more than 90 days; 5. Fraudulently using the name of the Customs Administration or other enterprises to seek illegal profit; 6. Concealing facts from the Customs Administration and providing false information which exerts negative impact on enterprise credit management; 7. Resisting and hindering the law enforcement of the Customs officers with severe consequences; 8. Being included in the national list of discredited enterprises subject to joint sanctions due to criminal offence; 9. Other circumstances provided by the General Administration of Customs. When the cumulative amount of administrative penalties against enterprises (other than customs brokers) or customs brokers recorded and registered with the Customs Administration in the current year exceeds RMB 1 million Yuan or RMB 300,000 Yuan respectively within one year due to the violation of Customs regulatory provisions, they are regarded as the discredited by the Customs Administration.”

Whereas: (1) The aforesaid customs administrative penalties do not belong to illegal acts involving national security, public safety, ecological safety, production safety, public health and safety, etc.; (2) The proportion of each of aforesaid fines to corresponding currency value is located at lower level of the penalty interval specified in Article 18 of the *Regulations on the Implementation of Customs Administrative Penalties*, and the administrative penalty decision does not identify such act as serious circumstance; (3) According to the Corporate Credit Status Certificate issued by Shanghai Customs and after Sponsor and the Issuer’s Attorney logging on the website of China Customs Enterprise Import and Export Credit Information Disclosure Platform (URL: <http://credit.customs.gov.cn/>) for inquiries, the issuer is recognized by the Customs as a general credit enterprise, and the above administrative penalties do not affect the adjustment of customs credit status; the issuer has not been identified as a dishonest enterprise, that is, there is no situation as stipulated in Article 12 of the *Measures for Enterprise Credit Management by the Customs Administration of the People’s Republic of China*. Based on this, the Sponsor and the Issuer’s Attorney believe that the aforesaid administrative penalties imposed on ACMSH (before restructuring) do not constitute major violations of laws and regulations and will not have a significant adverse impact on the Issuer’s current offering and listing.

2. On October 9, 2019, the Company received the Decision on Administrative Punishment (Hu Pu Ji Guan Jian Wei Zi [2019] No.2546) issued by the customs authority of Shanghai Pudong International Airport, which states “the party holding the declaration form numbered 223320191001125917 applies to the customs authority for importing goods in the trading means of general trade, but the application was found to be untrue after examination: the specifications and model of goods in the third item were applied and reported as resistors switching different value of resistance through band switches within the designated scope of frequency, but were actually used for power of silicon chip cleaning machines; the application and reporting number of goods was 8543709990 but actually was 8548900002.” According to provisions of paragraph 3 of Article 86 of the *Customs Law* and paragraph (1) of Article 15 of the *Implementation Regulations on Customs Administrative Punishments*, the customs authority of Shanghai Pudong International Airport imposed a fine of RMB 1,000 Yuan on the Company. As of the execution date of this [***], the above fine has been paid in full.

Article 86 of the *Customs Law* stipulates: “Anyone who violates the provisions of this law and commits one of the following acts may be fined; if there are illegal gains, the illegal gains shall be confiscated: ... (III) False declaration of import and export of goods or items, or transit, transshipment or through goods to the customs”; Article 15 of *Regulations on the Implementation of Customs Administrative Penalties* stipulates: “Failure to declare or to truthfully declare to the Customs the commodity name, tariff headings, quantity, specifications, prices, term of trade, origin, place of dispatch, place of arrival, final destination or other items of the import or export goods which should be so declared shall be punished respectively in accordance with the following provisions and the illegal gains, if any, shall be confiscated: (I) where it has an effect on the accuracy of Customs statistics, a warning shall be given or a fine of not less than RMB 1,000 Yuan but not more than RMB 10,000 Yuan shall be imposed;...”.

In view of the fact that aforesaid fine of ACMSH (before restructuring) is only RMB 1,000 Yuan, which is the lower limit of the penalty amount, the relevant penalty decision did not determine that the act was serious and the relevant fine has been paid; therefore, the Sponsor and the Issuer’s Attorney believe that the aforesaid customs administrative penalties imposed on ACMSH (before restructuring) do not constitute major violation of laws and regulations.

3. In April 2018, due to the expiration of work visa of LISA YI LU FENG, an employee of the Company, the Pudong branch of Shanghai Municipal Public Security Bureau issued a notification of administrative punishment against the Company and LISA YI LU FENG respectively, and imposed a fine of RMB 10,000 Yuan and RMB 5,000 Yuan respectively. As of the execution date of this [***], the above fines have been paid in full.

According to provisions of Article 41 of the Exit and Entry Administration Law, foreigners who work in China shall obtain work permits and work-type residence permits in accordance with relevant provisions. No entities or individuals shall employ foreigners who have no work permits or work-type residence permits. The paragraph 3 of Article 80 provides that individuals or entities that illegally employ foreigners shall be fined of RMB 10,000 Yuan for each illegally employed foreigner, with a cap of RMB 100,000 Yuan in total; and the illegal proceeds, if any, shall be confiscated.

Considering that the Company has already corrected the violations and paid such fines in full, therefore, the above administrative punishments imposed on the Company do not constitute material violations of laws or regulations.

4. In 2019, ACM Wuxi was subject to the confiscation of proceeds (fine of act) of RMB 1,000 Yuan imposed by tax authorities due to its failure to go through tax declaration of stamp taxes (purchase and sale contracts) as scheduled. As of the execution date of this [***], the above fines have been paid by ACM Wuxi in full.

On March 9, 2020, Wuxi City Xinwu District Tax Bureau in Wuxi National High-Tech Industrial Development Zone of State Administration of Taxation issued a *Notification on Search Results of Tax-related Information* to confirm that ACM Wuxi failed to file tax returns of stamp duties (purchase and sale contracts) as scheduled for the period commencing from March 1, 2017 to October 31, 2007 within the period commencing from January 1, 2007 to December 31, 2019, which has been rectified at present; in addition, ACM Wuxi does not have any other punishment records.

According to provisions of Article 62 of the *Law on the Administration of Tax Collection of the People’s Republic of China*, “If a taxpayer fails to accomplish declaration of tax or to submit tax payment materials within the specified period, or a person having the withholding obligation fails to submit statements on tax withholding, collection and remittance within the specified period, the tax authority shall order him to make corrections within a given time limit and may impose a fine not exceeding RMB 2,000 Yuan or a fine exceeding RMB 2,000 Yuan but not exceeding RMB 10,000 Yuan if the circumstance is serious.” Considering that the amount of the fine imposed by the above tax authority is RMB 1,000 Yuan, the amount is relatively small, and thus shall not constitute a serious circumstance, and ACM Wuxi has already made corrections and paid the fine in full, therefore, the above tax-related violation made by ACM Wuxi shall not constitute a material violation of tax laws, nor the above tax-related punishment will constitute a material tax-related punishment.

5. On June 12, 2020, the Company received the *On-the-spot Punishment Decision of Shanghai Public Security Bureau* (1631820040) issued by Pudong Branch of Shanghai Public Security Bureau, pursuant to which, a decision was made to impose a fine of RMB 500 Yuan on the Company for its failure to record the purchase of flammable and explosive chemicals as required in accordance with item (5), paragraph 1, Article 81 of the *Regulations on the Safety Management of Hazardous Chemicals*. As of the date hereof, the Company has paid such fine in full.

Item (5), paragraph 1, Article 81 of the *Regulations on the Safety Management of Hazardous Chemicals* stipulates: “Where anyone is under any of the following circumstances, the public security organ shall order it to correct, and may impose a fine of up to RMB 10,000 Yuan; and, if it refuses to correct, impose a fine of RMB 10,000 Yuan up to RMB 50,000 Yuan:... (5) An entity selling or purchasing highly toxic chemicals or hazardous chemicals which can be used to produce explosives fails to report the variety, quantity and destination of the chemicals it sold or purchased to the public security organ of the local people’s government at the county level for archival purposes within the prescribed time”. Given the above fine is in a small amount, and the Company has corrected the violations and paid the relevant fine in full, the above administrative punishment imposed on the Company does not constitute a material violation of laws and regulations.

In conclusion, the above acts on which administrative punishments were imposed conducted by the Issuer do not constitute serious circumstances or material violations of laws or regulations. Considering the amounts involved in the above administrative punishments are relatively small, the acts will not constitute material adverse effect on operational or financial circumstances of the Issuer, and the Company have already corrected the above acts. At the same time, the above violations of laws or regulations have not resulted in any serious environmental pollution, material casualties or odious social effect, do not constitute materially illegal acts involving national security, public security, ecological security, production safety, public health safety, etc. Therefore, the violations of laws or regulations involved in the above administrative punishments will not constitute a substantive obstruction to this public offering.

Except for the above, the Issuer does not have any other illegal act during the Reporting Period.

VII. Independent and Continuous Operation of the Issuer Directed to the Market

Since the incorporation of the Company, it has established a normative corporate governance structure as required by the *Company Law*, the *Securities Law* and the *Articles of Association*, is independent of shareholders of the Company and other enterprises controlled by such shareholders in terms of assets, personnel, finance, organization, business, etc., and has an independent and complete system of R&D, procurement, production, sales and services and the ability to independently face the market and carry out its operational activities by itself.

(I) Completeness of assets

The Company is incorporated from the change of ACMSH in its entirety and succeeds to all assets of ACMSH according to laws, and the Company’s sponsors have completed their contribution of assets to the Company in full. The Company legally owns machinery, equipment and other fixed assets and intangible assets, such as patents, necessary for its production and operation, and the title to them is clear. The Company has an independent system of raw materials procurement and product sales. As of the execution date of this [***], none of the controlling shareholder or other enterprises controlled thereby illegally occupies or uses any asset of the Issuer.

(II) Independence of personnel

The Company has an independent system of human resources management, and all directors, supervisors and senior executives of the Company are generated and hold their positions in strict accordance with relevant provisions of the *Company Law and the Articles of Association*. All of the general manager, deputy general managers, person in charge of financial matters, secretary of board of directors and other senior executives of the Company work for the Company on a full-time basis and receive compensations from the Company, they do not hold any position (other than director, supervisor) in any other enterprise controlled by the controlling shareholder or the actual controller, or any other enterprise engaging in the business identical or similar with that of the Company. No financial personnel of the Company hold any position in a shareholder, or any other enterprise controlled thereby on a part-time basis.

(III) Independence of finance

The Company has established an independent system of financial accounting, is able to make financial decisions and has normative financial accounting rules and rules on the administration of financial matters of its subsidiaries, without any circumstance under which any shareholder interferes with the Company's use of its funds. The Company opens bank accounts independently and pays taxes independently according to laws.

(IV) Independence of organization

The Company has established the general meeting of shareholders, board of directors, supervisory board and other decision-making and supervisory bodies, built an effective corporate governance structure according to laws and independently exercises its authorities of operation and management. There is no mix-up situation between the Company and any of its shareholders or other enterprises controlled by it, since the incorporation of the Company, no shareholder has ever interfered with the normal activities of production and operation of the Company.

(V) Independence of business

The Company and its subsidiaries independently carry out their operational activities, mainly engage in the R&D, production and sales of special-purpose semiconductor equipment, their main products include semiconductor cleaning equipment, semiconductor plating equipment, advanced package wet process equipment, etc. The Company is independent of major shareholders and enterprise thereby in terms of business, makes its own decisions on operation independently, owns a complete system of procurement, production and sales, and does not have any related transaction which will seriously affect independence or is obviously unfair with any of its major shareholders. Both ACMR, the controlling shareholder of the Company, and HUI WANG, the de facto controller of the Company, have issued the *Commitment Letter on Avoiding Horizontal Competition* to undertake that they will not directly or indirectly engage in any competing business identical or similar with the principal business of the Company.

(VI) Stability of directors, senior executives and key technicians

The Issuer and its subsidiaries have always been committed to researching and developing, producing and selling special-purpose semiconductor equipment in the most recent two years, their main products include semiconductor cleaning equipment, semiconductor plating equipment, advanced package wet process equipment, etc., and there is no change in their principal business; there is no material adverse change in directors, senior executives and key technicians of the Issuer in the most recent two years; the ownership over shares held by ACMR, the controlling shareholder of the Issuer, and major shareholders is clear without any material dispute on the ownership which may result in any change in control.

(VII) Other matters

The ownership over main assets, core technologies and trademarks of the Issuer is clear without any material dispute on the ownership or material repayment risk, material security, litigation, arbitration or other contingent matters. There is no circumstance under which the continuous operation will be materially affected, like the business environment has or will be changed materially.

VIII. Horizontal Competition

(I) Information on horizontal competition

The controlling shareholder of the Company is ACMR, and the de facto controller of the Company is HUI WANG. There is no horizontal competition between the Company and its controlling shareholder, de facto controller or other enterprises controlled thereby.

ACMR holds 91.67% of equity in the Company and 100% of equity in ACM Research (Cayman), INC. and ACM RESEARCH (SINGAPORE) PTE. LTD. ACMR is a holding company without engaging in other businesses. ACM Research (Cayman), INC. does not engage in any actual business, who planned to operate ACMKR and other overseas subsidiaries of ACMR as a controlling platform of ACMR for businesses outside Mainland China, but has no other business plan after the Company indirectly acquired 100% equity in ACMKR from ACMR. ACM Research (Singapore) PTE. Ltd has no other business planning.

Neither HUI WANG, the de facto controller of the Company, nor ACMR, the controlling shareholder of the Company, controls any other company engaging in special-purpose semiconductor equipment, without any horizontal competition with the Company.

(II) Commitments on avoidance of horizontal competition

To avoid horizontal competition or potential horizontal competition, preserve interests of the Company, safeguard normal operation of the Company, the de facto controller, the persons acting in concert JING CHEN, BRIAN WANG and SOPHIA WANG, the family trusts David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust, and the controlling shareholder of the Company have issued the Commitment Letter on Avoiding Horizontal Competition respectively to undertake that:

“1. I/We (including me/our enterprise/other enterprises controlled by our trust (except the Issuer and its holding enterprises), the same below) have not engaged in any business or activity which is competing with the principal business of the Issuer (including enterprises directly and indirectly controlled by the Issuer) at present in any form; the assets of the Issuer are complete, and all of its assets, businesses, personnel, finance and organization are independent of me/us.

2. As of the date on which this Letter is issued, I/we will not engage in any business or activity which is competing with the principal business of the Issuer in any form, or support any enterprise other than the Issuer in engaging in any business or activity which is competing with the principal business of the Issuer in any manner.

3. As of the date on which this Letter is issued, if I/we inevitably engage in any business or activity which is competing with that of the Issuer in the future, I/we will initiatively, or upon a dispute raised by the Issuer, transfer or terminate the above business in a timely manner, and the Issuer shall have the right of first refusal with respect to such business.

4. The above commitments shall remain in force within the period in which I/we act as the de facto controller/controlling shareholder of the Issuer.”

IX. Related Party and Related Relationship

According to provisions of the *Company Law*, the *Accounting Standards for Business Enterprises* and the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, related parties and their related relationship of the Company are as follows:

(I) De facto controller and controlling shareholder

The controlling shareholder of the Company is ACMR, and the de facto controller of the Company is HUI WANG. For basic information on them, please refer to “V. (I) Controlling Shareholder and Actual Controller” of “Section V Overview of the Issuer” of this [***].

(II) Shareholders directly or indirectly holding more than 5% of shares of the Issuer

Except for the controlling shareholder, there is no shareholder directly holding more than 5% of shares of the Issuer.

The legal persons or other organizations indirectly holding more than 5% of shares of the Issuer are Shanghai Science and Technology Venture Capital Co., Ltd. and Pudong Science and Technology Cayman Co., Ltd.

(III) Subsidiaries and equity participation corporations of the Issuer

As of the execution date of this [***], the Company has 5 subsidiaries in total, i.e. CleanChip HK, ACM Wuxi, Shengwei Shanghai, ACMKR and ACM CA, and 3 equity participation corporations i.e. Shengyi Technology, Shixi Chanheng and Qingdao Yuyuan. For specific information on the above corporations, please refer to “IV. Controlled Subsidiaries and Equity Participation Companies of the Issuer” of “Section V Overview of the Issuer” of this [***].

(IV) Legal person or other organizations directly or indirectly controlled by legal persons or other organizations directly holding more than 5% of shares of the Issuer

As of the execution date of this [***], the legal person directly holding more than 5% of shares of the Issuer is ACMR which holds 100% of shares in ACM Research (Cayman), INC. and ACM RESEARCH (SINGAPORE) PTE. LTD.

(V) Directors, supervisors, senior executives of the Issuer and their closely related family members

The directors, supervisors and senior executives of the Company and their closely related family members are related parties of the Company.

(VI) Directors, supervisors, senior executives and other main responsible persons of legal persons or other organizations directly or indirectly controlling the Issuer

The controlling shareholder of the Company is ACMR, and directors of ACMR are HUI WANG, HAIPING DUN, CHENMING C. HU, TRACY DONG LIU, YINAN XIANG, ZHENGFEAN YANG. HUI WANG and MARK MCKECHNIE serve as CEO and CFO of ACMR respectively.

(VII) Legal persons or other organizations (other than the issuer and its subsidiaries) which are directly or indirectly controlled or materially affected by directors, supervisors, senior executives of the Issuer and their closely related family members or directors, supervisors, senior executives or other main responsible persons of legal persons or other organizations directly or indirectly controlling the Issuer, or in which the above persons (except for independent directors) serve as directors or senior executives.

1. Legal persons or other organizations (other than the Issuer and its subsidiaries) which are directly or indirectly controlled or materially affected by directors, supervisors, senior executives of the Issuer and their closely related family members or in which the above persons (except for independent directors) serve as directors or senior executives

Legal persons or other organizations (other than the Issuer and its subsidiaries) which are directly or indirectly controlled or materially affected by directors, supervisors, senior executives of the Company or in which the above persons (except for independent directors) serve as directors or senior executives are related parties of the Company, please refer to “(X) External Investments Made by Directors, Supervisors, Senior Executives and Key Technicians of the Company” and “(VII) Brief Information of Directors, Supervisors, Senior Executives and Key Technician” of “Section V Overview of the Issuer” of this [***] for specific information.

Legal persons or other organizations (other than the Issuer and its subsidiaries) which are directly or indirectly controlled or materially affected by closely related family members of directors, supervisors, senior executives of the Company or in which the above persons (except for independent directors) serve as directors or senior executives are related parties of the Company, specifically:

Name	Relationship	Entity in which the Position is Held/Controlled Entity	Information on the Position/Control
PING-HAI CHIAO	Brother of STEPHEN SUN-HAI CHIAO, a director	Zhengzhou Xingjingwang Enterprise Management Consulting Partnership (Limited Partnership)	Holding 76.69% of interest shares
		Shanghai Jingmeng Silicon Materials Co., Ltd.	Director
		Shanghai Wafer Works Materials Co., Ltd.	Director
		Taiwan Wafer Works	Chairman, General Manager
		Silicon Technology Investment (Cayman) Corp.	Director
		Grand Sea Investments Limited	Holding 100% of shares
		Jingcai Technology Co., Ltd.	Chairman
		Helitek Company Ltd	Executive Officer
		Wafer Works Investment Corp.	Director
		Ruizheng Co., Ltd	Director
		Wafermaster Investment Corp.	Director
		Weihai Investment Co., Ltd.	Chairman, holding 100% if shares
Ren Du Xiaochun	Sister of ZHANBING REN, a director	Shanghai Ruizhong International Trading Co., Ltd.	Holding 70% of equity interests
		SinoGroupe Sàrl	CEO
ZHONGRUI XIA	Spouse of QIAN DONG, a supervisor	Ruizhang Technology Co., Ltd.	Chairman
		Shanghai Lianwan Investment Management Center (Limited Partnership)	Executive Partner
		Amlogic Holding Ltd	Director
		Shanghai Ruizhang Internet of Things Technology Co., Ltd.	Director
		Shanghai Yuezhang Investment Co., Ltd.	Executive Director
		Shanghai Ruizhang Investment Co., Ltd.	Director, General Manager
		Shanghai Wearlinks Technology Inc.	Chairman
		Shanghai Datatist Information Technology Inc.	Director
		Chongqing Ruizhang Technology Co., Ltd.	Executive Director
		Aliaen Technology, LLC	Chairman
YIFU ZHANG	Son of SUTONG ZHANG, a director	Chuangxiang Xingkong (Tianjin) Technology Co., Ltd.	Executive Director and General Manager, holding 99.00% of shares
		Minglue Chuangxin (Beijing) Technology Co., Ltd.	Chairman and General Manager, holding 40.35% of shares
		Shanghai Maiyunxinhe Enterprise Management Center (L.P.)	Executive Partner, holding 33.40% of share
		Beijing Huili Tongda Technology Co., Ltd.	Executive Director and General Manager, holding 100% of shares

2. Legal persons or other organizations (other than the Issuer and its subsidiaries) which are directly or indirectly controlled or materially affected by directors, supervisors, senior executives or other main responsible persons of legal persons or other organizations directly or indirectly controlling the Issuer, or in which the above persons (except for independent directors) serve as directors or senior executives

Specific information on legal persons or other organizations (other than the Issuer and its subsidiaries) which are directly or indirectly controlled or materially affected by directors, supervisors, senior executives or other main responsible persons of legal persons or other organizations directly or indirectly controlling the Issuer, or in which the above persons (except for independent directors) serve as directors or senior executives is as follows:

Name	Position in ACMR	Entity in which the Part-time Position is Held/Controlled Entity	Information on the Part-time Position/Control
CHENMING HU	Director	Ambarella Inc.	Director
		Duntai Electronics Co., Ltd	Director
		University of California, Berkeley (Department of Electrical Engineering and Computer Sciences)	Professor
		Inphi Corporation.	Director
YINAN XIANG	Director	Shanghai Science and Technology Venture Capital (Group) Co., Ltd.	Deputy General Manager
		Shanghai Venture Capital Consultant Co., Ltd.	Executive Director
		Ensense Biomedical Technologies (Shanghai) Co., Ltd	Director
		Shanghai International Wine Exchange Center Co., Ltd.	Director
		Shanghai Sand Information Technology System Co., Ltd	Director
		CETC Shanghai Microwave Communication CO., LTD	Director
		Shanghai COSUNET Technology Co., Ltd.	Director
		Shanghai Radk-Tech Hydraulic System Co., Ltd.	Director
		RolandBerger Yunsai (Shanghai) Enterprise Service Co., Ltd.	Director
		Shanghai Rail Transit Inspection and Certification (Group) Co., Ltd.	Director
		Shanghai Huaxiang Computer Communication Engineering Co., Ltd.	Director
		Shanghai Zhongheng Information Industry Co., LTD.	Director
		Shanghai Science & Technology Park of ECUST Co., Ltd.	Director
		Shanghai Caohejing Venture Capital Co., Ltd.	Chairman
		Shanghai Tissue Engineering Life Science Co., Ltd.	Chairman
		Shanghai Zhongxin Technology Venture Capital Co., Ltd.	Executive Director
		Shanghai PEIVY Huixin Venture Capital Co., Ltd.	Chairman
		Shanghai Zhaofeng Chuangye Investment Co., Ltd.	Chairman
		Shanghai Fudan Venture Investment Co., Ltd.	Chairman
		Shanghai Shenteng Information Technology Co., Ltd.	Director
		SICIF	Director
		Shanghai Foremost Group CO., LTD.	Director
		Shanghai Qianji Biomedical Venture Capital Co., Ltd.	Director
		Shanghai Qianji Venture Capital Management Co., Ltd.	Director
		Shanghai Masteck Environment Co., Ltd.	Director
		Shanghai Shangchuang Junqiang Investment Management Co., Ltd.	Director

3. Information on business contacts between the Company and the above related parties

During the Reporting Period, the information on business contacts between the Company and the above related parties is as follows:

Serial Number	Name of Related Party	Information on Related Relationship
1	NINEBELL	HUI WANG, a director of the Company, serves as a director of this company
2	Shanghai Jingmeng Silicon Materials Co., Ltd.	PAT PING-HAI CHIAO, a brother of STEPHEN SUN-HAI CHIAO who is a director of the Company, served as a director of this company
	Shanghai Wafer Works Materials Co., Ltd.	PAT PING-HAI CHIAO, a brother of STEPHEN SUN-HAI CHIAO who is a director of the Company, served as a director of this company
3	Taiwan Wafer Works	PAT PING-HAI CHIAO, a brother of STEPHEN SUN-HAI CHIAO who is a director of the Company, served as the Chairman and CEO of this company
4	AMEC	ZHENG FAN YANG, a former director of ACMR, serves as a director of this company
5	Shanghai Sand Information Technology System Co.	YINAN XIANG, a director of ACMR, serves as a director of this company
6	Law and Law	Charles Law, a director of ACMR, serves as the managing partner of this firm

(VIII) Other related parties

Except for the above disclosed related parties, other related parties of the Issuer also include natural persons, legal persons or other organizations which had related relationship with the Company during the Reporting Period, and other persons deemed to be related parties of the Issuer determined based on the principle of substance over form, which have special relationship with the Issuer which may result in the inclination of interests of the Issuer to it or are deemed to be related parties of the Issuer within 12 months as of the date of transaction or 12 months after relevant transaction agreements take effect or relevant arrangements are put into place.

During the Reporting Period, the information on business contacts between the Company and the above related parties is as follows:

Serial Number	Name of Related Party	Information on Related Relationship
1	Shengxin Shanghai	JIAN WANG, the director and general manager of the Issuer, holds 100% of equity interest in ShengYuan Management Consulting (Shanghai) Co., Ltd. which was the general partner of Shengxin Shanghai
2	Shanghai Integrated Circuit	LING LIN and ZHIDE Yuan served as directors of the Company during the Reporting Period, who serves or served directors of Shanghai Integrated Circuit

Note: ShengYuan Management Consulting (Shanghai) Co., Ltd. was deregistered on September 1, 2020.

The basic information on Shengxin Shanghai is as follows:

Name	Shengxin (Shanghai) Management Consulting Partnership (L.P.)
Unified Social Credit Code	91310115MA1K3BAU2L
Principal Place of Business	Room 210-32, 2 nd Floor, Building 1, No.38 Debao Road, China (Shanghai) Pilot Free Trade Zone
Executive Partner	Xinrun Management Consulting (Shanghai) Co., Ltd.
Category of Company	Limited Partnership
Scope of Business	Enterprise management consultancy; enterprise marketing planning; commercial information consultancy; market information consultancy and investigation (being prohibited from engaging in social investigation, social survey, public opinion survey, public opinion poll); conference services. [For projects subject to any approval in accordance with laws, business activities may be carried out only after such approval of relevant authorities has been obtained]
Date of Establishment	May 4, 2016

As of the execution date of this [***], the partners of Shengxin Shanghai are as follows:

Name of Partner	Category of Partner	Capital Contribution (RMB 10,000 Yuan)	Proportion of Contribution (%)	Position of the Partner
YIQUN HU	Limited Partner	325	15.50	Friend of HUI WANG, the de facto controller of the Issuer
LINLI YU	Limited Partner	230	10.97	Wife of JIAN WANG, the general manager of the Issuer
XIAOHONG WANG	Limited Partner	200	9.54	Cousin of HUI WANG, the de facto controller of the Issuer
YUN MA	Limited Partner	200	9.54	Wife of a cousin of HUI WANG, the de facto controller of the Issuer
YITONG TANG	Limited Partner	162.5	7.75	External investor
GANG HUANG	Limited Partner	97.5	4.65	Partner of the Issuer
WEI CAO	Limited Partner	70	3.34	Schoolmate of HUI WANG, the de facto controller of the Issuer
FUPING CHEN	Limited Partner	61.75	2.94	Deputy General Manager of the Issuer
LIN LIU	Limited Partner	50	2.38	Friend of HUI WANG, the de facto controller of the Issuer
BEIYI WANG	Limited Partner	48.75	2.32	Partner of the Issuer
QIN LI	Limited Partner	43.875	2.09	Friend of HUI WANG, the de facto controller of the Issuer
HONGCHAO YANG	Limited Partner	32.5	1.55	Core Business Personnel of the Issuer
HUI SHEN	Limited Partner	32.5	1.55	Core Manager of the Issuer
MINGZHU LUO	Limited Partner	32.5	1.55	Board Secretary of the Issuer

YAN LI	Limited Partner	32.5	1.55	Core Manager of the Issuer
BAOMING LI	Limited Partner	32.5	1.55	Partner of the Issuer
HONG ZHOU	Limited Partner	32.5	1.55	Friend of HUI WANG, the de facto controller of the Issuer
SHENA JIA	Limited Partner	32.5	1.55	Core Manager of the Issuer
ZHAOWEI JIA	Limited Partner	30.875	1.47	Core Manager of the Issuer
YULU HU	Limited Partner	24.375	1.16	Core Business Personnel of the Issuer
XIAOFENG TAO	Limited Partner	24.375	1.16	Core Business Personnel of the Issuer
YU HOU	Limited Partner	24	1.14	Younger brother of the wife of an elder brother of HUI WANG, the de facto controller of the Issuer
WEN SUN	Limited Partner	16.25	0.77	Friend of HUI WANG, the de facto controller of the Issuer
JUN WU	Limited Partner	16.25	0.77	Core Manager of the Issuer
HU ZHAO	Limited Partner	16.25	0.77	Core Business Personnel of the Issuer
JINGWEN HE	Limited Partner	16.25	0.77	Friend of FUPING CHEN, a senior executive of the Issuer
DEYUN WANG	Limited Partner	16.25	0.77	Core Manager of the Issuer
JUN WANG	Limited Partner	16.25	0.77	Core Technician of the Issuer
XIAYUN YANG	Limited Partner	16.25	0.77	Core Manager of the Issuer
XI WANG	Limited Partner	16.25	0.77	Core Manager of the Issuer
XIAOYAN ZHANG	Limited Partner	16.25	0.77	Core Manager of the Issuer
QIANG WANG	Limited Partner	16.25	0.77	Core Business Personnel of the Issuer
WENQING JI	Limited Partner	16.25	0.77	Core Manager of the Issuer
XUEJUN LI	Limited Partner	16.25	0.77	Core Technician of the Issuer
ANYUN BI	Limited Partner	13	0.62	Core Manager of the Issuer
XIAOWEI DI	Limited Partner	13	0.62	Core Business Personnel of the Issuer
YANLI HU	Limited Partner	13	0.62	Core Business Personnel of the Issuer

MINLI GU	Limited Partner	8.125	0.39	Core Manager of the Issuer
YU WANG	Limited Partner	8.125	0.39	Core Business Personnel of the Issuer
YUFENG HUANG	Limited Partner	6.5	0.31	Former employee of the Issuer
TAO TAO	Limited Partner	4.875	0.23	Core Business Personnel of the Issuer
GUANGYU XIA	Limited Partner	4.875	0.23	Core Business Personnel of the Issuer
FANGYONG ZHEN	Limited Partner	4.875	0.23	Core Business Personnel of the Issuer
WENJUN WANG	Limited Partner	4.875	0.23	Core Business Personnel of the Issuer
Xinrun Management Consulting (Shanghai) Co., Ltd.	General Partner	0.5	0.02	-
Total	-	2,097.25	100.00	-

X. Related Transactions

(I) Recurrent related transactions

During the Reporting Period, the information on recurrent related transactions occurred between the Company and related parties is as follows:

1. Procurement of Commodities or Labor Services

(In RMB 10,000 Yuan)

Related Party	Content of Transaction	Jan. to Jun. 2021		2020		2019		2018	
		Amount	Percentage of Operating Costs	Amount	Percentage of Operating Costs	Amount	Percentage of Operating Costs	Amount	Percentage of Operating Costs
ACMR	Valves, sensors, connectors, pumps, procurement service fees, etc.	-	-	373.03	0.66%	7,354.82	17.72%	10,393.20	33.84%
NINEBELL	Robot arms, etc.	9,321.12	25.86%	10,546.98	18.62%	5,955.30	14.34%	5,201.20	16.94%
Shengyi Technology	Filters, etc., installation service charge	585.19	1.62%	1,808.10	3.19%	590.24	1.42%	-	-
AMEC	Testing service fees	-	-	11.46	0.02%	14.57	0.04%	9.71	0.03%
Shanghai Integrated Circuit	Testing service fees	-	-	-	-	-	-	615.75	2.01%
Total		9,906.31	27.49%	12,739.56	22.49%	13,914.93	33.52%	16,219.86	52.82%

During the Reporting Period, there are circumstances where the Company purchased raw materials from related parties, i.e. ACMR, NINEBELL and Shengyi Technology, and purchased testing services from AMEC and Shanghai Integrated Circuit, specifically:

(1) During the Reporting Period, the Company purchased valves, sensors, connectors, pumps and other raw materials through ACMR, the transaction amount of which was RMB 103,932,000 Yuan, RMB 73,548,200 Yuan, RMB 3,730,300 Yuan and RMB 0 Yuan respectively. The raw materials purchased from ACMR from January to June 2020 are the inventories of raw materials purchased through ACMR, without further purchase of raw materials by the Company through ACMR thereafter. The main reasons why the Company purchased raw materials through ACMR are relatively convenient for ACMR, as an enterprise registered in the U.S., purchasing products from the U.S. and Japan and certain price advantages.

The price at which the Company purchased raw materials from ACMR is determined by reference to the price at which ACMR purchased such materials from its suppliers, without any circumstance where the price in related transactions is obviously unfair. The details are as follows:

① Procurement made by the Company through ACMR

During the Reporting Period, the Company made the following procurement through ACMR:

In RMB 10,000 Yuan

2020		
Supplier Name	Product Name	Amount
Product Systems Inc. USA	Megasonic wave generator, etc.	316.62
Advance Electric America Co., Inc.	Valves, flow meters, etc.	41.82
Ion Power, Inc.	Ion films	13.77
TECO Pneumatic, Inc.	Sensors	0.50
The Olander Company	Caster	0.32
Total		373.03
2019		
Supplier Name	Product Name	Amount
Advance Electric America Co., Inc.	Valves, flow meters, etc.	2,302.68
Harrington Industrial Plastics	Connectors, etc.	1,354.28
Product Systems Inc. USA	Megasonic wave generator, etc.	1,167.62
Horiba Instruments Inc.	Sensors, etc.	636.56
Daitron Inc.	Heaters, etc.	572.56
Others	Pumps, sensors, valves, etc.	1,321.12
Total		7,354.82

2018		
Supplier Name	Product Name	Amount
Advance Electric America Co., Inc.	Valves, flow meters, etc.	2,579.86
Product Systems Inc. USA	Megasonic wave generator, etc.	2,520.36
Harrington Industrial Plastics	Connectors, etc.	1,783.41
Horiba Instruments Inc.	Sensors, etc.	1,323.49
Daitron Inc.	Heaters, etc.	460.15
Others	Pumps, sensors, valves, etc.	1,725.93
Total		10,393.20

② Fairness analysis of procurement prices

According to the comparison between the prices of raw materials purchased by the Company from ACMR and the prices of raw materials purchased by ACMR from end suppliers, the prices for the same raw materials are same. In addition, the gross margin of the business for selling materials from ACMR to the Issuer is almost 0; the main reason is that the prices of raw materials purchased by the Issuer from ACMR are same as the prices of raw materials purchased by ACMR from end suppliers. During the Reporting Period, the gross margins on the materials sold by ACMR to the Issuer during the Reporting Period are as follows:

Item	2020	2019	2018
Gross margin on sales of materials	1.21%	0.08%	0.21%

Note: The difference in the gross margins on sales of materials is caused by the impact of the exchange rate.

Meanwhile, the Company has to pay service fees to ACMR for the raw materials purchased through ACMR. From 2018 to 2020, the amounts of the service fees paid are RMB 8.2417 million Yuan, RMB 5.7176 million Yuan and RMB 0 Yuan respectively. According to the *Policy on Procurement Service Fees and Payment in Advance* between ACMR and the Company, the Company has to pay ACMR procurement service fees at 8% of the procurement amount as agreed. The rate of 8% for service fees is determined through negotiation on the basis of the costs and expenses incurred by ACMR for purchasing the raw materials. From 2018 to 2020, the costs and expenses, including transportation expenses, mail expenses, salaries of relevant staff, administrative expenses, etc., incurred by ACMR for purchasing the raw materials, are RMB 7.7113 million Yuan, RMB 5.5917 million Yuan, and RMB 0 Yuan, respectively, which are basically same as the procurement service fees paid by the Company. The relevant comparison is as follows:

In RMB 10,000 Yuan

Item	2020	2019	2018
Service fees paid by the Company	-	571.76	824.17
Costs and expenses incurred by ACMR for purchasing the raw materials	-	559.17	771.13
Rate of deviation	-	2.25%	6.88%

In summary, the prices are fair for the raw materials purchased by the Issuer through ACMR.

The Company has established a subsidiary, ACM CA, to replace ACMR for purchasing raw materials in the United States on behalf of the Company; this will completely solve the problem of recurrent related transactions for purchasing raw materials through ACMR.

(2) During the Reporting Period, the Company purchased robot arms and other raw materials from NINEBELL. The amount of products purchased by the Company from NINEBELL had increased along with the increase in the amount of sales of the Company, which was RMB 52.0120 million Yuan, RMB 59.5530 million Yuan, RMB 105.4698 million Yuan, and RMB 93.2112 million Yuan, respectively. NINEBELL is a company focusing on the production of robot arms; its level of processing and technology is relatively high, and its products of robot arms match with products of the Company well, therefore, the Company has always cooperated with it. To further deepen the business cooperation relationship between both parties, ACMR increased its investment in NINEBELL in September 2017, acquiring 20% equity interest of NINEBELL, and HUI WANG began to serve as a director of this company at the same time.

Before and after ACMR makes investment in NINEBELL, the prices of main robot arm models purchased by the Issuer from NINEBELL are as follows:

Product Model	Average Procurement Price Prior to Investment	Average Procurement Price After Investment	Rate of Deviation	Cause of Deviation
Robot arm (8 chambers)	100.00	95.94	-4.06%	The unit procurement prices decrease along with the increase in the procurement volume.
Robot arm (12 chambers)	100.00	95.79	-4.21%	

Note: 1. The average procurement price prior to investment is the result of procurement amount/procurement volume for products of same specifications before the investment was made in 2017; the average procurement price after investment is the result of procurement amount/procurement volume for products of same specifications in 2018; and 2. it is assumed that the average procurement price index prior to investment is set to 100, and the average procurement price index after investment is calculated on the basis of the average procurement price prior to investment.

Before and after ACMR makes investment in NINEBELL, the prices of robot arms purchased by the Issuer from NINEBELL basically remained stable.

The price at which the Company purchases robot arms from NINEBELL is determined on market conditions, without any circumstance where the price in related transactions is obviously unfair.

(3) In 2019, the Company purchased filters and other raw materials from Shengyi Technology, the transaction amount of which is RMB 5.9024 million Yuan. In 2020 and the period from January to June 2021, the Company purchased filters and other raw materials from Shengyi Technology, the transaction amount of which is RMB 15.8615 million Yuan and RMB 4.1743 million Yuan respectively, and purchased installation services from Shengyi Technology in the amount of RMB 2.2195 million Yuan and RMB1.6776 million Yuan respectively.

In 2019, 2020 and the period from January to June 2021, the Company purchased the following raw materials, including filters, from Shengyi Technology:

Unit: Piece, RMB 10,000 Yuan

From Jan. To Jun. 2021				
Type of Raw Materials	Purchased from Shengyi Technology		Other Suppliers	Average Unit Price Difference Rate
	Quantity	Average Unit Price Index	Average Unit Price Index	
Filter	217.00	37.67	100.00	-62.30%
Cooler	3.00	50.34	100.00	-49.66%
2020				
Type of Raw Materials	Purchased from Shengyi Technology		Other Suppliers	Average Unit Price Difference Rate
	Quantity	Average Unit Price Index	Average Unit Price Index	
Filter	402.00	41.26	100.00	-58.74%
Cooler	15.00	51.67	100.00	-48.33%

2019				
Type of Raw Materials	Purchased from Shengyi Technology		Other Suppliers	Average Unit Price Difference Rate
	Quantity	Average Unit Price Index	Average Unit Price Index	
Filter	51.00	38.21	100.00	-61.79%
Wafer handling bench	8.00	80.23	100.00	-19.77%
Cooler	3.00	51.57	100.00	-48.43%
CO2 hybrid generator	1.00	73.07	100.00	-26.93%

On an assumption that all the raw materials purchased by the Company from Shengyi Technology were purchased from other overseas suppliers, a small impact will be caused on the operating costs, total profits, and net profits of the Company, which is specifically as follows:

In RMB 10,000 Yuan

From Jan. to Jun. 2021				
Item	Actual Data	Simulation Data	Amount Deviation	Rate of Deviation
Operating costs	36,042.40	36,575.70	533.31	1.48%
Total profits	9,325.23	8,791.92	-533.31	-5.72%
Net profits	8,967.60	8,500.95	-466.64	-5.20%
2020				
Item	Actual Data	Simulation Data	Amount Deviation	Rate of Deviation
Operating costs	56,642.24	58,286.55	1,644.32	2.90%
Total profits	22,302.41	20,658.09	-1,644.32	-7.37%
Net profits	19,676.99	18,279.33	-1,397.67	-7.10%
2019				
Item	Actual Data	Simulation Data	Amount Deviation	Rate of Deviation
Operating costs	41,515.84	41,925.29	409.45	0.99%
Total profits	15,311.91	14,902.46	-409.45	-2.67%
Net profits	13,488.73	13,140.70	-348.03	-2.58%

As shown above, for raw materials of the same type, the prices of procurement from Shengyi Technology are relatively lower than the prices of procurement from other suppliers. The main reasons include: (1) the raw materials purchased by the Company from other suppliers are produced in developed countries and regions, such as the United States, Europe, Japan, and South Korea, hence the labor costs, transportation costs, and customs declaration costs are high; (2) the air filters, wafer handling benches, and coolers produced by Shengyi Technology have not been substituted by Chinese domestic products, and only a few enterprises, including Shengyi Technology, in China are capable of producing such parts, hence overseas suppliers of raw materials have advantages in pricing; and (3) several liquid filters and CO2 hybrid generators are products sold on agency by Shengyi Technology, which are originally produced in Chinese mainland or Taiwan, and the costs and prices thereof are lower than products of the same type from developed countries and regions.

Since its establishment, Shengyi Technology is dedicated to replacing key parts of semiconductor equipment with those produced in Chinese mainland, and has made targeted development for parts not available from mass production by Chinese enterprises. Prior to the actual product development, Shengyi Technology performs market survey and assessment on such product to determine: (1) whether the product is in production by Chinese domestic enterprises, it is necessary for domestic substitution, and there is market space for domestic substitution; and (2) Shengyi Technology can produce products of the same type with reasonable costs and gross margins, and sell such products at a price at least 30% lower than those of overseas enterprises, hence achieving domestic substitution by making use of the price advantages. Therefore, it is reasonable for Shengyi Technology to charge a lower price than overseas suppliers for products of the same type.

The Company invests in the establishment of Shengyi Technology in the hope of cooperating with a Chinese enterprise to develop high-quality part products with high specifications and cost advantages to gradually reduce its dependence on the overseas supply chain.

In 2019, Shengyi Technology did not sell products of identical specifications to other third parties, hence no comparable data is available. In 2020, the product with identical specifications sold by Shengyi Technology both to the Company and to other third-party customers is the cooler. The price comparison is as follows:

Product	Corresponding Customer	Price Index
Cooler	Other third-party customer 1	105.00
	Other third-party customer 2	105.00
	The Company	100.00

Note: On an assumption that the price of products sold by Shengyi Technology to the Company is 100, the prices of products sold to other third parties are calculated on this basis.

Given the small deviation in the prices of products with identical specifications sold by Shengyi Technology to other third-party customers and to the Company, the prices are fair for the raw materials purchased by the Company from Shengyi Technology.

Shengyi Technology started its operation in 2019, and its operating revenues from the Issuer accounted for 63.15% in 2019; In 2020, its operating revenues from the Issuer accounted for 74.75%; From January to June 2021, its operating revenues from the Issuer accounted for 13.32%.

The price at which the Company purchases filters and other raw materials from Shengyi Technology is determined based on market conditions, without any circumstance where the price in related transactions is obviously unfair.

(4) In 2018, 2019 and 2020, the Company purchased wafer testing services from AMEC for RMB 97,100 Yuan, RMB 145,700 Yuan and RMB 114,600 Yuan respectively. The price of testing services is determined based on market conditions, without any circumstance where the price in related transactions is obviously unfair.

(5) LING LIN and ZHIDE Yuan served as directors of the Company during the Reporting Period, and they serve or served as directors of Shanghai Integrated Circuit. The board of directors of the Company reviewed and passed the resolution of the resignation of ZHIDE Yuan and LING LIN as directors of the Company on August 10, 2017 and August 18, 2017 respectively. The Company determines that Shanghai Integrated Circuit is a related party of the Company during the period from January 1, 2017 to August 18, 2018.

In January-August 2018, the Company purchased testing services from Shanghai Integrated Circuit for RMB 6.1575 million Yuan. The price at which the Company purchases lens and accessories, software development services, testing services, etc. from Shanghai Integrated Circuit is determined based on market conditions, without any circumstance where the price in related transactions is obviously unfair.

2. Sale of Commodities or Labor Services

In RMB 10,000 Yuan

Related Party	Content of Transaction	From Jan. to Jun. 2021		2020		2019		2018	
		Amount	Percentage of Operating Costs	Amount	Percentage of Operating Costs	Amount	Percentage of Operating Costs	Amount	Percentage of Operating Costs
ACMR	semiconductor cleaning equipment	-	-	845.96	0.84%	-	-	6,081.94	11.05%
Taiwan Wafer Works	semiconductor cleaning equipment	-	-	-	-	-	-	496.31	0.90%
	services and accessories	1.31	0.00%	7.96	0.01%	11.27	0.01%	-	-
Shanghai Jingmeng Silicon Materials Co., Ltd.	semiconductor cleaning equipment	-	-	1,034.64	1.03%	793.33	1.05%	-	-
	services and accessories	-	-	20.42	0.02%	43.71	0.06%	7.31	0.01%
Shanghai Integrated Circuit	semiconductor cleaning equipment	-	-	-	-	-	-	2,646.96	4.81%
Shanghai Wafer Works Materials Co., Ltd.	semiconductor cleaning equipment	-	-	1,393.32	1.38%	-	-	-	-
Total		1.31	0.00%	3,302.29	3.28%	848.31	1.12%	9,232.52	16.78%

During the Reporting Period, there are circumstances where the Company sold semiconductor cleaning equipment to related parties, i.e. ACMR, Taiwan Wafer Works, Shanghai Jingmeng Silicon Materials Co., Ltd. and Shanghai Integrated Circuit, specifically:

(1) In 2018 and 2020, the Company sold semiconductor cleaning equipment to ACMR, the amount of sales of which is RMB 60.8194 million Yuan and RMB 8.4596 million Yuan respectively. In 2019, the Company did not sell any product to ACMR.

In 2018, Yangtze Memory ordered 2 sets of semiconductor cleaning equipment from ACMR, and the Company produced and sold to ACMR 2 sets of semiconductor cleaning equipment. ASM America Inc. purchased 1 set of semiconductor cleaning equipment from ACMR, and in 2020, the Company produced and sold to ACMR 1 set of semiconductor cleaning equipment.

The price at which the Company sold semiconductor cleaning equipment to ACMR is determined by reference to the price at which Yangtze Memory and ASM America Inc. purchased such products from ACMR, without any circumstance where the price in related transactions is obviously unfair.

During the Reporting Period, the sales of the Company to ACMR and the sales of ACMR to end customers are as follows:

In RMB 10,000 Yuan, US\$ 10,000

Year	Customer Name	Product Name	Sales Amount of the Issuer		Sales Amount of ACMR	Rate of Deviation
			USD	RMB	USD	
2018	YMTC	Single-wafer cleaning equipment	467.00	2,992.42	491.58	5.00%
			467.00	3,089.51	491.58	5.00%
2020	ASM America Inc.	Single-wafer cleaning equipment	118.75	845.96	125.00	5.00%

For transactions in which the Issuer made sales to end customers through ACMR, the prices of products sold by the Issuer to ACMR are basically same as the prices of products sold by ACMR to end customers, for which the deviation rate is reasonable caused by the costs and expenses incurred by ACMR for accepting such orders.

The sales of products made by the Company through ACMR are free from any circumstance where the price in related transactions is obviously unfair.

(2) In 2018 and 2019, the Company sold semiconductor cleaning equipment to Taiwan Wafer Works and Shanghai Jingmeng Silicon Materials Co., Ltd. for RMB 4.9631 million Yuan and RMB 7.9333 million Yuan respectively; In 2020, the Company sold semiconductor cleaning equipment to Shanghai Jingmeng Silicon Materials Co., Ltd. for RMB 10.3464 Yuan. Besides, the Company sold semiconductor cleaning equipment to Zhengzhou Airport Economy Zone Waferworks Technology Corp., a wholly-owned subsidiary of Shanghai Wafer Works Materials Co., Ltd., for RMB 13.9332 million Yuan.

In addition, during the Reporting Period, the revenue from the Company's sale of accessories to Shanghai Jingmeng Silicon Materials Co., Ltd. is RMB 73,100 Yuan, RMB 437,100 Yuan and RMB 204,200 Yuan respectively; and the revenue from the sale of accessories to Taiwan Wafer Works in 2019, 2020 and the period from January to June 2021 is RMB 112,700 Yuan, RMB 79,600 Yuan and RMB 13,100 Yuan respectively. Shanghai Jingmeng Silicon Materials Co., Ltd. is a subsidiary of Taiwan Wafer Works. The price at which the Company sells semiconductor cleaning equipment to them is determined based on market conditions, without any circumstance where the price in related transactions is obviously unfair.

(3) In January-August 2018, the Company sold semiconductor cleaning equipment to Shanghai Integrated Circuit for RMB 26.4696 million Yuan respectively. The price at which the Company sells semiconductor cleaning equipment to it is determined based on market conditions, without any circumstance where the price in related transactions is obviously unfair.

3. Payment of Remuneration to Key Managers

During the Reporting Period, the allowances and remuneration paid by the Company to current key managers are as follows:

(In RMB 10,000 Yuan)

Item	From Jan. to Jun. 2021	2020	2019	2018
Remuneration of Key Managers	603.18	878.25	578.06	446.77

(II) Non-recurrent related transactions

1. Related Securities

During the Reporting Period, the related securities in connection with the Company were securities provided by HUI WANG, the de facto controller of the Company, for the Company in order to obtain borrowings, specifically:

(In RMB 10,000 Yuan)

Person Providing Security	Secured Amount	Starting Date	Expiring Date	Status of Performance
HUI WANG	7,700.00	April 24, 2020	March 19, 2022	Completed
HUI WANG	8,000.00	April 2, 2020	September 30, 2021	Completed
HUI WANG	3,000.00	March 1, 2018	March 1, 2021	Completed
HUI WANG	5,500.00	February 25, 2019	January 23, 2020	Completed
HUI WANG	5,000.00	February 25, 2019	February 24, 2020	Completed
HUI WANG	2,200.00	February 19, 2019	January 13, 2020	Completed
HUI WANG	1,000.00	January 24, 2018	January 23, 2019	Completed
HUI WANG	500.00	September 30, 2017	September 29, 2018	Completed
HUI WANG	2,750.00	August 21, 2017	August 20, 2018	Completed

2. Borrowing and Lending Monies

During the Reporting Period, there are circumstances where the Company borrowed and lent monies, specifically:

Related Party	Amount of Money Borrowed/Lent	Starting Date	Expiring Date
Borrow-in			
Shengxin Shanghai	RMB 20.1235 million Yuan	December 9, 2016	October 30, 2023
ACMR	US\$6 million	December 10, 2017	November 6, 2019
ACMR	US\$1 million	February 26, 2020	March 31, 2020
Lend-out			
ACMR	US\$ 5 million	June 21, 2019	June 21, 2020

(1) Information on borrowing and lending monies between the Company and Shengxin Shanghai

① Generation process of credits and debts among the Company, Shengxin Shanghai and ACMR

On October 30, 2016, Shengxin Shanghai and ACMSH entered into the Debt-to-Equity Conversion Agreement and agreed that Shengxin Shanghai provides a loan of RMB 20,123,500 Yuan to ACMSH for the development of ACMSH's businesses and needs of relevant businesses, the loan rate of which is fixed annual rate equal to 1% per year on the basis of simple interest; Shengxin Shanghai shall subscribe for newly increased registered capital of ACMSH at the price of RMB 3 Yuan corresponding to RMB 1 Yuan/registered capital by using the loan through the means of debt-to-equity conversion after 6 months as of the date on which ACMR succeeds in listing in the NASDAQ stock market in the U.S. and within 84 months as of the date on which the amounts have actually remitted into its account.

On October 30, 2016, Shengxin Shanghai and ACMSH, ACMR entered into the Options Agreement and agreed that Shengxin Shanghai will obtain the equity of ACMSH in the future under the Debt-to-Equity Conversion Agreement, ACMR granted Shengxin Shanghai an option to sell its equity in ACMSH to ACMR, and Shengxin Shanghai granted ACMR an option to purchase its limited equity in Shengmei from Shengxin Shanghai; The exercise price shall be paid in USD cash at the price of US\$2.5 per share.

On March 14, 2017, Shengxin Shanghai and ACMSH, ACMR entered into the Share Subscription Agreement and agreed that Shengxin Shanghai or its assignee may subscribe for 1,192,504 Class A common shares of ACMR in total at the price of US\$2.50 per share in cash or non-cash, the deadline of exercise is May 17, 2023, and the total consideration of exercise is US\$ 2,981,259.26. If shares of ACMR are subsequently subject to any split/consolidation or other arrangement, the exercise price of Shengxin Shanghai shall be decreased/increased accordingly, and the number of exercisable shares shall be increased/decreased accordingly.

On March 30, 2018, Shengxin Shanghai entered into the Exercise Agreement with ACMSH and ACMR and agreed that Shengxin Shanghai would subscribe for 397,502 common shares of ACMR in total according to the adjustment mechanism under the above Share Subscription Agreement and other provisions, the exercise price shall be US\$7.50 per share, and the total consideration of exercise shall be US\$2,981,259.26; the funds used for exercise made by Shengxin Shanghai would source from the loan provided by ACMR to it, and at the same time, Shengxin Shanghai, upon the request of ACMR, would issue a senior guaranteed promissory note of US\$ 2,981,259.26 to ACMSH, in addition, as the consideration for the above transfer of creditor's rights, ACMSH would issue a commercial promissory note of equivalent amount to ACMR.

In conclusion, as of March 30, 2018, Shengxin Shanghai held 397,502 Class A common shares of ACMR, representing 2.97% of all Class A shares.

In August 2019, ACMR entered into the Share Purchase Agreement with some of its shareholders (including Shengxin Shanghai), pursuant to which ACMR finally repurchased 154,821 Class A common shares from Shengxin Shanghai on August 14, 2019. As of December 31, 2019, the number of shares in ACMR held by Shengxin Shanghai is 242,681, accounting for 1.50% of all Class A common shares of ACMR at the end of that year.

②Settlement of credits and debts among the Shengxin Shanghai, ACMR and ACMSH

A. Repayment of certain funds

On August 14, 2019, ACMR repurchased 154,821 Class A common shares from Shengxin Shanghai at the price of US\$13.195 per share, the total consideration of such repurchase is approximately US\$2,042,863.10, among which, US\$ 1,161,157.50 is deducted by ACMR, the loan principal under the senior guaranteed promissory note between Shengxin Shanghai and ACMSH and the commercial promissory note between ACMSH and ACMR is therefore deceased to US\$ 1,820,101.76.

On October 29, 2019, ACMSH repaid the loan principal of RMB 7,837,039.02 Yuan (as calculated based on the exchange rate at the time of executing the Debt-to-Equity Conversion Agreement, the amount was approximately US\$ 1,161,157.50) under the Debt-to-Equity Conversion Agreement to Shengxin Shanghai.

B. Termination of credits and debts under promissory notes

On April 30, 2020, Shengxin Shanghai, ACMR and ACMSH entered into the *Agreement on Assignment and Termination of Promissory Notes* and agreed that the Company transfers all of its right and interests under the senior guaranteed promissory note between Shengxin Shanghai and ACMSH to ACMR; as the consideration for the above assignment, ACMR agreed to terminate the commercial promissory note between ACMSH and ACMR, and the obligations and liabilities of the Company under the commercial promissory note were discharged accordingly.

On the same day, ACMR and Shengxin Shanghai entered into the *Agreement on Share Transfer and Termination of Promissory Notes* and agreed that Shengxin Shanghai transfers all of 242,681 shares in ACMR held by it at present to ACMR, subject to the approval of relevant competent governmental authorities before December 31, 2023, both parties may choose one of the following methods as the method of paying the consideration of such share transfer:

Method I: A. ACMR terminates the senior guaranteed promissory note of Shengxin Shanghai, and releases it from all of its obligations and liabilities under the promissory note; B. ACMR grants a new warrant to Shengxin Shanghai, pursuant to which Shengxin Shanghai may purchase 242,681 Class A common shares of ACMR at the price of US\$ 7.50 per share;

Method II: A. Shengxin Shanghai performs the obligation of paying US\$ 1,820,101.76 under the senior guaranteed promissory note and other obligations to ACMR; B. ACMR issues 242,681 Class A common shares to Shengxin Shanghai;

Method III: Any other method of payment approved by competent governmental authorities and agreed by ACMR and Shengxin Shanghai.

If the above methods fail to be approved by competent governmental authorities and ACMR and Shengxin Shanghai fail to enter into a new agreement on the payment of the above consideration before December 31, 2023, the cancellation of the senior guaranteed promissory note of Shengxin Shanghai will be deemed as the full performance of the obligation of paying consideration by ACMR.

C. Termination the Debt-to-Equity Conversion Agreement between the Company and Shengxin Shanghai and repayment of funds

On April 28, 2020, the Company repaid the loan principal of RMB 12,286,460.98 Yuan under the Debt-to-Equity Conversion Agreement to Shengxin Shanghai, and so far, the loan principal under the Debt-to-Equity Conversion Agreement was repaid in full.

On April 30, 2020, the Company and Shengxin Shanghai entered into the Termination Agreement and agreed that the Company shall pay interest payable equal to RMB 643,357.51 Yuan under the Debt-to-Equity Conversion Agreement to Shengxin Shanghai within 5 days from the effective date of the Termination Agreement, and the Debt-to-Equity Conversion Agreement shall be automatically terminated as of the date on which the above interest is repaid in full; both parties confirmed that no dispute has arisen from the Debt-to-Equity Conversion Agreement, and they will not make any litigation, arbitration or other claim for relevant matters in connection with the Debt-to-Equity Conversion Agreement.

On April 30, 2020, the Issuer paid the interest payable equal to RMB 643,357.51 Yuan to Shengxin Shanghai, the Debt-to-Equity Conversion Agreement was therefore terminated on April 30, 2020.

(2) In November 2017, in order to meet the needs of working capital turnover, the Company entered into a loan agreement with ACMR and agreed that, within the limit of US\$10,000,000.00, ACMR would provide the Company with loan of which annual interest rate is 2.5%. The Company actually borrowed US\$6,000,000.00 on December 18, 2017, the original maturity date of such loan was November 6, 2018. In October 2018, the Company entered into the *Agreement on Extension of Foreign-debt Borrowing* and agreed that the one-year effective period of the original loan agreement would be extended to November 6, 2019 which date should be the maturity date, and within the extension period of November 7, 2018 to November 6, 2019, the annual interest rate of the borrowing should be changed into 4%. The Company has repaid such borrowing in December 2019.

(3) In February 2020, ACM CA received US\$1 million from ACMR due to the misoperation by ACMR employees, the sum of which has been fully returned to ACMR in March 2020.

(4) In June 2019, in order to raise funds to be used for the increase in capital of the Company, ACMR entered into the *Loan Agreement* with CleanChip HK, a then wholly-owned subsidiary, and agreed that CleanChip HK would provide ACMR with a one-year loan of which the principal is US\$ 5 million, the annual interest rate of such loan is 2.5%. The Company acquired 100% equity interest of CleanChip HK from ACMR and put CleanChip HK in the scope of consolidated statements. Therefore, as of December 31, 2019, within the scope of consolidated statement of the Company, the Company had a balance of fund transfer with ACMR. ACMR had fully repaid such loan to CleanChip HK, a subsidiary of the Company, in January 2020.

3. Acquisition of CleanChip HK

On November 29, 2019, the Company held the first session extraordinary general meeting of shareholders in 2019 to resolve that the Company would acquire 100% equity interest of CleanChip HK from ACMR in cash. The Company entered into the Share Transfer Agreement with ACMR and agreed that the Company would purchase all shares of CleanChip HK from ACMR for US\$3.5 million. The consideration of this transaction was determined based on the *Project Asset Appraisal Report on the Appraisal of All Interests of Shareholders Involved in the Proposed Acquisition of CleanChip Technologies Limited by ACM Research (Shanghai), Inc.* (Zhong Lian Ping Bao Zi [2019] No.1879) issued by China United Assets Appraisal Group Co., Ltd. After the appraisal, as of June 30, 2019, the appraised value of CleanChip HK and its subsidiaries is RMB 24.8750 million Yuan.

On February 24, 2020, the Company completed formalities of foreign exchange registration involved in the payment of acquisition price in the transaction, and paid the amount of equity transfer of US\$ 3.5 million to ACMR on the next day.

4. Payment of Fees by the Company on behalf of ACMR

The Company paid allowances of Chinese directors, U.S. listing fees, patent fees, etc. on behalf of ACMR, specifically:

(In RMB 10,000 Yuan)

Item	From Jan. to Jun. 2021	2020	2019	2018
Allowances of Chinese directors of ACMR	-	-	44.70	-
U.S. listing fees of ACMR	-	-	-	8.61
Patent fees of ACMR	-	-	2.64	11.02
Others	-	-	3.38	7.23

5. Acceptance of Technology License

On January 31, 2007, ACMR entered into the *Technology License Agreement* with ACMSH and agreed that ACMR would grant a global license of intellectual property rights owned or controlled by ACMR to ACMSH, i.e. to use, reproduce, modify, make derivative works or improve licensed technologies for the purpose of processing, manufacturing, importing, exporting, offering for sale or selling or otherwise distributing or commercializing products, such licensed intellectual property rights refer to any intellectual property rights owned or controlled by ACMR with respect to licensed technologies (i.e. Ultra ECP™ and Ultra SFPT™ technologies owned by ACMR on a proprietary basis) as of the date on which the agreement takes effect, including but not limited to 45 patents and 62 pending patents; the effective period of the agreement is 20 years commencing from the execution date of the agreement, and the agreement shall be extended automatically and remain in full force and effect when it expires unless and until ACMR is no longer a shareholder of ACMSH; notwithstanding the agreement is terminated because ACMR is no longer a shareholder of ACMSH, ACMSH shall still have the right to use licensed technologies agreed upon in the agreement, unless ACMR pays RMB 84 million Yuan to ACMSH. For specific information on the Company's acceptance of technology license, please refer to "V(IV) Sharing of Key Resources with Other Parties" of "Section VI Business and Technology".

6. Other Related Transactions

(1) Purchase of smartpass cards from Shanghai Sand Information Technology System Co., Ltd.

In 2018, 2019 and 2020, the Company purchased smartpass cards from Shanghai Sand Information Technology System Co., Ltd. for distributing benefits to employees, the amounts of which were RMB 453,000 Yuan, RMB 580,300 Yuan and RMB 690,400 Yuan respectively. The price at which the Company purchases smartpass cards is determined based on market conditions, without any circumstance where the price in related transactions is obviously unfair.

(2) Provision of legal services by Law and Law to the Company

In April 2019, the Company and Law and Law entered into the *Regular Legal Consultant Contract*, the Company engaged Law and Law to serve as the regular legal consultant of the Company, the period of service commenced from April 16, 2019 to April 15, 2020, and the fees of legal consultant was US\$ 30,000. The Company paid RMB 157,500 Yuan and RMB 105,400 Yuan to it for the fees of legal consultant in 2019 and 2020 respectively.

(3) Payment of remuneration to MARK MCKECHNIE

In August 2018, the Company and MARK MCKECHNIE entered into the *Labor Contract*. In January 2019, MARK MCKECHNIE obtained the Foreigner Working Permit, and the Company paid the remuneration of RMB 501,900 Yuan and RMB 137,100 Yuan to MARK MCKECHNIE in 2019 and January-March 2020 respectively. In March 2020, MARK MCKECHNIE resigned from ACMSH.

(4) Sublease

On January 1, 2020, a sublease agreement was entered into by and between ACM CA, a subsidiary of the Company, and ACMR, whereby it is specified that ACMR shall sublease 50% of the leased area of the office space located at 42307 Osgood Road, Room B, Suite I, Fremont, CA94539 rented from D&J Construction. INC. to ACM CA for a term from January 1, 2020 to March 31, 2021, with the monthly rent being US\$1,650.00 from January 1, 2020 to March 31, 2020, and US\$1,695.00 from April 1, 2020 to March 31, 2021.

On March 31, 2021, a sublease agreement was entered into by and between ACM CA, a subsidiary of the Company, and ACMR, specifying that ACMR shall sublease 50% of the leased area of the office space located at 42307 Osgood Road, Room B, Suite I, Fremont, CA94539 rented from D&J Construction. INC. to ACM CA for a term from April 1, 2021 to March 31, 2023, with the monthly rent being US\$1,695.00.

