Financial results

FQ3 2024

Safe harbor statement

During the course of this meeting, we may make projections or other forward-looking statements regarding market demand and supply, the impact of new technologies such as AI, pricing, cost reductions, expected product volume production, our market position, expected product announcements, future events or the future financial performance or expected financial projections of the Company and the industry. We wish to caution you that such statements are predictions, and that actual events or results may differ materially. We refer you to the documents the Company files from time to time with the Securities and Exchange Commission, including the Company's most recent Form 10-K and Form 10-Q. These documents contain and identify important factors that could cause the actual results for the Company to differ materially from those contained in our projections or forward-looking statements. These certain factors can be found at investors.micron.com/risk-factor. 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 to conform these statements to actual results.

This presentation includes Non-GAAP financial measures. Non-GAAP financial measures represent GAAP measures, excluding the impact of certain activities, which management excludes in analyzing our operating results and understanding trends in our earnings, adjusted free cash flow, and business outlook. Further information regarding Micron's use of non-GAAP measures and reconciliations between GAAP and non-GAAP measures are included in the Appendix.

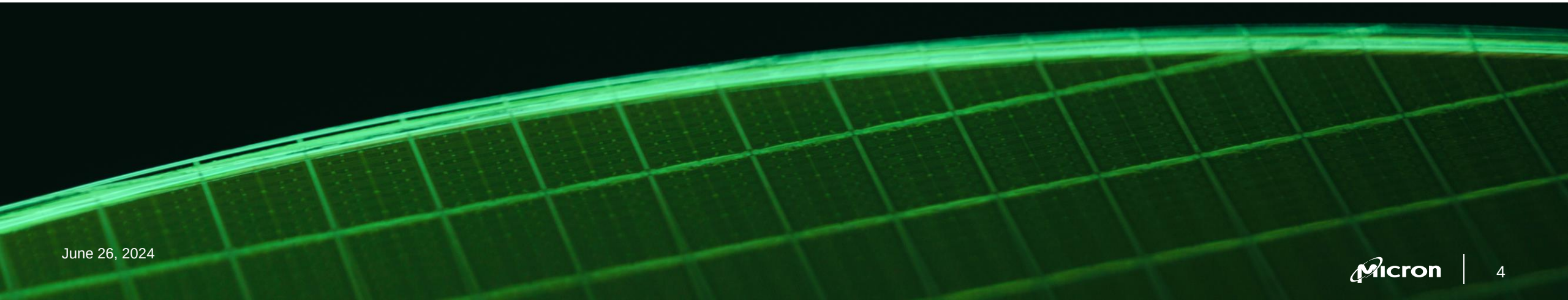
Sanjay Mehrotra

President and CEO

June 26, 2024

Overview

- Micron delivered fiscal Q3 revenue, gross margin and EPS all above the high end of guidance ranges.
- Micron drove robust price increases as industry supply-demand conditions continued to improve. This improved pricing, combined with our strengthening product mix, resulted in increased profitability across all our end markets.
- In data center, rapidly growing AI demand enabled us to grow our revenue by over 50% on a sequential basis, and we grew share in high margin AI-related product categories such as HBM, high-capacity DIMMs and data center SSDs.
- Robust AI-driven demand for data center products is causing tightness on our leading-edge nodes. Consequently, we expect continued price increases throughout CY24 despite only steady near-term demand in PCs and smartphones.
- As we look ahead to 2025, demand for AI PCs and AI smartphones, and continued growth of AI in the data center, create a favorable set up that gives us confidence that we can deliver a substantial revenue record in FY25, with significantly improved profitability underpinned by our ongoing portfolio shift to higher margin products.



