



Financial Results

FQ1 2020

©2019 Micron Technology, Inc. All rights reserved. Information, products, and/or specifications are subject to change without notice. All information is provided on an "AS IS" basis without warranties of any kind. Statements regarding products, including statements regarding product features, availability, functionality, or compatibility, are provided for informational purposes only and do not modify the warranty, if any, applicable to any product. Drawings may not be to scale. Micron, the Micron logo, and all other Micron trademarks are the property of Micron Technology, Inc. All other trademarks are the property of their respective owners.

Safe Harbor Statement

During the course of this meeting, we may make projections or other forward-looking statements regarding future events or the future financial performance 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, specifically 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 <http://www.micron.com/certainfactors>. 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 the date of the presentation to conform these statements to actual results.



Sanjay Mehrotra

President and CEO

Overview

Solid Start to FY-20 Against Backdrop of Challenging Industry Environment

- Delivered good profitability
- Maintained positive free cash flow
- Strengthened our product portfolio

Optimism for FQ2-20 Bottom with Continued Recovery in 2HCY20

- Industry supply-demand balance continues to improve in both DRAM and NAND
- Recent business trends give us optimism

Continued Excellent Progress on Key Strategic Objectives

- Increased mix of high value solutions
 - Expected to grow from 50% of NAND bits in FY-19 to over 66% in FY-20; up to 80% in FY-21
- Improved cost structure
- Enhanced customer engagement

Micron Insight Highlights

Acquisition of FWDNXT

- FWDNXT “Deep Learning Accelerator” hardware and software technology, when combined with advanced Micron memory, makes it possible to deploy neural network models from any framework into edge devices for inference
- Will help us learn and better address customers’ AI needs

Launched First 3D XPoint Product: X100

- X100 is the world’s fastest storage device, dramatically faster than any other SSD
- Showcased at Microsoft Ignite conference by Azure team

Strong Technology and Roadmap Execution

Micron is the only company in the world with a portfolio of DRAM, NAND and 3DXPoint technologies, putting us in a unique position to develop differentiated products for our customers

DRAM

- 1Z-based LP4 uMCP had the fastest revenue ramp of any product in the history of our mobile business; Production mix on 1Z will grow throughout 2020
- Cleanroom expansion in Taiwan is on track and we expect output in calendar 2021
- Advanced immersion together with Micron's proprietary multi-patterning technology shows superior economics through 1 gamma node; however Taiwan cleanroom is EUV capable

NAND

- Expect to begin production on our 128-layer first-gen RG node in 2H of FY20 delivering minimal cost reduction in FY20
- Second-gen RG node with higher layer count in FY21 will provide more robust cost reduction as it ramps
- Second-gen node will leverage Micron's leadership in QLC and CMOS under the array

End Market Highlights



SSDs

- Supply shortages across the industry, and pricing trends are improving
- As of FQ2, NVMe SSDs in all market segments, positioned to gain share in FY20
- Achieved qualifications with multiple OEMs on our 96-layer SATA datacenter SSD



Mobile

- MCP market share increased approximately 50% Y/Y
- 1Z LP4 DRAM-based uMCP achieved qualification at multiple OEMs
- Leading on bandwidth and low power in LP5 DRAM; positions us well for 5G



Data Center, Graphics & PC

- **Data Center:** Strong demand growth from enterprise and cloud customers
- **Graphics:** Shipments of 14 gigabit per second GDDR6, well positioned for launch of next generation gaming consoles in CY20
- **PC:** Bit shipment growth Q/Q; CPU shortages continuing at least into early CY20



Automotive

- Q/Q revenue growth driven by secular memory and storage content growth
- Qualified and shipped the industry's first BGA NVMe SSD

DRAM Outlook

Industry

- CY-19 industry bit demand growth has increased to approximately 20%
- CY-20 industry bit demand growth of mid-teens percent range, with industry bit supply growth to be somewhat less than demand
- Long-term industry bit demand growth CAGR in mid-to-high teens

Micron

- CY-19 bit supply growth will be less than industry supply growth of mid-teens
- CY-20 bit supply growth to be slightly above industry bit supply growth
- Long-term Micron supply growth in line with industry demand CAGR of mid-to-high teens

