Farhan Ahmad, Vice President, Investor Relations

Thank you, and welcome to Micron Technology's fiscal third 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.

Highlights

We delivered outstanding results in FQ3. Our strong execution enabled us to achieve the largest sequential EPS improvement in our history and to set multiple revenue records. NAND hit record revenue, propelled by record mobile MCP, consumer SSD, and client SSD revenues. Our embedded business exceeded $1 billion for the first time, with record revenue across automotive and industrial markets. We also achieved key technology and product milestones, with our industry-leading 1α (1-alpha) DRAM and 176-layer NAND reaching a meaningful portion of our bit production and QLC NAND accounting for a majority of our client SSD bit shipments. We expect DRAM and NAND supply to remain tight into CY22 as the global economy rebounds. The strong demand for memory and storage across the data center, intelligent edge and user devices puts Micron in the best position ever to fully capitalize on these exciting opportunities.

We continue to make solid progress on our goals to deliver industry-leading technology and improve our cost structure, to bring differentiated products to market and improve our product mix, and to grow our share of industry profits while maintaining stable bit share.

Operations

I will start with an update on our operations. Despite shortages across the semiconductor ecosystem in various assembly materials and assembly capacity, Micron delivered record assembly output this quarter, which helped fuel our strong revenue performance. Our assembly and test success was the result of a strategic decision we made several years ago to increase our captive footprint and strengthen relationships with suppliers and partners.

We successfully mitigated the impacts of the drought in Taiwan with no reduction in our production output. Taiwan's rainy season has begun, bringing with it sufficient water supply to support our manufacturing requirements.

While the drought in Taiwan is behind us, the rise in COVID-19 cases in Malaysia, India, and Taiwan are a risk to our manufacturing operations and R&D activities in these regions. We are also working with local governments to facilitate on-site testing and vaccination for Micron team members where possible. Additionally, in order to protect Micron team members at our Muar, Malaysia, back-end facility, we temporarily reduced our on-site workforce early in FQ4, which reduced output levels. We have since started bringing back team members to the site as the situation has improved. While we ramp back toward full production levels in Muar, we will utilize our global supply chain, including subcontractor partners, to meet our customer commitments and minimize any disruption to delivery schedules.

Earlier this year, we announced our decision to exit 3D XPoint development and manufacturing and to reprioritize our R&D investments toward new CXL-enabled memory solutions. CXL, or Compute Express Link, is a new industry standard interface that will significantly change data center architecture through high-performance connectivity between compute, memory and storage. We are developing exciting CXL-enabled products and will have more to share on our roadmap in the future. As part of our exit from the 3D XPoint business, we announced our intent to sell our Lehi, Utah, fab. Today, I'm pleased to report that Micron has reached an agreement to sell the fab to Texas Instruments in a transaction that we expect to close later this calendar year. We see this transaction as positive for our team members, the Lehi community and our shareholders.

The Lehi site has been an important part of the Micron network and responsible for many technology and manufacturing innovations across NAND and 3D XPoint products. Texas Instruments will offer all Lehi team members the opportunity to become TI employees at the Lehi site upon closing. After the sale closes, we

will be able to eliminate the remaining underloading costs we were incurring at Lehi, enhancing our efficiency and strengthening our profitability. Dave will provide additional details.

Technology & Products

Now for an update on technology and products. Our industry-leading 1α DRAM and 176-layer NAND process technologies are now in production and ramping according to plan. These nodes accounted for a meaningful portion of our bit production in FQ3 and are on track to become a meaningful portion of our revenue in FQ4. We expect that, by end of CY21, the combination of 1α and 1z DRAM nodes will represent the majority of our DRAM bit production, and at the same time, 176-layer NAND will be the majority of our NAND bit production. In FY22, we expect these workhorse nodes to fuel bit growth and provide us with good front-end cost reduction on a like-for-like basis. However, there are two factors that will create cost headwinds for us next fiscal year. The first is driven by our strategic portfolio migration toward more advanced and higher-value products such as DDR5 memory, high-density server modules and SSDs. While this portfolio shift helps us increase profit share, it will also impact our costs next fiscal year. The second cost headwind is driven by several actions we've taken in our supply chain to increase resilience and provide business continuity to our customers across all product lines. While these actions will allow us to capitalize on robust market demand, they will also impact our costs.

We are on track to support customers as they begin to introduce DDR5-enabled platforms in the second half of CY21. DDR5 was designed to meet modern data center requirements, including improved performance through doubling of memory bandwidth and improved reliability and efficiency through integration of on-die ECC. DDR5 features a larger die size compared to DDR4, limiting DRAM industry supply growth and cost reduction as it ramps, starting from the second half of CY21.