(III) Related receivables and payables of the Company during the Reporting Period

At the end of each period during the Reporting Period, the information on the balance of each item of related parties is as follows:

(In RMB 10,000 Yuan)

Item	Corporation	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Receivables	ACMR	-	774.81	-	3,257.34
	Shanghai Jingmeng Silicon Materials Co., Ltd.	-	101.40	97.47	1.18
	Shanghai Wafer Works Materials Co., Ltd.	-	131.80	-	-
	Taiwan Wafer Works	-	-	6.17	-
Prepayments	ACMR	-	-	309.73	-
	NINEBELL	1,118.98	1,048.42	243.07	392.61
Other receivables	ACMR	-	-	3,693.14	139.93
	JIAN WANG	-	-	1.03	2.33
	FUPING CHEN	-	-	1.90	1.28
Long-term Receivables	Shengxin Shanghai	-	-	1,371.16	2,092.29
Payables	ACMR	-	-	2,419.57	5,482.65
	NINEBELL	3,444.15	1,890.64	587.43	1,013.81
	Shengyi Technology	383.46	779.48	340.45	-
Deposits received	Shanghai Jingmeng Silicon Materials Co., Ltd.	-	-	941.79	710.34
Other Payables	ACMR	-	-	3,458.32	5,817.63
	Shengxin Shanghai	-	-	1,288.95	2,053.84
	Shengyi Technology	-	-	-	75.00
	HUI WANG	44.51	10.58	19.29	7.86
	JIAN WANG	26.62	4.44	10.49	3.63
	FUPING CHEN	21.21	-	3.43	-
	LISA YI LU FENG	-	-	3.74	0.41
Long-term Payables	ACMR	-	-	1,371.16	2,092.29

Receivables between the Company and related parties are amounts receivable by the Company from ACMR, Shanghai Jingmeng Silicon Materials Co., Ltd. and Zhengzhou Airport Economy Zone Waferworks Technology Corp., a wholly-owned subsidiary of Shanghai Wafer Works Materials Co., Ltd. for purchasing cleaning equipment, and the change in amounts receivable by the Company from ACMR, Shanghai Jingmeng Silicon Materials Co., Ltd. and Shanghai Wafer Works Materials Co., Ltd. is caused by unsettled amounts of products sold by the Company to ACMR, Shanghai Jingmeng Silicon Materials Co., Ltd. and Shanghai Wafer Works Materials Co., Ltd..

Prepaid amounts between the Company and related parties are amounts prepaid by the Company to ACMR and NINEBELL for purchasing raw materials. The main reason for the change in the balance of prepaid amounts of the Company is the increase in procurement from ACMR and NINEBELL arising out of the increase in sales revenue of the Company.

Other receivables between the Company and related parties are borrowed amounts receivable by the Company from ACMR. In June 2019, in order to raise funds for the increase in capital of the Company, ACMR borrowed US\$ 5 million from CleanChip HK which was a wholly-owned subsidiary of it at that time. In December 2019, the Company acquired 100% of equity interest in CleanChip HK from ACMR and included CleanChip HK in its scope of consolidated financial statements. Therefore, as of December 31, 2019, within the scope of consolidated financial statements of the Company, the Company existed the balance of other receivables from ACMR arising out of the merger of CleanChip HK.

Long-term receivables between the Company and related parties are the balance of the senior guaranteed promissory note issued by Shengxin Shanghai to ACMSH. The reason for the change in long-term receivables between the Company and related parties is that, in August 2019, ACMR repurchased 154,821 Class A common shares from Shengxin Shanghai, the consideration of such repurchase was approximately US\$2,042,863.10, among which, US\$1,161,157.50 is deducted by ACMR, the loan principal under the senior guaranteed promissory note between Shengxin Shanghai and ACMSH and the commercial promissory note between ACMSH and ACMR is therefore decreased to US\$ 1,820,101.76 (RMB 7.8370 million Yuan).

Payables between the Company and related parties are amounts payable by the Company to ACMR, NINEBELL and Shengyi Technology for products. The main reason for the change in payables between the Company and related parties is that in order to reduce related transactions, the Company established a subsidiary, i.e. ACM CA, to purchase raw materials and thus to undertake the business of purchasing raw materials of ACMR in the U.S., therefore, amounts payable by the Company to ACMR are decreased.

Deposits received between the Company and related parties are amounts of goods received from Shanghai Jingmeng Silicon Materials Co., Ltd.. The main reason for the change in deposits received between the Company and related parties lies in the Company's purchasing products for and delivering products to Shanghai Jingmeng Silicon Materials Co., Ltd..

Other payables between the Company and related parties are mainly the balance of price for the acquisition of CleanChip HK, procurement service fees and borrowed amounts payable by the Company to ACMR and the balance of borrowed amounts payable by the Company to Shengxin Shanghai. The change in other payables between the Company and related parties is caused by the change in payable procurement service fees, repayment of borrowings provided by ACMR and payable price for the acquisition of CleanChip HK and repayment of borrowings provided by Shengxin Shanghai.

Long-term payables between the Company and related parties are mainly the balance of commercial promissory note issued by ACMSH to ACMR. The main reason for the change in long-term receivables between the Company and related parties is that, in August 2019, ACMR repurchased 154,821 Class A common shares from Shengxin Shanghai, the consideration of such repurchase was approximately US\$2,042,863.10, among which, US\$1,161,157.50 is deducted by ACMR, the loan principal under the senior guaranteed promissory note between Shengxin Shanghai and ACMSH and the commercial promissory note between ACMSH and ACMR is therefore decreased to US\$ 1,820,101.76 (RMB 7.8370 million Yuan).

(IV) Brief summarization of related transactions

During the Reporting Period, related transactions of the Company are summarized as follows:

(In RMB 10,000 Yuan)

Item	From Jan. to Jun. 2021	2020	2019	2018
Related Procurement	9,906.31	12,739.56	13,914.93	16,219.86
Related Sales	1.31	3,302.29	848.31	9,232.52
Remuneration of Key Managers	603.18	878.25	578.06	446.77
Fees Paid for the account of others	0	0	50.72	26.86
Other related transactions	0	107.23	123.97	45.30

(V) Effect of related transactions on financial status and operating results of the Company

During the Reporting Period, there is no material difference between related sales made by the Company and related parties and contemporaneous market prices, and the amount and percentage of recurrent related transactions appear to be in decline, therefore, they have no material effect on financial status and operating results of the Company.

(VI) Specific subsequent measures, arrangements and commitments on regulating related transactions

1. Specific Subsequent Measures and Arrangements for Regulating Related Transactions

The Company has formulated and will strictly abide by the relevant provisions on related transactions contained in the *Articles of Association*, rules of procedures of the shareholders' meeting, board of directors, and board of supervisors, the *Working System of the Independent Directors*, and the *Measures on the Management of Related Transactions*. In order to reduce and regulate related transactions between the Company and related parties, the Company will implement the following specific measures and arrangements in the future:

(1) The Company will further regulate and reduce business transactions with ACMR, the controlling shareholder

For procurement of raw materials, the Company has established a subsidiary, ACM CA, to replace ACMR for purchasing raw materials in the United States on behalf of the Company; this will completely solve the problem of recurrent related transactions for purchasing raw materials through ACMR.

For sales of products, the Company will continue to have CleanChip HK as the platform for export sales of the Company's products to reduce product sales made through ACMR. In 2019, there was no sales transaction between the Company and ACMR.

In the future, the Company will not engage in business transaction with ACMR involving payment on behalf of each other or lending of funds.

(2) The Company will regulate other related transactions in strict compliance with the *Measures on the Management of Related Transactions*

In consideration of the availability and technical confidentiality of key parts, and the requirements on producing parts in Chinese mainland, the Company will retain its business transactions with NINEBELL and Shengyi Technology. With respect to such necessary related transactions, the Company will fulfill relevant review procedures and ensure the fairness of transaction prices in strict compliance with the requirements of the *Measures on the Management of Related Transactions*.

With respect to other related transactions, the Company will reduce business transactions with other related parties as much as possible. With respect to related transactions within the scope of normal business operation or that are necessary or cannot be avoided due to other reasonable causes, the Company will strictly fulfill relevant review procedures and ensure the fairness of transaction prices.

2. Commitments on Regulating Related Transactions

To reduce and regulate related transactions which may occur in the future between the Company and related parties and ensure that interests of minority shareholders will not be impaired, the de facto controller, the persons acting in concert JING CHEN, BRIAN WANG and SOPHIA WANG, the family trusts David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust, and the controlling shareholder of the Company make the following commitments with respect to the regulation and reduction of related transactions:

“1. I/We will take measures to regulate related transactions with the Issuer and endeavor to reduce such related transactions, provided that the interests of the Issuer and its shareholders shall not be adversely affected.

2. With respect to related transactions which are in the normal course of business or necessary to be carried out based on other reasonable reasons or unavoidable, I/us and other enterprises controlled by me/us will enter into regulated transaction agreement with the Issuer according to laws, and go through approval procedures in accordance with provisions of relevant laws, administrative regulations, departmental rules, normative documents and the Articles of Association of ACM Research (Shanghai), Inc. then effective, and ensure the enforcement of such related transactions based on the principle of fair pricing.

3. I/We will perform necessary obligations, such as the obligation of related parties’ avoidance of voting, legal approval procedures approving related transactions and the obligation of information disclosure in strict accordance with relevant provisions.

4. I/We undertakes not to make use of related transactions for illegally transferring funds, profits of the Issuer or engaging in any other act infringing on interests of the Issuer, other shareholders or creditors.”

XI. Decision-making Procedures and Opinions of Independent Directors of Related Transactions during the Reporting Period

During the Reporting Period, related transactions occurred by the Company have performed approval procedures of related transactions as provided for in the Articles of Association and other documents. Meanwhile, to further regulate and reduce related transactions, the Issuer has formulated the *Rules on Procedures of General Meeting of Shareholders*, the *Rules on Procedures of Meeting of Board of Directors*, the *Working Rules of Independent Directors*, the *Administration Rules on Related Transactions*, etc., which has further specified approval procedures of related transactions, information disclosure of related transactions and other matters.

The independent directors gave their opinions on the legality of approval procedures performed by related transactions and fairness of trading prices during the Reporting Period as follows:

Related transactions between the Company and related parties during the Reporting Period have observed the principle of fairness, voluntariness and reasonableness, and the price of related transactions are fair without infringing on the interests of the Company and non-related shareholders.

XII. Changes in Related Parties

During the Reporting Period, changes in related parties of the Company are mainly as below:

(I) Changes in related legal persons during the Reporting Period

1. New Subsidiary or Equity Participation Company Created through Merger by an Enterprise under Common Control

During the Reporting Period, there are three new subsidiaries of the Company, i.e. CleanChip HK, ACMKR and ACM CA, through merger by enterprises under common control. For specific information, please refer to “Section V. IV. Controlled Subsidiaries and Equity Participation Companies of the Issuer” of this [***].

2. Changes in Legal Persons Directly or Indirectly Controlled or Significantly Affected by Related Natural Persons

During the Reporting Period, any change in legal persons or other organizations which are directly or indirectly controlled by related natural persons of the Issuer or in which the above persons (except for independent directors) serve as directors or senior executives constitutes a change in related legal persons during the Reporting Period.

3. Changes in Other Related Legal Persons

During the Reporting Period, any change in legal persons or other organizations which are directly or indirectly controlled by any shareholder directly holding more than 5% of shares of the Issuer constitutes a change in related legal persons during the Reporting Period.

(II) Changes in related natural persons during the Reporting Period

1. Changes in Directors, Supervisors or Senior Executives

During the Reporting Period, any change in directors, supervisors or senior executives shall constitute a change in related natural persons.

2. Changes in Other Related Natural Persons

During the Reporting Period, any change in closely related family members of directors, supervisors or senior executives of the Issuer, including spouse, children of age of 18 years or above and their spouses, parents and spouse's parents, brothers and sisters and their spouses, spouse's brothers and sisters, parents of children's spouse.

Section VIII Financial Accounting Information and Management Analysis

The financial accounting data and relevant financial information in this Section, unless otherwise specified, are based on the audited financial statements and the notes thereto. Unless otherwise noted, the Company's financial data and financial indicators are calculated on the basis of the data in the consolidated financial statements. The financial and accounting data and relevant instructions in this Section reflect the main contents of the audited financial statements and notes of the Company during the Reporting Period. The Company

reminds investors to pay attention to the full text of the financial statements and audit reports to obtain all the financial information.

I. Audited Financial Statements

(I) Consolidated financial statements

1. Consolidated Balance Sheet

In RMB 1 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current assets:				
Cash and bank balances	253,827,002.50	271,267,852.84	440,029,105.69	95,828,639.76
Held-for-trading financial assets	201,916,518.62	184,208,918.79	-	-
Accounts receivables	307,582,591.88	256,075,757.62	209,896,421.78	173,605,541.67
Prepayments	57,265,500.36	35,760,885.14	11,244,578.61	13,360,469.02
Other receivables	41,739,723.41	34,713,166.21	47,638,486.72	17,160,806.70
Inventory	935,189,764.09	614,869,365.46	307,274,118.34	264,159,937.04
Other current assets	25,769,142.80	24,666,762.37	192,567,769.71	3,717,096.53
Total current assets	1,823,290,243.66	1,421,562,708.43	1,208,650,480.85	567,832,490.72
Non-current assets:				
Long-term receivables	-	-	14,841,790.94	24,704,508.34
Long-term equity investments	30,582,848.62	30,488,610.34	30,719,024.14	739,752.09
Other non-current financial assets	-	-	-	-
Fixed assets	29,171,187.61	28,114,683.89	13,963,028.87	16,384,814.69
Construction in progress	19,166,020.36	14,371,605.82	3,702,119.11	-
Right-of-use assets	33,272,425.94	-	-	-
Intangible assets	66,360,459.98	66,538,187.71	2,400,762.49	1,881,893.23
Long-term deferred expenses	9,587,028.94	10,526,954.10	8,295,263.44	8,689,887.89
deferred tax assets	1,920,410.01	2,299,731.45	20,120,805.29	11,086,424.72
Other non-current assets	280,583,645.94	269,621,198.09	5,308,201.87	4,702,696.64
Total non-current assets	470,644,027.40	421,960,971.40	99,350,996.15	68,189,977.60
Total Assets	2,293,934,271.06	1,843,523,679.83	1,308,001,477.00	636,022,468.32

(Continued)

In RMB 1 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current liabilities:				
Short-term borrowings	143,503,868.29	171,753,542.58	96,958,575.62	64,835,620.60
Accounts payable	509,083,455.00	291,942,188.20	143,174,383.74	188,211,170.82
Deposit received	-	-	68,022,078.58	68,258,641.92
Contract liabilities	232,720,142.50	86,017,842.49	-	-
Employee benefits payable	15,391,937.29	19,601,166.54	13,478,935.67	3,416,152.85
Taxes payable	5,239,714.49	3,757,755.08	29,038,214.04	9,241,710.55
Other payables	12,128,518.19	11,057,657.83	61,905,739.91	91,372,797.93
Non-current liabilities due within one year	26,987,694.78	10,458,460.32	-	-
Total current liabilities	945,055,330.54	594,588,613.04	412,577,927.56	425,336,094.67
Non-current liabilities:				
Long-term borrowings	120,909,449.95	117,280,857.74	-	-
Lease liabilities	18,385,698.53	-	-	-
Long-term payables	-	-	13,711,646.54	20,922,885.14
Long-term employee benefits payable	2,648,278.40	1,839,426.56	1,114,296.57	212,643.68
Estimated liabilities	32,211,185.17	30,067,131.50	22,053,589.22	13,163,850.07
Deferred income	27,293,269.28	51,074,327.14	28,615,025.37	31,339,538.78
Total non-current Liabilities	201,447,881.33	200,261,742.94	65,494,557.70	65,638,917.67
Total liabilities	1,146,503,211.87	794,850,355.98	478,072,485.26	490,975,012.34
Shareholders' Equity				
Share capital / paid in capital	390,201,347.00	390,201,347.00	390,201,347.00	213,124,950.00
Capital reserve	396,924,302.04	387,754,532.67	366,545,796.07	7,748,794.15
Other comprehensive income	793,198.70	881,213.21	115,559.34	163,531.34
Surplus reserve	28,626,564.68	28,626,564.68	7,471,613.51	-
Retained earnings	330,885,646.77	241,209,666.29	65,594,675.82	-75,989,819.51

Total shareholders' equity attributable to the parent company	1,147,431,059.19	1,048,673,323.85	829,928,991.74	145,047,455.98
Total shareholders' equity	1,147,431,059.19	1,048,673,323.85	829,928,991.74	145,047,455.98
Total liabilities and shareholders' equity	2,293,934,271.06	1,843,523,679.83	1,308,001,477.00	636,022,468.32

2. Consolidated Income Statement

In RMB 1 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
I. Total operating income	625,280,772.35	1,007,471,809.80	756,732,956.80	550,269,055.81
Including: Operating income	625,280,772.35	1,007,471,809.80	756,732,956.80	550,269,055.81
II. Total operating cost	575,982,726.86	896,386,734.45	626,548,338.60	464,868,954.67
Including: operating cost	360,423,960.21	566,422,360.10	415,158,395.29	307,096,125.81
Taxes and surcharges	357,296.03	843,405.52	647,614.16	421,488.03
Selling expenses	65,516,953.66	105,639,504.93	84,754,934.36	60,046,855.52
Administrative expenses	29,275,101.42	50,318,924.37	30,297,265.12	20,404,116.85
Research and development expenses	114,602,769.83	140,791,112.52	99,268,029.88	79,414,978.15
Financial expenses	5,806,645.71	32,371,427.01	-3,577,900.21	-2,514,609.69
Including: Interest expenses	3,037,479.26	6,295,231.98	7,456,097.63	5,047,846.77
Interest income	326,768.98	2,701,255.66	2,046,399.55	638,352.04
Add: Other income	28,314,811.54	25,929,804.09	26,715,646.95	20,876,330.34
Investment income ("-" for loss)	-929,330.51	1,284,412.23	1,240,299.89	-10,247.91
Including: investment income from associated enterprises and joint ventures	94,238.28	-230,413.80	-20,727.95	-10,247.91
Income from changes in fair value ("-" for loss)	17,707,599.83	86,719,932.51	-	-
Credit impairment losses ("-" for loss)	-1,967,228.51	1,224,680.63	-2,235,058.65	-
Asset impairment losses ("-" for loss)	215,837.60	-3,533,652.20	-788,808.94	-2,373,682.39
III. Operating profit ("-" for loss)	92,639,735.44	222,710,252.61	155,116,697.45	103,892,501.18
Add: Non-operating income	619,560.94	537,276.10	33,632.92	54,367.47
Less: Non-operating expenses	6,985.17	223,454.11	2,031,271.51	1,115,198.33
IV. Total profit ("-" for total losses)	93,252,311.21	223,024,074.60	153,119,058.86	102,831,670.32
Less: Income tax expenses	3,576,330.73	26,254,132.96	18,231,716.42	10,301,280.16
V. Net profit ("-" for net loss)	89,675,980.48	196,769,941.64	134,887,342.44	92,530,390.16
(I) Classified by business continuity				

1. Net profit from continuing operations (“-” for net loss)	89,675,980.48	196,769,941.64	134,887,342.44	92,530,390.16
2. Net profit from discontinued operations (“-” for net loss)	-	-	-	-
(II) Classified by ownership				
1. Net profits attributable to shareholders of the parent company (“-” for net loss)	89,675,980.48	196,769,941.64	134,887,342.44	92,530,390.16
2. Profit or loss of minority interest (“-” for net loss)	-	-	-	-
VI. Other comprehensive income, net of tax	-88,014.51	765,653.87	-47,972.00	160,704.28
Other comprehensive income attributable to owners of the parent company, net of tax	-88,014.51	765,653.87	-47,972.00	160,704.28
(I) Other comprehensive income that cannot be reclassified to profit or loss	-	-	-	-
(II) Other comprehensive income to be reclassified to profit or loss	-88,014.51	765,653.87	-47,972.00	160,704.28
Including: Foreign currency translation reserve	-88,014.51	765,653.87	-47,972.00	160,704.28
Other comprehensive income attributable to owners of minority shareholders, net of tax	-	-	-	-
VII. Total comprehensive income	89,587,965.97	197,535,595.51	134,839,370.44	92,691,094.44
Total comprehensive income attributable to owners of the parent company	89,587,965.97	197,535,595.51	134,839,370.44	92,691,094.44
Total comprehensive income attributable to minority shareholders	-	-	-	-
VIII. Earnings per share:				
(I) Basic earnings per share (RMB 1 Yuan/share)	0.23	0.50	0.36	-
(II) Diluted earnings per share (RMB 1 Yuan/share)	0.23	0.50	0.36	-

3. Consolidated Statement of Cash Flows

In RMB 1 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
I. Cash flows from operating activities				
Cash received from sales of goods or rendering of services	733,198,155.36	965,793,104.81	730,630,575.46	540,892,514.09
Refunds of taxes	46,694,868.17	45,064,618.95	51,415,157.90	31,616,948.86

Cash received relating to other operating activities	7,549,187.14	62,688,068.49	32,124,009.88	4,266,384.04
Subtotal of cash inflows from operating activities	787,442,210.67	1,073,545,792.25	814,169,743.24	576,775,846.99
Cash paid for goods and services	539,497,096.68	834,434,849.80	538,881,062.29	400,716,490.93
Cash paid to and on behalf of employees	110,036,442.30	113,224,120.74	84,379,310.56	58,378,437.95
Cash paid for all types of taxes	4,537,114.39	35,531,985.55	8,575,237.99	265,012.03
Cash paid relating to other operating activities	92,439,430.93	178,599,781.18	109,627,644.35	78,605,561.90
Subtotal of cash outflows from operating activities	746,510,084.30	1,161,790,737.27	741,463,255.19	537,965,502.81
Net cash flows from operating activities	40,932,126.37	-88,244,945.02	72,706,488.05	38,810,344.18
II. Cash inflows from investing activities				
Cash received from return of investemnt	-	242,041,200.00	-	-
Cash received from investment	-	3,671,014.66	-	-
Net cash received from disposal of fixed assets, intangible assets and other long-term assets	-	2,720.73	2,350.00	8,200.00
Cash received relating to other investing activities	-	7,406,102.64	-	-
Subtotal of cash inflows from investing activities	-	253,121,038.03	2,350.00	8,200.00
Cash paid for acquisition and construction of fixed assets, intangible assets and other long-term assets	19,040,311.74	355,449,882.11	10,165,874.74	14,731,164.00
Cash paid for investment	-	120,943,300.00	188,852,600.00	-
Net cash paid by acquisition of subsidiaries and other business units	-	24,541,650.00	30,750,000.00	-
Cash paid relating to other investment activities	-	12,336,000.00	34,492,500.00	-

Subtotal of cash outflows from investing activities	19,040,311.74	513,270,832.11	264,260,974.74	14,731,164.00
Net cash flows from investing activities	-19,040,311.74	-260,149,794.08	-264,258,624.74	-14,722,964.00
III. Cash flows from financing activities				
Cash received from investment absorption	-	-	560,661,364.69	-
Cash received from borrowings	124,167,819.86	340,137,518.99	128,873,975.15	121,295,620.60
Subtotal of cash inflows from financing activities	124,167,819.86	340,137,518.99	689,535,339.84	121,295,620.60
Cash paid for debt repayment	146,935,586.45	132,833,143.88	97,735,510.19	89,760,000.00
Cash paid for distribution of dividends or profits and for interest expenses	6,821,352.36	6,442,311.63	7,611,020.80	2,640,570.32
Cash paid relating to other financing activities	7,699,573.83	12,286,460.98	49,994,239.02	-
Subtotal of cash outflows from financing activities	161,456,512.64	151,561,916.49	155,340,770.01	92,400,570.32
Net cash flows from financing activities	-37,288,692.78	188,575,602.50	534,194,569.83	28,895,050.28
IV. Effect of foreign exchange rate changes on cash and cash equivalents	-2,043,972.19	-8,942,116.25	1,558,032.79	-2,306,981.52
V. Net increase in cash and cash equivalents	-17,440,850.34	-168,761,252.85	344,200,465.93	50,675,448.94
Add: Cash and cash equivalents at beginning of period	271,267,852.84	440,029,105.69	95,828,639.76	45,153,190.82
VI. Cash and cash equivalents at end of period	253,827,002.50	271,267,852.84	440,029,105.69	95,828,639.76

(II) Financial statements of the parent company

1. Balance Sheet of the Parent Company

In RMB 1 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current assets:				
Cash and bank balances	20,057,183.65	75,817,949.02	286,781,661.15	27,215,160.52
Held-for-trading financial assets	201,916,518.62	184,208,918.79	-	-
Accounts receivables	357,979,574.93	385,776,905.05	320,416,930.78	195,092,417.32
Prepayments	71,455,177.77	46,262,350.69	23,159,474.00	13,328,626.96
Other receivables	44,393,465.87	36,747,275.60	11,555,869.32	17,064,181.28
Inventory	896,443,968.41	602,044,135.29	295,107,215.49	263,975,720.12
Other current assets	21,322,747.20	20,056,989.68	192,023,607.72	2,944,359.83
Total current assets	1,613,568,636.45	1,350,914,524.12	1,129,044,758.46	519,620,466.03
Non-current assets:				
Long-term receivables	210,874,539.31	203,818,031.81	14,841,790.94	24,704,508.34
Long-term equity investments	38,582,848.62	38,488,610.34	36,719,024.14	5,739,752.09
Fixed assets	27,708,369.63	26,940,268.54	13,651,736.37	16,305,494.30
Construction in progress	14,257,883.24	11,095,707.80	3,702,119.11	-
Right-of-use assets	30,892,727.51	-	-	-
Intangible assets	3,108,222.97	3,131,022.63	1,997,794.83	1,600,080.80
Long-term deferred expenses	8,180,129.73	9,565,554.88	8,116,458.98	8,669,850.06
deferred tax assets	-	-	17,951,274.93	11,070,257.47
Other non-current assets	12,190,994.69	4,804,334.63	4,644,711.91	4,518,951.92
Total non-current assets	345,795,715.70	297,843,530.63	101,624,911.21	72,608,894.98
Total Assets	1,959,364,352.15	1,648,758,054.75	1,230,669,669.67	592,229,361.01

(Continued)

In RMB 1 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current liabilities:				
Short-term borrowings	143,503,868.29	171,753,542.58	96,958,575.62	64,835,620.60
Accounts payable	432,681,567.42	249,280,254.24	115,306,027.30	188,130,524.93
Deposit received	-	-	23,322,451.48	32,405,506.20
Contract liabilities	87,289,725.29	52,054,433.00	-	-

Employee benefits payable	11,485,517.28	16,178,241.10	11,559,044.56	2,788,215.49
Taxes payable	1,811,908.31	1,425,132.55	27,931,334.97	8,196,421.68
Other payables	18,657,930.58	13,101,486.98	61,196,982.56	90,312,457.45
Non-current liabilities due within one year	15,035,017.20	-	-	-
Total current liabilities	710,465,534.37	503,793,090.45	336,274,416.49	386,668,746.35
Non-current liabilities:				
Long-term borrowings	9,000,000.00	-	-	-
Lease liabilities	17,243,916.83	-	-	-
Long-term payables	-	-	13,711,646.54	20,922,885.14
Estimated liabilities	32,211,185.17	30,067,131.50	22,053,589.22	13,163,850.07
Deferred income	27,293,269.28	51,074,327.14	28,615,025.37	31,339,538.78
Deferred income tax liabilities	3,742,709.20	2,090,723.42	-	-
Total non-current Liabilities	89,491,080.48	83,232,182.06	64,380,261.13	65,426,273.99
Total liabilities	799,956,614.85	587,025,272.51	400,654,677.62	452,095,020.34
Shareholders' Equity				
Share capital / paid in capital	390,201,347.00	390,201,347.00	390,201,347.00	213,124,950.00
Capital reserve	393,445,715.23	385,265,788.47	365,097,509.99	7,222,320.06
Surplus reserve	28,626,564.68	28,626,564.68	7,471,613.51	-
Retained earnings	347,134,110.39	257,639,082.09	67,244,521.55	-80,212,929.39
Total shareholders' equity	1,159,407,737.30	1,061,732,782.24	830,014,992.05	140,134,340.67
Total liabilities and shareholders' equity	1,959,364,352.15	1,648,758,054.75	1,230,669,669.67	592,229,361.01

2. Income Statement of the Parent Company

In RMB 1 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
I. Operating income	601,261,596.98	961,184,814.25	727,990,275.70	538,268,092.74
Less: operating cost	362,831,583.06	568,943,512.84	415,095,559.79	307,096,125.81

Taxes and surcharges	325,206.31	816,664.08	647,614.16	421,488.03
Selling expenses	46,610,151.45	63,143,119.47	59,017,992.96	58,120,402.63
Administrative expenses	31,989,964.25	51,230,844.57	27,274,443.41	18,028,288.17
Research and development expenses	103,610,022.53	123,002,633.42	89,291,097.73	75,582,755.94
Financial expenses	5,961,283.93	29,485,652.13	-3,651,805.80	-833,760.93
Including: Interest expenses	3,559,037.06	5,695,655.54	7,447,466.67	5,047,846.77
Interest income	1,353,139.70	3,532,267.65	1,562,504.19	632,774.75
Add: Other income	28,314,811.54	25,929,804.09	26,715,646.95	20,876,330.34
Investment income (“-” for loss)	-929,330.51	1,284,412.23	1,240,299.89	-10,247.91
Including: investment income from associated enterprises and joint ventures	94,238.28	-230,413.80	-20,727.95	-10,247.91
Income from changes in fair value (“-” for loss)	17,707,599.83	86,719,932.51	-	-
Credit impairment losses (“-” for loss)	-1,972,423.73	4,027,112.25	-4,401,517.26	-
Asset impairment losses (“-” for loss)	215,837.60	-3,533,652.20	-788,808.94	-2,390,364.32
II. Operating profit (“-” for loss)	93,269,880.18	238,989,996.62	163,080,994.09	98,328,511.20
Add: Non-operating income	53,800.03	313,440.61	24,971.35	836.81
Less: Non-operating expenses	6,502.00	217,511.29	2,030,140.30	1,113,405.44
III. Total profit (“-” for total losses)	93,317,178.21	239,085,925.94	161,075,825.14	97,215,942.57
Less: Income tax expenses	3,822,149.91	27,536,414.23	20,315,527.09	9,361,577.74
IV. Net profit (“-” for net loss)	89,495,028.30	211,549,511.71	140,760,298.05	87,854,364.83
(I) Net profit from continuing operations (“-” for net loss)	89,495,028.30	211,549,511.71	140,760,298.05	87,854,364.83
(II) Net profit from discontinued operations (“-” for net loss)	-	-	-	-
V. Other comprehensive income, net of tax				
(I) Other comprehensive income that cannot be reclassified to profit or loss	-	-	-	-
(II) Other comprehensive income to be reclassified to profit or loss	-	-	-	-
VI. Total comprehensive income	89,495,028.30	211,549,511.71	140,760,298.05	87,854,364.83
VII. Earnings per share:				
(I) Basic earnings per share (RMB 1 Yuan/share)	-	-	-	-
(II) Diluted earnings per share (RMB 1 Yuan/share)	-	-	-	-

3. Statement of Cash Flows of the Parent Company

In RMB 1 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
I. Cash flows from operating activities				
Cash received from sales of goods or rendering of services	674,152,455.59	905,529,938.40	603,269,257.85	461,257,053.63
Refunds of taxes received	46,694,868.17	45,064,618.95	51,415,157.90	31,616,948.86
Cash received relating to other operating activities	6,970,553.52	51,845,877.86	31,998,311.79	4,284,153.45
Subtotal of cash inflows from operating activities	727,817,877.28	1,002,440,435.21	686,682,727.54	497,158,155.94
Cash paid for goods and services	544,285,889.99	835,714,229.81	544,449,905.39	399,376,146.95
Cash paid to and on behalf of employees	91,259,213.40	88,771,965.75	74,857,899.56	52,924,907.19
Cash paid for all types of taxes	4,332,855.32	34,754,163.67	8,584,497.05	294,768.20
Cash paid relating to other operating activities	92,759,747.74	146,005,489.74	104,829,026.11	72,855,435.20
Subtotal of cash outflows from operating activities	732,637,706.45	1,105,245,848.97	732,721,328.11	525,451,257.54
Net cash flows from operating activities	-4,819,829.17	-102,805,413.76	-46,038,600.57	-28,293,101.60
II. Cash flows from investing activities				
Cash received from return of investemnt	-	209,416,700.00	-	-
Cash received from investment	-	3,113,683.80	-	-
Net cash received from disposal of fixed assets, intangible assets and other long-term assets	-	-	2,350.00	8,200.00
Subtotal of cash inflows from investing activities	-	212,530,383.80	2,350.00	8,200.00
Cash paid for acquisition and construction of fixed assets, intangible assets and other long-term assets	16,262,511.53	30,771,139.33	8,832,529.79	14,288,397.74

Cash paid for investment	-	120,943,300.00	188,852,600.00	-
Net cash paid by acquisition of subsidiaries and other business units	-	26,541,650.00	31,750,000.00	-
Cash paid relating to other investing activities	6,023,000.00	202,959,000.00	-	-
Subtotal of cash outflows from investing activities	22,285,511.53	381,215,089.33	229,435,129.79	14,288,397.74
Net cash flows from investing activities	-22,285,511.53	-168,684,705.53	-229,432,779.79	-14,280,197.74
III. Cash flows from financing activities				
Cash received from investment absorption	-	-	560,661,364.69	-
Cash received from borrowings	124,167,819.86	211,637,518.99	128,873,975.15	121,295,620.60
Cash received from other financing activities	-	-	-	-
Subtotal of cash inflows from financing activities	124,167,819.86	211,637,518.99	689,535,339.84	121,295,620.60
Cash paid for debt repayment	141,564,178.66	131,990,016.88	97,735,510.19	89,760,000.00
Cash paid for distribution of dividends or profits and for interest expenses	3,883,120.03	5,925,180.25	6,624,389.84	2,640,570.32
Cash paid relating to other financing activities	7,361,484.15	12,286,460.98	49,994,239.02	-
Subtotal of cash outflows from financing activities	152,808,782.84	150,201,658.11	154,354,139.05	92,400,570.32
Net cash flows from financing activities	-28,640,962.98	61,435,860.88	535,181,200.79	28,895,050.28
IV. Effect of foreign exchange rate changes on cash and cash equivalents	-14,461.69	-909,453.72	-143,319.80	-610,879.68
V. Net increase in cash and cash equivalents	-55,760,765.37	-210,963,712.13	259,566,500.63	-14,289,128.74
Add: Cash and cash equivalents at beginning of period/year	75,817,949.02	286,781,661.15	27,215,160.52	41,504,289.26
VI. Cash and cash equivalents at end of period/year	20,057,183.65	75,817,949.02	286,781,661.15	27,215,160.52

II. Preparation Basis of Financial Statements and Scope of Consolidated Statements

(I) Preparation basis of financial statements

1. Preparation Basis

The financial statements are prepared in accordance with the Accounting Standards for Business Enterprises – General Principles issued by the China Ministry of Finance (“MoF”), together with specific accounting standards, application guidance thereon, interpretations and other related regulations thereof, and in accordance with the disclosure provisions of Compilation Rule for Information Disclosure by Companies Offering Securities to the Public No. 15 - General Provisions on Financial Reports issued by China Securities Regulatory Commission, on the basis of a going concern and the actual transactions and events for the period of the financial statements.

2. Going Concern

There exist no events that affect its ability to continue as a going concern, and it is expected to have such ability in the next twelve months. The Company’s financial statements have been prepared on the basis of going concern assumption.

(II) Scope and changes of consolidated financial statements

1. Scope of Consolidated Financial Statements

The consolidation scope of the Company’s consolidated financial statements is determined on the basis of control, and all the subsidiaries (including the separable part of the investees under the control of the Company) are included in the consolidated financial statements.

During the Reporting Period, the subsidiaries within the scope of the Company’s consolidated financial statements are as follows:

Name of subsidiary	Shareholding ratio	Whether it is included in the scope of consolidated financial statements			
		June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018

ACM Wuxi	100%	Yes	Yes	Yes	Yes
Shengwei Shanghai	100%	Yes	Yes	Yes	N/A
CleanChip HK	100%	Yes	Yes	Yes	Yes
ACMKR	100%	Yes	Yes	Yes	Yes
ACM CA	100%	Yes	Yes	Yes	N/A

Note: 1. Shengwei Shanghai was established on March 25, 2019; 2. CleanChip HK was established on June 9, 2017; 3. ACM South Korea was established on December 5, 2017; 4. ACMR CA was established on April 5, 2019.

2. Changes in the Consolidation Scope during the Reporting Period

(1) Changes in the scope of consolidated statements in 2018

In 2018, the scope of the Company's consolidated statements did not change.

(2) Changes in the scope of consolidated statements in 2019

The Company acquisition of 100% equity of CleanChip HK from ACMR, the controlling shareholder of the Company, which is a business combination involving entities under common control. CleanChip HK and its subsidiaries, ACM South Korea and ACMR CA, have been incorporated into the scope of the Company's consolidated statements from the date of establishment; Shengwei Shanghai, a wholly owned subsidiary of the Company, was incorporated on March 25, 2019. The Company has included Shengwei Shanghai into the scope of the consolidated statements since its incorporation.

(3) Changes in the scope of consolidated statements in 2020

In 2020, the scope of the Company's consolidated statements did not change.

(4) Changes in the scope of consolidated statements in the period from January to June 2021

In the period from January to June 2021, the scope of the Company's consolidated statements did not change.

III. Audit Opinion of Certified Public Accountant

Entrusted by the Company, BDO China has audited the Company's financial statements, including the consolidated and the parent company's balance sheets as of December 31, 2018, December 31, 2019, December 31, 2020 and June 30, 2021, the consolidated and the parent company's income statements, the consolidated and the parent company's cash flow statements, consolidated and the parent company's statements of changes in owner's equity and notes to financial statements of 2018, 2019, 2020 and the six-month period ending June 30, 2021 and issued an unmodified audit opinion.

In the opinion of BDO China, the financial statements of the Company are prepared in accordance with the Accounting Standards for Business Enterprises in all major aspects, and fairly reflect the consolidated and the parent company's financial position of ACMSH as of December 31, 2018, December 31, 2019, December 31, 2020 and June 30, 2021, as well as the consolidated and the parent company's operating results and cash flows in 2018, 2019, 2020 and the six-month period ending June 30, 2021.

IV. Key Audit Matters and Judgment Criteria for Materiality Related to Financial Accounting Information

(I) key audit matters

1. Recognition of operating income

(1) Details

In the opinion of BDO China,

"ACMSH is mainly engaged in the research and development, production and sales of special semiconductor equipment. The operating income of ACMSH in Jan.-June 2021, 2020, 2019 and 2018 are RMB 625.2808 million Yuan, RMB 1.0074718 billion Yuan, RMB 756.733 million Yuan and RMB 550.2691 million Yuan respectively.

The large amount of operating income is one of the reporting indicators of ACMSH. Due to the high gross profit of ACMSH, the growth of operating income is the main reason for the increase in profit, for which there is an inherent risk that the management will manipulate operating income recognition in order to achieve specific goals or expectations, so we determine the recognition of operating income as a key audit matter."

(2) How our audit addressed the key audit matter

For the recognition of operating income, the audit procedures implemented by BDO China mainly include:

① Understand, evaluate and test the internal control system related to the recognition of operating income, and test the effectiveness of key internal control implementation;

② Check the sales contracts and orders between ACMSH and its main customers, including the main sales terms, and evaluate the relevant accounting policies for the recognition of operating income of ACMSH;

③ Select samples to check the supporting documents related to the recognition of operating income, such as sales contract, sales order, sales invoice, acceptance form and other information for verification;

- ④ Select samples to implement confirmation procedures for sales revenue and accounts receivable balance;
- ⑤ Implement the interview procedure, interview the main customers and some end customers of product sales to understand the authenticity of sales revenue;
- ⑥ Perform a cut-off test on operating income to determine whether revenue recognition is recorded in the correct accounting period.

(II) Judgment criteria for materiality related to financial accounting information

According to its industry and development stage, the Company judges the importance of financial information from the nature and amount of the event. When judging the importance of the nature of the event, the Company mainly considers whether the event is one of the daily activities in nature, whether it significantly affects the Company's financial position, operating results, cash flows and other factors; when judging the importance of the amount of the event, based on the consideration of the nature and size of the Company's business, the standards for major events related to financial accounting information disclosed by the Company in this Section are those events that account for 5% of consolidated operating income or consolidated net assets, with a significant change amount and over 30% of change proportion, or that have significant impact on the Company's future operating results, financial position, cash flow, liquidity and ability to continue as a going concern and may affect the investors' investment judgment.

V. Potential Specific Impacts on or Risks to Issuer's Future Profitability (Operation) or financial position

(I) Main factors affecting the Company's future profitability (operation) or financial position and changing trend thereof

1. Product Features

The Company is mainly engaged in the research and development, production and sales of semiconductor equipment, with the main products including semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet processing equipment. The Company insists on the development strategy of differentiation competition and innovation. Through independent research and development of single-wafer megasonic cleaning technology, single wafer wet bench combined cleaning technology, electro-plating technology, stress-free polishing technology, vertical furnace tube technology etc., the Company provides customized equipment and process solutions to global customers in wafer manufacturing, advanced packaging and other fields, effectively improving the customer's production efficiency, product yield and reduce production costs.

Based on independent innovation and research and development as well as many years of professional technique and technology accumulation, the Company has successfully developed the world's first SAPS/TEBO megasonic cleaning technology and single wafer wet bench combined cleaning technology applied to the wafer cleaning area with technology nodes 45 nm and below, which can effectively solve the cleaning problem of organic contamination and particles after etching and greatly reduce the usage of the chemical reagents such as sulfuric acid, helping customers reduce production costs while meeting the requirements of China's energy conservation and emissions reduction at the same time.

With its advanced technology and abundant product lines, the Company has developed into one of the few semiconductor equipment suppliers with certain international competitiveness in mainland China, whose products have been recognized by many domestic and foreign mainstream semiconductor manufacturers and have gained a good reputation in the market.

With the continuous evolution of global semiconductor manufacturing technology, the requirements for technical indicators of semiconductor specific equipment manufacturing are also increasing. The profitability and financial position of the Company, to some extent, will depend on the advanced manufacturing technology of semiconductor special equipment, which puts forward higher requirements for the Company to maintain sufficient R&D investment and continue technological innovation.

2. Business Model

Semiconductor special equipment enterprises focus on technology and process accumulation, have high requirements for raw material quality, strict customer verification process and highly customized products, and put forward higher requirements for business management capabilities such as R&D, sales, production, etc. In the R&D process, semiconductor special equipment enterprises need to increase R&D investment and continue technological innovation in order to have certain technical advantages in the industry competition; in the procurement process, semiconductor special equipment enterprises have strict requirements for the quality of raw materials and parts, and the raw materials and parts with high precision, quality and reliability are important guarantees of semiconductor special equipment's performance and stability; in the sales process, semiconductor special equipment enterprises need to continuously increase investment in product technical verification and after-sales service.

3. Industry Competition

The semiconductor special equipment industry of the Company is a typical technology-intensive industry, involving microelectronics, electrical, mechanical, material, chemical engineering, fluid mechanics, automation, image recognition, communications, software system and many other disciplines, with a high threshold of technical R&D. Through years of technology accumulation and economies of scale, leading enterprises in the industry have established high barriers to entry. The global semiconductor cleaning equipment market is highly concentrated, especially in the field of single-wafer cleaning equipment, the total market share of the four companies, namely DNS, TEL, LAM and SEMES, has reached more than 90%, of which the market share of DNS is the highest and accounts for more than 40%.

Faced with the high concentration and economies of scale formed by leading companies in semiconductor special equipment industry, the Company needs to continuously strengthen its technical strength and expand the scale of production and marketing to enhance its competitiveness in the industry.

4. External Market Environment

The external market environment factors that affect the Company's future operating results and financial position are mainly the global economy and industry life cycle. Due to the changes in the global economic environment and industry life cycle, the demand for semiconductor products will fluctuate, which will affect the Company's operating results and financial position.

At present, the global semiconductor industry is on the road to its third industrial transfer, that is, to transfer to mainland China. Looking back, the first industrial transfer to Japan and the second industrial transfer to South Korea and Taiwan both led to the development of local industries, the advancement of vertical division of labor and the optimization of resource allocation. For the target countries and regions of industrial transfer, the semiconductor industry thereof tends to extend from packaging and testing to wafer manufacturing and chip design, to semiconductor materials and equipment, and ultimately to the overall development of the whole industrial chain. Compared with developed countries and regions, the division of labor in semiconductor industry chain in mainland China is still in the early stage, and the semiconductor special equipment industry will become the focus of future growth.

Benefiting from the accelerated transfer of semiconductor industry to mainland China, China's semiconductor industry has expanded its scale and demand, and the Company has made full use of its geographical characteristics, technological capabilities and market accumulation to sustain its sound development.

(II) Potential specific impacts on or risks to the Company's future profitability (operation) or financial position of the said main factors

The potential specific impacts on or risks to the Company's future profitability (operation) or financial position of the said main factors are as follows:

1. Operating Income

Recent years have witnessed the growing semiconductor industry on the whole, the increasing downstream emerging demand, the transfer of semiconductor industry to mainland China, the increase in capital expenditure of customers and the constantly growing demand for semiconductor special equipment. Meanwhile, the trend of import substitution of China's semiconductor special equipment is becoming increasingly evident. With the advantages of technology and process accumulation, new product development capability, rich product lines, product quality, customer resources, etc., the Company's operating income has maintained rapid growth from 2018 to 2020, with an average compound annual growth rate of 35.31%. In the future, the Company's operating income is expected to continue to grow.

2. Gross Margin

The semiconductor special equipment is typically one of the advanced, precise and cutting-edge products considering the semiconductor special equipment is highly customized and its downstream customers have high requirements on specifications, product standards, technical parameters, etc.. And further the industry has high technical barriers to entry, market barriers and customer verification barriers. The above products and industry characteristics determine that the Company has a relatively high gross margin.

During the Reporting Period, the comprehensive gross margin of the Company was 44.19%, 45.14%, 43.78% and 42.36% respectively, each of which can be considered as a high gross margin. The Company will further improve its market position and maintain a high gross margin through product upgrades, process improvement, increased product types, enhanced cost control, and better business negotiation.

3. R&D Investment

Since its establishment, the Company has been committed to providing innovation-driven, high-performance products and technical solutions for the semiconductor industry, and keeps a relatively high R&D investment. After years of accumulation, the Company has developed a large number of core technologies with independent intellectual property rights, and applied them to the main products, which has been recognized by its customers. During the Reporting Period, the amount of R&D expenses of the Company was RMB 79.415 million Yuan, RMB 99.268 million Yuan, RMB 140.7911 million Yuan and RMB 114.6028 million Yuan respectively, accounting for 14.43%, 13.12%, 13.97% and 18.33% of the operating income respectively, each of which can be considered as a high R&D investment. In order to improve the market competitiveness of products, the Company will continue to attach importance to the R&D, and the proportion of R&D investment to operating income will remain at a relatively high level.

VI. Significant Accounting Policies and Accounting Estimates Adopted in the Reporting Period

(I) Accounting treatment method of business combination involving entities under common control and not involving entities under common control

Business combinations involving entities under common control: assets and liabilities that are obtained by the Company in a business combination involving entities under common control (including the goodwill generated by the ultimate controlling party in the acquisition of the acquiree) shall be measured at the carrying amounts of the assets and liabilities of the Company being combined as recorded in the consolidated financial statements of the ultimate controlling company on the combination date. The difference between the carrying amount of the net assets obtained by the combination and the carrying amount of the consideration paid for the combination (or the aggregate face value of shares issued as consideration) shall be adjusted to share premium under capital surplus. If the capital surplus is not sufficient to decrease the difference, any excess shall be adjusted against retained earnings.

Business combinations not involving entities under common control: assets paid and liabilities incurred or undertaken by the Company as the consideration of business combinations are measured at fair value on the acquisition date, and the difference between fair value and carrying amount is recorded to profit or loss for the current period. Where the combination cost is more than the share of the fair value of the net identifiable assets of the acquiree acquired in the combination, the difference is recognized as goodwill. Where the combination cost is less than the share of the fair value of the net identifiable assets of the acquiree acquired in the combination, the difference is recognized in profit or loss of the current period.

The intermediary fees for audit, legal services, assessment, consultation, etc. and other direct fees incurred for the business combination shall be recognized as profit or loss of the current period upon incurrence; the transaction fees of issuing equity securities or debt securities for the business combination shall be recognized as the initial recognition amount of equity securities or debt securities.

(II) Preparation method of consolidated financial statements

1. Scope of consolidation

The consolidation scope of the Company's consolidated financial statements is determined on the basis of control, and all subsidiaries (including the separable part of the investee controlled by the Company) are included in the consolidated financial statements.

2. Consolidation procedure

Based on the financial statements of the Company and its subsidiaries, the Company prepares the consolidated financial statements according to other relevant information. In the preparation of the consolidated financial statements, the Company regards the entire company group as an accounting entity, and reflects the overall financial position, operating results and cash flows of the Company group in accordance with the recognition, measurement and presentation requirements of the relevant Accounting Standards for Business Enterprises and the unified accounting policies.

The accounting policies and accounting periods adopted by all subsidiaries included in the consolidation scope of the consolidated financial statements are consistent with those of the Company. In case of any inconsistency, necessary adjustments shall be made according to the accounting policies and accounting periods of the Company when the consolidated financial statements are being prepared. For subsidiaries acquired through business combination not involving entities under common control, their financial statements shall be adjusted on the basis of the fair value of the identifiable net assets on the acquisition date. For the subsidiaries acquired through business combination involving entities under common control, the financial statements of the subsidiaries shall be adjusted based on the carrying amount of their assets and liabilities (including the goodwill generated by the ultimate controlling party in the acquisition of the acquiree) in the financial statements of the ultimate controlling party.

The owner's equity, net profit or loss of the current period and the share of non-controlling interests in the current comprehensive income of the subsidiary are separately listed below the owner's equity line item in the consolidated balance sheet, the net profit line item in the consolidated income statement and the total comprehensive income line item. If the current loss shared by the minority shareholders of the subsidiary exceeds the balance formed by the minority shareholders' share in the owner's equity at beginning of period of the subsidiary, the minority shareholders' equity shall be offset.

(1) Add subsidiary or business

During the Reporting Period, if subsidiaries or businesses are increased due to business combinations involving entities under common control, the opening balance of the consolidated balance sheet shall be adjusted; the incomes, expenses and profits of subsidiaries or businesses from the beginning of the current period to the end of the Reporting Period shall be included in the consolidated income statement; the cash flows of subsidiaries or businesses from the beginning of the current period to the end of the Reporting Period shall be included in the consolidated statement of cash flows, and the related items in the comparative statement shall be adjusted at the same time as if the consolidated reporting entity has been existing since the ultimate controlling party began to control.

If the investee under common control can be controlled due to additional investment or other reasons, the adjustment shall be deemed to be made by parties involved in the combination according to the current status when the ultimate controlling party begins to control. For the equity investment held prior to the acquisition of the control of the acquiree, the relevant profit or loss, other comprehensive income and other changes in net assets from the later of the date of acquiring the original equity and the date when the acquirer and the acquiree are under common control to the combination date have been determined to respectively decrease the retained earnings at the beginning of the period or the current profit or loss in the period of the comparative statement.

During the Reporting Period, if subsidiaries or businesses are increased due to business combination not involving entities under common control, the opening balance of the consolidated balance sheet will not be adjusted; the income, expenses and profits of subsidiaries or businesses from the acquisition date to the end of the Reporting Period will be included in the consolidated income statement; the cash flows of subsidiaries or businesses from the acquisition date to the end of the Reporting Period will be included in the consolidated statement of cash flows.

If the investee not under common control can be controlled due to additional investment or other reasons, the equity of the acquiree held before the acquisition date shall be re-measured by the Company according to the fair value of the equity on the acquisition date, and the difference between the fair value and the carrying amount shall be recognized as the current investment income. If the equity of the acquiree held before the acquisition date involves other comprehensive income under the equity method accounting and other changes in owner's equity other than net profit or loss, other comprehensive income and profit distribution, the changes in other comprehensive income and other owner's equity related to it will be converted into the current investment income on the acquisition date, except for other comprehensive income arising from the change in net liabilities or net assets of the defined benefit plan remeasured by the investee.

(2) Disposal of subsidiaries or businesses

① General treatment

During the Reporting Period, when the Company disposes of a subsidiary or business, the income, expenses and profits of the subsidiary or business from the beginning of the period to the disposal date shall be included in the consolidated income statement; the cash flows of the subsidiary or business from the beginning of the period to the disposal date shall be included in the consolidated statement of cash flows.

When the control of the investee is lost due to the disposal of part of the equity investment or other reasons, the remaining equity investment after disposal shall be re-measured by the Company at its fair value on the date when the control is lost. The difference between the sum of the consideration obtained from the disposal of equity and the fair value of the remaining equity, less the sum of the share of the net assets of the original subsidiary calculated continuously from the acquisition date or the combination date calculated according to the original shareholding ratio and the goodwill, shall be recognized as the investment income in the period in which the control is lost. Other comprehensive income related to the equity investment of the original subsidiary or other changes in owner's equity other than net profit or loss, other comprehensive income and profit distribution shall be converted into current investment income in the period in which the control is lost, except for other comprehensive income arising from the change of net liabilities or net assets of the defined benefit plan remeasured by the investee.

Accounting treatment shall be carried out according to the above principles if the shareholding ratio of the Company decreases and the control is lost due to the capital increase of the subsidiary by other investors.

② Step-by-step disposal of subsidiaries

Where the Company loses control of a subsidiary through two or more arrangements (transactions) to dispose of the equity investments in the subsidiary step by step, if the terms and conditions of the arrangements (transactions) of the disposal of the equity investments in the subsidiary and the economic effects fall under one or more of the following circumstances, it usually indicates that the Company shall account for the multiple arrangements as a "package deal":

A. they are entered into at the same time or in contemplation of each other;

B. only taken as a whole can they achieve an overall commercial effect;

C. the occurrence of one transaction is dependent on the occurrence of at least one other transaction;

D. one single transaction seems not economically justified, but it is economically justified when considered together with other transactions.

Where the transactions of disposal of equity investments in a subsidiary until the loss of control are assessed as a package deal, these transactions are accounted for as one transaction of disposal of a subsidiary with loss of control. Before losing control, however, the difference of consideration received on disposal and the share of net assets of the subsidiary from the acquisition is recognized as other comprehensive income in the consolidated financial statements. When losing control, the cumulated other comprehensive income is transferred to profit or loss of the period of losing control.

If the transactions of disposal of equity investments in a subsidiary until the loss of control are not assessed as a package deal, these transactions are accounted for according to the relevant policies of partial disposal of equity investment in subsidiaries without loss of control; upon loss of control, accounting treatment shall be carried out according to the general treatment method of disposal of subsidiaries.

(3) Purchase of minority interests in subsidiaries

The difference between the long-term equity investment newly acquired by the Company due to purchase of minority interests and the share of net assets of subsidiaries continuously calculated according to the newly increased shareholding ratio from the acquisition date (or the combination date), shall be adjusted to share premium under capital surplus in the consolidated balance sheet. If the capital surplus is not sufficient to decrease the difference, any excess shall be adjusted against retained earnings.

(4) Partial disposal of equity investments in subsidiaries without loss of control

The difference between the disposal price obtained from the partial disposal of the long-term equity investment in subsidiaries and the share of the net assets of subsidiaries continuously calculated from the acquisition date or the combination date corresponding to the disposal of the long-term equity investment, without loss of control, shall be adjusted to share premium under capital surplus in the consolidated balance sheet. If the capital surplus is not sufficient to decrease the difference, any excess shall be adjusted against retained earnings.

(III) Financial instruments

Financial instruments include financial assets, financial liabilities and equity instruments.

1. Classification of financial instruments

(1) Applicable accounting policies from January 1, 2019

According to the business model for the Company to manage financial assets and the contractual cash flows characteristics of financial assets, financial assets after the initial recognition are classified into: financial assets measured at amortized cost, financial assets (debt instruments) at fair value through other comprehensive income ("FVTOCI") and financial assets at fair value through profit or loss ("FVTPL").

If the business model is intended to collect the contract cash flows and the contract cash flows is only the payments of principal and accrued interest on the outstanding principal, such financial assets will be classified as the financial assets measured at amortized cost; if the business model is intended to both collect the contract cash flows and sell the financial assets, with the contract cash flows being only the payments of principal and accrued interest on the outstanding principal, such financial assets will be classified as financial assets (debt instruments) at FVTOCI; other financial assets are classified as the financial assets at FVTPL.

For non-held-for-trading equity instrument investment, the Company determines whether to designate it as financial asset (equity instrument) to FVTOCI at the time of initial recognition. Upon the initial recognition, in order to eliminate or significantly reduce accounting mismatches, financial assets can be designated as the financial assets at FVTPL.

Financial liabilities are classified at the time of initial recognition as the financial liabilities at FVTPL and the financial liabilities measured at amortized cost.

Financial liabilities meeting one of the following conditions can be designated as the financial liabilities at FVTPL at the time of initial measurement:

① Such designation can eliminate or significantly reduce accounting mismatches.

② According to the enterprise risk management or investment strategy stated in formal written documents, a portfolio of financial liabilities or a portfolio of financial assets and financial liabilities is managed and made performance evaluation on the basis of fair value, and the key management personnel in the Company shall be reported thereon.

③ The financial liabilities include embedded derivatives that need to be separately split.

(2) Applicable accounting policies before January 1, 2019

Financial assets and financial liabilities upon the initial recognition are classified into: financial assets or financial liabilities at FVTPL, including held-for trading financial assets or financial liabilities and financial assets or financial liabilities directly designated at FVTPL; held-to-maturity investments; receivables; available-for-sale financial assets; other financial liabilities, etc.

2. Recognition basis and measurement method of financial instruments

(1) Accounting policies applicable from January 1, 2019

① Financial assets measured at amortized cost

Financial assets measured at amortized cost include notes receivable, accounts receivables, other receivables, long-term receivables, debt investment, etc., which are initially measured at fair value, and relevant transaction expenses are recognized as the initially recognized amount; accounts receivables that do not contain significant financing components and that the Company decides not to consider financing components for no more than one year are initially measured at the contract transaction price.

The interest calculated by the effective interest method during the holding period is recorded to profit or loss for the period.

At the time of recovery or disposal, the difference between the price obtained and the carrying amount of the financial asset shall be recorded to profit or loss for the period.

② Financial assets (debt instruments) at FVTOCI

Financial assets (debt instruments) at FVTOCI, including accounts receivables financing, other debt investment, etc., are initially measured at fair value, and relevant transaction costs are recognized as the initially recognized amount. The financial assets are subsequently measured at fair value and the changes in fair value are recognized as other comprehensive income except for interest, impairment loss or gain and exchange gain or loss calculated by the effective interest method.

At the time of derecognition, the cumulative profits or losses previously recognized in other comprehensive income are transferred and reclassified into profit or loss for the period.

③ Financial assets (equity instruments) at FVTOCI

Financial assets (equity instruments) at FVTOCI, including other equity instrument investments, are initially measured at fair value, and relevant transaction costs are recognized as the initially recognized amount. The financial assets are subsequently measured at fair value, and the changes in fair value are recognized as other comprehensive income. The dividends obtained shall be recorded to profit or loss for the period.

At the time of derecognition, the cumulative profits or losses previously recognized in other comprehensive income are transferred and reclassified into retained earnings.

④ Financial assets at FVTPL

Financial assets at FVTPL include held-for trading financial assets, derivative financial assets and other non-current financial assets, which are initially measured at fair value, and relevant transaction costs are recorded to profit or loss for the period. The financial assets are subsequently measured at fair value, and the changes in fair value are recorded to profit or loss for the period.

⑤ Financial liabilities at FVTPL

Financial liabilities at FVTPL include held-for-trading financial liabilities, derivative financial liabilities, etc., which are initially measured at fair value, and relevant transaction costs are recorded to profit or loss for the period. The financial liabilities are subsequently measured at fair value, and the changes in fair value are recorded to profit or loss for the period.

At the time of derecognition, the difference between the carrying amount and the consideration paid shall be recorded to profit or loss for the period.

⑥ Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost include short-term borrowings, notes payable, accounts payable, other payables, long-term borrowings, bonds payable and long-term payables, which are initially measured at fair value, and relevant transaction costs are recorded to the initially recognized amount.

The interest calculated in accordance with the effective interest method during the holding period is recorded to profit or loss for the period.

At the time of derecognition, the difference between the consideration paid and the carrying amount of the financial liability shall be recorded to profit or loss for the period.

(2) Applicable accounting policies before January 1, 2019

① Financial assets (financial liabilities) at FVTPL

At the time of acquisition, fair value (deducting cash dividends that have been declared but not yet paid or bond interest that has reached the interest payment period but not yet received) shall be taken as the initial recognition amount, and the relevant transaction costs shall be recorded to profit or loss for the period.

During the holding period, the interest or cash dividends obtained shall be recognized as investment income, and the changes in fair value shall be recorded to profit or loss for the period at the end of the period.

At the time of disposal, the difference between the fair value and the initial entry amount shall be recognized as investment income, and the profit or loss of changes in fair value shall be adjusted.

② Held-to-maturity investments

At the time of acquisition, the sum of the fair value (deducting the bond interest that has reached the interest payment period but has not been received) and related transaction costs shall be taken as the initial recognition amount.

During the holding period, the interest income shall be calculated and recognized according to the amortized cost and the actual interest rate, and recorded to the investment income. The effective interest rate shall be determined at the time of acquisition and shall remain unchanged during the expected duration or the applicable shorter period.

At the time of disposal, the difference between the price obtained and the carrying amount of the investment shall be recorded to the investment income.

③ Accounts receivables

The receivable creditor's rights formed by the Company's external sales of goods or provision of services, as well as the creditor's rights of other enterprises held by the Company that do not include debt instruments with quoted prices in the active market, including accounts receivables, other receivables, etc., shall take the contract or agreement price receivable from the buyer as the initial recognition amount; for those with financing nature, they shall be initially recognized according to their present value.

At the time of recovery or disposal, the difference between the price obtained and the carrying amount of the accounts receivables shall be recorded to profit or loss for the period.

④ Available-for-sale financial assets

At the time of acquisition, the sum of the fair value (deducting the cash dividends that have been declared but not yet paid or the bond interest that has reached the interest payment period but not yet received) and the relevant transaction expenses shall be taken as the initial recognition amount.

The interest or cash dividend obtained during the holding period shall be recognized as investment income. At the end of the period, it is measured at fair value and changes in fair value are recognized as other comprehensive income. However, the equity instrument investment that has no quotation in the active market and whose fair value cannot be reliably measured, and the derivative financial assets that are linked to the equity instrument and must be settled by delivering the equity instrument, shall be measured at cost.

At the time of disposal, the difference between the price obtained and the carrying amount of the financial asset shall be recognized as the investment profit or loss; at the same time, the amount corresponding to the disposal part of the cumulative amount of the fair value change originally directly recognized as other comprehensive income shall be transferred and recorded to profit or loss for the period.

⑤ Other financial liabilities

The sum of the fair value and related transaction costs shall be taken as the initial recognition amount. The financial liabilities are subsequently measured at amortized cost.

3. Recognition basis and measurement method for financial assets transfer

When the Company transfers the financial assets, if it has transferred almost all the risks and rewards of the ownership of the financial assets to the transferee, the financial assets will be derecognized; if it has retained almost all the risks and rewards of the ownership of the financial assets, the financial assets will not be derecognized.

When judging whether the transfer of financial assets meets the above conditions for derecognition of financial assets, the principle of substance over form shall be adopted. The Company divides the transfer of financial assets into the entire transfer and partial transfer of financial assets. For a transfer of a financial asset in its entirety that satisfies the condition of derecognition, the difference between the following is recognized in profit or loss for the period.

(1) the carrying amount of the financial asset transferred; and

(2) the sum of the consideration received from the transfer and any cumulative amount of the changes in fair value originally recognized in the owner's equity (if the financial assets involved in the transfer are the financial assets (debt instruments) measured at FVTOCI, and available-for-sale financial assets)

If a part of the transferred financial asset qualifies for derecognition, the overall carrying amount of the financial asset prior to transfer is to be allocated between the part that continues to be recognized and the part that is derecognized, based on the respective fair values of those parts, and the difference between the following is to be recognized in profit or loss for the period:

(1) the carrying amount allocated to the part derecognized on the date of derecognition; and

(2) the sum of the consideration received for the part derecognized and any cumulative changes in the fair value allocated to the part derecognized which has been previously directly recognized in the owner's equity (if the financial assets involved in the transfer are the financial assets (debt instruments) measured at FVTOCI, and available-for-sale financial assets).

For a transfer of a financial asset that does not satisfy the derecognition criteria, the Company continues to recognize the transferred financial asset. The consideration received from transfer of assets is recognized as a financial liability.

4. Conditions for derecognition of financial liabilities

The Company derecognizes a financial liability (or part of it) only when the underlying present obligation (or part of it) thereof is discharged. An agreement between the Company and a creditor to replace the existing financial liability with a new financial liability with substantially different terms is accounted for as derecognition of the existing financial liability and recognition of a new financial liability.

If all or part of the contract terms of the existing financial liability are substantially modified, the existing financial liability or part of it shall be derecognized, and the financial liability after the modification of the terms shall be recognized as a new financial liability.

When the Company derecognizes a financial liability or a part of it, it recognizes the difference between the carrying amount of the financial liability (or part of the financial liability) derecognized and the consideration paid (including any non-cash assets transferred or new financial liabilities assumed) in profit or loss for the period.

If the Company repurchases part of the financial liability, the carrying amount of the financial liability as a whole shall be allocated on the repurchase date at the relative fair value of the continuously recognized part and the derecognized part. The difference between the carrying amount allocated to the derecognized part and the consideration paid (including any non-cash assets transferred or new financial liabilities assumed) shall be recorded to profit or loss for the period.

5. Determination method for fair value of financial assets and financial liabilities

For financial instruments with an active market, the fair value shall be determined by the quoted price in the active market. For financial instruments without an active market, the fair value shall be determined by valuation technology. In the valuation, the Company adopts the valuation technology applicable in the current situation and supported by sufficient data and other information, selects the input values consistent with the characteristics of the assets or liabilities considered by the market participants in the transactions of the relevant assets or liabilities, and gives priority to the use of the relevant observable input values. The unobservable input value is used only when the relevant observable input value cannot be obtained or is not feasible.

6. Test method and accounting treatment method for financial assets impairment

(1) Applicable accounting policies from January 1, 2019

The Company takes account of all reasonable and supportable information, including forward-looking information, to estimate the expected credit loss of financial assets measured at amortized cost and financial assets (debt instruments) at FVTOCI in a single or combined way. The measurement of expected credit loss ("ECL") depends on whether there is a significant increase in credit risk of financial assets since the initial recognition.

If the credit risk of the above financial instruments has increased significantly since initial recognition, the Company measures loss allowance based on the amount of ECL in the full lifetime; if credit risk of the financial instrument has not increased significantly since initial recognition, the Company recognizes loss allowance based on the amount of ECL within the coming 12-month of the financial instrument. Increase in or reversal of loss allowance is included in profit or loss for the period as loss/gain on impairment.

