

# Financial Results

FQ3 2020

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# Sanjay Mehrotra

President and CEO



## FQ3 Highlights

Strong execution drove solid sequential revenue and EPS growth

 Ramping the industry's most advanced DRAM node and increasing our mix of high-value NAND

 Strong competitive position and diversified product portfolio put Micron in an outstanding position for growth in the memory and storage markets





## **Operations Update**

- Most of our fab and assembly sites operated at full production throughout the quarter
- Our Singapore and Taiwan assembly and test facilities achieving record production
- COVID-19's impact to our production early in our third quarter was limited to our back-end assembly and test sites in Muar and Penang, Malaysia, and we quickly offset this impact with production adjustments at our other facilities
- All our production facilities are operating normally at this time
- We continue to prioritize the health and safety of all team members and contractors and have strong COVID-19 safety measures in place at all our sites worldwide
- We are taking a conservative, phased and site-specific approach to returning our team members on-site, prioritizing our manufacturing workforce and engineering teams



#### **Market Environment**

## End-Market Trends

- Technology is rapidly helping society with changes stemming from the pandemic, and the faster pace of digital transformation in the economy is here to stay
- 2HCY20 data center outlook to be healthy, smartphone and consumer end-unit sales to improve, and new gaming consoles will drive DRAM and NAND demand
- Limited short-term visibility due to COVID-19, macro and trade, customer inventory changes, and recent restrictions on Huawei

#### Long-term Outlook

- DRAM industry bit demand CAGR in the mid-to-high teens
- NAND industry bit demand CAGR in the 30% range
- Long-term Micron supply growth in line with industry demand growth CAGR



## Strong Technology and Roadmap Execution

Since 2016, Micron has made tremendous progress narrowing the competitive gap on leading-edge technology nodes

#### **DRAM**

- Ramping 1z, the industry's most advanced node, and achieving yield improvements that reduce our cost, with several customer qualifications underway
- Our 1y and 1z nodes together now make up more than 50% of our bit production and we continue to make progress on our 1-alpha node, which we expect to introduce in FY21
- Have begun sampling our first highbandwidth DRAM memory product, which is competitive with the industry's most advanced products, and will expand our Al data center opportunity

#### **NAND**

- 128-layer first-gen RG node in volume production in FQ3 and recently began customer shipments; good progress on second-gen RG and on track for meaningful RG NAND output by the end of CY20
- QLC bits now represent more than 10% of Micron's overall NAND production, contributing to our NAND cost improvements
- NAND high-value solutions now make up over 75% of our quarterly NAND bits, on target to increase this to 80% for FY21



## **End Market Highlights**



#### **SSDs**

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- Record quarterly revenue with cloud SSD doubling Q/Q and client NVMe SSD growth
- Customer qualifications progressing well for nextgeneration products for both NVMe and SATA markets
- Announced a TLC client SSD and our first QLC client SSD, both using nextgen 96-layer technology



## Data Center & Networking

- Data Center: Cloud DRAM sales grew significantly Q/Q; sampling 1z DDR5 for enterprise and higherfrequency DDR4 for Intel's Ice Lake server platform
- Networking: Significant DRAM bit shipment growth Q/Q, driven by infrastructure deployment, particularly in Asia



#### **Mobile**

- Healthy Y/Y growth
- 5G driven resumption of smartphone units expected in CY21 with multiplier effect of higher memory and storage content
- Design-ins for LP4 and LP5
  5G platforms; mNAND products now sampling at several major OEMs
- Micron is well positioned to win in the 5G era



#### PC, Graphics & Auto

- PC: DRAM revenue up Q/Q driven by higher pricing; unit shipment decline expected for CY20
- Graphics: Started shipping GDDR6 for next-gen gaming consoles; strong demand expected for CY20
- Automotive: Significant Q/Q revenue decline due to broad auto supply chain disruptions; content driven record LP4 DRAM revenue



June 29, 2020



## **Dave Zinsner**

**Chief Financial Officer** 



#### FQ3-20 Revenue

# \$5.4B

Revenue up 13% Q/Q and up 14% Y/Y



# Performance by Technology

#### **DRAM**

- 66% of total revenue in FQ3-20
- Revenue up 16% Q/Q and up 6% Y/Y
- Bit shipments up approximately 10% Q/Q
- ASPs up mid-single-digit percent range Q/Q