Technology & Operations

- Over 80% of our DRAM bit production is now on leading-edge 1-alpha and 1-beta nodes. Over 90% of our NAND bit production is on our two leading-edge NAND nodes.
- 1-gamma DRAM pilot production using extreme ultraviolet (EUV) lithography is progressing well, and we are on track for volume production in CY25.
- Our next-gen NAND node is also on track, with high volume production planned for CY25.
- Despite impacts from the earthquake, we now expect our FY24 DRAM front-end cost reductions excluding HBM, to be in the high single-digits percentage range.
- We expect our FY24 NAND front-end cost reductions to be in the low teens percentage range.

CHIPS

- Micron signed a non-binding preliminary memorandum of terms, or PMT, with the U.S. government for $6.1 billion in grants under the CHIPS and Science act.
- Fab construction in Idaho is underway, and we are working diligently to complete the regulatory and permitting processes in New York. This additional leading-edge greenfield capacity, along with continued technology transition investments in our Asia facilities is required to meet long-term demand in the second half of this decade and beyond.
- These investments support our objective to maintain our current bit share over time, and to grow our memory bit supply in line with long-term industry bit demand. Micron retains flexibility under the PMT to manage construction and timing of supply growth in a manner that allows us to remain responsive to market conditions.

End markets overview

- We are in the early innings of a multi-year race to enable Artificial General Intelligence, or AGI, which will revolutionize all aspects of life. Enabling AGI will require training ever-increasing model sizes with trillions of parameters and sophisticated servers for inferencing.
- AI will also permeate to the edge via AI PCs and AI smartphones, as well as smart automobiles and intelligent industrial systems.
- These trends will drive significant growth in the demand for DRAM and NAND, and we believe that Micron will be one of the biggest beneficiaries in the semiconductor industry of the multi-year growth opportunity driven by AI.

Customer Inventories

- Most data center customer inventories have normalized, and demand from customers continues to strengthen.
- PC and smartphone customers have built additional inventories due to the rising price trajectory, the anticipated growth in AI PCs and AI smartphones, as well as the expectation of tight supply as an increasing portion of DRAM and NAND output is dedicated to meeting growing data center demand.
- Due to expectations for continued leading-edge node tightness, we are seeing increased interest from many customers across market segments to secure 2025 long-term agreements ahead of their typical schedule.

End market highlights

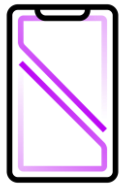
Data center

- In data center, industry server unit shipments are expected to grow in the mid-to-high-single digits in CY24, driven by strong growth for AI servers and a return to modest growth for traditional servers.
- **HBM:** Our HBM shipment ramp began in FQ3, and we generated over $100M in HBM3E revenue in the quarter, at margins accretive to DRAM and overall company margins. We expect to generate several hundred million dollars of revenue from HBM in FY24, and multiple $Bs in revenue from HBM in FY25. We expect to achieve HBM market share commensurate with our overall DRAM market share sometime in CY25. Our HBM is sold out for CY24 and CY25, with pricing already contracted for the overwhelming majority of our 2025 supply. We are making significant strides towards expanding our HBM customer base in CY25, as we design-in our industry-leading HBM technology with most of the major HBM customers.
- We have sampled our 12-high HBM3E product and expect to ramp it into high volume production in CY25, and increase in mix throughout 2025. We are confident we will maintain our technology leadership with HBM4 and HBM4E.
- **128GB Modules:** We achieved full validation on our 1-beta 32 gigabit monolithic-die based 128 gigabyte high-capacity server DIMM products, and are on track to achieve several hundred million dollars of revenue from high capacity DIMMs in the second half of fiscal 2024. Additionally, we continue to see strong interest in our industry-leading 1-beta LPDRAM in data center applications.
- **Data center SSDs:** Amidst of a strong demand recovery as customers have worked through their 2023 inventory. Hyperscale demand is improving, driven primarily by AI training and inference infrastructure, and supplemented by the start of a recovery of traditional compute and storage infrastructure demand. Micron is gaining share in data center SSDs, as we reach new revenue and market share records in this important product category. During the quarter, we more than tripled bit shipments of our 232-layer based 6500 30 terabyte SSDs, which offer best-in-class performance, reliability, and endurance for AI data lake applications. We continued our leadership and innovation by becoming the first NAND vendor to supply 200+ layer QLC for the enterprise storage market.