Generally, if the overdue period is more than 30 days, the Company will consider that the credit risk of the financial instrument has increased significantly, unless there is conclusive evidence that the credit risk of the financial instrument has not increased significantly since the initial recognition.

If the credit risk of the financial instrument on the balance sheet date is low, the Company considers that the credit risk of the financial instrument has not increased significantly since the initial recognition.

If there is objective evidence that a financial asset has suffered credit impairment, the Company shall make provision for impairment of the financial asset on a single basis.

For accounts receivables, contract assets, or long-term receivables formed by the Company through sales of goods or rendering of services, regardless of whether it contains significant financing components or not, the Company always measures its loss allowance based on the amount of ECL in the full lifetime, and increase in or reversal of loss allowance is included in profit or loss for the period as loss/gain on impairment.

The Company combines the accounts receivables according to similar credit risk characteristics (Aging), and makes the following estimates of the provision rate of bad debt allowances for the accounts receivables based on all reasonable and supportable information, including forward-looking information:

① Credit group of non-combined related parties

Aging	Provision rate for the accounts receivables (%)
Within 1 year (including 1 year)	1 or 5
Including: within 6 months	1
7-12 months	5
1-2 years (including 2 years)	10

2-3 years (including 3 years)	20
3-4 years (including 4 years)	25
4-5 years (including 5 years)	30
More than 5 years	100

②Credit group of combined related parties

The accounts receivables, contract assets and long-term receivables formed by the Company through sales of goods or rendering of services that final customers have paid to related parties at the end of the period and then related parties have paid to the Company after the period are not subject to bad debt allowances; the accounts receivables that the final customer has not paid to the related party at the end of the period are subject to bad debt allowances based on the credit group of non-combined related parties.

(2) Applicable accounting policies before January 1, 2019

In addition to the financial assets at FVTPL, the Company will check the carrying amount of financial assets on the balance sheet date. If there is objective evidence that a financial asset is impaired, the provision for impairment shall be made.

① Provision for impairment of available-for-sale financial assets:

At the end of the period, if the fair value of available-for-sale financial assets declines seriously, or it is expected that the decline is not temporary after considering various related factors, it is recognized that it has been impaired, and the accumulated loss caused by the decline of the fair value originally recognized as the owner's equity is transferred together to recognize the impairment loss.

If, in a subsequent accounting period, the fair value of available-for-sale debt instruments increases and the increase can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment losses are reversed. The reversal shall be recognized in profit or loss for the current period.

The impairment loss of available-for-sale equity instrument investment shall not be reversed through profit or loss.

② Bad debt allowances for accounts receivables:

A. Accounts receivables with individually significant amount and individual allowance for bad debts:

Judgment basis or amount standard of individually significant amount:

Individually significant amount of accounts receivables refers to an amount of more than RMB 8 million Yuan (inclusive).

Individually significant amount of other receivables refers to an amount of more than RMB 3 million Yuan (inclusive).

The provision method for receivables with individually significant amount and individual allowance for bad debts:

In case of individual impairment assessment of receivables, if there is objective evidence to prove that impairment has occurred, the allowances for bad debts shall be made according to the difference between the present value of estimated future cash flows and their carrying amount, and shall be recorded to profit or loss for the period. Receivables without impairment through individual assessment shall be classified into the corresponding group for allowances for bad debts.

B. Receivables with allowances for bad debts in the group with identical credit risk characteristics:

Basis for determining group	
Group by Aging	Divide the group based on Aging of receivables as credit risk characteristics
Other Group	Accounts receivables with very low credit risk, such as accounts receivables, export tax refund of value-added tax receivable, petty cash, deposit and margin, which final customers have paid to related parties at the end of the period and then related parties have paid to the Company after the period
Provision method for receivables with allowances for bad debts in the group with identical credit risk characteristics	

Group by Aging	Aging Analysis
Other Group	According to the actual loss rate of previous years and the current situation, there is generally no allowances for bad debts

In a group, allowances for bad debts are made by aging analysis:

Aging	Provision rate for the accounts receivables (%)	Provision rate for other receivables (%)
Within 1 year (inclusive)	1 or 5	5
Including: within 6 months	1	5
7-12 months	5	5
1-2 years (including 2 years)	10	10
2-3 years (including 3 years)	20	20
3-4 years (including 4 years)	25	25
4-5 years (including 5 years)	30	30
More than 5 years	100	100

C. Receivables without individually significant amount but with individual allowance for bad debts:

Reasons for individual allowance for bad debts: there is objective evidence that the Company will not be able to recover the amount according to the original terms of receivables.

Provision method for bad debts: the provision shall be made according to the difference between the present value of estimated future cash flows of receivables and their carrying amount.

(3) Provision for impairment of held-to-maturity investments:

The measurement of impairment loss of held-to-maturity investments shall be handled according to the measurement method for impairment loss of receivables.

(IV) Inventories

1. Classification of Inventories

Inventory classification: materials in transit, raw materials, finished goods, work in process, delivered goods, entrusted processing materials, etc.

2. Pricing for inventories transferred out

The actual cost of inventories transferred out is determined by using the weighted average method, and the cost of finished goods inventory and work in process inventory shall include the raw materials, direct labor and the manufacturing expenses allocated by the system method under the normal production capacity.

3. Basis for determining the net realizable value of different types of inventories

In the ordinary course of business, net realizable value of finished goods inventory, materials inventory for sale and other merchandise inventory directly available for sale is the estimated selling price of the said inventories less the estimated costs necessary to make the sale and relevant taxes. Net realizable value of material inventories to be processed is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale and relevant taxes. Net realizable value of inventories held for performing sales contracts or employment contracts is calculated on the basis of contract prices. If the quantity of inventories held is more than the quantity ordered in sales contracts, net realizable value of the excess part of the inventories shall be calculated based on the general sales price.

Unless there is conclusive evidence that the market price on the balance sheet date is abnormal, the net realizable value of inventories is measured at the market price on the balance sheet date.

The net realizable value of inventory items at the end of the period is determined based on the market price on the balance sheet date.

4. Inventory system of inventories

The Company adopts a perpetual inventory system.

5. Amortization method for low value consumables and packages

(1) Low value consumables use the immediate write-off method; and

(2) Packing materials use the immediate write-off method.

(V) Fixed assets

1. Recognition of Fixed Assets

Fixed assets refer to tangible assets that are held for the purpose of producing goods, providing services, leasing or operating management, and whose useful life exceeds one accounting year. No fixed asset may be recognized unless it simultaneously meets the conditions as follows:

(1) The economic benefits pertinent to the fixed asset are likely to flow into the enterprise; and

(2) The cost of the fixed asset can be measured reliably.

2. Depreciation Method

The depreciation of fixed assets is calculated and withdrawn by using the straight-line method, and the depreciation rate is determined according to the category of fixed assets, expected useful life and expected net residual value rate. If the useful life of each component of the fixed assets is different or the economic benefits are generated for the enterprise in different ways, different depreciation rates or depreciation methods are selected to accrue depreciation respectively.

For the fixed assets acquired under finance leases, if it can be reasonably determined that the ownership of the leased assets will be acquired at the end of the lease term, depreciation shall be accrued within the remaining useful life of the leased assets; if it cannot be reasonably determined that the ownership of the leased assets can be acquired at the end of the lease term, depreciation shall be accrued within the shorter period between the lease term and the remaining useful life of the leased assets.

The depreciation method, depreciation life, residual value rate and annual depreciation rate of various fixed assets are as follows:

Category	Depreciation method	Depreciation life (year)	Residual value rate (%)	Annual depreciation rate (%)
Machinery equipment	Straight-line Method	5–10	5	9.50 ~ 19.00
Computer and electronic equipment	Straight-line Method	3–5	5	19.00 ~ 31.67
office equipment	Straight-line Method	5	5	19.00
Transportation equipment	Straight-line Method	4–5	5	19.00 ~ 23.75

(VI) Intangible assets

1. Valuation method for intangible assets

(1) Intangible assets obtained by the Company are measured initially at cost;

The cost of the purchased intangible assets includes the purchase price, relevant taxes and other expenses directly attributable to the expected use of the assets. If the purchase price of intangible assets is delayed beyond the normal credit conditions and has the nature of financing in essence, the cost of intangible assets shall be determined on the basis of the present value of the purchase price.

Intangible assets acquired by debt restructuring for debt repayment by the debtor shall be recorded at the fair value of the waived creditor's rights, and the taxes and other costs attributable to the expected use of the assets, and the difference between the fair value of the waived creditor's rights and the carrying amount shall be recorded to profit or loss for the period.

On the premise that the exchange of non-monetary assets has commercial substance and the fair value of the assets received and the assets transferred can be reliably measured, the received intangible assets in the exchange of non-monetary assets is recorded on the basis of the fair value of the assets transferred, unless there is conclusive evidence that the fair value of the assets received is more reliable; for the exchange of non-monetary assets that do not meet the above premise, the received intangible assets is at the cost of carrying amount of the assets transferred and the relevant taxes payable and no profit or loss is recorded.

(2) Subsequent measurement

Analyze and judge the useful life of intangible assets when acquiring them.

An intangible asset with a finite useful life is amortized by using the straight-line method over the period of bringing economic benefits to the Company; an intangible asset with an indefinite useful life when there is no foreseeable limit to the period over which the asset is expected to generate economic benefits for the Company, is not amortized.

2. Useful life estimation of intangible assets with finite useful life

Item	Expected useful life	Amortization method	Basis
Land use rights	50 years	Straight-line method	Expected beneficial life
Software	2-10 years	Straight-line method	Expected beneficial life
Patented technology	10 years	Straight-line method	Expected beneficial life

For an intangible asset with a finite useful life, the Company reviews the useful life and the amortization method at the end of each financial year.

After review, the useful life and the amortization method for intangible assets at the end of this year are not different from the previous estimates.

3. Judgment basis of intangible assets with indefinite useful life and the procedure of rechecking its useful life

As of the balance sheet date, the Company has not used intangible assets with indefinite useful life.

4. Specific criteria for dividing research stage and development stage

The internal R&D project expenditure of the Company is divided into expenditure in research stage and expenditure in development stage.

Research stage: refers to a stage carrying out original and planned investigation and research activities to acquire and understand new scientific or technological knowledge.

Development stage: refers to a stage applying research results or other knowledge to a plan or design to produce new or substantially improved materials, devices, products and engage in other activities before commercial production or use thereof.

5. Specific conditions for capitalization of expenditures in development stage

The intangible assets shall be recognized when the expenditures for internal R&D projects at the development stage meet the following conditions:

(1) Development projects have been fully demonstrated by the technical team;

- (2) The management has approved budget for development projects;
- (3) The research and analysis of the earlier market research shows that products produced by development projects are marketable;
- (4) There is sufficient technical and financial support to carry out development activities of development projects and follow-up large-scale production; and
- (5) The expenditure for development projects can be collected reliably.

Expenditures in the development stage that do not meet the above conditions shall be recorded to profit or loss for the period upon incurrence. The development expenditure recorded to the profit or loss in the previous period shall not be re-recognized as an asset in later period. The capitalized expenditures in the development stage are presented as development assets in the balance sheet, and are transferred to intangible assets from the date when the project meets the intended purpose. When the recoverable amount of intangible assets is lower than the carrying amount, the carrying amount is written down to the recoverable amount.

(VII) Contract liabilities

Accounting policies since January 1, 2020

The Company presents contract assets or contract liabilities in the balance sheet according to the relationship between the satisfaction of performance obligation and customers' payment. The Company's obligations to transfer goods to customers in respect of the considerations received or receivable from the customers are presented as contract liabilities. Contract assets and contract liabilities under the same contract are presented in net amount.

(VIII) Estimated liabilities

1. Recognition standard of provisions

The Company recognizes an obligation related to litigation, debt guarantee, loss contract, reorganization or other contingency as a estimated liability when all of the following conditions are satisfied:

- (1) The obligation is a present obligation of the Company;
- (2) It is probable that an outflow of economic benefits from the Company will be required to settle the obligation; and
- (3) The amount of the obligation can be measured reliably.

2. Measurement methods of various estimated liabilities

An estimated liability is initially measured at the best estimate of the expenditure required to settle the related present obligation.

When determining the best estimate, the Company comprehensively takes account of the risks, uncertainty and time value of money relating to a contingency. If the time value of money has a significant impact, the best estimate is determined by discounting the relevant future cash outflow.

The best estimate is treated as follows:

If there is a continuous range (or interval) of the required expenditure and various results within the range have the same probability of occurring, the best estimate shall be determined according to the middle value of the range, i.e. the average of the upper and lower limit amounts.

If there is no continuous range (or interval) for the required expenditure, or if there is a continuous range but various results within the range have different probability of occurring, or if a contingency involves a single item, the best estimate shall be recognized as the most likely amount; or if a contingency involves multiple items, the best estimate shall be recognized in accordance with various possible results and relevant probability calculation.

If all or part of the expenditure required by the Company to pay off the estimated liabilities are expected to be compensated by a third party, the compensation amount shall be separately recognized as an asset when its receipt can be basically determined, and the recognized compensation amount shall not exceed the carrying amount of the estimated liabilities.

(IX)Revenue

1. Accounting policies since January 1, 2020**(1) Accounting policies adopted for revenue recognition and measurement**

The Company recognizes revenue when it has satisfied the performance obligation under the contract, that is, when the customer has obtained the right to control the relevant goods or services. “Obtaining the right to control the relevant goods or services” means that it is able to dominate the use of the goods and derive almost all economic benefits therefrom.

Where a contract includes two or more performance obligations, the Company, on the date of commencement of the contract, allocate the transaction price to all single performance obligations according to the relative proportion of the standalone selling price of goods or services promised in each single performance obligation. The Company measures the revenue according to the transaction price allocated to each single performance obligation.

“Transaction price” refers to the amount of consideration that the Company is expected to be entitled to receive due to the transfer of goods or services to customers, excluding the amount collected on behalf of a third party and the amount expected to be returned to customers. The Company determines the transaction price based on contract terms and in light of its past regular practices, and, when determining the transaction price, considers the effects of such factors as variable consideration, significant financing components in the contract, non-cash consideration and consideration payable to the customer. The Company determines transaction price containing variable consideration to the extent it does not exceed the amount of cumulative revenue recognized where it is highly probable that a significant reversal therein will not occur when the relevant uncertainty is resolved. In the case of a significant financing component in a contract, the Company determines the transaction price according to the amount to be paid by the customer if the customer makes payment in cash when obtaining the right to control the goods or services. The difference between the transaction price and the contract consideration is amortized within the contract period according to the effective interest method.

Where any of the following conditions is met, a performance obligation is deemed to be satisfied over time; otherwise, it is deemed to be satisfied at a certain point in time:

- ① When the Company performs a contract, the customer obtains and consumes the economic benefits from such contract performance.
- ② The customer is able to control the goods under construction during the Company’s performance of a contract.
- ③ The goods produced during the Company’s performance of a contract are of irreplaceable purpose, and the Company has the right to charge for the part of the contract that has been cumulatively fulfilled to date during the whole contract period.

For a performance obligation satisfied over time, the Company recognizes revenue according to the contract performance schedule within such period of time, except that the contract performance schedule cannot be reasonably determined. The Company considers the nature of the goods and adopts the output or input method to determine the appropriate contract performance schedule. When the contract performance schedule cannot be rationally determined, if the cost incurred by the enterprise are expected to be compensated, the revenue is recognized according to the amount of cost incurred until the contract performance schedule can be rationally determined.

For a performance obligation satisfied at a certain point in time, the Company recognizes revenue at the point in time when the customer obtains the right to control the relevant goods or services. When judging whether the customer has obtained the right to control the goods or services, the Company considers the following indications:

- ① The Company is entitled to charge for the goods or services at present, that is, the customer is obliged to pay for the goods or services at present.
- ② The Company has transferred the legal ownership of the goods to the customer, that is, the customer has obtained the legal ownership of the goods.

③ The Company has transferred physical possession of the goods to the customer, that is, the customer has physical possession of the goods.

④ The Company has transferred the major risks and rewards of the ownership of the goods to the customer, that is, the customer has obtained the major risks and rewards of the ownership of the goods.

⑤ The customer has accepted the goods or services, etc.

(2) Specific principles for revenue from sales of goods

The Company's revenue from sales of goods mainly includes the revenue from sales of special semiconductor equipment and equipment-related spare parts. Generally, there is only one performance obligation i.e. to deliver goods in the contract related to the sale of goods.

① Revenue from sales of special equipment

With respect to products not required for commissioning, the Company will recognize the revenue after the customer's commissioning and acceptance as well as obtaining the right to control the goods.

With respect to products required for commissioning, the Company will transport special equipment products to agreed delivery places in accordance with provisions of the agreement and contract, and recognize the revenue after the installation and commissioning, the customer's acceptance, the expiration of trial operation and the customer's obtaining the right to control the goods.

② Revenue from sales of spare parts

Spare parts of the Company will be recognized by the Company when they are transported to agreed delivery places in accordance with provisions of the agreement and contract, and the customer obtains the right to control the goods.

2. Accounting policies prior to January 1, 2020

(1) General principles for recognition of revenue from sales of goods

① The Company has transferred the main risks and rewards of the ownership of the goods to the buyer;

② The Company has neither retained the right of continuous management associated with the ownership nor exercised effective control over the sold goods;

③ The amount of revenue can be measured reliably;

④ Relevant economic benefits are likely to flow into the Company;

⑤ Relevant, incurred or to-be-incurred costs can be reliably measured.

The Company determines the amount of revenue from sales of goods according to contract or agreement price received or receivable from the buyer, except for unfair contract or agreement price received or receivable.

(2) Specific principles for recognition of revenue from sales of goods

① With respect to products not required for commissioning, the Company will transport special equipment products to agreed delivery places in accordance with provisions of the agreement and contract, and recognize the revenue after a customer's commissioning and acceptance. After special equipment products are commissioned and accepted by customers, the customer has the right to use products at its discretion and bears the risk of price fluctuation or damage of products.

② With respect to products required for commissioning, the Company will transport special equipment products to agreed delivery places in accordance with provisions of the agreement and contract, and recognize the revenue after the installation and commissioning, a customer's acceptance and the expiration of trial operation. After special equipment products are commissioned and accepted by customers and the trial operation has expired, the customer has the right to use products at its discretion and bears the risk of price fluctuation or damage of products.

Spare parts of the Company shall be transported to agreed delivery places in accordance with provisions of the agreement and contract, and the revenue shall be recognized after a customer's confirmation of acceptance. After the delivery of spare parts, the customer has the right to use products at its discretion and bears the risk of price fluctuation or damage of products.

3. Impact of implementation of new standards of revenue recognition

According to the revised *Accounting Standards for Business Enterprises No. 14 - Revenues* (hereinafter referred to as the "New Standards for Revenues") issued by the Ministry of Finance in 2017, the Company will implement the New Standards for Revenues from January 1, 2020.

Combined with the specific situation of the Company's business model and contract terms, the Company's recognition time under the existing revenue recognition policy is also in line with the recognition of customers' acquisition of relevant commodity control rights under the New Standards for Revenues. After the implementation of the New Standards for Revenues, the specific method of revenue recognition has not changed, and the Company's business model, contract terms, revenue recognition, etc. have not been affected by the implementation of the New Standards for Revenues. The Company's implementation of the New Standards for Revenues has no impact on the main financial indicators of the consolidated financial statements of the years before the first implementation date.

(X)Contract cost

Accounting policies since January 1, 2020

Contract cost includes contract performance cost and contract acquisition cost.

Where the cost incurred by the Company for the performance of a contract does not fall within the scope regulated by relevant standards on inventories, fixed assets or intangible assets, etc., it shall be recognized as a contract performance cost when the following conditions are met at the same time:

1. The cost directly relates to a current or prospective contract.
2. The cost increases the resources to be used by the Company in the future to satisfy the performance obligation.
3. The cost is expected to be recovered.

Incremental cost incurred by the Company for obtaining the contract will be taken as contract acquisition cost and recognized as an asset if it is expected to be recovered. "Incremental cost" means the cost that will not be incurred if the Company does not obtain the contract. Other expenditures incurred by the Company for obtaining the contract other than the incremental cost that is expected to be recovered (such as traveling cost that would be incurred no matter whether the contract is obtained) will be included in current profits and losses when they are incurred, except for those specified to be borne by the customer.

The assets related to the contract cost are amortized on the same basis as that for recognizing the revenue of goods or services relating to such assets and included in current profits and losses; However, with respect to the contract acquisition cost the amortization period of which does not exceed one year, the Company will include it into current profits and losses when it occurs.

For assets relating to contract cost, if their book value is higher than the difference between the following two items, the Company will make provision for impairment for the excessive part which will be recognized as losses from asset impairment:

1. The remaining consideration that the Company expects to receive in exchange for transferring goods or services relating to the assets.
2. The cost expected from the transfer of the relevant goods or services.

Where the difference between two items mentioned above is higher than the book value of such assets, since factors on impairment in the previous period change afterwards, the provision for asset impairment that has been made will be recovered and included in current profits and losses, provided that the book value of the assets after the recovery will not exceed the book value of the assets on the recovery date if no impairment provision is made.

(XI) Government grants

1. Type

Government grants are monetary assets or non-monetary assets obtained by the Company from the government free of charge, comprised of government grants related to assets and government grants related to income.

A government grant related to assets refers to the government grant obtained by the Company for acquiring and constructing or forming long-term assets in other ways. A government grant related to income refers to the government grant other than those related to assets.

The specific criteria for the Company to classify a government grant as a government grant related to assets are the approval document of government grants clearly stating that the grant is used for acquiring and constructing or forming long-term assets in other ways.

The specific criteria for the Company to classify a government grant as a government grant related to income are the approval document of government grants clearly stating that the grant is used for any purpose other than acquiring and constructing or forming long-term assets.

If the government document does not clearly specify the grant object, the Company classifies a government grant as that related to assets or income based on whether it is used for acquiring and constructing or forming long-term assets in other ways.

2. Confirmation time

For general government grants, the Company will recognize the time when such government grant is received as confirmation time of the government grant; for government grants that can be accurately estimated according to relevant policies or regulations and can be obtained later with certainty, the Company will recognize the time when such government grant will be received according to the policies as confirmation time of the government grant.

3. Accounting treatment

A government grant related to an asset shall be: (a) deducted from the carrying amount of the asset; or (b) recognized as deferred income. In case of the latter, the grant will be amortized by the rational and systematic method within the useful life of the related asset and recognized in profit or loss over the useful life of the related asset (in case of a government grant related to the Company's daily activities, recognized in other income; as for a government grant not related to the Company's daily activities, recognized in non-operating income);

A government grant related to income is accounted as follows: (a) if the grant is a compensation for related costs or losses to be incurred in subsequent periods, the grant is recognized as deferred income, and recognized in profit or loss (in case of a government grant related to the Company's daily activities, recognized in other income; as for a government grant not related to the Company's daily activities, recognized in non-operating income) or reduced related costs or losses over the periods in which the related costs or losses are recognized; (b) if the grant is a compensation for related expenses or losses already incurred, it is recognized immediately in profit or loss of the current period (in case of a government grant related to the Company's daily activities, recognized in other income; as for a government grant not related to the Company's daily activities, recognized in non-operating income) or to decrease the related costs or losses.

The discount of government policy-related preferential loans obtained by the Company shall be accounted as follows:

(1) If the finance allocates the discount funds to a bank, and the bank provides the loan to the Company at the policy-related preferential interest rate, the Company takes the actual received loan amount as the entry value of the loan, and calculates the relevant borrowing costs according to the loan principal and the policy-related preferential interest rate.

(2) If the finance allocates the discount funds to the Company directly, the Company will offset the relevant borrowing costs with the corresponding discount.

(XII) Share-based payments

The Company's share-based payment refers to a transaction in which an enterprise grants equity instruments or undertakes equity-instrument-based liabilities in return for services from employee or other parties. The Company's share-based payments shall consist of equity-settled share-based payments and cash-settled share-based payments.

1. Equity-settled share-based payments and equity instruments

The equity-settled share-based payment in return for employee services shall be measured at the fair value of the equity instruments granted to the employees. If the Company makes share-based payment with restricted stocks and the employees subscribe for the stocks, the stocks shall not be available for sale or transferred until the unlocking conditions are met; if the unlocking conditions specified in the final equity incentive plan are not met, the Company shall repurchase the stocks at the price agreed in advance. When the Company obtains the payment for employees' subscription for restricted stocks, it shall recognize the share capital and capital surplus (share premium) according to the acquired subscription, and at the same time, it shall fully recognize a liability for the repurchase obligation and confirm the treasury shares. On each balance sheet date within the vesting period, the services obtained in the current period shall, based on the best estimate of the number of vested equity instruments in accordance with the [change in the number of vesting employees], [whether to meet the specified performance conditions] and other most recent subsequent information, be included in the relevant costs or expenses at the fair value of the equities instruments on the date of the grant and the capital reserves shall be increased accordingly. After the vesting date, the relevant costs or expenses recognized and the total owner's equity will not be adjusted. If the restricted stocks may be exercised immediately after the grant, the fair value of the stocks shall, on the date of the grant, be included in the relevant costs or expenses and the capital reserves shall be increased accordingly.

No cost or expense shall be recognized for the share-based payment that fails to exercise finally, unless the vesting condition is the market condition or non-vesting condition. Under such condition, regardless of whether the market condition or non-vesting condition is satisfied or not, as long as the non-market condition of all vesting conditions is satisfied, it shall be deemed as exercisable.

If the terms of equity-settled share-based payment are modified, the services obtained shall be recognized at least according to the unmodified terms. In addition, any modification that increases the fair value of the granted equity instrument, or the change that is beneficial to the employees on the modification date, shall recognize the increase of the services obtained.

If the equity-settled share-based payment is cancelled, it shall be treated as accelerated vesting on the cancellation date, and the unrecognized amount shall be recognized immediately. If the employee or other parties can choose to meet the non-vesting conditions but fail to meet them within the vesting period, it shall be treated as the cancellation of equity-settled share-based payment. Provided, however, that, if a new equity instrument is granted and the new equity instrument granted is deemed to replace the cancelled equity instrument on the grant date of the new equity instrument, the new equity instrument granted shall be treated in the same way as the modification of the terms and conditions of the original equity instrument.

2. Cash-settled share-based payment and equity instruments

A cash-settled share-based payment shall be measured in accordance with the fair value of liability calculated and confirmed based on the shares or other equity instruments undertaken by the Company. As to a cash-settled share-based payment instruments, if the right may be exercised immediately after the grant, the fair value of the liability undertaken by the Company shall, on the date of the grant, be included in the relevant costs or expenses, and the liabilities shall be increased accordingly. As to a cash-settled share-based payment instruments, if the right may not be exercised until the vesting period comes to an end or until the specified performance conditions are met, within the vesting period, the services obtained in the current period shall, based on the best estimate of the information about the exercisable right, be included in the relevant costs or expenses at the fair value of the liability undertaken by the Company, and the liabilities shall be increased accordingly. The Company shall, on each balance sheet date and on each account date prior to the settlement of the relevant liabilities, re-measure the fair values of the liabilities and include the changes in the current profits and losses.

(XIII) Foreign currency transactions and foreign currency translation

1. Foreign currency transactions

Foreign currency transactions are recorded in RMB using the spot exchange rates prevailing at the transaction dates.

Foreign currency monetary items are translated using the spot exchange rate at the end of each period. All the resulting exchange differences are taken to profit or loss for the period, except for those relating to foreign currency borrowings specifically for the construction and acquisition of qualifying assets, which are capitalized in accordance with the principle of capitalization of borrowing costs.

2. Foreign Currency Translation

Asset and liability items in the balance sheet are translated using the spot exchange rates at the end of each period; equity items other than “Retained earnings” are translated using the spot exchange rates at the dates of transactions. Revenue and expense items in the income statement are translated using the spot exchange rate for the period during which the transactions occur.

If the disposal only involves a portion of a particular foreign operation, the exchange difference resulted from the component of foreign currency income relating to that particular foreign operation is recognized in profit or loss of the current period from equity items.

(XIV) Deferred income tax assets and liabilities

A deferred income tax asset is recognized for deductible temporary differences, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilized. A deferred income tax asset is recognized for carry forward of unused deductible tax losses and tax credits, to the extent that it is probable that taxable profit will be available against which the carry forward of deductible tax losses and tax credits can be utilized.

A deferred tax liability is recognized for all taxable temporary differences, except:

Where the taxable temporary differences arise from the initial recognition of goodwill, or the initial recognition of an asset or liability in a transaction or matter which contains both of the following characteristics: (i) the transaction or matter is not a business combination; and (ii) at the time of the transaction, it affects neither accounting profit nor taxable profit (or deductible loss).

When the Company has a legally enforceable right to set off and intends to settle off or acquire assets and pay off liabilities at the same time, the current income tax assets and current income tax liabilities shall be offset.

Deferred tax assets and deferred tax liabilities are offset if the Company has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

(XV) Changes in significant accounting policies and accounting estimates

1. On January 1, 2019, the new financial instrument standard was implemented for the first time. The implementation of the new financial instrument standard for the first time in the current year has no impact on the relevant items of the financial statements at the beginning of the year.

2. Implementation of the *Accounting Standards for Business Enterprises No. 14 - Revenue* (revised in 2017)

The *Accounting Standards for Business Enterprises No. 14 - Revenue* was revised by the Ministry of Finance in 2017, pursuant to which, an enterprise that implements such standards for the first time shall, according to the cumulative effect, adjust the retained earnings at the beginning of the year when it implements the standards for the first time and amounts of other relevant items in the financial statements for such a year, without adjusting information in the comparative period.

The Company has implemented the new revenue standards since January 1, 2020. As per the standards, the Company only adjusts the retained earnings at the beginning of 2020 and the amounts of other relevant items in the financial statements for such year according to the cumulative effect under contracts not completed on the first day of implementation, while the financial statements of prior years are not adjusted.

The implementation of the new revenue standards has no effect on the Company's business model, contract terms and revenue recognition. There is no difference in the accounting policies for revenue recognition before and after the implementation of the new revenue standards, and the implementation has no impact on the operating income, net profits attributable to the Company's common shareholders, total assets and net assets attributable to the Company's common shareholders in each year (end) before the first day of implementation.

3. Implementation of the Accounting Standards for Business Enterprises No. 21 - Leases (revised in 2018)

The Accounting Standards for Business Enterprises No. 21 - Leases was revised by the Ministry of Finance in 2018. The Company has implemented the new lease standards from January 1, 2021. According to the revised standards, for a contract that exists before the first day of implementation, the Company chooses not to re-assess whether it is a lease or includes a lease on the first day of implementation.

(1) The Company as lessee

The Company chooses to, according to the cumulative effect of implementing the standards for the first time, adjust the retained earnings at the beginning of the year when it implements such standards for the first time and amounts of other relevant items in the financial statements for such a year, and not adjust information in the comparative period.

For operating lease before the first day of implementation, the Company, on the first day of implementation and on the basis of the remaining lease payment, measures lease liability according to the present value discounted at the Company's incremental borrowing rate on the first day of implementation, and chooses either of the following two items for measuring the right-of-use assets on the basis of each lease:

Book value assumed for which the new lease standards are adopted on the lease inception date (the Company's incremental borrowing rate on the first day of implementation is adopted as the discount rate); and

The amount equal to the lease liability, subject to the necessary adjustments made on the basis of the prepaid rent.

While adopting the above measures, the Company, on the basis of each lease, adopts one or several of the following simplified treatment methods for operating lease prior to the first day of implementation:

- ① A lease that will be completed within 12 months after the first day of implementation will be treated as a short-term lease;
- ② In the measurement of lease liability, a lease with similar characteristics adopts the same discount rate;
- ③ The measurement of the right-of-use assets does not include initial direct costs;
- ④ In the event of option of renewal or termination of the lease option, the lease term is determined on the basis of the actual exercising of the option before the first day of implementation and other latest situation;
- ⑤ As an alternative to the impairment test of the right-of-use assets, the Company assesses whether the contract containing the lease is a loss contract before the first day of implementation according to the Note "III. (XXIII) Estimated Liabilities" hereof, and adjust the right-of-use assets on the basis of the reserves for losses included in the balance sheet before the first day of implementation;
- ⑥ No retroactive adjustment is made for lease changes occurring before the first implementation day, and accounting treatment is conducted therefor according to the new lease standards on the basis of the ultimate arrangements for the lease changes.

When measuring lease liabilities, the Company uses the lessee's incremental borrowing rate on January 1, 2021 (weighted average: 3.8610%) to discount the lease payment.

For financing lease before the first day of implementation, the Company, on the first day of implementation, separately measures the right-of-use assets and lease liability on the basis of the assets leased by financing and the original book value of the financing lease payable.

(2) The Company as lessor

For a sub-lease that is classified into operating lease before the first day of implementation and that still exists after the first day of implementation, the Company, on the first day of implementation, conducts re-assessment on the basis of the residual contract terms and clauses of the original lease and sub-lease, and conducts classification according to the provisions of the new lease standards. Being reclassified as a finance lease, it will be subject to accounting treatment as a new financing lease.

Except for sub-lease, the Company, while having no need to adjust any lease in which it is lessor according to the new lease standards, has conducted accounting treatment according to the new lease standards since the first day of implementation.

4. Changes in other significant accounting policies

(1) Implementation of the *Notice by the Ministry of Finance on Revising and Issuing the Format of Financial Statements of General Enterprises in 2019*

On April 30, 2019, the Ministry of Finance issued the *Notice on Revising and Issuing the Format of Financial Statements of General Enterprises in 2019* (Cai Kuai [2019] No. 6), which revised the format of financial statements of general enterprises. It shall be implemented on the issuance date. The Company's implementation of the above standard has no significant impact during the Reporting Period.

(2) Implementation of the *Accounting Standards for Business Enterprises No. 7 - Exchange of Non-monetary Assets* (revised in 2019)

The Ministry of Finance issued the *Accounting Standards for Business Enterprises No. 7 - Exchange of Non-monetary Assets* (revised in 2019) (Cai Kuai [2019] No. 8) on May 9, 2019. The revised standards shall come into effect from June 10, 2019. The exchange of non-monetary assets between January 1, 2019 and the implementation date of the standards shall be adjusted in accordance with the standards. The exchange of non-monetary assets before January 1, 2019 does not need to be retroactively adjusted in accordance with the provisions of the standards. The Company's implementation of the above standards has no significant impact in the Reporting Period.

(3) Implementation of the *Accounting Standards for Business Enterprises No. 12 - Debt Restructuring* (revised in 2019)

The Ministry of Finance issued the *Accounting Standards for Business Enterprises No. 12 - Debt Restructuring* (revised in 2019) (Cai Kuai [2019] No. 9) on May 16, 2019. The revised standards shall come into force on June 17, 2019. The debt restructuring between January 1, 2019 and the implementation date of the standards shall be adjusted in accordance with the standards. For debt restructuring before January 1, 2019, retroactive adjustment is not required in accordance with the provisions of the standards. The Company's implementation of the above standards has no significant impact during the Reporting Period.

(4) Implementation of the *Interpretation No. 13 of the Accounting Standards for Business Enterprises*

The Ministry of Finance issued the *Interpretation No. 13 of the Accounting Standards for Business Enterprises* (Cai Kuai [2019] No. 21, "Interpretation No. 13") on December 10, 2019, which will come into force as of January 1, 2020, and requires no retroactive adjustment.

① Identification of related parties

The Interpretation No. 13 specifies that the following parties constitute related parties: an enterprise and the joint venture or associated enterprise of any other member entity of the enterprise group to which the enterprise is affiliated (including the parent company and subsidiaries); and an enterprise's joint venture and the enterprise's any other joint venture or associated enterprise. In addition, the Interpretation No. 13 also makes it clear that two or more parties that are substantially affected by the same party do not constitute related parties, and further states that associated enterprises include affiliated enterprises and their subsidiaries, and joint ventures include joint ventures and their subsidiaries.

② Definition of business

The Interpretation No. 13 improves the three elements of business composition, refines the judgment conditions of business composition, and introduces the adoption of "concentration ratio test" to simplify the judgment on whether the combination obtained from business combination not under the same control constitutes business or not, etc..

The Company has implemented the Interpretation No. 13 since January 1, 2020, without adjusting the financial statements of 2019, 2018 and 2017. The implementation of the Interpretation No. 13 has had no significant impact on the Company's financial status and operating results.

(5) Implementation of the *Interim Provisions on the Accounting Treatment Regarding Carbon Emissions Right Trading*

The Ministry of Finance issued the Interim Provisions on the Accounting Treatment Regarding Carbon Emissions Right Trading (Cai Kuai [2019] No. 22) on December 16, 2019, which shall apply to the relevant enterprises among key emission enterprises ("key emission enterprises") that conduct carbon emission trading business in accordance with the *Interim Measures for the Administration of Carbon Emission Permit Trading* and other relevant provisions. The Provisions shall come into force on January 1, 2020, and key emission enterprises shall adopt the prospective application method therefor.

The Company has implemented the Provisions since January 1, 2020, without adjusting the financial statements of 2019, 2018 and 2017, the implementation of which has had no significant impact on the Company's financial status and operating results.

(6) Implementation of the *Provisions on the Accounting Treatment of the COVID-19 Pandemic-related Rental Concessions*

The *Provisions on the Accounting Treatment of the COVID-19 Pandemic-related Rental Concessions* (Cai Kuai 2020 [10]) was issued by the Ministry of Finance on June 19, 2020, and has come into effect since June 19, 2020, allowing enterprises to adjust the relevant rental concessions that occurred between January 1, 2020 and the effective date thereof in accordance therewith. Pursuant to the Provisions, an enterprise may conduct accounting treatment using the simplified method for the rent reduction, exemption, deferred payment and other rental concessions which are directly caused by the COVID-19 pandemic and meet the relevant conditions.

The Company, according to the Provisions, conducts accounting treatment using the simplified method for all in-scope rent concessions, and makes corresponding adjustments to the relevant rent concessions between January 1, 2020 and the effective date of the Provisions. The implementation of the Provisions has had no significant impact on the Company's financial status and operating results.

5. Changes in significant accounting estimates

There is no significant change in accounting estimates during the Reporting Period.

VII.Applicable Tax Rate and Main Fiscal and Tax Preferential Policies

(I)Main taxes and tax rates

During the Reporting Period, the main taxes applicable to the Company and the tax rates are listed as follows: input vat incurred may be credited against output vat in computing the vat payable

Taxes	Base of Taxation	Tax Rates			
		From Jan. to Jun. 2021	2020	2019	2018
Value-added Tax	The difference between output VAT calculated on the basis of the income from sales of goods and taxable services calculated in accordance with the provisions of tax law in China and input Tax allowed to be credited in the current period	6% 13%	6% 13%	6% 13% 16%	6% 16% 17%
Urban Maintenance and Construction Tax	Amounts of actually paid value-added tax	1% 7%	1% 7%	1% 7%	1% 7%
Education surcharges	Amounts of actually paid value-added tax	3%	3%	3%	3%
Local Education Surcharges	Amounts of actually paid value-added tax	2%	2%	1% 2%	1% 2%
Corporate Income Tax	Taxable income	12.5% 10% 25% 16.5% 21%	15% 10% 25% 16.5% 21%	15% 10% 25% 16.5% 21%	15% 10% 25% 16.5%

1. Corporate Income Tax

During the Reporting Period, the applicable corporate income tax rates of the Company and its controlled subsidiaries are listed as follows:

Name of Taxpayer	Place of Registration	From Jan. to Jun. 2021	2020	2019	2018
ACMSH	Mainland China	12.5%	15%	15%	15%
ACM Wuxi	Mainland China	25%	25%	25%	25%
CleanChip HK	Hong Kong, China	16.5%	16.5%	16.5%	16.5%
ACMKR	The Republic of Korea	10%	10%	10%	10%
ACM CA	USA	21%	21%	21%	N/A
Shengwei Shanghai	Mainland China	25%	25%	25%	N/A

2. Value-added Tax

The applicable value-added tax rate for sales of goods by the Company and its domestic subsidiaries is 17% in the period from January to April 2018, 16% in the periods from May to December 2018 and from January to March 2019, and 13% in the period from April 2019 to June 2021; and the applicable value-added tax rate for providing services is 6%. The Company has been approved to engage in import and export business, and the export refund policy of Exempt, Credit, and Refund (ECR) method is implemented for the value-added tax of export products, among which the tax rebate rate of export products in the period from January to July 2018 was 13%, 15% or 17% (as the case may be subject to different product category and commodity code of export goods); from May 1, 2018, for exportation of goods and services subject to VAT at 17% with an applicable export refund at the same rate, the export refund rate was adjusted to 16%. (According to the *Notice regarding the adjustments of Value-added Tax (VAT) rates* (Cai Shui [2018] No. 32) jointly issued by the Ministry of Finance and the State Administration of Taxation, before July 31, 2018, for the production enterprises applicable to the Exempt, Credit, and Refund (ECR) method, the export refund rate before the adjustment shall prevail); from April 1, 2019, for exportation of goods and services subject to VAT at 16% with an applicable export refund at the same rate, the export refund rate was adjusted to 13%. (According to the *Announcement on Policies for Deepening the VAT Reform* jointly issued by the Ministry of finance, the State Administration of Taxation and the General Administration of Customs, before June 30, 2019 (including days before April 1, 2019), for enterprises applicable to the Exempt, Credit, and Refund (ECR) method, the export refund rate before the adjustment shall prevail. When calculating according to the Exempt, Credit, and Refund (ECR) method, if the applicable tax rate is lower than the export refund rate, the difference between the applicable tax rate and the export refund rate shall be regarded as zero in the calculation according to the Exempt, Credit, and Refund (ECR) method).

The value-added tax rate applicable to the overseas subsidiary of the Company, ACMKR, is 10% in South Korea. CleanChip HK and ACM CA do not need to pay value-added tax.

(II) Tax preference

The Company passed the qualification review of high-tech enterprises on August 19, 2015, and obtained the High-Tech Enterprise Certificate with the number of GF201531000216 jointly issued by Shanghai Science and Technology Committee, Shanghai Municipal Finance Bureau, Shanghai State Tax Bureau and Shanghai Municipal Tax Bureau, which is valid for three years. The Company enjoys preferential corporate income tax from 2015 to 2017 according to the provisions, with the tax rate of 15%.

On November 2, 2018, the Company passed the qualification examination of high-tech enterprises again and obtained the High-Tech Enterprise Certificate (No. GR201831000195) jointly issued by Shanghai Science and Technology Committee, Shanghai Municipal Finance Bureau, Shanghai State Tax Bureau and Shanghai Municipal Tax Bureau. The Certificate is valid for three years. The Company has enjoyed preferential corporate income tax for high-tech enterprises from 2018 to 2020 according to the provisions, with a tax rate of 15%.

In accordance with the *Announcement of the Ministry of Finance, the State Taxation Administration, the National Development and Reform Commission and the Ministry of Industry and Information Technology on Enterprise Income Tax Policies for Promoting the High-Quality Development of the Integrated Circuit Industry and the Software Industry* (Announcement No. 45 [2020] of the Ministry of Finance, the State Taxation Administration, the National Development and Reform Commission and the Ministry of Industry and Information Technology), the Company is under the circumstance as set out in Item III thereof specifying “integrated circuit design, equipment, materials, packaging, testing and software enterprises encouraged by the state shall, from the first profit-making year, be exempt from enterprise income tax for the first two years, and be subject to enterprise income tax at the reduced half of the statutory rate of 25% from the third to the fifth year.” According to such provisions, the Company is entitled to pay enterprise income tax at the reduced half of the statutory rate of 25% from 2020 to 2022. The Company has paid the enterprise income tax of 2020 at the rate of 15%, with the excess to be regarded as the prepaid enterprise income tax.

VIII. Segment Information

The financial statements of the Company do not contain segment information.

IX. Non-recurring Profits or Losses

(I) Details and amounts of non-recurring profits or losses

During the Reporting Period, the non-recurring profits or losses statement verified by the accountant is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Profits or losses on disposal of non-current assets	-	-16.83	-202.85	-1.47
Government grants recorded to profit or loss for the period (closely related to the business of the enterprise, except for the government grants according to the unified national standard quota or quantitative)	2,791.61	2,592.98	2,666.69	2,082.34
Fund occupation fee charged to non-financial enterprises recorded to the current profit or loss	-	12.84	53.87	44.54
The net profit or loss for the period from the beginning of the period to the combination date of subsidiaries from business combination involving enterprises under common control	-	-	-1,054.11	394.41
Profit or loss from changes in fair value arising from the holding of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities and derivative financial liabilities, as well as the investment income from disposal of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities and other debt investments, except the effective hedging business related to the normal business of the Company	1,770.76	8,671.99	-	-
Other non-operating income and expenditure other than the above items	61.26	47.97	2.39	-109.79
Other profit or loss items that meet the definition of non-recurring profits or losses	39.88	971.92	-647.47	5.30
Subtotal	4,663.50	12,280.88	818.51	2,415.32
Impact on the income tax	-581.56	-1,847.66	-377.28	-302.34
Impact on the minority interests (after tax)	-	-	-	-
Net non-recurring profits or losses attributable to shareholders of the parent company	4,081.94	10,433.21	441.23	2,112.98

Note: Other profits or losses items in 2019 falling within the definition of non-recurring profits or losses are mainly share-based payments composed of capital increase of ESOPs.

(II) Impact of non-recurring profits or losses on current operating results

During the Reporting Period, impact of non-recurring profits or losses on current operating results is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Net non-recurring profits or losses attributable to shareholders of the parent company	4,081.94	10,433.21	441.23	2,112.98
Net profits attributable to shareholders of the parent company	8,967.60	19,676.99	13,488.73	9,253.04
Net profits attributable to shareholders of the parent company after deduction of non-recurring profits or losses	4,885.66	9,243.78	13,047.50	7,140.06

During the Reporting Period, the Company's net non-recurring profits or losses attributable to shareholders of the parent company are RMB 21.1298 million Yuan, RMB 4.4123 million Yuan, RMB 104.3321 million Yuan and RMB 40.8194 million Yuan, respectively, and the main non-recurring profits or losses are mainly government grants, the current net profits or losses of subsidiaries from business combination involving entities under common control from the beginning of the period to the combination date, the share-based payments and investment gains from holding held-for-trading financial assets; the Company's net profits attributable to shareholders of the parent company after deduction of non-recurring profits or losses increased significantly, which are RMB 71.4006 million Yuan, RMB 130.475 million Yuan, RMB 92.4378 million Yuan and RMB 48.8566 million Yuan, respectively.

X. Main Financial Indicators

(I) Main financial indicators

Main financial indicators	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current ratio (frequency)	1.93	2.39	2.93	1.34
Quick ratio (frequency)	0.94	1.36	2.18	0.71
Liabilities to assets (L/A) ratio (parent company)	40.83%	35.60%	32.56%	76.34%
Net assets per share attributable to shareholders of the issuer (RMB 1 Yuan)	2.94	2.69	2.13	N/A
Main financial indicators	2021	2020	2019	2018
Accounts receivables turnover ratio (frequency)	2.15	4.19	3.80	3.91
Inventory turnover rate (frequency)	0.46	1.21	1.44	1.51
EBITDA (RMB 10,000 Yuan)	10,398.61	23,752.53	16,654.67	11,063.48
Net profits attributable to shareholders of the issuer (RMB 10,000 Yuan)	8,967.60	19,676.99	13,488.73	9,253.04
Net profits attributable to shareholders of the issuer after deduction of non-recurring profits or losses (RMB 10,000 Yuan)	4,885.66	9,243.78	13,047.50	7,140.06
Times interest earned (frequency)	31.70	36.43	21.54	21.37
Proportion of R&D investment in operating income	18.33%	13.97%	13.12%	14.43%
Cash flows from operating activities per share (RMB 1 Yuan/share)	0.10	-0.23	0.19	N/A
Net cash flows per share (RMB 1 Yuan/share)	-0.04	-0.43	0.88	N/A

Note: The Company is a limited liability company in 2018, so the calculation of per share indicator is not applicable during the corresponding financial statement period.

The above financial indicators are calculated as follows:

1. Current ratio = current assets / current liabilities
2. Quick ratio = (current assets - inventories) / current liabilities
3. L/A ratio = (total liabilities / total assets) * 100%
4. Inventory turnover ratio = operating cost / average inventory
5. Accounts receivables turnover ratio = operating income / average accounts receivables
6. EBITDA = total profit + interest expenditures + depreciation of fixed assets + amortization of long-term deferred expenses + amortization of intangible assets

7. Proportion of R&D investment in operating income = R&D expenses / operating income * 100%

8. Times interest earned = (total profit + interest expenditures) / interest expenditures

9. Cash flows from operating activities per share = net cash flows from operating activities / total share capital at the end of the period

10. Net cash flows per share = net increase in cash and cash equivalents / total share capital at the end of the period

11. Net assets per share attributable to shareholders of the issuer = net assets at the end of the period attributable to common shareholders of the Company / total share capital at the end of the period

(II) ROE and earnings per share

According to the *Compilation Rule for Information Disclosure by Companies Offering Securities to the Public No. 9 - Calculation and Disclosure of ROE and Earnings Per Share* issued by China Securities Regulatory Commission (revised in 2010), the ROE and earnings per share of the Company during the Reporting Period are as follows:

Profit in the Reporting Period	Reporting Period	Weighted average ROE (%)	Earnings per share (RMB 1 Yuan/share)	
			Basic earnings per share	Diluted earnings per share
Net profits attributable to common shareholders of the Company	From Jan. to Jun. 2021	8.20	0.23	0.23
	2020	21.20	0.50	0.50
	2019	34.22	0.36	0.36
	2018	137.72	N/A	N/A
Net profits attributable to common shareholders after deduction of non-recurring profits or losses	From Jan. to Jun. 2021	4.47	0.13	0.13
	2020	9.96	0.24	0.24
	2019	30.67	0.32	0.32
	2018	115.54	N/A	N/A

Note: The Company is a limited liability company in 2018, so the calculation of earnings per share is not applicable during the corresponding financial statement period.

The above financial indicators are calculated as follows:

1. Weighted average ROE:

$$\text{Weighted average ROE} = P_0 / (E_0 + NP / 2 + E_i * M_i / M_0 - E_j * M_j / M_0 \pm E_k * M_k / M_0)$$

Where: P₀ refers to the net profits attributable to the common shareholders of the Company and the net profits attributable to the common shareholders of the Company after deduction of non-recurring profits or losses; NP refers to the net profits attributable to the common shareholders of the Company; E₀ refers to the opening net assets attributable to the common shareholders of the Company; E_i refers to the newly increased net assets attributable to the common shareholders of the Company due to the issuance of additional shares or debt-to-equity swap in the Reporting Period; E_j refers to the reduced net assets attributable to the common shareholders of the Company due to repurchase or cash dividend in the Reporting Period; M₀ refers to the number of months in the Reporting Period; M_i refers to the cumulative number of months from the next month of newly increased net assets to the end of the Reporting Period; M_j refers to the cumulative number of months from the next month of reduced net assets to the end of the Reporting Period; E_k refers to the increase or decrease in net assets attributable to the common shareholders of the Company caused by other transactions or events; M_k refers to the cumulative number of months from the next month of increase or decrease in other net assets to the end of the Reporting Period.

2. Basic earnings per share:

Basic earnings per share = $P0 / S$

$S = S0 + S1 + Si * Mi / M0 - Sj * Mj / M0 - Sk$

Where: P0 refers to the net profits attributable to the common shareholders of the Company or the net profits attributable to the common shareholders after deduction of non-recurring profits or losses; S refers to the weighted average common shares outstanding; S0 refers to the total number of shares at the beginning of the year; S1 refers to quantity of additional shares due to the conversion of provident fund into share capital or stock dividend distribution during the Reporting Period; Si refers to quantity of additional shares due to the issuance of additional shares or debt-to-equity swap in the Reporting Period; Sj refers to decrease in shares due to repurchase in the Reporting Period; Sk refers to equity decrease in the Reporting Period; M0 refers to months in the Reporting Period; Mi refers to the cumulative number of months from the next month of additional shares to the end of the Reporting Period; Mj refers to the cumulative number of months from the next month of decrease in shares to the end of the Reporting Period.

3. Diluted earnings per share

Diluted earnings per share = $P1 / (S0 + S1 + Si * Mi / M0 - Sj * Mj / M0 - Sk + \text{weighted average common shares increased due to warrants, share options, convertible bonds, etc.})$

Where, P1 refers to the net profits attributable to the common shareholders of the Company or the net profits attributable to the common shareholders of the Company after deduction of non-recurring profits or losses, and considering the impact of diluted potential common shares, it shall be adjusted in accordance with the Accounting Standards for Business Enterprises and relevant provisions. When calculating diluted earnings per share, the Company shall consider the impact of all diluted potential common shares on the net profits attributable to the common shareholders of the Company or the net profits attributable to the common shareholders of the Company after deduction of non-recurring profits or losses and weighted average shares, and the diluted potential common shares shall be recorded to the diluted earnings per share based on the extent of dilution according to the sequential order from the big to the small, until the diluted earnings per share to be the minimum.

XI. Operating Results Analysis

(I) Changes in the Company's main operating results during the Reporting Period

1. Overview of operation during the Reporting Period

During the Reporting Period, the specific operation of the Company is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Operating income	62,528.08	100,747.18	75,673.30	55,026.91
Operating profit	9,263.97	22,271.03	15,511.67	10,389.25
Total profit	9,325.23	22,302.41	15,311.91	10,283.17
Net profit	8,967.60	19,676.99	13,488.73	9,253.04
Net profits attributable to shareholders of the parent company	8,967.60	19,676.99	13,488.73	9,253.04
Net profits attributable to shareholders of the parent company after deduction of non-recurring profits or losses	4,885.66	9,243.78	13,047.50	7,140.06

During the Reporting Period, the Company's operating income and net profit continued to increase, with the operating income of RMB 550.2691 million Yuan, RMB 756.733 million Yuan, RMB 1.0074718 billion Yuan, RMB 625.2808 million Yuan, respectively. The operating income in 2019 and 2020 increased by 37.52% and 33.13% year on year, with an average compound annual growth rate of 35.31% from 2018 to 2020. The Company's net profits attributable to shareholders of the parent company were RMB 92.5304 million Yuan, RMB 134.8873 million Yuan, RMB 196.7699 million Yuan and RMB 89.676 million respectively, and the net profits of 2019 and 2020 increased by 45.78% and 45.88% year on year.

2. Logical analysis of operating results achieved in the Reporting Period

The main business of the Company is the R&D, production and sales of semiconductor special equipment. The main products include semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet process equipment, which are mainly used in wafer manufacturing, semiconductor packaging and testing and semiconductor wafer manufacturing.

During the Reporting Period, the Company's operating income was RMB 550.2691 million Yuan, RMB 756.733 million Yuan, RMB 1.0074718 billion Yuan, and RMB 625.2808 million Yuan, with a compound annual growth rate of 35.31% from 2018 to 2020, and the operating income maintained a high growth trend; the Company's main business gross margin was 43.80%, 44.67%, 42.65% and 40.56% respectively, each of which can be considered as a high gross margin and equivalent to the industry average level.

During the Reporting Period, the main logic of the Company's operating results is as follows:

(1) Outstanding scientific and technological innovation ability, leading technology and high-quality products are the basis for the Company to obtain customer recognition

Since its establishment, the Company has persisted in the development strategy of differentiated competition and innovation. Through self-developed SAPS megasonic cleaning technology, TEBO megasonic cleaning technology, chip copper interconnection copper electroplating technology and other key technologies, the Company provides customized equipment and process solutions to global customers in wafer manufacturing, advanced packaging and other fields, effectively improving the production of customers efficiency, improve product yield and reduce production cost.

The Company's technical level for the megasonic single-chip cleaning equipment, single-chip slot-type combined cleaning equipment and electroplating process equipment of copper interconnection, has reached international leading or international advanced level. As of June 30, 2021, the Company and its holding subsidiaries has 322 main licensed patents, including 152 domestic patents and 170 overseas patents. Among them, there are 317 invention patents. The Company also won the title of "Shanghai Key Laboratory of Advanced Wet Process Equipment for Integrated Circuits". It is the main subject unit of major scientific research projects in China such as "Research and development and application for 20-14nm copper plating equipment of copper interconnection" and "Research and development for 65-45nm stress-free polishing equipment of copper interconnection", and other ("02 Special Project") major scientific projects in China.

During the Reporting Period, the R&D expenses of the Company were RMB 79.415 million Yuan, RMB 99.268 million Yuan, RMB 140.7911 million Yuan and RMB 114.6028 million Yuan, respectively, accounting for 14.43%, 13.12%, 13.97% and 18.33% of the operating income respectively, with a compound annual growth rate of 33.15% from 2018 to 2020. The Company continued to increase its R&D investment and kept at a high level.

As a scientific and technological innovation enterprise, the Company's sustained large amount of R&D investment has accelerated the pace of product upgrades and innovation, improved the Company's ability to develop new products and to meet new needs of customers, and ensured the Company's sustainable provision of competitive products to customers.

(2) The Company has established a good reputation among the international mainstream semiconductor manufacturers, which is conducive to the continuous development of high-quality customer resources

Semiconductor manufacturing industry, especially wafer manufacturing industry, often has a large scale of equipment investment. At present, the investment of 12-inch wafer manufacturing project is billions or even tens of billions of US dollars. The kinds of equipment needed for production line thereof are in a big quantity, and the efficiency and reliability of single equipment will directly affect the working efficiency of the whole production line and the yield of chip products, so the wafer manufacturing enterprises are very careful about the choice of new equipment, which first of all, ensure that the new equipment meets the requirements of the advanced technology and reliability, and then that, we will consider commercial conditions such as economy and decide whether to purchase.

In 2008, the Company succeeded in SAPS technology research and development. In 2009, SAPS cleaning equipment got access to one of the world's top ten semiconductor enterprise and the world's leading memory enterprise, Hynix, to carry out product verification. In 2011, the Company first obtained Hynix's official order for the SAPS cleaning equipment for 12-inch 45nm process, and in 2013, obtained multiple repeated orders from Hynix. As the Company's product has won the recognition of the international advanced customers, the Company has successfully obtained the orders of the mainland China's leading customers such as Yangtze Memory, SMIC and Huahong Group after 2015, thanks to the Company's achievements and reputation in the industry abroad.

The Company's products have passed the verification of the global first-line semiconductor enterprise Hynix, successfully entered its production line, formed a good market demonstration effect, and enhanced the confidence of the global semiconductor enterprises in the Company's technology and products and the willingness to provide opportunities to verify the Company's products. At the same time, through in-depth cooperation with the global first-line semiconductor enterprises, the Company also improved its understanding of market demand, targeted development of innovative solutions, and deepened its understanding of new products, new technologies and new markets, and its technology and product competitiveness.

(3) By continuously launching new products and entering new markets, the Company further increased its operation income

In 2017, the Company's revenue was generated from single-wafer cleaning equipment and advanced packaging wet process equipment; in 2018, the Company's first back-end advanced packaging electroplating equipment was sold; in 2019, the Company successfully realized the sales of three types of first equipment, including wet bench cleaning equipment, single wafer wet bench combined cleaning equipment and front-end copper interconnection electroplating equipment. In addition, the Company combined front-end scrubbing equipment, stress-free polishing equipment and vertical furnace tube equipment and researched and developed the first combined equipment and successfully entered the verification of customers.

During the Reporting Period, the Company continued to raise the sales volume of mature single-wafer cleaning equipment and advanced packaging wet process equipment; at the same time, during the Reporting Period, the Company continued to launch a number of new products, continuously entered new markets and new customers, and achieved rapid growth in operating income.

(4) The rapid development of the global semiconductor industry and its transfer to mainland China accelerated the pace of development of the Company's business.

The semiconductor industry is the core of the information technology industry and a strategic, basic and leading industry that supports economic and social development. The rapid development of the global semiconductor industry and its transfer to mainland China have become favorable factors for the Company's business development. In the future, with the steady growth of downstream 5G communications, computer, consumer electronics, network communications and other industries, as well as the rapid development of Internet of Things, artificial intelligence, automotive electronics, smart phones, smart wear, cloud computing, big data and security electronics and other emerging fields, the semiconducting industry is facing the demand for capacity expansion of new chips or advanced processes, which brings a broad market space for the semiconductor special equipment industry. As the largest consumer market of semiconductor end products in China, the scale of China's semiconductor industry has been expanding.

As the global semiconductor industry chain has been transferred to mainland China, semiconductor companies have invested and built factories in China. China's semiconductor industry has experienced an increasingly rapid growth. According to the statistics from Gartner, the equipment expenditure of chip manufacturers in mainland China reached US\$10.434 billion in 2018 and US\$12.244 billion in 2019. It is expected that such expenditure will be reduced to US\$ 9.628 billion in 2020 considering the impact of the global semiconductor industry prospect, that, with the gradual recovery of the global semiconductor industry in 2021, such expenditure will increase to US\$12.842 billion in 2024. The compound annual growth rate is expected to be 7.47% in 2020-2024.

Thanks to the rapid development of the semiconductor industry and its continuous transfer to mainland China, downstream semiconductor enterprises' demand for semiconductor special equipment is constantly increasing.

(5) Semiconductor special equipment is a typical high-end, sophisticated equipment, and the Company's product gross margin remained at a high level during the Reporting Period

Semiconductor special equipment is the basic and supporting link of semiconductor industry chain. The production technology involves the comprehensive application of multi-disciplinary and multi field knowledge, such as microelectronics, electrical, mechanical, material, chemical engineering, fluid mechanics, automation, image recognition, communication, software system, etc. It is a typical high-end sophisticated equipment with high technical barriers, market barriers and customer verification barriers. The above products and industry characteristics determine the relatively high gross margin level of the Company's products.

(II) Operating income analysis

1. Composition of operating income

During the Reporting Period, the composition of the Company's operating income is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion %	Amount	Proportion %	Amount	Proportion %	Amount	Proportion %
Main operating income	58,804.77	94.05%	97,532.78	96.81%	74,340.81	98.24%	53,961.17	98.06%
Other operating income	3,723.30	5.95%	3,214.40	3.19%	1,332.48	1.76%	1,065.74	1.94%
Total	62,528.08	100.00%	100,747.18	100.00%	75,673.30	100.00%	55,026.91	100.00%

During the Reporting Period, the Company's main business is the R&D, production and sales of special semiconductor equipment, and the Company's products are mainly used in the integrated circuit industry. The Company's operating income mainly comes from the main business. During the Reporting Period, the Company's main business revenue accounted for 98.06%, 98.24%, 96.81% and 94.05% of the operating income respectively, with outstanding main business. The Company's other operating income mainly comes from the sales of spare parts and after-sales services, which accounts for a small proportion.

2. Composition and analysis of main operating income products

The Company's products are mainly divided into three categories: semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet process equipment. The fluctuation of the main operating income is mainly affected by the following factors: the prosperity of the downstream industry, the arrangement of customer capital expenditure, the market development and product verification of the Company's existing and potential customers.

During the Reporting Period, the Company's main operating income is classified as follows by product:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion %	Amount	Proportion %	Amount	Proportion %	Amount	Proportion %
Semiconductor cleaning equipment	48,900.39	83.16%	81,627.25	83.69%	62,522.30	84.10%	50,135.96	92.91%
Including: single wafer cleaning equipment	43,884.74	74.63%	71,610.80	73.42%	55,099.52	74.12%	50,135.96	92.91%
Wet bench cleaning equipment	5,015.65	8.53%	3,310.85	3.39%	4,801.36	6.46%	-	-
Single wafer wet bench combined cleaning equipment	-	-	6,705.60	6.88%	2,621.43	3.53%	-	-
Semiconductor electroplating equipment	3,591.85	6.11%	5,290.13	5.42%	7,857.39	10.57%	1,191.13	2.21%
Advanced packaging wet process equipment	6,312.54	10.73%	9,856.51	10.11%	3,961.12	5.33%	2,634.07	4.88%
Vertical furnace tube equipment	-	-	758.90	0.78%	-	-	-	-
Total	58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

During the Reporting Period, the Company's main operating income was RMB 539.6117 million Yuan, RMB 743.4081 million Yuan, RMB 975.3278 million Yuan and RMB 588.0477 million Yuan, respectively, with a rapidly increasing trend year by year.

In 2018, the Company's main operating income increased by RMB 290.4735 million Yuan or 116.59% year-on-year, mainly due to a year-on-year increase of RMB 286.4348 million Yuan or 133.27% in semiconductor cleaning equipment income. In 2019, the Company's main operating income increased by RMB 203.7965 million Yuan or 37.77% year-on-year, which was due to the growth of semiconductor cleaning equipment revenue, semiconductor electroplating equipment and advanced packaging wet process equipment revenue. In 2020, the Company's main operating income increased by RMB 231.9197 million Yuan or 31.20% year-on-year, which was due to the growth of revenue from semiconductor cleaning equipment and advanced packaging wet process equipment.

(1) Semiconductor cleaning equipment

During the Reporting Period, the sales volume and unit price changes of various semi-conductor cleaning equipment of the Company are as follows:

Item		From Jan. to Jun. 2021	2020	2019	2018
Single wafer cleaning equipment					
Sales volume	Quantity (per piece)	21	31	22	21
	Change ratio	-	40.91%	4.76%	90.91%
Unit price	Average price (RMB 10,000 Yuan/piece)	2,089.75	2,310.03	2,504.52	2,387.43
	Change ratio	-9.54%	-7.77%	4.90%	22.19%
Sales revenue	Amount (RMB 10,000 Yuan)	43,884.74	71,610.80	55,099.52	50,135.96
	Change ratio	-	29.97%	9.90%	133.27%
Wet bench cleaning equipment					
Sales volume	Quantity (per piece)	3	2	3	-
	Change ratio	-	-33.33%	-	-
Unit price	Average price (RMB 10,000 Yuan/piece)	1,671.88	1,655.43	1,600.45	-
	Change ratio	0.99%	3.43%	-	-
Sales revenue	Amount (RMB 10,000 Yuan)	5,015.65	3,310.85	4,801.36	-
	Change ratio	-	-31.04%	-	-
Single wafer wet bench combined cleaning equipment					
Sales volume	Quantity (per piece)	-	2	1	-
	Change ratio	-	100.00%	-	-
Unit price	Average price (RMB 10,000 Yuan/piece)	-	3,352.80	2,621.43	-
	Change ratio	-	27.90%	-	-
Sales revenue	Amount (RMB 10,000 Yuan)	-	6,705.60	2,621.43	-
	Change ratio	-	155.80%	-	-

In 2018, the Company's semiconductor cleaning equipment revenue increased due to the increase in single wafer cleaning equipment revenue.