- 31% of total revenue in FQ3-20
- Revenue up 10% Q/Q and up over 50% Y/Y
- Bit shipments up lower-single-digit percent range Q/Q
- ASPs up upper-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

	FQ3-20	FQ2-20	Q/Q % Change	FQ3-19	Y/Y % Change
Compute and Networking (CNBU)	\$2,218M	\$1,967M	13%	\$2,079M	7%
Mobile (MBU)	\$1,525M	\$1,258M	21%	\$1,174M	30%
Storage (SBU)	\$1,014M	\$870M	17%	\$813M	25%
Embedded (EBU)	\$675M	\$696M	(3)%	\$700M	(4)%





## **FQ3-20**

Non-GAAP Operating Results

Revenue: \$5.4 billion

**Gross Margin:** 33.2%

Net Income: \$941 million

**Diluted EPS:** \$0.82

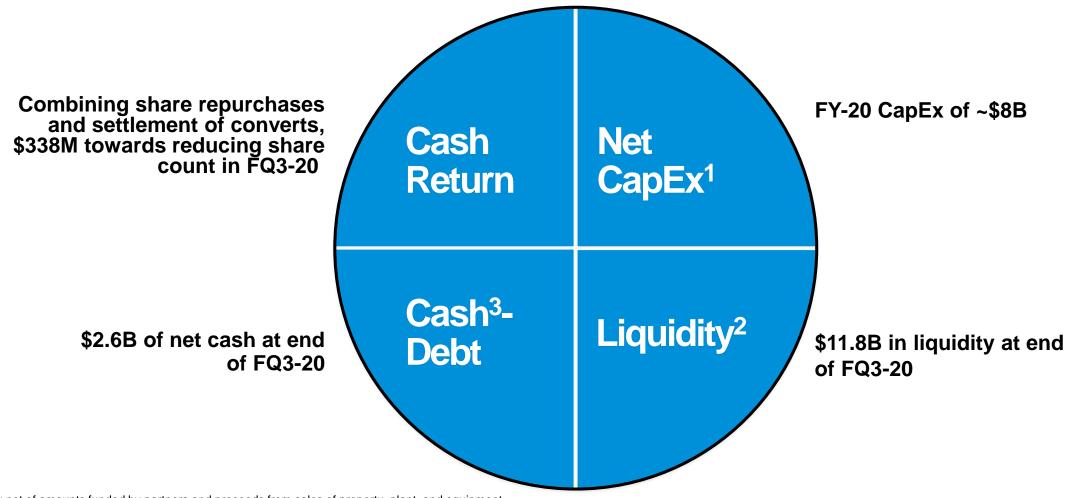
**Operating Expenses:** \$823 million

Operating Income: \$981 million

Cash from Operations: \$2.0 billion



## **Capital Allocation**



<sup>&</sup>lt;sup>1</sup>Capex net of amounts funded by partners and proceeds from sales of property, plant, and equipment <sup>2</sup>Cash, short-term and long-term marketable investments, restricted cash and undrawn revolver capacity <sup>3</sup>Cash, short-term and long-term marketable investments, and restricted cash



## FQ4-20 Guidance

Non-GAAP

Revenue	\$5.75 billion to \$6.25 billion
Gross margin	35.5% ± 1.5%
Operating expenses	\$850 million ± \$25 million
Interest (income) expense, net	\$30 million
Diluted EPS*	\$1.05 ± \$0.10



<sup>\*</sup>Based on ~1.14 billion diluted shares



# Other Key Data



## **Financial Summary**

#### Non-GAAP

Amounts in millions, except per share	FQ3-20	% of Revenue	FQ2-20	% of Revenue	FQ3-19	% of Revenue
Revenue	\$5,438	100%	\$4,797	100%	\$4,788	100%
Gross margin	1,804	33%	1,398	29%	1,884	39%
Operating income	981	18%	542	11%	1,110	23%
Income tax (provision) benefit	(29)		(17)		63	
Net income attributable to Micron	941	17%	517	11%	1,198	25%
Diluted earnings per share	0.82		0.45		1.05	
Cash provided by operating activities	2,023		2,001		2,711	
Cash, marketable investments, and restricted cash	9,288		8,120		7,933	

