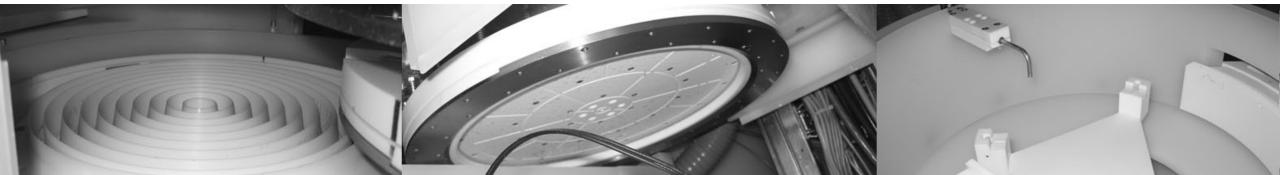


Supplemental Investor Presentation Earnings Release – Fourth Quarter and Fiscal Year 2022

February 24, 2023



Forward-Looking Statements. Certain statements contained in this presentation are not historical facts and may be forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "plans," "expects," "believes," "anticipates," "designed," and similar words are intended to identify forward-looking statements. Forward-looking statements are based on ACM management's current expectations and beliefs, and involve a number of risks and uncertainties that are difficult to predict and that could cause actual results to differ materially from those stated or implied by the forward-looking statements. A description of certain of these risks, uncertainties and other matters can be found in filings ACM makes with the U.S. Securities and Exchange Commission, all of which are available at www.sec.gov. Because forward-looking statements involve risks and uncertainties, actual results and events may differ materially from results and events currently expected by ACM. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. ACM undertakes no obligation to publicly update these forward-looking statements to reflect events or circumstances that occur after the date hereof or to reflect any change in its expectations with regard to these forward-looking statements or the occurrence of unanticipated events.

Market Data. Information presented below under "Investment Highlights" concerning ACM's total addressable market presents a forecast based on information provided by Gartner, Inc. in its report "Forecast: Semiconductor Wafer Fab Manufacturing Equipment (Including Wafer-Level Packaging), Worldwide, 4Q22 Update" (December 2022). You are cautioned not to rely on or give undue weight to this information. The Gartner report represents research opinions or viewpoints that are published, as part of a syndicated subscription service, by Gartner and are not representations of fact. The Gartner report speaks as of its original publication date (and not as of the date of this presentation), and the opinions expressed in the Gartner report are subject to change without notice. While ACM is not aware of any misstatements regarding the information provided in the Gartner report, it has not independently verified the accuracy or completeness of that information, which involves numerous assumptions and is subject to risks and uncertainties, as well as change based on various factors, that could cause results to differ materially from the forecast presented. The industry in which ACM operates is subject to a high degree of uncertainty and risk due to variety of factors, including those described in ACM Research, Inc.'s public filings with the Securities and Exchange Commission, as described above.

Note Regarding Presentation of Non-GAAP Financial Measures. Information presented below under "FY22 and Q4'22 Summary", "2022 Financial Results", "Q4 2022 Financial Results" includes certain "non-GAAP financial measures" as defined in Regulation G under the Securities Exchange Act of 1934, including non-GAAP gross margin, non-GAAP operating loss, non-GAAP basic and diluted EPS, and non-GAAP gross profit. These supplemental measures exclude the impact of stock-based compensation, non-cash change in fair value of financial liabilities and unrealized gain on trading securities, which ACM does not believe are indicative of its core operating results. A reconciliation of each non-GAAP financial measure to the most directly comparable GAAP financial measure is included under "2022 GAAP and Non-GAAP Reconciliation" and "Q4 2022 GAAP and Non-GAAP Reconciliation" below as well as in ACM's fourth quarter and fiscal year 2022 earnings release dated February 24, 2023, which (a) has been furnished to the Securities and Exchange Commission and can be viewed at https://www.sec.gov/Archives/edgar/data/1680062/000114036123008431/brhc10048753 ex99-01.htm and (b) has been posted at, and can be downloaded from, the "Investors" content area at ACM's website, https://ir.acmrcsh.com/news-release/news-release/details/acm-research-reports-fourth-quarter-and-fiscal-year-2022-results.