In 2018, the revenue of the Company's single wafer cleaning equipment increased by RMB 286.4348 million Yuan or 133.27% from 2017, mainly due to the substantial increase in the number of product sales and the rise of sales unit price.

In 2018, the Company's single wafer cleaning equipment sales increased due to the following reasons: 1). The global semiconductor industry is in an upward cycle of demand growth. The demand for expansion of chip manufacturing companies has increased, capital expenditures have increased, and the demand for semiconductor special equipment has also increased; 2) As the leading enterprise of semiconductor cleaning equipment in China, the Company has obtained the verification of many customers in the early stage of its single wafer cleaning equipment by virtue of its technical advantages and innovative capabilities; 3) Global chip manufacturing capacity continues to transfer to mainland China, and the domestic substitution process of the Chinese semiconductor industry has also accelerated; 4) Memory is one of the fastest-growing products in the global semiconductor market in 2018. The Company's main customers, Hynix and Yangtze Memory are large-scale memory manufacturing companies. In order to meet market demand, the investment scale of production lines has been increased; 5) The Company's single wafer cleaning equipment can be applied to a variety of advanced memory processes such as DRAM, 3D NAND, etc.; affected by the explosion of memory terminal demand, the Company's product demand has also increased.

In 2018, the reason for the rise in the unit price of the Company's single wafer cleaning equipment is that the more chambers of single equipment of the same type uses, the higher the sales price is. In 2017, the Company mainly sold single wafer cleaning equipment of 8 chambers. In 2018, the proportion of single wafer cleaning equipment of 12 chambers increased, and the average sales unit price of single wafer cleaning equipment rose accordingly.

In 2019, the increase of the Company's semiconductor cleaning equipment revenue is mainly due to the successful sales of the Company's first wet bench cleaning equipment and single wafer wet bench combined cleaning equipment, and the continuous growth of the single wafer cleaning equipment revenue.

In 2020, the increase of the Company's semiconductor cleaning equipment revenue is mainly due to the continuous growth of revenue from single wafer cleaning equipment and single wafer wet bench combined cleaning equipment.

(2) Semiconductor electroplating equipment

During the Reporting Period, the sales volume and unit price change of semiconductor electroplating equipment of the Company are as follows:

Item		From Jan. to Jun. 2021	2020	2019	2018
Sales volume	Quantity (per piece)	2	4	4	1
	Change ratio	-	0.00%	300.00%	-
Unit price	Average price (RMB 10,000 Yuan/piece)	1,795.93	1,322.53	1,964.35	1,191.13
	Change ratio	35.80%	-32.67%	64.91%	-
Sales revenue	Amount (RMB 10,000 Yuan)	3,591.85	5,290.13	7,857.39	1,191.13
	Change ratio	-	-32.67%	559.66%	-

During the Reporting Period, the Company's semiconductor electroplating equipment revenue was RMB 11.9113 million Yuan, RMB 78.5739 million Yuan, RMB 52.9013 million Yuan, and RMB 35.9185 million Yuan, respectively.

During the Reporting Period, the reasons for the increase in the Company's semiconductor electroplating equipment sales are as follows: ① in 2018, the Company's first back-end advanced packaging semiconductor electroplating equipment successfully obtained customer verification and was sold for the first time; ② in 2019, the Company's sales of back-end advanced packaging semiconductor electroplating equipment continued to increase and the Company's first front-end copper interconnection electroplating equipment was sold for the first time.

In 2019, the rise in the unit price of semiconductor electroplating equipment is due to the sales of the front-end copper interconnection electroplating equipment with higher unit price. The technical difficulty of the front-end copper interconnection electroplating equipment is higher than that of the back-end advanced packaging electroplating equipment. At the same time, only a few enterprises in the world have the ability to produce the front-end copper interconnection electroplating equipment, and the market competition is relatively low. Therefore, the sales unit price of the front-end copper interconnection electroplating equipment is higher than that of the back-end advanced packaging electroplating equipment. In 2020, the unit price of the Company's semiconductor electroplating equipment decreased, primarily due to the products sold this year being the back-end advanced packaging electroplating equipment, and the products sold to Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences being equipment for its R&D, which has a comparatively low price, reducing the average price of electroplating equipment.

(3) Advanced packaging wet process equipment

During the Reporting Period, the Company's advanced packaging wet process equipment sales and unit price changes are as follows:

Item		From Jan. to Jun. 2021	2020	2019	2018
Sales volume	Quantity (per piece)	14.00	20	7	6
	Change ratio	-	185.71%	16.67%	-14.29%
Unit price	Average price (RMB 10,000 Yuan/piece)	450.90	492.83	565.87	439.01
	Change ratio	-8.51%	-12.91%	28.90%	-10.18%
Sales revenue	Amount (RMB 10,000 Yuan)	6,312.54	9,856.51	3,961.12	2,634.07
	Change ratio	-	148.83%	50.38%	-23.01%

During the Reporting Period, the Company's revenue from advanced packaging wet process equipment was RMB 26.3407 million Yuan, RMB 39.6112 million Yuan, RMB 98.5651 million Yuan, and RMB 63.1254 million Yuan, respectively, and the sales unit price and the sales revenue fluctuated to some extent. Such fluctuation is mainly affected by the different sales volumes, products structures, and configurations of the equipment itself (including the number of chambers, functional differences, customer customized requirements, etc.). In 2020, the increase in the Company's revenue from advanced packaging wet process equipment was mainly due to the insufficient domestic chip production capacity caused by the increase of chip demand this year, in response to which many semiconductor companies increased the investment in advanced packaging equipment, resulting in a significant increase in the sales of and revenue from the Company's advanced packaging wet process equipment.

(4) Vertical furnace tube equipment

During the Reporting Period, the Company's vertical furnace tube equipment sales and unit price changes are as follows:

Item		From Jan. to Jun. 2021	2020	2019	2018
Sales volume	Quantity (per piece)	-	1	-	-
	Change ratio	-	-	-	-
Unit price	Average price (RMB 10,000 Yuan/piece)	-	758.90	-	-
	Change ratio	-	-	-	-
Sales revenue	Amount (RMB 10,000 Yuan)	-	758.90	-	-
	Change ratio	-	-	-	-

In 2020, the Company's vertical furnace tube equipment was successfully accepted by customers and it achieved a sales revenue of RMB 7.589 million Yuan therefrom.

3. Main business revenue is divided by sales regions

During the Reporting Period, the Company's main operating income categorized by sales region and location of the ultimate customer is as follows:

In RMB 10,000 Yuan

Sales region	Location of ultimate customer	From Jan. to Jun. 2021		2020		2019		2018	
		Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Export sales	Overseas countries or regions	-	-	1,290.86	1.32%	2,613.69	3.52%	3,443.94	6.38%
Domestic bonded areas	Mainland China	48,410.23	82.32%	96,241.93	98.68%	71,727.12	96.48%	49,639.75	91.99%
Home sales	Mainland China	10,394.54	17.68%	-	-	-	-	877.48	1.63%
Total		58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

During the Reporting Period, the regional composition of the Company's main operating income is as follows:

In RMB 10,000 Yuan

Regions	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Mainland China	58,804.77	100.00%	96,241.93	98.68%	71,727.12	96.48%	50,517.23	93.62%
Taiwan	-	-	-	-	2,613.69	3.52%	496.31	0.92%
South Korea	-	-	-	-	-	-	2,494.67	4.62%
Philippines	-	-	444.90	0.46%	-	-	452.97	0.84%
USA	-	-	845.96	0.87%	-	-	-	-
Total	58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

Note: According to the location of the ultimate customer.

During the Reporting Period, the Company's product sales were mainly concentrated in the mainland China. Sales revenue from mainland China accounted for 93.62%, 96.48%, 98.68% and 100% of the main business revenue, respectively.

The semiconductor industry in mainland China has developed rapidly, and the investment scale of local semiconductor manufacturing companies has expanded. At the same time, overseas semiconductor manufacturing companies such as Hynix have also set up production bases in mainland China, and the demand for semiconductor special equipment has also increased significantly.

With the continuous transfer of global semiconductor capacity to mainland China, China's IC industry continues to develop rapidly. According to the statistics from Gartner, the equipment expenditure of chip manufacturers in mainland China reached US\$10.434 billion in 2018, and US\$12.244 billion in 2019. The compound growth rate is expected to be 7.47% in the 2020 -2024.

During the Reporting Period, the Company's income in other countries and regions accounted for a relatively low proportion, mainly concentrated in Taiwan, South Korea and the Philippines.

4. Seasonal fluctuation of main operating income

During the Reporting Period, the Company's main operating income is divided into the following quarterly categories:

In RMB 10,000 Yuan

Quarters	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
1 st quarter	25,732.14	43.76%	13,446.31	13.79%	9,682.43	13.02%	3,721.39	6.90%
2 nd quarter	33,072.63	56.24%	20,992.28	21.52%	19,613.53	26.38%	14,060.04	26.06%
3 rd quarter	-	-	26,362.03	27.03%	27,445.54	36.92%	11,587.61	21.47%
4 th quarter	-	-	36,732.16	37.66%	17,599.30	23.67%	24,592.12	45.57%
Total	58,804.77	100.00%	97,532.78	100.00%	74,340.81	100.00%	53,961.17	100.00%

During the Reporting Period, the Company's main operating income was affected by many factors such as the number of orders, product acceptance cycle, fluctuation of capital expenditure of customers in the downstream semiconductor manufacturing industry, etc., without obvious seasonal characteristics.

(III) Operating cost analysis

1. Composition of operating cost

During the Reporting Period, the composition of the Company's operating cost is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Main operating cost	34,951.94	96.97%	55,932.96	98.75%	41,134.20	99.08%	30,324.39	98.75%
Other operating costs	1,090.46	3.03%	709.28	1.25%	381.64	0.92%	385.22	1.25%
Total	36,042.40	100.00%	56,642.24	100.00%	41,515.84	100.00%	30,709.61	100.00%

During the Reporting Period, the operating cost of the Company increased with the expansion of the Company's business scale, matching the change of the Company's operation income scale. During the Reporting Period, the Company's main operating costs were RMB 303.2439 million Yuan, RMB 411.342 million Yuan, RMB 559.3296 million Yuan, RMB 349.5194 million Yuan, respectively, accounting for over 96.00% of the operating cost, which were the main components of the operating cost, while other operating costs accounted for a relatively small proportion.

2. Analysis of product composition of main operating cost

During the Reporting Period, the Company's main operating costs by product composition are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Semiconductor cleaning equipment	27,080.84	77.48%	44,887.96	80.25%	34,171.81	83.07%	27,823.44	91.75%
Including: single wafer cleaning equipment	23,566.22	67.42%	38,736.48	69.26%	29,775.66	72.39%	27,823.44	91.75%
Wet bench cleaning equipment	3,514.62	10.06%	2,163.51	3.87%	3,050.71	7.42%	-	-
Single wafer wet bench combined cleaning equipment	-	-	3,987.97	7.13%	1,345.44	3.27%	-	-
Semiconductor electroplating equipment	2,528.96	7.24%	3,986.22	7.13%	4,773.22	11.60%	992.43	3.27%
Advanced packaging wet process equipment	5,342.13	15.28%	6,497.95	11.62%	2,189.17	5.32%	1,508.52	4.97%
Vertical furnace tube equipment	-	-	560.83	1.00%	-	-	-	-
Total	34,951.94	100.00%	55,932.96	100.00%	41,134.20	100.00%	30,324.39	100.00%

During the Reporting Period, the Company's main operating cost was semiconductor cleaning equipment cost, which accounted for 91.75%, 83.07%, 80.25% and 77.48% of the main operating cost respectively, matching with the proportion of semiconductor cleaning equipment revenue in the main business revenue.

3. Analysis on the composition of main operating cost

During the Reporting Period, the composition of the Company's main operating cost is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Direct materials	32,345.22	92.54%	52,842.53	94.47%	38,418.92	93.40%	28,595.15	94.30%
Direct labor costs	817.99	2.34%	1,091.96	1.95%	905.50	2.20%	600.52	1.98%
Manufacturing expenses	1,788.73	5.12%	1,998.46	3.57%	1,809.78	4.40%	1,128.72	3.72%
Total	34,951.94	100.00%	55,932.96	100.00%	41,134.20	100.00%	30,324.39	100.00%

The Company's main operating cost consists of direct materials, direct labor and manufacturing costs. During the Reporting Period, with the expansion of the Company's business scale, the cost of various types increased year by year.

During the Reporting Period, the Company's direct materials were RMB 285.9515 million Yuan, RMB 384.1892 million Yuan, RMB 528.4253 million Yuan and RMB 323.4522 million Yuan respectively, accounting for 94.30%, 93.40%, 94.77% and 92.54% of the main operating costs in each period, which were the main components of the main operating costs. During the Reporting Period, please refer to "IV. (I) Issuer's Procurement" in "Section VI Business and Technology" of this [***] for the Company's main raw material procurement and price changes.

During the Reporting Period, the Company's direct labor costs were RMB 6.0052 million Yuan, RMB 9.055 million Yuan, RMB 10.9196 million Yuan and RMB 8.1799 million Yuan, respectively, accounting for 1.98%, 2.20%, 1.95% and 2.34% of the main operating costs in each period, mainly composed of the wages and salaries of production personnel.

During the Reporting Period, the Company's manufacturing costs were RMB 11.2872 million Yuan, RMB 18.0978 million Yuan, RMB 19.9846 million Yuan and RMB 17.8873 million Yuan, respectively, accounting for 3.72%, 4.40%, 3.57% and 5.12% of the main operating costs in each period, mainly for factory rental, outsourcing processing, indirect labor cost, etc.

During the Reporting Period, the manufacturing costs among the Company's main operating costs are composed, primarily, of the following:

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Outsourcing processing fee	350.98	19.62%	400.96	20.06%	691.65	38.22%	417.71	37.01%
Factory rental fee	263.12	14.71%	590.02	29.52%	511.73	28.28%	490.10	43.42%
Indirect labor cost	284.01	15.88%	522.62	26.15%	443.78	24.52%	295.15	26.15%
Other	890.63	49.79%	484.86	24.26%	162.62	8.98%	-74.24	-6.58%
Total	1,788.73	100.00%	1,998.46	100.00%	1,809.78	100.00%	1,128.72	100.00%

During the Reporting Period, the outsourcing processing fee, factory rental fee and indirect labor cost occupied a large amount of the manufacturing costs among the main operating costs, and the manufacturing costs increased with the expansion of the Company's production and sales scale.

(1) Analysis on the change of outsourcing processing fee

During the Reporting Period, the Company's outsourcing processing fee was RMB 4.1771 Yuan, RMB 6.9165 Yuan, RMB 4.0096 Yuan and RMB 3.5098 Yuan, respectively. The reasons for the increase are: ① the quantity of equipment produced and sold by the Issuer kept increasing, resulting in the increase of purchased outsourcing processing parts; ② the product process and technical specifications of the Issuer's equipment were constantly upgraded, with higher requirements on equipment parts as to their accuracy and appearance and accordingly increase in the unit price of processing corresponding parts. The outsourcing processing fee decreased in 2020, mainly because the Company has changed the way of outsourcing processing to direct purchase from third parties for the fire-proof PVC materials since the second half of 2019, and the outsourcing processing fee was decreased accordingly.

(2) Analysis on the change of factory rental fee

During the Reporting Period, the Company's factory rental fee was RMB 4.901 million Yuan, RMB 5.1173 million Yuan, RMB 5.9002 Yuan and RMB 2.6312 Yuan respectively. The main reason for the upward trend in factory rental fee lies in the annual increase in rents on the basis of the prior year.

(3) Analysis on the change of indirect labor cost

During the Reporting Period, the Company's indirect labor cost was RMB 2.9515 million Yuan, RMB 4.4378 million Yuan, RMB 5.2262 Yuan and RMB 2.8401 million Yuan, respectively. Over the same period, the number of warehouse management and quality inspection personnel whose benefits were included in the indirect labor costs was 18, 26, 29 and 29 respectively. With the expansion of the Issuer's production scale, the number of personnel increased year by year, and in light of the increased average benefits, the indirect labor costs increased accordingly.

(4) Analysis on other changes

During the Reporting Period, other items in the Company's manufacturing costs mainly include packaging costs, logistics costs, insurance premiums, maintenance costs, water and electricity costs and raw material return expenses. During the same periods, the general materials for production were included into the manufacturing costs when they were returned, which were used to offset the current production costs. In 2018, other items of manufacturing costs were negative, mainly due to the large amount of returned general materials collected for production resulting in higher cost of equipment in production in the current period upon offset."

(IV)Gross margin analysis

1. Analysis of gross profit and gross margin

During the Reporting Period, the Company's gross profit and gross margin are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021			2020		
	Amount	Contribution level	Gross profit margin	Amount	Contribution level	Gross profit margin
Main business	23,852.83	90.06%	40.56%	41,599.82	94.32%	42.65%
Other business	2,632.84	9.94%	70.71%	2,505.12	5.68%	77.93%
Total	26,485.68	100.00%	42.36%	44,104.94	100.00%	43.78%
Item	2019			2018		
	Amount	Contribution level	Gross profit margin	Amount	Contribution level	Gross profit margin
Main business	33,206.61	97.22%	44.67%	23,636.78	97.20%	43.80%
Other business	950.85	2.78%	71.36%	680.52	2.80%	63.85%
Total	34,157.46	100.00%	45.14%	24,317.29	100.00%	44.19%

During the Reporting Period, the gross profit of the Company was RMB 243.1729 million Yuan, RMB 341.5746 million Yuan, RMB 441.0494 million Yuan and RMB 264.8568 million Yuan respectively, increasing year by year with the continuous expansion of the Company's income scale. The main business of the Company is outstanding, and the gross profit mainly comes from the main business. The gross profit contribution of the main business in each period accounts for 97.20%, 97.22%, 94.32% and 90.06% respectively.

During the Reporting Period, the comprehensive gross margin of the Company was 44.19%, 45.14%, 43.78% and 42.36% respectively, which was relatively stable.

2. Analysis of gross profit and gross margin of main business

(1) General analysis

During the Reporting Period, the Company's main business gross profit and gross margin by product category are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021			2020		
	Gross profit amount	Gross Profit Margin	Proportion of income	Gross profit amount	Gross Profit Margin	Proportion of income
Semiconductor cleaning equipment	21,819.55	44.62%	83.16%	36,739.29	45.01%	83.69%
Including: single wafer cleaning equipment	20,318.52	46.30%	74.63%	32,874.32	45.91%	73.42%
Wet bench cleaning equipment	1,501.03	29.93%	8.53%	1,147.34	34.65%	3.39%
Single wafer wet bench combined cleaning equipment	-	-	-	2,717.63	40.53%	6.88%
Semiconductor electroplating equipment	1,062.89	29.59%	6.11%	1,303.91	24.65%	5.42%
Advanced packaging wet process equipment	970.41	15.37%	10.73%	3,358.56	34.07%	10.11%
Vertical furnace tube equipment	-	-	-	198.06	26.10%	0.78%
Total	23,852.83	40.56%	100.00%	41,599.82	42.65%	100.00%
Item	2019			2018		
	Gross profit amount	Gross Profit Margin	Proportion of income	Gross profit amount	Gross Profit Margin	Proportion of income
Semiconductor cleaning equipment	28,350.49	45.34%	84.10%	22,312.53	44.50%	92.91%
Including: single wafer cleaning equipment	25,323.86	45.96%	74.12%	22,312.53	44.50%	92.91%
Wet bench cleaning equipment	1,750.64	36.46%	6.46%	-	-	-
Single wafer wet bench combined cleaning equipment	1,275.99	48.68%	3.53%	-	-	-
Semiconductor electroplating equipment	3,084.18	39.25%	10.57%	198.70	16.68%	2.21%
Advanced packaging wet process equipment	1,771.95	44.73%	5.33%	1,125.55	42.73%	4.88%
Vertical furnace tube equipment	-	-	-	-	-	-
Total	33,206.61	44.67%	100.00%	23,636.78	43.80%	100.00%

During the Reporting Period, the gross margin of the Company's main business was 43.80%, 44.67%, 42.65% and 40.56% respectively, which was generally stable.

(2) Analysis of semiconductor cleaning equipment

During the Reporting Period, the gross margin of the Company's semiconductor cleaning equipment was 44.50%, 45.34%, 45.01% and 44.62% respectively, which was relatively stable and remained at a relatively high level. The main reasons were: ① The Company's semiconductor cleaning equipment is well-developed and its gross margin is relatively stable; ② The Company's semiconductor cleaning equipment has a high degree of customization, which is a typical high-end and sophisticated equipment as downstream customers have high requirements for specifications, product standards, technical parameters, etc. The industry had high market barriers and customer verification barriers. Therefore, the above products and industry characteristics determine its relatively high level of gross margin; ③ The Company has a strong competitive edge on the semiconductor cleaning equipment market of mainland China, considering that at present, China's semiconductor cleaning equipment market has fewer Mainland China competitors; ④ The Company has a strong competitive edge on the world semiconductor cleaning equipment market. The Company's semiconductor cleaning equipment has successfully entered the production line of Hynix, one of the top ten semiconductor enterprises in the world and constantly received Hynix's orders; ⑤ The Company has applied for patent protection for core technology to form technical barriers, effectively ensuring the competitiveness of the Company's product technology..

(3) Analysis of semiconductor electroplating equipment

During the Reporting Period, the gross margin of the Company's semiconductor electroplating equipment was 16.68%, 39.25%, 24.65% and 29.59% respectively. The main reasons for the gross margin fluctuation are: ① in 2018, the Company's back-end advanced packaging semiconductor electroplating equipment was in the early stage of market promotion, and the Company and customers jointly carried out verification work. Since customers need to invest corresponding resources for new product verification, the gross margin of the equipment is relatively low; ② in 2019, the Company sold the first front-end copper interconnection electroplating equipment, and considering the process difficulty and technical level of the front-end electroplating equipment are higher than that of the back-end advanced packaging electroplating equipment, the gross margin of the former is higher, and such first sale drove the rise in the gross margin of the Company's semiconductor electroplating equipment; ③ In 2020, the Company mainly sold back-end advanced packaging electroplating equipment, the gross profit margin of which is lower than that of the front-end electroplating equipment, decreasing the gross margin of semiconductor electroplating equipment in 2020.

(4) Analysis of advanced packaging wet process equipment

During the Reporting Period, the gross margin of the Company's advanced packaging wet process equipment was 42.73%, 44.73%, 34.07% and 15.37% respectively. The main reason for the low gross margin of advanced packaging wet process equipment in 2020 is that there was many advanced packaging brushing equipment with comparatively low gross margin sold this year, which reduces the overall gross margin of advanced packaging wet process equipment.

3. Comparative analysis of gross margin with comparable companies in the same industry

The Company's main business is the research and development, production and sales of semiconductor special equipment, the main products include semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet process equipment. The Company selects NAURA and KINGSEMI, which are listed in the domestic market as A-shares and form direct or potential competition relationship with the Company in the subdivision field, and also selects AMEC and HZCCTECH, which are listed in the domestic market as A-shares of semiconductor special equipment in China, as the comparable companies. During the Reporting Period, the comparison between the gross margin of the Company's main business and that of comparable listed companies in the same industry is as follows:

Company Name	From Jan. to Jun. 2021	2020	2019	2018
NAURA	43.15%	36.69%	40.53%	38.38%
AMEC	42.34%	37.67%	34.93%	35.50%
KINGSEMI	40.76%	42.58%	46.62%	46.49%
HZCCTECH	53.70%	50.11%	51.15%	55.60%
Average value	44.99%	41.76%	43.31%	43.99%
The Company	40.56%	42.65%	44.67%	43.80%

Note: the above indicators are calculated based on the data publicly disclosed by comparable listed companies.

During the Reporting Period, the Company's gross margin level was similar to the average level of comparable listed companies in the same industry.

(V) Period cost analysis

During the Reporting Period, the Company's period expenses are detailed as follows:

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount (RMB 10,000 Yuan)	Proportion in operating income	Amount (RMB 10,000 Yuan)	Proportion in operating income	Amount (RMB 10,000 Yuan)	Proportion in operating income	Amount (RMB 10,000 Yuan)	Proportion in operating income
Selling expenses	6,551.70	10.48%	10,563.95	10.49%	8,475.49	11.20%	6,004.69	10.91%
Administrative expenses	2,927.51	4.68%	5,031.89	4.99%	3,029.73	4.00%	2,040.41	3.71%
Financial expenses	580.66	0.93%	3,237.14	3.21%	-357.79	-0.47%	-251.46	-0.46%
R&D expenses	11,460.28	18.33%	14,079.11	13.97%	9,926.80	13.12%	7,941.50	14.43%
Total	21,520.15	34.42%	32,912.10	32.67%	21,074.23	27.85%	15,735.13	28.60%

During the Reporting Period, the total expenses of the Company were RMB 157.3513 million Yuan, RMB 210.7423 million Yuan, RMB 329.121 million Yuan and RMB 215.2015 million Yuan, accounting for 28.60%, 27.85%, 32.67% and 34.42% of the operating income respectively. With the expansion of the Company's production and operation scale and the growth of sales revenue, the total expenses during the Reporting Period accounted for a continuous decline in the proportion of operating income.

1. Selling expenses

(1) General analysis

During the Reporting Period, the details of the Company's sales expenses are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Sales commission	2,221.47	33.91%	4,046.99	38.31%	2,761.73	32.58%	1,931.14	32.16%
Employee benefits	1,704.87	26.02%	2,499.05	23.66%	1,945.09	22.95%	1,036.01	17.25%
After sales service fee	798.80	12.19%	1,167.85	11.06%	1,360.12	16.05%	1,174.57	19.56%
Installation and service fee	63.35	0.97%	601.01	5.69%	820.50	9.68%	665.92	11.09%
Travel expenses	347.37	5.30%	492.76	4.66%	436.99	5.16%	316.84	5.28%
Logistics and package fee	708.53	10.81%	477.22	4.52%	380.01	4.48%	276.08	4.60%
Share-based payment	267.03	4.08%	465.69	4.41%	219.09	2.58%	77.79	1.30%
Business entertainment	207.68	3.17%	252.39	2.39%	204.99	2.42%	238.93	3.98%
Exhibition advertising fee	85.14	1.30%	59.97	0.57%	112.78	1.33%	84.95	1.41%
Office expenses	13.23	0.20%	14.05	0.13%	11.02	0.13%	42.38	0.71%
Rental fee	10.53	0.16%	67.95	0.64%	96.91	1.14%	58.72	0.98%
Depreciation charge	17.74	0.27%	8.60	0.08%	5.04	0.06%	3.16	0.05%
Other	105.95	1.62%	410.43	3.89%	121.23	1.43%	98.18	1.64%
Total	6,551.70	100.00%	10,563.95	100.00%	8,475.49	100.00%	6,004.69	100.00%

During the Reporting Period, the Company's sales expenses were RMB 60.0469 million Yuan, RMB 84.7549 million Yuan, RMB 105.6395 million Yuan and RMB 65.517 million Yuan, the Company's sales expenses increase year by year; the Company's sales expenses account for 10.91%, 11.20%, 10.49% and 10.48% of the current year's operating income respectively. With the expansion of the Company's business scale, it shows a downward trend.

① Sales commission

The Company signs a product sales agency agreement with the agent, and the agent is responsible for the marketing of relevant products in a specific region. The Company directly signs a sales contract with relevant customers and delivers goods directly to customers, and pays the agent commission according to the type of products it sells as an agent and the commission rate agreed in advance.

There are a large number of potential customers in the semiconductor industry, with a long sales cycle and large sales uncertainty. The sales will fluctuate with the life cycle of the semiconductor industry. Through agent sales, the Company can further speed up its market development and improve its sales scale.

During the Reporting Period, the sales commissions in the sales expenses were RMB 19.3114 million Yuan, RMB 27.6173 million Yuan, RMB 40.4699 million Yuan and RMB 22.2147 million Yuan respectively, accounting for 3.51%, 3.65%, 4.02% and 3.55% of the operating income. The Company's revenue scale grew rapidly, the operating income in 2018 increased by 116.99%, in 2019 by 37.52% and in 2020 by 33.13% year-on-year, and the Company's sales commission paid to agents for sales increased along with the increase in operating income. The change trend of the amount of sales commission of the Company is consistent with the operating income, and the proportion of the sales commission to the operating income generally shows a downward trend.

② Employee benefits

During the Reporting Period, the employee benefits in the sales expenses were RMB 10.3601 million Yuan, RMB 19.4509 million Yuan, RMB 24.9905 million Yuan and RMB 17.0487 million Yuan, respectively, accounting for 1.88%, 2.57%, 2.48% and 2.73% of the operating income. The Company has expanded its business scale and increased the number of sales personnel in each period, and has increased the salary and bonus of sales personnel due to the increase of performance.

③ After-sales service fee

During the Reporting Period, the after-sales service fees in the sales expenses were RMB 11.7457 million Yuan, RMB 13.6012 million Yuan, RMB 11.6785 million Yuan and RMB 7.988 million Yuan respectively, accounting for 2.13%, 1.80%, 1.16% and 1.28% of the operating income. After sales service fee means that the Company has the warranty obligation for the sold semiconductor special equipment according to the contract, and the Company accrues the after-sales service fee for the maintenance fee that is expected to be borne in the future.

④ Installation and service fee

During the Reporting Period, the installation and service fees in the sales expenses were RMB 6.6592 million Yuan, RMB 8.205 million Yuan, RMB 6.0101 million Yuan and RMB 633,500 Yuan, respectively, accounting for 1.21%, 1.08%, 0.60% and 0.10% of the operating income. The sales volume of the Company's equipment increased year by year, and an increase in the number of equipment to be installed in each period will bring about a rise in the installation and service fees.

(2) Comparison with comparable companies in the same industry

During the Reporting Period, the comparison of the sales expense rate between the Company and the listed companies in the same industry is as follows:

In RMB 10,000 Yuan

Company name	From Jan. to Jun. 2021		2020		2019		2018	
	Operating income	Sales expense rate	Operating income	Sales expense rate	Operating income	Sales expense rate	Operating income	Sales expense rate
NAURA	360,835.87	6.14%	605,604.30	5.84%	405,831.29	5.87%	332,385.10	5.08%
AMEC	133,862.77	11.00%	227,329.19	10.41%	194,694.93	10.12%	163,928.83	13.21%
KINGSEMI	35,090.80	8.66%	32,890.02	11.34%	21,315.67	9.67%	20,999.05	8.24%
HZCCTECH	67,328.38	9.91%	80,382.93	10.90%	39,883.41	13.59%	21,612.15	14.40%
Average value	149,279.46	8.93%	236,551.61	9.62%	165,431.32	9.81%	134,731.28	10.23%
The Company	62,528.08	10.48%	100,747.18	10.49%	75,673.30	11.20%	55,026.91	10.91%

Note: The above indicators are calculated based on the data publicly disclosed by the comparable listed companies.

During the Reporting Period, the Company's sales expense rate was close to the average value of comparable companies in the same industry and within a reasonable range.

2. Administrative expenses

(1) General introduction

During the Reporting Period, the details of the Company's administrative expenses are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Employee benefits	1,307.39	44.66%	1,921.12	38.18%	1,219.20	40.24%	840.52	41.19%
Intermediary fee	195.79	6.69%	411.44	8.18%	374.17	12.35%	189.65	9.29%
Consulting service fee	434.88	14.85%	508.66	10.11%	371.33	12.26%	213.08	10.44%
Rental fee	179.28	6.12%	411.05	8.17%	294.72	9.73%	301.11	14.76%
Share-based payment	211.59	7.23%	1,011.58	20.10%	248.18	8.19%	106.27	5.21%
Business entertainment	100.57	3.44%	162.58	3.23%	121.17	4.00%	59.16	2.90%
Travel expenses	77.52	2.65%	127.21	2.53%	127.28	4.20%	126.15	6.18%
Office expenses	146.05	4.99%	242.79	4.83%	91.07	3.01%	81.55	4.00%
Depreciation and amortization	243.02	8.30%	133.27	2.65%	24.24	0.80%	20.71	1.02%
Other	31.43	1.07%	102.19	2.03%	158.37	5.23%	102.21	5.01%
Total	2,927.51	100.00%	5,031.89	100.00%	3,029.73	100.00%	2,040.41	100.00%

During the Reporting Period, the amount of the Company's administrative expenses was RMB 20.4041 million Yuan, RMB 30.2973 million Yuan, RMB 50.3189 million Yuan and RMB 29.2751 million Yuan, accounting for 3.71%, 4.00%, 4.99% and 4.68% of the operating income, respectively, each of which was relatively stable.

① Employee benefits

During the Reporting Period, the employee benefits in the administrative expenses were RMB 8.4052 million Yuan, RMB 12.192 million Yuan, RMB 19.2112 million Yuan and RMB 13.0739 million Yuan, accounting for 1.53%, 1.61%, 1.91% and 2.09% of the operating income respectively. Considering the Company's operating performance has been greatly improved, in order to motivate the management personnel and further improve the management efficiency and meet the management needs arising from the expansion of business scale, the Company has increased the employee benefits paid to the management personnel and the number of management personnel employed.

② Intermediary fee

During the Reporting Period, the intermediary fees in the administrative expenses were RMB 1.8965 million Yuan, RMB 3.7417 million Yuan, RMB 4.1144 million Yuan and RMB 1.9579 million Yuan respectively, accounting for 0.34%, 0.49%, 0.41% and 0.31% of the operating income. The Company hired intermediary agencies due to audit, legal counsel, asset assessment and other work, as a result of which the intermediary fees increased.

③ Consulting service fee

During the Reporting Period, the consulting service fees in the administrative expenses were RMB 2.1308 million Yuan, RMB 3.7133 million Yuan, RMB 5.0866 million Yuan and RMB 4.3488 million Yuan respectively, accounting for 0.39%, 0.49%, 0.50% and 0.70% of the operating income, mainly including human resource service fees, investment and media consulting service fees and translation fees.

(2) Share-based payment expenses

During the Reporting Period, the share based payment expenses confirmed by the Company includes: ① the share-based payment expenses incurred by the issuer's employees when they obtain the options of the controlling shareholder ACMR, ② the share-based payment expenses incurred by the employee stock holding platforms Xinshi Consulting and Xingang Consulting increase capital of ACMSH in 2019.

During the Reporting Period, the share-based payment expenses confirmed by the Company are as follows:

In RMB 10,000 Yuan

Category	From Jan. to Jun. 2021	2020	2019	2018
Sales expenses	267.03	465.69	219.09	77.79
Administrative expenses	211.59	1,011.58	248.18	106.27
R&D expenses	329.47	523.19	752.70	168.81
Operation cost	108.89	120.43	172.28	46.90
Total	916.98	2,120.89	1,392.25	399.78

During the Reporting Period, the share-based payments confirmed by the Company were RMB 3.9978 million Yuan, RMB 13.9225 million Yuan, RMB 21.2089 million Yuan and RMB 9.1698 million Yuan respectively. The substantial increase in share-based payments is due to the increase in share-based payment expenses caused by the capital increase of ACMSH by the employee stock holding platforms Xinshi Consulting and Xingang Consulting, as well as the increase in the number of options acquired by the employees of the Issuer from ACMR, the controlling shareholder.

(3) Comparison with comparable companies in the same industry

During the Reporting Period, the comparison of the administrative expenses ratio between the Company and listed companies in the same industry is as follows:

In RMB 10,000 Yuan

Company name	From Jan. to Jun. 2021	2020	2019	2018
NAURA	11.28%	14.06%	13.75%	15.14%
AMEC	7.85%	6.73%	5.59%	7.96%
KINGSEMI	11.56%	17.37%	15.96%	13.61%
HZCCTECH	7.39%	10.23%	14.06%	9.43%
Average value	9.52%	12.10%	12.34%	11.54%
The Company	4.68%	4.99%	4.00%	3.71%

Note: The above indicators are calculated based on the data publicly disclosed by comparable listed companies.

During the Reporting Period, the Company's administrative expenses rate was lower than the average level of comparable listed companies, mainly because: ① the Company's management was flat, it focused on the main business, and the number of subsidiaries was small, as a result of which the management personnel were relatively less and the amount and rate of administrative expenses were lower than the average amount and rate of comparable companies; ② during the Reporting Period, the main production and operation sites of the Company were obtained through leasing, and the corresponding amount of depreciation and amortization was relatively small

3. R&D expenses

(1) General analysis

During the Reporting Period, the R&D expenses of the Company are detailed as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021		2020		2019		2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Employee benefits	4,697.70	40.99%	5,918.68	42.04%	4,731.41	47.66%	3,020.84	38.04%
Material consumption	4,772.20	41.64%	5,427.71	38.55%	2,664.11	26.84%	2,007.19	25.27%
Share-based payment	329.47	2.87%	523.19	3.72%	752.70	7.58%	168.81	2.13%
Travel expenses	451.51	3.94%	639.89	4.54%	582.91	5.87%	420.73	5.30%
Depreciation and amortization	469.35	4.10%	306.39	2.18%	267.96	2.70%	216.89	2.73%
Rental expenses	40.80	0.36%	237.92	1.69%	236.03	2.38%	224.50	2.83%
Service charge	402.05	3.51%	397.40	2.82%	215.74	2.17%	106.33	1.34%
Test and development expenses	-	-	31.74	0.23%	50.93	0.51%	1,566.36	19.72%
other expenses	297.20	2.59%	596.19	4.23%	425.01	4.28%	209.84	2.64%
Total	1	1	14,079.11	100.00%	9,926.80	100.00%	7,941.50	100.00%

During the Reporting Period, the amount of R&D expenses of the Company was RMB 79.415 million Yuan, RMB 99.268 million Yuan, RMB 140.7911 million Yuan, and RMB 114.6028 million Yuan respectively, accounting for 14.43%, 13.12%, 13.97% and 18.33% of the operating income.

The Company has always attached great importance to the research and development of new products and technologies. During the Reporting Period, the Company has successfully developed new products such as single wafer wet bench combined cleaning equipment, wet bench cleaning equipment, back-end advanced packaging electroplating equipment, front-end copper interconnection electroplating equipment in the front channel, front-end scrubbing equipment, vertical furnace tube equipment, etc. During the Reporting Period, the Company invested a lot in early stage R&D and later stage continuous improvement of its products, and the R&D expenses increased year by year.

① Employee benefits

During the Reporting Period, the employee benefits in the R&D expenses was RMB 30.2084 million Yuan, RMB 47.3141 million Yuan, RMB 59.1868 million Yuan and RMB 46.977 million Yuan respectively, accounting for 5.49%, 6.25%, 5.87% and 7.51% of the operating income. During the Reporting Period, the increase of employee benefits in R&D expenses is mainly due to the increase of R&D personnel and average compensation with the expansion of the Company's business scale and performance.

② Material consumption

During the Reporting Period, the amount of material consumption in the Company's R&D expenses was RMB 20.0719 million Yuan, RMB 26.6411 million Yuan, RMB 54.2771 million Yuan and RMB 47.722 million Yuan respectively, accounting for 3.65%, 3.52%, 5.39% and 7.63% of the operating income, respectively. With the expansion of the Company's business scale, the proportion decreased year by year.

③ Test and development expenses

During the Reporting Period, the test and development expenses in the R&D expenses were RMB 15.6636 million Yuan, RMB 509,300 Yuan, RMB 317,400 million Yuan and RMB 0 Yuan, accounting for 2.85%, 0.07%, 0.03% and 0% of the operating income, respectively. For some new equipment, the Company hopes to know the specifications, performance indicators and operation stability of the equipment in wafer manufacturing or advanced packaging production line, so as to ensure that the equipment can reach the best operation state after being sold to customers. In this case, the Company will entrust the downstream semiconductor manufacturing enterprise to use its site, personnel, materials, etc. to test and evaluate the new equipment, and the downstream semiconductor manufacturing enterprise will require the Company to pay the corresponding test and development expenses.

(2) R&D projects

During the Reporting Period, the corresponding R&D projects of the Company's R&D expenses are as follows:

In RMB 10,000 Yuan

Project	From Jan. to Jun. 2021	2020	2019	2018
SAPS cleaning technology	1,365.18	2,204.99	4,215.52	3,482.72
ECP electrochemistry electroplating technology	2,021.60	3,633.89	2,144.10	2,187.17
WET bench cleaning technology	1,293.93	1,306.64	927.15	208.06
Backside cleaning technology	2,433.00	2,540.09	688.98	325.06
Tahoe technology	1,372.26	638.03	449.17	253.52
Furnace vertical furnace tube technology	763.43	827.79	422.41	201.38
Backend Tools advanced packaging wet process technology	596.66	1,187.62	395.58	647.67
SFP stress-free polishing technology	98.91	348.45	265.23	270.08
TEBO cleaning technology	158.83	423.29	259.69	329.10
Development and industrialization of polytetrafluoroethylene cavity manufacturing process for semiconductor equipment	468.51	9.20	28.13	13.94
Other	887.97	959.12	130.83	22.79
Total	11,460.28	14,079.11	9,926.80	7,941.50

(3) Comparison with comparable companies in the same industry

During the Reporting Period, the comparison of R&D expense rate between the Company and listed companies in the same industry is as follows:

In RMB 10,000 Yuan

Company name	From Jan. to Jun. 2021	2020	2019	2018
NAURA	17.39%	11.07%	12.93%	10.57%
AMEC	12.54%	14.55%	12.00%	7.21%
KINGSEMI	14.08%	13.81%	16.45%	16.29%
HZCCTECH	21.17%	23.30%	26.82%	28.55%
Average value	16.29%	14.18%	17.05%	15.66%
The Company	18.33%	13.97%	13.12%	14.43%

Note: The above indicators are calculated on the basis of the data publicly disclosed by comparable listed companies.

There are some differences between the Company and the comparable listed companies in the specific business, the specific stages of R&D projects and the operating income scale, as well as in the R&D expense rate. During the Reporting Period, the Company's R&D expense rate accounted for the same proportion of operating income as the average level of comparable companies in the same industry, but was lower than that of HZCCTECH with a lower scale of operating income.

4. Financial expenses

During the Reporting Period, the details of the Company's financial expenses are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Interest expenses	303.75	629.52	745.61	504.78
Less: interest income	32.68	270.13	204.64	63.84
Exchange gains/losses	286.72	2,841.84	-924.65	-716.95
Bank charges	22.87	35.91	25.89	24.54
Total	580.66	3,237.14	-357.79	-251.46

During the Reporting Period, the financial expenses of the Company were RMB -2.5146 million Yuan, RMB -3.5779 million Yuan, RMB 32.37 million Yuan and RMB 5.8066 million Yuan respectively, accounting for -0.46%, -0.47%, 3.21% and 0.93% of the operating income, and the main components included interest expense, interest income and exchange gains/losses, etc., the amounts and proportions of which in each period were relatively small. Among them, exchange gains/losses mainly refer to gains or losses of accounts receivables, accounts payables and cash and bank balances due to exchange fluctuations caused by the Company through transactions dominated in USD and KRW. In 2020, the exchange rate of US dollar against RMB decreased significantly, resulting in a comparatively large amount of exchange losses caused by the Company's sales.

(VI) Analysis of other profit or loss items

1. Other income

During the Reporting Period, the composition of other income of the Company is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Government grants	2,791.61	2,592.98	2,666.69	2,082.34
Commission for withholding individual income tax	39.88	-	4.88	5.30
Total	2,831.48	2,592.98	2,671.56	2,087.63

During the Reporting Period, the Company's other income amounts to RMB 20.8763 million Yuan, RMB 26.7156 million Yuan, RMB 25.9298 million Yuan, and RMB 28.3148 million Yuan respectively, mainly referring to government grants.

During the Reporting Period, the government grants included in other income of the Company is as follows:

In RMB 10,000 Yuan

Grant project	From Jan. to Jun. 2021	2020	2019	2018	Asset related /income related
65-45nm Copper Interconnection Stress Free Polishing Equipment R&D	44.27	128.40	138.70	199.83	Comprehensive subsidy
20-14nm Copper Interconnection Copper Plating Equipment R&D and Application	165.25	453.50	2,088.34	1,802.77	Comprehensive subsidy
Patent Pilot Funding	-	24.00	31.36	12.14	Income related
R&D and Industrialization of Polytetrafluoroethylene Cavity Manufacturing Process for Semiconductor Equipment	84.89	9.20	28.13	13.94	Income related
R & D and industrialization of single wafer wet bench combined cleaning equipment	619.29	347.15	-	-	Comprehensive subsidy
Special R&D of 300mm integrated circuit back etching / cleaning equipment and process	1,834.45	876.32	-	-	Comprehensive subsidy
Shanghai enterprise and public institution patent work demonstration unit	13.46	-	-	-	Income related
2019 Technology Giant Subsidy	-	-	300.00	-	Income related
2019 Shanghai Patent Funding	-	-	45.77	-	Income related
2019 Zhangjiang Science City Intellectual Property Support Fund	-	-	20.00	-	Income related
Grants for Chinese patent applications and licensing fees in Pudong New Area in 2019	-	-	14.40	-	Income related
2018 Shanghai Patent Grant	-	-	-	18.89	Income related
Grants for Chinese patent applications and licensing fees in Pudong New Area in 2018	-	-	-	4.40	Income related
2018 Stability Grants	-	-	-	8.17	Income related
Others	-	-	-	22.20	Income related
2019 equity investment subsidy	-	400.00	-	-	Income related
Second Batch of Grants of Science and Technology Development Fund for Key Enterprise R&D Institution in 2020	-	80.00	-	-	Income related
2020 Shanghai Patent Grant	-	78.53	-	-	Income related
2020 Zhangjiang Science City Intellectual Property Support Fund	-	60.00	-	-	Income related
2020 High Value Patent Portfolio Award	-	50.00	-	-	Income related
2020 Exhibition Subsidy	-	24.85	-	-	Income related
2020 Stability Grants	-	16.67	-	-	Income related
Financial subsidy of science and technology development fund in 2020	-	14.74	-	-	Income related
2019 Stability Grants	-	11.23	-	-	Income related
2020 Excellent Patent Award	-	10.00	-	-	Income related
Grants for Chinese patent applications and licensing fees in Pudong New Area in 2020	-	8.40	-	-	Income related
2021 Shanghai Patent Grant	30.00	-	-	-	Income related
Total	2,791.61	2,592.98	2,666.69	2,082.34	-

2. Investment income

During the Reporting Period, the details of the Company's investment income are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Long-term equity investment income accounted by equity method	9.42	-23.04	-2.07	-1.02
Investment income from held-for-trading financial assets during the holding period	-102.36	-148.74	-	-
Investment income of wealth management products	-	300.23	126.10	-
Total	-92.93	128.44	124.03	-1.02

During the Reporting Period, the Company's investment income was mainly composed of investment income from wealth management products, mainly due to the interest income obtained by the Company from the bank's wealth management purchased with idle bank book funds in order to improve the efficiency of capital use.

3. Credit impairment loss / asset impairment loss

During the Reporting Period, the composition of credit impairment loss of the Company is as follows:

In RMB 10,000 Yuan

Item	Category	From Jan. to Jun. 2021	2020	2019	2018
Credit impairment loss	Bad debts loss of accounts receivables	-198.06	116.88	-221.58	-
	Bad debts loss of other receivables	1.33	5.59	-1.93	-
Assets impairment loss	Bad debts losses	-	-	-	-267.47
	Losses from decline in value of inventories	21.58	-353.37	-78.88	30.10
Total		-175.14	-203.90	-302.39	-237.37

In 2019, the Company implemented the new financial instrument standard, and the bad debts losses were transferred from the asset impairment loss to the credit impairment loss for presentation. During the Reporting Period, the Company's credit impairment loss/asset impairment loss is mainly composed of allowances for bad debts of accounts receivables.

4. Non-operating expenses

During the Reporting Period, the composition of non-operating expenses of the Company is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Non-recurring losses	-	-	-	108.36
Losses from damage and retirement of non-current assets	-	16.83	202.85	1.47
Penalties and overdue fines	0.70	0.44	0.11	1.52
Others	0.00	5.08	0.17	0.18
Total	0.70	22.35	203.13	111.52

During the Reporting Period, the Company's non-operating expenses were RMB 1.1152 million Yuan, RMB 2.0313 million Yuan, RMB 223,500 million Yuan, and RMB 7,000 Yuan respectively, mainly composed of non-recurring loss, losses from damage and retirement of non-current assets, and penalties and overdue fines. In 2018, the non-recurring loss in the Company's non-operating expenses was RMB 1.0836 million Yuan, which was caused by the accidental damage of equipment parts during the transportation to customers.

5. Profit and loss from changes in fair value

During the Reporting Period, the Company's profit and loss from changes in fair value are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Held-for-trading financial assets	1,770.76	8,671.99	-	-
Total	1,770.76	8,671.99	-	-

In June 2020, the Company invested RMB 100 million Yuan into Qingdao Juyuan Xinxing Equity Investment Partnership (L.P.) for the latter's establishment. Qingdao Juyuan was established for the purpose of participating in the strategic placement of SMIC listing on the STAR Market, and obtained a total of 80,589,949 shares in the strategic placement, of which 3,550,218 shares were acquired by the Company, with a lock-up period of one year. The fair value at the end of the period is calculated as the market price minus the liquidity discount.

(VII) Tax payment

During the Reporting Period, the details of income tax of the Company are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Current income tax expenses	319.70	874.65	2,722.98	893.05
Deferred income tax expenses	37.93	1,750.76	-899.81	137.08
Total	357.63	2,625.41	1,823.17	1,030.13

During the Reporting Period, with the growth of the Company's income and profit scale, the Company's income tax expenses increased accordingly.

XII.Asset Quality and Solvency Analysis

(I)Asset structure and change analysis

At the end of each Reporting Period, the composition of the Company's assets by liquidity is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Current assets	182,329.02	79.48%	142,156.27	77.11%	120,865.05	92.40%	56,783.25	89.28%
Non-current assets	47,064.40	20.52%	42,196.10	22.89%	9,935.10	7.60%	6,819.00	10.72%
Total Assets	229,393.43	100.00%	184,352.37	100.00%	130,800.15	100.00%	63,602.25	100.00%

At the end of each Reporting Period, the total assets of the Company were RMB 636.0225 million Yuan, RMB 1,308.0015 million Yuan, RMB 1.8435237 billion Yuan, and RMB 2.2939343 billion Yuan respectively. The asset scale increased year by year, mainly due to the corresponding increase of cash and bank balances, accounts receivables, inventory and other assets with the expansion of the Company's business scale.

At the end of each Reporting Period, the Company's current assets accounted for 89.28%, 92.40%, 77.11% and 79.48% of the total assets, with a relatively high proportion of current assets. The spare parts needed for the Company's production are mainly purchased and outsourced, and the Company carries out pre-assembly, general assembly and testing, with a small quantity and amount of production equipment; meanwhile, the Company's office building, plant and land are mainly obtained through leasing, so the Company's non-current assets account for a relatively low proportion. On December 31, 2020, the amount of non-current assets of the Company increased significantly due to the acquisition of land and the building of plants, while the amount of current assets decreased slightly, resulting in a decrease in the proportion of current assets.

1. Current assets analysis

At the end of each Reporting Period, the composition of the Company's current assets is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Cash and bank balances	25,382.70	13.92%	27,126.79	19.08%	44,002.91	36.41%	9,582.86	16.88%
Held-for-trading financial assets	20,191.65	11.07%	18,420.89	12.96%	-	-	-	-
Accounts receivables	30,758.26	16.87%	25,607.58	18.01%	20,989.64	17.37%	17,360.55	30.57%
Prepayments	5,726.55	3.14%	3,576.09	2.52%	1,124.46	0.93%	1,336.05	2.35%
Other receivables	4,173.97	2.29%	3,471.32	2.44%	4,763.85	3.94%	1,716.08	3.02%
Inventory	93,518.98	51.29%	61,486.94	43.25%	30,727.41	25.42%	26,415.99	46.52%
Other current assets	2,576.91	1.41%	2,466.68	1.74%	19,256.78	15.93%	371.71	0.65%
Total current assets	182,329.02	100.00%	142,156.27	100.00%	120,865.05	100.00%	56,783.25	100.00%

At the end of each Reporting Period, the Company's current assets were RMB 567.8325 million Yuan, RMB 1,208.6505 million Yuan, RMB 1,421.5627 million Yuan and RMB 1,823.2902 million Yuan respectively, showing a rapid upward trend during the Reporting Period. On the one hand, continuous expansion of the Company's business scale enables an increase in the accounts receivable and inventory year by year, on the other hand, ACMR increased the Company's capital and the Company implemented equity financing in 2019, for which there was a significant increase in cash and bank balances and other current assets of the Company. At the end of each Reporting Period, the Company's current assets structure is relatively stable, mainly composed of cash and bank balances, accounts receivables, inventory and other current assets.

(1) Cash and bank balances

At the end of each Reporting Period, the details of the Company's cash and bank balances are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Cash on hand	1.53	2.02	3.05	4.70
Bank deposit	25,381.17	27,124.76	43,999.86	9,578.16
Other cash and bank balances	-	-	-	-
Total	25,382.70	27,126.79	44,002.91	9,582.86
Including: total amount deposited overseas	23,168.78	19,074.57	15,259.82	6,832.42

At the end of each Reporting Period, the Company's cash and bank balances were RMB 95.8286 million Yuan, RMB 440.0291 million Yuan, RMB 271.2679 million Yuan and RMB 253.827 million Yuan, respectively, accounting for 16.88%, 36.41%, 19.08% and 13.92% of the current assets at the end of each Reporting Period, which are important components of the Company's current assets. During the Reporting Period, the Company's cash and bank balances showed a growth trend, which was due to the continuous growth of the Company's business scale, the capital increase of the Company by ACMR, the implementation of equity financing, etc., and the Company's capital strength continued to increase.

① Overseas deposits

A. Overseas bank deposits

In RMB 10,000

Company	Place of Deposit	Jun. 30, 2021	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2018	Source/Use
CleanChip HK	Hong Kong, China	20,458.68	18,343.16	14,507.61	6,696.58	Sales proceeds, daily operation of the Company
ACMKR	Korea	702.19	216.22	240.27	135.84	Daily operation of the Company
ACM CA	U.S.	2,007.92	515.19	511.95	-	Daily operation of the Company
-	Total	23,168.78	19,074.57	15,259.82	6,832.42	-

As shown in the table above, at the end of each Reporting Period, the balance of overseas deposits of the Issuer was RMB 68.3242 million Yuan, RMB 152.5982 million Yuan, RMB 190.7457 million Yuan and RMB 231.6878 million Yuan respectively, all of which were bank deposits of the Issuer's overseas wholly-owned subsidiaries. Among them, the bank deposits of CleanChip HK were deposited in Hong Kong, China, the bank deposits of ACMKR were deposited in Korea, and the bank deposits of ACM CA were deposited in the United States.

B. During the Reporting Period, the reasons for the substantial increase of overseas deposits, the relationship between overseas deposits and business operations, and the rationality and necessity of overseas deposits

CleanChip HK is a Company registered in Hong Kong, China, through which the Issuer's export business has been carried out since June 2018. The funds deposited in banks by CleanChip HK were mainly sourced from its sales proceeds. As customers generally pay at the end of the year, the Issuer had a larger amount of deposits in Hong Kong at the end of each Reporting Period. In 2018 and 2019, the operating income of the Issuer increased significantly, resulting in a substantial increase of the sales proceeds collected through CleanChip HK, which in turn caused a substantial increase in the amount of overseas deposits.

ACMKR is a Company registered in Korea, which is responsible for the R&D of components related to the main products of the Company, as well as purchasing parts of semiconductor special equipment for the Issuer. ACMKR's funds deposited with local banks in Korea were mainly used for its daily operation, some of which were pension reserve account funds for the sole use of paying employees' pension upon their retirement.

ACM CA is a Company registered in the United States engaging in the procurement and sales of semiconductor special equipment parts and components for the Issuer. ACM CA's funds deposited in the United States were mainly used for its daily operation such as purchasing raw materials and parts.

To sum up, the reason for the substantial increase of the amount deposited by the Issuer overseas lies in the substantial increase in the operating income of the Issuer; the Issuer's deposits in Hong Kong represented the sales proceeds that have not been remitted back by CleanChip HK to Mainland China, and the deposits in Korea and the United States represented the funds required for the daily operation of overseas subsidiaries, which are reasonable and necessary.

② Restriction on some cash and bank balances

A. Restriction on cash and bank balances

At the end of each Reporting Period, the use of some cash and bank balances of the Company is limited, as follows:

In RMB 10,000 Yuan				
Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Amounts deposited overseas and restricted in repatriation	173.75	188.81	83.21	23.47
Voluntary committed restricted funds	-	-	22,817.00	-
Total	173.75	188.81	22,900.21	23.47

Amounts deposited overseas and restricted in repatriation are the Pension Reserve Account Fund set up by Sumer Korea, the Company's subsidiary, according to the local regulations of South Korea, which can only be used to pay the employee's pension when the employee retires.

B. Voluntary committed restricted funds

a. Basic information of voluntary committed restricted funds

In 2019 when equity financing, the Company voluntarily made a commitment to restrict the use of the corresponding raised funds. In June 2019 when ACMSH (before restructuring) made the fifth capital increase, the Company voluntarily made the following commitments: before the Company completes the listing on the STAR Market or repurchases new investors' shares, such additional funds raised will only be used for reserves; in November 2019 when ACMSH made the first capital increase, the Company voluntarily made the following commitments: before the Company submits to Shanghai Stock Exchange the listing documents with respect to the listing on the STAR Market or repurchased new investors' shares, such additional funds raised will only be used for reserves. The Company plans to terminate the above voluntary commitment after submitting the IPO application to the STAR Market, and the restrictions on the use of corresponding funds will be released.

As of December 31, 2019, the Company's use and deposit of the above equity financing funds are as follows:

In RMB 10,000 Yuan

Financing	Currency	Amount	Use and deposit	Currency	Amount
The fifth capital increase of ACMSH (before restructuring)	RMB	16,792.40	Other current assets	RMB	16,792.40
	USD	283.73		USD	283.73
The first capital increase of ACMSH	RMB	22,817.00	Cash and bank balances	RMB	22,817.00

Note: The funds from the fifth capital increase of ACMSH (before restructuring) were used by the Company to purchase fixed-term deposits, and were included into other current assets.

b. The reasons, background and commercial reasonableness of the above-mentioned voluntary commitments on restricting the use of funds, whether they involve the Issuer's business operations, valuation adjustment or other interest arrangements

It is stipulated in the capital increase agreements and their ancillary agreements entered into by the Company in the two rounds of equity financing in 2019, as well as the letters of commitment issued by ACMR with respect to the equity financing: if the Company fails to complete the qualified listing by the date on which the three-year period from the accomplishment date of the investment expires, the investors shall have the right to require the Company to repurchase all or part of the shares then held by the investors in the Company at the capital increase price; such provisions shall be automatically terminated on the date when the Company formally submits the listing application documents to the exchange. ACMR has announced the above-mentioned matters and the provisions of the agreements. In order to eliminate the concerns of ACMR's about the Company pressure from cash expenditure for share repurchase, the Company made a commitment voluntarily to restrict the funds from such capital increase.

The Company's commitment to the restricted use of the additional funds from the above two rounds of equity financing is made on a voluntary basis, without being subject to the provisions of the capital increase agreements, their auxiliary agreements and other transaction documents. Meanwhile, according to the Statement and Commitment Letters issued by ACMR and the above two-round investors, except for the aforesaid agreements on share repurchase, there is no written or oral agreement between the companies of the investors and the investors and/or other shareholders of the Company that involves and/or may involve investment return commitment, the Company's operating performance commitment, relevant commitments related to the Company's listing, compensation provisions, share repurchase, valuation adjustment and other issues. As of the date of the [***], the agreements on share repurchase between the Company and the above two-round investors has been terminated.

To sum up, in order to eliminate the concerns of ACMR's investors about the Company's pressure from cash expenditure for share repurchase, the Company has made a voluntary commitment to restrict the above funds from capital increase, which commitment is reasonable involving no business operation, valuation adjustment or other interest arrangements of the Company.

c. The specific procedures necessary to release the restriction on use, the release progress up to the latest time and the reasons for failure in release

According to the legal opinions on ACMR issued by overseas lawyers and the statement issued by ACMR, the commitment of the Issuer on restricting the funds is unilateral and voluntary, which can be released by the Issuer without meeting any legal or contractual substantive or procedural conditions. On May 7, 2020, ACMR indicated to investors in ACM Research, Inc Q1 2020 Earnings Call that the above-mentioned restricted funds would be released after the Company submitted the application documents for listing on the STAR Market. As of the date of the [***], the Company has submitted the application documents for listing on the STAR Market to Shanghai Stock Exchange, and the above restricted funds of the Company has been released.

(2) Held-for-trading financial assets

At the end of each Reporting Period, the held-for-trading financial assets of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Financial assets at fair value through profit or loss	20,191.65	18,420.89	-	-
Including: Investments in debt instruments	-	-	-	-
Investments in equity instruments	20,191.65	18,420.89	-	-
Financial assets designated as at fair value through profit or loss	-	-	-	-
Total	20,191.65	18,420.89	-	-

In June 2020, the Company invested RMB 100 million Yuan into Qingdao Juyuan Xinxing Equity Investment Partnership (L.P.) for the latter's establishment. Qingdao Juyuan was established for the purpose of participating in the strategic placement of SMIC listing on the STAR Market, and obtained a total of 80,589,949 shares in the strategic placement, of which 3,550,218 shares were acquired by the Company, with a lock-up period of one year. The fair value at the end of the period is calculated as the market price minus the liquidity discount.

(3) Accounts receivables

At the end of each Reporting Period, the Company has no notes receivable, and the Company's accounts receivables are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Balance of accounts receivables	31,700.30	26,359.08	21,845.46	17,987.45
Less: allowances for bad debts	942.04	751.50	855.82	626.89
Net accounts receivables	30,758.26	25,607.58	20,989.64	17,360.55

At the end of each Reporting Period, the net accounts receivables of the Company were RMB 173.6055 million Yuan, RMB 209.8964 million Yuan, RMB 256.0758 million Yuan and RMB 307.5826 million Yuan, respectively, accounting for 30.57%, 17.37%, 18.01% and 16.87% of the current assets at the end of each Reporting Period, which were important components of the current assets of the Company.

① Analysis of changes in balance of accounts receivables

During the Reporting Period, the balance of accounts receivables and changes in operating income of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Balance of accounts receivables	31,700.30	26,359.08	21,845.46	17,987.45
Growth rate of balance of accounts receivables at the end of the period	20.26%	20.66%	21.45%	77.45%
Growth rate of operating income	-	33.13%	37.52%	116.99%

During the Reporting Period, the balance of accounts receivables of the Company increased significantly, mainly due to the rapid growth of the Company's operating income. From 2018 and 2020, the growth rate of the Company's accounts receivables balance is lower than the growth rate of operating income, and the Company's accounts receivables collection is in good condition.

② Aging analysis and provisions of allowances for bad debts of accounts receivables

A. Aging analysis of accounts receivables

In RMB 10,000 Yuan

Aging	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Within 1year (inclusive)	27,564.32	22,638.63	16,651.68	15,203.01
Including: within 6 months	21,244.37	18,618.18	12,612.86	10,556.63
within 7-12 months	6,319.96	4,020.45	4,038.82	4,646.39
1-2 years (including 2 years)	4,135.97	3,720.45	5,110.07	2,698.68
2-3 years (including 3 years)	-	-	83.71	45.98
3-4 years (including 4 years)	-	-	-	39.77
4-5 years (including 5 years)	-	-	-	-
Over 5 years	-	-	-	-
Subtotal	31,700.30	26,359.08	21,845.46	17,987.45
Less: allowances for bad debts	942.04	751.50	855.82	626.89
Total	30,758.26	25,607.58	20,989.64	17,360.55

At the end of each Reporting Period, the aging of accounts receivables of the Company is mainly within one year, accounting for 87.57%, 79.33%, 88.41% and 89.62% respectively.

B. Provisions for bad debts of accounts receivables

a. From January 1, 2019

For accounts receivables, regardless of whether it contains significant financing, the Company always measures its loss allowance based on the amount of lifetime ECL, and increase in or reversal of loss allowance is included in profit or loss for the period as loss/gain on impairment.

In 2019 and 2020, the Company made provision for bad debts individually and by group. The Company groups the accounts receivables according to similar credit risk characteristics (aging), and makes the estimates of the provision rate of bad debt allowances for the accounts receivables based on all reasonable and supportable information, including forward-looking information. On December 31, 2019, the Company reviewed the appropriateness of the provisions for bad debts of accounts receivables in previous years according to the historical bad debt loss, and believed that the probability of default is strongly related to the aging of accounts, and aging is still a sign of whether the credit risk of accounts receivables of the Company has significantly increased. Therefore, the Company's credit risk loss on December 31, 2019 is estimated on the basis of aging according to the original loss ratio of the credit group of non-combined related parties.

