

## Sanjay Mehrotra, President and Chief Executive Officer

Micron continues to perform exceptionally well, achieving record revenue and profitability and generating strong operating cash flow in the third quarter. Our focus on structural improvements and consistent execution is driving improved financial performance. First, we are accelerating advanced technology development and rapidly deploying it into production to meet our supply growth and product cost reduction targets. Second, we are broadening our portfolio of high-value solutions to drive increased profitability and strengthen our customer relationships. And third, we announced a capital return program to repurchase up to \$10 billion of our shares outstanding starting in FY2019. These initiatives underscore our commitment to enhancing long-term shareholder value.

Turning to our businesses, we delivered strong results across the breadth of our end markets. We were particularly pleased with our mobile business, where we increased revenue by 12 percent sequentially, setting a new company record. Revenue from high-value mobile NAND nearly doubled quarter-over-quarter, enabled by the ramp of eMMC and eMCP products to multiple smartphone OEMs. 85 percent of Managed NAND gigabytes that we shipped in FQ3 were lower-cost TLC NAND, as compared to virtually no TLC NAND just one year ago. Memory and storage content per phone continues to rise, creating ongoing demand for our mobile solutions. We are strategically shaping our mobile portfolio to put us in the best competitive position, including the production launch of our 1Y nanometer low-power DDR4 memory and several new 64-layer TLC UFS and eMCP Managed NAND solutions — all later this year.

Data center trends are also driving momentum for Micron's DRAM and NAND solutions, with combined revenue up 87 percent year-over-year. In the third quarter, ongoing demand for our memory and storage solutions in cloud computing was a key highlight. Our DRAM and NAND revenue from cloud customers increased sequentially by 33 percent and 24 percent, respectively. This performance was enabled by our improving execution, ability to expand share, and strengthening relationships with key customers in this rapidly growing segment.

We stand to benefit from the significant investments cloud service providers are making to build out their IT infrastructure. Cloud capex is expected to be \$50 billion in 2018, and as we shared during our investor event, analysts project this capex to reach \$108 billion by 2021.

We achieved record revenue across all market segments of our embedded business, enabled by shifts to higher-value products and continuing healthy demand. Growth was particularly robust in consumer and industrial markets, driven by trends in home and industrial automation, drones, and IoT. We completed qualification of a 64-layer 3D NAND surveillance-grade microSD card, which is designed for smart surveillance deployments that move Al capabilities to edge devices. We also had notable design-in activity on low-power automotive DRAM and see growing opportunities in the near term for our portfolio of



infotainment, dashboard, and ADAS solutions. We readied multiple new products for customer qualification this quarter, including the first 1X nanometer low-power automotive DRAM and a GDDR6 solution for ADAS and autonomous applications. These advanced new products extend an industry-leading portfolio of unique automotive and industrial solutions that, coupled with long-term customer relationships, has helped the Embedded Business Unit deliver consistent profitable growth for Micron.

Overall, we continue to strengthen our product portfolio as we shift our mix away from components and toward high-value solutions. We are outpacing competitors in the high-value graphics market, and our graphics revenue more than doubled year-over-year. We also set another company record in overall SSD sales, increasing our revenue by 37 percent versus a year ago. We began volume production shipments of our 64-layer 3D NAND enterprise SATA SSD and shipped the world's first QLC-based SSD, a high-capacity drive ideal for read-centric applications like streaming media servers. This QLC SSD is built on our industry-leading 64-layer 3D NAND, utilizing the first-ever terabit NAND die in the industry. As we continue to introduce new SSD solutions on lower-cost, next-generation technologies, we believe that we can unlock new pools of demand that are currently being served by HDDs.

Our technology and operational execution continues to pay dividends. As we recently shared, we achieved yield maturity and production output crossover on our 64-layer 3D NAND ahead of schedule. We still expect to have production shipments on our 96-layer 3D NAND in the second half of calendar year 2018. We are also making good progress on the development of our fourth-generation 3D NAND, which will utilize our novel replacement gate technology.

In DRAM, we are on track to reach bit crossover on our 1X technology and to begin production shipments on our 1Y technology, both in the second half of calendar year 2018. As we noted at our analyst event, we have a strong product and process roadmap for DRAM with 1Z and 1-alpha development programs already underway.

Turning to 3D XPoint™ technology, as you know, we are partners with Intel in the development and manufacturing of 3D XPoint. As part of that ongoing relationship, we have been discussing the commercial terms of our future-generation 3D XPoint collaboration. Our goal in these discussions is to ensure that Micron has a path to strong ROI for our investments and technology contributions. We will provide updates as appropriate as these discussions progress further.

As we highlighted at our investor day, we are excited about the potential for 3D XPoint technology to create a new tier of memory and storage between DRAM and NAND flash. We remain focused on our 3D XPoint product development and are on track to introduce our first products in late calendar 2019, with meaningful revenue in 2020.