End market highlights

PC

- **PC**: Unit volumes remain on track to grow in the low single-digit range for CY24. We are optimistic that the planned Windows 10 end of life in 2025, the launch of Windows 12 and the introduction of a new generation of AI PCs will accelerate the PC replacement cycle starting in late CY24. The PC replacement cycle should gather momentum through CY25, as new AI applications are rolled out.
- During Computex in Taiwan, we saw several announcements of next-generation chipsets and AI PCs. These devices feature high-performance Neural Processing Unit chipsets, and we expect these devices will have 40% to 80% more DRAM content than today's average PC. We expect next-gen AI PCs to make up a meaningful portion of total PC units in CY25, growing each year until most PCs ultimately support AI PC specs.
- AI PCs are also likely to require higher performance and higher average capacity SSDs than traditional PCs, aligning well with our leading technology portfolio on our 232-layer NAND with our Performance 3500 SSD, and our industry-leading value QLC 2500 NVMe SSDs.



Mobile and intelligent edge

- **Mobile**: Smartphone unit volumes in CY24 remain on track to grow in the low-to-mid single digit percentage range. Micron's leading LP5X is enabling the recent 12GB and 16GB AI phone releases at all Android tier 1 customers, representing a 50% to 100% increase over last year's flagship models.
- **Automotive**: The automotive sector continued to experience robust demand for memory and storage, and Micron achieved a record quarter for automotive revenues. In the fiscal third quarter, we launched the world's first multi-port Gen 4 NVMe SSD in support of next generation centralized compute architectures.
- **Industrial**: In industrial and retail consumer segments, which are a smaller part of our business, we are seeing some near-term demand uncertainty from our distribution partners and end customers. We remain confident in the long-term fundamentals and growth drivers of these businesses - especially with the increasing adoption of AI in a variety of applications.

Outlook

- **Demand:** We forecast CY24 bit demand growth for the industry to be in the mid-teens percentage range for both DRAM and NAND. Over the medium term, we expect industry bit demand growth CAGRs of mid-teens in DRAM and high teens in NAND.
- **Supply:** We expect CY24 industry supply to be below demand for both DRAM and NAND.
- As discussed previously, the ramp of HBM production will constrain industry supply growth in non-HBM products. Industry wide, HBM3E consumes approximately three times the wafer supply as D5 to produce a given number of bits in the same technology node. With increased performance and packaging complexity, across the industry, we expect this trade ratio for HBM4 to be even higher than the trade ratio for HBM3E. We anticipate strong HBM demand due to AI, combined with increasing silicon intensity of the HBM roadmap, to contribute to tight supply conditions for DRAM across all end markets. As the memory industry is still recovering from the challenging environment in 2023, this tight supply environment will help drive the considerable improvements in profitability and ROI that are needed to enable the investments required to support future growth.
- Micron's bit supply growth in FY24 remains below our demand growth for both DRAM and NAND.
- Micron will continue to exercise supply and capex discipline, and focus on improving profitability, while maintaining our bit market share for DRAM and NAND. We continue to project we will end fiscal 2024 with low double digit percentage less wafer capacity in both DRAM and NAND than our peak levels in fiscal 2022. We intend to use our existing inventory to drive a portion of the bit growth supporting our revenue in fiscal 2025, to enable a more optimized use of our capex investments.