At the end of 2019, 2020 and June 2021, the Company's provisions for bad debts are as follows:

In RMB 10,000 Yuan

Category	June 30, 2021			December 31, 2020			December 31, 2019		
	Carrying amount	Provision for bad debts	Proportion (%)	Carrying amount	Provision for bad debts	Proportion (%)	Carrying amount	Provision for bad debts	Proportion (%)
Provision for bad debts made individually	-	-	-	-	-	-	-	-	-
Provision for bad debts made by group:	31,700.30	942.04	2.97	26,359.08	751.50	2.85	21,845.46	855.82	3.92
Including:									
Credit group of non-combined related parties	31,700.30	942.04	2.97	25,584.26	751.50	2.94	21,845.46	855.82	3.92
Accounts receivables that final customers have paid to related parties at the end of the period and then related parties have paid to the Company after the period	-	-	-	774.81	-	-	-	-	-
Total	31,700.30	942.04	2.97	26,359.08	751.50	2.85	21,845.46	855.82	3.92

At the end of 2019, 2020 and June 2021, the provisions for bad debts made by the Company according to the credit group of non-combined related parties are as follows:

In RMB 10,000 Yuan

Aging	June 30, 2021			December 31, 2020			December 31, 2019		
	Accounts receivables	Provisions for bad debts	Proportion (%)	Accounts receivables	Provisions for bad debts	Proportion (%)	Accounts receivables	Provisions for bad debts	Proportion (%)
Within 6 months	21,244.37	212.44	1.00	17,843.36	178.43	1.00	12,612.86	126.13	1.00
Within 7-12 months	6,319.96	316.00	5.00	4,020.45	201.02	5.00	4,038.82	201.94	5.00
1-2 years (including 2 years)	4,135.97	413.60	10.00	3,720.45	372.04	10.00	5,110.07	511.01	10.00
2-3 years (including 3 years)	-	-	20.00	-	-	20.00	83.71	16.74	20.00
3-4 years (including 4 years)	-	-	25.00	-	-	25.00	-	-	25.00
4-5 years (including 5 years)	-	-	30.00	-	-	30.00	-	-	30.00
Over 5 years	-	-	100.00	-	-	100.00	-	-	100.00
Total	31,700.30	942.04	-	25,584.26	751.50	-	21,845.46	855.82	-

In 2019, 2020 and the period from January to June 2021, no provision for bad debts was made individually by the Company.

b. Before January 1, 2019

Before January 1, 2019, the Company accrued bad debt provisions for accounts receivables in three categories: accounts receivables with individually significant amount and individual provision for bad debts, receivables with provisions for bad debts in the group with identical credit risk characteristics and receivables without individually significant amount but with individual provision for bad debts. In 2017 and 2018, the Company did not have accounts receivables with individually significant amount and individual provision for bad debts, and receivables without individually significant amount but with individual provision for bad debts. The provision for receivables with provisions for bad debts in the group with identical credit risk characteristics (aging analysis method) is as follows:

In RMB 10,000 Yuan

Aging	December 31, 2018		
	Accounts receivables	Provisions for bad debts	Proportion (%)
Within 1year (inclusive)	15,203.01	337.89	2.22
Including: within 6 months	10,556.63	105.57	1.00
within 7-12 months	4,646.39	232.32	5.00
1-2 years (including 2 years)	2,698.68	269.87	10.00
2-3 years (including 3 years)	45.98	9.20	20.00
3-4 years (including 4 years)	39.77	9.94	25.00
4-5 years (including 5 years)	-	-	-
Over 5 years	-	-	-
Total	17,987.45	626.89	-

The comparison between the Company's bad debt provision policy based on aging group and comparable listed companies in the same industry during the Reporting Period is as follows:

Listed companies	Within 6 months	7-12 months	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years
NAURA	5.00%	5.00%	10.00%	20.00%	30.00%	30.00%	100.00%
AMEC	1.00%	5.00%	15.00%	20.00%	30.00%	50.00%	100.00%
KINGSEMI	5.00%	5.00%	10.00%	30.00%	50.00%	80.00%	100.00%
HZCCTECH	5.00%	5.00%	10.00%	20.00%	40.00%	80.00%	100.00%
Issuer	1.00%	5.00%	10.00%	20.00%	25.00%	30.00%	100.00%

It can be seen from the above table that the proportion of provisions for bad debts of the Company (aging within 6 months) is 1%, which is the same as that of AMEC, lower than 5% of KINGSEMI, NAURA and HZCCTECH. In addition, except that the proportion (aging 3-4 years) of provisions for bad debts is slightly lower than that of comparable listed companies, the proportion of provisions for bad debts for each aging period of the Company is within the corresponding proportion range of comparable listed companies and in the Reporting Period, the balance of accounts receivables aging over 3 years of the Company is relatively small. There is no significant difference between the proportion of provisions for bad debts of accounts receivables of the Company and that of comparable listed companies in the same industry, and the policy of provisions for bad debts is cautious.

③ Top five accounts receivables customers

At the end of June 2021, the top five accounts receivables are as follows:

In RMB 10,000 Yuan

Customer name	Closing balance of accounts receivables	Proportion in accounts receivables (%)
Huahong Group	13,118.41	41.38
Yangtze Memory	7,941.00	25.05
Xiamen Silan Microchip Manufacturing Co., Ltd.	2,097.54	6.62
Changdian Integrated Circuit (Shaoxing) Co., Ltd.	1,850.17	5.84
Beijing Yitang Technology Co., Ltd.	1,668.00	5.26
Total	26,675.13	84.15

Note: 1. Huahong Group includes Huahong Semiconductor (Wuxi) Co., Ltd., Shanghai Huahong Hongli Semiconductor Manufacturing Co., Ltd., Shanghai Huali IC Manufacturing Co., Ltd., Shanghai Huali Microelectronics Corporation, and Shanghai IC R&D Center, the same below; 2. Yangtze Memory includes Yangtze Memory Technologies Co., Ltd. and Wuhan Xinxin Semiconductor Manufacturing Co., Ltd., the same below.

At the end of 2020, customers with the top five accounts receivables are as follows:

In RMB 10,000 Yuan

Customer name	Closing balance of accounts receivables	Proportion in accounts receivables (%)
Huahong Group	9,332.07	35.40
Yangtze Memory	7,910.78	30.01
Innotron Memory Co., Ltd.	2,572.77	9.76
Xiamen Silan Microchip Manufacturing Co., Ltd.	1,292.58	4.90
Changdian Integrated Circuit (Shaoxing) Co., Ltd.	978.74	3.71
Total	22,086.94	83.78

At the end of 2019, customers with the top five accounts receivables are as follows:

In RMB 10,000 Yuan

Customer name	Closing balance of accounts receivables	Proportion in accounts receivables (%)
Huahong Group	11,825.01	54.13
Chater Base International	3,676.46	16.83
Yangtze Memory	2,328.52	10.66
JCET	1,512.24	6.92
Taiwan Phoenix Silicon	908.38	4.16
Total	20,250.60	92.70

At the end of 2018, customers with the top five accounts receivables are as follows:

In RMB 10,000 Yuan

Customer name	Closing balance of accounts receivables	Proportion in accounts receivables
Huahong Group	5,475.96	30.44
Chater Base International	4,251.72	23.64
ACMR	3,257.34	18.11
Hynix	3,098.92	17.23
Yangtze Memory	1,317.03	7.32
Total	17,400.96	96.74

At the end of each period of the Reporting Period, the Company's total of the top five accounts receivables balances were respectively RMB 174.0096 million Yuan, RMB 202.506 million Yuan, RMB 220.8694 million Yuan, and RMB 266.7513 million Yuan, accounting for 96.74%, 92.70%, 83.78% and 84.15% of the account receivable balance at the end of each period.

In 2018, part of the Company's export business was carried out through Chater Base International, an import and export service provider. The specific way was to sell the products to Chater Base International first, and then it would go through the formalities of customs declaration. Chater Base International sold the products to the end customers at the same price. At the same time, the Company paid Chater Base International the agency fee for export customs declaration. Therefore, the top five accounts receivable accounted for a higher proportion of each closing balance of accounts receivables. After June 2018, the Company's export business was carried out through CleanChip HK, a wholly-owned subsidiary in Hong Kong. The Company no longer engages in business with Chater Base International.

In 2018 and 2020, some customers of the Company placed orders with ACMR, the Company sold the products to ACMR, and then ACMR sold such products to the end customers. In 2019, the Company did not sell to the end customers through ACMR.

(4) Prepayments

At the end of each Reporting Period, the Company's prepayments are as follows:

In RMB 10,000 Yuan

Aging	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Within 1 year (inclusive)	5,726.55	100%	3,576.09	100%	1,124.46	100%	1,336.05	100%
1-2 years (including 2 years)	-	-	-	-	-	-	-	-
2-3 years (including 3 years)	-	-	-	-	-	-	-	-
Over 3 years	-	-	-	-	-	-	-	-
Total	5,726.55	100%	3,576.09	100%	1,124.46	100%	1,336.05	100%

The Company's advance payment is mainly the advance payment to the supplier. At the end of each Reporting Period, the Company's prepayment balance was RMB 13.3605 million Yuan, RMB 11.2446 million Yuan, RMB 35.7609 million Yuan and RMB 57.2655 million Yuan, respectively, accounting for 2.35%, 0.93%, 2.52% and 3.14% of current assets. At the end of each Reporting Period, with the expansion of the Company's business scale, the Company's prepayment amount scale has expanded, but the proportion of current assets is relatively low, and the aging is within 1 year.

(5) Other receivables

At the end of each Reporting Period, other receivables of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Balance of other receivables	4,176.11	3,474.79	4,772.91	1,723.22
Less: Provisions for bad debts	2.14	3.47	9.06	7.14
Net amount of other receivables	4,173.97	3,471.32	4,763.85	1,716.08

At the end of each Reporting Period, balance of other receivables is classified as follows according to their nature:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Related party accounts	-	-	3,696.06	143.53
Export tax refund receivable	2,747.57	2,224.26	613.58	1,288.70
Deposit	109.27	297.61	148.05	180.30
Intermediary prepayment fee	1,113.86	845.65	125.00	-
Staff reserve	32.53	24.35	78.05	30.14
Other	172.88	82.92	112.17	80.55
Total	4,176.11	3,474.79	4,772.91	1,723.22

At the end of each Reporting Period, the book value of other receivables of the Company was RMB 17.1608 million Yuan, RMB 47.6385 million Yuan, RMB 34.7132 million Yuan and RMB 41.7397 million Yuan respectively, accounting for 3.02%, 3.94%, 2.44% and 2.29% of current assets, mainly including related party accounts, export tax refund, deposit, staff reserve and others. During the Reporting Period, the Company's other receivables increased year by year. In 2019, the net amount of the Company's other receivables increased by RMB 30.4777 million Yuan compared with 2018, mainly due to the increase of related party amounts in 2019.

At the end of each Reporting Period, the amounts of related parties in other receivables were RMB 1.4353 million Yuan, RMB 36.9606 million Yuan, RMB 0 Yuan, and RMB 0 Yuan respectively. At the end of 2019, the amount of the Company's related parties increased a lot, mainly because ACMR borrowed money from CleanChip HK to raise the capital increase of the Company. After the Company acquired CleanChip HK, ACMR's loan from CleanChip HK became a related party loan. Please refer to "X. (II) Non-recurrent Related Transactions" in "Section X Related Transactions" of the [***] for details of the related party loan. As of the date of signing this [***], ACMR has returned such amount.

(6) Inventory

① Inventory Composition

At the end of each Reporting Period, the Company's inventory mainly includes raw materials, finished goods, work in process, and delivered goods. The Company's inventory composition is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Book Value	Proportion	Book Value	Proportion	Book Value	Proportion	Book Value	Proportion
Raw material	31,526.48	33.71%	21,129.18	34.36%	9,139.20	29.74%	7,873.60	29.81%
Work in process	15,557.68	16.64%	15,571.85	25.33%	7,524.25	24.49%	6,067.57	22.97%
Finished goods	-	0.00%	66.26	0.11%	301.50	0.98%	-	0.00%
Delivered goods	46,434.82	49.65%	24,719.65	40.20%	13,762.46	44.79%	12,474.82	47.22%
Total	93,518.98	100.00%	61,486.94	100.00%	30,727.41	100.00%	26,415.99	100.00%

During the Reporting Period, the inventory increased year by year with the expansion of the Company's business scale. At the end of each Reporting Period, the book value of the Company's inventory was RMB 264.1599 million Yuan, RMB 307.2741 million Yuan, RMB 614.8694 million Yuan and RMB 935.1898 million Yuan, respectively, accounting for 46.52%, 25.42%, 43.25% and 51.29% of the current assets at the end of each Reporting Period.

The Company mainly conducts customized production based on customer orders. At the end of each Reporting Period, the Company's inventory mainly consists of delivered goods, raw materials and work in process. Under customized production, the Company has no finished goods stock, and the products will be delivered after acceptance by the Company. The amount of goods in stock is small. During the Reporting Period, the Company's inventory structure was relatively stable.

The Company's raw materials mainly include gas circuit, material transmission, mechanical, electrical and other materials. At the end of each Reporting Period, the book value of the Company's raw materials was RMB 78.736 million Yuan, RMB 91.392 million Yuan, RMB 211.2918 million Yuan and RMB 315.2648 million Yuan respectively, accounting for 29.81%, 29.74%, 34.36% and 33.71% of the book value of the inventory at the end of each period.

The Company's work in progress and delivered goods are mainly various kinds of semiconductor special equipment products that have been produced and delivered but not yet accepted. The Company will transport the special equipment products to the agreed delivery place according to the provisions of the agreement and contract, and confirm the revenue only after the customer's commissioning and acceptance by the customer. At the end of each Reporting Period, the book value of goods issued by the Company was RMB 124.7482 million Yuan, RMB 137.6246 million Yuan, RMB 247.1965 million Yuan and RMB 463.3482 million Yuan respectively, accounting for 47.22%, 44.79%, 40.20% and 49.65% of the book value of inventories at the end of each Reporting Period.

②Provision for decline in value of inventories

In each Reporting Period, the provision for decline in value of inventories of the Company is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		
	Carrying amount	Provision for decline in value of inventories	Book value
Raw material	31,886.58	360.10	31,526.48
Work in process	15,557.68	-	15,557.68
Finished goods	362.27	362.27	-
Delivered goods	46,434.82	-	46,434.82
Total	94,241.34	722.36	93,518.98
Item	December 31, 2020		
	Carrying amount	Provision for decline in value of inventories	Book value
Raw material	21,510.86	381.68	21,129.18
Work in process	15,571.85	-	15,571.85
Finished goods	428.52	362.27	66.26
Delivered goods	24,719.65	-	24,719.65
Total	62,230.88	743.95	61,486.94
Item	December 31, 2019		
	Carrying amount	Provision for decline in value of inventories	Book value
Raw material	9,469.01	329.82	9,139.20
Work in process	7,524.25	-	7,524.25
Finished goods	362.27	60.76	301.50
Delivered goods	13,762.46	-	13,762.46
Total	31,117.99	390.58	30,727.41
Item	December 31, 2018		
	Carrying amount	Provision for decline in value of inventories	Book value
Raw material	8,185.30	311.70	7,873.60
Work in process	6,067.57	-	6,067.57
Finished goods	-	-	-
Delivered goods	12,474.82	-	12,474.82
Total	26,727.69	311.70	26,415.99

At the end of each Reporting Period, the Company checks all kinds of inventories, and makes provision for falling prices of inventories whose cost is greater than the net realizable value. The Company carries out customized production, most of the inventories are held in accordance with the sales contract, and the net realizable value is the amount of the estimated selling price of the finished products minus the estimated cost to be incurred, estimated selling expenses and related taxes until completion. At the end of each Reporting Period, the provision for the Company's inventory impairment were RMB 3.117 million Yuan, RMB 3.9058 million Yuan, RMB 7.4395 million Yuan and RMB 7.2236 million Yuan respectively.

③ Aging structure of issued goods

The aging structure of delivered goods at the end of each Reporting Period is as follows:

In RMB 10,000 Yuan

Aging	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Within 1 year (inclusive)	43,255.62	93.15%	21,541.57	87.14%	11,389.90	82.76%	10,818.02	86.72%
1-2 years (including 2 years)	568.41	1.22%	1,872.98	7.58%	1,078.02	7.83%	1,294.53	10.38%
2-3 years (including 3 years)	1,304.58	2.81%	-	-	1,294.53	9.41%	-	-
Over 3 years	1,306.21	2.81%	1,305.09	5.28%	-	-	362.27	2.90%
Total	46,434.82	100.00%	24,719.65	100.00%	13,762.46	100.00%	12,474.82	100.00%

At the end of each Reporting Period, the equipment delivered for more than 1 year is listed as follows:

In RMB 10,000 Yuan

Customer	Order/Contract No.	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018		Specific reasons for failure to obtain customer acceptance	Whether the contract has been complied with	Is there any possibility that the customer may cancel the purchase	Is there any impairment risk	Whether sufficient provision has been made for decline in value
		Amount	Aging	Amount	Aging	Amount	Aging	Amount	Aging					
SMIC	1121704748	1,306.21	Over 3 years	1,305.09	More than 3 years	1,294.53	2 to 3 years	1,294.53	1 to 2 years	See Note 1	See Note 1	See Note 1	No	No provision for decline in value is required
Nepes	1600337	680.69	2 to 3 years	680.69	1 to 2 years	680.69	Within 1 year	-	-	The equipment was delivered in June 2019, but has not been installed, given the customer is in the Philippines, and the Company's engineers are prevented by COVID-19 epidemic from proceeding to the site.	Yes, 50% of the contract price as the deposit from customer has been received, and no acceptance time is agreed in the contract.	No	No	No provision for decline in value is required
Nepes	1601173	623.89	2 to 3 years	623.89	1 to 2 years	623.89	Within 1 year	-	-	The equipment was delivered in June 2019, but has not been installed, given the customer is in the Philippines, and the Company's engineers are prevented by COVID-19 epidemic from proceeding to the site.	Yes, 50% of the contract price as the deposit from customer has been received, and no acceptance time is agreed in the contract.	No	No	No provision for decline in value is required

JCET	JCAPEQ-2018-097	568.41	1 to 2 years	568.41	1 to 2 years	568.41	Within 1 year	-	-	The equipment was delivered in November 2019. The installation has not been installed yet as the equipment has been postponed due to the customer's production line, which is expected to be completed by the end of 2021. The acceptance is expected to be completed by the end of 2022.	Yes, 80% of the contract price as the deposit from customer has been received, and no acceptance time is agreed in the contract.	No	No	No provision for decline in value is required
SMIC	7222002408	-	-	-	-	463.68	1 to 2 years	463.68	Within 1 year	The equipment has been accepted in 2020	Yes, the full payment has been received	The equipment has been accepted in 2020	The equipment has been accepted in 2020, without impairment risk	No provision for decline in value is required

SMIC	7222002408	-	-	-	-	410.29	1 to 2 years	410.29	Within 1 year	The equipment has been accepted in 2020	Yes, the full payment has been received	The equipment has been accepted in 2020	The equipment has been accepted in 2020 without impairment risk	No provision for decline in value is required
SMIC Shaoxing (SMIC)	7721800597	-	-	-	-	204.05	1 to 2 years	204.05	Within 1 year	The equipment has been accepted in 2020	Yes, the full payment has been received	The equipment has been accepted in 2020	The equipment has been accepted in 2020 without impairment risk	No provision for decline in value is required
Taiwan Wafer Works	ZP21 8110025539	-	-	-	-	-	-	362.27	More than 3 years	See Note 2	See Note 2	See Note 2	Full provision for decline in value has been made at the end of the reporting period as the contract cannot be executed	The equipment has been recorded as delivered goods instead of finished goods after being transported back to the warehouse, and full provision for decline in value has been made at the end of the reporting period

Note 1: This product is used to tackle key problems in SMIC's 20-14nm advanced manufacturing process. It was delivered in June 2017 and installed in the same month. According to the Entrusted Test Agreement between the Company and SMIC in 2017, SMIC will consider purchasing the equipment if the test results meet the conditions of process and technical requirements after test and verification. The equipment has been installed in SMIC's production line for technical verification in mid-2018, and has been in normal operation, met the technical requirements of process steps, and actually served the production of SMIC by the end of 2018. The report meeting of "20-14nm advanced semiconductor product process" project in the first half of 2019 held in SMIC informed that the equipment technical verification had been roughly completed. However, by the end of 2019, due to SMIC's project schedule changes and personnel transfer, the equipment procurement failed to be duly carried out. In August 2020, the Company re-negotiated with SMIC on the procurement scheme. By the end of 2020, the particulars of the procurement scheme were still under negotiation. At present, the equipment is still running on SMIC's production line. In June 2021, the technical agreement concerning the equipment has been confirmed, and SMIC and the Company's management are actively communicating about the procurement. The increase in the amount at the end of 2020 is the cost of parts maintenance. In case of the worst scenario where no agreement can be reached on procurement, the equipment will be assessed by Company as a device that meets the requirements of SMIC's 20-14nm advanced semiconductor product process. So far, the equipment is still advanced in domestic equipment having the value of being sold to third parties. As a kind of single wafer cleaning equipment, it can be applied to the production lines of other customers after transformation although it is special customized equipment. With reference to the price of the same type of products negotiated by the Company with customers (about RMB 20 million Yuan), the market price of the equipment is evaluated to be higher than the cost plus the transformation fee which equals to about 2% of the cost, without impairment risk.

Note 2: This equipment was shipped to Waigaoqiao Free Trade Zone in March 2015, pending notice from Taiwan Wafer Works for delivering to Taiwan. However, due to the change of the customer's production and operation plan, the Company was informed of the delay in the delivery schedule, subject to a new delivery time. In 2017, the customer notified to the Company of its decision to cancel the contract, and accordingly the equipment was stored in the free trade zone. After internal discussion of the Company's sales team, the equipment can be sold to other intended customers. From the cancellation of the contract in 2017 to the end of 2018, the Company was negotiating with an intended customer on the sales of the equipment at a price of US\$1,253,000 (about RMB 7,976,000 Yuan). According to the negotiated price and referring to the sales price of products of the same specification (about RMB 8 million Yuan), the Company believes that the realizable value of the equipment is higher than the cost thereof, so no provision for decline in value is made therefor. In 2019, given no purchase order for the equipment was obtained by the Company from the intended customer, the equipment was shipped back to the warehouse and was recorded as finished goods instead of delivered goods. At the end of 2019, the Company assessed the amount of parts to be replaced for the equipment in order to meet the customized needs of other intended customers, and made provisions for decline in value in the amount of RMB 607,600 Yuan according to the amount of parts that cannot be reused and are expected to be scrapped after replacement. In 2020, the intended customer put forward new technical requirements in equipment sales. In case of transformation, except for the availability of auxiliary equipment, the cleaning chamber and frame can not be used due to the large gap between the 8-inch process and the 12-inch process. The economic benefit of transforming the equipment for resale is low. Therefore, no plan of transforming the equipment proceeded, with full provision for decline in value being made accordingly. At the end of each period, the Company evaluated whether the provision for decline in value of the equipment is required according to the actual situation and sales plan at the then-current time, which reasonably reflected the inventory value at the end of the period, without profit adjustment. The provision for decline in value at the end of each period is as follows:

Item	June 30, 2021			December 31, 2020			December 31, 2019			December 31, 2018		
	Carrying amount (RMB 10,000 Yuan)	Provision for decline in value of inventory (RMB 10,000 Yuan)	Book value (RMB 10,000 Yuan)	Carrying amount (RMB 10,000 Yuan)	Provision for decline in value of inventory (RMB 10,000 Yuan)	Book value (RMB 10,000 Yuan)	Carrying amount (RMB 10,000 Yuan)	Provision for decline in value of inventory (RMB 10,000 Yuan)	Book value (RMB 10,000 Yuan)	Carrying amount (RMB 10,000 Yuan)	Provision for decline in value of inventory (RMB 10,000 Yuan)	Book value (RMB 10,000 Yuan)
Delivered goods	-	-	-	-	-	-	-	-	-	362.27	-	362.27
Finished goods	-	-	-	362.27	362.27	-	362.27	60.76	301.50	-	-	-

(7) Other current assets

At the end of each Reporting Period, other current assets of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Fixed deposit	-	-	19,011.36	-
Input tax to be deducted	2,060.19	1,862.31	159.40	274.71
Input tax to be certified	9.93	40.69	60.12	77.61
Prepaid expenses	174.58	473.96	25.90	19.39
Contract acquisition cost	88.83	89.72	-	-
Prepayment of enterprise income tax	243.39	-	-	-
Total	2,576.91	2,466.68	19,256.78	371.71

At the end of each Reporting Period, the balance of other current assets of the Company was RMB 3.7171 million Yuan, RMB 192.5678 million Yuan, RMB 24.6668 million Yuan and RMB 25.7691 million Yuan respectively, accounting for 0.65%, 15.93%, 1.74% and 1.41% of the current assets at the end of each Reporting Period, mainly including fixed deposit, input tax to be deducted and input tax to be certified.

At the end of 2019, the Company's other current assets increased significantly mainly due to the Company's use of equity financing funds to purchase one-year term deposits.

2. Analysis of non-current assets

At the end of each Reporting Period, the composition of non-current assets of the Company is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Long-term receivables	-	-	-	-	1,484.18	14.94%	2,470.45	36.23%
Long term equity investment	3,058.28	6.50%	3,048.86	7.23%	3,071.90	30.92%	73.98	1.08%
Fixed assets	2,917.12	6.20%	2,811.47	6.66%	1,396.30	14.05%	1,638.48	24.03%
Construction in progress	1,916.60	4.07%	1,437.16	3.41%	370.21	3.73%	-	-
Right-of-use assets	3,327.24	7.07%	-	-	-	-	-	-
Intangible assets	6,636.05	14.10%	6,653.82	15.77%	240.08	2.42%	188.19	2.76%
Long-term deferred expenses	958.70	2.04%	1,052.70	2.49%	829.53	8.35%	868.99	12.74%
Deferred tax assets	192.04	0.41%	229.97	0.55%	2,012.08	20.25%	1,108.64	16.26%
Other non-current assets	28,058.36	59.62%	26,962.12	63.90%	530.82	5.34%	470.27	6.90%
Total non-current assets	47,064.40	100.00%	42,196.10	100.00%	9,935.10	100.00%	6,819.00	100.00%

During the Reporting Period, with the expansion of the Company's business scale, the Company's non-current assets increased year by year. At the end of each Reporting Period, the Company's non-current assets were RMB 68.19 million Yuan, RMB 99.351 million Yuan, RMB 421.961 million Yuan and RMB 470.644 million Yuan, respectively. The Company's non-current assets mainly include long-term receivables, long term equity investment, fixed assets, long-term deferred expenses, deferred income tax assets and other non-current assets.

(1) Long-term receivables

At the end of each Reporting Period, the details of long-term receivables of the Company are as follows:

In RMB 10,000 Yuan				
Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Shengxin Shanghai	-	-	1,371.16	2,092.29
Product sales receivables	-	-	113.01	378.16
Total	-	-	1,484.18	2,470.45

Note: Product sales receivables refer to sales of product receivables with a collection period of more than one year as agreed in the contract.

At the end of each Reporting Period, the balance of book value of long-term receivables of the Company was RMB 24.7045 million Yuan, RMB 14.8418 million Yuan, RMB 0 million Yuan and RMB 0 million Yuan, respectively. The Company's long-term receivables are the balance of senior secured promissory notes issued by Shengxin Shanghai to ACMSH. In August 2019, ACMR repurchased 154,821 Series A common shares from Shengxin Shanghai at a total consideration of US\$2,042,863.10, of which US\$1,161,157.50 was deducted by ACMR. As a result, the loan principal under senior secured promissory notes of Shengxin Shanghai and ACMSH (before restructuring), commercial promissory notes of ACMSH and ACMR were reduced to US\$1,820,101.76 (RMB 7.837 million Yuan). At the end of 2020 and the end of June 2021, the Company had no long-term receivables.

(2) Long term equity investment

At the end of each Reporting Period, the details of the Company's long-term equity investment are as follows:

In RMB 10,000 Yuan				
Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Shixi Chanheng	2,934.44	2,960.90	2,993.19	-
Shengyi Semiconductor	123.84	87.97	78.72	73.98
Total	3,058.28	3,048.86	3,071.90	73.98

The Company's main foreign investment project is the long-term equity investment in Shixi Chanheng, as follows:

Company name	Duration of investment	Investment amount (10,000 Yuan)	Shareholding ratio	Change in value during the Reporting Period (10,000 Yuan)
Shixi Chanheng	Long term	3,000.00	10.00%	-65.55

In 2019, Shixi Chanheng's net profit was RMB -681,400 Yuan, and the Company's long-term equity investment accounted by equity method decreased RMB 68,100 Yuan.

In 2020, Shixi Chanheng's net profit was RMB -3.2291 million Yuan, and the Company's long-term equity investment accounted by equity method decreased RMB 322,900 Yuan.

In 2021, Shixi Chanheng's net profit was RMB -2.6455 million Yuan, and the Company's long-term equity investment accounted by equity method decreased RMB 264,500 Yuan.

(3) Fixed assets

① Composition of fixed assets

At the end of each Reporting Period, the specific classification of the Company's fixed assets is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Book value	Proportion	Book value	Proportion	Book value	Proportion	Book value	Proportion
Machinery equipment	2,321.62	79.59%	2,386.66	84.89%	1,196.90	85.72%	1,488.79	90.86%
Computer and electronic equipment	358.78	12.30%	306.14	10.89%	148.48	10.63%	83.96	5.12%
Office equipment	174.37	5.98%	49.11	1.75%	19.38	1.39%	21.08	1.29%
Transportation	62.35	2.14%	69.57	2.47%	31.55	2.26%	44.66	2.73%
Total	2,917.12	100.00%	2,811.47	100.00%	1,396.30	100.00%	1,638.48	100.00%

The spare parts needed for the Company's production are mainly purchased and outsourced, and the Company carries out pre assembly, general assembly and testing, with less production equipment and amount; meanwhile, the Company's office building, plant and land are obtained through leasing, with less fixed assets. At the end of each Reporting Period, the Company's fixed assets were RMB 16.3848 million Yuan, RMB 13.963 million Yuan, RMB 28.1147 million Yuan and RMB 29.1712 million Yuan, accounting for 24.03%, 14.05%, 6.66% and 6.20% of non-current assets respectively. During the Reporting Period, with the increase of long-term receivables and long-term equity investment, the proportion of fixed assets to non-current assets decreased year by year.

② Transfer of large amounts of construction in progress

During the Reporting Period, the Company transferred large amount of construction in progress to fixed assets as follows:

Year of fixed assets transfer	Project name	Amount (10,000 Yuan)	Basis for transferring to fixed assets
2020	Clean room reconstruction project of Zhangjiang plant	978.01	Fixed assets acceptance form

③ Depreciation life and newness rate of fixed assets

By the end of June 2021, the original cost of the Company's fixed assets was RMB 51.2122 million Yuan, the accumulated depreciation balance was RMB 22.041 million Yuan, and the net value of fixed assets was RMB 29.1712 million Yuan with a residue ratio of 56.96%, as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
I. Original cost				
Office equipment	242.12	106.93	71.43	67.06
Computer and electronic equipment	614.67	512.24	312.83	223.35
Transportation	139.69	140.63	86.70	126.12
Machinery equipment	4,124.75	3,925.44	2,787.16	6,688.51
II. Accumulated depreciation				
Office equipment	67.75	57.82	52.06	45.98
Computer and electronic equipment	255.89	206.10	164.35	139.39
Transportation	77.33	71.06	55.15	81.46
Machinery equipment	1,803.13	1,538.78	1,590.26	5,199.72
III. Book value				
Office equipment	174.37	49.11	19.38	21.08
Computer and electronic equipment	358.78	306.14	148.48	83.96
Transportation	62.35	69.57	31.55	44.66
Machinery equipment	2,321.62	2,386.66	1,196.90	1,488.79

During the Reporting Period, the Company's fixed assets were in good condition, and there were no large fixed assets that were damaged and no longer had the use value and transfer value, or could not be used due to technological progress or other reasons, or could not bring economic benefits to the Company in essence.

(4) Construction in progress

① Composition of construction in progress

At the end of each Reporting Period, the construction in progress of the Company is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Construction in progress	1,916.60	1,437.16	370.21	-
Total	1,916.60	1,437.16	370.21	-

At the end of each Reporting Period, the book value of the Company's construction in progress is RMB 0 Yuan, RMB 3.7021 million Yuan, RMB 14.3716 million Yuan and RMB 19.166 million Yuan, respectively, accounting for 0%, 3.73%, 3.41% and 4.07% of the non-current assets in each period, which is relatively low, mainly for, among others, Lingang R&D and manufacturing center civil construction and decoration project, equipment to be installed and installed systems. At the end of each Reporting Period, there is no sign of impairment in the Company's construction in progress, and no provision for impairment is required.

②Changes of important projects under construction

In 2021, the Company's major construction in progress change is as follows:

In RMB 10,000 Yuan

Item	Balance at the beginning of the year	Current year increase	Amount of fixed assets transferred in current year	Other decrease	Year-end balance
Lingang R&D and manufacturing center civil construction and decoration project	327.59	163.22	-	-	490.81
Total	327.59	163.22	-	-	490.81

In 2020, the Company's major construction in progress change is as follows:

In RMB 10,000 Yuan

Item	Balance at the beginning of the year	Current year increase	Amount of fixed assets transferred in current year	Other decrease	Year-end balance
Clean room reconstruction project of Zhangjiang plant	360.54	617.47	978.01	-	-
Chuansha plant reconstruction project	5.60	452.42	-	458.02	-
Lingang R&D and manufacturing center civil construction and decoration project	-	327.59	-	-	327.59
Total	366.14	1,397.48	978.01	458.02	327.59

In 2019, the Company's major construction in progress change is as follows:

In RMB 10,000 Yuan

Item	Balance at the beginning of the year	Current year increase	Amount of fixed assets transferred in current year	Other decrease	Year-end balance
Clean room reconstruction project of Zhangjiang plant	-	360.54	-	-	360.54
Total	-	360.54	-	-	360.54

In 2018, the Company has no significant changes in construction in progress.

(5) Intangible assets

At the end of each Reporting Period, the net intangible assets of the Company were RMB 1.8819 million Yuan, RMB 2.4008 million Yuan, RMB 66.5382 million Yuan and RMB 66.3605 million Yuan respectively, accounting for 2.76%, 2.42%, 15.77% and 14.10% of the total non-current assets respectively. Intangible assets of the Company are mainly composed of software use right, patent right and land use right.

At the end of each Reporting Period, the Company's intangible assets are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
I. Original cost of intangible assets	15,467.16	15,341.58	8,770.73	8,662.39
Land use right	6,356.12	6,356.12	-	-
Software use right	484.44	358.86	216.37	108.04
Patent right	8,626.60	8,626.60	8,554.35	8,554.35
II. Accumulated amortization	8,831.12	8,687.77	8,530.65	8,474.20
Land use right	127.12	63.56	-	-
Software use right	242.92	174.46	96.94	55.93
Patent right	8,461.07	8,449.74	8,433.70	8,418.27
III. Provision for impairment of intangible assets	-	-	-	-
IV. Book value of intangible assets	6,636.05	6,653.82	240.08	188.19
Land use right	6,229.00	6,292.56	-	-
Software use right	241.51	184.40	119.43	52.11
Patent right	165.53	176.86	120.65	136.08

At the end of each Reporting Period, the Company's software use right, patent right and land use right showed no sign of impairment, so no provision for impairment was made.

(6) Long-term deferred expenses

The long-term deferred expenses of the Company are mainly the decoration and renovation works of factory buildings and offices. At the end of each Reporting Period, the long-term deferred expenses of the Company were RMB 8.6899 million Yuan, RMB 8.2953 million Yuan, RMB 10.527 million Yuan and RMB 9.587 million Yuan respectively, accounting for 12.74%, 8.35%, 2.49% and 2.04% of the non-current assets at the end of each Reporting Period.

(7) Deferred tax assets

① Non-offset deferred income tax assets

During the Reporting Period, the Company's deferred income tax assets mainly come from the asset impairment provision, accrued expenses and the differences between the revenue recognition accounting and tax law. At the end of each Reporting Period, the Company's non-offset deferred income tax assets are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets
Provision for impairment of assets	1,666.54	243.14	1,498.92	235.78	1,268.02	197.15	965.63	146.22
Deductible loss	3,085.68	524.34	2,477.96	418.32	1,370.64	242.25	-	-
Accrued expenses	3,596.56	449.57	3,469.13	520.37	2,603.41	390.51	2,533.54	380.03
Difference between revenue recognition accounting and tax law	2,412.44	301.55	2,556.79	383.52	8,085.85	1,212.88	4,110.75	616.61
Total	10,761.22	1,518.60	10,002.80	1,557.99	13,327.92	2,042.80	7,609.93	1,142.86

② Non-offset deferred income tax liabilities

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Taxable temporary difference	Deferred tax assets	Taxable temporary difference	Deferred tax assets	Taxable temporary difference	Deferred tax assets	Taxable temporary difference	Deferred tax assets
Difference of fixed assets between accounting standards and tax law	169.75	21.22	181.42	27.21	204.77	30.72	228.11	34.22
Differences of changes in fair value of tradable financial assets between accounting standards and tax law	10,442.75	1,305.34	8,671.99	1,300.80	-	-	-	-
合计	10,612.50	1,326.56	8,853.42	1,328.01	204.77	30.72	228.11	34.22

During the Reporting Period, the Company's deferred income tax liabilities mainly come from the differences of fixed assets and changes in fair value of tradable financial assets between accounting standards and tax law.

③ Deferred income tax assets or liabilities presented in net amount after offset

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Offset amount of deferred income tax assets and liabilities	Balance of deferred income tax assets or liabilities after offset	Offset amount of deferred income tax assets and liabilities	Balance of deferred income tax assets or liabilities after offset	Offset amount of deferred income tax assets and liabilities	Balance of deferred income tax assets or liabilities after offset	Offset amount of deferred income tax assets and liabilities	Balance of deferred income tax assets or liabilities after offset
Deferred income tax assets	1,326.56	192.04	1,328.01	229.97	30.72	2,012.08	34.22	1,108.64
Deferred income tax liabilities	1,326.56	-	1,328.01	-	30.72	-	34.22	-

(8) Other non-current assets

At the end of each Reporting Period, the composition of other non-current assets of the Company is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Public rental housing deposit	26,079.89	25,730.32	-	-
Performance guarantee	492.99	492.99	-	-
Patent application fee	356.44	207.25	162.94	156.62
Advance project payment	533.45	3.50	90.00	18.83
Advance equipment payment	58.95	89.35	27.69	92.62
Lease deposit	536.65	438.71	250.19	202.21
Total	28,058.36	26,962.12	530.82	470.27

At the end of each Reporting Period, the balance of other non-current assets of the Company was RMB 4.7027 million Yuan, RMB 5.3082 million Yuan, RMB 269.6212 million Yuan and RMB 280.5836 million Yuan, respectively, accounting for 6.90%, 5.34%, 63.90% and 59.62% of the non-current assets at the end of each Reporting Period, mainly for public rental housing deposit, performance guarantee, patent application fee and lease deposit, of which the public rental housing deposit refers to the deposit effected for the project on the “renting before selling” public rental housing (phase III) in the Lingang Industrial Zone under the Overall Pre-sale Contract on Shanghai Public Rental Housing between Shengwei Shanghai and Shanghai Lingang Industrial Zone Public Rental Housing Construction Operation Management Co., Ltd..

During the Reporting Period, with the expansion of the Company’s business, other non-current assets of the Company increased year by year.

(9) Right-of-use assets

Since 2021, the Company has implemented the new lease standards and recognized the right-of-use assets for the houses and buildings leased by the Company, as follows:

In RMB 10,000 Yuan

Item	Original cost	Accumulated depreciation	Book value
Houses and buildings	4,017.56	690.32	3,327.24
Total	4,017.56	690.32	3,327.24

(II) Analysis of debt structure and changes

At the end of each Reporting Period, the composition of the Company’s liabilities is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Current liabilities	94,505.53	82.43%	59,458.86	74.81%	41,257.79	86.30%	42,533.61	86.63%
Non-current liabilities	20,144.79	17.57%	20,026.17	25.19%	6,549.46	13.70%	6,563.89	13.37%
Total liabilities	114,650.32	100.00%	79,485.04	100.00%	47,807.25	100.00%	49,097.50	100.00%

At the end of each Reporting Period, the total liabilities of the Company were RMB 490.975 million Yuan, RMB 478.0725 million Yuan, RMB 794.8504 million Yuan and RMB 1.1465032 billion Yuan, mainly for current liabilities, accounting for 86.63%, 86.30%, 74.81% and 82.43%, respectively.

1. Analysis of current liabilities

At the end of each Reporting Period, the composition of current liabilities of the Company is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Short-term borrowings	14,350.39	15.18%	17,175.35	28.89%	9,695.86	23.50%	6,483.56	15.24%
Accounts payable	50,908.35	53.87%	29,194.22	49.10%	14,317.44	34.70%	18,821.12	44.25%
Deposit received	-	-	-	-	6,802.21	16.49%	6,825.86	16.05%
Contract liabilities	23,272.01	24.63%	8,601.78	14.47%	-	-	-	-
Employee benefits payable	1,539.19	1.63%	1,960.12	3.30%	1,347.89	3.27%	341.62	0.80%
Taxes payable	523.97	0.55%	375.78	0.63%	2,903.82	7.04%	924.17	2.17%
Other payables	1,212.85	1.28%	1,105.77	1.86%	6,190.57	15.00%	9,137.28	21.48%
Non-current liabilities due within one year	2,698.77	2.86%	1,045.85	1.76%	-	-	-	-
Total current liabilities	94,505.53	100.00%	59,458.86	100.00%	41,257.79	100.00%	42,533.61	100.00%

At the end of each Reporting Period, the total current liabilities of the Company were RMB 425.3361 million Yuan, RMB 412.5779 million Yuan, RMB 594.5886 million Yuan and RMB 945.0553 million Yuan, respectively. The structure of current liabilities was relatively stable, mainly composed of short-term borrowings, accounts payable, deposit received, contract liabilities and other accounts payable, etc..

(1) Short-term borrowings

At the end of each Reporting Period, the details of the Company's short-term borrowings are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Credit loan	9,490.00	4,900.00	2,000.00	-
Guaranteed loan	4,826.78	12,156.42	6,597.41	2,483.56
Borrowing (Guarantee + pledge)	-	-	1,000.00	4,000.00
Accrued interest	33.60	118.94	98.45	-
Total	14,350.39	17,175.35	9,695.86	6,483.56

At the end of each Reporting Period, the Company's short-term borrowings balance was RMB 64.8356 million Yuan, RMB 96.9586 million Yuan, RMB 171.7535 million Yuan, and RMB 143.5039 million Yuan, respectively, accounting for 15.24%, 23.50%, 28.89% and 15.18% of the total liabilities. During the Reporting Period, with the increase of the Company's business and capital demand, the Company's short-term loan balance increased year by year.

(2) Accounts payable

At the end of each Reporting Period, the balance of accounts payable of the Company was RMB188.2112 million Yuan, RMB 143.1744 million Yuan, RMB 291.9422 million Yuan, and RMB 509.0835 million Yuan, respectively, accounting for 44.25%, 34.70%, 49.10% and 53.87% of the current liabilities at the end of each Reporting Period, which is an important part of the current liabilities of the Company. During the Reporting Period, the Company's accounts payable are mainly the accounts payable to suppliers. In 2018, with the expansion of the Company's business scale, in order to meet the production demand, the Company made more procurements, and the balance of accounts payable increased accordingly. At the end of 2019, when the total purchase amount of the Company slightly increased year-on-year, the accounts payable decreased. The main reasons were as follows: ①the Company arranged production and purchase according to the order, and the monthly purchase amount fluctuated. The purchase amount of the Company was higher in the fourth quarter of 2018, while it was relatively lower in the fourth quarter of 2019; ②in order to reduce related transactions, the Company established a subsidiary, ACM CA, to purchase raw materials. It was expected that the Company's accounts payable to ACMR decreased more, while the increase of accounts payable in ACM CA was smaller. At the end of 2020, the Company had a large amount of accounts payable, mainly due to the expansion of its scale and the increase of corresponding procurement.

At the end of each Reporting Period, the Company's accounts payable aging more than 1 year was RMB 7.2086 million Yuan, RMB 15.9462 million Yuan, RMB 22.0005 million Yuan and RMB 28.34 million Yuan, respectively. At the end of each Reporting Period, the Company's important accounts payable with an aging of more than one year had a large balance, mainly including the payable test and development expenses to SMIC and the commission to LIDA Technology Co., LTD.

(3) Deposit received and contract liabilities

At the end of each Reporting Period, the balance of the Company's deposit received was RMB 68.2586 million Yuan, RMB 68.0221 million Yuan, RMB 0 Yuan and RMB 0 Yuan respectively, accounting for 16.05%, 16.49%, 0% and 0% of the current liabilities at the end of each Reporting Period, which is an important part of the Company's current liabilities. The Company's deposit received mainly refers to the goods payment received from the customers. At the end of each Reporting Period, the Company's deposit received was on the rise, mainly due to the Company's increasing business size and the increase in goods payment received from the customers. At the end of each Reporting Period, the account aging of the Company's most deposit received is within 1 year.

According to the new revenue standards, the deposits received will be adjusted to contract liabilities in the accounting from 2020. At the end of 2020, the balance of contract liabilities of the Company was RMB 86.0178 million Yuan, accounting for 14.47% of the current liabilities. At the end of June 2021, the balance of the Company's contract liabilities was RMB 232.7201 million Yuan, accounting for 24.63% of the current liabilities.

(4) Employee benefits payable

At the end of each Reporting Period, the employee benefits payable of the Company was RMB 3.4162 million Yuan, RMB 13.4789 million Yuan, RMB 19.6012 million Yuan and RMB 15.3919 million Yuan, respectively, accounting for 0.80%, 3.27%, 3.30% and 1.63% of the current liabilities at the end of each Reporting Period. The employee benefits payable of the Company mainly includes the salary, bonus, allowance and subsidy payable to the employees. From 2018 to 2020, the employee benefits payable increased year by year, mainly due to the increase in the number of employees.

(5) Taxes payable

At the end of each Reporting Period, the details of taxes payable by the Company are as follows:

In RMB 10,000 Yuan				
Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Corporate income tax	398.75	253.74	2,822.47	896.03
Individual income tax	86.65	83.56	57.90	5.97
Stamp duty	30.48	35.79	23.45	19.68
Auto-purchase tax	-	-	-	2.50
Land use tax	1.60	2.67	-	-
VAT payable	6.49	-	-	-
Total	523.97	375.78	2,903.82	924.17

At the end of each Reporting Period, the taxes payable by the Company were RMB 9.2417 million Yuan, RMB 29.0382 million Yuan, RMB 3.7578 million Yuan and RMB 5.2397 million Yuan, respectively, accounting for 2.17%, 7.04%, 0.63% and 0.55% of the current liabilities at the end of each Reporting Period. At the end of 2020, the corporate income tax payable by the Company was lower than that in 2019, mainly because some corporate income tax of 2020 had been prepaid.

(6) Other payables

At the end of each Reporting Period, details of other payables of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Interest payable	-	-	-	67.66
Other payables	1,212.85	1,105.77	6,190.57	9,069.62
Total	1,212.85	1,105.77	6,190.57	9,137.28

Other payables of the Company mainly consist of other payables. Details of other payables of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current accounts of related parties	92.34	15.01	4,784.23	7,958.38
Deposit	-	-	565.22	21.35
Rental fee payable	6.09	136.45	113.34	164.08
Intermediary fee payable	7.01	4.94	114.24	25.11
Accrued installation cost	-	-	65.00	167.08
Other accrued expenses	769.11	531.84	175.32	167.68
Employee reimbursement and subsidies	72.30	81.09	105.77	77.96
Other	266.00	336.42	267.45	487.98
Total	1,212.85	1,105.77	6,190.57	9,069.62

Please refer to “X. (III) Related Receivables and Payables of the Company during the Reporting Period ” in “Section VII Corporate Governance and Independence” of the [***] for the specific situation of related party’s current accounts.

(7) Non-current liabilities due within one year

At the end of each Reporting Period, the details of the Company’s non-current liabilities due within one year are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Long-term borrowings due within one year	1,170.61	1,045.85	-	-
Lease liabilities due within one year	1,528.16	-	-	-
Total	2,698.77	1,045.85	-	-

At the end of June 2021, the Company's non-current liabilities due within one year refers to the borrowings due within one year under the Loan and Mortgage Contract for Corporate House Purchase (No.: ZJ02201111) between Shengwei Shanghai and China Merchants Bank, Subbranch of Lingang New Area, China (Shanghai) Pilot Free Trade Zone and the lease liabilities due within one year.

2. Analysis of non-current liabilities

At the end of each Reporting Period, the composition of the Company's non-current liabilities is as follows:

In RMB 10,000 Yuan

Item	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Amount	Proportion	Amount	Proportion	Amount	Proportion	Amount	Proportion
Long-term borrowings	12,090.94	60.02%	11,728.09	58.56%	-	-	-	-
Lease liabilities	1,838.57	9.13%						
Long term accounts payable	-	0.00%	-	-	1,371.16	20.94%	2,092.29	31.88%
Long-term employee benefits payable	264.83	1.31%	183.94	0.92%	111.43	1.70%	21.26	0.32%
Estimated liabilities	3,221.12	15.99%	3,006.71	15.01%	2,205.36	33.67%	1,316.39	20.05%
Deferred income	2,729.33	13.55%	5,107.43	25.50%	2,861.50	43.69%	3,133.95	47.75%
Total	20,144.79	100.00%	20,026.17	100.00%	6,549.46	100.00%	6,563.89	100.00%

At the end of each Reporting Period, the Company's non-current assets balance was RMB 65.6389 million Yuan, RMB 65.4946 million Yuan, RMB 200.2617 million Yuan and RMB 201.4479 million Yuan, respectively. The Company's non-current liabilities mainly consist of long-term borrowings, long-term payables, estimated liabilities and deferred income.

(1) Long-term borrowings

At the end of each Reporting Period, the long-term borrowings of the Company are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Mortgage + guaranteed loan	11,190.94	11,728.09	-	-
Credit loan	900.00	-	-	-
Total	12,090.94	11,728.09	-	-

On November 19, 2020, Shengwei Shanghai, a subsidiary of the Company, entered into the Loan and Mortgage Contract for Corporate House Purchase (No.: ZJ02201111) with China Merchants Bank, Subbranch of Lingang New Area, China (Shanghai) Pilot Free Trade Zone, with respect to a loan amounting to RMB 128,500,000.00 Yuan at the annual interest rate of 4.65% for a term from November 26, 2020 to November 25, 2030, to be repaid in 120 installments, with the real estate under the Overall Pre-sale Contract on Shanghai Public Rental Housing used as the collateral. By issuing the Irrevocable Guarantee (No.: ZJ02201111), ACMSH provided guarantee for the loan. As of June 30, 2021, the loan had a balance of RMB 122,529,056.71 Yuan, of which RMB 10,619,606.76 Yuan was long-term borrowings due within one year.

On June 3, 2021, the Company entered into the Working Capital Loan Contract (No.: M122021PK (GS) 40) with Bank of China Limited Shanghai Pudong Development Zone Sub-branch, with respect to the loan amounting to RMB 10,000,000.00 Yuan at the annual interest rate of 2.60% for a term from June 4, 2021 to June 4, 2024, with the loan principal to be repaid in 6 installments. As of June 30, 2021, the loan had a balance of RMB 10,000,000.00 Yuan, of which RMB 1,000,000.00 Yuan was long-term borrowings due within one year.

(2) Long-term accounts payable

At the end of each Reporting Period, the Company's long-term payables were RMB 20.9229 million Yuan, RMB 13.7116 million Yuan, RMB 0 Yuan and RMB 0 Yuan respectively. The Company's long-term payables are mainly composed of the following:

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
ACMR	-	-	1,371.16	2,092.29
Total	-	-	1,371.16	2,092.29

The Company's long-term payables with the related party are mainly composed of the balance of commercial promissory notes issued by ACMSH to ACMR. For details, please refer to "X. (III) Related Receivables and Payables of the Company during the Reporting Period" in "Section VII Corporate Governance and Independence" of the [***].

(3) Long-term employee benefits payable

At the end of each Reporting Period, the Company's long-term payable employee benefits balance is respectively RMB 0.2126 million Yuan, RMB 1.1143 million Yuan, RMB 1.8394 million Yuan and RMB 2.6483 million Yuan, respectively. The long-term employee benefits payable by the Company mainly refers to the employee's severance pay accrued by the Company in accordance with the laws of South Korea.

(4) Estimated liabilities

At the end of each Reporting Period, the Company's estimated liabilities are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Product quality warranty	3,221.12	3,006.71	2,205.36	1,316.39
Estimated liabilities	3,221.12	3,006.71	2,205.36	1,316.39

At the end of each Reporting Period, the Company's product quality warranty increased year by year, mainly due to the expansion of the Company's sales scale. During the Reporting Period, there was no major quality dispute over the Company's products, and the above-mentioned product quality warranty will not have a significant adverse impact on the Company's normal production and operation.

(5) Deferred income

At the end of each Reporting Period, the details of the Company's deferred income are as follows:

In RMB 10,000 Yuan

Item	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018	Asset related /income related
65-45nm Copper Interconnection Stress Free Polishing Equipment R&D	814.15	858.43	906.82	1,045.52	Comprehensive subsidy
20-14nm Copper Interconnection Copper Plating Equipment R&D and Application	1,241.84	1,407.09	1,860.60	1,934.86	Comprehensive subsidy
Patent Pilot Funding	-	-	-	31.36	Income related
R&D and Industrialization of Polytetrafluoroethylene Cavity Manufacturing Process for Semiconductor Equipment	-	84.89	94.09	122.22	Income related
R & D and industrialization of single wafer wet bench combined cleaning equipment	387.56	1,006.85	-	-	Comprehensive subsidy
R&D of 300mm integrated circuit back etching / cleaning equipment and process	239.23	1,690.18	-	-	Comprehensive subsidy
Shanghai enterprise and public institution patent work demonstration unit	16.54	30.00	-	-	Income related
Supporting subsidy for pilot (demonstration) units of patent work in Shanghai	30.00	30.00	-	-	Income related
Total	2,729.33	5,107.43	2,861.50	3,133.95	-

At the end of each Reporting Period, the balance of the Company's deferred income was RMB 31.3395 million Yuan, RMB 28.615 million Yuan, RMB 51.0743 million Yuan and RMB 27.2933 million Yuan, respectively, and the Company's deferred income was all government grants.

(III)Liquidity analysis

1. Analysis of current ratio and quick ratio

During the Reporting Period, the Company's current ratio and quick ratio are as follows:

Main financial indicators	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
Current ratio (frequency)	1.93	2.39	2.93	1.34
Quick ratio (frequency)	0.94	1.36	2.18	0.71

During the Reporting Period, the comparison of current ratio and quick ratio between the Company and comparable listed companies in the same industry is as follows:

Company name	June 30, 2021		December 31, 2020		December 31, 2019		December 31, 2018	
	Current ratio	Quick ratio	Current ratio	Quick ratio	Current ratio	Quick ratio	Current ratio	Quick ratio
NAURA	1.19	0.60	1.39	0.77	1.77	1.01	1.27	0.59
AMEC	10.19	9.02	3.41	2.54	4.29	3.08	2.12	1.19
KINGSEMI	1.82	0.94	2.58	1.58	5.84	4.69	2.35	1.19
HZCCTECH	2.31	1.44	2.30	1.56	2.65	1.62	2.30	1.80
Average value	3.88	3.00	2.42	1.61	3.64	2.60	2.01	1.19
The Company	1.93	0.94	2.39	1.36	2.93	2.18	1.34	0.71

During the Reporting Period, the Company's current ratio and quick ratio are similar to those of NAURA, but lower than the average value of comparable listed companies in the industry. The main reasons are as follows: (1) the Company's R&D investment in the early stage is large, and before equity financing in 2019, the Company's capital scale is smaller than that of comparable listed companies; (2) the Company has a well-developed supply chain management system, the Company's prepayment amount is small, and accounts payable is relatively large; (3) in 2018, the Company's other payables to related parties were large. In 2019, the Company's current ratio and quick ratio increased significantly, mainly because the Company's equity financing and profitability continued to improve, and the increase of the Company's current assets was greater than the increase of current liabilities. At the end of 2020, the Company's current ratio and quick ratio decreased, mainly because of the increase in the Company's short-term borrowings due to the expansion of the Company's business scale and capital demand, and the expansion of the Company's procurement volume with the increase of the Company's output, resulting in more accounts payable.

(IV) Solvency analysis

During the Reporting Period, the Company's main debt service indicators are as follows:

Main financial indicators	June 30, 2021/ From Jan. to Jun. 2021	December 31, 2020/ 2020	December 31, 2019/ 2019	December 31, 2018/ 2018
Asset liability ratio (parent company)	40.83%	35.60%	32.56%	76.34%
Asset liability ratio (consolidated)	49.98%	43.12%	36.55%	77.19%
EBITDA (RMB 10,000 Yuan)	10,398.61	23,752.53	16,654.67	11,063.48
Interest protection multiples	31.70	36.43	21.54	21.37

During the Reporting Period, the Company's asset liability ratio decreased generally, mainly due to the Company's equity financing during such period. The Company's capital strength has been constantly increasing; with the expansion of the Company's business scale and the improvement of its profitability, the structure of assets and liabilities has been constantly improving.

In 2018, the Company's asset liability ratio was relatively high, mainly due to the large investment in research and development in the early stage of the Company. At the end of 2018, the Company still had outstanding losses and small net assets. In 2019, the Company conducted equity financing, with a significant increase in owner's equity and a significant decrease in the Company's asset liability ratio.

In 2018, 2019, 2020 and the period from January to June 2021, with the expansion of the Company's business scale and the improvement of its profitability, the Company's EBITDA increased year by year, which were RMB 110.6348 million Yuan, RMB 166.5467 million Yuan, RMB 237.5253 million Yuan and RMB 103.9861 million Yuan, respectively. During the Reporting Period, the Company's interest protection multiples was 21.37, 21.54, 36.43 and 31.70 respectively, and the debt paying ability was improved.

During the Reporting Period, the comparison of asset liability ratio (consolidated) indicators between the Company and comparable listed companies in the same industry is as follows:

Company name	June 30, 2021	December 31, 2020	December 31, 2019	December 31, 2018
NAURA	66.35%	59.40%	55.59%	62.49%
AMEC	9.89%	24.68%	21.43%	40.09%
KINGSEMI	48.45%	34.79%	18.93%	42.09%
HZCCTECH	34.06%	31.75%	24.57%	30.63%
Average value	39.69%	37.66%	30.13%	43.83%
The Company	49.98%	43.12%	36.55%	77.19%

At the end of 2018, the Company's asset liability ratio was higher than the average value of comparable listed companies in the industry, mainly due to the following reasons: 1. The Company still had uncovered losses at the end of 2018, and its net assets were small; 2. In 2019, the IPO of AMEC and KINGSEMI was launched successfully and the funds were raised, and the then asset liability ratio dropped significantly. In 2019, the Company's asset liability ratio is close to the average value of comparable listed companies in the industry after the significant drop of the asset liability ratio.

(V) Assets turnover capacity analysis

The main indicators of the Company's assets turnover capacity during the Reporting Period are as follows:

Financial indicators	From Jan. to Jun. 2021	2020	2019	2018
Turnover rate of accounts receivables (frequency)	2.15	4.19	3.80	3.91
Inventory turnover rate (frequency)	0.46	1.21	1.44	1.51

During the Reporting Period, the turnover rate of the Company's accounts receivable showed an overall upward trend, which was mainly due to the relatively rapid growth of the Company's operating income during such period, resulting in the growth rate of the balance of accounts receivable at the end of each period being less than that of the operating income. The Company's customers are mainly leading enterprises in the semiconductor industry, with good business reputation, strong payment ability and small risk of receivables.

During the Reporting Period, the Company's inventory turnover rate showed a downward trend on a whole, mainly because the Company's income scale expanded, and the amount of raw materials, products in process and delivered goods of the Company continued to increase at the end of the period.

During the Reporting Period, the comparison of accounts receivables turnover rate and inventory turnover rate between the Company and comparable listed companies in the same industry is as follows:

Company name	Turnover rate of accounts receivables				Inventory turnover			
	From Jan. to Jun. 2021	2020	2019	2018	From Jan. to Jun. 2021	2020	2019	2018
NAURA	2.06	5.12	4.56	4.21	0.34	0.89	0.73	0.81
AMEC	4.35	8.03	5.21	3.56	0.62	1.32	1.08	0.99
KINGSEMI	2.65	4.73	3.93	5.39	0.39	0.67	0.74	0.97
HZCCTECH	1.34	2.39	2.05	1.79	0.55	1.04	0.89	1.20
Average value	2.60	5.07	3.94	3.74	0.48	0.98	0.86	0.99
The Company	2.15	4.19	3.80	3.91	0.46	1.21	1.44	1.51

During the Reporting Period, generally, the turnover rate of accounts receivables and inventory of the Company was higher than the average turnover rate of accounts receivables and inventory of listed companies in the same industry, and the turnover of accounts receivable and inventory of the Company was faster and the operation capacity was better.

XIII.Dividend Distribution Policy**(I)Dividend distribution during the Reporting Period**

During the Reporting Period, the Company did not make dividend distribution.

(II)Dividend policy in recent three years

For details of the Company's dividend distribution policy, please refer to "II. Dividend Distribution Policy of the Issuer" in "Section X Investor Protection" of this [***].

XIV.Cash Flow Analysis

During the Reporting Period, the cash flow of the Company is as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Net cash flow from operating activities	4,093.21	-8,824.49	7,270.65	3,881.03
Net cash flow from investment activities	-1,904.03	-26,014.98	-26,425.86	-1,472.30
Net cash flow from financing activities	-3,728.87	18,857.56	53,419.46	2,889.51
Effect of exchange rate changes on cash and cash equivalents	-204.40	-894.21	155.80	-230.70
Net increase in cash and cash equivalents	-1,744.09	-16,876.13	34,420.05	5,067.54
Balance of cash and cash equivalents at the beginning of the period	27,126.79	44,002.91	9,582.86	4,515.32
Balance of cash and cash equivalents at the end of the period	25,382.70	27,126.79	44,002.91	9,582.86

(I)Cash flow analysis of operating activities

During the Reporting Period, the details of cash flow from operating activities of the Company are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Cash received from sales of goods or rendering of services	73,319.82	96,579.31	73,063.06	54,089.25
Refunds of taxes	4,669.49	4,506.46	5,141.52	3,161.69
Cash received from other operating activities	754.92	6,268.81	3,212.40	426.64
Subtotal of cash inflow from operating activities	78,744.22	107,354.58	81,416.97	57,677.58
Cash paid for goods and services	53,949.71	83,443.48	53,888.11	40,071.65
Cash paid to and on behalf of employees	11,003.64	11,322.41	8,437.93	5,837.84
Taxes paid	453.71	3,553.20	857.52	26.50
Other cash paid related to operating activities	9,243.94	17,859.98	10,962.76	7,860.56
Subtotal of cash outflow from operating activities	74,651.01	116,179.07	74,146.33	53,796.55
Net cash flow from operating activities	4,093.21	-8,824.49	7,270.65	3,881.03
Net profit	8,967.60	19,676.99	13,488.73	9,253.04
Net cash flow/net profit from operating activities	45.64%	-44.85%	53.90%	41.94%

During the Reporting Period, the cash received by the Company from selling goods and providing labor services was RMB 540.8925 million Yuan, RMB 730.6306 million Yuan, RMB 965.7931 million Yuan, and RMB 733.1982 million Yuan respectively, accounting for 98.30%, 96.55%, 95.86% and 117.26% of the operating income in the same period. The cash received from selling goods and providing labor services matched the operating income and the collection was in good condition.

During the Reporting Period, the adjustment relationship and difference between the net cash flow generated by the Company's operating activities and the net profit are as follows:

In RMB 10,000 Yuan				
Item	From Jan. to Jun. 2021	2020	2019	2018
Net profit	8,967.60	19,676.99	13,488.73	9,253.04
Add: credit impairment loss	196.72	-122.47	223.51	-
Provision for impairment of assets	-21.58	353.37	78.88	237.37
Depreciation of fixed assets	332.14	307.92	253.72	201.07
Depreciation of right-of-use assets	690.84	-	-	-
Amortization of intangible assets	144.58	158.37	56.30	44.50
Amortization of long-term deferred expenses	292.91	354.31	287.13	29.96
Losses on scrapping of fixed assets ("-" for gains)	-	16.83	202.85	1.47
Losses from changes in fair value ("-" for gains)	-1,770.76	-8,671.99	-	-
Financial expenses ("-" for gains)	615.86	1,378.78	531.55	751.55
Investment loss ("-" for gains)	-9.42	-277.19	-170.78	1.02
Decrease of deferred income tax assets ("-" for increase)	37.93	1,782.11	-903.44	137.07
Decrease of inventory ("-" for increase)	-32,010.46	-31,112.89	-4,390.30	-12,832.70
Decrease of operating receivables ("-" for increase)	-8,551.47	-11,167.16	-2,849.30	-10,560.81
Increase in operating payables ("-" for decrease)	36,639.45	14,131.71	-1,379.44	18,106.79
Others	-1,461.13	4,366.80	1,841.24	-1,489.31
Net cash flow from operating activities	4,093.21	-8,824.49	7,270.65	3,881.03

During the Reporting Period, the difference between the net cash flow and net profit generated by the Company's operating activities is mainly affected by inventory, operating receivables and payables, financial expenses, losses from changes in fair value and asset depreciation.

(II) Cash flow analysis of investment activities

During the Reporting Period, the details of cash flow from investment activities of the Company are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Cash received from return of investemnt	-	24,204.12	-	-
Cash received from investment	-	367.10	-	-
Net cash received from disposal of fixed assets	-	0.27	0.24	0.82
Cash received relating to other investing activities	-	740.61	-	-
Subtotal of cash inflow from investment activities	-	25,312.10	0.24	0.82
Cash paid for acquisition and construction of fixed assets, intangible assets and other long-term assets	1,904.03	35,544.99	1,016.59	1,473.12
Cash paid for investment	-	12,094.33	18,885.26	-
Net cash paid by subsidiaries and other business units	-	2,454.17	3,075.00	-
Other cash paid related to investment activities	-	1,233.60	3,449.25	-
Subtotal of cash outflow from investment activities	1,904.03	51,327.08	26,426.10	1,473.12
Net cash flow used in investment activities	-1,904.03	-26,014.98	-26,425.86	-1,472.30

During the Reporting Period, the net cash flow from the Company's investment activities was RMB -14.723 million Yuan, RMB -264.2586 million Yuan, RMB -260.1498 million Yuan and RMB -19.0403 million Yuan, respectively.

In 2018, 2020 and the period from January to June 2021 the Company's cash outflow from investment activities was mainly the cash paid for the acquisition and construction of fixed assets, intangible assets and other long-term assets. In 2019, the Company's cash outflow from investment activities increased significantly, mainly due to the acquisition of CleanChip HK, borrowing from CleanChip HK to ACMR and the use of equity investment funds to purchase fixed deposits.

