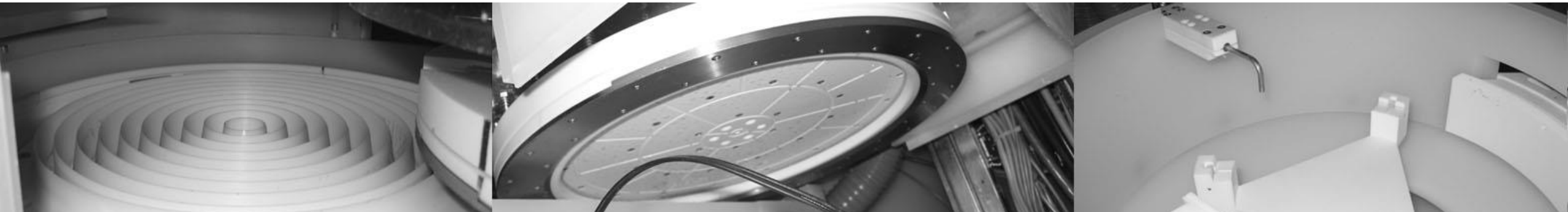




Supplemental Investor Presentation Earnings Release – Second Quarter 2020

August 6, 2020



Forward-Looking Statements. Information presented below under “2020 Outlook” with respect to revenue projected to be generated in 2020 is a forward-looking statement for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Actual results may vary significantly from ACM Research’s expectations based on a number of risks and uncertainties, including but not limited to the following, any of which could be exacerbated even further by the continuing COVID-19 outbreak in China and globally: anticipated customer orders or identified market opportunities may not grow or develop as anticipated; customer orders already received may be postponed or canceled; suppliers may not be able to meet ACM Research’s demands on a timely basis; volatile global economic, market, industry and other conditions could result in sharply lower demand for products containing semiconductors and for ACM Research’s products and in disruption of capital and credit markets; ACM Research’s failure to successfully manage its operations; and trade regulations, currency fluctuations, political instability and war may materially adversely affect ACM Research due to its substantial non-U.S. customer and supplier base and its substantial non-U.S. manufacturing operations. ACM Research cannot guarantee any future results, levels of activity, performance or achievements. The industry in which ACM Research operates is subject to a high degree of uncertainty and risk due to variety of factors, including those described in ACM Research’s public filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended December 31, 2019 for a more complete discussion of these factors and other risks, particularly under the heading “Risk Factors.” ACM Research expressly disclaims any obligation to update forward-looking statements after the date of this presentation.

Market Data. Information presented below under “Investment Highlights” concerning ACM Research’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, 2Q19 Update” (July 2019). 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 Research 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 Research operates is subject to a high degree of uncertainty and risk due to variety of factors, including those described in ACM Research’s public filings with the Securities and Exchange Commission, as described above.

Note Regarding Presentation of Non-GAAP Financial Measures. Information presented below under “Q2 2020 Highlights” and “Q2 2020 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 margin, non-GAAP gross profit and non-GAAP operating profit. These supplemental measures exclude the impact of stock-based compensation, which ACM Research does not believe is indicative of its core operating results. A reconciliation of each non-GAAP financial measure to the most directly comparable GAAP financial measure is included in ACM Research’s second quarter 2020 earnings release dated August 5, 2020, which (a) has been filed with the Securities and Exchange Commission and can be viewed at https://www.sec.gov/Archives/edgar/data/1680062/000114036120017586/brhc10014127_ex99-01.htm and (b) has been posted at, and can be downloaded from, the “Investors” content area at ACM Research’s website, <http://ir.acmrcsh.com/news-releases/news-release-details/acm-research-reports-second-quarter-2020-results>.