Capex plan

- FY24 capex plan will be ~$8.0B and WFE spending will be down YoY in FY24.
- We expect to increase our capital spending materially next year, with capex around mid-30s % range of revenue for FY25, which will support HBM assembly and test equipment, fab and back-end facility construction as well as technology transition investment to support demand growth.
- Record revenue and significantly improved profitability in FY25 will help support average quarterly capex in FY25 to be meaningfully above the FQ4 2024 level of $3B.
- The construction capex in the planned Idaho and New York greenfield fabs in fiscal 2025 will be half or more of the expected increase in total capex. In fact, the growth in both greenfield fab construction and HBM capex investments, is projected to make up the overwhelming majority of the year-over-year capex increase.
- These fab construction investments are necessary to support supply growth for the latter half of this decade. This Idaho fab will not contribute to meaningful bit supply until fiscal 2027 and the New York construction capex is not expected to contribute to bit supply growth until fiscal 2028 or later. The timing of future WFE spend in these fabs will be managed to align supply growth with expected demand growth.

Mark Murphy

Chief Financial Officer

June 26, 2024

FQ3-24 revenue

$6.8B

Revenue up 17% Q/Q
and up 82% Y/Y

Performance by technology

DRAM FQ3-24

- $4.7 billion, representing 69% of total revenue
- Revenue increased 13% Q/Q
- Bit shipments decreased by a mid-single digit percentage Q/Q
- ASPs increased by approximately 20% Q/Q

NAND FQ3-24

- $2.1 billion, representing 30% of total revenue
- Revenue increased 32% Q/Q
- Bit shipments increased by a high-single digit percentage Q/Q
- ASPs increased by approximately 20% Q/Q

Revenue by business unit

Amounts in millions	FQ3-24	FQ2-24	Q/Q % Change	FQ3-23	Y/Y % Change
Compute and Networking (CNBU)	$2,573	$2,185	18%	$1,389	85%
Mobile (MBU)	$1,588	$1,598	(1%)	$819	94%
Embedded (EBU)	$1,294	$1,111	16%	$912	42%
Storage (SBU)	$1,353	$905	50%	$627	116%

