Farhan Ahmad, Vice President, Investor Relations

Thank you, and welcome to Micron Technology's fiscal first quarter 2021 financial conference call. On the call with me today are Sanjay Mehrotra, President and CEO, and Dave Zinsner, Chief Financial Officer. Today's call will be approximately 60 minutes in length. This call, including the audio and slides is also being webcast from our Investor Relations website at investors.micron.com. In addition, our website contains the earnings press release, and the prepared remarks filed a short while ago. Today's discussion of financial results will be presented on a non-GAAP financial basis unless otherwise specified. A reconciliation of GAAP to non-GAAP financial measures may be found on our website. As a reminder, a webcast replay will be available on our website later today. We encourage you to monitor our website at micron.com throughout the quarter for the most current information on the company, including information on the various financial conferences that we will be attending. You can follow us on Twitter at MicronTech. As a reminder, the matters we will be discussing today include forward-looking statements. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from statements made today. We refer you to the documents we file with the SEC, specifically our most recent Form 10-K and 10-Q, for a discussion of risks that may affect our future results. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. We are under no duty to update any of the forward-looking statements after today's date to conform these statements to actual results.

I'll now turn the call over to Sanjay.

Sanjay Mehrotra, President and Chief Executive Officer

Thank you, Farhan.

Good afternoon and happy new year, everyone.

Highlights

Micron delivered strong revenue and earnings in FQ1. I am proud of the Micron team for continuing our business momentum and putting Micron in a better technology and product position than ever before, despite the ongoing challenges posed by the pandemic. We began shipping the industry's most advanced NAND with 176 layers. And in DRAM, we made good progress on our 1-alpha node and are on track to begin volume production in the first half of calendar 2021. We believe DRAM is past the bottom of the industry cycle and expect improving trends through calendar 2021 as the digitization of the global economy continues, fueled by artificial intelligence, cloud, 5G, and the intelligent edge, including smart vehicles. Against this backdrop, Micron is poised to emerge stronger, and we are excited about our future.

Operations

I will start with a quick update on our manufacturing operations. In early December, two separate events affected our Taiwan DRAM operations. The first event was a power outage at our Taoyuan facility, which occurred on December 3rd, the last day of our fiscal first quarter. The second event, a 6.7-magnitude earthquake off the northeast coast of Taiwan, occurred on December 10th. The earthquake was felt at both our Taoyuan and Taichung locations. The investments we have made over the last few years in facilities' redundancy and cleanroom control substantially mitigated the impact of these two events. However, these disruptions have reduced our available FQ2 DRAM supply and negatively influenced our costs in the short-term. The expected impact of these events is factored into our outlook.

Tech Roadmap

Micron continues to make solid progress on our key goals:

First, to deliver industry-leading technology and improve our cost structure. Second, to bring differentiated products to market and improve our product mix. And third, to grow our share of industry profits while maintaining stable bit share.

From FY16 to FY20, we substantially improved our EBITDA margin for our combined DRAM and NAND business while the rest of the industry in aggregate was roughly flat. And over the last few years, we have accelerated our technology roadmap in both DRAM and NAND. As a result, for the first time in our history, Micron has technology leadership in both DRAM and NAND simultaneously. Now that we are leading the industry in technology capability, going forward, we expect to maintain this competitive position through a more typical cadence for node transitions consistent with the rest of the industry.

In DRAM, we are making good progress on our 1-alpha node. This will be an outstanding technology node for Micron, delivering a 40% improvement in bits per wafer over our 1z. A substantial portion of this improvement comes from our chip-design concepts that provide greater memory array efficiency. Following the extraordinary improvements of our 1-alpha node, we anticipate lower gains in bits-per-wafer growth as more complex interfaces such as DDR5 are introduced and as DRAM technology scaling challenges continue. We are also making progress with differentiated DRAM products such as GDDR6 and 6X for graphics. In FQ1, we saw strong growth in bit shipments for these products. We also began revenue shipments of HBM2E products.

