

Micron®



## Financial Results

FQ3 2019

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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 forwardlooking 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



## **FQ3-19 Highlights**

- Delivered solid results despite headwinds of industry oversupply and steeper than expected price declines, reflecting technology advancement and product cost reduction
- Healthy balance sheet, structurally improved profitability, and winning team position us well for when industry environment recovers
- Long-term demand outlook for memory and storage is robust, driven by broad secular trends such as AI, autonomous vehicles, 5G and IoT
- Customer inventory corrections have proceeded broadly in line with our expectations in most end markets and reinforces
  confidence in return to healthy Y/Y DRAM bit demand growth in 2HCY19; NAND bit demand is also increasing in most
  markets as elasticity kicks in
- Further cuts in capex and production required to bring industry supply-demand into balance



# Continued Strong Technology and Roadmap Execution

> 2000 basis points of EBITDA margin improvement relative to peers since FY2016

Expect healthy Y/Y cost declines in both DRAM and NAND this fiscal year

## DRAM

1y-nm: continuing to increase mix

1z-nm: excellent progress towards ramping next fiscal year

Broke ground in April for cleanroom expansion at Taichung facility to enable future nodes

## NAND

Continue to ramp 96 layer and on track to deliver healthy cost declines in FY2019

Good progress on 128-layer 3D NAND which use replacement gate

High-value solutions: now over two-thirds of NAND revenues

## **ASSEMBLY & TEST**

Captive back-end packaging facilities now account for more than half of our total assembly requirements



## FQ3-19 Accomplishments

#### SSDs

- Strengthening SSD portfolio with launch of 9300 Datacenter NVMe SSDs for cloud and enterprise markets
- More than doubled revenue shipments of NVMe Client SSD to large PC OEMs (built with our own controller)
- QLC SSD bit shipments increased ~75% sequentially driven by growth of our consumer NVMe SSDs

#### Mobile

- Micron's mobile DRAM features best-in-class power consumption
- Leading on LPDDR5: started sampling highest density LPDDR5 die
- Recently launched 2<sup>nd</sup>-gen UFS product with best-in-class endurance

#### Data Center & Graphics

- Cloud customers are turning the corner on inventories; most are approaching normal levels
- Continue to sample and qualify 64GB DDR4 server modules built with 1Y-nm DRAM

#### Automotive

- Leading market share, deep customer relationships, and well-established product quality
- Content growth driven by advanced in-vehicle infotainment and ADAS
- Began ramping shipments to a leading OEM for their most advanced autonomous system; uses 16 GB of our LPDRAM



## **Comments on Huawei**

- Effective May 16, the US Commerce Department's Bureau of Industry and Security (BIS) added Huawei and 68 of its non-US affiliates to the BIS Entity List
- To ensure compliance, Micron immediately suspended shipments to Huawei and began a review of Micron products sold to Huawei to determine whether they are subject to the imposed restrictions
- Through this review, we determined that we could lawfully resume shipping a subset of current products because they
  are not subject to Export Administration Regulations and Entity List restrictions
- We have started shipping some orders of those products to Huawei in the last two weeks
- However, there is considerable ongoing uncertainty surrounding the Huawei situation, and we are unable to predict the volumes or time periods over which we'll be able to ship products to Huawei
- Micron will continue to comply with all government and legal requirements, just as we do in all our operations globally
- Of course, we cannot predict whether additional government actions may further impact our ability to ship to Huawei



## **CY2019 Industry Outlook**

## DRAM

- Anticipate healthy Y/Y bit demand growth in 2HCY19
- CY2019 bit demand growth in mid-teens; industry bit supply growth tracking to mid-to-high teens
- Continuing with previously announced 5% idling of wafer starts

## NAND

- CY2019 bit demand growth in mid-30s; industry bit supply growth in high-30s
- Targeting bit shipments to grow close to industry bit demand growth rate
- Reducing our wafer starts by ~10%, an increase from 5% previously