See Non-GAAP reconciliations



### **Non-GAAP Financial Data and Guidance**

% of Revenue	FQ3-20
DRAM	66%
NAND	31%

% Sales Volume Change	FQ3-20 Q/Q
DRAM	Increased approximately 10%
NAND	Increased lower-single-digit percent range

% ASP Change	FQ3-20 Q/Q
DRAM	Increased mid-single-digit percent range
NAND	Increased upper-single-digit percent range

	FQ3-20 Non-GAAP (amounts in millions, except per share)		FQ4-20 Non-GAAP Guidance
Revenue	\$	5,438	\$5.75 billion to \$6.25 billion
Gross margin		33%	35.5% ± 1.5%
Operating expenses	\$	823	\$850 million ± \$25 million
Interest (income) expense, net	\$	24	\$30 million
Earnings per share	\$	0.82	\$1.05 ± \$0.10

	0 Non-GAAP nts in millions)	FQ4-20 Non-GAAP Estimates
Diluted shares	1,142	~1.14 billion
Income tax (provision) benefit	\$ (29)	~6% rate
Operating cash flow	\$ 2,023	<del></del>
Depreciation and amortization	\$ 1,415	_
Investments in capex, net (capital cash flow)	\$ 1,922	FY-20: ~\$8 billion

See Non-GAAP reconciliations



## Revenue by Technology

Amounts in millions	FQ3-20	% of Revenue	FQ2-20	% of Revenue	FQ3-19	% of Revenue
DRAM	\$3,587	66%	\$3,083	64%	\$3,398	71%
NAND	1,665	31%	1,514	32%	1,104	23%
Other	186	3%	200	4%	286	6%
Total	\$5,438	100%	\$4,797	100%	\$4,788	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.

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Amounts in millions	FQ3-20	FQ2-20	FQ3-19
GAAP gross margin	\$ 1,763	\$ 1,355	\$ 1,828
Stock-based compensation	34	37	24
Start-up and preproduction costs	_	_	23
Other	7	6	9
Non-GAAP gross margin	\$ 1,804	\$ 1,398	\$ 1,884
GAAP operating expenses	\$ 875	\$ 915	\$ 818
Stock-based compensation	(48)	(48)	(34)
Restructure and asset impairments	(4)	(10)	(9)
Other	 _	(1)	(1)
Non-GAAP operating expenses	\$ 823	\$ 856	\$ 774
GAAP operating income	\$ 888	\$ 440	\$ 1,010
Stock-based compensation	82	85	58
Start-up and preproduction costs	_	_	23
Restructure and asset impairments	4	10	9
Other	7	7	10
Non-GAAP operating income	\$ 981	\$ 542	\$ 1,110



Amounts in millions	FQ3-20	FQ2-20	FQ3-19
GAAP net income attributable to Micron	\$ 803	\$ 405	\$ 840
Stock-based compensation	82	85	58
Start-up and preproduction costs	_	_	23
Restructure and asset impairments	4	10	9
Amortization of debt discount and other costs	4	6	10
(Gain) loss on debt repurchases and conversions	2	_	317
Other	7	7	13
Impact of U.S. income tax reform	_	_	(42)
Estimated tax effects of above, non-cash changes in net deferred income taxes, and assessments of tax exposures	 39	 4	(30)
Non-GAAP net income attributable to Micron	\$ 941	\$ 517	\$ 1,198
GAAP income tax (provision) benefit	\$ (68)	\$ (21)	\$ 135
Impact of U.S. income tax reform		_	(42)
Estimated tax effects of non-GAAP adjustments, non-cash changes in net deferred income taxes, and assessments of tax exposures	39	4	(30)
Non-GAAP income tax (provision) benefit	\$ (29)	\$ (17)	\$ 63