In NAND, in early November, we began volume production of our second-generation replacement-gate node (176-layer), which is the most advanced in the industry, combining our replacement-gate architecture, CMOS under the array and advanced charge-trap process technology. It also features double the power efficiency and write performance of Micron's 96-layer 3D NAND. These improvements are essential for

addressing future high-end mobile applications. We began shipping 176-layer consumer SSDs in FQ1 and will be introducing products built with this technology across the rest of our product portfolio over the next several months. We are also driving product innovations and cost reductions through an increased mix of QLC NAND, and we are leading the industry with the broadest portfolio of QLC SSDs across client, consumer and data center markets. QLC helps to make SSDs more cost-effective and accelerates the replacement of HDDs with SSDs. QLC SSD adoption continues to grow, and our bit mix of QLC SSDs increased further in FQ1.

Turning to end markets:

End Market Highlights

Data Center

In data center, cloud and AI will drive long-term growth, with memory and storage becoming an increasing portion of server BOM cost. New compute architectures are enabling more memory channels and higher-density modules, contributing to increases in server memory content. Micron is positioned for success in this market, with a broad portfolio of high-bandwidth, high-quality and power-efficient products. Cloud and enterprise DRAM revenue declined sequentially from a very strong 14-week FQ4, with ongoing enterprise market weakness. In FQ1, we began revenue shipments for our ultra-bandwidth HBM2E memory, which is used for data center AI training and inference. We are making progress on the DDR5 transition, which will double bandwidth and reduce power consumption, and we plan to start that transition in the second half of fiscal 2021.

In data center SSDs, we continue to make progress on our NVMe portfolio and completed several customer qualifications in FQ1. We also continue to maintain our leadership position in SATA. Data center SSD revenue declined sequentially but was up year-over-year as cloud growth offset a decline in enterprise. We remain focused on strengthening our data center NVMe SSD roadmap with internally developed controllers and have new product introductions planned in the coming quarters.

Mobile

Our FQ1 mobile revenue was up sequentially, driven by solid execution and improved handset demand. A better-than-expected transition of Micron's mobile business from Huawei to other mobile customers also contributed to our revenue upside in FQ1. Micron is well positioned to win in the 5G era with our industry-leading product portfolio. We had several key achievements in our mobile business in FQ1. We maintained LP5 solutions leadership and grew our LP5 shipments, were the first to market with uMCP5 and achieved record MCP revenue.

PC

In PC, the continued remote work and learning trend drove strong notebook and Chromebook demand in the quarter, despite pockets of nonmemory component shortages in the supply chain. We delivered strong sequential growth in PC DRAM shipments driven by this demand. In client SSD, NVMe represented over 90% of the client SSD bits, with nearly half of those NVMe SSD bits being QLC. Consumer SSDs had a second consecutive record quarter for bit shipments, and we shipped the world's first 176-layer-based consumer SSDs.

Graphics

In graphics, we achieved strong GDDR6 and 6X bit shipment growth driven by new game console and PC graphics product launches. Micron has a strong position in this high-growth market, with a broad product portfolio and deep customer partnerships.

Auto

We had a record auto revenue quarter, resulting from the resumption of auto manufacturing around the globe and the continued growth of memory and storage content per vehicle. We also achieved qualification of our 1z LP4 DRAM and began sampling our 96-layer-based UFS NAND. Electric vehicles have higher semiconductor content, and as EVs continue to proliferate, we expect our auto business to continue to excel. In addition, as autonomous driving features advance, this content growth trend will accelerate further. Micron's quality and market share leadership uniquely position us to not just benefit from this growth, but also to drive innovative solutions for next-generation vehicles in collaboration with our ecosystem of customers and industry partners.

Industry Outlook

Now turning to our view of calendar 2020 industry demand.

During FQ1, overall demand was strong across most end markets despite shortages of nonmemory components in PC, mobile, auto and graphics. Cloud demand was healthy while enterprise demand was weak due to the economic environment. As a result of the stronger-than-expected demand at the end of the year, we now estimate that calendar 2020 industry DRAM bit demand growth was slightly above 20%, while NAND bit demand growth was in the mid-20s.

Now for our calendar 2021 outlook:

In DRAM, we are past the bottom, and the industry is in tight supply across major market segments. As a result, we are already seeing our calendar Q1 pricing starting to increase in several parts of the market.