In summary, we continue to see strong market demand for memory and fast storage products due to the value these solutions provide in an economy where data — and fast access to that data — is increasingly important. Growing capabilities in the data center have enabled greater functionality at the edge, increasing users and creating more data and, in turn, driving opportunities for expanded, higher-value data services. We believe this virtuous cycle has driven the secular growth patterns we are currently seeing across nearly all of our markets and believe that it will persist into the foreseeable future.

I will now turn the call over to our CFO, Dave Zinsner, to provide details on our third quarter results and outlook for the remainder of FY2018.

## **Dave Zinsner, Senior Vice President and Chief Financial Officer**

Micron's relentless focus on execution is evident in our third quarter results. We set new records for revenue, gross margin, operating income, and EPS. In addition, we delivered on our goal of achieving a net cash positive position with our cash balance nearly \$350 million above our GAAP debt position. We are on the strongest financial footing in the company's 40-year history, allowing us to make investments that will capitalize on the secular growth trends driven by the data economy.

Our focus on growing high-value solutions, including Managed NAND and low-power DRAM products for the mobile market, SSDs for the cloud market, as well as graphics DRAM, drove our FQ3 results. We also saw the benefit of strong execution on technology transitions. Total revenue was \$7.8 billion, up 6 percent from FQ2 and 40 percent from the prior year.

Non-GAAP gross margins for the period expanded to a record 61 percent, up 250 basis points from the prior quarter and up from 48 percent in the prior year. A robust business environment, more favorable mix, and good execution on cost reductions drove significant gross margin expansion. It is important to note that we were able to achieve record gross margins while we continue to incur underloading charges in advance of volume ramp of our 3D XPoint solutions, which will follow product introductions that are targeted for late calendar 2019. We estimate that these charges impacted gross margins by approximately 100 basis points.

Our record revenue and gross margin performance drove strong profitability in the third quarter. Operating income grew to \$4 billion on a non-GAAP basis, representing 52 percent of revenue. This compares with operating margins of 49 percent in FQ2 and 37 percent in the year-ago period.

Non-GAAP operating expenses came in at \$733 million, up approximately 10 percent from FQ2 and in line with our planned investments in technology and product development. Moving forward, we expect to increase our OPEX from the current run rate, particularly for R&D as we continue to accelerate the development of new products and technologies.



Turning to performance by business unit, we achieved record revenue for the Compute and Networking Business Unit (CNBU) of \$4 billion in the third quarter, up 67 percent year-over-year and 8 percent from the prior quarter. Every CNBU business contributed to this growth except the client business, as we directed supply to customers in markets experiencing robust demand. We saw broad-based demand for our memory solutions, with sales of both cloud server and graphics memory products more than doubling year-over-year. Operating income for CNBU increased by 12 percent sequentially to \$2.6 billion or 66 percent of revenue and more than doubled on a year-over-year basis.

Revenue for the Mobile Business Unit increased to a record \$1.8 billion, up 12 percent quarter-over-quarter and 55 percent year-over-year. We are experiencing ongoing momentum for our Managed NAND products, with multiple customer qualifications underway for our eMCP solutions. We also continue to see healthy demand for our industry-leading low-power DRAM products. The benefits of shifting more of our supply to these high-value mobile products are evident in our profits. Operating income increased to \$860 million or 49 percent of revenue — up from \$689 million last quarter and \$304 million in the year-ago period.

The Embedded Business Unit continues to deliver solid results, with record revenue of \$897 million, up 8 percent versus FQ2 and up 28 percent year-over-year. Growth was driven by demand for consumer and industrial applications, including set-top boxes, factory automation, and industrial drones, while ADAS and in-vehicle experience applications supported record automotive sales for the quarter. Fiscal Q3 operating income was \$386 million, which translates to a healthy 43 percent of revenue — roughly flat with the prior quarter and up by 600 basis points from the prior year.

Finally, turning to the Storage Business Unit (Storage Business Unit), third quarter revenue was \$1.1 billion, which is comprised of SSD, NAND components, and 3D XPoint sales. We continue to build momentum with our SSD portfolio and set a new record for SSD revenue, which now represents over 50 percent of total SBU revenue. Consistent with our strategy and as we shared at our investor event, we are shifting more of our NAND supply away from components to high-value products such as Managed NAND, which are targeted for our mobile and embedded markets, as well as SSDs. This shift in NAND supply and lower 3D XPoint sales to our partner resulted in a 9 percent sequential decline in our Storage Business Unit revenue.

The underutilization costs associated with 3D XPoint production that I previously mentioned had a negative impact on SBU operating margins of approximately 700 basis points in the third quarter. Our resulting SBU operating income was \$156 million dollars or 14 percent of third quarter revenue, compared with 20 percent in FQ2. Today, a majority of our SSD sales are based on 32-layer 3D NAND. As Sanjay pointed out earlier, we are starting to ramp SSD solutions built on our 64-layer 3D NAND — initially targeting consumer and cloud customers. Our SBU cost structure will benefit from this transition to lower-cost 64-layer SSDs.