Q2 2020 Highlights

- **Strong Q2 Results:**

- \$39.0 million revenue, up 35% from Q2 2019; total shipments of \$45 million
- 49.6% GAAP gross margin and 18.8% GAAP operating margin
- 49.7% non-GAAP gross margin and 21.0% non-GAAP operating margin
- Ended Q2 with \$86 million of cash

- **Key Operational Progress:**

- Repeat Tahoe shipment in Q2; multiple tools planned for 2H'2020
- “First tool” acceptance for ECP map Q2; additional tool delivered to another China foundry customer in July
- Purchase order for SAPS-VI to support production ramp at a key memory customer
- Purchase orders and final stage bidding total of \$36 million in from two new customers for semi-critical & SAPS-II tools
- SAPS II tool for R&D delivered to US demo lab of leading OEM

- **Update on Strategic Initiatives:**

- Began construction for 1 million square foot of R&D and production facilities in Lingang
- Submitted application in May for STAR Market IPO
- Invested RMB 100 million (\$14.2 million) to a special fund for investment in SMIC’s Shanghai STAR Market IPO

Tier One Customer Base

Front-End Customers



- Major new entrant into NAND flash and DRAM industry
- Expanding capacity with construction of \$24B production facility in Wuhan⁽¹⁾
- Proprietary Xtacking architecture used to produce 3D NAND products⁽²⁾
- ACM 2019 Revenue %: 28% (primarily 3D NAND)



- Leading advanced foundry in China
- Manages first fully automated 300mm wafer production line in mainland China⁽³⁾
- Production capacity for 35,000 wafers per month⁽³⁾
- ACM 2019 Revenue %: 27% (primarily Foundry / Logic)



- Global market leader in memory (DRAM & NAND) semiconductor products
- ACM's first major customer
- Expected to spend \$107B in the coming years to build four new memory chip plants⁽⁴⁾
- ACM 2019 Revenue %: 20% (primarily DRAM)

Back-End Customers



- 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⁽⁶⁾
- Global customer base with exposure to the U.S., Western Europe and Asia



- Mainland China's largest foundry
- Tier one customer base including Qualcomm, Broadcom and Texas Instruments
- Six strategically located fabs in China and Western Europe
- Building \$10B fab to produce 14nm, 10nm and 7nm chips⁽⁵⁾



- New China-based entrant to DRAM industry
- Ordered 12-Chamber SAPS-V tool for evaluation
- ACM delivered first tool in Q4 2019

Two New Analog/Power IC Manufacturing 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.
- ACM expects significant shipment of first tools during 2H' 2020.