In storage, we introduced the industry's first UFS 3.1 solution for automotive applications this quarter. We also announced volume production of client PCIe® Gen4 SSDs built on the world's first 176-layer NAND and available in a variety of form factors. We are delivering 176-layer NAND in volume to OEM and channel customers across multiple markets and have several products in customer qualifications.

We are also driving an increased mix of QLC NAND, which brings down the cost of SSDs, accelerating the replacement of hard drives. QLC SSD adoption continues to grow, and we delivered record QLC SSD revenue and bit mix in FQ3.

End Market Highlights

Turning to end markets.

Data Center

In the data center, integration of AI into data-centric workloads will drive long-term growth, with memory and storage becoming an increasing portion of server BOM cost. Propelled by the transition to DDR5, strong capabilities in graphics memory and the introduction of HBM and NVMe SSD product offerings, Micron's strong product roadmap across DRAM and NAND positions us for success in the data center. We will enhance our NVMe SSD portfolio with the introduction of new products with internally designed controllers in the coming months. In FQ3, data center DRAM revenue grew quarter over quarter, driven by strong demand from cloud customers and increases in module density. Data center SSD bit shipments and revenue grew sequentially, driven by both cloud and enterprise. Data center demand is expected to be strong in the second half of CY21 as cloud demand picks up and enterprise demand improves due to broad economic recovery. In addition, we expect that new CPUs featuring more memory channels will accelerate server memory demand starting later this year and continuing into CY22.

PC

The PC market continues to benefit from the trend toward greater mobility as people embrace a work- or learn-from-anywhere culture. Industry expectations for CY21 PC unit demand growth have increased to the high teens, driven by robust notebook sales and a recovery in the desktop market. In FQ3, we achieved several customer qualifications for our 1α-based DDR4 products across various PC platforms. Our client SSD bit shipments were up sharply quarter over quarter and year over year.

Graphics

In graphics, bit shipments increased sequentially and year over year, driven by strong next-generation game console and graphics card shipments. Micron has an excellent position in the graphics market, with a broad product portfolio and deep customer partnerships.

Mobile

Mobile business achieved record MCP quarterly revenue. We made strong progress with our 1α LPDRAM products and 176-layer UFS 3.1-enabled solutions. We have already completed customer qualification for some of these products. While COVID-19 has softened mobile demand in parts of Asia, supply shifts to address stronger demand in other regions are keeping the global market in tight supply/demand balance. Mobile unit sales are expected to show healthy growth this year, with some variability across geographies, driven by an expected doubling of 5G units in CY21 to more than 500 million units. These 5G phones also feature rich content demanding significantly higher DRAM and NAND. We are also encouraged to see bold OEM innovation in new devices like gaming smartphones featuring 18GB of DRAM.

Auto

Our automotive business delivered a third consecutive record quarter, driven by continued manufacturing recovery and increased LPDDR4 and eMMC content for in-vehicle infotainment and driver assistance applications. Auto unit sales are expected to grow significantly from last year. Auto memory and storage content growth trends remain strong, particularly as EVs, which have significantly higher memory and storage content requirements, grow much faster than the broader auto market. We are continuing to see record automotive and industrial segment demand, yet despite our best efforts, we may be unable to meet all the demand from these customers over the next few months due to certain non-memory semiconductor component shortages in our supply chain.

Outlook

Turning to our market outlook: While the pandemic remains a risk factor, CY21 is shaping up to be a strong year fueled by the macroeconomic recovery combined with secular drivers, such as AI and 5G, that are creating sustained demand increases across broad end markets.

As a result, our expectations for CY21 DRAM and NAND bit growth have increased since our last earnings call, and we now expect CY21 DRAM bit demand growth to be somewhat above 20% and NAND bit demand growth in the mid 30% range. There is currently unmet demand for DRAM and NAND due to end market strength. This unmet demand would have been even larger had it not been for the non-memory component shortages influencing our customers' ability to manufacture their products, particularly in the PC, automotive and industrial markets. These shortages can cause variability in demand patterns as customers experience challenges sourcing matched sets of non-memory components. We are hopeful that foundry capacity coming online can begin to alleviate some of the component shortages in the second half of CY21 and support robust memory and storage growth. Additionally, as a result of strong end market demand trends, the lessons of the pandemic and ongoing geopolitical uncertainty, some customers will change their inventory management strategy from just-in-time to just-in-case and increase the target level of what they consider normal inventory levels.

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

Turning to Micron supply, we are targeting to align our long-term bit supply growth CAGR with the industry bit demand growth CAGR across DRAM and NAND. However, we expect year-to-year variability caused by node-transition timing. In both DRAM and NAND, we expect our CY21 bit supply growth to be below the industry bit demand growth, and we have used our inventory to add to our bit shipment growth this year.