Company References. As used in these "ACM Shanghai" refers to ACM Research (Shangahi), Inc. and "ACM" refers to ACM Research, Inc. and its subsidiaries, including ACM Shanghai.



FY22 and Q4'22 Summary

Q4 2022 Financial Results

- Revenue was \$108.5 million compared to \$95.1 million last year
- Shipments were a record \$197 million up 69% year-over-year
- Gross margin was 49.6% and non-GAAP operating margin was 17.7%

2022 Financial Results

- \$388.8 million revenue (up 49.7%); total shipments of \$539 million (up 45%)
- 47.2% GAAP gross margin (versus 44.2% in 2021)
- 47.4% non-GAAP gross margin (versus 44.4% in 2021)
- \$59.0 million GAAP operating income (15.2% of revenue)
- \$66.8 million non-GAAP operating income (17.2% of revenue)
- \$0.59 diluted GAAP earnings per share (versus \$0.58 in 2021)
- \$0.83 diluted non-GAAP earnings per share (versus \$0.65 in 2021)

Key Operational Updates

- Share gains in cleaning, significant contribution from ECP. Furnace product cycle to begin in 2023..
- Entered the Track and PECVD market with two new product categories that doubles our SAM to \$16 billion
- International expansion with shipment to leading U.S. manufacturer and European customer
- Initial production in Lingang, Shanghai expected in the second-half of 2023
- · Increasing investment in Korea to support international growth initiatives
- Moving forward with purchase of new ACM Shanghai Headquarters in Zhangjiang, Shanghai



2022 Revenue Details

Cleaning

- \$272.9M revenue (up 44%)
- Revenue mix 70% vs. 73%

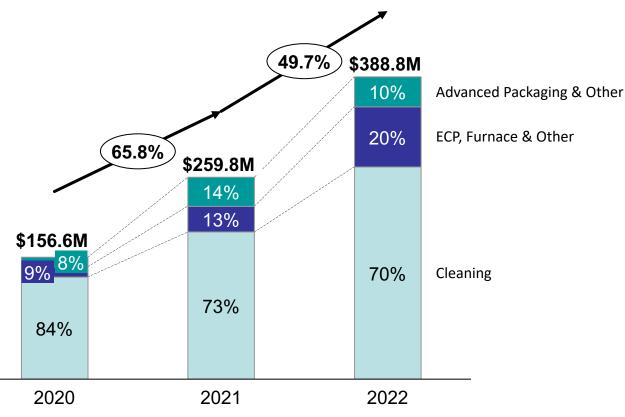
ECP, Furnace & Other

- \$77.5M revenue (up 133%)
- Revenue mix 20% vs. 13%

Advanced Packaging & Other

- \$38.4M revenue (up 3%)
- Revenue mix 10% vs. 14%

Product Category^{1,2,3}



1. <u>Cleaning</u>: Single wafer cleaning, Tahoe and semi-critical cleaning equipment

- 2. <u>ECP, Furnace & Other</u>: ECP (front-end and packaging), furnace and other technologies
- 3. <u>Advanced Packaging & Other</u>: Advanced Packaging (excluding ECP), services & spares



