

97

# FQ3 2021

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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 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.



2

### Sanjay Mehrotra President and CEO



### Highlights

- Strong execution enabled us to achieve the largest sequential EPS improvement in our history and set multiple revenue records
- NAND hit record revenue, propelled by record mobile MCP, consumer SSD, and client SSD revenues
- Our embedded business exceeded \$1B for the first time, with record revenue across automotive and industrial markets
- Our industry-leading 1α DRAM and 176-layer NAND reached a meaningful portion of our bit production, and QLC NAND accounted for a majority of our client SSD bit shipments
- We expect DRAM and NAND supply to remain tight into CY22



### **Operations**

- Micron delivered record assembly output this quarter, which helped fuel our strong revenue performance
- Successfully mitigated the impacts of the drought in Taiwan with no reduction in our production output
- Due to the rise in COVID-19 cases, we temporarily reduced our on-site workforce at our Muar, Malaysia back-end facility early in FQ4 - we have since started bringing back team members to site as the situation has improved; we will utilize our global supply chain, including subcontractor partners, to meet our customer commitments and minimize any disruption to delivery schedules
- Reached an agreement to sell our Lehi fab to Texas Instruments
  - Expect transaction to close later this calendar year
  - Texas Instruments will offer all Lehi team members the opportunity to become Texas Instruments employees at the Lehi site upon closing



### Strong Technology and Roadmap Execution

In FY22, expect our workhorse nodes, 1α, 1z DRAM and 176-layer NAND, to fuel bit growth and provide us with good frontend cost reduction on a like-for-like basis.

#### DRAM

- 1α DRAM accounted for a meaningful portion of our bit production in FQ3 and on track to become a meaningful portion of our revenue in FQ4
- By end of CY21, expect the combination of 1α and 1z DRAM nodes will represent the majority of our DRAM bit production
- On track to support customers as they begin to introduce DDR5enabled platforms in 2H-CY21

#### NAND

- 176-layer NAND node accounted for a meaningful portion of bit production in FQ3 and on track to become a meaningful portion of revenue in FQ4
- By the end of CY21, expect 176layer NAND will be the majority of our NAND bit production
- Driving an increased mix of QLC NAND; delivered record QLC SSD revenue and bit mix in FQ3



6

### **End Market Highlights**



#### **Data Center**

- Memory and storage is becoming an increasing portion of server BOM cost
- We will enhance our NVMe SSD portfolio with the introduction of new products with internally designed controllers in the coming months
- Data center DRAM revenue grew Q/Q driven by strong demand from cloud customers and increases in module density
- Data center SSD bit shipments and revenue grew Q/Q driven by both cloud and enterprise
- Data center demand expected to be strong in 2H-CY21



#### **PC & Graphics**

- PC: 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.
- Achieved several customer qualifications for our 1α based DDR4 products across various PC platforms
- Client SSD bit shipments were up sharply Q/Q and Y/Y
- Graphics: Bit shipments increased Q/Q and Y/Y, driven by strong next-gen Game Console and Graphics Card shipments



#### Mobile & Intelligent Edge

- Mobile: Achieved record MCP
   quarterly revenue
- Made strong progress with our 1α LPDRAM products and 176-layer UFS 3.1 enabled solutions; completed customer qualification for some of these products
- Mobile unit sales expected to show healthy growth this year, driven by an expected doubling of 5G units in CY21 to more than 500 million units
- Auto: Third consecutive recordrevenue quarter driven by continued manufacturing recovery and increased LPDDR4 and eMMC content for in-vehicle-infotainment and driver assistance applications



### Outlook

	<ul> <li>Expect CY-21 DRAM industry bit demand growth to be somewhat above 20%, with DRAM industry supply below demand; there is currently unmet demand for DRAM due to end market strength and we expect the DRAM market to remain tight into CY-22</li> </ul>
ndustry	<ul> <li>Expect CY-21 NAND industry bit demand growth in the mid 30% range, with NAND supply below demand; we also see the NAND market as tight into CY-22</li> </ul>
	<ul> <li>Long-term DRAM bit demand growth CAGR of mid-to-high teens</li> </ul>