16Gb adoption in client and data center modules has increased, causing the same supply tightness that was previously seen in 8Gb, to also now be visible in 16Gb. We expect calendar 2021 DRAM industry bit demand growth of high teens, with DRAM industry supply to be below demand. Stronger-than-expected industry demand has reduced supplier DRAM inventories. Low inventories, combined with disciplined industry CapEx in 2020 and a vaccine-driven recovery from the pandemic, should result in further tightening of the DRAM market through calendar 2021. In addition, we will also benefit from higher content in 5G phones, which are forecast to double in unit sales in 2021 to around 500 million units. We anticipate healthy unit growth in the PC market, and graphics should continue to benefit from new gaming consoles and from new gaming cards launched in the second half of last year. We expect the cloud market to grow at a healthy pace, and enterprise market recovery will be driven by the timing of the broader economic recovery.

Calendar 2021 industry NAND bit demand growth is expected to be approximately 30%, with supply potentially higher. The NAND market is challenging in the near term. However, we believe that as the year progresses, elasticity coupled with pandemic recovery should lead to improving demand. We believe the market can stabilize over the course of 2021 if suppliers moderate their production growth.

Long-term, we expect DRAM bit demand growth CAGR of mid to high teens and a NAND bit demand growth CAGR of approximately 30%.

Micron Outlook

Turning to Micron supply, we target our long-term bit supply growth CAGR to be in line with industry bit demand growth CAGR for both DRAM and NAND. However, there can be year-to-year variability caused by node-transition timing. In both DRAM and NAND, we expect our calendar 2021 bit supply growth to be below the industry demand growth, and we plan to use inventory to support bit shipment growth that is in line with industry demand growth.

For fiscal 2021, we expect DRAM cost reductions in the mid-single-digit percentage range, with somewhat higher levels of cost reductions on a like-for-like basis. We anticipate NAND cost reductions in the low- to-mid-teens percentage range. We are targeting fiscal 2021 CapEx to be approximately $9 billion to support our long-term goal of maintaining a stable share of industry bit supply. If demand expectations change, we remain flexible to adjust our CapEx.

As we look ahead, we are excited about the growth and health of our diverse end markets, which continue to benefit from powerful secular technology trends, including AI, cloud, 5G and the intelligent edge. These trends are already enabling the data economy and increasing the importance of DRAM and NAND. Memory and storage industry revenues have grown faster than the broader semiconductor industry, from approximately 10% of semiconductor industry revenues in the early 2000s to now approaching 30%. We expect that our TAM growth will continue to outpace the rest of the semiconductor industry over the next

decade. Micron's focus on technology and product leadership, operational excellence, and deep customer partnerships positions us well to grow our relevance and profit share in the industry.

I'll now turn it over to Dave to provide our financial results and guidance.

DAVE ZINSNER, SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER

Thanks Sanjay.

OPENING

Micron delivered very strong fiscal first quarter results, with revenues and earnings coming in well above the guidance ranges provided in our last earnings call. We saw an improving business environment through the quarter, and demand and pricing were better than expected for both DRAM and NAND.

REVENUE

Total FQ1 revenue was approximately $5.8 billion, down 5% quarter-over-quarter but up 12% year-over-year. Adjusting for the extra week in the prior quarter, revenue increased 3% sequentially driven by strength in a broad set of markets, including auto, graphics, client, mobile and consumer.

PERFORMANCE BY TECHNOLOGY

DRAM

FQ1 DRAM revenue was $4.1 billion, representing 70% of total revenue. DRAM revenue decreased 7% sequentially but was up 17% year-over year. Bit shipments were down in the low-single-digit percentage range sequentially, and ASPs were down in the mid-single-digit percentage range quarter-over-quarter.

NAND

FQ1 NAND revenue was approximately $1.6 billion, representing 27% of total revenue. NAND revenue increased 3% sequentially and was up 11% year-over-year. Bit shipments increased in the high-teens percentage range sequentially, while ASPs declined in the low-teens percentage range quarter-over-quarter. Half of the decline was attributable to a change in mix, which included a greater portion of components.