(III) Cash flow analysis of financing activities

During the Reporting Period, the details of cash flow from financing activities of the Company are as follows:

In RMB 10,000 Yuan

Item	From Jan. to Jun. 2021	2020	2019	2018
Cash received from investment absorption	-	-	56,066.14	-
Cash received from borrowings	12,416.78	34,013.75	12,887.40	12,129.56
Subtotal of cash inflows from financing activities	12,416.78	34,013.75	68,953.53	12,129.56
Cash paid for debt repayment	14,693.56	13,283.31	9,773.55	8,976.00
Cash paid for distribution of dividends or profits and for interest expenses	682.14	644.23	761.10	264.06
Cash paid relating to other financing activities	769.96	1,228.65	4,999.42	-
Subtotal of cash outflows from financing activities	16,145.65	15,156.19	15,534.08	9,240.06
Net cash flows from financing activities	-3,728.87	18,857.56	53,419.46	2,889.51

During the Reporting Period, the net cash flows from the Company's financing activities were RMB 28.8951 million Yuan, RMB 534.1946 million Yuan, RMB 188.5756 million Yuan, RMB -37.2887 million Yuan, respectively.

During the Reporting Period, the cash inflow from financing activities of the Company mainly included the cash input from investors and the cash received from borrowings; the cash outflow from financing activities of the Company mainly included the cash to repay the principal of liabilities, pay the interest and pay cash related to other financing activities. In 2019, the Company paid other cash related to financing activities mainly for the repayment of borrowings to shareholders and related parties

XV.Capital Expenditure Analysis

(I)Expenditure of major assets during the Reporting Period

During the Reporting Period, major capital expenditures of the Company are mainly used for the acquisition and construction of fixed assets, intangible assets and other long-term assets. In each Reporting Period, the cash paid by the Company for the construction of fixed assets, intangible assets and other long-term assets was RMB 14.7312 million Yuan, RMB 10.1659 million Yuan, RMB 355.4499 million Yuan and RMB 19.0403 million Yuan respectively.

(II)Foreseeable expenditure of major assets in the future

As of the signing date of this [***], the Company has no foreseeable major capital expenditure plan except for the investment project of the raised capital of this issuance. For the investment plan of the raised funds of this offering, please refer to “II. Utilization of Raised Funds” in “Section IX Utilization of Raised Funds and Future Development Plan” of this [***].

XVI.Analysis of Going Concern Capability

The Company is mainly engaged in the research and development, production and sales of semiconductor special equipment, and its main products include semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet process equipment. Adhering to the development strategy of differentiated competition and innovation, the Company provides customized equipment and solutions to customers in the semiconductor industry through independently developed single wafer megasonic cleaning technology, single wafer wet bench combined cleaning technology, electroplating technology, stress-free polishing technology, vertical furnace tube technology, etc., effectively improving the production efficiency of customers, improving product yield and reducing production cost.

Due to advanced technology and rich product lines, the Company has developed into one of the few semiconductor equipment providers with certain international competitiveness in Mainland China, and its products have been recognized by many mainstream semiconductor manufacturers at home and abroad and the Company has earned a good market reputation.

As of June 30, 2021, the Company’s current assets are RMB 1.8232902 billion Yuan, including RMB 945.0553 million Yuan of current liabilities, and RMB 1.1474311 billion Yuan of total owner’s equity. During the Reporting Period, the Company’s net profit after deducting non-recurring gains or losses has been greatly improved, and the Company’s profitability has continued to improve. The Company’s asset liquidity is good, the profitability is rapidly improved. There is no situation that seriously affects the Company’s ability to continue to operate, such as debt breach, inability to continue to perform the relevant terms of the major loan contract, inability to obtain the funds needed for R&D, etc.

To sum up, the Company has the ability of continuous operation. For the risk factors that may directly or indirectly have a significant adverse impact on the Company’s ability to continue as a going concern, please refer to “Section IV Risk Factors” of this [***].

XVII.Major Equity Acquisition and Merger

In 2019, based on the principles of asset integrity, business integrity and personnel integrity, the Company carried out restructuring and merger under the same control of CleanChip HK. For details of the Company’s acquisition of CleanChip HK, please refer to “IX. (I). 1. CleanChip HK” in “Section V Overview of the Issuer” of the [***].

XVIII.Subsequent Matters, Contingencies, Other Important Matters, Major Guarantees and Litigation Matters**(I)Events after the balance sheet date**

As of the date hereof, the Company has no events after the balance sheet date to be disclosed.

(II)Contingencies

As of the date of this [***], the Company has no significant contingencies to be disclosed.

(III)Other important matters**1. Capital expenditure commitment**

In November 2019, Shengwei Shanghai, a subsidiary of the Company, entered into a Project Investment Agreement with Shanghai Lingang Industrial Zone Economic Development Co., Ltd. and China (Shanghai) Pilot Free Trade Zone Lingang New Area Management Committee, pursuant to the agreement of which, Shengwei Shanghai will bid for the target plot located in the Lingang Industrial Zone, with an estimated area of 42,786 square meters (about 64 mu), for the construction and operation of the “ACMSH Equipment R&D and Manufacturing Center” project. According to the agreement, the Company is required to invest a total of RMB 882.45 million Yuan in the project, of which the investment in fixed assets totals to RMB 45 million Yuan. As of June 30, 2021, Shengwei Shanghai has invested a sum of RMB 63.5612 million Yuan in land use rights and RMB 4.9081 million Yuan in construction in progress.

(IV)Major guarantee and litigation matters

As of the signing date of this [***], the Company has no major guarantee and litigation matters.

XIX.Profit Forecast

The Company has not prepared profit forecast report.

XX.Main Financial Information and Operating Conditions after the Deadline for Auditing Financial Report

The deadline for the audit of the Company’s financial report falls on June 30, 2021. From the said deadline to the date hereof, the Company has good operating conditions, without material changes in the business model, the purchase scale and purchase price for main raw materials, the revenue scale, the sales price, and the composition of customers and suppliers, or material adverse changes in the overall business environment.

Section IX Utilization of Raised Funds and Future Development Plan

I. Overview of Investment Projects with Raised Funds

(I) Investment direction of raised funds

The funds raised by the IPO will be invested in the projects after deducting the issuance expenses, as follows:

In RMB10,000 Yuan

S/N	Investment direction of raised funds	Total Investment	Amount of raised funds to be used
1	ACMSH Equipment R&D and Manufacturing Center	88,245.00	70,000.00
2	ACMSH High-end Semiconductor Equipment R&D Project	45,000.00	45,000.00
3	Supplementary working capital	65,000.00	65,000.00
Total		198,245.00	180,000.00

(II) Arrangement for investment and use of raised funds

If the actual raised fund amount (after the issuance fee is deducted) is lower than the fund demand of the projects to be invested, the Company will arrange the raised funds according to the investment proportion of the above-mentioned investment projects with raised fund, the gap shall be solved with self-raised fund; if the actual raised fund amount (after the issuance fee is deducted) exceeds the above-mentioned fund demand, the remaining part will be used for the development of the Company's main business according to the actual operation needs of the Company as well as relevant provisions of the CSRC and Shanghai Stock Exchange. The funds raised by the proposed public offering will be invested according to the proportion and priorities of the projects. Before the raised funds are in place, the Company may use the self-raised funds to invest in the above-mentioned planned investment projects first, and replace the above-mentioned self-raised funds with the raised funds after the raised funds are ready.

(III) Impact of raised fund investment projects on horizontal competition and independence

The implementation of the fund-raising investment project will not lead to horizontal competition between the Company and the controlling shareholders, de facto controllers and their subordinate enterprises, nor will it adversely affect the independence of the Company.

(IV) The management system for the use of raised funds and specific arrangements for the raised funds invested in the key scientific and technological innovation projects

In order to regulate the management of raised funds and improve the use efficiency of raised funds, the Company has formulate the *Management System for Raised Funds*, which specifies the storage, use, change of investment direction, management and supervision of the raised funds account, in accordance with the *Company Law*, the *Securities Law*, the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, the *Management Measures for the Raised Funds of the Shanghai Stock Exchange* and other laws, regulations, normative documents and provisions of the *Articles of Association*. The raised funds will be stored in the special account designated by the Board of Directors in strict accordance with the provisions for centralized management, and will be used normatively for the expected purpose.

Please refer to "II. Utilization of Raised Funds" in this Section for specific arrangements for the raised funds invested in the key scientific and technological innovation projects.

(V) Analysis of necessity and feasibility of implementation of investment projects with raised funds

1. Necessity of implementation of investment projects with raised funds

(1) China's integrated circuit industry has a vast market demand, providing a huge growth space for Chinese semiconductor special equipment manufacturers

In recent years, as China attaches great importance to the semiconductor industry, some semiconductor special equipment enterprises in China have made breakthroughs in some technical fields after more than 10 years of technical research & development and accumulation, and have successfully passed through the verification of domestic and international mainstream wafer manufacturing, advanced packaging enterprise, and semiconductor equipment and products have entered into the production lines of such enterprises.

Although the sales scale of China's semiconductor special equipment enterprises continues to grow, the overall market share is still at a low level, and China's semiconductor special equipment is still mainly dependent on imports. According to the statistics of China Electronic Production Equipment Industry Association, the sales volume of domestic semiconductor special equipment in 2018 is RMB10.9 billion Yuan, the self-sufficiency rate is about 13%, and the self-sufficiency rate in the field of integrated circuit manufacturing equipment is even lower, so domestic semiconductor equipment companies have great potential for development.

(2) The technical threshold of the integrated circuit equipment industry is high. There is still a gap between the technical level of the Company and the international giants, and the process of technology R&D and industrialization needs to be accelerated.

The current international advanced level of integrated circuit equipment involves multi-disciplinary, multi-domain knowledge comprehensive application like micro-electronics, electrical, mechanical, material, chemical engineering, fluid mechanics, automation, pattern recognition, communication, software system etc. and several advanced manufacturing technologies like dynamic sealing technology, ultra clean room technology, particle and pollutant analysis technology etc. Therefore, the integrated circuit equipment has the characteristics of high technology content, high manufacturing difficulty, high equipment value and high industry threshold, and is recognized as one of the representatives of the highest level of precision manufacturing in industry.

At present, the market concentration of the major semiconductor special equipment industry in the world is relatively high, and the Company still lags far behind the international giants in terms of business scale, technology level and market share.

(3) The implementation of the investment projects with raised fund will help rapidly improve the R&D capability and comprehensive competitiveness of the Company, accelerate the process of building the Company into an international leading comprehensive integrated circuit equipment group, and form an industrial driving effect.

Semiconductor integrated circuit industry is a high technology barrier industry, the leading enterprises invest a large amount of research and development costs for new technology research and development in industry, which will widen the gap with the pursuers, resulting in the market pattern of stronger keep constantly stronger. And when a new round of market opportunities comes, the pursuer company will be more likely to rise, catch up, or even surpass. Looking back at the global semiconductor development history, every transfer in the industry has created a number of leading semiconductor special equipment suppliers. At present, the global semiconductor industry is in the process of the third industry transfer, benefiting from the strong market demand in consumer electronics and other fields in the Mainland China, so that the Mainland China has the specific conditions of industry transfer, which is expected to become the biggest beneficiary of the third industrial transfer, this transfer will also bring new development opportunities to the Company.

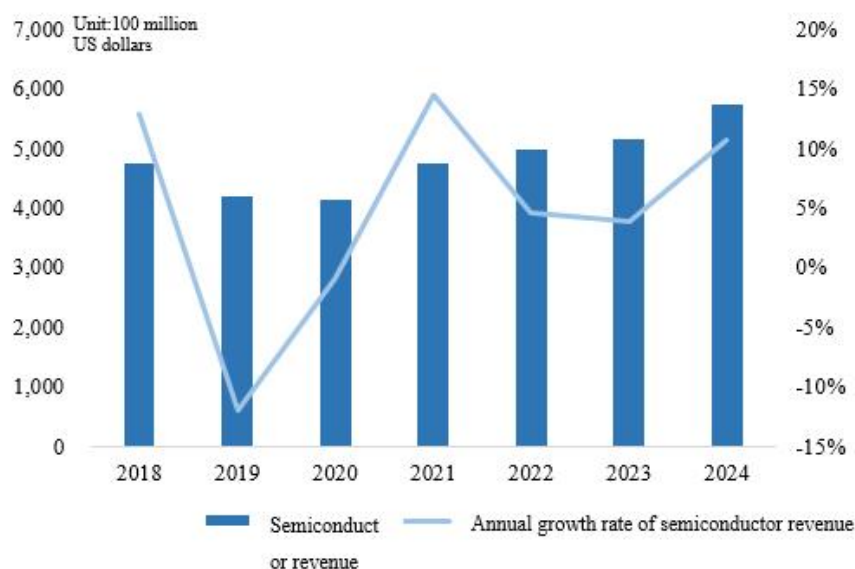
The funded investment project will revolve around the Company's strategic goal of getting the Company into one of the first tier of comprehensive international integrated circuit equipment enterprises. On the one hand, the technical accumulation advantages of the Company in the early stage, as well as the policy advantages such as convenient investment and operation, free entry and exit of goods, convenient fund flow, highly open transportation, free practice of personnel and quick communication of information will be made full use, to build advanced and intelligent demonstration manufacturing base and R & D center in the Lin-gang Special Area, and realize intelligent management in manufacturing, testing and automatic three-dimensional storage; on the other hand, aiming at more advanced technological node, upgrading iteration and product expansion of various high-end process equipment such as cleaning equipment, electroplating equipment, polishing equipment and furnace tube equipment will be carried out using the existing R&D system, and the product lines combining wet and dry process equipment in all categories will be established and expanded, so as to rapidly improve the R&D capacity and production capacity of the Company, help build the Company into a comprehensive internationally integrated circuit equipment group, and improve the Company's comprehensive competitiveness for continuous development.

2. Feasibility of implementation of investment projects with raised funds

(1) The broad market prospect provides market guarantee for the implementation and benefit of the project

With the rapid development of global informatization, networking and knowledge economy, in particular, driven by strong demand in emerging application such as Internet of Things, artificial intelligence, automotive electronics, smartphones, smart wear, cloud computing, big data and security electronics, the global semiconductor industry has been on a large income scale. The global income of the semiconductor industry is US\$476,151 million in 2018. Due to the global macroeconomic downturn, the prosperity of the semiconductor industry declined by 11.97% year on year to US\$419,148 million in 2019. It is expected that the semiconductor industry will start to recover in 2021. In 2024, global semiconductor industry revenue is expected to reach US\$572,788 million. According to Gartner's statistics and projections, the income and annual growth rate of the global semiconductor industry from 2018 to 2024 are as follows:

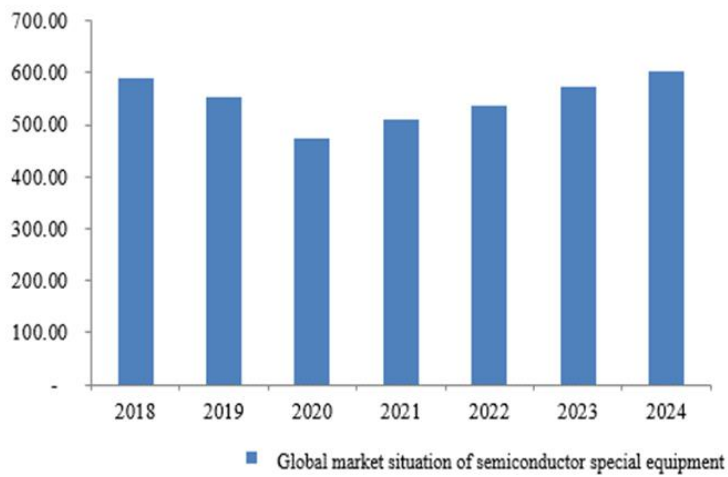
Global Semiconductor Industry Revenue and Annual Growth in 2018-2024



Source: Gartner

The market of semiconductor special equipment is closely related to the prosperity of semiconductor industry, in which chip manufacturing equipment is the most demanding field in semiconductor special equipment industry. According to Gartner's statistics, global chip manufacturers' equipment expenditure reached US\$58,944 million in 2018, and US\$55,480 million in 2019 with a slight drop from that of 2018 due to the global macroeconomic downturn. It is expected that the semiconductor industry will start recovering in 2021 and grow to US\$60,214 million in 2024. The composite annual growth rate is expected to be 6.27% from 2020 to 2024.

Global Market Situation of Semiconductor Special Equipment in 2018-2024 (US\$ 100 million)



Source: Gartner

In the future, with the steady growth of downstream 5G communication, computer, consumer electronics, network communication and other industries, And rapid development in emerging areas such as the Internet of Things, artificial intelligence, automotive electronics, smartphones, smart wear, cloud computing, big data, security electronics, etc.. The integrated circuit industry is facing the demand of capacity expansion of new type chip or advanced technology, which brings wide market space for semiconductor special equipment industry.

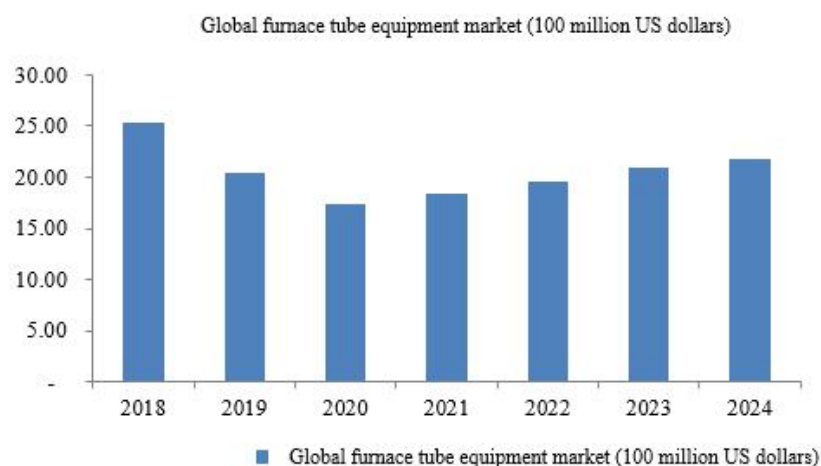
(2) The rich customer resources provide the customer base for the market benefit of the project

The manufacturing technology of integrated circuit is complicated with perplexing steps, the kinds of equipment needed for production are in a big quantity, the efficiency and reliability of single equipment will directly affect the working efficiency of the whole production line and the yield of chip products, so the integrated circuit manufacturing enterprises are very careful about the choice of new equipment, which requires a long period of verification. The Company has been focused on the integrated circuit special equipment R&D and manufacturing field for more than 10 years, and by relying on independent R&D to form the core technology, reliable quality and high-quality service continuously expand the customer resources reserve. The Company products have obtained the certification of high-quality customers including Yangtze Memory, Hynix, SMIC, Huahong Group, JCET, TFME, SJsemi, Wafer Works, JRH, ZING SEMI, Institute of Microelectronics of Chinese Academy of Sciences, Shanghai IC, NCAP, etc.. The majority of the Company's customers are leading enterprises in the industry, in the long run, with strong demand for expansion of production and equipment procurement, among which the demand for semiconductor special equipment is relatively high.

Through abundant customer resources and mature service experience in past, the Company has laid a solid foundation for the smooth implementation of the raised fund investment project, and will provide in-depth market support. At the same time, a brand demonstration effect of high-quality customer groups and strong procurement demand will provide sufficient guarantee for product conversion efficiency and benefit of R&D achievement of investment projects with the raised funds.

(3) The profound technical accumulation provides technical support for the implementation of the project

After more than ten years of development, the Company has established a strong intellectual property system, and has been committed to providing advanced wafer cleaning and wet processing equipment for the wafer manufacturing industry, forming product lines including semiconductor cleaning equipment, semiconductor electroplating equipment, advanced packaging wet process equipment as well as SFP equipment, vertical furnace tube equipment, and has a mature supply chain management and manufacturing system. According to Gartner statistics, the global furnace tube equipment market for 2018-2024 is as follows:



The Company's technical level for the megasonic single-chip cleaning equipment, single-chip slot-type combined cleaning equipment and electroplating process equipment of copper interconnection, has reached international leading or international advanced level. As of June 30, 2021, the Company and its holding subsidiaries has 322 main licensed patents, comprising 152 domestic patents and 170 overseas patents. Among them, there are 317 invention patents. The Company also won the title of "Shanghai Key Laboratory of Advanced Wet Process Equipment for Integrated Circuits". It is the main subject unit of major scientific research projects in China such as "Research and development and application for 20-14nm copper plating equipment of copper interconnection" and "Research and development for 65-45nm stress-free polishing equipment of copper interconnection", and other ("02 Special Project") major scientific projects in China. In December 2020, the Company's "SAPS (space alternating phase shift) megasonic cleaning technology" won the first prize of Shanghai Science and Technology Award.

By virtue of the integrated application experience accumulated in the integrated circuit equipment industry over many years, the Company has mastered the mature core key technology and R&D capability. At the same time, by meeting the needs of the application market in the middle and lower reaches of the integrated circuit industry chain, the accumulation of existing technology and industrial experience of the Company will provide a strong guarantee for the smooth implementation of the raised fund investment project.

(4) The Company's management team and talent team provide talent support for project implementation

The Company attaches great importance to the construction and cultivation of technical research and development team, and encourages self innovation and independent research and development. Since its establishment, the Company has continuously trained and introduced professionals in the global industry, and after years of accumulation, the Company has had an international and professional technical research and development team. The Company's technical R & D team takes Dr. HUI WANG as the core. Most of the key technical personnel have overseas study or practice experience, have international vision and thinking, and are conducive to learning and mastering international advanced technologies. In addition, the Company has set up a professional R & D team in South Korea, relying on South Korea's technical talents in the field of machinery and electronics, and complement each other with R & D team in China mainland. By establishing an international and professional technical R & D team and adhering to the differential technological innovation and competition strategy, which has ensured that the Company can continuously launch new products and continuously improve existing products, consolidate and enhance the technical research and development capability of the Company.

The Company attaches great importance to the construction of talent echelons, and, according to the development strategy of the Company, defines the duties, conditions, development space and professional treatment of the post. The Company has reserved a large number of excellent talents, and has cultivated lots of middle and senior executive talents with management and technical ability who will play an important role in the implementation of each project.

Therefore, the rich, mature experience and excellent technical ability of Company's core management personnel and R&D team will provide technical guarantee and management ability for the smooth implementation of the raised fund investment project.

II. Utilization of Raised Funds

(I) ACMSH equipment R&D and manufacturing center

1. Basic information of the project

The project is planned to build a semiconductor integrated circuit equipment R&D and manufacturing center in Shanghai Lin-gang Special Area, and the implementation body of the project is Shengwei Shanghai, a wholly-owned subsidiary of the Company. The project will be put into operation in 2023, and all the production capacity of the Company will be transferred to this new R&D and manufacturing center, laying a solid foundation for the Company's rapid development in the future.

This project focuses on the global development strategy of ACMSH. On the one hand, based on the core electronic control and software module technology of wet-process equipment such as advanced megasonic single wafer cleaning machine which have been mastered by the Issuer, and introduction of first-class advanced process hardware module and process technology from abroad, the integrated development and production of related process equipment, such as wet bench cleaning equipment, vertical furnace tube equipment (annealing furnace, oxidation furnace, LPCVD, ALD), and so on will be rapidly realized, thereby expanding and establishing the product lines with a complete variety of wet and dry process equipment to cope with the continuous growth of orders across the world; on the other hand, the equipment and related technologies developed by the Issuer will be introduced to the ACMSH Lin-gang R&D and Manufacturing Center for production, building it into a demonstration base of advanced manufacturing and intelligent manufacturing.

This project plans to build 2 production workshops, 1 auxiliary workshop, 2 R&D buildings, chemical warehouse and other related supporting facilities.

The construction land for this project is located in the Lin-gang heavy equipment industrial area, with a total land area of 42,786.30 square meters and a total floor area of 125,977.50 square meters.

2. Project construction contents and investment budget estimates

This project plans to build 2 production workshops, 1 auxiliary workshop, 2 R&D buildings and relevant supporting facilities such as chemical warehouse.

The total investment amount of this project is RMB 882.45 million Yuan, and it is planned to use the raised fund of RMB 700 million Yuan for civil engineering, decoration, equipment and software investment. The investment estimates of the project are as follows:

In RMB 10,000 Yuan

S/N	Project name	Amount	Proportion
1	Civil work and decoration	30,337.28	34.38%
2	Equipment and software investment	9,662.72	10.95%
3	Development or design costs	6,292.36	7.13%
4	Cost of raw materials for trial production	27,266.87	30.90%
5	Fuel power cost for trial production	1,993.43	2.26%
6	Fees for testing (or detection)	2,097.45	2.38%
7	Reserve fund	4,194.89	4.75%
8	Land acquisition	6,400.00	7.25%
Total		88,245.00	100.00%

3. Time period and schedule required for the specific project with raised funds

The construction period of this project is 36 months, and is divided into the following two stages: The first stage is the building construction, decoration and equipment procurement stage, which lasts for 30 months, with the main work being the construction, decoration, equipment procurement, construction and installation as well as software procurement, installation and commissioning of production facilities and supporting production facilities of production workshop, etc.; the second stage is the equipment commissioning and trial production stage, which lasts for 6 months, mainly for production preparation and trial operation, etc..

4. Performance of the procedures for filing raised funds

The construction content of this project has obtained the *Shanghai Enterprise Investment Project Record Certificate* of China (Shanghai) Pilot Free Trade Zone Lin-Gang Special Area Development and Construction Management Committee in May 2020.

5. Environmental protection of the project

Noise, small amount of waste gas, waste water and solid waste will be generated in the production process of this project; domestic sewage will also be generated in the life of employees. Various preventive measures will be taken to reduce the emission of pollutants and minimize the impact on the environment during the implementation of the project. The project has obtained the *Decision of the China (Shanghai) Pilot Free Trade Zone Lingang New Area Management Committee as to the Notification and Commitment on Environmental Impact Report of ACMSH Equipment R&D and Manufacturing Center Project* (Hu Zi Mao Lin Guan Huan Bao Xu Ping [2020] No. 15).

The Company will take corresponding measures to ensure no obvious influence on acoustic environment and atmospheric environment of the area in the construction period and operation period of the project, and ensure the water quality of the sewage body controlled at the original level. During the construction period and operation period of the project, low-noise equipment and noise reduction measures such as vibration reduction, sound attenuation and sound insulation will be adopted to keep the boundary noise value of the project up to Class 2 criterion of the *Emission Standard for Environmental Noise at the Boundary of Industrial Enterprises* (GB12348-2008); The waste water discharge will be subject to the level I standard in the period II of DB4426-2001 *Water Pollutant Discharge Limit* so as to ensure that the waste water reaches the discharge standard after being treated.

6. Relationship between existing major businesses and core technologies of the Issuer

As one of few semiconductor special equipment providers with certain international competitiveness, the Company is in a technically intensive industry, its performance growth being driven by technology R&D efficiency and industrial chain integration capability. This project is dedicated to applying the core key technologies of integrated circuit manufacturing equipment, making full use of Lin-gang Special Area's advantages of investment and operation convenience, free entry and exit of goods, convenient fund flow, highly opened transportation, free practice of personnel and fast communication of information to build advanced R&D laboratories for the enhancement of the Company's ability of sustainable innovation and R&D; at the same time, a demonstration base for advanced manufacturing and intelligent manufacturing will be built to realize intelligent management in manufacturing, testing and automatic three-dimensional storage.

The construction of this project will enable the Company to expand and establish a complete product line of wet and dry equipment, accelerate the industrialization of R&D achievement, and meet the Company's strategic objective of becoming one of comprehensive international first tier integrated circuit equipment enterprises. In addition, it will be helpful for the Company to quickly respond to the demands of the integrated circuit manufacturing and advanced packaging industry for continuous iterative upgrading of equipment, and will lay a solid foundation for the Company to enhance its market share and expand its leading edge.

(II) Research and development project of ACMSH high-end semiconductor equipment

1. Basic information of the project

This project revolves around the Company's strategic goal of developing into one of the world's comprehensive first-class integrated circuit equipment enterprises, aiming at more advanced process nodes, using the existing R&D system to conduct upgrading iteration and product expansion of high-end process equipment such as semiconductor cleaning equipment, semiconductor electroplating equipment, advanced packaging wet-process equipment, SFP equipment and vertical furnace tube equipment to expand and establish a product line with wet and dry processes in all categories. By configuring advanced equipment, introducing high-end talents, making full use of the integrated production capacity and technical resources of the industrial chain, the Company improves its independent innovation ability and R&D level in relevant fields, consolidates its leading position in technology and makes the Company a comprehensive international integrated circuit equipment.

This project is to further develop, upgrade and innovate the existing or future major products and core technologies of the Company, and the specific R&D directions are arranged as follows:

(1) Technical improvement and Research & development of TEBO megasonic cleaning equipment

As the technical node of chip technology is developing to a small dimension and the aspect ratio is further increased, the difficulty of pattern wafer cleaning becomes greater. When the chip technology node extends to below 50nm and the pattern structure develops to multi-layer 3D, the traditional megasonic cleaning technology is difficult to control the bubbles for the stable acoustic cavitation effect, which causes the bubble to break, thus producing the high-energy microstream to damage wafer surface pattern structure.

The TEBO cleaning equipment independently developed by the Company can be used for pattern wafer cleaning at 28 nm and below through a series of rapid (frequency up to one million times per second) pressure changes. The bubble is kept oscillating in size and shape at a controlled temperature, and the bubble is controlled in a stable oscillating state without imploding, thereby protecting the wafer microstructure from being destroyed and performing non-damage cleaning on the wafer surface pattern structure. In that technology transfer of the device structure from 2D to 3D, the TEBO cleaning equipment of the Company can be applied to finer product such as FinFET, DRAM and emerging 3D NAND with 3D structure, as well as new nano-devices and quantum devices in the future, it plays an increasingly important role in improving the yield of customers' products.

As the further development of the chip manufacture, wafer structure is getting more complex, and the requirements for cleaning will be further improved. For example, when the logic integrated circuit manufacturing process enters the 14nm era, the 3D FinFET structure appears, and when the DRAM technology node enters the 1xnm era, the STI with higher and higher aspect ratio and Storage Node appear; high aspect ratio structure channel holes appear when the number of layer of 3D NAND stacked cells exceeds 64 or even 128. The conventional cleaning technology can not effectively clean the new 3D fragile structure. The main challenges of future cleaning technologies include fine fragile structure cleaning, high aspect ratio structure cleaning, fine particle removal and material loss control.

In light of that development of node clean technology in the future at 14 nm and below, TEBO megasonic wave cleaning equipment is focus on expanding its application to structures of smaller size and higher aspect ratio, and the main research contents of this project include:

① Acoustic wave control models for different wafer sizes and different structures;

② The chemical liquid easily causes material loss to the micro-pattern structure, TEBO cleaning process, combined with extremely dilute chemical solution to achieve less material loss.

③ In that ultra-small pattern structure, because the surface tension and capillary force are increased, water or chemical solution is difficult to enter into the micro structure, and effective clean of the inside of the pattern becomes more difficult, However, the problems such as adhesion caused by the drying process after wet cleaning in the pattern structure of small size become more severe, and the project will develop a drying technology that is compatible with the TEBO cleaning process, such as high-temperature IPA drying technology, special solvent drying technology and so on.

(2) Technical improvement and Research & development of Tahoe single wafer wet bench combined cleaning equipment

With the continuous improvement of chip manufacturing process, the wet bench cleaning equipment could not meet the requirements of 28nm and below technology nodes, and the cleaning technology gradually changed from wet bench cleaning to single wafer cleaning. This change has greatly increased the consumption of sulfuric acid, resulting in a series of safety and environmental problems arising from the treatment of sulfuric acid waste liquid at present.

The cleaning effect and technology of Tahoe cleaning equipment is comparable to that of single wafer cleaning equipment, and at the same time, the amount of sulfuric acid used can be greatly reduced compared with single wafer cleaning equipment, help customers reduce the cost of production and can better comply with the Chinese government's energy conservation and environmental protection policy.

In that light of the future development of the technology node cleaning technology of 14 nm and below, the Tahoe single wafer wet bench combined cleaning equipment extends the advantages of low sulfuric acid usage of the wet bench cleaning to a lower technology node, and ensure the process performance comparable to that of single wafer cleaning. the main research contents of this project include:

① It is more suitable for optimization of bench structure and cleaning sequence of small particle control. Including the optimization of the conveying speed between the benches, the design and optimization of the flow velocity and flow direction of the liquid in the benches, the design and optimization of the pre-wetting system between the benches and the cavity modules, the design and optimization of the gas flow distribution in the cavities, high temperature operation of cavity, etc.

② Aiming at the development of photoresist removal technology of high-energy and high-dose ion implantation technology, the application of Tahoe technology is extended to a wide range of applications by introducing a new degluing solution and adopting a new degluing process combined with SPM degluing process.

③ Technical improvement and R & D of backside cleaning equipment

Along with the development of semiconductor technology, the interconnect wire in the wafer starts to turn from the traditional aluminum wire to the copper wire, which the advantages of lower resistivity and less electron migration defects than aluminum interconnects. But because copper migrates faster in silicon and silicon dioxide layers, if the copper atom concentration on the surface of wafer is high, copper atoms will rapidly diffuse to the inside, thereby causing copper contamination and degrading the performance of the chip. If the concentration of copper ions on the backside of the wafer is not removed or reduced timely, the wafer fixture and transfer mechanisms will be contaminated by copper, thereby affecting all wafers using these devices and ultimately affecting product yield rate.

For the future cleaning technology development of node at 14nm and below, the main research contents of this project include:

① Smaller particle control: For the 14nm technology node, the key process parts, including the rotary bearing, the processing accuracy and quality inspection of the Bernoulli clamp, etc. are deeply researched and developed to achieve more stable particle control.

② Steady and balanced gas flow field control in the cavity: research and develop the control technology for stable and uniform gas flow field distribution in the cavity and reduce the retention of acid gas in the process cavity.

③ The challenge of the backside etching process: research the control technology of the chemical reflow of the wafer front surface and the etching uniformity of the edge and sidewall of the wafer in the etching process.

(4) Technical improvement and R & D of front end brush scrubber

The front end brushing equipment is one of the most frequently used process equipment in the wafer cleaning process, of which main process purpose is to remove wafer surface particles. The most commonly used cleaning media for such equipment include deionized water and SC-1 solution. The front brushing equipment of the Company uses a single wafer cavity to clean the front and back sides of the wafer according to the process, which can carry out cleaning processes including wafer back side brushing, wafer edge brushing, front and back side two-fluid cleaning and the like; the equipment occupies a small area, has advantages like high production capacity, strong stability and flexible selection of various cleaning methods.

For the future cleaning technology development of node at 14nm and below, the main research contents of this project include:

① Optimize the structure and cleaning technology of the gas-liquid two-fluid nozzle to further improve the cleaning efficiency of the two fluids, and the research directions include the striking force of the ejection liquid, the angle of the ejection liquid, and the size of the liquid column, relationship between key parameters such as gas and liquid flow rate and particle removal efficiency, wafer pattern non-destructive cleaning, etc.

② In that process of brushing machine, a functional water cleaning process is introduced to enhance the removal effect of particles, and a chemical oxide layer is not easy to grow on the surface of the cleaned wafer, and the pollution to the environment is small, and the loss of materials is also small.

(5) Technical improvement and R&D of front end process electroplating equipment

As the semiconductor technological node is further advanced and the aspect ratio is further increased, especially when the technology node is going below 45nm, and the pattern structure is developed to multi-layer 3D, the process requirements on trench filling effect, plating uniformity and the plating quality pose great challenges to the copper interconnection electroplating equipment. On this basis, the Company has adopted multi-anode local electroplating and pulse electroplating technology to cope with this challenge.

In view of the future electroplating technology development of technology node at 14nm and below, the main research contents of this project include:

① As that technical node become smaller and the thickness of the copper seed layer is thinner, higher requirements are put forward for electroplating water current and motion control, How to avoid the corrosion of the seed layer by the electroplating solution while ensuring the uniformity of deposition in the whole wafer scale is a major technical difficulty.

② With the increase of chip density in the wafer, in order to place more chips in the same wafer, the limited plating range of the wafer is expanded, and the edge width will gradually develop from 2.5 mm to 1.5 mm. Therefore, the fixture of the plating process chamber also needs to develop a device and process corresponding to the width of 1.5 mm to ensure the width trimming while ensuring the conductivity of the fixture and the wafer.

③ The new seed layer material cobalt will be introduced into the 7nm technology node to replace the existing copper seed layer, so how to electroplate cobalt or copper on the cobalt seed layer under 7nm technology node, it will also be a technical difficulty that needs to be solved.

(6) Technical improvement and R & D of SFP equipment

With the development of integrated circuit technology, the semiconductor wafer processing technology nodes become smaller and smaller, and the size of copper wiring, as a conductive connection device, inside the chip becomes smaller and smaller too. At present, the inter-layer wiring in the chip is mainly performed using a Damascus process, and the copper layer on the rear surface of each layer is polished and removed using a chemical mechanical polishing technique, leaving copper in the dielectric layer as a conductive wire. CMP technology has been widely used because of its extremely high flatness and overall flattening effect. However, in the CMP process, a certain pressure is required to act on the wafer to easily cause scratches on the wafer surface, or even damages to the pattern edge copper wire and the low-k dielectric constant material structure. To overcome the disadvantages of the above CMP technology, for the first time in the world, the concept of Stress Free Polish (SFP) is proposed by the Company. In the process of removing the metal coating on the wafer surface by using the principle of electrochemical reaction, the mechanical pressure in the polish process is completely discarded, thus the damage to the metal wire caused by the mechanical pressure is eliminated. After SFP polishing, the copper wire on the wafer surface is continuous and free of damage or defects due to no mechanical pressure applied. The core advantage of SFP stress-free polishing is that it does not cause mechanical damage to the structure of fine copper wire and ultra-low k ($k < 2.0$) dielectric constant material, thus ensuring the quality of the final copper interconnects.

This project will mainly focus on the research and development of the technology application of SFP technology in the technological nodes of dual Damascus process of logic circuits at 7nm, 5nm and below.

① In the technology node below 5nm, it will be a great technical difficulty to introduce barrier ruthenium to replace tantalum, the combination of stress-free copper casting process and wet etching process to satisfy the choice ratio of copper, ruthenium and underlying dielectric layer.

② In the technological node under 5nm, the pattern density increases, how to solve the uniformity of depression control under the condition of different metal copper distribution ratio of dense line structure and single line structure by the stress-free polishing process will also be a technical difficulty that needs to be solved.

③ In the technology node below 5nm, when the wet etching technology is used to remove the new ruthenium barrier layer, it is necessary to remove the barrier layer exposed on the front side, and it is also necessary to avoid over-etching of the vertical side wall in the bench. If overetched copper ions will enter the dielectric layer, causing failure and avoiding overetching is also a technical difficulty to be solved.

④ The integration of copper, ruthenium and ultra-low k dielectric is a potential solution for signal delay in the future. Developed the wet etching process to improve the selection ratio of ruthenium oxide and ultra-low k dielectric after stress-free polishing.

(7) Technical improvement and R&D of vertical furnace equipment

In order to improve the product diversity of the Company, the Company strode from the wet process equipment field into the dry process equipment field, and self-developed vertical furnace equipment. Vertical furnace equipment field refers to the furnace equipment in the semiconductor manufacture, which is an important semiconductor front end equipment. It can be divided into diffusion equipment, low pressure chemical vapor deposition equipment and atomic layer deposition equipment according to different process types; furnace equipment structure is similar; for the reasons of process needs, functions like oxidation, annealing, LPCVD and ALD can be flexibly configured. The diffusion equipment is mainly used in the oxidation and annealing process, the furnace operating temperature is 100 ~ 1050 degrees, the pressure is a standard atmospheric pressure, and generally it uses hydrogen plus oxygen, or nitrogen; low pressure chemical vapor deposition equipment is mainly used in polysilicon, silicon nitride, high temperature silicon oxide, medium temperature silicon oxide and other processes; the working temperature of the furnace is generally 500 ~ 800 degrees, the pressure is below 7.5pa, and vacuum pump must be equipped; the atomic layer deposition equipment is mainly used in the process of silicon oxide and silicon nitride. Compared with low pressure chemical vapor deposition equipment, the atomic layer deposition device provides the same process application, but the deposition order is different; the working environment requirements are similar to the low pressure chemical vapor deposition equipment.

The vertical furnace equipment developed in this project by the Company will focus on low pressure chemical vapor deposition equipment first, then expand to oxidation and diffusion furnaces, and finally to the ALD application. Facing the technical nodes of 28nm and below, the project mainly solves the following technical difficulties:

① Uniformity of deposition coverage: When chemical deposition is carried out, a thin film is formed on both the bottom and the side, and the coverage index will become more and more important as the technology nodes become smaller and smaller.

② Control the film deposition thickness difference of different aspect ratio structure: In the same device, different width and depth regions, the film thickness formed by chemical deposition will be obviously different, when the technology node becomes smaller and smaller, how to control these thickness difference within that range of process requirement will be very difficult.

③ Develop high temperature oxidation furnace, solve the reliability of 1,200℃ high temperature oxidation furnace, improve the uniformity of silicon wafer temperature.

④ Developing ALD equipment, developing new precursor chemical materials, improving the coating forming efficiency and coating quality of ALD.

2. Budget estimate for project investment

The specific directions of the Company's R&D project include following seven: technical improvement and R & D of TEBO megasonic cleaning equipment, technical improvement and R & D of Tahoe single wafer wet bench combined cleaning equipment, technical improvement and R & D of single wafer backside cleaning equipment, technical improvement and R & D of single wafer brush scrubber, technical improvement and R & D of front end process electroplating equipment, technical improvement and R & D of stress-free polishing equipment and technical improvement and R & D of vertical furnace equipment. And the investment is mainly used for purchasing relevant R&D materials, paying testing costs, inspection expenses and personnel remuneration, etc. The specific plans are as follows:

In RMB 10,000 Yuan			
S/N	Project name	Amount	Proportion
1	Hardware investment	8,156.15	18.12%
2	R&D Materials	28,790.22	63.98%
3	Testing and inspection	749.23	1.66%
4	Staff remuneration	6,177.60	13.73%
5	Other expenses	1,126.80	2.50%
Total		45,000.00	100.00%

Other expenses mainly include technical consultation fee, patent authorization fee and site lease fee required for research and development in the project.

3. Performance of the procedures for filing raised funds

The construction content of this project has obtained the Notice on Enterprise Investment Project Filing of Zhangjiang Science City Construction Management Committee of China (Shanghai) Pilot Free Trade Zone in May 2020 from

4. Environmental protection of the project

This project is a R&D project, and the impact on the environment mainly comes from the waste liquid, waste water and solid waste generated during the R&D process, which are all collected in a unified manner, and delivered to a qualified third party company for regular collection, transportation and unified treatment. The Environmental Impact Registration Form of the Project has been filed and publicized online in the filing system (Shanghai) of Environmental Impact Registration.

5. Relationship with the Issuer's existing major businesses and core technologies

The Company is mainly engaged in the research and development, production and sales of semiconductor special equipment, the main products include semiconductor cleaning equipment, semiconductor plating equipment and advanced packaging wet equipment. The Company adheres to the development strategy of differential competition and innovation, and adopts the self-developed single wafer megasonic cleaning technology, single wafer wet bench combined cleaning technology, plating technology, stress-free polishing technology and vertical furnace tube technology, provide customized equipment and process solutions to global wafer manufacturing, advanced packaging and other customers to effectively improve customer production efficiency, improve product yield and reduce production costs. On this basis, the project will carry out technical improvement and R & D on the basis of existing products and technologies, aiming at more advanced technical nodes and technical performance. We will also expand and establish a complete range of product lines combining wet process and dry process equipment to consolidate our market position and enhance our profitability.

(III) Supplementary working capital

1. Basic information of the project

The Company plans to supplement the working capital in an appropriate amount based on the actual operating conditions and the future strategic development objectives. The project of supplementary working capital does not involve filing and environmental impact assessment procedures.

2. Necessity of the project

During the Reporting Period, the Company's capital demand is mainly met through its own operation accumulation. However, with the continuous expansion of the Company's business scale, the Company's product range is continuously enriched, and its investment in product R&D and industrial chain integration continues to expand, the Company is expected to have a liquidity gap. By supplementing the working capital, the Company will effectively increase the working capital, enhance the R&D capacity, multi-product operation capacity and continuous operation capacity, improve the solvency, reduce the liquidity and operation risk, and optimize the financial structure, thereby enhancing the Company's market competitiveness.

3. Management and operation arrangements for supplementary working capital

The Company will strictly implement the provisions of Shanghai Stock Exchange and CSRC on the use of raised funds, and manage the supplementary working capital in accordance with the *Management System for Raised Funds*. The Company implements the special account storage system for raised funds, with the raised funds to be deposited into the special account determined by the Board of Directors for centralized management. During the use process, the Company will reasonably arrange the use of supplementary working capital according to the needs of business development and actual operation of the Company, ensure the safe and efficient use of raised funds, and guarantee and increase the return of shareholders. In the process of fund allocation, the Company will approve and allocate funds in strict accordance with relevant provisions of the *Management System for Raised Funds* and the *Financial Management System*.

4. The impact of supplementary working capital on the financial position and operating results of the Company and its role in enhancing the core competitiveness of the Company

After the supplementary working capital is allocated in place, the Company's net assets and net assets per share will be increased. The increase in net assets will enhance the Company's ability to sustain development and resist risks. In the short term, due to the increase of net assets, the return on net assets of the Company will be diluted and the earnings per share will decline to a certain extent. In the medium and long term, the supplementary working capital will be an important source of funding for R&D team building, business expansion and daily operation of the Company; the Company will consolidate its market position in the field of integrated circuit equipment manufacturing, increase its market competitiveness and influence, and enhance its core competitiveness.

III. Explanation on the Newly Acquired Land or Real Estate Involved in the Use of Raised Funds

In the projects with raised fund, ACMSH Equipment R&D and Manufacturing Center and High-end Semiconductor Equipment R&D project involve land or real estate use, while the project of supplementary working capital does not involve land and real estate use, of which the ACMSH Equipment R&D and Manufacturing Center project involves newly acquired land or real estate with the details as follows:

The construction land of ACMSH Equipment R&D and Manufacturing Center is located at Hill 16/65, Block 9, Luchaogang Town, having a total land area of 42,786.30 square meters, a total floor area of 125,977.50 square meters, and Real Estate Title Certificate with Ref. Hu [2020] Shi Zi Bu Dong Chan Quan No. 000721.

The implementation location of ACMSH High-end Semiconductor Equipment R&D Project is Building 4, No. 1690 Cailun Road, Zhangjiang High-tech Park, Shanghai, which is the existing leased plant of the Issuer and does not involve newly acquired land or real estate.

IV. Strategic Planning of the Company

(I) Development strategy of the Company

1. Overall strategy

Since its establishment, the Company has been dedicated to the field of semiconductor special equipment, focusing on large-scale high-end integrated circuit wet and dry equipment products, to provide customers with a series of integrated circuit equipment products and services. The Company has always adhered to the technical R&D strategy of differential competition and innovation, accumulated a series of innovative technologies through the combination of independent original R&D and effective and controllable overseas business expansion, and continuously cultivated and built a first-class R&D team relying on an talent team to attract high-end professionals at home and abroad; improves the core competitiveness of the Company through continuously launching differentiated new products and technologies with a leading level in the world; and through a strong market expansion at home and abroad, enhances the market share; while keeping the reasonable gross profit rate, expands the Company's income scale, creating the value for the customer and the shareholder.

2. Continuous innovation plan

The Company will strive to seize the rapid development opportunities of China's semiconductor industry, give full play to its existing market position, R&D advantages, technological accumulation and industry experience, and pay close attention to the leading technologies development direction of the global semiconductor special equipment industry to ensure the Company's product quality, ensure its core technology in the leading position industry in China, and ensure the original innovation technology and products to be maintained in the international leading level. The Company will realize continuous improvement of product performance and technology on the basis of existing products, keep tracking the changes in emerging terminal markets, and ensure effective integration of the Company's products and market demands.

3. Development objectives

While maintaining the continuous growth of the Company's semiconductor cleaning equipment, semiconductor electroplating equipment and advanced packaging wet equipment and vertical furnace tube equipment, the Company will focus on its core advantages, improve the core technology and integrate the inside and outside sources; based on differentiated independent innovation and R&D, combined with effective and controllable overseas business expansion models to promote the R&D of new products through investment and M&A; and expand and establish a complete product line combining wet and dry process equipment. The Company will further transform itself into an integrated product company, continuously enhance its comprehensive competitiveness, strive to build ACMSH into a comprehensive integrated circuit equipment group, and rank among the first echelon of international integrated circuit equipment enterprises.

(II) Measures taken to realize the strategic objectives during the Reporting Period and the implementation results

During the Reporting Period, the Company completed the equity acquisition of CleanChip HK, ACMKR and ACM CA through the merger of enterprises under the same control, and realized the integration of all business processes such as sales, R&D, production and procurement.

After years of continuous input on research and development and market development, the Company has successively developed semiconductor cleaning equipment for single wafer SAPS megasonic cleaning, single wafer TEBO megasonic cleaning, single wafer backside cleaning, single wafer brush scrubbing, automatic wet bench cleaning and single wafer wet bench combined cleaning, and advanced packaging wet process equipment such as vertical furnace equipment, electroplating equipment used in the front end and back end process of semiconductor manufacturing, stress-free polishing equipment, wet etching equipment, gluing equipment, developing equipment and degluing equipment, etc.. With advanced technology and rich product lines, the Company has developed into one of few semiconductor special equipment suppliers with certain international competitiveness in China, and its products have been recognized by many mainstream semiconductor chip manufacturers at home and abroad, winning a good reputation in the market.

Through the projects invested by raised fund, the Company will continuously expand its competitive advantages in the field of semiconductor cleaning equipment cleaning, and maintain the the leading position of SAPS, TEBO megasonic cleaning equipment, single wafer wet bench combined cleaning equipment, front end electroplating and stress-free polishing equipment in the industry. The Company will continue to consolidate and expand the process application and customer base, actively promote the market expansion of the vertical furnace series products, launch new products continuously to realize the long-term sustainable growth of the Company's performance.

(III) Measures taken in the future planning

In the future, the Company will follow the principle of prudence and rigorous development, adhere to the development strategy of talent introduction, independent research and development, global patent protection and differential competition, actively seek multi-level and multi-field cooperation, strive to overcome a number of key technologies, further build an industrial ecosystem, continuously increase the market share of semiconductor special equipment, and strive to occupy an important position in the world's advanced semiconductor special equipment industry.

1. Technological innovation plan

Technology is the key factor of long term development of semiconductor special equipment enterprises. The Company closely follows the trend of global semiconductor industry development, further enhances R&D and industrialization capacity, continuously develops new products and new technologies through independent R&D and domestic and overseas M&A, enriches core technologies and enhances existing production performance and quality of products to expand global market share.

The Company will continue to work closely with teaching and scientific research institutions to improve its own technology while promoting scientific and technological progress of semiconductor special equipment, and provide new solutions for the global semiconductor equipment industry.

The Company will further increase research and development investment in technologies related to core products, and continue to maintain the international advanced level in the forefront of single wafer cleaning equipment, copper electroplating equipment and stress-free polishing equipment, etc..

2. Plans for the expansion of the capacity for advanced products

With the booming development of industries at the downstream of the semiconductor industry like 5G communication, computer, consumer electronics, network communication, automobile electronics, Internet of Things etc., the production capacity of chip manufacturing enterprises continues to expand, and the market demand for semiconductor special equipment of the Company will further increase. The Company plans to use the raised funds to accelerate the construction of ACMSH Equipment R&D and Manufacturing Center project, successfully build a global first-class semiconductor equipment R&D laboratory, and realize the expansion of the production capacity of the Company's semiconductor special equipment to enhance the competitiveness of the Company in the industry.

On the basis of maintaining the existing semiconductor special equipment business, the Company plans to realize the product layout that can cover the larger market through expanding production and technology upgrading, especially upgrading to more advanced process nodes, so as to further increase production and marketing scale, steadily increase the gross profit rate of products, reduce production cost, improve product quality, optimize product structure, realize the growth of performance and enhance the Company's position in the industry and core competitiveness.

3. Market and business development plan

Based on the demand of chip manufacturing enterprises in China mainland, mainly for the demand of Mainland China, the Company will increase the market share of existing products in existing customers, accelerate the process of product certification for new customers, and strive to promote simultaneously certification work of multi-customer and multi-product. At the same time, the Company will pay close attention to the launch plan of chip manufacturing production lines around the world on the basis of successfully entering the markets of South Korea and Taiwan, following closely the big customers of the first tier of the world semiconductor industry, and improve the size the sales proportion of the international market outside Mainland China, eventually becoming a world's influential semiconductor equipment industry group.

4. Human resources plan

The Company has always attached importance to the introduction and cultivation of talents at home and abroad. Semiconductor special equipment industry is a highly talent intensive industry, which needs multi-disciplinary and multi-domain talents in microelectronics, electrical, mechanical, materials, chemical engineering, fluid mechanics, automation, image recognition, communication, and software system, etc.. According to the actual situation and future development plan, the Company will continue to introduce and cultivate talents of all aspects, absorb high-end talents from the world at the same time, and optimize the talent structure; the Company will strengthen employee training, and continue to improve the employee training plan, shape an effective personnel training and growth mechanism, and improve the employees' business ability and overall quality through internal and external training and subject research; and foster the team awareness and enhance the spirit of cooperation while keeping employees' personalized and differentiated development, to build a world-class team of top talents and realize sustainable development. Meanwhile, the Company will provide continuous equity or option incentives to outstanding talents in the future according to specific conditions, combining interests of the Company, individual and shareholders, so as to effectively motivate the outstanding talents.

5. Plan for extending the industrial chain

In the future, the Company will further extend and improve the industrial chain, expand the products of the Company, work closely with domestic and overseas manufacturers of key components for semiconductor special equipment, and realize effective cooperation and complement advantages of production elements in a wide range, to tamp up the position in the field of international semiconductor special equipment.

6. Extension-type development plan

According to the overall development strategy and target plan, the Company will properly acquire and merge some technical and innovative enterprises around the core business of the Company when conditions are met, and integrate them into the Company's global R&D, production and sales platform. At the same time, after its market value reaches a certain scale, the Company will acquire and merge some mature semiconductor special equipment enterprises at home and abroad, with a certain scale and good benefit, which is of strategic significance to the development of the Company, so as to improve the production and operation scale and competition strength of the Company, and further to achieve the effect of expanding the market scale, increasing market share, expanding income sources, reducing production costs and expanding talent team, etc., promote rapid expansion of the Company, and maintain sound and sustainable development.

According to the development trend of the global semiconductor industry and the actual business conditions of the Company, the Company has formulated the above-mentioned strategic plan. After many years of development, the Company has established leading position in the industry in China, and has a strong competitive edge in the industry in the international market competition. Such conditions laid the foundation for the realization of the above objectives. Realizing the above-mentioned business development objectives will help consolidate and enhance the competitive advantages of the Company and realize steady improvement of the Company's profitability.

Section X Investor Protection

I. Main Arrangements by the Issuer on Investor Relations

For protecting the lawful rights and interests of investors, regulating the Company's information disclosure behaviors and investor relations management, and safeguarding the legitimate rights and interests of the Company's shareholders, creditors and other stakeholders, the Company, as required by Chinese laws and regulations, has formulated certain corporate governance documents such as the *Information Disclosure Management Rules*, the *Investor Relations Management Rules* and others, and established systems for information disclosure and investor relations management which are gradually improving in conformity with the listing requirements, so as ensure that information can be disclosed in a timely and fair manner and the information disclosed is true, accurate and complete. Therefore, the Company can guarantee the investors' rights to know, to make decisions and to participate, and protect the lawful rights and interests of investors effectively.

(I) Information disclosure rules and procedures

On April 30, 2020, the Company held the fourth meeting of the first board of directors, deliberating and adopting the *Information Disclosure Management Rules*, in which clear provisions are made with respect to the Company's basic principles and requirements for information disclosure, periodic reports, contents to be disclosed, management of information disclosure affairs, basic procedures, confidentiality measures, data management and other related matters. Pursuant to the *Information Disclosure Management Rules*, the Company and the relevant information disclosure obligors shall disclose all matters that may considerably affect the Company's stock trading price or the investment decision-making. The Company and the relevant information disclosure obligors shall make the disclosure in a timely and fair manner to ensure the truth, accuracy and completeness of the information disclosed. The *Information Disclosure Management Rules* expressly stipulate that the board office shall be responsible for managing the Company's information disclosure under the unified leadership and management of the board of directors, and also make corresponding provisions on the general procedures of collecting, submitting, reviewing and disclosing periodic reports and interim announcements. Without the written authorization of the Company's board of directors, no directors, supervisors, senior executives, key technicians or other personnel of the Company shall release or disclose to shareholders or the media such information as has not been made public by the Company in any form on behalf of the Company or the board of directors.

(II) Establishment of communication channels for investors

On April 30, 2020, the Company held the fourth meeting of the first board of directors, deliberating and adopting the *Investor Relations Management Rules* in which clear provisions are made with respect to the purposes, principles, objects and contents of investor relations work, the investor relations management departments and responsibilities, and the investor relations activities, among others. The board chairman of the Company shall be the first responsible person for, and the secretary of the Company's board of directors shall be the specific person in charge of, the management of investor relations. The Company's board office and other relevant functional departments shall undertake specific work by organizing and coordinating the daily affairs of the Company's investor relations management. According to the provisions of the *Investor Relations Management Rules*, the Company may communicate with investors through multiple channels and at multiple levels in a way as convenient and effective as possible for the investors' participation, including without limitation: announcements (inclusive of periodic reports and ad hoc reports), general meeting of shareholders; Company website and e-mail; analyst meetings, performance presentations and road shows; one-on-one communication; site visit and symposium; and telephone counseling. Where a relevant major issue of the Company is highly concerned about or is challenged by the market, the Company shall, in addition to performing the obligation of information disclosure timely according to the listing rules, convene explanation meetings on site, online or by any other means to introduce the situation, explain reasons and answer the relevant questions. The board chairman, general manager, secretary of the board of directors, chief financial officer or any other responsible person of the Company shall participate in the explanation meetings.

(III) Future plans for investor relations management

In order to strengthen the information communication between the Company and the investors for better services to the investors, the Company will, according to the provisions of the *Company Law*, the *Securities Law*, the *Administrative Measures for the Disclosure of Information of Listed Companies*, the *Working Guidelines for the Relationship Between Listed Companies and Investors*, the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange* and other laws, regulations as well as the *Articles of Association (Draft)* applicable to the Company after the IPO and the *Investor Relations Management Rules*, effectively carry out related work in terms of the construction, management and maintenance of investor relations to establish an open communication platform for the Company and Investors, ensuring the investors' fair and timely access to the Company's public information. Through information disclosure and exchange, the Company will establish two-way communication channels and effective mechanisms between the Company and investors, promote the benign relationship between the Company and investors, and effectively safeguard the interests of all shareholders, especially small and medium shareholders, in an effort to maximize the value of the Company and the interests of shareholders.

II. Dividend Distribution Policy of the Issuer

(I) Dividend distribution policy after the Offering

In accordance with the *Articles of Association (Draft)* applicable to the Company after the IPO and the *Plan for Dividend Return in the Three Years Following Listing*, which were deliberated and adopted by the second extraordinary general meeting of shareholders on May 15, 2020, the dividend distribution policy of the Company after the offering is as follows:

1. Principle of Dividend Return Planning

The Company plans to pay dividends subject to the actual situation of the Company by fully considering and accepting the opinions of shareholders (especially small and medium shareholders), independent directors and supervisors through a variety of channels, and implements a sustained and stable profit distribution policy.

2. Form of Profit Distribution

There are mainly three forms in which the Company makes dividend distribution, which are cash, stock and combination of cash and stock. The Company will give priority to dividend distribution in the form of cash, and may, according to the Company's cash flow status, business growth, size of net assets per share and other reasonable factors, adopt the form of stock or a combination of cash and stock to distribute dividends.

3. Term Interval of Profit Distribution

Generally the Company will make annual dividends, while the board of directors may also propose to make interim cash dividends in the context of the Company's fund demand status.

4. Conditions and Proportions of Cash Dividends

If there is no major investment plan or major cash expenditure after the Company makes profits and draws statutory reserve, surplus reserve and the like according to law for a current year, the annual cash dividend amount shall not be less than 10% of the attributable profit realized in the current year.

Major investment plans or major cash expenditures shall refer to projects under which the Company's cumulative expenditures for proposed external investment, asset acquisition or equipment purchase, fixed asset investment or research and development in the next 12 months will reach or exceed 5% of the Company's audited net assets of the latest period, except for fund-raising investment projects.

By taking full into account, among others, the characteristics of the industry, the stage of development, the Company's own business model, the level of profitability, and whether there is major capital expenditure arrangement, the board of directors of the Company shall, in accordance with the procedures stipulated in the *Articles of Association*, propose a differentiated cash dividend policy in response to the different situations as below:

(1) If the Company is in a mature development stage and has no major capital expenditure arrangements, when making profit distribution, the minimum proportion of cash dividends in the corresponding profit distribution shall be 80%;

(2) If the Company is in a mature development stage and has major capital expenditure arrangements, when making profit distribution, the minimum proportion of cash dividends in the corresponding profit distribution shall be 40%;

(3) If the Company is in a growing development stage and has major capital expenditure arrangements, when making profit distribution, the minimum proportion of cash dividends in the corresponding profit distribution shall be 20%.

Where the Company is in an indistinguishable development stage but has major capital expenditure arrangements, the provisions of the preceding paragraph may apply. Currently the Company is in a growing development stage having major capital expenditure arrangement in the future, so when conducting profit distribution, the minimum proportion of cash dividends in the profit distribution should be 20%. If, with the continuous development, the Company moves to such a development stage as considered by the board of directors to be matured, depending on the presence of major capital expenditure arrangement, the board of directors shall, according to the profit distribution policy adjustment procedures stipulated in the *Articles of Association* proposes to the general meeting of shareholders on increasing the minimum proportion of cash dividends in the profit distribution.

5. Stock Dividends

Subject to the full distribution of cash dividends, the Company may make additional distribution by stock dividends and transfer capital reserve into share capital based on shareholders' wills and requirements, with the specific proposal, after being deliberated and passed by the Company's board of directors, submitted to the general meeting of shareholders for approval. The Company shall meet the following conditions for distribution of stock dividends:

(1) The Company is in good operating condition;

(2) The Company's stock price does not match the Company's share capital size, and the distribution of stock dividends will be beneficial to the overall interests of all shareholders of the Company;

(3) The proportions of cash dividends and stock dividends distributed conform to the provisions of the Company's *Articles of Association*;

(4) Other conditions stipulated by laws, administrative regulations, departmental rules and normative documents.

6. Use of the Remaining Undistributed Profits

The Company will use the remaining undistributed profits in a prudent and reasonable manner. The remaining undistributed profits will be mainly used for external investment, acquisition of assets, purchase of equipment and other major investment and cash expenditure, to gradually expand the scale of the Company's production and operation, accelerate the Company's business development and continuous growth in operating performance, achieve the Company's future development objectives in a planned and step-by-step manner, and generate more returns for the shareholders of the Company.

7. Decision-making Procedures and Mechanism of Profit Distribution Plan

In order to generate reasonable returns for shareholders, the board of directors of the Company shall, prior to the release of annual reports or semi-annual reports, and in the light of the Company's profit distribution plan as well as the Company's current production and operation status, cash flow status, future business development plans, fund use demands, and previous annual losses recovery, etc., carefully study and demonstrate the timing, conditions and minimum proportion of the Company's cash dividends, adjustment conditions and decision-making procedures, etc., to establish the annual or semi-annual profit distribution plans which shall be subject to the approval by a majority of the board of directors after deliberation. The independent directors shall express independent opinions on the profit distribution plans.

The profit distribution plans shall be submitted by the board of directors to the general meeting of shareholders for approval after deliberation through the above-mentioned procedures, and shall be approved by a majority of the voting rights held by the shareholders (including their proxies) present at the general meeting of shareholders. Before the general meeting of shareholders deliberates on a specific plan of cash dividends, the Company shall actively communicate with shareholders, especially small and medium shareholders, through various channels to fully open to opinions and appeals from small and medium shareholders, and timely reply to questions concerned by the small and medium shareholders.

8. Adjustment of Profit Distribution Policy

Where it becomes absolutely necessary for the Company to adjust the profit distribution policy in response to its production and operation situation, investment planning and long-term development needs, the profit distribution plan so adjusted shall not violate the provisions of the securities regulatory authorities, and the proposal for profit distribution plan adjustment shall, after opinions of the independent directors and the board of supervisors as well as deliberation by the board of directors of the Company, be submitted to the general meeting of shareholders for approval, which shall be passed by a vote of more than two thirds of the voting rights held by the shareholders (including their proxies) present at the general meeting. At the same time, online voting shall be made available to the public shareholders for their voting in the general meeting of shareholders.

(II) Difference of dividend distribution policy before and After the Offering

In accordance with the relevant laws and regulations promulgated by the CSRC, the Shanghai Stock Exchange and other regulatory authorities, the Company has formulated the *Articles of Association (Draft)* applicable to it after the IPO, which has been deliberated and approved by the Company's second extraordinary general meeting of shareholders in 2020. The dividend distribution policy of the Company after the public offering as below has been further improved and refined on the basis of the current *Articles of Association* by adding contents such as profit distribution principle, profit distribution form, as well as profit distribution conditions and proportions.

III. Distribution Policy of Accumulated Profits before the Offering

According to the *Proposal on Distribution Plans for Accumulated Profits before the Company's Initial Public Offering* adopted by the Company's second extraordinary general meeting of shareholders after deliberation on May 15, 2020, the profits accumulated before the the Company's IPO shall be shared by the new and old shareholders in proportion to their shareholdings after the listing.

IV. Voting Mechanism for Shareholders of the Issuer

(I) Cumulative voting system

According to the *Articles of Association (Draft)* applicable after the IPO deliberated and adopted by the Company's second extraordinary general meeting of shareholders on May 15, 2020, the general meeting of shareholders shall actively implement the cumulative voting system in the election of directors and supervisors. A listed company whose individual shareholders and their persons acting in concert hold 30% or more shares shall implement the cumulative voting system. The term "cumulative voting system" refers to a system of voting for the election of directors or supervisors at the general meeting of shareholders where in which a shareholder can multiply his voting rights by the number of candidates and vote them all for one candidate for director or supervisor.

