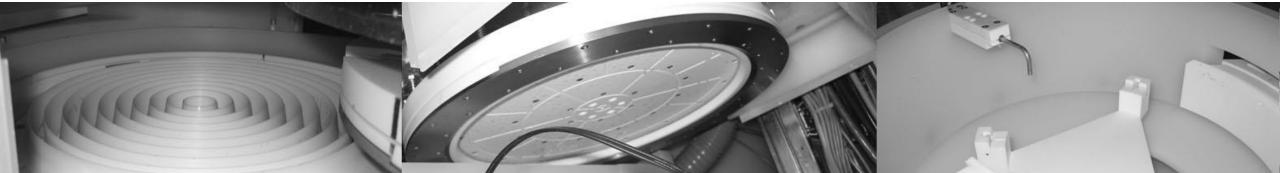


Supplemental Investor Presentation Earnings Release – First Quarter 2023

May 5, 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 (the "SEC"), 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 concerning ACM's total addressable market presents a forecast based on information provided by Gartner, Inc. in its report "Forecast: Semiconductor Wafer Fab Equipment, 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 SEC, as described above.

Note Regarding Presentation of Non-GAAP Financial Measures. Information presented below under "Q1 2023 Summary" and "Q1 2023 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 "Q1 2023 GAAP to Non-GAAP Reconciliation" below as well as in ACM's first quarter 2023 earnings release dated May 5, 2023, which (a) has been furnished to the SEC and can be viewed at https://www.sec.gov/Archives/edgar/data/1680062/000114036123023074/brhc20052525 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-first-quarter-2023-results.

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



Q1 2023 Summary

Q1 2023 Financial Results

- \$74.3 million revenue (up 76.0%); total shipments of \$89.0 million (up 33.0%)
- 53.8% GAAP gross margin (versus 46.7% in Q1 2022)
- 54.0% non-GAAP gross margin (versus 46.9% in Q1 2022)
- \$8.9 million GAAP operating income (11.9% of revenue)
- \$10.9 million non-GAAP operating income (14.7% of revenue)
- \$0.11 diluted GAAP earnings per share (versus loss of \$0.10 in Q1 2022)
- \$0.15 diluted non-GAAP earnings per share (versus loss of \$0.01 in Q1 2022)

Key Operational Updates

- Good growth from Cleaning; increased contribution from our ECP, furnace, and other technologies
- Growing interest in Track and PECVD platforms
- Received Purchase Order for SAPS Tool from Major European Global Semiconductor Manufacturer
- U.S. customer evaluation on track. Leased Oregon facility for expanded U.S. support
- Initial production in Lingang, Shanghai planned for second half of 2023
- Increasing commitment to Korea; Purchased land as site for planned R&D and production facility