- Long-term NAND bit demand growth CAGR of approximately 30%
- Targeting to align our long-term bit supply growth CAGR with the industry bit demand growth CAGR across DRAM and NAND

### Micron

- CY-21 DRAM and NAND Micron bit supply growth expected to be below industry demand growth
- Placed orders for multiple EUV tools from ASML as part of long-term agreement
- FY21 Capex revised to somewhat above \$9.5 bn; mostly from areas that don't impact CY21 and CY22 bit growth such as EUV pre-payments, construction spending and other R&D and corporate items



8

# **Dave Zinsner**

**Chief Financial Officer** 





# FQ3-21 Revenue \$71 AB

Revenue up 19% Q/Q and up 36% Y/Y



June 30, 2021

### Performance by Technology



NAND

- 73% of total revenue in FQ3-21
- Revenue up 23% Q/Q and up 52% Y/Y
- Bit shipments up low-single-digit percent range Q/Q
- ASPs up approximately 20% Q/Q



- Revenue up 10% Q/Q and up 9% Y/Y
- Bit shipments up low-single-digit percent range Q/Q
- ASPs up high-single-digit percent range Q/Q



Amounts in millions	FQ3-21	FQ2-21	Q/Q % Change	FQ3-20	Y/Y % Change
Compute and Networking (CNBU)	\$3,304	\$2,636	25%	\$2,218	49%
Mobile (MBU)	\$1,999	\$1,811	10%	\$1,525	31%
Storage (SBU)	\$1,009	\$850	19%	\$1,014	0%
Embedded (EBU)	\$1,105	\$935	18%	\$675	64%

### FQ3-21

Non-GAAP Operating Results

Revenue: \$7.4 billion

**Gross Margin:** 42.9%

**Operating Expenses:** \$821 million

**Operating Income:** \$2.4 billion

Net Income: \$2.2 billion

Diluted EPS: \$1.88

Adjusted EBITDA: \$4.0 billion

Cash from Operations (GAAP): \$3.6 billion



#### **Capital Allocation** \$3.0B total share repurchases FY-21: CapEx somewhat higher from FY19 through FQ3-21 Cash Net than \$9.5B CapEx<sup>1</sup> Return Cash<sup>3</sup>-Liquidity<sup>2</sup> \$3.1B of net cash at end \$12.3B in liquidity at end Debt of FQ3-21 of FQ3-21 <sup>1</sup>Capex net of amounts funded by partners and proceeds from sales of property, plant, and equipment

<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

June 30, 2021



### **FQ4-21 Guidance**

Non-GAAP

Revenue	\$8.2 billion ± \$200 million
Gross margin	47.0% ± 1%
Operating expenses	\$900 million $\pm$ \$25 million
Diluted EPS*	\$2.30 ± \$0.10

\*Based on ~1.15 billion diluted shares



## **Other Key Data**



17

# Financial Summary Non-GAAP

Amounts in millions, except per share	FQ3-21	% of Revenue	FQ2-21	% of Revenue	FQ3-20	% of Revenue
Revenue	\$7,422	100%	\$6,236	100%	\$5,438	100%
Gross margin	3,185	43%	2,054	33%	1,804	33%
Operating income	2,364	32%	1,257	20%	981	18%
Income tax (provision) benefit	(200)		(125)		(29)	
Net income attributable to Micron	2,173	29%	1,128	18%	941	17%
Diluted earnings per share	1.88		0.98		0.82	
Cash provided by operating activities (GAAP)	3,560		3,057		2,023	
Cash, marketable investments, and restricted cash (GAAP)	9,815		8,567		9,288	