NAND Outlook

Industry

- CY-19 industry bit demand growth in the mid-40% range
- CY-20 industry bit demand growth of high-20% to low-30% range. Industry bit supply to be lower than industry bit demand
- Long-term industry bit demand growth CAGR of approximately 30%

Micron

- CY-19 bit supply growth slightly below industry bit demand growth
- CY-20 bit supply growth to be meaningfully below industry bit supply growth; bit shipment growth to be close to industry bit demand growth as we ship our inventory during first generation of our RG transition
- Long-term Micron supply growth in line with industry demand CAGR of approximately 30%


Huawei Update

- We applied for, and recently received all requested licenses that enable us to provide support for certain products not subject to Export Administration Regulations and Entity List restrictions, as well as qualify new products for Huawei's mobile and server businesses.
- Although we are now able to qualify new products with Huawei's mobile and server businesses, it will take some time before the qualifications are completed and contribute to revenue.
- Consequently, we do not expect these licenses to have a material impact on our revenue in the next couple of quarters
- If there are changes to Export Administration Regulations or Entity List restrictions, our revenue with Huawei or other Chinese customers could be negatively impacted, and these licenses could be rendered ineffective by new regulations.



Dave Zinsner

Chief Financial Officer

An abstract geometric wireframe graphic composed of interconnected lines and polygons, resembling a stylized map or network, is positioned on the left side of the slide. It spans across the blue and white background sections.

FQ1-20 Revenue

\$5.1B

Revenue up 6% Q/Q and down 35% Y/Y

Performance by Technology

DRAM

- 67% of total revenue in FQ1-20
- Revenue up 2% Q/Q and down 41% Y/Y
- Bit shipments up approximately 10% Q/Q
- Bit shipments up mid-20 percent range Y/Y
- ASPs down upper-single digit percent range Q/Q

NAND

- 28% of total revenue in FQ1-20
- Revenue up 18% Q/Q and down 14% Y/Y
- Bit shipments up mid-teen percent range Q/Q
- Bit shipments up mid-30 percent range Y/Y
- ASPs up low-single-digit percent range Q/Q

The metrics above reflect the change in reporting for MCPs and SSDs, which have been disaggregated into DRAM and NAND.



Revenue by Business Unit

	FQ1-20	FQ4-19	Q/Q % Change	FQ1-19	Y/Y % Change
Compute and Networking (CNBU)	\$1.98B	\$1.90B	4%	\$3.60B	(45)%
Mobile (MBU)	\$1.46B	\$1.41B	4%	\$2.21B	(34)%
Storage (SBU)	\$968M	\$848M	14%	\$1.14B	(15)%
Embedded (EBU)	\$734M	\$705M	4%	\$933M	(21)%