REVENUE BY BUSINESS UNIT

Now turning to our revenue trends by business unit.

Revenue for the Compute and Networking Business Unit was approximately $2.5 billion, down approximately 16% sequentially but up 29% year-over-year. We had solid sequential growth in graphics and client revenues, while data center revenues declined sequentially, coming off a particularly strong quarter for cloud, the loss of the extra week and continued weakness in enterprise

Revenue for the Mobile Business Unit was $1.5 billion, up 3% sequentially and up 3% year-over-year. Mobile demand remains strong as 5G momentum increases and the mobile market recovers from the impact of the pandemic.

Revenue for the Storage Business Unit was $911 million, roughly flat from the prior quarter and down 6% year over year. As a reminder, 3D XPoint revenues are now reported in the Compute and Networking Business Unit. Excluding 3D XPoint from the prior year's quarter, SBU revenues would be up 14% year-over-year.

Finally, revenue for the Embedded Business Unit was $809 million, up 24% sequentially and up 10% year over year. EBU revenue was the highest since Q1 FY19, driven by record auto revenue as demand recovered from pandemic-related shutdowns.

OPERATING RESULTS

GROSS MARGIN

The consolidated gross margin for FQ1 was 30.9%, down 400 basis points from the prior quarter. Our gross margin was impacted by pricing declines and a greater mix of NAND.

OPEX

Operating expenses were $811 million in FQ1 as we continued to tightly manage expenses.

We are expecting to increase operating expenses in the second half of this fiscal year as the previously delayed FY21 salary increases take effect at the beginning of FQ3 and we incur additional prequalification-related expenses in FQ3 and FQ4. As a result, we anticipate that FQ3 expenses will increase approximately 10% sequentially from FQ2, but of course we remain flexible to reduce operating expenses from those levels should business conditions warrant.

OPERATING INCOME

FQ1 operating income was $973 million, resulting in an operating margin of 17%, compared to 21% in the prior quarter and 12% in the prior year's quarter.

NET INTEREST EXPENSE

Net interest expense was flat quarter-over-quarter at $31 million.

We expect the net interest expense to be approximately $35 million in FQ2.

TAXES

Our FQ1 effective tax rate was 7.4%. We expect our tax rate to be in the mid to high single digits for the remainder of FY21.

EARNINGS PER SHARE

Non-GAAP earnings per share in FQ1 were $0.78, down from $1.08 in FQ4 and up from $0.48 in the year-ago quarter. EPS included 2 cents of nonoperating income related to gains from investments in our venture arm, Micron Ventures.

OPERATING CASH FLOW

Turning to cash flows and capital spending, we generated approximately $2 billion in cash from operations in FQ1, representing 34% of revenue.

CAPITAL ALLOCATION

CapEx and Free Cash Flow

Net capital spending was approximately $2.8 billion during the quarter. We expect approximately $9 billion in capital spending for FY21 with spending weighted towards the first half of the fiscal year. Free cash flow in the quarter was negative $816 million. We expect free cash flow to remain negative in FQ2 but to improve from the FQ1 level, driven by increased cash flow from operations. As we said previously, we expect to generate healthy free cash flow during the second half of FY21. Although we didn't repurchase shares in FQ1, we remain committed to returning greater than 50% of our annual free cash flow to shareholders through share repurchases

INVENTORY

We made a significant improvement on our days of inventory and ended FQ1 with $5.5 billion of inventory or 125 days versus 135 days last quarter.

As we look ahead to FQ2, I want to share some changes to our upcoming inventory reporting. Starting in FQ2, we will be using a FIFO (or first in, first out) approach to inventory valuation, as opposed to the average cost method that we have historically used. Concurrently, we are introducing a new costing methodology that uses standard costing. These changes will help us improve our business reporting by valuing inventory at the most recent production costs and aligning with general semiconductor industry practices. While we expect no material impact to our non-GAAP results from these changes, we do expect to record a one-time non-cash charge of approximately $300 million, which will impact our FQ2 GAAP results and reduce the carrying value of our inventory. Unlike certain valuation adjustments or write-downs to inventory, this is a permanent methodology change that will not result in a material impact to our future costs or margins. Concurrently with these changes, we will also reclassify spare parts from inventory to other current assets, which also better aligns with the rest of the industry. This new representation will reduce our inventory balance and consequently, our days of inventory will decline by approximately 10 days versus the old methodology. Applying this 10-day decline, our FQ1 days of inventory would have been approximately 115 days, and our new days of inventory target is approximately 95 to 105 days. We expect to reach our days of inventory target in the second half of FY21.