Amounts in millions		FQ3-	20	FQ2-20	FQ3-19
GAAP cost of goods sold	,	\$ ;	3,675	\$ 3,442	\$ 2,960
Stock-based compensation			(34)	(37)	(24)
Start-up and preproduction costs			_	_	(23)
Other	_		(7)	(6)	(9)
Non-GAAP cost of goods sold	<u> </u>	\$ ;	3,634	\$ 3,399	\$ 2,904
GAAP selling, general and administrative		\$	216	\$ 223	\$ 206
Stock-based compensation	_		(26)	 (26)	 (18)
Non-GAAP selling, general and administrative	<u> </u>	\$	190	\$ 197	\$ 188
GAAP research and development		\$	649	\$ 681	\$ 606
Stock-based compensation			(22)	(22)	(16)
Other				 (1)	 (1)
Non-GAAP research and development		\$	627	\$ 658	\$ 589



Amounts in millions		FQ3-20	FQ2-20	FQ3-19
GAAP shares used in diluted EPS calculations	· · · · · · · · · · · · · · · · · · ·	1,129	1,133	1,129
Adjustment for stock-based compensation and capped calls		13	11	 6
Non-GAAP shares used in diluted EPS calculations		1,142	1,144	1,135
GAAP diluted earnings per share	\$	0.71	\$ 0.36	\$ 0.74
Effects of non-GAAP adjustments		0.11	0.09	 0.31
Non-GAAP diluted earnings per share	\$	0.82	\$ 0.45	\$ 1.05
GAAP net income	\$	805	\$ 407	\$ 851
Interest (income) expense, net		28	12	(23)
Provision (benefit) for income taxes		68	21	(135)
Depreciation and amortization of property, plant, and equipment and intangibles		1,422	 1,365	 1,360
EBITDA	\$	2,323	\$ 1,805	\$ 2,053
GAAP interest (income) expense, net	\$	28	\$ 12	\$ (23)
Amortization of debt discount and other costs		(4)	(6)	(10)
Non-GAAP interest (income) expense, net	\$	24	\$ 6	\$ (33)



#### Non-GAAP Reconciliations

Amounts in millions		FQ3-20	FQ2-20		FQ3-19
Net cash provided by operating activities		2,023	\$ 2,001	\$	2,711
Investments in capital expenditures, net					
Expenditures for property, plant, and equipment, net*		(1,937)	(2,013)		(2,345)
Payments on equipment purchase contracts		(20)	(18)		(17)
Amounts funded by partners		35	 93		213
Adjusted free cash flow	\$	101	\$ 63	\$	562

Amounts in millions	FQ3-20	FQ2-20
Cash and short-term investments	\$ 8,658	\$ 7,481
Current and noncurrent restricted cash	53	53
Long-term marketable investments	577	586
Current and long-term debt	 (6,686)	(5,425)
Net cash	\$ 2,602	\$ 2,695



**26** June 29, 2020

<sup>\*</sup>Expenditures for property, plant and equipment, net include proceeds from sales of property, plant, and equipment of \$7 million for FQ3-20, \$43 million for FQ2-20, and \$58 million for FQ3-19.

#### FQ4-20 Guidance

#### Non-GAAP Reconciliations

		GAAP	Adjustments			Non-GAAP	
Reve	enue	\$5.75 billion to \$6.25 billion	_		•	\$5.75 billion to \$6.2	5 billion
Gros	ss margin	34.5% ± 1.5%	1%	Α		35.5%	± 1.5%
Ope	rating expenses	\$900 million ± \$25 million	\$50 million	В		\$850 million ± \$25	5 million
Inter	est (income) expense, net	\$33 million	\$3 million	С		\$30	) million
Dilut	ed EPS*	\$0.88 ± \$0.10	\$0.17	A,B,C,D		\$1.05 :	± \$0.10
Adjus	stments (amounts in millions)						
Α	Stock-based compensation – c	cost of goods sold			\$	37	
Α	Other – cost of goods sold					7	
В	Stock-based compensation – s	sales, general, and administrative				27	
В	Stock-based compensation – r	esearch and development				23	
С	Amortization of debt discount a	and other costs				3	
D	Tax effects of the above items	and non-cash changes in net deferred income taxe	es			99	
					\$	196	

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