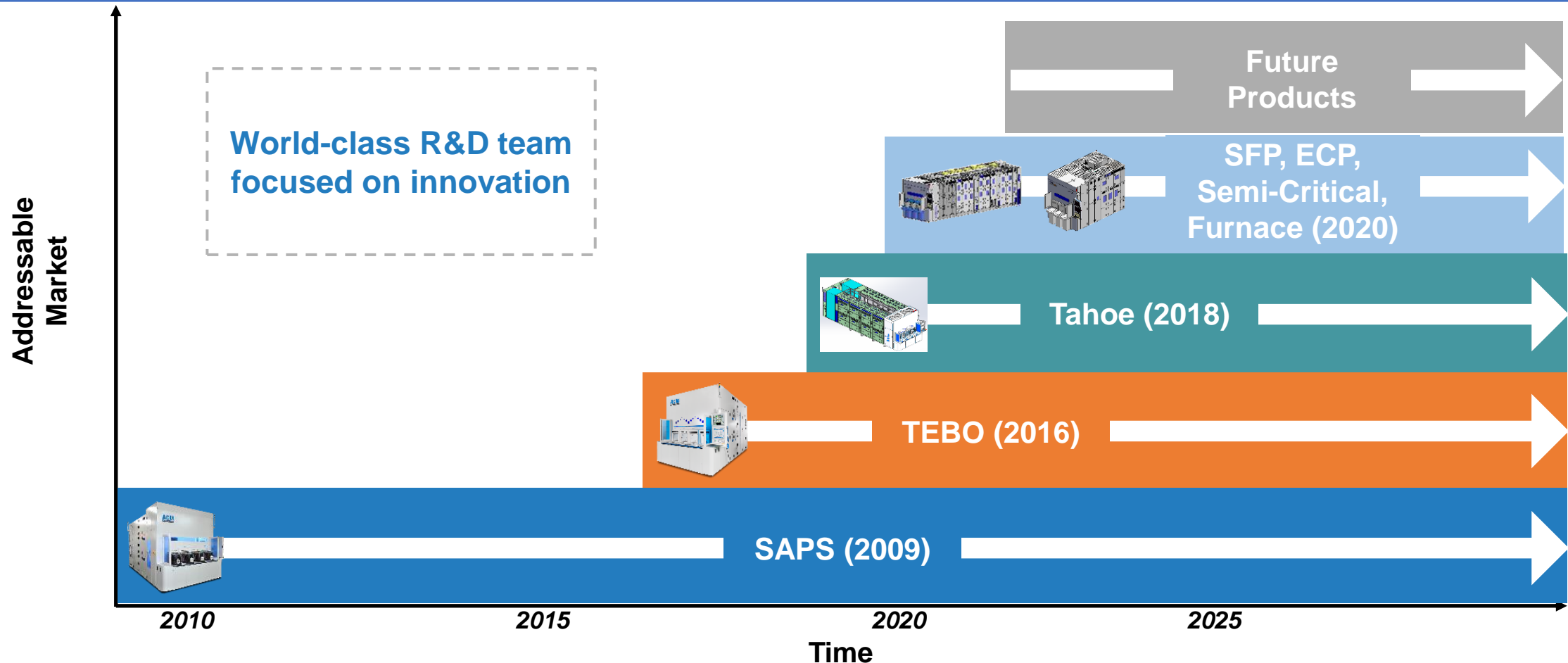


- Leading OSAT provider – #7 globally⁽⁷⁾ and top 3 in China⁽⁸⁾
- Fastest growing OSAT provider globally with 32% year-over-year revenue growth⁽⁷⁾
- Six production facilities serving more than half of the top ten global semiconductor manufacturers⁽⁸⁾

(1) Source: Nikkei Asian Review. (2) Source: YMTC Press Release. (3) Source: HLMC Press Release. (4) Source: Reuters. (5) Source: AnandTech. (6) Source: JCAP Company Profile. (7) Source: Electronics Weekly. (8) Source: TFME website.

Innovation and Product Introductions Expanding Addressable Market

ACM forecasts that SAPS, TEBO, Tahoe and Semi-Critical tools address more than 80% of the wet cleaning market
SFP, ECP and Furnace further expand ACM's market opportunity



Shanghai Manufacturing Facilities – Existing and Planned

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

Facility #2



- Second factory; opened in September 2018
- 100,000 sq. ft. facility
- Shifting large portion of future production to this facility
- Additional dedicated space for product sub-assembly, component inventory and manufacturing related offices
- Added 2nd floor production in Q2 2020

Lingang Under Construction



- Broke ground on the new R&D and production facilities in Lingang region of Shanghai in July 2020
- The site is approximately 30 miles from ACM Shanghai's HQ in Zhangjiang.
- 1 million square feet
- Expects initial production activities to commence in late 2022.

New R&D and Production Center in Lingang Region

- Finalized agreement for land rights for proposed R&D and production facility
- Held ground-breaking ceremony on July 7, 2020