TOTAL CASH/DEBT

We ended the quarter with total cash of $8.4 billion and total liquidity of approximately $10.9 billion. FQ1 ending total debt was $6.6 billion.

NON-GAAP GUIDANCE

OUTLOOK

Now turning to our outlook.

We are seeing improving conditions across multiple DRAM end markets with strong demand in cloud, client, auto and mobile. This demand recovery would be even stronger if it weren't for the shortages of nonmemory components in several markets. On the supply side, as Sanjay mentioned, a power outage and an earthquake have limited our DRAM supply, and we are rapidly drawing down on our inventory across DRAM and NAND.

From a gross margin perspective, the power outage and earthquake impact will be a headwind to our DRAM cost reductions in FQ2. Additionally, the timing of new DRAM and NAND node ramps also limits our cost reductions for FQ2.

GUIDANCE

With all these factors in mind, our non-GAAP guidance for FQ1 is as follows. We expect revenue to be $5.8 billion, plus or minus $200 million; gross margin to be in the range of 31%, plus or minus 100 basis points; and operating expenses to be approximately $825 million, plus or minus $25 million. Finally, based on a share count of approximately 1.15 billion fully diluted shares, we expect earnings per share to be $0.75, plus or minus $0.07.

As we look beyond FQ2, we anticipate that a vaccine-driven economic recovery combined with secular trends such as 5G adoption and AI will result in stronger demand. In the second half of FY21, we expect improved financial performance, driven by strengthening market conditions and a stronger cost reduction across DRAM and NAND.

CLOSING

In closing, we're confident in Micron's ability to deliver strong long-term revenue growth and cross-cycle profitability. Over the last four years, Micron has delivered average gross margins of 40%, EBITDA margins of 50% and return on invested capital of 20%. We believe Micron's strong performance will continue cross-cycle.

As we look to the expected upturn in the DRAM business in calendar 2021, Micron's relentless focus on execution positions us well to generate solid returns for our shareholders.

I'll now turn the call over to Sanjay for closing remarks.

Sanjay Mehrotra, President and Chief Executive Officer

Thank you, Dave.

Over the last year, Micron delivered strong performance in the face of significant challenges from COVID. I am thankful to the Micron team, whose tenacity and resilience enabled us to navigate this challenging

period and maintain production at normal levels while continuing to advance our technology and product portfolio.

Micron is poised to emerge stronger in calendar 2021 as the world recovers from the pandemic. We are confident in our roadmap to further enhance our competitive position while exercising supply discipline. We are in a better position than ever before, and this has been recognized by our customers. Recently, Micron received supplier awards from multiple customers, including from tier 1 China smartphone OEMs.

We also continue to make great strides in advancing our corporate responsibility agenda. In November, Micron published our FY20 annual diversity, equality and inclusion report, detailing our progress over the year and our commitments for FY21. In 2020, we increased our female board representation and also made investments to improve representation of all underrepresented groups, including Blacks and Latinx, in technical and leadership roles. We expanded our pay equity initiative beyond gender to also include other underrepresented groups and to consider total compensation across pay and equity awards. We're working with industry organizations to establish best practices in supplier diversity and to support the inclusion and competitiveness of diverse suppliers in the semiconductor industry. And finally, we leveraged the power of Micron's influence in the communities where we live and work to advocate for greater social justice and safety globally.

We are also proud to report that, in November, we were added to the Dow Jones Sustainability Index, joining the ranks of the most sustainable American companies. We aim to build on this recognition as we advance on our sustainability goals this year

Thank you, and now we will open the call for questions.