Q1 2023 Revenue Details

Cleaning

- \$36.6M revenue (up 41%)
- Revenue mix 49% vs. 62%

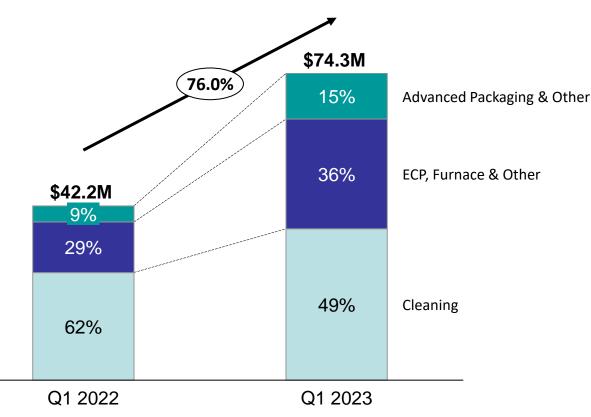
ECP, Furnace & Other

- \$26.6M revenue (up 117%)
- Revenue mix 36% vs. 29%

Advanced Packaging & Other

- \$11.0M revenue (up 183%)
- Revenue mix 15% vs. 9%

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

	Back-End Customers				
 Leading advanced foundry in China ACM 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 ⁽¹⁾ SMIC Shenzhen entered into production by the end of 2022 ⁽¹⁾ ACM 2022 Revenue %: 15% 	 Major new entrant into NAND flash and DRAM industry Innovative Xtacking 2.0 unleashes potential of 3D NAND ⁽²⁾ ACM 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⁽³⁾ Global customer base with exposure to the U.S., Western Europe and Asia 		
 New China-based entrant to DRAM industry ACM 2022 Revenue %: <10% 	 Global market leader in memory (DRAM & NAND) semiconductor products ACM's first major customer ACM 2022 Revenue %: <10% (primarily DRAM) 	 Tier 2 and 3 China-based IC Manufacturers Tier 2 includes Hangzhou Silan and 4 China-based customers Ordered a range of semi-critical tools including the scrubber, wet etch, and backside wafer etching tool, auto wet bench, SAPS-II cleaning tool and Cu interconnect ECP map tool. Tier 3 includes a handful of companies investing in new capacity in IoT, EV, AI 	 Leading OSAT provider – #4 globally⁽⁴⁾ and top 3 in China⁽⁴⁾ Fastest growing OSAT provider globally with ~30% year-over-year revenue growth in 2022⁽⁴⁾ Six production facilities serving more than half of the top ten global semiconductor manufacturers⁽⁴⁾ 		

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



Shanghai Facilities

ACM Shanghai HQ and R&D Center

- ACM Shanghai Headquarters and China R&D Center
- Conduct R&D and services support operations in leased facility located in the Zhangjiang Hi-Tech park in Shanghai

Chuansha Production Facilities



- Located in Chuansha area of Pudong district, approximately 11 miles from ACM Shanghai's Zhangjiang area HQ
- Three leased facilities with more than 236,00 sq
 ft.

Lingang R&D and Production Center



- Construction in progress for R&D and production facilities in Lingang region of Shanghai
- Approximately 30 miles from ACM Shanghai's HQ in Zhangjiang
- 1 million square feet
- Expect initial production activities to commence in second half of 2023



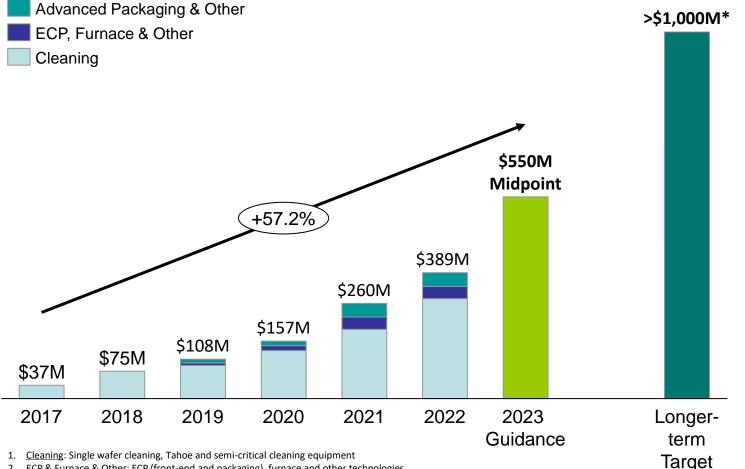
Innovative Product Introductions Expanding Serviceable Available Market ("SAM")¹

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



¹Source: Gartner - "Forecast: Semiconductor Wafer Fab Equipment, Worldwide, 4Q22 Update" (December 2022) and Company Estimates

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	>\$1.0B					

¹Source: Gartner - "Forecast: Semiconductor Wafer Fab Equipment, Worldwide, 4Q22 Update" (December 2022) and Company Estimates:

- 2025 Gartner WFE market of \$91B
- ACM Global SAM is ~18% of Global WFE and China is 15% of ACM Global SAM

Cleaning: Single wafer cleaning, Tahoe and semi-critical cleaning equipment 1.