Tier One Customer Base

	Front-End Customers		Back-End Customers
 Leading advanced foundry in China ACM Research 2022 Revenue %: 18% (primarily Foundry / Logic) 	 Mainland China's largest foundry Tier-one customers include Qualcomm, Broadcom and Texas Instruments 7 strategically located fabs in China Building 3 12-inch fabs in China ⁽³⁾ SMIC Shenzhen entered into production by the end of 2022 ⁽³⁾ ACM Research 2022 Revenue %: 15% 	 Major new entrant into NAND flash and DRAM industry Innovative Xtacking 2.0 unleashes potential of 3D NAND ⁽¹⁾ ACM Research 2022 Revenue %: 10% (primarily 3D NAND) 	 jcap Largest bumping house in China and leading WLCSP production base Subsidiary of OSAT company JCET Owns one of the most advanced packaging technology R&D service platforms⁽²⁾ Global customer base with exposure to the U.S., Western Europe and Asia
Tier 2 and 3 China-based IC Manufacturers	GXMt	SK hynix	TONGFU MICROELECTRONICS CO., LTD.
	New China-based entrant to DRAM industry	Global market leader in memory (DRAM &	 Leading OSAT provider – #4 globally⁽⁴⁾ and top 3 in China⁽⁴⁾
• Tier 2 includes Hangzhou Silan and 4	New China-based entrant to DRAM		 Leading OSAT provider – #4 globally⁽⁴⁾ and

(1) Source: YMTC Press Release. (2) Source: JCAP Company Profile. (3) Source: SMIC website. (4) Source: TFME website.



Manufacturing Facilities

Factory #1 (Shanghai HQ)



- Original ACM factory
- 36,000 sq. ft. facility
- 8,000 sq. ft. of class 10,000 clean room space for product assembly and testing
- 800 sq. ft. of class 1 clean room space for product demonstration purposes
- Co-located with ACM Shanghai Headquarters and China R&D Center

Factory #2(Chuansha Production)



- Located in Chuansha area of Pudong district, approximately 11 miles from ACM Shanghai's Zhangjiang area HQ
- Opened first building in September 2018 and added 2nd floor in 2020; fully operational with 100,000 sq. ft. of available floor space
- Leased second building in Q1 2021 to expand Chuansha facility to 200,000 sq. ft. of available floor space for production

Lingang



- Broke ground on the new R&D and production facilities in Lingang region of Shanghai in July 2020
- Approximately 30 miles from ACM Shanghai's HQ in Zhangjiang
- 1 million square feet
- Expect initial production activities to commence in mid-2023

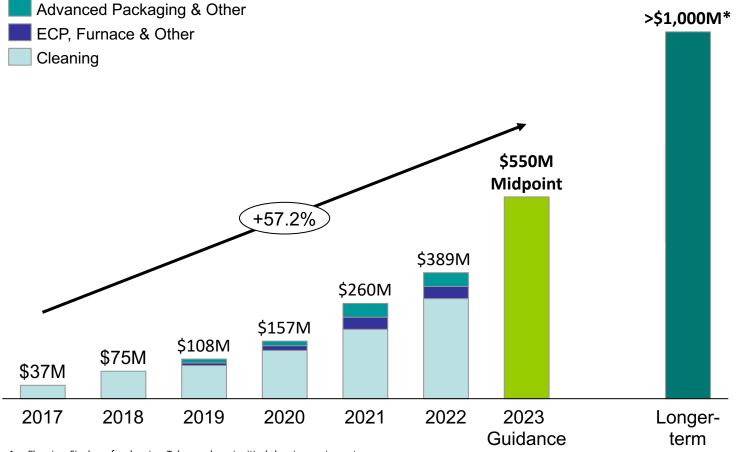


Innovative Product Introductions Expanding SAM¹

Estimated 2022 SAM of \$16 billion addressed by ACM's current product portfolio



Internal Longer-Term Target for \$1B+ in Revenue



	ACM Research									
Mainland China	SAM ¹	Share	Revenue							
Cleaning	\$0.7B	55%	\$0.4B							
ECP	\$0.2B	50%	\$0.1B							
Furnace	\$0.5B	35%	\$0.2B							
PECVD	\$0.7B	15%	\$0.1B							
Track	\$0.4B	15%	\$0.1B							
Ad. Packaging	n/a	n/m	\$0.15B							
	\$2.5B	39%	\$1.0B							
RoW										
Cleaning	\$3.8B	-								
ECP	\$0.6B	-								
Furnace	\$2.6B	-	Upside							
PECVD	\$4.0B	-								
Track	\$2.3B	-								
Ad. Packaging	n/a	-								
	\$13.2B	-	Upside							
ACM China + RoW Revenue >\$1.0B										