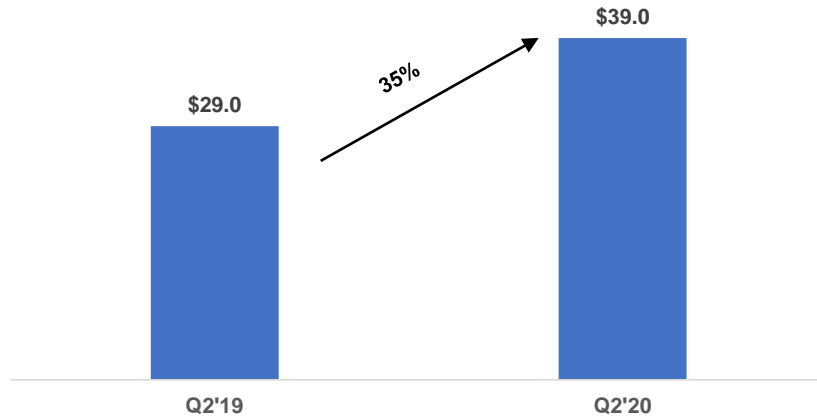
2020 Outlook

- **Increased 2020 revenue guidance to a range of \$140 to \$155 million**
 - 37% year-over-year growth at mid-point
- **Outlook assumes:**
 - COVID-19 situation further improves in China and stabilizes in the rest of the world
 - Chinese semiconductor industry fab investment continues
 - Good growth from foundry and NAND customers and muted DRAM recovery