FQ1-20

Non-GAAP Operating Results

Revenue: \$5.1 billion

Gross Margin: 27.3%

Net Income: \$548 million

Diluted EPS: \$0.48

Operating Expenses: \$811 million

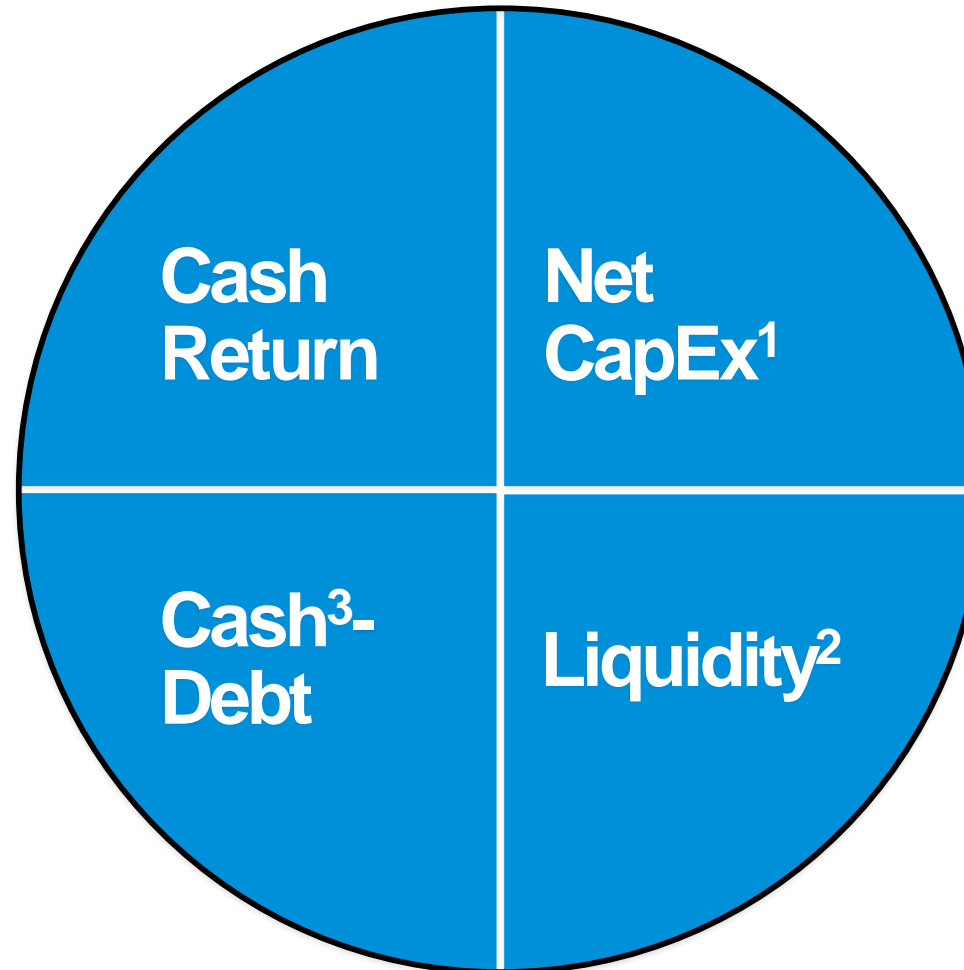
Operating Income: \$594 million

Cash from Operations: \$2.0 billion

Capital Allocation

**\$50M used for share repurchases
in FQ1-20**
(1 million shares)
**\$200M used for convert reduction
in FQ1-20**
(3 million shares)

**\$2.7B of net cash at end
of FQ1-20**



FY-20 CapEx of \$7B-\$8B

**\$11B in liquidity at end
of FQ1-20**

¹Capex net of partner contributions

²Cash, short-term and long-term marketable investments, restricted cash and undrawn revolver capacity

³Cash, short-term and long-term marketable investments, and restricted cash

FQ2-20 Guidance

Non-GAAP

Revenue	\$4.5 billion to \$4.8 billion
Gross margin	27% ± 1.5%
Operating expenses	\$825 million ± \$25 million
Interest (income) expense, net	\$0 million
Diluted EPS*	\$0.35 ± \$0.06

*Based on ~1.14 billion diluted shares



Other Key Data

Financial Summary

Non-GAAP

Amounts in millions, except per share	FQ1-20	% of Revenue	FQ4-19	% of Revenue	FQ1-19	% of Revenue
Revenue	\$5,144	100%	\$4,870	100%	\$7,913	100%
Gross margin	1,405	27%	1,491	31%	4,670	59%
Operating income	594	12%	694	14%	3,887	49%
Income tax (provision) benefit	(42)		(64)		(400)	
Net income attributable to Micron	548	11%	637	13%	3,508	44%
Diluted earnings per share	0.48		0.56		2.97	
Cash provided by operating activities	2,011		2,233		4,810	
Cash, marketable investments, and restricted cash	8,313		9,246		7,206	

See Non-GAAP reconciliations

Non-GAAP Financial Data and Guidance

% of Revenue	FQ1-20
DRAM	67%
NAND	28%

% Sales Volume Change	FQ1-20 Q/Q
DRAM	Increased approximately 10%
NAND	Increased mid-teens percent range

% ASP Change	FQ1-20 Q/Q
DRAM	Decreased upper-single-digit percent range
NAND	Increased low-single-digit percent range

	FQ1-20 Non-GAAP (amounts in millions, except per share)	FQ2-20 Non-GAAP Guidance
Revenue	\$ 5,144	\$4.5 billion to \$4.8 billion
Gross margin	27%	27% ± 1.5%
Operating expenses	\$ 811	\$825 million ± \$25 million
Interest (income) expense, net	\$ (7)	\$0 million
Earnings per share	\$ 0.48	\$0.35 ± \$0.06