June 25, 2019

# Dave Zinsner Chief Financial Officer

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# FQ3-19 Revenue \$4.8B

Revenue down 39% Y/Y and down 18% Q/Q





# Performance by Product Line

- 64% of overall company revenue in FQ3-19
- Revenue down 19% Q/Q and down 45% Y/Y
- ASPs approached down 20% Q/Q
- Shipment quantities relatively flat Q/Q

**NAND** 

- 31% of overall company revenue in FQ3-19
- Revenue down 18% Q/Q and down 25% Y/Y
- ASPs down mid-teens percent range Q/Q
- Bit shipments down mid-single-digit percent range Q/Q



## **Revenue by Business Unit**

	FQ3-19	FQ2-19	Q/Q % Change	FQ3-18	Y/Y % Change
Compute and Networking (CNBU)	\$2.08B	\$2.38B	(13)%	\$3.99B	(48)%
Mobile (MBU)	\$1.17B	\$1.61B	(27)%	\$1.75B	(33)%
Storage (SBU)	\$813M	\$1.02B	(20)%	\$1.14B	(29)%
Embedded (EBU)	\$700M	\$799M	(12)%	\$897M	(22)%





## FQ3-2019

Non-GAAP Operating Results

Revenue: \$4.8 billion

**Gross Margin:** 39%

Net Income: \$1.2 billion

Diluted EPS: \$1.05

**Operating Expenses:** \$774 million

**Operating Income:** \$1.1 billion

Cash from Operations: \$2.7 billion



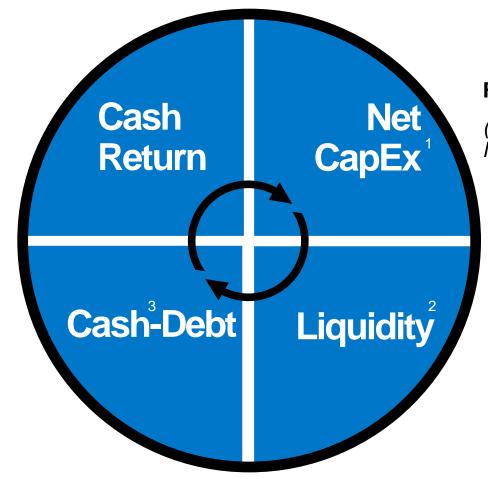
## **Capital Allocation**

~8% reduction in outstanding shares since FQ3-18

~70% of ~\$3.8B in free cash flow used for repurchases YTD (67M shares)

2043 convert redeemed in FQ3 (effectively eliminated ~9M shares from fully diluted count)

\$3.0B of net cash at end of FQ3



FY19 capex of ~\$9B

(High ROIC Node transitions + elevated level of buildings and facilities capex)

~\$10B in liquidity at end of FQ3



<sup>&</sup>lt;sup>1</sup>Capex net of partner contributions

<sup>&</sup>lt;sup>2</sup>Cash, short-term and long-term marketable investments, restricted cash and undrawn revolver capacity

<sup>&</sup>lt;sup>3</sup>Cash, short-term and long-term marketable investments, and restricted cash

## FQ4-19 Guidance

Non-GAAP

Revenue	\$4.5 billion ± \$200 million
Gross margin	29% ± 1.5%
Operating expenses	\$785 million ± \$25 million
Diluted EPS*	\$0.45 ± \$0.07

# Other Key Data



## **Financial Summary**

## Non-GAAP

Amounts in millions except per share	FQ3-19	% of Revenue	FQ2-19	% of Revenue	FQ3-18	% of Revenue
Revenue	\$4,788	100%	\$5,835	100%	\$7,797	100%
Gross margin	1,884	39%	2,928	50%	4,750	61%
Operating income	1,110	23%	2,110	36%	4,017	52%
Income tax (provision) benefit	63		(178)		(97)	
Net income attributable to Micron	1,198	25%	1,971	34%	3,898	50%
Diluted earnings per share	1.05		1.71		3.15	
Cash provided by operating activities	2,711		3,435		4,261	
Cash, marketable investments, and restricted cash	7,933		9,223		7,677	