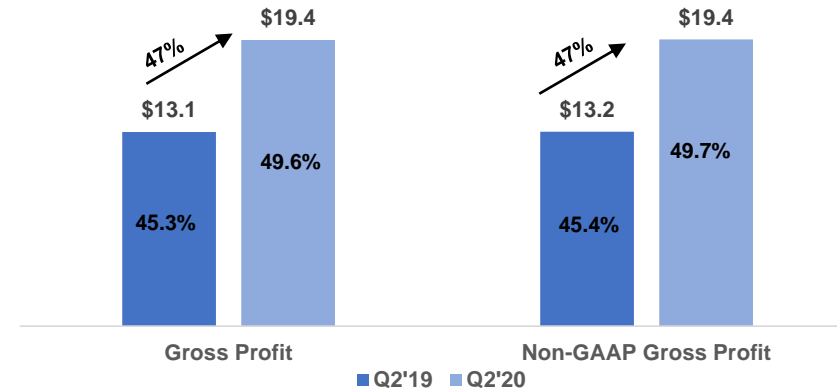
Q2 2020 Financial Results

\$ Millions

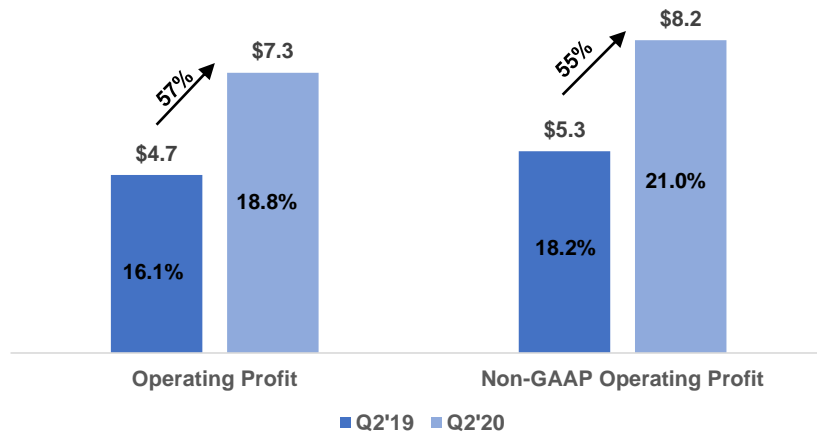
Revenue



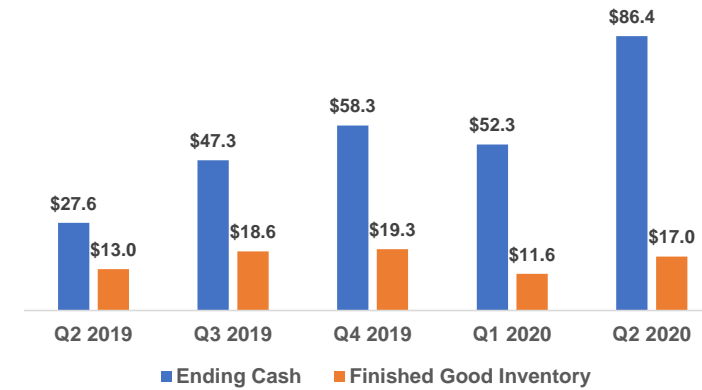
Gross Profit



Operating Profit

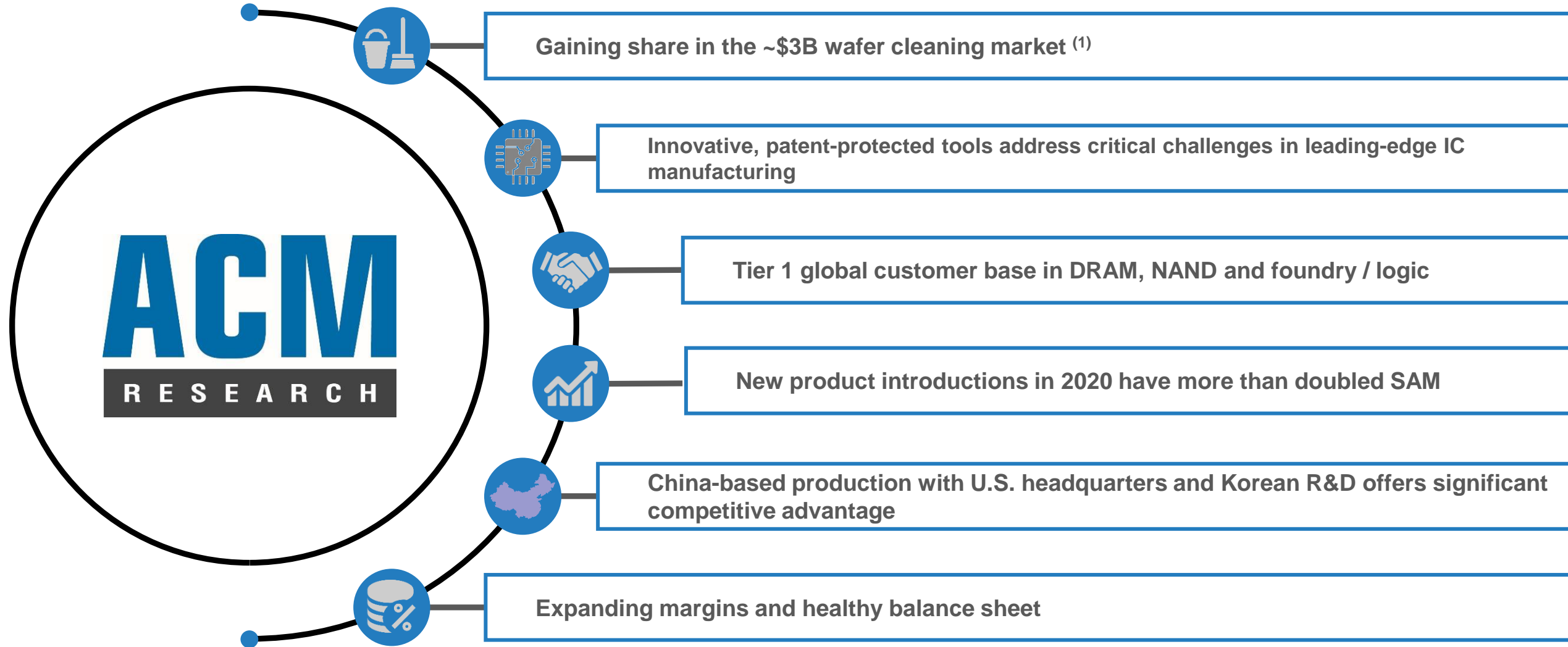


Balance Sheet Data*



* 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.

Investment Highlights



(1) Source: Gartner – “Forecast: Semiconductor Wafer Fab Manufacturing Equipment (Including Wafer-Level Packaging), Worldwide, 2Q19 Update” (July 2019). See “Market Data” on page 2.