	FQ1-20 Non-GAAP (amounts in millions)	FQ2-20 Non-GAAP Estimates
Diluted shares	1,138	~1.14 billion
Income tax (provision) benefit	\$ (42)	~5% rate
Operating cash flow	\$ 2,011	—
Depreciation and amortization	\$ 1,289	—
Capital expenditures (capital cash flow)*	\$ 1,932	FY-20: \$7 billion to \$8 billion

See Non-GAAP reconciliations
*Net of amounts funded by partners

Convertible Notes Dilution Overview

(shares in millions)

Stock Price	Actual FQ1-20*	\$39	\$42	\$45	\$48	\$51	\$54	\$57	\$60	\$63	\$66
2032 D Notes	11	10	10	10	11	11	11	11	11	11	11
2033 F Notes	1	1	1	1	1	1	1	1	1	1	1
Total dilutive shares	12	11	11	11	12	12	12	12	12	12	12
Benefit from capped call	(2)	(3)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)
Net dilution	10	8	9	9	10	10	10	10	10	10	11

Note: Except for actual FQ1-20 dilution, the table above presents the potential dilutive impact of convertible notes outstanding as of November 28, 2019 and the anti-dilutive benefit from capped calls over the range of trading prices for Micron's stock.

*Represents the actual dilutive impact of convertible notes for FQ1-20 diluted share count based on an average share price of \$46.87 for the quarter.

Revenue by Technology

Amounts in millions	FQ1-20	% of Revenue	FQ4-19	% of Revenue	FQ1-19	% of Revenue
DRAM	\$3,469	67%	\$3,399	70%	\$5,893	74%
NAND	1,422	28%	1,204	25%	1,660	21%
Other	253	5%	267	5%	360	5%
Total	\$5,144	100%	\$4,870	100%	\$7,913	100%

Revenue for MCPs and SSDs, which contain both DRAM and NAND, are disaggregated into DRAM and NAND in the table above based on the relative values of each component.

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

Historical Revenue % by Technology

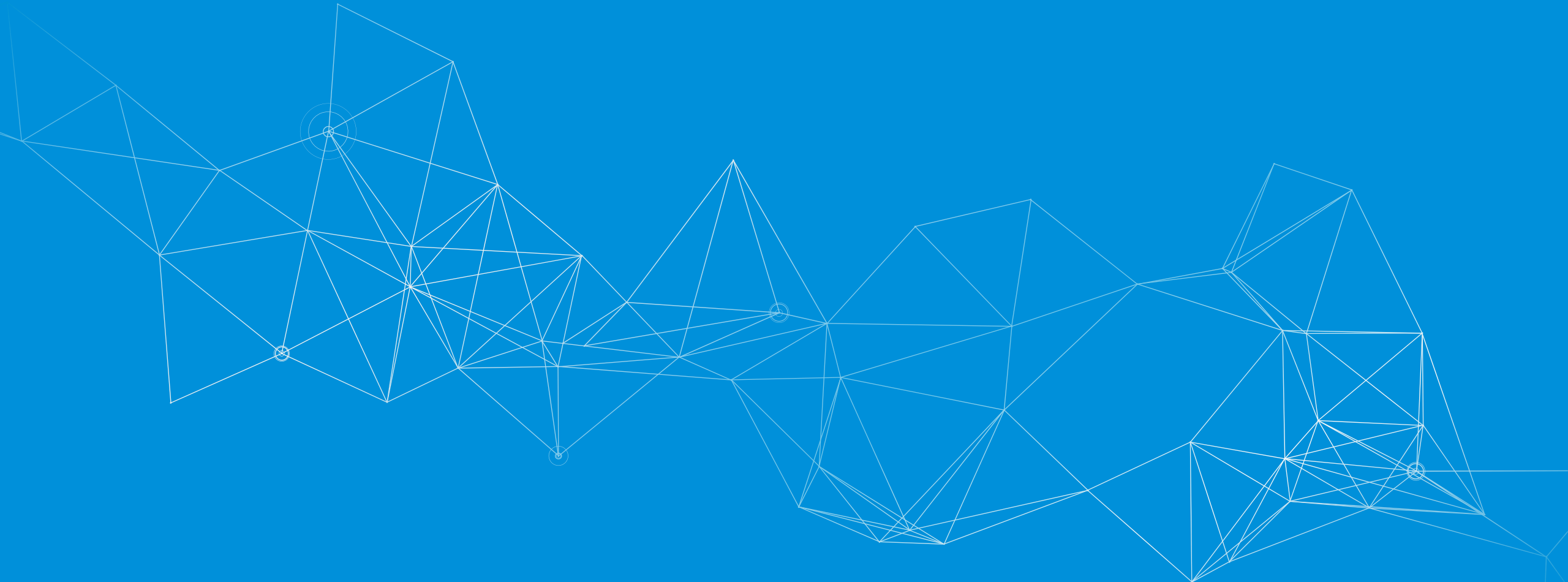
	Q1-19	Q2-19	Q3-19	Q4-19	FY-19
DRAM	74%	71%	71%	70%	72%
NAND	21%	24%	23%	25%	23%
Other	5%	5%	6%	5%	5%
Total	100%	100%	100%	100%	100%