Moving to performance by product line, DRAM represented 71 percent of total company revenue in FQ3. DRAM revenue was up 6 percent from the prior quarter and 56 percent year-over-year, reflecting strong



execution on our strategy and a robust market environment. ASPs increased in the mid-to-upper single digit percentage range, supported by broad-based demand and a richer mix of high-value sales, including server and graphics DRAM products. Shipment quantities were relatively flat quarter-over-quarter. Our resulting non-GAAP gross margin was 69 percent, up from 66 percent in FQ2 and 54 percent from the year-ago quarter.

We achieved \$1.9 billion in trade NAND revenue, representing 25 percent of total company revenue FQ3. Trade NAND revenue was up 8 percent quarter-over-quarter and 14 percent year-over-year, reflecting healthy demand for our products. While on a like-for-like basis, NAND pricing declined modestly sequentially, our overall NAND ASP increased in the mid-to-upper single-digit percentage range, driven by a richer mix of high-value solutions in our NAND portfolio. We ramped eMCP solutions to our mobile customers, which tend to carry higher ASPs relative to other NAND products. Trade NAND shipment quantities remained relatively flat compared to the prior quarter. Trade NAND gross margins were 47 percent on a non-GAAP basis, up 50 basis points from the prior quarter and up 600 basis points from the year-ago quarter.

Our solid execution and healthy industry environment led to record non-GAAP earnings per share of \$3.15, up 12 percent from the prior quarter and 94 percent from the prior year.

We generated \$4.3 billion in cash from operations, representing 55 percent of revenue. Capital spending, net of third-party contributions, was \$2.1 billion in the third quarter. We expect the full FY2018 capex to be approximately \$8 billion, which includes previously discussed investments associated with our cleanroom expansions in Singapore and Hiroshima.

Our resulting free cash flow was \$2.2 billion, flat with the prior quarter and nearly double that of the year ago period.

We ended the quarter in a net cash positive position with approximately \$7.7 billion in cash, marketable investments, and restricted cash, and \$7.3 billion in GAAP debt, including approximately \$300 million of incremental debt incurred in Q3 by our jointly owned 3D XPoint fab. We are very pleased to have achieved a net cash positive position one quarter earlier than we had originally committed. We reduced our gross debt position by approximately \$2 billion in FQ3, and we expect to reduce our debt by another \$2 billion in the FQ4.

We also used \$1.1 billion in cash in the third quarter to settle the debt and equity components of our convertible notes. In addition, we received another \$550 million of convertible note redemptions in the third quarter, which we will cash settle early in the fourth quarter. Combined, these convert notices equate to roughly a 20 million share count reduction.



This is a great start to our strategy of reducing our fully diluted share count, which we expect will continue in FY2019, when we begin utilizing at least 50 percent of our annual free cash flow to repurchase shares under our \$10 billion share repurchase authorization.

Turning to non-GAAP guidance for the fourth fiscal quarter, the market for our products continues to be robust, and we are executing well on our strategy. We therefore expect sequential revenue growth again in the fourth quarter. We expect revenue to be in the range of \$8.0 billion to \$8.4 billion; gross margins to be in the range of 59 percent to 62 percent. Operating expenses are expected to be \$750 million, plus or minus \$25 million. Based on a share count of approximately 1.23 billion shares, these results should drive EPS of \$3.30, plus or minus 7 cents.

## Sanjay Mehrotra, President and Chief Executive Officer

We recently introduced our vision for the "New Micron." We have been undergoing a fundamental transformation, driven by changes in our markets, our industry, and within our company.

Starting with our markets, data-hungry applications are driving secular growth for memory and storage solutions. Importantly, our customers recognize the essential added value that memory and fast storage provide for the solutions they deliver to their end customers.

Second, the industry we operate within is structurally different than in the past. Technology transitions require more capex and provide less bit gain, and the pace of those transitions has slowed, given increased process complexities. The result is a more consistent and stable supply/demand outlook. These structural changes have also resulted in improved ROI over the last several years.

Finally, a laser-sharp focus on executing our strategic business objectives has allowed Micron to better capitalize on our excellent technology portfolio, product breadth, manufacturing scale, customer reach, and deep team expertise. We are creating a culture of increased urgency, crisp execution, and accountability that will enable us to consistently deliver against these strategic objectives and create positive results for all stakeholders.



This document contains forward-looking statements regarding the company's strategic position and financial results, and future financial performance of the company and the industry. These forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially. Please refer to the documents the company files with the Securities and Exchange Commission, specifically its most recent Form 10-K and Form 10-Q. These documents contain and identify important factors that could cause the company's actual results to differ materially from those contained in its forward-looking statements. These certain factors can be found at <a href="http://www.micron.com/certainfactors">http://www.micron.com/certainfactors</a>. Although the company believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance, or achievements. The company is under no duty to update any of the forward-looking statements after the date of this release to conform these statements to actual results.