¹Source: Gartner - "Forecast: Semiconductor Wafer Fab Manufacturing Equipment (Including Wafer-Level Packaging), World-wide, Q4'22 Update" and Company Estimates:

2025 Gartner WFE market of \$91B

Target

ACM Global SAM is ~18% of Global WFE and China is 15% of ACM Global SAM

1. <u>Cleaning</u>: Single wafer cleaning, Tahoe and semi-critical cleaning equipment

2. ECP & Furnace & Other: ECP (front-end and packaging), furnace and other technologies

3. Advanced Packaging & Other: Advanced Packaging (excluding ECP), services & spares

* ACM Research longer-term internal target, for internal planning purposes only, not a projection or estimate of actual or future revenue

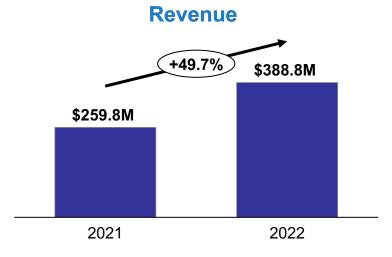


2023 Outlook

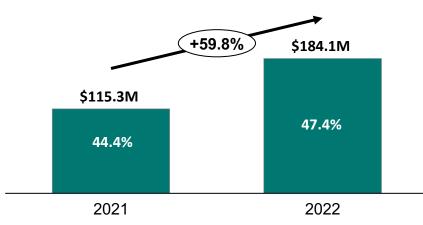
- Maintain 2023 revenue guidance of \$515 to \$585 million
- Outlook reflects, among other things:
 - Current assessment of potential impact from US-China trade policy
 - Various expected spending scenarios of key customers, supply chain constraints, and the timing of acceptances for first tools under evaluation in the field.



2022 Financial Results



Non-GAAP Gross Profit

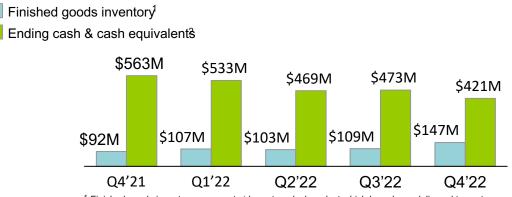


EPS



See slide 14 for reconciliation between GAAP and Non-GAAP Gross Profit and EPS

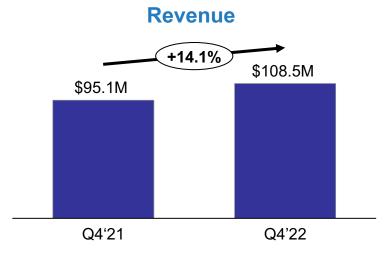
Balance Sheet¹



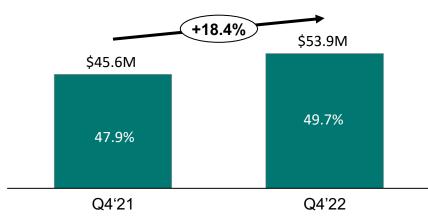
 ¹ Finished goods inventory represents 'demo-to-sales' product which have been delivered to customers for evaluation. These products are carried at cost until ownership is transferred.
 ² Including interest bearing time deposits.



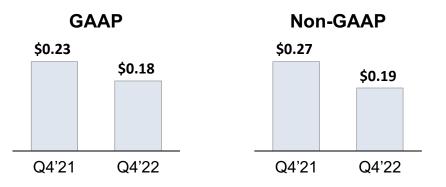
Q4 2022 Financial Results



Non-GAAP Gross Profit

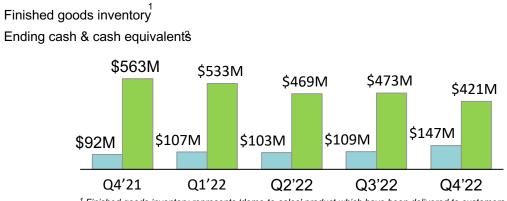


EPS



See slide 15 for reconciliation between GAAP and Non-GAAP Gross Profit and EPS

Balance Sheet¹



¹ Finished goods inventory represents 'demo-to-sales' product which have been delivered to customers for evaluation. These products are carried at cost until ownership is transferred. 2 Including interest bearing time deposits.