Before handing over to Dave, I have one more important announcement to share regarding our DRAM technology and manufacturing strategy. Based on our assessment of the progress EUV has been making and aligned with our technology strategy and industry-leading DRAM scaling roadmap, we plan to insert EUV into our DRAM roadmap starting in the 2024 time frame. Micron has placed purchase orders for multiple EUV tools from ASML as part of a long-term volume agreement. The pre-payments for these systems will contribute toward the FY21 and FY22 CapEx. We have increased our FY21 CapEx to be somewhat above $9.5 billion, mostly from areas that do not impact CY21 and CY22 bit growth, such as these EUV pre-payments, construction spending and other R&D and corporate items.

I will now turn it over to Dave.

Dave Zinsner, Senior Vice President and Chief Financial Officer

Thanks, Sanjay.

Opening

Micron delivered outstanding FQ3 results. Revenue and EPS grew by a record amount sequentially on an organic basis, and we generated over $1.5 billion in free cash flow in the quarter.

Revenue

Total FQ3 revenue was approximately $7.4 billion, up 19% quarter over quarter and up 36% year over year. Revenue growth was driven by stronger DRAM and NAND pricing and by robust customer demand for Micron's products.

DRAM

FQ3 DRAM revenue was $5.4 billion, representing 73% of total revenue. DRAM revenue increased 23% sequentially and was up 52% year over year. Bit shipments increased in the low single-digit range sequentially, and ASPs were up approximately 20% quarter over quarter.

NAND

FQ3 NAND revenue was approximately $1.8 billion, representing 24% of total revenue and an all-time high for the company. NAND revenue increased 10% sequentially and was up 9% year over year. Bit shipments increased by low single digits sequentially while ASPs increased in the high single-digit percentage range quarter over quarter.

Revenue by Business Unit

Now turning to our revenue trends by business unit.

Revenue for the Compute and Networking Business Unit was approximately $3.3 billion, up approximately 25% sequentially and 49% year over year. CNBU revenue growth was driven by broad-based sequential pricing increases.

Revenue for the Mobile Business Unit was $2 billion, up 10% sequentially and 31% year over year. Mobile demand remained healthy as 5G handset sales continue to ramp.

Revenue for the Storage Business Unit was $1 billion, up approximately 19% from the prior quarter and approximately flat year over year. Both client and consumer SSD revenues set records.

Finally, the Embedded Business Unit generated record revenue of $1.1 billion, which was up 18% sequentially and 64% year over year. Automotive and industrial revenues were at an all-time high for the company.

Operating Results

Gross Margin

The consolidated gross margin for FQ3 was 42.9%, up 10 percentage points from the prior quarter. DRAM and NAND price increases helped drive the margin expansion in FQ3. Gross margins also benefited by 100 basis points from $75 million less depreciation at our Lehi fab, which is classified as "assets held for sale."

OpEx

Operating expenses were $821 million in FQ3, which we continue to tightly manage. Operating expenses also benefited from approximately $21 million of gains from the sales of certain assets.

Operating Income

FQ3 operating income was $2.4 billion, resulting in an operating margin of 32%, compared to 20% in the prior quarter and 18% in the prior year's quarter.

FQ3 EBITDA was $4 billion, resulting in an EBITDA margin of 53%, compared to 45% in the prior quarter and 44% in the prior year.

Net Interest Expense

Net interest expense was $31 million in FQ3, and we expect it to be roughly flat going forward.

Taxes

Our FQ3 effective tax rate was 8.4%. We expect our tax rate to be in the high single digits for FQ4.

Earnings Per Share

Non-GAAP earnings per share in FQ3 were $1.88, up from $0.98 in FQ2. The $0.90 sequential improvement was the largest in Micron's history.

EPS included approximately $0.05 from the sale of certain assets, investment gains from Micron Ventures and one-time tax items.

Operating Cash Flow

Turning to cash flows and capital spending, we generated approximately $3.6 billion in cash from operations in FQ3, representing 48% of revenue.

Capital Allocation

Net capital spending was approximately $2 billion during the quarter. As Sanjay mentioned, we now expect our FY21 capital spending to be somewhat higher than $9.5 billion. Most of this CapEx increase that we are highlighting today will not increase our CY21 and CY22 bit supply. We expect that while we invest in the EUV infrastructure and initial deployment, our capital intensity will increase to mid 30% of revenues. Once we get past the investment period of EUV adoption, we expect that these tools will boost our competitiveness and help drive productivity of our fabs.

As a result of the strong market environment and Micron's extraordinary execution, we generated positive free cash flow of $1.5 billion in FQ3. The increased cash flow was driven by strong revenue growth, higher margins and efficient working capital management. We expect free cash flow to continue to improve in FQ4, driven by continuing growth in revenue and earnings.