(II) Separate voting system for small and medium investors

According to the *Articles of Association (Draft)* applicable after the IPO adopted by the Company's second extraordinary general meeting of shareholders after deliberation on May 15, 2020, when a general meeting of shareholders deliberates on significant matters which have an impact on the interests of small and medium investors, the votes of small and medium investors shall be computed separately. The separate voting results shall be announced and disclosed promptly. The term "small and medium investors" refers to the shareholders other than the directors, supervisors, senior executives of the Company and the shareholders holding 5% or more of the shares in the Company individually or jointly on the share record date corresponding to the general meeting of shareholders.

(III) Online voting at general meetings of shareholders

According to the *Articles of Association (Draft)* applicable after the IPO deliberated and adopted by the Company's second extraordinary general meeting of shareholders on May 15, 2020, the Company shall provide online voting method or otherwise to facilitate participation by shareholders in general meetings of shareholders. In the case of online voting by shareholders, the relevant provisions made by the CSRC, Shanghai Stock Exchange, China Securities Depository and Clearing Co., Ltd. and other authorities as well as the Articles of Association shall be followed. Shareholders participating in a general meeting of shareholders via the aforesaid method shall be deemed present at the meeting.

Where a general meeting of shareholders adopts online or other method, the voting time and procedures for such online or other method shall be stated in the notice of the meeting. The general meeting of shareholders adopting online or other voting method shall not commence earlier than 3:00 p.m. on the day preceding the date of the physical general meeting of shareholders or later than 9:30 a.m. on the date of the physical general meeting of shareholders, nor shall it end before 3:00 p.m. of the date of the physical general meeting of shareholders.

The same voting rights may only be exercised on site, online or via one of any other voting methods. In the event of repeated voting using the same voting rights, the first voting shall prevail.

A physical general meeting of shareholders shall not end earlier than the meeting using online or any other method, and the chairman of the meeting shall announce the voting status and result for each proposal and announce in accordance with the voting result whether the proposal is adopted.

Before the voting result is officially announced, the Company, counters, scrutineers, major shareholders, network service providers and other relevant parties involved in the voting at the general meeting of shareholders physically, online or otherwise shall be obliged to keep the voting status confidential.

(IV) Solicitation of voting rights

According to the *Articles of Association (Draft)* applicable after the IPO deliberated and adopted by the Company's second extraordinary general meeting of shareholders on May 15, 2020, the board of directors, independent directors and shareholders satisfying the stipulated criteria may openly solicit voting rights of shareholders. In soliciting the voting rights from shareholders, specific information such as voting intent shall be fully disclosed to the relevant shareholders. It is prohibited to solicit voting rights from shareholders with direct or indirect compensations. The Company shall not impose a minimum shareholding limit on the solicitation of voting rights.

V. Important Commitments Made by Relevant Parties to the Offering and Their Fulfillment

As of the execution date of this [***], the parties to the Offering have made the important commitments as follows:

(I) Commitments on restricted sale of shares before the Offering, voluntary share lock-up, and extension of lock-up period

1. Commitments from ACMR Acting as the Controlling Shareholder of the Company

(1) Within 36 months from the listing date of the Issuer's shares, we shall not transfer or entrust another person to manage the shares of the Issuer held directly or indirectly by us before the IPO ("Pre-IPO Shares"), or propose the repurchase of such shares by the Issuer.

(2) If the daily closing price of the Issuer's shares is lower than the issue price at the IPO ("Issue Price of the Issuer") for 20 consecutive trading days within 6 months after the IPO, or the closing price at the end of the 6-month period after the IPO is lower than the Issue Price of the Issuer, the lock-up period of the shares held by us in the Issuer will be automatically extended for 6 months. If the Issuer has paid dividends, given bonus shares, capitalized capital reserve, issued new shares or had other ex-right and ex-dividend matters, the said issue price refers to the adjusted price of the Issuer's shares.

(3) If the Issuer, upon the occurrence of any of the material law-breaking circumstances specified in Section 2, Chapter XII of the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, triggers the delisting criteria, we will not reduce our shareholdings in the Issuer during the period from the date of a relevant administrative penalty decision or judicial decision to the termination of listing of the Issuers' shares.

(4) If we reduce our shareholdings of Pre-IPO Shares after the expiration of the lock-up period, we will strictly abide by laws, administrative regulations, departmental rules, normative documents and relevant provisions of Shanghai Stock Exchange, and fulfill corresponding information disclosure obligations.

(5) We will promptly report to the Issuer the shares by us in the Issuer held and the changes thereof.

(6) If we violate the said commitments to reduce our shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer.

2. Commitments from HUI WANG Acting as the Company's De Facto Controller, Director, and Key Technician, and His Wife, Children and Family Trusts

(1) Commitments from HUI WANG

① Within 36 months from the listing date of the Issuer's shares, I shall not transfer or entrust another person to manage the shares of the Issuer held directly or indirectly by me before the IPO ("Pre-IPO Shares"), or propose the repurchase of such shares by the Issuer.

② If the daily closing price of the Issuer's shares is lower than the issue price for 20 consecutive trading days within 6 months after the IPO, or the closing price at the end of the 6-month period after the IPO is lower than the issue price, the lock-up period of the shares held by me in the Issuer will be automatically extended for 6 months. If the Issuer has paid dividends, given bonus shares, capitalized capital reserve, issued new shares or had other ex-right and ex-dividend matters, the said issue price refers to the adjusted price of the Issuer's shares.

③ If the Issuer, upon the occurrence of any of the material law-breaking circumstances specified in Section 2, Chapter XII of the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, triggers the delisting criteria, I will not reduce my shareholdings in the Issuer during the period from the date of a relevant administrative penalty decision or judicial decision to the termination of listing of the Issuers' shares.

④ After the expiration of the said share lock-up period, during the period of being a director of the Issuer, and subject to the fulfillment of the share lock-up commitment, the shares of the Issuer transferred by me each year shall not exceed 25% of the total shares of the Issuer held by me. If I leave office for any reason, within six months thereafter, I will not transfer or entrust another person to manage the shares of the Issuer held by me. If I leave office before the expiration of my term of office, I will continue to comply with the aforesaid reduction requirements within the remaining portion of my term of office determined at the time of taking office and within 6 months after the expiration of my term of office.

⑤ I, as the key technician of the Issuer, shall not transfer the Pre-IPO Shares held by me each year during the 4 years upon the expiration of the lock-up period for the Pre-IPO Shares held by me exceeding 25% of the total Pre-IPO Shares held by me when the Issuer was listed, and such percentage may be applied on a cumulative basis; and during the 6 months upon my resignation, I will neither transfer or entrust another person to manage the Pre-IPO Shares held by me nor propose the repurchase of such shares by the Issuer.

⑥ I will strictly abide by the relevant provisions on the shareholding and share change of the de facto controllers, directors and key technicians of the Issuer under laws, administrative regulations, departmental rules and normative documents, truthfully and timely report to the Issuer on the shares of the Issuer directly or indirectly held by me and their changes and fulfill my obligations as a director in a standardized and honest way. I will not refuse to perform the above commitments due to position change, resignation and other reasons.

⑦ If I violate the said commitments to reduce my shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer.

(2) Commitments from each of HUI WANG’s Wife JING CHEN, and Children BRIAN WANG and SOPHIA WANG

① Within 36 months from the listing date of the Issuer’s shares, I shall not transfer or entrust another person to manage the shares of the Issuer held directly or indirectly by me before the IPO (“Pre-IPO Shares”), or propose the repurchase of such shares by the Issuer.

② If the daily closing price of the Issuer’s shares is lower than the issue price for 20 consecutive trading days within 6 months after the IPO, or the closing price at the end of the 6-month period after the IPO is lower than the issue price, the lock-up period of the shares held by me in the Issuer will be automatically extended for 6 months. If the Issuer has paid dividends, given bonus shares, capitalized capital reserve, issued new shares or had other ex-right and ex-dividend matters, the said issue price refers to the adjusted price of the Issuer’s shares.

③ If the Issuer, upon the occurrence of any of the material law-breaking circumstances specified in Section 2, Chapter XII of the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, triggers the delisting criteria, I will not reduce my shareholdings in the Issuer during the period from the date of a relevant administrative penalty decision or judicial decision to the termination of listing of the Issuers’ shares.

④ If I violate the said commitments to reduce my shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer.

(3) Commitments from each of HUI WANG’s Family Trusts i.e. David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust

① Within 36 months from the listing date of the Issuer’s shares, we shall not transfer or entrust another person to manage the shares of the Issuer held directly or indirectly by me before the IPO (“Pre-IPO Shares”), or propose the repurchase of such shares by the Issuer.

② If the daily closing price of the Issuer’s shares is lower than the issue price for 20 consecutive trading days within 6 months after the IPO, or the closing price at the end of the 6-month period after the IPO is lower than the issue price, the lock-up period of the shares held by us in the Issuer will be automatically extended for 6 months. If the Issuer has paid dividends, given bonus shares, capitalized capital reserve, issued new shares or had other ex-right and ex-dividend matters, the said issue price refers to the adjusted price of the Issuer’s shares.

③ If the Issuer, upon the occurrence of any of the material law-breaking circumstances specified in Section 2, Chapter XII of the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, triggers the delisting criteria, we will not reduce our shareholdings in the Issuer during the period from the date of a relevant administrative penalty decision or judicial decision to the termination of listing of the Issuers’ shares.

④ If we violate the said commitments to reduce our shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer.

3. Commitments from Shareholders of the Company Including Xinwei Consulting, [*], Jinpu Investment, Taihu Guolian, Xinshi Consulting, Hai Feng Investment and Xingang Consulting**

(1) Within 12 months from the listing date of the Issuer’s shares, we shall not transfer or entrust another person to manage the shares of the Issuer held by us before the IPO (“Pre-IPO Shares”), or propose the repurchase of such shares by the Issuer.

(2) If we reduce our shareholdings of Pre-IPO Shares after the expiration of the lock-up period, we will strictly abide by laws, administrative regulations, departmental rules, normative documents and relevant provisions of Shanghai Stock Exchange, and fulfill corresponding information disclosure obligations.

(3) If we violate the said commitments to reduce our shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer, and all losses and legal consequences arising therefrom shall be borne by us.

4. Commitment from Yongkong Consulting, SYEM, Shangrong Innovation, SRJY, Runguang Investment, SICIF, PEII and ZJTVC, Shareholders of the Company

(1) Within 36 months from the date of direct holding the Issuer's shares (i.e. December 13, 2019, the date when the industrial and commercial change registration procedures are completed), we shall not transfer or entrust another person to manage the shares of the Issuer held by us before the IPO ("Pre-IPO Shares"), or propose the repurchase of such shares by the Issuer.

(2) Within 12 months from the listing date of the Issuer's shares, we shall not transfer or entrust another person to manage the Pre-IPO Shares held by us, or propose the repurchase of such shares by the Issuer.

(3) If we reduce our shareholdings of Pre-IPO Shares after the expiration of the lock-up period, we will strictly abide by laws, administrative regulations, departmental rules, normative documents and relevant provisions of Shanghai Stock Exchange, and fulfill corresponding information disclosure obligations.

(4) If we violate the said commitments to reduce our shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer, and all losses and legal consequences arising therefrom shall be borne by us.

5. Commitments from each of the Company's Directors, Supervisors and Senior Executives

(1) Within 12 months from the listing date of the Issuer's shares, I will not transfer or entrust another person to manage the shares of the Issuer held by me directly or indirectly through ACM RESEARCH, INC., the controlling shareholder of the Issuer, before the IPO, or propose the repurchase of such shares by the Issuer.

(2) After the expiration of the said share lock-up period, during the period of being the director, supervisor or senior executive of the Issuer, the shares of the Issuer transferred by me each year shall not exceed 25% of the total shares of the Issuer held by me. If I leave office for any reason, within six months thereafter, I will not transfer the shares of the Issuer held by me. If I leave office before the expiration of my term of office, I will continue to comply with the aforesaid reduction requirements within the remaining portion of my term of office determined at the time of taking office and within 6 months after the expiration of my term of office.

(3) I will strictly abide by the relevant provisions on the shareholding and share change of directors, supervisors and senior executives of the Issuers under laws, administrative regulations, departmental rules and normative documents, and truthfully and timely report to the Issuer on the shares of the Issuer held by me and their changes. I will not refuse to perform the above commitments due to position change, resignation and other reasons.

(4) If I violate the above commitments to reduce my shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer, and all losses and legal consequences arising therefrom shall be borne by me.

6. Commitments from QIAN DONG, a Supervisor of the Company

(1) Within 12 months from the listing date of the Issuer's shares, I will not transfer or entrust another person to manage the shares of the Issuer held by me directly or indirectly through Xinwei (Shanghai) Management Consulting Partnership (L.P.) before the IPO, or propose the repurchase of such shares by the Issuer.

(2) If the Issuer, upon the occurrence of any of the material law-breaking circumstances specified in Section 2, Chapter XII of the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange*, triggers the delisting criteria, I will not reduce my shareholdings in the Issuer during the period from the date of a relevant administrative penalty decision or judicial decision to the termination of listing of the Issuers' shares.

(3) After the expiration of the said share lock-up period, during the period of being the supervisor of the Issuer, and subject to the fulfillment of the share lock-up commitment, the shares of the Issuer transferred by me each year shall not exceed 25% of the total shares of the Issuer held by me. If I leave office for any reason, within six months thereafter, I will not transfer or entrust another person to manage the shares of the Issuer held by me. If I leave office before the expiration of my term of office, I will continue to comply with the aforesaid reduction requirements within the remaining portion of my term of office determined at the time of taking office and within 6 months after the expiration of my term of office.

(4) During the period of being the supervisor of the Issuer, I will strictly abide by the relevant provisions on the shareholding and share change of the supervisor of the Issuers under laws, administrative regulations, departmental rules and normative documents, fulfill my obligations as a supervisor in a standardized and honest way, and truthfully and timely report to the Issuer on the shares of the Issuer directly or indirectly held by me and their changes. I will not refuse to perform the above commitments due to position change, resignation and other reasons.

(5) If I violate the above commitments to reduce my shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer.

7. Commitments from each of the Company's Key Technicians

(1) Within 12 months from the listing date of the Issuer's shares and during the 6 months upon my resignation, I will not transfer or entrust another person to manage the shares of the Issuer held by me directly or indirectly through Xinshi (Shanghai) Management Consulting Partnership (L.P.) before the IPO ("Pre-IPO Shares"), or propose the repurchase of such shares by the Issuer. If I leave office before the expiration of the said lock-up period, I will still comply with the aforesaid commitments on share lock-up.

(2) The Pre-IPO Shares I transfer each year during the 4 years upon the expiration of the lock-up period for the Pre-IPO Shares held by me shall not exceed 25% of the total Pre-IPO Shares held by me when the Issuer was listed, and such percentage may be applied on a cumulative basis.

(3) During the term when I acts as a key technician of the Issuer, I will strictly abide by the relevant provisions on the shareholding and share change of key technicians under laws, administrative regulations, departmental rules and normative documents. I agree to assume and compensate for all such losses as may be caused to the Issuer and its controlled companies as a result of my breach of the above commitment.

(4) During my shareholding period, if the laws, administrative regulations, departmental regulations, normative documents and requirements of securities regulatory authorities for locking up and reducing shares change, I am willing to automatically apply the changed laws, regulations, departmental regulations, normative documents and requirements of securities regulatory authorities.

(5) If I violate the above commitments to reduce my shareholdings in the Issuer, the actual proceeds (if any) from such reduction shall be owned by the Issuer, and all losses and legal consequences arising therefrom shall be borne by me.

(II) Letter of commitment on intention to maintain/reduce shares

1. Commitments from ACMR as the Company's Controlling Shareholder, HUI WANG as the De Facto Controller as well as His Persons Acting in Concert JING CHEN, BRIAN WANG, SOPHIA WANG and Family Trusts David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust

(1) Upon expiration of the lock-up period for shares held in the Company, we/I shall decide whether to reduce shares and the amount of shares to be reduced according to the actual needs and the secondary market conditions.

(2) If we/I intend to reduce our/my shares held in the Company that were issued before the IPO ("Pre-IPO Shares"), we/I will strictly abide by the relevant provisions of the CSRC and the Shanghai Stock Exchange on shareholding reduction, carefully formulate the shareholding reduction plan, and confirm and disclose the arrangement for the control of the Company in advance, so as to ensure the Company's continuous and stable operation. Where we/I intend to reduce our/my shareholding within two years after the expiration of the lock-up period for shares held in the Company, the price at which the shares are to be reduced shall not be lower than the issue price at the time of the Company's IPO (if the Company pays dividends, gives bonus shares, capitalizes capital reserve, issues new shares or proceeds with other ex-right and ex-dividend matters, the price of reduced shares will be adjusted as per the regulatory provisions), and we/I shall make the announcement through the Company within three trading days before the reduction or within the time limit stipulated by relevant laws and regulations, as well as disclose in the relevant information disclosure documents the reasons for the reduction, the amount to be reduced, the future shareholding intention and the impact of the reduction on the Company's governance structure, equity structure and going concern.

(3) We/I will, in case of reducing the Pre-IPO Shares after the expiration of the lock-up period, strictly comply with the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China* and other applicable laws, administrative regulations, departmental rules, normative documents and relevant regulatory provisions on shareholding reduction and information disclosure for the way and procedures of reduction.

(III) Plan and restraint measures to stabilize the Company's stock price within three years after listing

1. Plan of the Issuer to Stabilize Stock Price

The Company has prepared the *Proposal on the Plan to Stabilize Stock Price within Three Years after Initial Public Offering and Listing on the STAR Market* upon deliberation and approval by the second extraordinary meeting of general shareholders dated 15 May, 2020. The Company, its controlling shareholder, de facto controllers as well as those directors (other than any independent director) and senior executives who receive salaries and/or allowances from the Company undertake to strictly comply with the following Plan to Stabilize Stock Price:

(1) Conditions for Starting/Stopping Stock Price Stabilization Measures

①Starting conditions: If, for 20 consecutive trading days within three years after its IPO and listing on the STAR Market, the daily closing price of the Company's shares is less than the audited value of net asset per share of the Company for the previous fiscal year (value of the net asset per share = total equity attributable to ordinary shareholders of the parent company in the consolidated financial statements/total number of shares of the Company at the end of the year; if the net assets of the Company or the total number of its shares varies due to dividend distribution, issue of bonus stocks, capitalization of capital reserve, issue of new shares and other ex-rights and ex-dividend matters in respect of the Company's shares or due to other reasons, the relevant calculation and comparison methods shall be adjusted in accordance with the relevant provisions of the stock exchange or other applicable provisions, the same below), the Company will take one or more of the following measures in sequence to stabilize the Company's stock price: A. the Company repurchases its shares; B. the controlling shareholder increases its shareholdings; and/or C. directors and senior executives increase their shareholdings.

②Stopping conditions: During the implementation period of the specific measures to stabilize the stock price, if the daily closing price of the Company's shares is higher than the audited value of net asset per share of the Company for the previous fiscal year for 20 consecutive trading days, or if the continued repurchase and/or shareholding increase will make the Company ineligible for listing in terms of its equity distribution, the stock price stabilization measures will be stopped.

(2) Specific Measures to Stabilize Stock Price

①Measures Taken by the Company to Stabilize Stock Price

When the starting conditions for the above stock price stabilization measures are triggered, on the premise of ensuring that the Company's equity distribution complies with the listing conditions and does not affect its normal production and operation, the Company shall timely perform relevant legal procedures and repurchase shares from public shareholders pursuant to the provisions of the *Company Law of the People's Republic of China*, the *Measures on the Administration of Listed Companies' Repurchase of the Shares Held by the Public (for Trial Implementation)*, the *Supplementary Provisions on the Share Repurchase by Listed Companies by Means of Centralized Bidding* and other relevant laws, administrative regulations, departmental rules, normative documents, relevant stock exchange rules, the Articles of Association and the internal corporate governance system of the Company.

The Company shall, within 10 trading days from the date when the measures to stabilize the stock price are triggered, convene a board meeting to deliberate the Company's share repurchase proposal, which shall be approved by a majority vote of all the directors of the Board of Directors. Moreover, the Company shall, within 2 trading days after the resolution of the Board of Directors, announce the board resolution, the relevant proposal and the notice on convening the general meeting of shareholders. The share repurchase proposal shall include the price or price range of the shares to be repurchased, the number of shares, the duration of the repurchase, and other information that shall be included under the laws, administrative regulations, departmental rules, normative documents and relevant stock exchange rules then in effect. The resolution of the Company's general meeting of shareholders on the share repurchase proposal shall be approved by no less than two-thirds of the voting rights held by the shareholders present at the general meeting, and the controlling shareholder of the Company shall undertake to vote in favor of such repurchase at the general meeting. The Company shall initiate the implementation of the specific scheme to stabilize the stock price within 5 trading days after the proposal is approved by the general meeting of shareholders. The repurchased shares will be canceled in accordance with the law and the Company will promptly go through the procedures for capital reduction.

Where the Company adopts a share repurchase proposal for the purpose of stabilizing the stock price, the number and amount of shares repurchased shall meet the following conditions:

A. The amount of funds used to repurchase the shares on a single occasion shall be no less than 10% but no more than 20% of the audited net profits attributable to the Company's shareholders for the previous fiscal year;

B. The total repurchase funds used to stabilize the stock price for the same fiscal year shall not exceed 50% of the audited net profits attributable to the shareholders of the Company for the previous fiscal year.

If the above criteria are exceeded, the relevant measures to stabilize the stock price will no longer be implemented in the current year. However, the Company will continue to implement the Plan to Stabilize Stock Price in accordance with the above principles in the event that the stock price stabilization measures need to be started in the following year.

② Measures Taken by Controlling Shareholder to Stabilize Stock Price

When the daily closing price of the Company's shares is lower than the audited value of net asset per share for the previous fiscal year for 20 consecutive trading days after expiration of the implementation period of the Company's share repurchase plan, or when it is impossible to implement the stock price stabilization measures by way of the Company's share repurchase, the controlling shareholder of the Company shall initiate the plan to increase its shareholdings in the Company through competitive bidding in the secondary market:

A. Subject to the conditions and requirements set forth in the *Measures for the Administration of the Takeover of Listed Companies*, the *Rules Governing the Listing of Stocks on the STAR Market of Shanghai Stock Exchange* and other relevant laws, administrative regulations, departmental rules, normative documents and relevant stock exchange rules, the controlling shareholder of the Company shall increase its holdings of the Company's shares and shall undertake to vote in favor of the Company's stock price stabilization plan at the general meeting of shareholders with all the votes it has.

B. The controlling shareholder shall, within 10 trading days from the date of triggering the stock price stabilization measures, notify the Company in writing of the specific plan to increase its shareholdings in the Company, which shall be announced by the Company. The controlling shareholder shall initiate the implementation of the specific plan to stabilize the stock price within 5 trading days after the announcement of the plan.

C. Where the controlling shareholder of the Company increases its shareholdings in the Company for the purpose of stabilizing the stock price, the number and amount of the shares purchased shall meet the following conditions:

a. The cumulative amount of funds used by the controlling shareholder to increase its shareholdings in the Company within a period of 12 consecutive months shall be no less than 30% but no more than the total amount of after-tax cash dividend received by the controlling shareholder from the Company for the previous year; and

b. The cumulative number of shares purchased by the controlling shareholder within a period of 12 consecutive months shall not exceed 2% of the total shares in the Company. If the requirement in sub-paragraph b contradicts that in sub-paragraph a, the former shall prevail.

If the above criteria are exceeded, the relevant measures to stabilize the stock price will no longer be implemented in the current year. However, the controlling shareholder will continue to implement the Plan to Stabilize Stock Price in accordance with the above principles in the event that the stock price stabilization measures need to be started in the following year.

③ Measures Taken by Directors and Senior Executives to Stabilize Stock Price

When the Company starts the stock price stabilization measures and the daily closing price of the Company's shares is lower than the audited value of net asset per share for the previous fiscal year for 20 consecutive trading days after expiration of implementation period of the controlling shareholder's shareholding increase plan, or when it is impossible to implement the stock price stabilization measures by way of the controlling shareholder's shareholding increase, the directors and senior executives of the Company shall initiate the plan to increase their shareholdings in the Company through competitive bidding in the secondary market:

A. Subject to the conditions and requirements set forth in the *Measures for the Administration of the Takeover of Listed Companies*, the *Rules on the Management of Shares Held by the Directors, Supervisors and Senior Executives of Listed Companies and the Changes Thereof* and other relevant laws, administrative regulations, departmental rules, normative documents and relevant stock exchange rules, the directors and senior executives shall increase their shareholdings in the Company and undertake, in their capacity as directors (if any), to vote in favor of the Company's stock price stabilization plan at the meeting of the board of directors.

B. The above-mentioned directors and senior executives with the obligation to increase their shareholdings shall, within 10 trading days from the date of triggering the stock price stabilization measures, notify the Company in writing of the specific plan to increase their shareholdings in the Company, which shall be announced by the Company. Such directors and senior executives shall initiate the implementation of the specific plan to stabilize the stock price within 5 trading days after the announcement of the plan.

C. Where the above-mentioned directors and senior executives increase their shareholdings in the Company for the purpose of stabilizing the stock price, except for force majeure, the number and amount of the shares purchased shall meet the following conditions:

Within one fiscal year from the date upon the satisfaction of the starting conditions for the above stock price stabilization measures, the funds used by any of the directors and senior executives to increase its shareholdings in the Company shall be no less than 10% but no more than 30% of the sum of after-tax cash dividends (if any), salaries and allowances received by it from the Company for the previous year.

If the above criteria are exceeded, the relevant measures to stabilize the stock price will no longer be implemented in the current year. However, they will continue to implement the Plan to Stabilize Stock Price in accordance with the above principles in the event that the stock price stabilization measures need to be started in the following year.

D. During the term of the *Plan to Stabilize Stock Price*, newly appointed directors and senior executives who meet the above conditions shall abide by the provisions of the *Plan to Stabilize Stock Price* on the obligations and responsibilities of the directors and senior executives of the Company. The Company and its controlling shareholder, existing directors and senior executives shall procure that the newly appointed directors and senior executives will abide by the *Plan to Stabilize Stock Price* and enter into the relevant undertakings before they are nominated in writing.

④ Other Measures to Stabilize Stock Price

A. Subject to the laws, administrative regulations, departmental rules, normative documents and relevant stock exchange rules and on the premise that the capital meets the Company's operation demand, the Company may stabilize its stock price by making profit distribution or capitalizing capital reserve upon the deliberation and approval by the Board of Directors and the general meeting of shareholders;

B. Subject to laws, administrative regulations, departmental rules, normative documents and relevant stock exchange rules, the Company may improve its performance and stabilize its stock price by cutting expenses, restricting the salaries of senior executives, and suspending implementation of the equity incentive plan; and

C. Other stock price stabilization measures prescribed by the laws, administrative regulations, departmental rules and normative documents, as well as those approved by the CSRC and relevant stock exchange.

2. Restraint Measures

(1) Restraint Measures in Case of the Company's Failure to Fulfill Stock Price Stabilization Commitment

If the Company fails to fulfill its commitments to stabilize the stock price or fails to fulfill the said commitments as scheduled, it shall publicly explain the specific reasons at the general meeting of shareholders and the disclosure media designated by the CSRC. If such failure is not caused by force majeure and results in losses to the investors, the Company shall be liable to compensate the investors according to law, and shall bear the corresponding liabilities as provided by the laws, administrative regulations and as required by relevant regulatory authorities; if such failure is caused by force majeure, the Company shall work out the solution to minimize the losses of investors' interests, and submit it to the general meeting of shareholders for consideration so as to protect the interests of the investors as much as possible.

(2) Restraint Measures in Case of the Controlling Shareholder's Failure to Fulfill Stock Price Stabilization Undertakings

If the controlling shareholder fails to fulfill its commitments to stabilize the stock price or fails to fulfill the commitments as scheduled, the controlling shareholder shall publicly explain the specific reasons at the general meeting of shareholders and the disclosure media designated by the CSRC. If such failure is not caused by force majeure, the controlling shareholder shall agree not to receive the portion of the Company's distributed profits attributable to the controlling shareholder until the relevant commitments have been fulfilled, and agree to compensate the investors for the losses according to laws; if such failure is caused by force majeure, the controlling shareholder shall work out the solution to minimize the losses of investors' interests so as to protect their interests as much as possible.

(3) Restraint Measures in Case of the Directors' and Senior Executives' Failure to Fulfill Stock Price Stabilization Undertakings

If the foregoing directors and senior executives with the obligation to increase their shareholdings fail to fulfill their commitments to stabilize the stock price or fails to fulfill the commitments as scheduled, they shall publicly explain the specific reasons at the general meeting of shareholders and the disclosure media designated by the CSRC. If such failure is not caused by force majeure, the salaries and/or allowances of directors and senior executives shall be reduced or suspended, and if losses are caused to the investors, they shall compensate the investors according to laws; if such failure is caused by force majeure, they shall work out the solution to minimize the losses of investors' interests so as to protect their interests as much as possible.

(IV) Commitments on repurchase of shares in case of fraudulent offering and listing

The Company, its controlling shareholder and the de facto controller make the following commitments:

1. There is no fraud in the IPO of the Company.

2. If the Company is ineligible for the IPO but manages to obtain issuance registration and complete the IPO by fraud, the Company and its controlling shareholder/de facto controller will, within 5 working days from date when a determination of fraudulent offering and listing is made by the CSRC and other competent authorities, start the stock repurchase procedure to buy back all the new shares issued by the Company in the IPO; If there is a placement of old shares, the shareholders implementing the placement will buy back the original restricted shares transferred (if any).

(V) Measures and commitments on compensation of diluted immediate returns

1. Commitments from the Company

The Company undertakes to take various measures to prevent the risk of dilution of immediate returns, specifically:

(1) Rapidly enhancing the Company's overall strength, and expanding the Company's business scale

Upon this IPO, the Company's total assets will be further increased, and its anti-risk ability, comprehensive strength as well as market value will be significantly improved. By making use of the capital market and good development opportunities, the Company will continue to expand the main business scale, and give full play to its advantages in the field of semiconductor equipment for its sustainable, healthy and stable development.

(2) Strengthening internal management and reducing operating cost

The Company will actively promote the optimization of product process, improvement of technical process, and transformation and upgrading of technical equipment, and strengthen fine management to continuously improve its production and operation efficiency, and reduce its production losses. At the same time, the Company will strengthen budget management and control its expense ratio to improve its profitability.

(3) Speeding up implementation of the fund-raising investment projects and improving the management of funds raised

The funds raised herein will be used for investments focusing on the Company's main business, which is conducive to the improvement of the Company's comprehensive competitiveness and profitability. After the funds are successfully raised, the Company will accelerate implementation of the relevant investment projects to obtain the expected return as soon as possible. Meanwhile, the Company will, according to the requirements in the *Articles of Association of ACM Research (Shanghai) Inc. (Draft)*, the *Rules for Management of Funds Raised by ACM Research (Shanghai) Inc.* and other relevant regulations, strengthen the management of funds raised and regulate the use thereof to ensure that the funds are used as intended for earnings.

(4) Improving profit distribution policies and increasing returns to investors

In order to define the dividend return to the Company's shareholders based on equities, the Company has, in the light of its factual situation, further refined the provisions on the dividend distribution principles in the *Articles of Association of ACM Research (Shanghai) Inc. (Draft)*, and established the *Plan for Dividend Return in the Three Years Following Listing of ACM Research (Shanghai), Inc.* in accordance with the requirements of relevant regulations, including, among others, the *Notice of the CSRC on the Implementation of Related Matters Concerning Cash Dividends by Listed Companies*, and the *Guidelines No. 3 on the Supervision and Administration of Listed Companies - Distribution of Cash Dividends of Listed Companies*. The Company will implement the profit distribution policy in a strict manner, actively make profit distributions to the shareholders if the conditions for distribution are satisfied, and optimize the investment return mechanism.

2. Commitments from AMCR Acting as the Controlling Shareholder of the Company

As the controlling shareholder of the Issuer, we hereby make the following commitments with respect to the compensation for diluted immediate returns, in accordance with relevant laws, regulations and the relevant provisions of the CSRC:

We will urge the Issuer to effectively fulfill the measures to compensate the diluted immediate returns, and undertake that: we or the directors nominated by us shall participate in the operation and management activities of the Issuer within the authority and shall make every effort to safeguard the legitimate interests of the Issuer and its shareholders.

3. Commitments from the Company's Directors and Seniors Executives

I, as the director/senior executive of the Issuer, hereby make the following commitments on the compensation for diluted immediate returns in accordance with the relevant laws, administrative regulations and the relevant provisions of the CSRC:

(1) I will not transfer benefits to any other units or individuals for free or on the unfair conditions, nor harm the Issuer's interests in any other forms.

(2) I will restrict my behavior of duty-related consumption.

(3) I will not use the assets of the Issuer to engage in investment and consumption activities unrelated to my duties.

(4) I will do my best to procure that the compensation system prepared by the Company's board of directors or remuneration and appraisal committee is related to the implementation of measures for compensation for diluted immediate returns by the Company.

(5) If the Issuer intends to implement the equity incentives, I will do my best to the extent of my own duties and authorities to procure that the conditions for exercise of equity incentives to be published by the Issuer are related to the implementation of measures for compensation for diluted immediate returns by the Issuer.

(6) I will effectively fulfill my commitments on measures for compensation for diluted immediate returns. If I violate the commitment, causing losses to the Issuer or investors, I am willing to be liable for compensation according to laws.

(VI) Commitments on profit distribution policy

Please refer to Article II. (I) Dividend Distribution Policy After the Offering hereof for details.

(VII) Commitments on making or bearing liability for compensation**1. Commitments from the Company**

(1) There are no misrepresentations, misleading statements or major omissions in the [***] and other information disclosure materials concerning the Company's IPO, and the Company will be severally and jointly liable for the authenticity, accuracy and completeness thereof.

(2) If there are misrepresentations, misleading statements or major omissions in the [***] and other information disclosure materials, thus causing investors to suffer losses in the issuance and trading of securities, the Company will compensate investors for such losses according to law after the China Securities Regulatory Commission (the "CSRC"), Shanghai Stock Exchange or any other competent authority makes final determination thereon.

(3) if there is any misrepresentation, misleading statement or material omission in the [***] as determined by China Securities Regulatory Commission (the "CSRC"), Shanghai Stock Exchange or other competent authorities, which has a significant and substantive impact on the judgment as to whether the Issuer has met the issuance conditions prescribed by law, the Company promises to legally repurchase all its new shares of initial public offering subject to the following methods:

①To the extent permitted by laws, if the said circumstance occurs during the period after the Company completes the initial public offering of new shares but before such shares are listed, the Company will, within 30 days from the date when the CSRC, Shanghai Stock Exchange or any other competent authority determines that the Company is under the said circumstance, repurchase all its new shares of initial public offering from online lot winning investors and offline investors at the issue price plus the interest calculated on the price using the bank deposit interest rate for the corresponding period;

②To the extent permitted by laws, if the said circumstance occurs after the Company completes the listing of new shares of initial public offering, the Company will, within 5 days from the date when CSRC, Shanghai Stock Exchange or any other competent authority determines that the Company is under the said circumstance, prepare the share repurchase plan and submit it to the board of directors and the general meeting of shareholders for deliberation and approval and thereafter, repurchase all its new shares of initial public offering through the trading system of Shanghai Stock Exchange at the repurchase price to be based on the issue price and determined with reference to relevant market factors. If the Company has paid dividends, given bonus shares, capitalized capital reserve or had other ex-right and ex-dividend matters after the IPO, the said issue price will be adjusted accordingly.

(4) If the Company fails to timely make repurchase or compensate the investors for losses in violation of its commitments, it will publicly explain the specific reasons for nonfulfillment at the general meeting of shareholders and the disclosure media designated by the CSRC; if the shareholders and public investors suffer losses due to its nonfulfillment of commitments, the Company will compensate them for such losses according to laws.

2. Commitments from ACMR Acting as the Controlling Shareholder of the Company

(1) There are no misrepresentations, misleading statements or major omissions in the [***] and other information disclosure materials provided by the Issuer in connection with the IPO, and we will be severally and jointly liable for the authenticity, accuracy and completeness thereof.

(2) We undertake that, if there is any misrepresentation, misleading statement or material omission in the [***] as determined by China Securities Regulatory Commission (the "CSRC"), Shanghai Stock Exchange or other competent authorities, which has a significant and substantive impact on the judgment as to whether the Issuer has met the issuance conditions prescribed by law, we will repurchase all the original restricted shares that have been transferred (if any) in accordance with the *Company Law of the People's Republic of China* and the *Securities Law of the People's Republic of China*.

(3) If any misrepresentation, misleading statement or material omission is contained in the Issuer's [***] or other information disclosures, thus causing investors to suffer losses in the issuance and trading of securities, we will compensate for the losses suffered by the investors according to law.

3. Commitments from HUI WANG Acting as the De Facto Controller of the Company

(1) There are no misrepresentations, misleading statements or major omissions in the [***] and other information disclosures provided by the Issuer in connection with the IPO, and I will be severally and jointly liable for the authenticity, accuracy and completeness thereof.

(2) If there is any misrepresentation, misleading statement or material omission in the [***] as determined by China Securities Regulatory Commission (the "CSRC"), Shanghai Stock Exchange or other competent authorities, which has a significant and substantive impact on the judgment as to whether the Issuer has met the issuance conditions prescribed by law, I will repurchase all the original restricted shares that have been transferred (if any) in accordance with the *Company Law of the People's Republic of China* and the *Securities Law of the People's Republic of China*.

(3) If there are misrepresentations, misleading statements or major omissions in the [***] and other information disclosures of the Issuer, thus causing investors to suffer losses in the issuance and trading of securities, I will compensate the investors for such losses according to laws.

4. Commitments from Each of Company's Directors, Supervisors and Senior Executives

(1) There are no misrepresentations, misleading statements or major omissions in the [***] and other information disclosures provided by the Issuer in connection with the IPO, and I will be severally and jointly liable for the authenticity, accuracy and completeness thereof.

(2) If there is any misrepresentation, misleading statement or major omission in the [***] and other information disclosures of the Issuer, thus causing investors to suffer losses in the issuance and trading of securities, I will compensate the investors for such losses according to laws.

(3) I am willing to bear all legal liabilities arising from breach of the above commitment, which will remain unchanged regardless of my position change or resignation.

5. Commitments from [*] Acting as the Company's Sponsor and Lead Underwriter**

"We undertake that, if there is any misrepresentation, misleading statement or major omission in the documents made or issued by us concerning the Issuer's IPO, thus causing losses to investors, we will compensate the investors for such losses according to laws."

6. Commitments from King & Wood Mallesons Acting as the Company's Lawyer

"We solemnly undertake that:

If there is any misrepresentation, misleading statement or major omission in the documents made or issued by us concerning the IPO of ACMSH, thus causing losses to investors, we will compensate the investors for the losses resulting therefrom according to laws after the same are determined by effective judgments of judicial authorities.

The qualifications of investors entitled to compensation, the standards for calculating losses, the division of liabilities among indemnitors and the exemption from liability, etc. shall be determined in accordance with the provisions of the *Securities Law*, *Some Provisions of the Supreme People's Court on Trying Cases of Civil Compensation Arising from False Statement in Securities Market* (Interpretation No. 2 [2003] of the Supreme People's Court) and other relevant laws and regulations, as amended from time to time.

We will strictly bear such compensation liability as determined by the effective judicial documents and accept social supervision to ensure that the legitimate rights and interests of investors are effectively protected."

7. Commitments from BDO China SHU LUN PAN Certified Public Accountants LLP Acting as the Company's Audit Agency

"If it is established that there is any misrepresentation, misleading statement or major omission in the documents made and issued by us for the Issuer's IPO and listing, resulting in losses to investors, we will compensate the investors for the losses according to law."

8. Commitments from China United Assets Appraisal Group Co., Ltd. Acting as the Company's Asset Appraisal Agency

"Our company and the handlers undertake that: the conclusions of the asset appraisal report issued for reference in the application documents for ACMSH's IPO and listing on the STAR Market are authentic, accurate and complete without misrepresentation, misleading statement or major omission. We will assume corresponding legal liability as to the authenticity, accuracy and completeness thereof."

(VIII) Commitments on restraint measures for non-fulfillment

1. Commitments from the Company

(1) The Company will strictly fulfill all the obligations and responsibilities under all public commitments disclosed in the IPO [***] of the Company.

(2) If the Company fails to fulfill its public commitments due to reasons other than force majeure, it shall make new commitments (which shall be subject to the relevant approval procedures in accordance with laws, regulations and Articles of Association of the Company) and accept the following restrain measures, until the new commitments are fulfilled or the corresponding remedial measures are completed:

① The Company will publicly explain the specific reasons for non-fulfillment of its commitments at the general meeting of shareholders and the disclosure media designated by the China Securities Regulatory Commission (the "CSRC");

② The Company will reduce or suspend paying remunerations and/or allowances of any director, supervisor, senior executive and key technician who shall be personally liable for the said non-fulfillment;

③ The Company will make supplementary or substituted commitments to the investors to protect their rights and interests as much as possible and agree to submit the said supplementary or substituted commitments to the general meeting of shareholders for deliberation;

④ If the investors suffer losses due to the non-fulfillment of the relevant commitments, the Company will compensate investors for such losses according to laws. If it is available to continue the fulfillment of the said commitments violated, the Company will continue to fulfill.

(3) If the Company fails to fulfill the public commitments due to force majeure, it will make new commitments (which shall be subject to the relevant approval procedures in accordance with laws, regulations and Articles of Association of the Company) and accept the following restrain measures, until the new commitments are fulfilled or the corresponding remedial measures are completed:

① The Company will publicly explain the specific reasons for non-fulfillment at the general meeting of shareholders and the disclosure media designated by the CSRC;

② The Company will work out the solution as soon possible to minimize the loss of investors' interests and protect investors' interests to the fullest possible extent.

2. Commitments from the Company's Controlling Shareholder and De Facto Controller as well as His Persons Acting in Concert JING CHEN, BRIAN WANG, SOPHIA WANG and Family Trusts David Hui Wang & Jing Chen Family Living Trust and David Hui Wang & Jing Chen Irrevocable Trust

(1) We/I will strictly fulfill all the obligations and responsibilities in all public commitments disclosed in the IPO [***] of the Issuer.

(2) If we/I fail to fully or effectively fulfill our public commitments due to reasons other than force majeure, we/I will undertake to take the following restraint measures as appropriate:

① We/I will publicly explain the specific reasons for non-fulfillment of our commitments at the general meeting of shareholders and the disclosure media designated by the China Securities Regulatory Commission (the “CSRC”);

② If the investors suffer losses in securities trading due to the non-fulfillment of our/my public commitments, we/I will compensate for such losses according to laws;

③ We/I will not receive the dividends or bonus shares distributed by the Issuer until we/I completely eliminate all adverse effects caused by our/my non-fulfillment of the relevant commitments;

④ If we/I receive financial gains due to our/my non-fulfillment/fulfill of the public commitments, such gains shall belong to the Issuer, and we/I will pay such gains to the account designated by the Issuer within five working days from the date of receipt of such gains.

(3) If we/I fail to fulfill the public commitments due to force majeure, we shall make new commitments (which shall be subject to the relevant approval procedures in accordance with laws, regulations and Articles of Association of the Issuer) and accept the following restraint measures, until the new commitments are fulfilled or the corresponding remedial measures are completed:

① We/I will publicly explain the specific reasons for non-fulfillment at the general meeting of shareholders and the disclosure media designated by the CSRC;

② We/I will work out the solution to minimize the loss of investors’ interests to protect investors’ interests to the fullest possible extent.

3. Commitments from Each of the Company’s Directors, Supervisors, Senior Executives and Key Technicians

(1) I will strictly fulfill all the obligations and responsibilities under all public commitments disclosed in the IPO [***] of the Issuer.

(2) If I fail to fully or effectively fulfill my public commitments due to reasons other than force majeure, I will undertake to take the following restraint measures as appropriate:

① I will publicly explain the specific reasons for non-fulfillment of my commitments at the general meeting of shareholders and the disclosure media designated by the China Securities Regulatory Commission (the “CSRC”);

② If the investors suffer losses in the securities trading due to my non-fulfillment of public commitments, I will voluntarily compensate the investors for such losses in advance according to laws using all my remunerations and/or allowances (if any) received from the Issuer for the year when the Issuer gets listed, and I will not request the Issuer to increase salaries or allowances for me in any form until I completely eliminate all adverse effects caused by my non-fulfillment of relevant commitments;

③ I will not receive the dividends or bonus shares distributed by the Issuer (if applicable) until I completely eliminate all adverse effects caused by my non-fulfillment of relevant commitments;

④ If I receive financial gains due to my non-fulfillment of public commitments, such gains shall belong to the Issuer, and I will pay such gains to the account designated by the Issuer within five working days from the date of receipt of such gains.

(3) If I fail to fulfill the public commitments due to force majeure, I will make new commitments (which shall be subject to the relevant approval procedures in accordance with laws, regulations and Articles of Association of the Company) and accept the following restraint measures, until the new commitments are fulfilled or the corresponding remedial measures are completed:

① I will publicly explain the specific reasons for non-fulfillment and apologize to shareholders and public investors at the general meeting of shareholders and the disclosure media designated by the CSRC;

②I will work out the solution as soon as possible to minimize the loss of investors’ interests and protect investors’ interests to the fullest possible extent.

(IX) Other commitments

1. Commitments on Avoidance of Horizontal Competition

Please refer to “VIII(II) Commitments on Avoidance of Horizontal Competition, Section VII Corporate Governance and Independence” hereof for details.

2. Commitments on Regulating and Reducing Related Transactions

Please refer to “X(VI) Commitments on Regulating Related Transactions, Section VII Corporate Governance and Independence” hereof for details.

Section XI Other Important Matters

I. Material Contracts

Based on its own business characteristics and financial condition, the Company has established the criteria whereby a contract is defined as a material one if it has a price of over RMB 10 million Yuan (continuous contracts with the same counter-party in a same fiscal year of the same substance or nature shall be counted as a whole on an cumulative basis).

(I) Purchase contracts

The Company mainly makes purchases using orders on a deal-by-deal basis, a single order having a small price while the number of orders being large. Though the Company has entered into frame contracts with partial customers, the formal transactions are still contracted in the form of order. As of June 30, 2021, the completed and ongoing material purchase frame contracts of the Company are as follows:

S/N	Name of Supplier	Purchased Product	Contract Term	Degree of Performance
1	NINEBELL	Material transforming products	Non-fixed term from January 1, 2017	Ongoing
2	DOUBLE MERITS HOLDINGS LIMITED	Gas circuit and special equipment products, etc.	Non-fixed term from January 1, 2019	Ongoing
3	Nomura Micro Science Co., Ltd.	Special equipment products	Non-fixed term from January 1, 2017	Ongoing
4	SAS Technology Limited	Gas circuit products	Non-fixed term from January 1, 2017	Ongoing
5	ACMR	Electrical, machinery, gas circuit, drive, special equipment, materials transforming and other products	Non-fixed term from January 1, 2017	Completed
6	Tokyo Keiso (Beijing) Instrument Co., Ltd.	Gas circuit products, etc.	Non-fixed term from January 1, 2017	Ongoing
7	Fujikin of China Incorporated	Gas circuit and special equipment products, etc.	Non-fixed term from January 1, 2018	Ongoing
8	Shanghai Molan Electromechanical Equipment Co., Ltd.	Electrical products, etc.	Non-fixed term from January 1, 2018	Ongoing
9	Goodwill Precision Machinery (SuZhou) Co., Ltd	Machinery and gas circuit products, etc.	Non-fixed term from January 1, 2018	Ongoing
10	Wuxi PSK Technology Co., Ltd.	Machinery products, etc.	Non-fixed term from January 1, 2018	Ongoing
11	MKS Instruments (HK) Company Ltd.	Gas circuit and special equipment products, etc.	Non-fixed term from November 15, 2019	Ongoing

12	Entegris (Shanghai) Microelectronics Trading Co., Ltd.	Machinery, gas circuit and electrical products, etc.	Non-fixed term from January 5, 2017	Ongoing
13	Shanghai Chuanzhimeng Automation Equipment Co., Ltd.	Machinery, gas circuit, special equipment and electrical products, etc.	Non-fixed term from March 16, 2020	Ongoing
14	KBF Technology (Shanghai) Co., Ltd.	Machinery and gas circuit products, etc.	Non-fixed term from March 18, 2020	Ongoing
15	Shanghai Oriental Motor Co., Ltd.	Drive and electrical products, etc.	Non-fixed term from March 17, 2020	Ongoing
16	Horiba (China) Trading Co., Ltd.	Electrical, gas circuit and special equipment products, etc.	From March 26, 2020 to March 26, 2022	Ongoing
17	Shengyi Technology	Machinery, electrical, gas circuit, special equipment and materials transforming products, etc.	Non-fixed term from October 20, 2020	Ongoing
18	Yixun Automobile Equipment (Shanghai) Co., Ltd.	Machinery products, etc.	Non-fixed term from March 17, 2020	Ongoing
19	Art Precision Machinery (Suzhou) Co., Ltd.	Machinery, gas circuit and drive products, etc.	Non-fixed term from March 18, 2020	Ongoing
20	Heyan Electronic Technology (Shanghai) Co., Ltd.	Machinery, gas circuit, and special equipment products, etc.	Non-fixed term from October 20, 2020	Ongoing
21	Zhihui Precision Plastics (Shanghai) Co., Ltd.	Machinery products	Non-fixed term from March 16, 2020	Ongoing
22	Shanghai Etong Automation Equipment Co., Ltd.	Drive, electrical and materials transforming products, etc.	Non-fixed term from March 17, 2020	Ongoing
23	Shanghai Hongji Electronic Technology Co., Ltd.	Machinery, drive, electrical and gas circuit products, etc.	Non-fixed term from October 20, 2020	Ongoing
24	Nichias (SHANGHAI) Trading Co., Ltd.	Machinery and gas circuit products, etc.	Non-fixed term from October 20, 2020	Ongoing

25	MOTION ELECTRONICS CO., LIMITED	Machinery and gas circuit products, etc.	Non-fixed term from March 16, 2020	Ongoing
26	Beijing Kunlun Jincheng Technology Development Co., Ltd.	Gas circuit, electrical and special equipment products, etc.	Non-fixed term from March 17, 2020	Ongoing
27	Pall Filter (Beijing) Co., Ltd.	Gas circuit products, etc.	Non-fixed term from March 18, 2020	Ongoing
28	Suzhou Gemasun Machinery Equipment Co., Ltd.	Machinery products	Non-fixed term from March 16, 2020	Ongoing
29	Shanghai Hexiang Precision Machinery Co., Ltd.	Machinery products	Non-fixed term from March 17, 2020	Ongoing
30	Beijing Reje Automation Co., Ltd.	Gas circuit and materials transforming products, etc.	Non-fixed term from March 17, 2020	Ongoing
31	Suzhou Tomake Mechanical and Electrical Equipment Co., Ltd.	Machinery products	Non-fixed term from March 17, 2020	Ongoing
32	Shanghai Xinbi Industry Co., Ltd.	Gas circuit and electrical products, etc.	Non-fixed term from March 17, 2020	Ongoing
33	MARS (Method Application cReative System) CO., LTD	Gas circuit, electrical products, machinery and materials transforming products, etc.	Non-fixed term from March 20, 2019	Ongoing

Note: The Company has terminated the purchase framework agreement with ACMR after it established a subsidiary ACM CA to replace ACMR to purchase raw materials as an agent in the U. S..

(II) Sales contracts

Material sales contracts or orders completed by the Company during the Reporting Period are as follows:

In US\$10,000

S/N	Seller	Final Customer	Subject Matter of Contract	Contract Price	Specified Delivery Date
1	Issuer	Hynix	Cleaning equipment	365.00	August 4, 2018
2	Issuer	Sk Hynix Semiconductor (China) Ltd.	Cleaning equipment	5,646.79	Subject to the contract/order
3	CleanChip HK	Fujian Jinhua Integrated Circuit Co., Ltd.	Cleaning equipment	350.00	September 15, 2018
4	CleanChip HK	Huahong Semiconductor (Wuxi) Co., Ltd.	Cleaning equipment, advanced packaging wet process equipment	4,074.00	Subject to the contract/order
5	Chater Base International, CleanChip HK	Jiangyin Changdian Advanced Packaging Co., Ltd.	Advanced packaging wet process equipment, electroplating equipment	2,090.00	Subject to the contract/order

6	CleanChip HK	Jinruihong Technology (Quzhou) Co., Ltd.	Cleaning equipment	315.00	Subject to the contract/order
7	CleanChip HK	Shanghai Huahong Grace Semiconductor Manufacturing Corporation	Cleaning equipment	185.00	June 25, 2019
8	Chater Base International, CleanChip HK	Shanghai Huali Integrated Circuit Corporation	Cleaning equipment, vertical furnace tube, advanced packaging wet process equipment,	7,042.40	Subject to the contract/order
9	CleanChip HK	Shanghai Huali Microelectronics Corporation	Cleaning equipment	695.80	August 20, 2019
10	Chater Base International	ICRD	Cleaning equipment	400.00	4 months after execution of the contract
11	Issuer	Taiwan Phoenix Silicon	Cleaning equipment	326.90	January 10, 2019
12	ACMR, CleanChip HK	Yangtze Memory	Cleaning equipment	12,491.87	Subject to the contract/order
13	Chater Base International	JRH	Cleaning equipment	155.00	February 28, 2018
14	Chater Base International, CleanChip HK	Semiconductor Manufacturing North China (Beijing) Corporation	Cleaning equipment	1,582.00	Subject to the contract/order
15	CleanChip HK	Ningbo Semiconductor International Corporation	Cleaning equipment	220.00	4.5 months after receipt of the order
16	CleanChip HK	SMIC Southern Integrated Circuit Manufacturing Co., Ltd.	Cleaning equipment	600.00	Subject to the contract/order
17	CleanChip HK	SJsemi	Advanced packaging wet process equipment, electroplating equipment	324.70	Subject to the contract/order
18	Issuer	Shanghai Jingmeng Silicon Materials Co., Ltd.	Cleaning equipment	150.00	November 1, 2019
19	CleanChip HK	Xiamen Tongfu	Advanced packaging wet process equipment	290.00	Subject to the contract/order
20	CleanChip HK	Jiangsu CAS Microelectronics Integration Technology Co., Ltd.	Advanced packaging wet process equipment	171.00	Subject to the contract/order
21	CleanChip HK	Innotron Memory Co., Ltd.	Cleaning equipment	394.30	June 25, 2019
22	CleanChip HK	Xiamen Silan Microchip Manufacturing Co., Ltd.	Advanced packaging wet process equipment, cleaning equipment	627.00	Subject to the contract/order

23	CleanChip HK	Changdian Integrated Circuit (Shaoxing) Co., Ltd.	Electroplating equipment, advanced packaging wet process equipment	698.00	Subject to the contract/order
24	CleanChip HK	Zhengzhou Airport Economy Zone Waferworks Technology Corp.	Cleaning equipment	202.00	May 30, 2020
25	Issuer	Beijing Yitang Technology Co., Ltd.	Cleaning equipment	388.78	January 31, 2021
26	CleanChip HK	Jiangsu Xinde Semiconductor Technology Co., Ltd.	Advanced packaging wet process equipment	262.00	Subject to the contract/order
27	CleanChip HK	QL Electronics Science (Quzhou) Co., Ltd.	Automatic liquid supply system	366.40	Subject to the contract/order
28	CleanChip HK	ZING SEMI	Cleaning equipment	185.00	Subject to the contract/order
29	Issuer	Xincheng Technology (Shaoxing) Co., Ltd.	Cleaning equipment	332.83	December 31, 2020

Note: the 2 sets of semiconductor cleaning equipment in No. 12 was sold by the Issuer to ACMR, which was then sold by ACMR to Yangtze Memory.

From July 1, 2021 to September 30, 2021, the completed and ongoing material sales contracts or orders of the Company are as follows:

In US\$10,000

S/N	Seller	Name of Customer	Subject Matter of Contract	Contract Price	Specified Delivery Date
1	CleanChip HK	SJsemi	Electroplating equipment, advanced packaging wet process equipment	1,087.80	Subject to the contract/order
2	CleanChip HK	SMIC Southern Integrated Circuit Manufacturing Co., Ltd.	Cleaning equipment	308.00	September 14, 2020
3	Chater Base International	Semiconductor Manufacturing International (Shanghai) Corporation	Cleaning equipment	320.00	June 30, 2017
4	CleanChip HK	Semiconductor Manufacturing North China (Beijing) Corporation	Cleaning equipment	1,258.00	Subject to the contract/order
5	CleanChip HK	Yangtze Memory	Cleaning equipment, advanced packaging wet process equipment, electroplating equipment	5,129.78	Subject to the contract/order

6	CleanChip HK	Zing Semiconductor Corporation	Cleaning equipment	166.00	June 30, 2021
7	Issuer	Shanghai Huali Integrated Circuit Corporation	Cleaning equipment	338.00	Subject to the contract/order
8	Issuer, CleanChip HK	Innotron Memory Co., Ltd.	Cleaning equipment, electroplating equipment, advanced packaging wet process equipment	2,937.13	Subject to the contract/order
9	CleanChip HK	Jiangyin Changdian Advanced Packaging Co., Ltd.	Advanced packaging wet process equipment, stress free polishing equipment, electroplating equipment	1,306.50	Subject to the contract/order
10	CleanChip HK	Huahong Semiconductor (Wuxi) Co., Ltd.	Advanced packaging wet process equipment, cleaning equipment	1,456.00	Subject to the contract/order
11	Issuer	Nepes	Advanced packaging wet process equipment	282.40	Subject to the contract/order
12	Issuer, CleanChip HK	Shanghai Jita Semiconductor Co, Ltd.	Cleaning equipment	322.60	Subject to the contract/order
13	CleanChip HK	Changdian Integrated Circuit (Shaoxing) Co., Ltd.	Advanced packaging wet process equipment, electroplating equipment	963.00	Subject to the contract/order
14	Issuer, CleanChip HK	Xiamen Silan Microchip Manufacturing Co., Ltd.	Vertical furnace tube, cleaning equipment, advanced packaging wet process equipment	1,137.47	Subject to the contract/order
15	Issuer	Sk Hynix Semiconductor (China) Ltd.	Cleaning equipment	424.00	November 15, 2021
16	CleanChip HK	Shanghai Integrated Circuit Equipment& Materials Industry Innovation Center Co., Ltd.	Cleaning equipment, electroplating equipment	5,073.50	Subject to the contract/order
17	CleanChip HK	SiEn (Qingdao) Integrated Circuits Co., Ltd.	Cleaning equipment	585.00	March 18, 2021
18	CleanChip HK	Quliang Electronics Co., Ltd.	Electroplating equipment	385.00	May 30, 2021

19	Issuer, CleanChip HK	Beijing Yitang Technology Co., Ltd.	Cleaning equipment, electroplating equipment, advanced packaging wet process equipment	2,934.41	Subject to the contract/order
20	CleanChip HK	Hangzhou Liangdongxin Microelectronics Co., Ltd.	Electroplating equipment	286.00	Subject to the contract/order
21	Issuer, CleanChip HK	Nexchip Semiconductor Corporation	Cleaning equipment	718.00	4 months after receipt of the order
22	Issuer	NCAP	Electroplating equipment	280.00	4 months after execution of the contract
23	CleanChip HK	Jiangsu Xinde Semiconductor Technology Co., Ltd.	Advanced packaging wet process equipment	383.00	Subject to the contract/order
24	CleanChip HK	QL Electronics Science (Quzhou) Co., Ltd.	Cleaning equipment	167.50	June 3, 2021
25	CleanChip HK	Ningbo Semiconductor International Corporation	Advanced packaging wet process equipment	498.00	Subject to the contract/order
26	Issuer	North IC Technology Innovation Center (Beijing) Co., Ltd.	Electroplating equipment	455.00	Subject to the contract/order
27	Issuer	Chengdu Tianfu New Area Tianfu Laboratory	Cleaning equipment	170.30	Within 6 months after the contract coming into effect
28	CleanChip HK	Texas Instruments Semiconductor Manufacturing (Chengdu) Co., Ltd.	Advanced packaging wet process equipment	192.00	Subject to the contract/order
29	CleanChip HK	Geke Semiconductor (Shanghai) Co., Ltd.	Cleaning equipment	1,705.00	Subject to the contract/order
30	CleanChip HK	Guangzhou Cansemi Technology Inc.	Cleaning equipment	345.00	July 30, 2021
31	CleanChip HK	Hangzhou Fullsemi Semiconductor Co., Ltd.	Cleaning equipment	235.00	June 2022
32	Issuer	Hefei Seeya Display Technology Co., Ltd.	Cleaning equipment	185.00	February 20, 2022
33	CleanChip HK	Hubei 3d Semiconductor Integrated Innovation Center Co., Ltd.	Electroplating equipment	470.00	November 18, 2021
34	CleanChip HK	Maxscend Microelectronics Company Limited	Cleaning equipment, electroplating equipment, advanced packaging wet process equipment	1,343.00	Subject to the contract/order

35	Issuer	Nantong Tongfu Technology Co., Ltd.	Electroplating equipment	402.80	January 15, 2022
36	CleanChip HK	Xiamen Tongfu	Advanced packaging wet process equipment	288.00	September 30, 2021
37	CleanChip HK	SIWAVE, Inc	Cleaning equipment, advanced packaging wet process equipment	575.00	Subject to the contract/order
38	Issuer	Shenzhen Ameston Electronic Co., Ltd.	Cleaning equipment, electroplating equipment, advanced packaging wet process equipment	1,540.60	Subject to the contract/order
39	CleanChip HK	Wuhan Xinxin Semiconductor Manufacturing Co., Ltd.	Cleaning equipment, advanced packaging wet process equipment	298.00	Subject to the contract/order
40	Issuer, CleanChip HK	Zhejiang ICsprout Semiconductor Co., Ltd.	Cleaning equipment, advanced packaging wet process equipment	490.00	Subject to the contract/order
41	Issuer, CleanChip HK	Zhe Jiang He Xin Semiconductor Co., Ltd.	Electroplating equipment, advanced packaging wet process equipment	635.00	Subject to the contract/order
42	Issuer	Institute of Optics and Electronics	Cleaning equipment	170.99	Within 6 months after execution of the contract
43	CleanChip HK	SMIC International Integrated Circuit Manufacturing (Shenzhen) Co., Ltd.	Cleaning equipment	370.00	August 1, 2021

(III) Loan contracts, credit contracts and guarantee contracts

As of September 30, 2021 hereof, the ongoing material loan contracts of the Company are as follows:

S/N	Lender	Borrower	Contract Name	Contract Amount	Term
1	China Merchants Bank, Subbranch of Lingang New Area, China (Shanghai) Pilot Free Trade Zone	Shengwei Shanghai	Loan and Mortgage Contract for Corporate House Purchase (No.: ZJ02201111)	RMB 128.5 million Yuan	November 26, 2020 to November 25, 2030
2	Bank of Shanghai Pudong Branch	Issuer	Foreign Exchange Liquidity Revolving Loan Contract (No.: 20121041002)	US\$15 million	June 1, 2021 to May 10, 2023
3	Bank of Shanghai Pudong Branch	Issuer	Liquidity Revolving Loan Contract (No.: 20121041001)	RMB 100 million Yuan	June 1, 2021 to May 10, 2023
4	Bank of China Shanghai Pudong Development Zone Sub-branch	Issuer	Liquidity Loan Contract (No.: M122021PK(GS)40)	RMB 10 million Yuan	June 4, 2021 to June 4, 2024
5	Bank of China Shanghai Pudong Development Zone Sub-branch	Issuer	Liquidity Loan Contract (No.: M122021PK(GS)42)	RMB 19.9 million Yuan	June 15, 2021 to June 15, 2022
6	Bank of China Shanghai Pudong Development Zone Sub-branch	Issuer	Liquidity Loan Contract (No.: M122021PK(GS)81)	RMB 35 million Yuan	September 18, 2021 to September 18, 2024

As of September 30, 2021, the ongoing material credit contracts of the Company are as follows:

S/N	Credit Grantor	Credit Receiver	Contract Name	Maximum Credit Line	Term
1	Bank of China Shanghai Pudong Development Zone Sub-branch	Issuer	Credit Line Agreement (No.: E012021PK(GS)42)	RMB 40 million Yuan	June 11, 2021 to December 30, 2021
2	China Everbright Bank Shanghai Branch	Issuer	Comprehensive Credit Agreement (No.: 3675012021003)	RMB 150 million Yuan	July 1, 2021 to June 30, 2024
3	Bank of Shanghai Pudong Branch	Issuer	Comprehensive Credit Contract (No.: 201210410)	RMB 100 million Yuan	June 1, 2021 to May 10, 2023

As of September 30, 2021, the ongoing material guarantee contracts of the Company are as follows:

S/N	Lender	Guarantor	Contract	Guarantee Amount	Term
1	China Merchants Bank, Subbranch of Lingang New Area, China (Shanghai) Pilot Free Trade Zone	ACMSH	Irrevocable Guarantee (No.: ZJ02201111)	RMB 128.5 million Yuan	From the effective date of the guarantee to the maturity date of loan or other debt, three years from the date of disbursement
2	Bank of Shanghai Pudong Branch	CleanChip HK	Maximum Amount Guarantee Contract (No.: ZDB201210410)	RMB 120 million Yuan	June 1, 2021 to May 10, 2023

(IV) License contracts

On January 31, 2007, a Technology License Agreement was entered into by and between ACMR and ACMSH (before restructuring), whereby it is agreed that ACMR shall grant ACMSH (before restructuring) a world-wide exclusive license for the intellectual property rights owned or controlled by ACMR. For details of such agreement, please refer to V. (IV) Sharing of Key Resources with Other Parties, Section VI Business and Technology hereof.

(V) Other contracts

In May 2019, the Company entered into a Sponsor Agreement with [***], under which [***] is engaged as the Sponsor for the Company's initial public offering and listing on the STAR Market.

In October 2020, Shengwei Shanghai and Shanghai Lingang Industrial Zone Public Rental Housing Construction Operation Management Co., Ltd. entered into an Overall Pre-sale Contract on Shanghai Public Rental Housing, whereby the former shall purchase from the latter 162 houses at No. 14, No. 21, No. 41 and No. 42, Lane 128, Qunfeng Road, with a predicted total area of 15,322.14 square meters at a predicted price totaling to RMB 257,303,200 Yuan.