Appendix



2022 GAAP to Non-GAAP Reconciliation

	Year Ended December 31,															
				1	202	22	2021									
	Actual (GAAP)		SBC		Other non- operating adjustments		Adjusted (Non-GAAP)		Actual (GAAP)		SBC	Other non- operating adjustments			Adjusted on-GAAP)	
								(In thous	and	ls)						
Revenue	\$	388,832	\$		\$	840	\$	388,832	\$	259,751	\$	(H)	\$	-	\$	259,751
Cost of revenue		(205,217)		(520)		-		(204,697)		(144,895)		(397)		-		(144,498)
Gross profit		183,615		(520)	Č.	-		184,135		114,856		(397)		-		115,253
Operating expenses:																
Sales and marketing		(39,889)		(1,877)		.÷		(38,012)		(26,733)		(1,802)		(-)		(24,931)
Research and development		(62,226)		(2,565)		-		(59,661)		(34,207)		(1,115)		-		(33,092)
General and administrative		(22,465)		(2,768)		-		(19,697)		(15,214)		(1,803)		-		(13,411)
Income from operations	\$	59,035	\$	(7,730)	\$	-	\$	66,765	\$	38,702	\$	(5,117)	\$	-	\$	43,819
Unrealized gain (loss) on trading securities		(7,855)		-		(7,855)		-		607		-		607		-
Net income (loss) attributable to ACM Research, Inc.	\$	39,263	\$	(7,730)	\$	(7,855)	\$	54,848	\$	37,757	\$	(5,117)	\$	607	\$	42,267
Basic EPS	\$	0.66					\$	0.93	\$	0.65					\$	0.73
Diluted EPS	\$	0.59					\$	0.83	\$	0.58					\$	0.65



Q4 2022 GAAP to Non-GAAP Reconciliation

	Three Months Ended December 31,																		
	2022										2021								
	Actual (GAAP)		SBC	Other non- operating adjustments		Adjusted (Non-GAAP)		Actual (GAAP)			SBC	Other non- operating adjustments			djusted on-GAAP)				
								(In thousa	ands	5)									
Revenue	\$	108,542	\$	-	\$	-	\$	108,542	\$	95,142	\$	-	\$	-	\$	95,142			
Cost of revenue		(54,737)		(137)		-		(54,600)		(49,696)		(108)		-		(49,588)			
Gross profit		53,805		(137)		-		53,942		45,446		(108)		-		45,554			
Operating expenses:																			
Sales and marketing		(12,395)		(600)		-		(11,795)		(9,273)		(402)		-		(8,871)			
Research and development		(17,835)		(832)		-		(17,003)		(12,914)		(314)		-		(12,600)			
General and administrative		(6,905)		(925)		-		(5,980)		(4,133)		(470)		-		(3,663)			
Income (loss) from operations	\$	16,670	\$	(2,494)	\$	-	\$	19,164	\$	19,126	\$	(1,294)	\$	-	\$	20,420			
Unrealized loss on trading securities		1,707		-		1,707		-		(1,210)		-		(1,210)		-			
Net income (loss) attributable to ACM Research, Inc.	\$	11,809	\$	(2,494)	\$	1,707	\$	12,596	\$	15,565	\$	(1,294)	\$	(1,210)	\$	18,069			
Basic EPS	\$	0.20					\$	0.21	\$	0.27					\$	0.31			
Diluted EPS	\$	0.18					\$	0.19	\$	0.23					\$	0.27			