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

% of Revenue	FQ3-19
DRAM	64%
NAND	31%

% Sales Volume Change	FQ3-19 Q/Q
DRAM	Relatively flat
NAND	Decreased mid-single-digit percent range

% ASP Change	FQ3-19 Q/Q
DRAM	Approaching 20% decline
NAND	Decreased mid-teens percent range

	(amounts	Non-GAAP in millions, per share)	FQ4-19 Non-GAAP Guidance
Revenue	\$	4,788	\$4.5 billion ± \$200 million
Gross margin		39%	29% ± 1.5%
Operating expenses	\$	774	\$785 million ± \$25 million
Earnings per share	\$	1.05	\$0.45 ± \$0.07

	(a	9 Non-GAAP mounts millions)	FQ4-19 Non-GAAP Estimates
Diluted shares		1,135	~1.13 billion
Income tax (provision) benefit	\$	63	FY19: ~9% of PBT
Operating cash flow	\$	2,711	_
Depreciation and amortization	\$	1,354	_
Capital expenditures (Capital cash flow)*	\$	2,207	FY19: ~\$9 billion



## **Convertible Notes Dilution Overview**

(shares in millions)

Stock Price	Actual FQ3-19*	<b>\$23</b>	\$26	\$29	\$32	\$35	\$38	\$41	\$44	\$47	\$50	\$53
2032 D Notes	10	8	8	9	9	10	10	10	10	11	11	11
2033 F Notes	4	3	3	4	4	4	4	4	4	4	5	5
Total dilutive shares	14	11	11	13	13	14	14	14	14	15	16	16
Benefit from capped call	(2)	(4)	(4)	(3)	(3)	(3)	(3)	(2)	(2)	(2)	(2)	(2)
Net dilution	12	7	7	10	10	11	11	12	12	13	14	14

Note: Except for FQ3-19 dilution, the table above presents the potential dilutive impact of convertible notes outstanding as of May 30, 2019 over the range of trading prices for Micron's stock.



<sup>\*</sup>Represents the actual dilutive impact of convertible notes for FQ3-19 diluted share count based on an average share price of \$40.03 for the quarter.



Amounts in millions except per share amounts	F	Q3-19	FQ2-19	FQ3-18
GAAP gross margin	\$	1,828 \$	\$ 2,864	\$ 4,723
Stock-based compensation		24	23	20
Start-up and preproduction costs		23	15	<u> </u>
Employee severance		_	13	<u> </u>
Other		9	13	7
Non-GAAP gross margin	\$	1,884	\$ 2,928	\$ 4,750
GAAP operating expenses	\$	818 \$	907	\$ 770
Stock-based compensation		(34)	(34)	(28
Employee severance		_	(4)	_
Restructure and asset impairments		(9)	(51)	8)
Other		(1)		(1
Non-GAAP operating expenses	\$	774	818	\$ 733
GAAP operating income	\$	1,010 \$	1,957	\$ 3,953
Stock-based compensation		58	57	48
Start-up and preproduction costs		23	15	
Employee severance		_	17	_
Restructure and asset impairments		9	51	8
Other		10	13	8
Non-GAAP operating income	\$	1,110	\$ 2,110	\$ 4,017



Amounts in millions except per share amounts	FQ3-19	FQ2-19	FQ3-18
GAAP net income attributable to Micron	\$ 840	\$ 1,619	\$ 3,823
Stock-based compensation	58	57	48
Start-up and preproduction costs	23	15	_
Employee severance	_	17	_
Restructure and asset impairments	9	51	8
Amortization of debt discount and other costs	10	11	23
(Gain) loss on debt repurchases and conversions	317	83	168
(Gain) loss from changes in currency exchange rates	1	3	24
Other	12	13	10
Impact of U.S. income tax reform	(42)	(14)	(222)
Estimated tax effects of above, non-cash changes in net deferred income taxes, and assessments of tax exposures	(30)	116	16
Non-GAAP net income attributable to Micron	\$ 1,198	\$ 1,971	\$ 3,898
		_	
GAAP income tax (provision) benefit	\$ 135	\$ (280)	\$ 109
Impact of U.S. income tax reform	(42)	(14)	(222)
Estimated tax effects of non-GAAP adjustments, non-cash changes in net deferred income taxes, and assessments of tax exposures	(30)	116	16
Non-GAAP income tax (provision) benefit	\$ 63	\$ (178)	\$ (97)