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

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

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

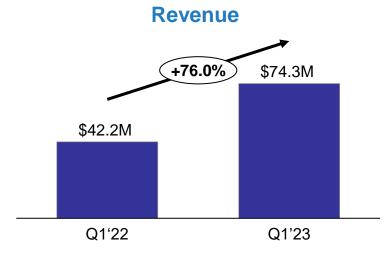


2023 Outlook

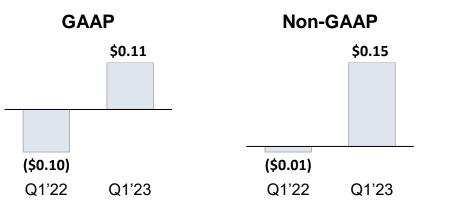
- Maintain 2023 revenue guidance of \$515 to \$585 million
- Outlook reflects, among other things:
 - Current assessment of continuing impact from U.S.-China trade policy
 - Various expected spending scenarios of key customers, supply chain constraints, and the timing of acceptances for first tools under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



Q1 2023 Financial Results



EPS

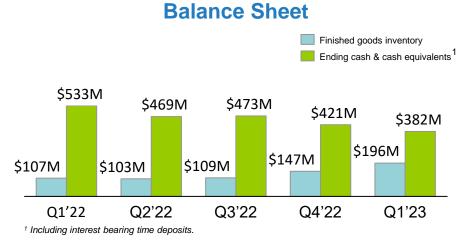


See slide 12 for reconciliation between GAAP and Non-GAAP Gross Profit and EPS



+102.6% \$40.1M \$19.8M 54.0% 46.9% Q1'22 Q1'23

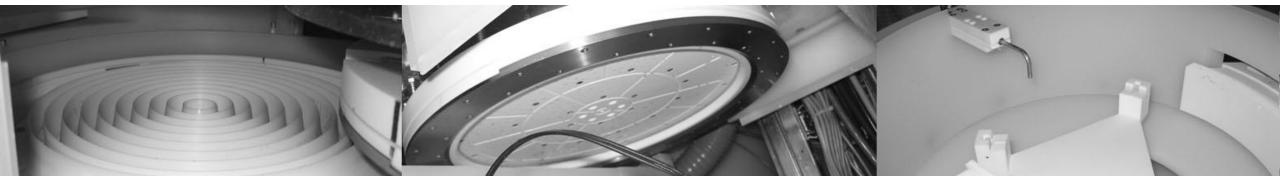
Non-GAAP Gross Profit



10



Appendix



Q1 2023 GAAP to Non-GAAP Reconciliation

						,	Three Months En	ded	March 31,						
	2023									2022					
	Actual				Other non-		Adjusted		Actual		Other non-		Adjusted		
	((GAAP)		SBC	operating adjustments		(Non-GAAP)		(GAAP)	SBC		perating justments	(No	n-GAAP)	
							(In thous	and	s)						
Revenue	\$	74,256	\$	-	\$.	. 9	\$ 74,256	\$	42,186 \$	-	\$	-	\$	42,186	
Cost of revenue		(34,270)		(125)	-		(34,145)		(22,500)	(113))	-		(22,387)	
Gross profit		39,986		(125)	-		40,111		19,686	(113))	-		19,799	
Operating expenses:															
Sales and marketing		(9,337)		(431)	-		(8,906)	1	(6,697)	(354))	-		(6,343)	
Research and development		(14,029)		(701)	-		(13,328)	1	(17,346)	(411))	-		(16,935)	
General and administrative		(7,758)		(811)	-		(6,947)	1	(4,949)	(496)		-		(4,453)	
Income (loss) from operations	\$	8,862	\$	(2,068)	\$ -	e .	\$ 10,930	\$	(9,306) \$	(1,374)	\$	-	\$	(7,932)	
Unrealized loss on trading securities		(654)		-	(654)	-		(3,858)	-		(3,858)		-	
Net income (loss) attributable to ACM Research, Inc.	\$	7,145	\$	(2,068)	\$ (654) :	\$ 9,867	\$	(5,786) \$	(1,374)	\$	(3,858)	\$	(554)	
Basic EPS	\$	0.12				1	\$ 0.17	\$	(0.10)				\$	(0.01)	
Diluted EPS	\$	0.11				!	\$ 0.15	\$	(0.10)				\$	(0.01)	