We completed share repurchases of $150 million, or approximately 1.7 million shares, in FQ3. From the inception of the share repurchase program, we have repurchased $3 billion worth of Micron stock, representing 55% of our cumulative free cash flow. In addition, since FY19, we have used approximately $2 billion in cash to settle conversions of our convertible notes, including approximately $800 million to settle the convert premiums. Combining the share repurchases and convert premiums, we have used

$3.8 billion or 69% of our cumulative free cash flow toward reducing our share count. We plan to continue repurchasing shares in FQ4.

Inventory

Ending FQ3 inventory was $4.5 billion or 98 days. We remain in a very lean inventory position as demand continues to outstrip our supply.

Total Cash/Debt

We ended the quarter with total cash and investments of $9.8 billion and total liquidity of approximately $12.3 billion. FQ3 ending total debt was $6.7 billion. Our balance sheet is rock solid, with investment-grade ratings from all three rating agencies. In the last three months, Fitch and Standard & Poor's both raised their outlook from stable to positive for Micron debt. These upgrades to the outlook for our debt ratings are further evidence of the financial transformation underway at Micron.

Lehi

Before providing the financial outlook, I want to cover the financial implications of the sale of our Lehi fab. We are pleased with this transaction and believe that it is good for our shareholders, as it frees up capital and enhances our ongoing profitability. The economic value for Micron from the sale is $1.5 billion, comprised of $900 million in cash resulting from the sales transaction and approximately $600 million in value for select tools and other assets that Micron will retain for redeployment to its other manufacturing sites, or that are sold to other buyers. We are taking an impairment charge of approximately $435 million, or approximately $330 million on an after-tax basis, as the $900 million sale price is below our book value of the assets being sold. Note that the tools that we are keeping have largely been depreciated but have substantial future value in our manufacturing network.

As we have previously disclosed, we stopped depreciation of the Lehi fab assets last quarter and this benefited our costs by approximately $75 million in FQ3. Once the sale is completed, we will further improve our profitability by entirely eliminating our underload charges.

Outlook

Now turning to our near-term outlook. Both DRAM and NAND markets are tight, and we expect pricing increases for both markets in FQ4. In FQ4, we are qualifying 1α and 176-layer nodes with several customers. We expect these nodes to support a modest level of bit growth and face cost headwinds that are common at this stage of the ramp. Additionally, we also expect cost headwinds from product mix and COVID mitigation. Despite cost headwinds, we expect strong improvement in our financial performance in FQ4. Our growth opportunity is healthy, and market momentum heading into FY22 is strong.

Non-GAAP Guidance

With all these factors in mind, our non-GAAP guidance for FQ4 is as follows. We expect revenue to be $8.2 billion, plus or minus $200 million; gross margin to be in the range of 47%, plus or minus 100 basis points; and operating expenses to be approximately $900 million, plus or minus $25 million. Finally, based on a share count of approximately 1.15 billion fully diluted shares, we expect EPS to be $2.30, plus or minus $0.10.

Closing

Micron's relentless focus on execution positions us well to generate solid returns for our shareholders. Measuring our performance trough to trough across the cycle from FY16 to FY20, we substantially improved our EBITDA margin, and our revenue grew by more than 70%. During this time, we delivered average gross margins of 40%, EBITDA margins of 50% and return on invested capital of 20%. We believe Micron's strong financial performance will continue cross-cycle, and over the long term, our revenue growth will outperform the broader semiconductor industry. Our industry-leading technology, dramatically improved product portfolio and financial strength position us well to capitalize on the long-running demand trends driving the memory and storage industry.

I will now turn it back to Sanjay.

Sanjay Mehrotra, President and Chief Executive Officer

Thank you, Dave.

Micron's FQ3 results demonstrate the strength of our business, and we expect to achieve continued strong results in the future. Demand for memory and storage is solid across market segments, and industry trends like artificial intelligence, edge computing and 5G continue to create new opportunities for Micron. Our team is building on our technology leadership to deliver bold new solutions that offer valuable differentiation for our customers. Micron's business is healthier and more robust than ever, and we are energized to seize the opportunities ahead at a truly exciting time in the semiconductor industry.

We are also leveraging our success to deliver results for all our stakeholders. In April, we released our sixth annual sustainability report, highlighting progress toward our environmental, social and governance goals. I am pleased to report that we are on track to achieve the environmental and sustainability goals we set last year, despite the challenges posed by the pandemic. In fact, our ESG risk scores have improved to the top 10% of the semiconductor industry according to the third-party rating agency Sustainalytics. We are also making good progress on achieving 100% renewable energy consumption in the U.S. by the end of 2025. In CY21, we continue to focus on emissions abatement, transition to renewable sources, water restoration and increased efforts to reduce, reuse or recycle waste. We will pursue these goals with the same focus with

which we have created sustained momentum in the business, and I look forward to providing updates on our progress on future calls.

We will now open for questions.