FQ3-24
Non-GAAP operating results

Revenue: $6.8 billion

Gross margin: 28%

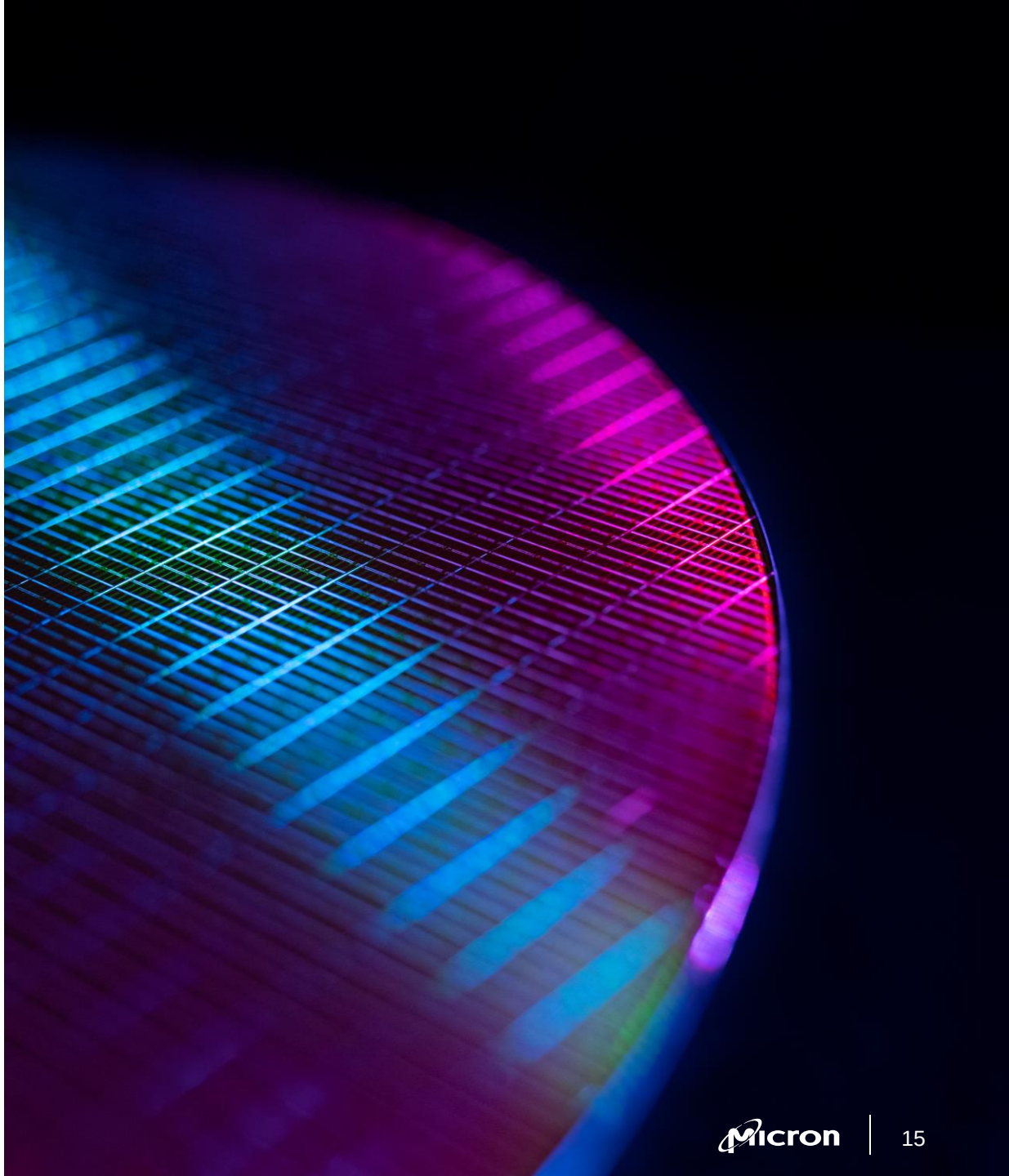
Operating expenses: $976 million

Operating income: $941 million

Net income: $702 million

Diluted earnings per share: $0.62

Cash from operations (GAAP): $2.5 billion



See non-GAAP reconciliations in Appendix

Cash flow and capital allocation

From FY-21 to FQ3-24:

$5.5 billion returned to shareholders from share repurchases and dividends, including $4.1 billion used to repurchase 60 million shares

Cash flow from operations	FQ3-24: $2.5B (36% of revenue)
Net CapEx[1]	FQ3-24: CapEx of $2.1B FY-24: CapEx guidance of approximately $8.0B
Adjusted FCF*	FQ3-24: $425M
Buybacks	FQ3-24: Temporarily suspended
Dividends	Dividend payment of $0.115 per share will be paid on July 23rd
Liquidity[2]	$11.7B in liquidity at end of FQ3-24

[1]CapEx net of proceeds from government incentives and proceeds from sales of property, plant, and equipment.
[2]Cash, short-term and long-term marketable investments, restricted cash, and undrawn revolver capacity.
*Adjusted free cash flow is a non-GAAP measure defined as net cash provided by operating activities less investments in capital expenditures net of proceeds from government incentives and proceeds from sales of property, plant, and equipment. See non-GAAP reconciliations in Appendix.

FQ4-24 guidance
Non-GAAP

Revenue	$7.60 billion ± $200 million
Gross margin	34.5% ± 1.0%
Operating expenses	$1.06 billion ± $15 million
Diluted earnings per share*	$1.08 ± $0.08

*Based on ~1.14 billion diluted shares.
See non-GAAP reconciliations in Appendix.