	Q1-18	Q2-18	Q3-18	Q4-18	FY-18
DRAM	71%	74%	76%	76%	74%
NAND	24%	21%	20%	21%	21%
Other	5%	4%	4%	3%	4%
Total	100%	100%	100%	100%	100%

	Q1-17	Q2-17	Q3-17	Q4-17	FY-17
DRAM	67%	68%	68%	70%	68%
NAND	29%	28%	29%	27%	28%
Other	4%	4%	4%	3%	4%
Total	100%	100%	100%	100%	100%

Revenue for MCPs and SSDs, which contain both DRAM and NAND, are disaggregated into DRAM and NAND in the table above based on the relative values of each component.

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



Non-GAAP Reconciliations

Consolidated Results

Non-GAAP Reconciliations

Amounts in millions	FQ1-20	FQ4-19	FQ1-19
GAAP gross margin	\$ 1,366	\$ 1,395	\$ 4,615
Stock-based compensation	31	29	26
Start-up and preproduction costs	—	12	8
Employee severance	1	47	13
Other	7	8	8
Non-GAAP gross margin	<u>\$ 1,405</u>	<u>\$ 1,491</u>	<u>\$ 4,670</u>
GAAP operating expenses	\$ 848	\$ 745	\$ 856
Stock-based compensation	(41)	(38)	(35)
Employee severance	—	(32)	(7)
Restructure and asset impairments	4	122	(30)
Other	—	—	(1)
Non-GAAP operating expenses	<u>\$ 811</u>	<u>\$ 797</u>	<u>\$ 783</u>
GAAP operating income	\$ 518	\$ 650	\$ 3,759
Stock-based compensation	72	67	61
Start-up and preproduction costs	—	12	8
Employee severance	1	79	20
Restructure and asset impairments	(4)	(122)	30
Other	7	8	9
Non-GAAP operating income	<u>\$ 594</u>	<u>\$ 694</u>	<u>\$ 3,887</u>

Consolidated Results

Non-GAAP Reconciliations

Amounts in millions	FQ1-20	FQ4-19	FQ1-19
GAAP net income attributable to Micron	\$ 491	\$ 561	\$ 3,293
Stock-based compensation	72	67	61
Start-up and preproduction costs	—	12	8
Employee severance	1	79	20
Restructure and asset impairments	(4)	(122)	30
Amortization of debt discount and other costs	10	10	18
(Gain) loss on debt repurchases and conversions	(42)	10	(14)
Other	7	13	15
Impact of U.S. income tax reform	—	—	47
Estimated tax effects of above, non-cash changes in net deferred income taxes, and assessments of tax exposures	13	7	30
Non-GAAP net income attributable to Micron	\$ 548	\$ 637	\$ 3,508
GAAP income tax (provision) benefit	\$ (55)	\$ (71)	\$ (477)
Impact of U.S. income tax reform	—	—	47
Estimated tax effects of non-GAAP adjustments, non-cash changes in net deferred income taxes, and assessments of tax exposures	13	7	30
Non-GAAP income tax (provision) benefit	\$ (42)	\$ (64)	\$ (400)