II. External Guarantee

As of the execution date of this [***], there has been no external guarantee involved by the Company and its subsidiaries.

III. Litigation and Arbitration**(I) Material litigation or arbitration involved by the Company**

As of the execution date of this [***], there has been no pending litigation or arbitration involved by the Company that may have great effect on the Company's financial condition, operating results, reputation, business activities, and future prospects, among others.

(II) Litigation and arbitration to which any major shareholder, de facto controller, holding subsidiaries, director, supervisor, senior executive and key technician is a party**1. Overview of the Class Action against ACMR acting as the controlling shareholder of the Company**

On October 8, 2020, J Capital Research, a short seller, issued a Short-sell Report on ACMR as the controlling shareholder of the Issuer. At the end of December 2020, Jerry Kain filed a single class action lawsuit based on the contents of the Short-sell Report issued by J Capital, against ACMR, followed by press releases from additional U.S. law firms soliciting ACMR investors to join the class action and soliciting alternative lead plaintiff candidates ("Class Action against ACMR").

The main issues involved in the Short-sell Report were made against the Issuer given the Issuer is the operating entity of ACMR owning the core assets and all operating businesses of the latter. As such, the Issuer has conducted a self-inspection on the relevant challenges in the Short-sell Report one by one, forming the Verification Report in Response to Media Challenges Concerning the Initial Public Offering and Listing of Shares on the STAR Market ("Media Challenges-related Verification Report") which has been verified by the Sponsor accordingly. Both the Issuer and the Sponsor consider the challenges in the Short-sell Report unsupported and to be against the facts. In December 2020, the Media Challenges-related Verification Report was published by the Issuer and ACMR in the SSE and the SEC respectively, after the disclosure of which, there was no further challenges on ACMR.

In connection with the Class Action against ACMR, as per the written documents issued by the U.S. lawyers engaged by ACMR for the present class action ("Responses from the U.S. Lawyers"): As of February 22, 2021 (the date on which the 60-day solicitation period expires), despite the many press releases by U.S. law firms that had been issued, there were only two of them (corresponding respectively to Jeffrey Kain and Karin Hiu Man Yeung as the plaintiffs) interested enough to seek to pursue the lawsuit.

According to the Responses from the U.S. Lawyers: Jeffrey Kain claims to have suffered minor losses: \$9,599. He did not purchase or sell any shares of ACMR stock. Rather, he traded in four option contracts for future purchases. Karin Hiu Man Yeung claims to have lost \$261,806.08 when she sold the shares of ACMR stock on September 8, 2020 (about one month before on the date when J Capital Research issued the Short-sell Report).

As per the Responses from the U.S. Lawyers, the progress of the Class Action against ACMR is as follows: On April 15, 2021, the Court conducted a lead plaintiff hearing. The Court denied the candidates' stipulation to be appointed joint lead plaintiffs. The Court further rejected the lead plaintiff application of Karin Hiu Man Yueng, due to lack of standing. The Court appointed as lead plaintiff Jeffrey Kain, the initial plaintiff.

The lead plaintiff filed the first amended complaint on May 6, 2021. Defendants filed a motion to dismiss on May 27, 2021. Plaintiff filed his opposition to the motion to dismiss on June 10, 2021. Defendants filed their reply in support of their motion to dismiss on June 24, 2021. On September 9, 2021, the court conducted a hearing on the defendants' motion to dismiss, upholding the defendants' defenses and dismissing the first amended complaint filed by Jeffrey Kain. Jeffrey Kain filed the second amended complaint on October 7, 2021. Defendants filed a motion to dismiss the same on October 21, 2021.

As of the date hereof, the Class Action against ACMR as the controlling shareholder of the Issuer is still pending. The U.S. Lawyers would anticipate a ruling on the motion to dismiss by January 2022, and there is the possibility that the court might take longer to make the decision.

2. Effect of the Class Action on ACMR as the controlling shareholder of the Issuer

(1) Relevant defendants in the Class Action against ACMR are not subject to criminal liabilities

According to the Responses from the U.S. Lawyers: "The Class Action against ACMR is a civil case, by a private individual, trying to obtain purported monetary damages related to ACMR's stock movement, and falls outside a criminal case which would be filed only by a U.S. government agency. ACMR's litigation legal counsel and I have seen nothing in the allegations here that suggests any risk of criminal exposure, nor are we aware of any indication of interest in ACMR from any governmental authorities with criminal jurisdiction."

Therefore, none of ACMR, the controlling shareholder of the Company, HUI WANG, the chairman of the Company and LISA YI LU FENG, the person in charge of financial matters of the Company, are involved in criminal liabilities, nor will their qualifications as director and senior executive of the Issuer be affected by the Class Action against ACMR.

(2) Estimation of possible damages amount and civil liability to be borne by ACMR

According to the Responses from the U.S. Lawyers: "In the United States legal system, in a civil lawsuit such as *Kain v. ACM Research, Inc.*, it is the plaintiff's burden to prove, by a preponderance of the evidence, the facts necessary to establish the elements of his claim. Throughout this process, defendants have multiple opportunities to seek dismissal of the action for factual and legal deficiencies. If a qualified lead plaintiff is not able to substantiate, and ultimately prove the allegations in his complaint, a class action should normally be dismissed."

"The complaint that has been filed is very weak and is vulnerable to being dismissed. Unless the consolidated amended complaint contains new information beyond the J Capital Research's short-sell report, it should also be vulnerable to dismissal by the U.S. court."

Even if the Class Action against ACMR is not dismissed, according to the Responses from the U.S. Lawyers: "Typically, shareholder class actions in the United States settle within the available D&O insurance. Although one cannot guarantee the specific result at this early stage of the case, we view that as the most likely outcome under the parameters discussed above."

(3) ACMR has made commitments on the class action

"The Issuer has not been listed as a defendant in the class action involving ACMR, nor has it received any notice on a claim against it or on the ACMR-related class action."

If the Issuer and some of its directors and senior executives are held by the U.S. court to be liable for damages in the future, thus causing any economic loss to the Issuer, ACMR will fully indemnify and hold the Issuer harmless from and against any direct economic loss thus incurred."

In view of the above, the Class Action against ACMR will have no material adverse effect on the production and operation of the Issuer, which will not constitute an obstacle to this Offering and Listing.

Except for the foregoing, as of the execution date of this [***], no major shareholder, de facto controller, holding subsidiaries, director, supervisor, senior executive or key technician of the Company has been involved as a party to any criminal litigation, material litigation or arbitration that may have an adverse effect on the Company.

(III) Administrative penalties and recorded investigations by judicial authorities and the CSRC against the directors, supervisors, senior executives and key technicians

As of the execution date of this [***], no director, supervisor, senior executive or key technician has been subject to any administrative penalty, judicial investigation or CSRC investigation on record in the last 3 years.

(IV) Serious illegal activities of the controlling shareholder and de facto controller

During the Reporting Period, no serious illegal activities were engaged in by the Company's controlling shareholder and de facto controller.

Section XII Statements

I. Statement by All Directors, Supervisors and Senior Executives of the Issuer

All directors, supervisors and senior executives of the Company undertake that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear joint and several legal liabilities for the authenticity, accuracy and completeness hereof.

Signed by All Directors:

HUI WANG
STEPHEN SUN-HAI CHIAO
JIAN WANG
CHEN HUANG
MINGXIU PENG
SUTONG ZHANG

HAIPING DUN
QIANLI LUO
JIANG LI
DI ZHANG
ZHANBING REN

ACM Research (Shanghai), Inc.
Date:

All directors, supervisors and senior executives of the Company undertake that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear joint and several legal liabilities for the authenticity, accuracy and completeness hereof.

Signed by All Supervisors:

TRACY DONG LIU

QIAN DONG

QIAN LI

Signed by All Senior Executives:

JIAN WANG

FUPING CHEN

SOTHEARA CHEAV

LISA YI LU FENG

MINGZHU LUO

ACM Research (Shanghai), Inc.

Date:

II. Statement by the Issuer's Controlling Shareholder

We undertake that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear joint and several legal liabilities for the authenticity, accuracy and completeness hereof.

Signed by the Authorized Representative:

HUI WANG

ACM RESEARCH, INC.

Date:

III. Statement by the Issuer's De Facto Controller

I undertake that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear joint and several legal liabilities for the authenticity, accuracy and completeness hereof.

Signed by the De Facto Controller:

HUI WANG

ACM Research (Shanghai), Inc.

Date:

IV. Statement (I) by the Sponsor (Lead Underwriter)

Having checked this [***], we confirm that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear corresponding legal liabilities for the authenticity, accuracy and completeness hereof.

Signed by the Project Co-organizer: _____

Signed by the Sponsor Deputy: _____
BOWEN ZHANG _____ LING LI

Signed by the Sponsor’s General Manager: _____
JUN LI

Signed by the Sponsor’s President and Legal Representative: _____
JIE ZHOU

[***]
Date:

IV. Statement (II) by the Sponsor (Lead Underwriter)

Having taken perusal of the full content of this [***] of ACM Research (Shanghai), Inc., we confirm that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear corresponding legal liabilities for the authenticity, accuracy and completeness hereof.

Signed by the Sponsor’s General Manager:

JUN LI

Signed by the Sponsor’s President:

JIE ZHOU

[***]

Date:

[***]

**Statement on the Absence of Project Co-organizer for the Initial Public Offering of Shares and Listing on the STAR Market by
ACM Research (Shanghai), Inc.**

We, [***], as the Sponsor of ACM Research (Shanghai), Inc. for its initial public offering of shares and listing on the STAR Market, hereby state that, JIEWEI ZHAO, the original co-organizer for the project concerned, has resigned from us and will no longer be the project co-organizer. As such, there is no co-organizer for the project for the time being.

Signed by the Sponsor's Legal Representative:

JIE ZHOU

[***]

Date:

V. Statement by the Joint Lead Underwriter

Having checked this [***], we confirm that there are no misrepresentations, misleading statements or major omissions in this [***], and shall bear corresponding legal liabilities for the authenticity, accuracy and completeness hereof.

Legal Representative:

RUJUN SHEN

[***]

Date:

VI. Statement by the Lawyer

We and our handling lawyers have reviewed this [***] of Initial Public Offering and Listing of Shares on the STAR Market by ACM Research (Shanghai), Inc., and confirm that it is consistent with the legal opinion and the lawyer's work report issued by us. We and our handling lawyers have no objection to the content of the legal opinion and the lawyer's work report referenced by the Issuer in this [***], confirm that none of the said content may result in any misrepresentation, misleading statement or major omission herein, and shall bear corresponding legal liabilities for the authenticity, accuracy and completeness of such content so referenced.

Person in Charge:

LING WANG

Handling Lawyers:

HUI XU

FUAN CHEN

ANRONG WANG

King & Wood Mallesons

Date: [], 2021

VII. Statement by the Audit Institution

We and our certified public accountants undersigned have reviewed this [***], and confirm that it is consistent with the audit report and the internal control verification report issued by us as well as the non-recurring income statement verified by us. We and our certified public accountants undersigned have no objection to the content of the audit report and the internal control verification report issued by us as well as the non-recurring income statement verified by us that are referenced by the Issuer herein, confirm that none of the said content may result in any misrepresentation, misleading statement or major omission herein, and shall bear corresponding legal liabilities for the authenticity, accuracy, completeness and timeliness thereof.

Signed by the Executive Partner:

ZHIGUO YANG

Signed by the Certified Public Accountants:

YI TANG

JING ZHAO

BDO CHINA SHU LUN PAN Certified Public Accountants LLP

[], 2021

VIII. Statement by the Asset Appraisal Agency

Having reviewed the [***] of Initial Public Offering and Listing of Shares on the STAR Market by ACM Research (Shanghai), Inc. (for Application) (the “[***]”), we and the certified public valuers undersigned confirm that its content is in line with the conclusions of the *Appraisal Report on the Total Equity Value Involved in the Restructuring of ACM Research (Shanghai), Inc. into a Joint-stock Company* (ZLPBZ [2019] No.1812) and the *Appraisal Report on the Total Stockholders’ Equity Involved in the Proposed Acquisition of CLEANCHIP TECHNOLOGIES LIMITED by ACM Research (Shanghai), Inc.* (ZLPBZ [2019] No.1879). issued by us. We and the certified public valuers undersigned have no objection to the conclusions of the *Appraisal Report on the Total Equity Value Involved in the Restructuring of ACM Research (Shanghai), Inc. into a Joint-stock Company* (ZLPBZ [2019] No.1812) and the *Appraisal Report on the Total Stockholders’ Equity Involved in the Proposed Acquisition of CLEANCHIP TECHNOLOGIES LIMITED by ACM Research (Shanghai), Inc.* (ZLPBZ [2019] No.1879). issued by us that are completely and correctly referenced in the [***] and its abstract, confirm that no reference to the asset appraisal conclusions issued by us may result in any misrepresentation, misleading statement or major omission in the [***] and its abstract, and shall bear corresponding legal liabilities for the authenticity, accuracy and completeness thereof.

Signed by the Certified Public Valuers:

WEI LIU

QIQUAN GE

Signed by the Legal Representative or Authorized Representative:

ZHI HU

China United Assets Appraisal Group Co., Ltd.

Date:

IX. Statement by the Capital Verification Institution

Having reviewed this [***], we and the certified public accountants undersigned confirm that it is consistent with the capital verification report issued by us. We and the certified public accountants undersigned have no objection to the content of the capital verification report issued by us referenced by the Issuer herein, confirm that none of the said content may result in any misrepresentation, misleading statement or major omission herein, and shall bear the corresponding legal liabilities for the accuracy, accuracy, completeness and timeliness thereof.

Signed by the Executive Partner:

ZHIGUO YANG

Signed by the Certified Public Accountants:

YI TANG

BAOYAN YIN

BDO CHINA SHU LUN PAN Certified Public Accountants LLP

Date:

Statement of the Capital Verification Institution on the Resignation of the Certified Public Accountant

Section XIII Attachments

I. Documents for Future Reference

All the official documents relating to the Offering listed below are accessible to investors:

- (1) Letter of sponsorship for offering;
- (2) Letter of sponsorship for listing;
- (3) Legal opinions;
- (4) Financial reports and audit reports;
- (5) Articles of Association (Draft);
- (6) Letters of commitments made by the Issuer and other responsible parties in connection with the Offering and listing;
- (7) Relevant financial statements and review reports (if any) between the base date of the Issuer's audit report and the execution date of this [***];
- (8) Profit forecast report and audit report (if any);
- (9) Internal control verification report;
- (10) Non-recurring income statement verified by certified public accountants;
- (11) Documents from CSRC approving the Issuer's registration for the Offering;
- (12) Other important documents relating to the Offering.

II. Access to Documents for Future Reference

(I) Time for Access

9:00 to 11:30 a.m., and 13:30 to 17:00 p.m., on weekdays.

(II) Place for Access and Contact Information

1. Issuer: ACM Research (Shanghai), Inc.

Business Address: Building 4, No.1690 Cailun Road, China (Shanghai) Pilot Free Trade Zone

Tel: 021-50808868; Contact: MINGZHU LUO

2. Sponsor (Lead Underwriter): [***]

Business Address: [***]

Tel: [***] Contact: [***]

Schedule I: Important Patents**1. Major Patents Owned in Mainland China by the Issuer and its Holding Subsidiaries**

S/N	Patentee	Patent Name	Patent Type	Patent No.	Patent Application Date	Registration Place
1	Issuer	Heat treatment method and device for semiconductor workpieces	Invention	ZL200710046405.9	September 26, 2007	China
2	Issuer	electroplating apparatus for electroplating metal on semiconductor work piece	Invention	ZL200710172314.X	December 14, 2007	China
3	Issuer	Method and device for cleaning semiconductor chip	Invention	ZL200810034827.9	March 20, 2008	China
4	Issuer	Heat treatment method and device for semiconductor workpieces	Invention	ZL200710046404.4	September 26, 2007	China
5	Issuer	Device or method for preparing solution for processing single wafer semiconductor	Invention	ZL200810037270.4	May 12, 2008	China
6	Issuer	Method and device for cleaning semiconductor chip	Invention	ZL200810034826.4	March 20, 2008	China
7	Issuer	Electrodeposition system	Invention	ZL200810037271.9	May 12, 2008	China
8	Issuer	Method and device for cleaning semiconductor silicon wafer	Invention	ZL200910050834.2	May 8, 2009	China
9	Issuer	Method and apparatus for metallic layer front wafer surface presoaking for electrochemical or chemical deposition	Invention	ZL200710172313.5	December 14, 2007	China
10	Issuer	Wafer cleaning device	Utility Model	ZL201320216748.6	April 25, 2013	China
11	Issuer	Wet process equipment	Design	ZL201330546123.1	November 14, 2013	China
12	Issuer	Method and device for removing barrier layer	Invention	ZL200910050835.7	May 8, 2009	China
13	Issuer	Method and device for cleaning semiconductor silicon wafer	Invention	ZL200910053774.x	June 25, 2009	China
14	Issuer	Method for depositing copper film on semiconductor wafer super-uniformly	Invention	ZL200810203809.9	December 1, 2008	China
15	Issuer	Detector and detection method for wafer position	Invention	ZL201210369969.7	September 27, 2012	China

16	Issuer	Cleaning machine for integrated circuit substrate	Utility Model	ZL201520110723.7	February 15, 2015	China
17	Issuer	Vacuum chuck	Invention	ZL201280071561.X	March 28, 2012	China
18	Issuer	Method and device for realizing deep hole uniform metal interconnection on semiconductor silicon chip	Invention	ZL201110365926.7	November 17, 2011	China
19	Issuer	Wafer edge cleaning device	Invention	ZL201210163145.4	May 22, 2012	China
20	Issuer	Vacuum chuck for electropolishing and/or electroplating	Invention	ZL201280071572.8	March 28, 2012	China
21	Issuer	Method and apparatus for pulse electrochemical polishing	Invention	ZL201280073426.9	May 24, 2012	China
22	Issuer	Device and method for cleaning reverse side of wafer	Invention	ZL201210220445.1	June 28, 2012	China
23	Issuer	Nozzle for stress-free electrochemical polishing	Invention	ZL201280071560.5	March 30, 2012	China
24	Issuer	Device and method used for electrochemical polishing/electroplating	Invention	ZL201210292690.3	August 16, 2012	China
25	Issuer	Barrier layer removal method and barrier layer removal device	Invention	ZL201410257649.1	May 8, 2009	China
26	Issuer	Preparation method of large-area nano-structure array	Invention	ZL201210243831.2	July 13, 2012	China
27	Issuer	Viscosity automatic control system and automatic control method	Invention	ZL201210163151.X	May 22, 2012	China
28	Issuer	Grinding head with wafer detection device	Invention	ZL201210491738.3	November 27, 2012	China
29	Issuer	Method and apparatus for cleaning semiconductor wafer	Invention	ZL201280077256.1	November 28, 2012	China
30	Issuer	Apparatus and method for electroplating and/or polishing wafer	Invention	ZL201380076475.2	May 9, 2013	China
31	Issuer	An etching apparatus and an etching method	Invention	ZL201210089507.X	March 30, 2012	China
32	Issuer	Wafer processing cavity	Invention	ZL201310116848.6	April 7, 2013	China
33	Issuer	Method and device for cleaning flip chips	Invention	ZL201210189044.4	June 8, 2012	China
34	Issuer	Stress-free polishing device and polishing method	Invention	ZL201210369944.7	September 27, 2012	China

35	Issuer	Substrate cleaning device and method	Invention	ZL201210499934.5	November 29, 2012	China
36	Issuer	Detection apparatus and detection method for wafer position	Invention	ZL201210214030.3	June 26, 2012	China
37	Issuer	Polishing fluid arm	Invention	ZL201210366048.5	September 27, 2012	China
38	Issuer	Semiconductor wafer polishing method	Invention	ZL201280077584.1	December 10, 2012	China
39	Issuer	Method and apparatus for uniformly metallization on substrate	Invention	ZL201380075887.4	April 22, 2013	China
40	Issuer	A technique for vapor etching a barrier layer with xenon difluoride	Invention	ZL201210089500.8	March 30, 2012	China
41	Issuer	Washing device	Invention	ZL201310335864.4	August 2, 2013	China
42	Issuer	System and method for controlling concentration of polishing solution to be stable	Invention	ZL201210375488.7	September 27, 2012	China
43	Issuer	Method and device for manufacturing semiconductor device	Invention	ZL201210491746.8	November 27, 2012	China
44	Issuer	Method for forming interconnection structures	Invention	ZL201280077240.0	November 27, 2012	China
45	Issuer	Semiconductor process chamber	Invention	ZL201310117998.9	April 7, 2013	China
46	Issuer	Load lock chamber and method of using load lock chamber to process substrates	Invention	ZL201210292475.3	August 16, 2012	China
47	Issuer	Method for manufacturing tungsten plug	Invention	ZL201210213955.6	June 26, 2012	China
48	Issuer	End point detection device and end point detection method	Invention	ZL201210290651.X	August 15, 2012	China
49	Issuer	Hollow door	Invention	ZL201410236079.8	May 30, 2014	China
50	Issuer	Apparatus and method used for quick preparation of nanostructured arrays	Invention	ZL201210292689.0	August 16, 2012	China
51	Issuer	Process chamber	Invention	ZL201210501578.6	November 30, 2012	China
52	Issuer	Wafer edge chip flattening method	Invention	ZL201310167821.X	May 8, 2013	China

53	Issuer	Cleaning fluid flow control system and cleaning fluid flow control method	Invention	ZL201210290586.0	August 15, 2012	China
54	Issuer	Wafer processing device	Invention	ZL201310566941.7	November 14, 2013	China
55	Issuer	Electrochemical polishing device and method	Invention	ZL201410067707.4	February 26, 2014	China
56	Issuer	Electrochemically polished metal anode and sealing structure thereof	Invention	ZL201410131557.9	April 2, 2014	China
57	Issuer	Xenon difluoride gas-phase etching method for barrier layer	Invention	ZL201210366144.X	September 27, 2012	China
58	Issuer	Chemical liquid supply and recycling system and method	Invention	ZL201310166862.7	May 8, 2013	China
59	Issuer	Pipeline for preventing residual liquid from dripping	Invention	ZL201310567168.6	November 14, 2013	China
60	Issuer	Silicon dioxide release technology	Invention	ZL201410117472.5	March 26, 2014	China
61	Issuer	Electrochemical polishing liquid supply device	Invention	ZL201410190482.1	May 7, 2014	China
62	Issuer	Sprayer device	Invention	ZL201410512483.3	September 29, 2014	China
63	Issuer	Method for flattening through-silicon-via back-surface metal	Invention	ZL201310169389.8	May 9, 2013	China
64	Issuer	Relative distance measurement device and method	Invention	ZL201410067724.8	February 26, 2014	China
65	Issuer	Apparatus and method for taping adhesive film on semiconductor substrate	Invention	ZL201380077368.1	June 19, 2013	China
66	Issuer	Photoresist bottle holding device	Invention	ZL201410235896.1	May 30, 2014	China
67	Issuer	Method for forming metal interconnection	Invention	ZL201480079797.7	July 8, 2014	China
68	Issuer	Wafer grinding head and wafer absorbing method	Invention	ZL201410110796.6	March 24, 2014	China
69	Issuer	Electrochemical polishing end-point detection apparatus and method	Invention	ZL201410190424.9	May 7, 2014	China
70	Issuer	Method for detecting inclination degree of wafer chuck plate	Invention	ZL201410235876.4	May 30, 2014	China

71	Issuer	Method and apparatus for through-silicon vias reveal	Invention	ZL201380075888.9	April 22, 2013	China
72	Issuer	Sprayer device	Invention	ZL201410512787.X	September 29, 2014	China
73	NOMURA MICRO SCIENCE KK; Issuer; HJS ENG CO LTD	Washing hydrogen water producing method and producing apparatus	Invention	ZL201610561383.9	July 15, 2016	China
74	Issuer	Apparatus and method for cleaning semiconductor wafer	Invention	ZL201480082120.9	September 26, 2014	China
75	Issuer	Spray head device with electrodes	Invention	ZL201410235874.5	May 30, 2014	China
76	Issuer	Method for optimizing process formula in pulse electrochemical polishing process	Invention	ZL201410365997.0	July 29, 2014	China
77	Issuer	Workpiece processing device	Invention	ZL201310553969.7	November 8, 2013	China
78	Issuer	Workpiece processing device	Invention	ZL201310553944.7	November 8, 2013	China
79	Issuer	Connection part of frame structure	Invention	ZL201410235865.6	May 30, 2014	China
80	Issuer	Apparatus and method for detecting position of wafer	Invention	ZL201280072827.2	May 2, 2012	China
81	Issuer	Method for manufacturing through-silicon-via structure	Invention	ZL201310169431.6	May 9, 2013	China
82	Issuer	Device for preventing residual liquid from dripping	Invention	ZL201310566899.9	November 14, 2013	China
83	Issuer	Gas-phase etching device	Invention	ZL201410066813.0	February 26, 2014	China
84	Issuer	Gluings method and gluing apparatus	Invention	ZL201410196004.1	May 9, 2014	China
85	Issuer	Liquid storage tank adopting inert gas protection	Invention	ZL201410366139.8	July 29, 2014	China
86	Issuer	Wafer processing device	Invention	ZL201310567261.7	November 14, 2013	China
87	Issuer	Electrochemical polishing equipment	Invention	ZL201410366491.1	July 29, 2014	China
88	Issuer	Electrochemical machining process and device	Invention	ZL201410366155.7	July 29, 2014	China
89	Issuer	Polishing slurry filtering device	Invention	ZL201410366212.1	July 29, 2014	China

90	Issuer	Device for processing semiconductor structure	Invention	ZL201410513602.7	September 29, 2014	China
91	Issuer	Wafer gluing equipment	Invention	ZL201410366461.0	July 29, 2014	China
92	Issuer	Polishing disk and cooling device thereof	Invention	ZL201410235835.5	May 30, 2014	China
93	Issuer	Method for improving polishing uniformity of wafer	Invention	ZL201410236044.4	May 30, 2014	China
94	Issuer	Workpiece processing device	Invention	ZL201310553898.0	November 8, 2013	China
95	Issuer	Gelatinizing equipment and framework thereof	Invention	ZL201410365925.6	July 29, 2014	China
96	Issuer	Levelness measuring device and method	Invention	ZL201410066598.4	February 26, 2014	China
97	Issuer	Recovery device for metal ions in electrochemical polishing solutions	Invention	ZL201410512977.1	September 29, 2014	China
98	Issuer	Method for forming semiconductor structures	Invention	ZL201310566058.8	November 14, 2013	China
99	Issuer	Metal coating processing method	Invention	ZL201310330145.3	July 31, 2013	China
100	Issuer	Apparatus For Holding Substrate	Invention	ZL201580085077.6	December 4, 2015	China
101	Issuer	Horizontal adjusting device for chuck and method utilizing device to horizontally adjust chuck	Invention	ZL201410513026.6	September 29, 2014	China
102	Issuer	Uniform air flow device	Invention	ZL201410366171.6	July 29, 2014	China
103	Issuer	Gumming machine with automatic cleaning function and automatic cleaning method for gumming machine	Invention	ZL201510242142.3	May 13, 2015	China
104	Issuer	Coaxial adjusting device and coaxial adjusting method using the same	Invention	ZL201510081687.0	February 15, 2015	China
105	Issuer	Falling-prevention semiconductor cleaning device	Invention	ZL201510081989.8	February 15, 2015	China
106	Issuer	Two-sided vapor-phase etching device	Invention	ZL201410512991.1	September 29, 2014	China
107	Issuer	Brush moving device of semiconductor cleaning device	Invention	ZL201410366503.0	July 29, 2014	China
108	Issuer	Copper-plated thinning integrated device	Invention	ZL201410190951.X	May 7, 2014	China
109	Issuer	Measuring apparatus and method for semiconductor wafer	Invention	ZL 2015100808855	February 15, 2015	China
110	Issuer	End point detection method of semiconductor etching process	Invention	ZL 2015100819455	February 15, 2015	China
111	Issuer	Current stabilizer	Invention	ZL 201410365759X	July 29, 2014	China
112	Issuer	Method for electrochemical polish in constant voltage mode	Invention	ZL 2015800839194	October 30, 2015	China
113	Issuer	Automatic correcting method for radial thickness	Invention	ZL 2014101161195	March 26, 2014	China

114	Issuer	Base plate transmitting cabin in semiconductor device	Invention	ZL 2015100812206	February 15, 2015	China
115	Issuer	Dual-axis alignment apparatus and method in semiconductor device	Invention	ZL 2015100818221	February 15, 2015	China
116	Issuer	Cleaning method for semiconductor structure	Invention	ZL 2015100818819	February 15, 2015	China
117	Issuer	Method for reducing surface roughness of wafer	Invention	ZL 2015100818876	February 15, 2015	China
118	Issuer	Polishing method for high-K-dielectric silicon wafer	Invention	ZL 2015100819972	February 15, 2015	China
119	Issuer	Method for removing residual substance in semiconductor processing	Invention	ZL 2015102528806	May 18, 2015	China
120	Issuer	Flow compensation method	Invention	ZL 2015104208342	July 17, 2015	China
121	Issuer	Semiconductor pre-wetting device and semiconductor pre-wetting method	Invention	ZL 2014105124706	September 29, 2014	China
122	Issuer	Pre-wetting method of semiconductor substrate	Invention	ZL 2014105125107	September 29, 2014	China
123	Issuer	Device and method for conducting uniform metallization on substrate	Invention	ZL 2015100865133	February 17, 2015	China
124	Issuer	Unstressed electrochemical polishing method	Invention	ZL 2015102511400	May 18, 2015	China
125	Issuer	Wafer rotating chuck optimized on basis of cathode spray head position change	Invention	ZL 2015104187609	July 16, 2015	China
126	Issuer	Alignment device and method	Invention	ZL 2013104325807	September 22, 2013	China
127	Issuer	Method for electrochemical polishing of metal interconnection wafer structure	Invention	ZL 2014105135382	September 29, 2014	China
128	Issuer	A fall-proof apparatus for cleaning semiconductor devices and a chamber with the apparatus	Invention	ZL 2015800757160	September 8, 2015	China
129	Issuer	Method for optimizing metal planarization process	Invention	ZL 201580076084X	February 15, 2015	China
130	Issuer	Two-sided vapor etching device for wafer	Invention	ZL 2014105124918	September 29, 2014	China
131	Issuer	Wafer rotating chuck achieving optimization based on position of anode sprayer	Invention	2015104187562	July 16, 2015	China
132	Issuer	Automatic correcting method for voltage	Invention	201510252932X	May 18, 2015	China
133	Issuer	Semiconductor machining device and technological method for machining semiconductor workpiece	Invention	2014102360213	May 30, 2014	China
134	Issuer	Magnetic connecting device	Invention	2014102358622	May 30, 2014	China
135	Issuer	Semiconductor substrate heat treatment device	Invention	2014102381351	May 30, 2014	China

136	Issuer	Optical radiation heating etching device and method	Invention	2015102434090	May 13, 2015	China
137	Issuer	Method and apparatus for integrated substrate cleaning and drying	Invention	2015800760750	February 15, 2015	China
138	Issuer	Wafer processing device	Invention	2014100677233	February 26, 2014	China
139	Issuer	Dry-process cleaning cavity and dry-process cleaning method	Invention	2015104187986	July 16, 2015	China
140	Issuer	Etching method	Invention	2015103674119	June 29, 2015	China
141	Issuer	Rotary gluing method for semiconductor chip	Invention	2014105136597	September 29, 2014	China
142	Issuer	Barrier layer removal method and semiconductor structure forming method	Invention	2014800826931	October 17, 2014	China
143	Issuer	Apparatus for substrate bevel and backside protection	Invention	201580079977X	May 14, 2015	China
144	Issuer	Flow control method	Invention	2014103672617	July 29, 2014	China
145	Issuer	Method for polishing wafers	Invention	2016103532485	May 25, 2016	China
146	Issuer	Method for removing barrier layer for minimizing sidewall recess	Invention	2015800754001	February 15, 2015	China
147	Issuer	Method of reducing thickness of copper film	Invention	201610292045X	May 5, 2016	China
148	Issuer	Semiconductor substrate developing apparatus and semiconductor substrate developing method	Invention	2014102359979	May 30, 2014	China
149	Issuer	Vapor phase etching method of copper interconnection structure	Invention	2015103731874	June 30, 2015	China
150	Issuer	Integrated circuit substrate cleaning equipment	Invention	2016102558596	April 22, 2016	China
151	Issuer	Electroplating tank	Invention	2016107043168	August 22, 2016	China
152	Issuer	Apparatus and method for removing film on edge of backside of wafer	Invention	2014800796033	June 6, 2014	China

2. Major Patents Owned Outside Mainland China by the Issuer and its Holding Subsidiaries

S/N	Patentee	Patent Name	Patent Type	Patent No.	Patent Application Date	Registration Place
1	Issuer	METHODES AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	4994501	December 10, 2007	Japan
2	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	5367840	December 12, 2008	Japan
3	Issuer	BARRIER LAYER REMOVAL METHOD AND APPARATUS	Invention	5412517	August 20, 2008	Japan

4	Issuer	SOLUTION PREPARATION APPARATUS AND METHOD FOR TREATING INDIVIDUAL SEMICONDUCTOR WORKPIECE	Invention	5442705	March 17, 2008	Japan
5	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	5466638	July 5, 2007	Japan
6	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	5648047	March 31, 2009	Japan
7	Issuer	METHODS AND APPARATUS FOR CLEANING FLIP CHIP ASSEMBLIES	Invention	6063944	September 22, 2011	Japan
8	Issuer	NOZZLE FOR STRESS-FREE POLISHING METAL LAYERS ON SEMICONDUCTOR WAFERS	Invention	6076458	March 30, 2012	Japan
9	Issuer	METHODS AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATES	Invention	6113154	June 24, 2011	Japan
10	NOMURA MICRO SCIENCE KK; Issuer; HJS ENG CO LTD	WASHING HYDROGEN WATER PRODUCING METHOD AND PRODUCING APPARATUS	Invention	6154860	July 17, 2015	Japan
11	Issuer	METHOD AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATE	Invention	6162881	April 22, 2013	Japan
12	Issuer	APPARATUS AND METHOD FOR PLATING AND/OR POLISHING WAFER	Invention	6186499	May 9, 2013	Japan
13	Issuer	SUBSTRATE SUPPORTING APPARATUS	Invention	6198840	November 27, 2012	Japan
14	NOMURA MICRO SCIENCE KK; Issuer; HJS ENG CO LTD	FUNCTIONAL WATER PRODUCING APPARATUS AND FUNCTIONAL WATER PRODUCING METHOD	Invention	6232086	January 29, 2016	Japan
15	Issuer	METHOD AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFER	Invention	6275155	November 28, 2012	Japan
16	Issuer	METHOD FOR FORMING METAL INTERCONNECTION	Invention	6301003	July 8, 2014	Japan
17	Issuer	APPARATUS AND METHOD FOR PLATING AND/OR POLISHING WAFER	Invention	6431128	May 9, 2013	Japan
18	Issuer	BARRIER LAYER REMOVAL METHOD AND SEMICONDUCTOR STRUCTURE FORMING METHOD	Invention	6438131	October 17, 2014	Japan

19	Issuer	APPARATUS AND METHOD FOR CLEANING SEMICONDUCTOR WAFER	Invention	6490202	September 26, 2014	Japan
20	Issuer	METHOD FOR REMOVING BARRIER LAYER FOR MINIMIZING SIDEWALL RECESS	Invention	6574486	February 15, 2015	Japan
21	Issuer	APPARATUS FOR SUBSTRATE BEVEL AND BACKSIDE PROTECTION	Invention	6592529	May 14, 2015	Japan
22	Issuer	A FALL-PROOF APPARATUS FOR CLEANING SEMICONDUCTOR DEVICES AND A CHAMBER WITH THE APPARATUS	Invention	6591555	September 8, 2015	Japan
23	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	6605044	May 20, 2015	Japan
24	Issuer	APPARATUS FOR HOLDING SUBSTRATE	Invention	6633756	December 4, 2015	Japan
25	Issuer	METHOD AND APPARATUS FOR THERMAL TREATMENT OF SEMICONDUCTOR WORKPIECES	Invention	10-1370807	August 29, 2007	Korea
26	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	10--1424622	July 5, 2007	Korea
27	Issuer	PLATING APPARATUS FOR METALLIZATION ON SEMICONDUCTOR WORKPIECE	Invention	10-1424623	November 2, 2007	Korea
28	Issuer	METHODES AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	10-1467974	December 10, 2007	Korea
29	Issuer	METHOD AND APPARATUS TO PREWET WAFER SURFACE FOR METALLIZATION FROM ELECTROLYTE SOLUTION	Invention	10-1487708	October 30, 2007	Korea
30	Issuer	BARRIER LAYER REMOVAL METHOD AND APPARATUS	Invention	10-1492467	August 20, 2008	Korea
31	Issuer	SOLUTION PREPARATION APPARATUS AND METHOD FOR TREATING INDIVIDUAL SEMICONDUCTOR WORKPIECE	Invention	10-1519832	March 17, 2008	Korea
32	Issuer	METHOD FOR SUBSTANTIALLY UNIFORM COPPER DEPOSITION ONTO SEMICONDUCTOR WAFER	Invention	10-1521470	September 16, 2008	Korea
33	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	10-1546660	December 12, 2008	Korea

34	Issuer	METHODS AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATES	Invention	10-1783786	June 24, 2011	Korea
35	Issuer	METHODS AND APPARATUS FOR CLEANING FLIP CHIP ASSEMBLIES	Invention	10-1837070	September 22, 2011	Korea
36	Issuer	METHOD FOR FORMING AIR GAP INTERCONNECT STRUCTURE	Invention	10-1842903	September 20, 2011	Korea
37	Issuer	NOZZLE FOR STRESS-FREE POLISHING METAL LAYERS ON SEMICONDUCTOR WAFERS	Invention	10-1891730	March 30, 2012	Korea
38	Issuer, and NOMURA MICRO SCIENCE CO., LTD	WASHING HYDROGEN WATER PRODUCING METHOD AND PRODUCING APPARATUS	Invention	10-1913465	July 14, 2016	Korea
39	Issuer	LOADLOCK CHAMBER AND METHOD FOR TREATING SUBSTRATES USING THE SAME	Invention	10-1940580	May 24, 2012	Korea
40	Issuer	METHOD AND APPARATUS FOR PULSE ELECTROCHEMICAL POLISHING	Invention	10-1947032	May 24, 2012	Korea
41	Issuer	VACUUM CHUCK	Invention	10-1963851	March 28, 2012	Korea
42	Issuer	METHOD AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFER	Invention	10-1992660	November 28, 2012	Korea
43	Issuer	METHOD FOR FORMING INTERCONNECTION STRUCTURES	Invention	10-1976727	November 27, 2012	Korea
44	Issuer	METHOD AND APPARATUS FOR THROUGH-SILICON VIAS REVEAL	Invention	10-2024122	April 22, 2013	Korea
45	Issuer	APPARATUS AND METHOD FOR PLATING AND/OR POLISHING WAFER	Invention	10-2043811	May 9, 2013	Korea
46	Issuer	PLATING APPARATUS FOR METALLIZATION ON SEMICONDUCTOR WORKPIECE	Invention	161074	November 2, 2007	Singapore
47	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	162170	December 10, 2007	Singapore
48	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	157876	July 5, 2007	Singapore
49	Issuer	METHOD FOR SUBSTANTIALLY UNIFORM COPPER DEPOSITION ONTO SEMICONDUCTOR WAFER	Invention	169663	September 16, 2008	Singapore

50	Issuer	METHOD AND APPARATUS TO PREWET WAFER SURFACE FOR METALLIZATION FROM ELECTROLYTE SOLUTION	Invention	161057	October 30, 2007	Singapore
51	Issuer	METHOD AND APPARATUS FOR THERMAL TREATMENT OF SEMICONDUCTOR WORKPIECES	Invention	159349	August 29, 2007	Singapore
52	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	174616	March 31, 2009	Singapore
53	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	172096	December 12, 2008	Singapore
54	Issuer	SOLUTION PREPARATION APPARATUS AND METHOD FOR TREATING INDIVIDUAL SEMICONDUCTOR WORKPIECE	Invention	164856	March 17, 2008	Singapore
55	Issuer	METHOD AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFER	Invention	11201503659Q	November 28, 2012	Singapore
56	Issuer	METHODS AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATES	Invention	195849	June 24, 2011	Singapore
57	Issuer	APPARATUS AND METHOD FOR TAPING ADHESIVE FILM ON SEMICONDUCTOR SUBSTRATE	Invention	11201510022S	June 19, 2013	Singapore
58	Issuer	NOZZLE FOR STRESS-FREE POLISHING METAL LAYERS ON SEMICONDUCTOR WAFERS	Invention	11201405586T	March 30, 2012	Singapore
59	Issuer	METHODS AND APPARATUS FOR CLEANING FLIP CHIP ASSEMBLIES	Invention	11201400619Q	September 22, 2011	Singapore
60	Issuer	SUBSTRATE SUPPORTING APPARATUS	Invention	11201503660V	November 27, 2012	Singapore
61	Issuer	APPARATUS AND METHOD FOR PLATING AND/OR POLISHING WAFER	Invention	11201508466Q	May 9, 2013	Singapore
62	Issuer	METHOD AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATE	Invention	11201507894X	April 22, 2013	Singapore
63	Issuer	METHOD FOR OPTIMIZING METAL PLANARIZATION PROCESS	Invention	11201706624U	February 15, 2015	Singapore
64	Issuer	APPARATUS AND METHOD FOR CLEANING SEMICONDUCTOR WAFER	Invention	11201702033V	September 26, 2014	Singapore
65	Issuer	METHOD FOR ELECTROCHEMICAL POLISH IN CONSTANT VOLTAGE MODE	Invention	11201803236V	October 30, 2015	Singapore

66	Issuer	METHOD AND APPARATUS FOR THROUGH-SILICON VIAS REVEAL	Invention	10201708304V	April 22, 2013	Singapore
67	Issuer	PLATING APPARATUS FOR METALLIZATION ON SEMICONDUCTOR WORKPIECE	Invention	I355686	November 5, 2007	Taiwan, China
68	Issuer	METHOD AND APPARATUS FOR THERMAL TREATMENT OF SEMICONDUCTOR WORKPIECES	Invention	I364075	August 30, 2007	Taiwan, China
69	Issuer	METHOD AND APPARATUS TO PREWET WAFER SURFACE FOR METALLIZATION FROM ELECTROLYTE SOLUTIONS	Invention	I366610	October 31, 2007	Taiwan, China
70	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	I371063	June 15, 2007	Taiwan, China
71	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	I390618	December 10, 2007	Taiwan, China
72	Issuer	WAFER CLEANING DEVICE	Utility Model	M464807	May 7, 2013	Taiwan, China
73	Issuer	ELECTROCHEMICAL DEPOSITION SYSTEM	Invention	I417962	March 20, 2008	Taiwan, China
74	Issuer	METHOD FOR SUBSTANTIALLY UNIFORM COPPER DEPOSITION ONTO SEMICONDUCTOR WAFER	Invention	I425122	September 17, 2008	Taiwan, China
75	Issuer	SOLUTION PREPARATION APPARATUS AND METHOD FOR TREATING INDIVIDUAL SEMICONDUCTOR WORKPIECE	Invention	I459489	March 17, 2008	Taiwan, China
76	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	I483299	January 9, 2009	Taiwan, China
77	Issuer	Wet process equipment	Design	D168609	November 20, 2013	Taiwan, China
78	Issuer	BARRIER LAYER REMOVAL METHOD AND APPARATUS	Invention	I501302	August 21, 2008	Taiwan, China
79	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	I501297	March 31, 2009	Taiwan, China
80	Issuer	Method and apparatus for pulse electrochemical polishing	Invention	I501307	July 31, 2013	Taiwan, China
81	Issuer	METHODS AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATES	Invention	I532083	June 24, 2011	Taiwan, China
82	Issuer	Vacuum chuck for electropolishing and/or electroplating	Invention	I576468	July 31, 2013	Taiwan, China

83	Issuer	Cleaning fluid flow control system and cleaning fluid flow control method	Invention	I587115	August 27, 2013	Taiwan, China
84	Issuer	Detector and detection method for wafer position	Invention	I596695	September 26, 2013	Taiwan, China
85	Issuer	Method and device for cleaning semiconductor silicon wafer	Invention	I604522	May 16, 2014	Taiwan, China
86	Issuer	Apparatus and method for taping adhesive film on semiconductor substrate	Invention	I604521	December 19, 2014	Taiwan, China
87	Issuer	Vacuum chuck	Invention	I606545	July 31, 2013	Taiwan, China
88	Issuer	Formation method of air-gap interconnection structure	Invention	I608541	January 20, 2012	Taiwan, China
89	Issuer	Method and apparatus for through-silicon vias reveal	Invention	I611507	October 23, 2014	Taiwan, China
90	Issuer	Semiconductor wafer polishing method	Invention	I614799	May 16, 2014	Taiwan, China
91	Issuer	Formation method of interconnection structure	Invention	I621234	May 16, 2014	Taiwan, China
92	Issuer	Nozzle for stress-free electrochemical polishing	Invention	I639488	July 31, 2013	Taiwan, China
93	Issuer	Method and apparatus for uniformly metallization on substrate	Invention	I639725	October 13, 2014	Taiwan, China
94	Issuer	Substrate strutting apparatus	Invention	I644390	May 16, 2014	Taiwan, China
95	NOMURA MICRO SCIENCE KK; Issuer; HJS ENG CO LTD	Manufacturing method and device of hydrogen water for cleaning	Invention	I646190	June 29, 2016	Taiwan, China
96	Issuer	Apparatus and method for electroplating or polishing wafer	Invention	I647343	May 16, 2014	Taiwan, China
97	Issuer	Apparatus and method for uniformly metallization on substrate	Invention	I658170	February 17, 2015	Taiwan, China
98	Issuer	Load lock chamber and method of using load lock chamber to process substrates	Invention	I663676	July 31, 2013	Taiwan, China
99	Issuer	Apparatus and method for removing edge film of reverse side of wafer	Invention	I665748	December 4, 2015	Taiwan, China
100	Issuer	METHOD AND APPARATUS FOR THERMAL TREATMENT OF SEMICONDUCTOR WORKPIECES	Invention	US8,383,429	August 29, 2007	USA
101	Issuer	PLATING APPARATUS FOR METALLIZATION ON SEMICONDUCTOR WORKPIECE	Invention	US8,518,224	November 2, 2007	USA

102	Issuer	METHODES AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US8,580,042	December 10, 2007	USA
103	Issuer	BARRIER LAYER REMOVAL METHOD AND APPARATUS	Invention	US8,598,039	August 20, 2008	USA
104	Issuer	METHODES AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US8,671,961	December 10, 2007	USA
105	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US9,070,723	July 5, 2007	USA
106	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US9,281,177	July 5, 2007	USA
107	Issuer	METHOD TO PREWET WAFER SURFACE	Invention	US9,295,167	November 12, 2013	USA
108	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US9,492,852	March 31, 2009	USA
109	Issuer	METHOD FOR FORMING INTERCONNECTION STRUCTURES	Invention	US9,496,172	November 27, 2012	USA
110	Issuer	VACUUM CHUCK	Invention	US9,558,985	March 28, 2012	USA
111	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US9,595,457	December 12, 2008	USA
112	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US9,633,833	March 31, 2009	USA
113	Issuer	METHODS AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATES	Invention	US9,666,426	June 24, 2011	USA
114	Issuer	NOZZLE FOR STRESS-FREE POLISHING METAL LAYERS ON SEMICONDUCTOR WAFERS	Invention	US9,724,803	March 30, 2012	USA
115	Issuer	METHOD AND APPARATUS FOR PULSE ELECTROCHEMICAL POLISHING	Invention	US9,865,476	May 24, 2012	USA
116	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	US10,020,208	December 12, 2008	USA
117	Issuer and NOMURA MICRO SCIENCE CO., LTD.	WASHING HYDROGEN WATER PRODUCING METHOD AND PRODUCING APPARATUS	Invention	US10,059,911	July 14, 2016	USA
118	Issuer	METHOD AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATE	Invention	US10,113,244	April 22, 2013	USA

119	Issuer	APPARATUS AND METHOD FOR CLEANING SEMICONDUCTOR WAFER	Invention	US10,141,205	September 26, 2014	USA
120	Issuer	METHOD FOR PROCESSING INTERCONNECTION STRUCTURE FOR MINIMIZING BARRIER SIDEWALL RECESS	Invention	US10,217,662	August 12, 2015	USA
121	Issuer	APPARATUS AND METHOD FOR PLATING AND/OR POLISHING WAFER	Invention	US10,227,705	May 9, 2013	USA
122	Issuer	METHOD AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFER	Invention	US10,297,472	November 28, 2012	USA
123	Issuer	SUBSTRATE SUPPORTING APPARATUS	Invention	US10,410,906	November 27, 2012	USA
124	Issuer	BARRIER LAYER REMOVAL METHOD AND SEMICONDUCTOR STRUCTURE FORMING METHOD	Invention	US10,453,743	October 17, 2014	USA
125	Issuer	METHODS AND APPARATUS FOR CLEANING SUBSTRATES USING HIGH TEMPERATURE CHEMICALS AND ULTRASONIC DEVICE	Invention	6670940	December 9, 2015	Japan
126	Issuer	SUBSTRATE HEAT TREATMENT APPARATUS	Invention	6697089	March 18, 2016	Japan
127	Issuer	METHOD AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATE	Invention	10-2119634	October 20, 2015	Korea
128	Issuer	SUBSTRATE SUPPORTING APPARATUS	Invention	10-2124417	June 18, 2015	Korea
129	Issuer	APPARATUS AND METHOD FOR UNIFORM METALLIZATION ON SUBSTRATE	Invention	11201704192W	November 25, 2014	Singapore
130	Issuer	METHOD FOR REMOVING BARRIER LAYER FOR MINIMIZING SIDEWALL RECESS	Invention	11201706167Q	February 15, 2015	Singapore
131	Issuer	Method for optimizing metal planarization process	Invention	I685029	June 22, 2016	Taiwan, China
132	Issuer	Gumming machine with automatic cleaning function and automatic cleaning method for gumming machine	Invention	I689354	May 28, 2015	Taiwan, China
133	Issuer	Apparatus for holding substrate	Invention	I691619	August 25, 2016	Taiwan, China
134	Issuer	Method for electrochemical polish in constant voltage mode	Invention	I695092	October 27, 2016	Taiwan, China
135	Issuer	Method and device for cleaning substrates	Invention	I695743	November 2, 2016	Taiwan, China

136	Issuer	METHOD FOR REMOVING BARRIER LAYER FOR MINIMIZING SIDEWALL RECESS	Invention	US10,615,073	February 15, 2015	USA
137	Issuer	FUNCTIONAL WATER PRODUCING APPARATUS AND FUNCTIONAL WATER PRODUCING METHOD	Invention	US10,654,014	January 27, 2017	USA
138	Issuer	SUBSTRATE SUPPORTING APPARATUS	Invention	6758587	June 6, 2016	Japan
139	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	6770757	April 6, 2016	Japan
140	Issuer, NOMURA MICRO SCIENCE CO., LTD., HJS ENG CO., LTD.	FUNCTIONAL WATER PRODUCING APPARATUS AND FUNCTIONAL WATER PRODUCING METHOD	Invention	10-2017-0009919	January 20, 2017	Korea
141	Issuer	BARRIER LAYER REMOVAL METHOD AND SEMICONDUCTOR STRUCTURE FORMING METHOD	Invention	11201703033R	October 17, 2014	Singapore
142	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	11201808637X	April 6, 2016	Singapore
143	Issuer	COATER WITH AUTOMATIC CLEANING FUNCTION AND COATER AUTOMATIC CLEANING METHOD	Invention	11201701411W	September 16, 2014	Singapore
144	Issuer	METHODS AND APPARATUS FOR CLEANING SEMICONDUCTOR WAFERS	Invention	11201709372X	May 20, 2015	Singapore
145	Issuer	TSV STRUCTURE PLANARIZATION PROCESS AND APPARATUS	Invention	11201808636T	April 7, 2016	Singapore
146	Issuer	A FALL-PROOF APPARATUS FOR CLEANING SEMICONDUCTOR DEVICES AND A CHAMBER WITH THE APPARATUS	Invention	11201706200U	September 8, 2015	Singapore
147	Issuer	Method for forming metal interconnection	Invention	I697983	January 4, 2016	Taiwan, China
148	Issuer	Substrate cleaning method and cleaning device	Invention	I698291	November 1, 2016	Taiwan, China
149	Issuer	Wafer cleaning device and method	Invention	I700730	January 4, 2017	Taiwan, China
150	Issuer	Method and device for cleaning semiconductor substrates	Invention	I702665	June 21, 2016	Taiwan, China
151	Issuer	Barrier layer removal method and semiconductor structure forming method	Invention	I705162	April 12, 2016	Taiwan, China

152	Issuer	Method and apparatus for cleaning and drying integrated circuit substrate	Invention	I706433	July 11, 2016	Taiwan, China
153	Issuer	Method for machining interconnection structure to minimize sidewall recess of barrier layer	Invention	I706434	October 12, 2016	Taiwan, China
154	Issuer	Device and method for cleaning semiconductor selenium sheet	Invention	I710412	March 23, 2016	Taiwan, China
155	Issuer	Apparatus for substrate bevel and backside protection	Invention	I712095	August 9, 2016	Taiwan, China
156	Issuer	FALL-PROOF APPARATUS FOR CLEANING SEMICONDUCTOR DEVICES AND A CHAMBER WITH THE APPARATUS	Invention	US10770315	September 8, 2015	USA
157	Issuer	SUBSTRATE SUPPORTING APPARATUS	Invention	US10770335	July 6, 2016	USA
158	Issuer	COATER WITH AUTOMATIC CLEANING FUNCTION AND COATER AUTOMATIC CLEANING METHOD	Invention	US10816901	September 16, 2014	USA
159	Issuer	METHOD FOR FORMING METAL INTERCONNECTION	Invention	10-2247940	January 9, 2017	Korea
160	Issuer	APPARATUS AND METHOD FOR WET PROCESS ON SEMICONDUCTOR SUBSTRATE	Invention	6831134	October 25, 2016	Japan
161	Issuer	METHODS FOR CLEANING SUBSTRATE	Invention	6843402	December 16, 2019	Japan
162	Issuer	METHOD AND APPARATUS FOR UNIFORMLY METALLIZATION ON SUBSTRATE	Invention	US10,907,266	April 22, 2013	USA
163	Issuer	METHOD AND APPARATUS FOR CLEANING SUBSTRATES USING HIGH TEMPERATURE CHEMICALS AND ULTRASONIC DEVICE	Invention	US11,000,782	December 9, 2015	USA
164	Issuer	APPARATUS FOR HOLDING A SUBSTRATE	Invention	US11,008,669	December 4, 2015	USA
165	Issuer	METHODS AND APPARATUS FOR CLEANING SUBSTRATES	Invention	3516684	July 31, 2019	EPO
166	Issuer	Barrier layer removal method and semiconductor structure forming method	Invention	I717346	October 16, 2017	Taiwan, China
167	Issuer	Device for cleaning substrate and high temperature chemical solution supply system	Invention	I721080	July 16, 2018	Taiwan, China
168	Issuer	Substrate strutting apparatus	Invention	I723240	July 16, 2019	Taiwan, China
169	Issuer	APPARATUS FOR SUBSTRATE BEVEL AND BACKSIDE PROTECTION	Invention	11201709054V	May 14, 2015	Singapore
170	Issuer	METHODS AND APPARATUS FOR CLEANING SUBSTRATES	Invention	11201902242R	September 19, 2016	Singapore

Schedule II: Important Trademarks

1. Major Trademarks Owned in Mainland China by the Issuer and its Holding Subsidiaries

S/N	Owner	International Classification	Trademark	Application No./Registration No.	Registration Date	Expiry Date
1	Issuer	Class 7	盛美	13396066	August 28, 2015	August 27, 2025
2	Issuer	Class 7	UltraSFP	12186123	August 7, 2014	August 6, 2024
3	Issuer	Class 7	UltraECP	12186124	August 7, 2014	August 6, 2024
4	Issuer	Class 7	UltraC	12186125	August 7, 2014	August 6, 2024
5	Issuer	Class 7	UltraC SAPS	12186126	August 7, 2014	August 6, 2024
6	Issuer	Class 7	ACM SFP	12186127	September 7, 2014	September 6, 2024
7	Issuer	Class 7	C _{BC}	13396065	August 21, 2015	August 20, 2025
8	Issuer	Class 7	C _{PRR}	13396064	March 14, 2015	March 13, 2025
9	Issuer	Class 7	C _{SAPS}	13396063	March 14, 2015	March 13, 2025
10	Issuer	Class 7	C _{TSV}	13396062	March 14, 2015	March 13, 2025
11	Issuer	Class 7	C _{TW}	13396061	August 28, 2015	August 27, 2025
12	Issuer	Class 7	C _{SAPS}	13396060	January 7, 2016	January 6, 2026
13	Issuer	Class 7	Ultra C TEBO	20518382	August 28, 2017	August 27, 2027
14	Issuer	Class 7	C _{TEBO}	20518381	October 21, 2017	October 20, 2027
15	Issuer	Class 7	Ultra Fn	48651305	April 7, 2021	April 6, 2031
16	Issuer	Class 7	ACM RESEARCH	46672000A	April 14, 2021	April 13, 2031
17	Issuer	Class 7	Smart Megasonix	50664878	June 14, 2021	June 13, 2031

2. Major Trademarks Owned Outside Mainland China by the Issuer and its Holding Subsidiaries

S/N	Owner	International Classification	Trademark	Application No./Registration No.	Registration Date	Expiry Date	Registration Place
1	Issuer	Class 7	Ultra C TEBO	107059018/1986040	September 11, 2018	May 15, 2029	Taiwan, China
2	Issuer	Class 7	UltraSFP	107059019/1980974	September 11, 2018	April 15, 2029	Taiwan, China
3	Issuer	Class 7	UltraC	107059021/1980975	September 11, 2018	April 15, 2029	Taiwan, China
4	Issuer	Class 7	UltraC SAPS	107059022/1980976	September 11, 2018	April 15, 2029	Taiwan, China
5	Issuer	Class 7	UltraSFP	International Registration No.: 1467252	January 2, 2019	January 2, 2029	Singapore
6	Issuer	Class 7	UltraECP	International Registration No.: 1467249	January 2, 2019	January 2, 2029	Singapore
7	Issuer	Class 7	UltraC	International Registration No.: 1467242	January 2, 2019	January 2, 2029	Singapore
8	Issuer	Class 7	Ultra C TEBO	International Registration No.: 1467241	January 2, 2019	January 2, 2029	Singapore
9	Issuer	Class 7	Ultra C TEBO	International Registration No.: 1467241	December 1, 2020	January 2, 2029	Korea
10	Issuer	Class 7	UltraC	International Registration No.: 1467242	November 12, 2020	January 2, 2029	Korea
11	Issuer	Class 7	UltraECP	International Registration No.: 1467249	November 12, 2020	January 2, 2029	Korea

12	Issuer	Class 7	UltraSFP	International Registration No.: 1467252	November 12, 2020	January 2, 2029	Korea
13	Issuer	Class 7	UltraC SAPS	International Registration No.: 1451450	July 6, 2020	January 9, 2029	Korea
14	Issuer	Class 7	Ultra C TEBO	International Registration No.: 1467241	April 23, 2021	January 2, 2029	Japan
15	Issuer	Class 7	UltraC	International Registration No.: 1467242	April 23, 2021	January 2, 2029	Japan
16	Issuer	Class 7	UltraECP	International Registration No.: 1467249	April 23, 2021	January 2, 2029	Japan
17	Issuer	Class 7	UltraSFP	International Registration No.: 1467252	April 23, 2021	January 2, 2029	Japan
18	Issuer	Class 7	Ultra C TEBO	International Registration No.: 6197430	November 17, 2020	January 2, 2029	USA
19	Issuer	Class 7	UltraC	International Registration No.: 6197431	November 17, 2020	January 2, 2029	USA
20	Issuer	Class 7	UltraECP	International Registration No.: 6197432	November 17, 2020	January 2, 2029	USA
21	Issuer	Class 7	UltraSFP	International Registration No.: 6197433	November 17, 2020	January 2, 2029	USA
22	Issuer	Class 7	UltraC SAPS	International Registration No.: 6121048	August 11, 2020	January 9, 2029	USA



Stock Code: 688082

Short Name: ACMSH

ACM Research (Shanghai), Inc.

Record of Investor Relation Activity

November, 2021

Category of investor relation activity	<input type="checkbox"/> Specific object research <input checked="" type="checkbox"/> Analyst meeting <input type="checkbox"/> Media interview <input type="checkbox"/> Performance briefing <input type="checkbox"/> Press conference <input type="checkbox"/> Roadshow <input type="checkbox"/> Site visit <input type="checkbox"/> Teleconference <input type="checkbox"/> Others (Please describe other activities in words)
Visitor's Unit	BOCI SECURITIES CHINA MERCHANTS SECURITIES HUATAI SECURITIES CSC FOUNDER SECURITIES CITIC SECURITIES HAITONG SECURITIES CICC
Time of meeting	November, 2021
Place of meeting	Company Conference Room
Name of receptionists of the listed company	Chairman: HUI WANG Director/General Manager: JIAN WANG Person in Charge of Financial Matters: LISA YI LU FENG Board Secretary: MINGZHU LUO

<p>Introduction to main contents of investor relation activity</p>	<p>1. Introduction to the Company by the General Manager and the Person in Charge of Financial Matters of the Company</p> <p>2. Q&A</p> <p>Q1: What’s your forward looking to the future market?</p> <p>A: With the increase of new products and new customers as well as the expansion of existing domestic customers, the total demand of customers for our products will increase. We will continue to develop domestic and international markets through differentiated products in the future, with half of sales in Mainland China and half of sales in the global market as our goal.</p> <p>Q2: What do you think of cleaning technology?</p> <p>A: The cleaning technology is constantly updated. While developing horizontally, we are also deepening vertically towards the advanced high-temperature IPA drying technology and the supercritical CO2 drying technology, among others, having made a global patent layout for the above two technologies. In the future, we will continue to carry out technological innovation and R&D in response to the market demand.</p>
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	<p>As to our megasonic technology, its main advantage is that its ability to clean particles below 30nm is much better than that of two-phase fluid technology. Megasonic cleaning technology is more needed for technical nodes below 28nm, especially those below 14nm, as advanced technical nodes are in greater need of cleaning small particles below 30nm. Particularly in 3D structures, small particles in grooves or deep holes, etc., cannot be cleaned by using two-phase fluids. Our cleaning equipment can be configured with SAPS or TEBO technology or two-phase fluid technology. The actual products will depend on the customer's product structure and particle cleaning requirements. In case of a fragile structure with high aspect ratio, TEBO is recommended. SAPS can be used for plane and deep holes, and two-phase fluid can be used for plane and large particle cleaning. Our Tahoe cleaning equipment combines wet bench and single wafer, which can greatly reduce the amount of sulfuric acid compared with single wafer high-temperature sulfuric acid cleaning equipment. We have very strong IP to protect the patent of wet bench and single wafer. For the cleaning process with special high temperature (greater than 180 °C), we also have single high-temperature sulfuric acid cleaning equipment for verification on the customer's production line.</p> <p>Q3: What are the territorial jurisdiction and governing law of your product technology?</p> <p>A: Since our establishment in 2005, the ownership of the technology developed by us and all IP vest in ACMSH. Accordingly, the technology is protected and governed by Chinese laws. We are listed on the STAR Market as a completely domestic semiconductor equipment company in China, and the technology developed by us is non-American technology. If parts made in the U.S. are used, they will be subject to the jurisdiction of the U.S. import and export laws. The regulations on parts made in the U.S. are the same for all semiconductor equipment companies at home and abroad.</p>
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	<p>Q4: What do you think of the parts supply cycle?</p> <p>A: From the published financial data, it can be seen that our production demand for suppliers has increased significantly this year. We will, according to the production expansion plan in the next 12 months, strengthen communication with suppliers to ensure the medium and long-term supply of core parts.</p> <p>Q5: What do you think of your other products?</p> <p>A: Copper plating equipment, etc., is covered in our plan. As for wet bench equipment, while still focusing on the market of 12-inch silicon wafer, we will enter the 8-inch market with differentiated technological innovation on the basis of ensuring gross profit margin. As for LPCVD of furnace tube, we have been in a leading position in the domestic market, and will explore the domestic market together with our partners. As for advanced packaging wet equipment, we have gluing, degluing, developing, etching, cleaning and electroplating copper equipment. We are also the only company in the world that can provide a complete set of wet processing solutions. In the future, we can not only accelerate localization, but also enter the global market for competition.</p> <p>Q6: What do you think of the decline of ASP for single wafer cleaning equipment?</p> <p>A: The main reason for the downward trend of the unit price of cleaning equipment mainly lies in the different number of chambers of cleaning equipment. The price will vary due to different number of chambers and different chemical preparation. In 2019, we mainly sold equipment with 8-12 chambers, and after 2020, we also began to sell certain equipment with 2-4 chambers, resulting in a decline in the ASP. Although the ASP has declined, the gross profit margin remains stable.</p>
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	<p>Q7: What do you think of platformization?</p> <p>A: The U.S. and Japan have similar experience in the goal of platform-based equipment companies. Except for the special lithography machine, only with multiple platform-based products can we become stronger and bigger. However, it is very rare and difficult for companies to truly become platform-based, and there are only a few companies in the world that can do so. It is not easy for a company to perfect one kind of equipment, let alone multiple platform-based products. A company may need more than ten or even decades of hard work before it can be platform-based, and the key to success depends on the company's differentiated innovation and original innovation ability. Through more than ten years of constant innovation, we have developed internationally advanced SAPS, internationally leading TEBO, Tahoe cleaning equipment, advanced wet packaging equipment, and then have expanded to high-end copper electroplating equipment and vertical furnace tube series equipment, realizing the leap from wet process to dry process. We are also continuing to develop two kinds of new front-end semiconductor equipment, so that the market coverage of our products will increase from the current USD5 billion to USD10 billion (calculated according to the global semiconductor equipment market in 2020). It's fair to say that we have basically completed the platform-based product layout and are moving towards the goal of becoming the first-tier semiconductor equipment company in the world.</p>
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