Appendix

Financial summary
Non-GAAP

Amounts in millions, except per share	FQ3-24	% of Revenue	FQ2-24	% of Revenue	FQ3-23	% of Revenue
Revenue	$6,811	100%	$5,824	100%	$3,752	100%
Gross margin	1,917	28%	1,163	20%	(603)	(16%)
Operating income (loss)	941	14%	204	4%	(1,469)	(39%)
Income tax (provision) benefit	(227)		294		(102)	
Net income (loss)	702	10%	476	8%	(1,565)	(42%)
Diluted earnings (loss) per share	0.62		0.42		(1.43)	
Cash provided by operating activities (GAAP)	2,482		1,219		24	
Cash, marketable investments, and restricted cash (GAAP)	9,224		9,718		11,397	

See non-GAAP reconciliations.

Non-GAAP financial data and guidance

% of Revenue	FQ3-24
DRAM	69%
NAND	30%

% Sales Volume Change	FQ3-24 Q/Q
DRAM	Decreased by a mid-single digit percentage
NAND	Increased by a high-single digit percentage

% ASP Change	FQ3-24 Q/Q
DRAM	Increased by approximately 20%
NAND	Increased by approximately 20%

	FQ3-24 Non-GAAP (amounts in millions, except per share)		FQ4-24 Non-GAAP Guidance
Revenue	$	6,811	$7.60 billion ± $200 million
Gross margin		28%	34.5% ± 1.0%
Operating expenses	$	976	$1.06 billion ± $15 million
Diluted earnings per share	$	0.62	$1.08 ± $0.08

	FQ3-24 Non-GAAP (amounts in millions)		FQ4-24 Non-GAAP Estimates
Diluted shares		1,136	~1.14 billion
Income tax (provision) benefit	$	(227)	~($320) million
Cash from operations (GAAP)	$	2,482	—
Investments in capex, net (capital cash flow)	$	(2,057)	FY-24: ~$8.0 billion

See non-GAAP reconciliations.

Revenue by technology

Amounts in millions	FQ3-24	% of Revenue	FQ2-24	% of Revenue	FQ3-23	% of Revenue
DRAM	$ 4,692	69%	$ 4,158	71%	$ 2,672	71%
NAND	2,065	30%	1,567	27%	1,013	27%
Other (primarily NOR)	54	1%	99	2%	67	2%
Total	$ 6,811	100%	$ 5,824	100%	$ 3,752	100%

Percentages of total revenue may not total 100% due to rounding.

Non-GAAP reconciliations

Consolidated results
Non-GAAP reconciliations

Amounts in millions	FQ3-24	FQ2-24	FQ3-23
GAAP gross margin	$ 1,832	$ 1,079	$ (668)
Stock-based compensation	80	80	60
Other	5	4	5
Non-GAAP gross margin	$ 1,917	$ 1,163	$ (603)
GAAP operating expenses	$ 1,113	$ 888	$ 1,093
Stock-based compensation	(137)	(129)	(91)
Restructure and asset impairments	—	—	(68)
Patent cross-license agreement gain	—	200	—
Litigation settlement	—	—	(68)
Non-GAAP operating expenses	$ 976	$ 959	$ 866
GAAP operating income (loss)	$ 719	$ 191	$ (1,761)
Stock-based compensation	217	209	151
Restructure and asset impairments	—	—	68
Patent cross-license agreement gain	—	(200)	—
Litigation settlement	—	—	68
Other	5	4	5
Non-GAAP operating income (loss)	$ 941	$ 204	$ (1,469)

Consolidated results
Non-GAAP reconciliations

Amounts in millions	FQ3-24	FQ2-24	FQ3-23
GAAP cost of goods sold	$ 4,979	$ 4,745	$ 4,420
Stock-based compensation	(80)	(80)	(60)
Other	(5)	(4)	(5)
Non-GAAP cost of goods sold	$ 4,894	$ 4,661	$ 4,355
GAAP research and development	$ 850	$ 832	$ 758
Stock-based compensation	(77)	(77)	(57)
Non-GAAP research and development	$ 773	$ 755	$ 701
GAAP selling, general, and administrative	$ 291	$ 280	$ 219
Stock-based compensation	(60)	(52)	(34)
Non-GAAP selling, general, and administrative	$ 231	$ 228	$ 185