Consolidated Results

Non-GAAP Reconciliations

Amounts in millions	FQ1-20	FQ4-19	FQ1-19
GAAP cost of goods sold	\$ 3,778	\$ 3,475	\$ 3,298
Stock-based compensation	(31)	(29)	(26)
Start-up and preproduction costs	—	(12)	(8)
Employee severance	(1)	(47)	(13)
Other	(7)	(8)	(8)
Non-GAAP cost of goods sold	\$ 3,739	\$ 3,379	\$ 3,243
GAAP selling, general and administrative	\$ 211	\$ 212	\$ 209
Stock-based compensation	(22)	(18)	(19)
Employee severance	—	(10)	(2)
Non-GAAP selling, general and administrative	\$ 189	\$ 184	\$ 188
GAAP research and development	\$ 640	\$ 623	\$ 611
Stock-based compensation	(19)	(20)	(16)
Employee severance	—	(22)	(5)
Other	—	—	(1)
Non-GAAP research and development	\$ 621	\$ 581	\$ 589

Consolidated Results

Non-GAAP Reconciliations

Amounts in millions, except per share amounts	FQ1-20	FQ4-19	FQ1-19
GAAP shares used in diluted EPS calculations	1,129	1,128	1,174
Adjustment for capped calls and stock-based compensation	9	6	5
Non-GAAP shares used in diluted EPS calculations	1,138	1,134	1,179
GAAP diluted earnings per share	\$ 0.43	\$ 0.49	\$ 2.81
Effects of non-GAAP adjustments	0.05	0.07	0.16
Non-GAAP diluted earnings per share	\$ 0.48	\$ 0.56	\$ 2.97
GAAP net income	\$ 508	\$ 586	\$ 3,296
Interest (income) expense, net	3	(18)	(5)
Provision (benefit) for income taxes	55	71	477
Depreciation and amortization of property, plant, and equipment and intangibles	1,296	1,416	1,335
EBITDA	\$ 1,862	\$ 2,055	\$ 5,103
Net cash provided by operating activities	\$ 2,011	\$ 2,233	\$ 4,810
Expenditures for property, plant, and equipment	(1,943)	(2,028)	(2,700)
Payments on equipment purchase contracts	(11)	(21)	(20)
Net partner contributions	22	79	236
Adjusted free cash flow	\$ 79	\$ 263	\$ 2,326

Consolidated Results

Non-GAAP Reconciliations

Amounts in millions	FQ1-20	FQ4-19	FQ1-19
GAAP interest (income) expense, net	\$ 3	\$ (18)	\$ (5)
Amortization of debt discount and other costs	(10)	(10)	(18)
Non-GAAP interest (income) expense, net	<u>\$ (7)</u>	<u>\$ (28)</u>	<u>\$ (23)</u>

Amounts in millions	FQ1-20	FQ4-19
Cash and short-term investments	\$ 7,588	\$ 7,955
Current and noncurrent restricted cash	126	127
Long-term marketable investments	599	1,164
Current and long-term debt	(5,650)	(5,851)
Net cash	<u>\$ 2,663</u>	<u>\$ 3,395</u>

FQ2-20 Guidance

Non-GAAP Reconciliations

	GAAP	Adjustments		Non-GAAP
Revenue	\$4.5 billion to \$4.8 billion	—		\$4.5 billion to \$4.8 billion
Gross margin	26% ± 1.5%	1%	A	27% ± 1.5%
Operating expenses	\$878 million ± \$25 million	\$53 million	B	\$825 million ± \$25 million
Interest (income) expense, net	\$5 million	\$5 million	C	\$0 million
Diluted EPS*	\$0.25 ± \$0.06	\$0.10	A,B,C,D	\$0.35 ± \$0.06

Adjustments (amounts in millions)

A	Stock-based compensation – cost of goods sold	\$	32
A	Other – cost of goods sold		7
B	Stock-based compensation – sales, general, and administrative		20
B	Stock-based compensation – research and development		21
B	Other – operating expenses		12
C	Amortization of debt discount and other costs		5
D	Tax effects of the above items and non-cash changes in net deferred income taxes		14
		\$	<u>111</u>

The above guidance does not incorporate the impact of any potential business combinations, divestitures, 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.

*GAAP EPS based on ~1.13 billion diluted shares and non-GAAP EPS based on ~1.14 billion diluted shares

The Micron logo features a stylized white 'M' with a white orbital ring around it, followed by the word 'micron' in a lowercase, sans-serif font with a registered trademark symbol (®) to its upper right.