Amounts in millions except per share amounts	FQ3-19	FQ2-19	FQ3-18	3
GAAP cost of goods sold	\$ 2,960	\$ 2,971	\$ 3	3,074
Stock-based compensation	(24)	(23)		(20)
Start-up and preproduction costs	(23)	(15)		_
Employee severance	_	(13)		_
Other	(9)	(13)		(7)
Non-GAAP cost of goods sold	\$ 2,904	\$ 2,907	\$ 3	3,047
GAAP selling, general and administrative	\$ 206	\$ 209	\$	211
Stock-based compensation	(18)	(18)		(14)
Employee severance	<u> </u>	(3)		_
Non-GAAP selling, general and administrative	\$ 188	\$ 188	\$	197
GAAP research and development	\$ 606	\$ 601	\$	603
Stock-based compensation	(16)	(16)		(14)
Employee severance	(1)	(1)		_
Other	_			(1)
Non-GAAP research and development	\$ 589	\$ 584	\$	588



Amounts in millions except per share amounts	FQ3-19		FQ2-19		FQ3-18
GAAP shares used in diluted EPS calculations	1,129		1,141		1,235
Adjustment for capped calls and stock-based compensation	 6		8		3
Non-GAAP shares used in diluted EPS calculations	1,135	_	1,149	_	1,238
GAAP diluted earnings per share	\$ 0.74	\$	1.42	\$	3.10
Effects of non-GAAP adjustments	0.31		0.29		0.05
Non-GAAP diluted earnings per share	\$ 1.05	\$	1.71	\$	3.15
GAAP net income	\$ 851	\$	1,625	\$	3,823
Interest (income) expense, net	(23)		(31)		44
Provision (benefit) for income taxes	(135)		280		(109)
Depreciation and amortization of property, plant, and equipment and intangibles	1,360		1,313		1,233
EBITDA	\$ 2,053	\$	3,187	\$	4,991
Net cash provided by operating activities	\$ 2,711	\$	3,435	\$	4,261
Expenditures for property, plant, and equipment	(2,403)		(2,649)		(2,411)
Payments for equipment purchase contracts	(17)		(17)		(17)
Net partner contributions	213		219		328
Adjusted free cash flow	\$ 504	\$	988	\$	2,161



## FQ4-19 Guidance

#### Non-GAAP Reconciliations

	GAAP	Adjustments		Non-GAAP	
Revenue	\$4.5 billion ± \$200 million	_		\$4.5 billion ± \$200 million	
Gross margin	27% ± 1.5%	2%	А	29% ± 1.5%	
Operating expenses	\$723 million ± \$25 million	\$62 million	В	\$785 million ± \$25 million	
Diluted EPS*	\$0.41 ± \$0.07	\$0.04	A,B,C	\$0.45 ± \$0.07	

Adjus	stments (amounts in millions)		
Α	Stock-based compensation and employee severance – cost of goods sold	\$ 77	
Α	Other – cost of goods sold	16	
В	Stock-based compensation and employee severance – sales, general, and administrative	27	
В	Stock-based compensation and employee severance – research and development	31	
В	Restructure and asset impairments	(120)	
С	Amortization of debt discount and other costs	9	
С	Tax effects of the above items and non-cash changes in net deferred income taxes	 6	
		\$ 46	

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 ~1.12 billion diluted shares and Non-GAAP EPS based on ~1.13 billion diluted shares