Consolidated results
Non-GAAP reconciliations

Amounts in millions	FQ3-24	FQ2-24	FQ3-23
GAAP net income (loss)	$ 332	$ 793	$ (1,896)
Stock-based compensation	217	209	151
Restructure and asset impairments	—	—	68
Patent cross-license agreement gain	—	(200)	—
Litigation Settlement	—	—	68
Other	3	2	7
Estimated tax effects of above and other tax adjustments	150	(328)	37
Non-GAAP net income (loss)	$ 702	$ 476	$ (1,565)
GAAP income tax (provision) benefit	$ (377)	$ 622	$ (139)
Estimated tax effects of non-GAAP adjustments and other tax adjustments	150	(328)	37
Non-GAAP income tax (provision) benefit	$ (227)	$ 294	$ (102)

Consolidated results
Non-GAAP reconciliations

Amounts in millions	FQ3-24	FQ2-24	FQ3-23
GAAP net income (loss)	$ 332	$ 793	$ (1,896)
Interest (income) expense, net	14	14	(8)
Income tax provision (benefit)	377	(622)	139
Depreciation expense and amortization of intangible assets	1,955	1,924	1,956
Non-GAAP adjustments			
Stock-based compensation	217	209	151
Restructure and asset impairments	—	—	68
Patent cross-license agreement gain	—	(200)	—
Litigation settlement	—	—	68
Other	—	1	—
Adjusted EBITDA	$ 2,895	$ 2,119	$ 478

Consolidated results
Non-GAAP reconciliations

Amounts in millions, except per share	FQ3-24	FQ2-24	FQ3-23
GAAP shares used in diluted EPS calculation	1,123	1,114	1,094
Adjustment for stock-based compensation	13	20	—
Non-GAAP shares used in diluted EPS calculation	1,136	1,134	1,094
GAAP diluted earnings (loss) per share	$ 0.30	$ 0.71	$ (1.73)
Effects of non-GAAP adjustments	0.32	(0.29)	0.30
Non-GAAP diluted earnings (loss) per share	$ 0.62	$ 0.42	$ (1.43)
Net cash provided by operating activities	$ 2,482	$ 1,219	$ 24
Expenditures for property, plant, and equipment	(2,086)	(1,384)	(1,561)
Payments on equipment purchase contracts	(45)	(26)	(36)
Proceeds from sales of property, plant, and equipment	41	13	34
Proceeds from government incentives	33	149	184
Investments in capital expenditures, net	(2,057)	(1,248)	(1,379)
Adjusted free cash flow	$ 425	$ (29)	$ (1,355)

FQ4-24 guidance
Non-GAAP reconciliations

	GAAP	Adjustments		Non-GAAP
Revenue	$7.60 billion ± $200 million	—		$7.60 billion ± $200 million
Gross margin	33.5% ± 1.0%	1.0%	A	34.5% ± 1.0%
Operating expenses	$1.19 billion ± $15 million	$125 million	B	$1.06 billion ± $15 million
Diluted earnings per share*	$0.61 ± $0.08	$0.47	A, B, C	$1.08 ± $0.08

Non-GAAP Adjustments (amounts in millions)		
A	Stock-based compensation – cost of goods sold	$ 84
A	Other – cost of goods sold	4
B	Stock-based compensation – research and development	77
B	Stock-based compensation – selling, general, and administrative	48
C	Tax effects of the above items and other tax adjustments	315
		$ 528

*GAAP earnings per share based on approximately 1.12 billion diluted shares and non-GAAP earnings per share based on approximately 1.14 billion diluted shares.
The above guidance does not incorporate the impact of any potential business combinations, divestitures, additional restructuring activities, balance sheet valuation adjustments, strategic investments, financing transactions, and other significant transactions. The timing and impact of such items are dependent on future events that may be uncertain or outside of our control.