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

% of Revenue DRAM	<b>FQ3-21</b> 73%		FQ3-21 Non-GAAP (amounts in millions, except per share)		FQ4-21 Non-GAAP Guidance
NAND	24%	Revenue	\$	7,422	\$8.2 billion ± \$200 million
		Gross margin		42.9%	47.0% ± 1%
% Sales Volume Change	FQ3-21 Q/Q	Operating expenses	\$	821	\$900 million ± \$25 million
	Increased low-single-digit	Diluted earnings per share	\$	1.88	\$2.30 ± \$0.10
DRAM	percent range				
NAND	Increased low-single-digit percent range			Non-GAAP s in millions)	FQ4-21 Non-GAAP Estimates
% ASP Change	FQ3-21 Q/Q	Diluted shares		1,154	~1.15 billion
76 Aor Onlange		Income tax (provision) benefit	\$	(200)	High-single-digit rate
DRAM	Increased approximately 20%	Cash from operations (GAAP)	\$	3,560	—
		Depreciation and amortization	\$	1,550	—
NAND	Increased high-single-digit percent range	Investments in capex, net (capital cash flow)	\$	2,042	FY-21: somewhat higher than \$9.5 billion



June 30, 2021

### **Revenue by Technology**

Amounts in millions	FQ3-21	% of Revenue	FQ2-21	% of Revenue	FQ3-20	% of Revenue
DRAM	\$5,448	73%	\$4,444	71%	\$3,587	66%
NAND	1,812	24%	1,650	26%	1,665	31%
Other	162	2%	142	2%	186	3%
Total	\$7,422	100%	\$6,236	100%	\$5,438	100%



## **Non-GAAP Reconciliations**



21

Amounts in millions	FQ3-21	FQ2-21	FQ3-20
GAAP gross margin	\$ 3,126	\$ 1,649	\$ 1,763
Stock-based compensation	45	57	34
Inventory accounting policy change to FIFO	—	133	_
Change in inventory cost absorption	—	160	—
3D XPoint inventory write-down	_	49	_
Other	14	6	7
Non-GAAP gross margin	\$ 3,185	\$ 2,054	\$ 1,804
GAAP operating expenses	\$ 1,327	\$ 986	\$ 875
Stock-based compensation	(53)	(55)	(48)
Patent license charges	—	(128)	—
Restructure and asset impairments	(453)	(5)	(4)
Other	_	(1)	
Non-GAAP operating expenses	\$ 821	\$ 797	\$ 823

Amounts in millions	FQ3-21	FQ2-21	FQ3-20
GAAP operating income	\$ 1,799	\$ 663	\$ 888
Stock-based compensation	98	112	82
Inventory accounting policy change to FIFO		133	_
Change in inventory cost absorption	_	160	_
3D XPoint inventory write-down	_	49	
Patent license charges	_	128	_
Restructure and asset impairments	453	5	4
Other	14	7	7
Non-GAAP operating income	\$ 2,364	\$ 1,257	\$ 981



Amounts in millions	FQ3-21	FQ2-21	FQ3-20
GAAP cost of goods sold	\$ 4,296	\$ 4,587	\$ 3,675
Stock-based compensation	(45)	(57)	(34)
Inventory accounting policy change to FIFO	—	(133)	_
Change in inventory cost absorption	—	(160)	_
3D XPoint inventory write-down	_	(49)	
Other	(14)	(6)	(7)
Non-GAAP cost of goods sold	\$ 4,237	\$ 4,182	\$ 3,634
GAAP research and development	\$ 670	\$ 641	\$ 649
Stock-based compensation	(29)	(29)	(22)
Other	—	(1)	_
Non-GAAP research and development	\$ 641	\$ 611	\$ 627
GAAP selling, general and administrative	\$ 230	\$ 214	\$ 216
Stock-based compensation	(24)	(26)	(26)
Non-GAAP selling, general and administrative	\$ 206	\$ 188	\$ 190



Amounts in millions	FQ3-21	FQ2-21	FQ3-20
GAAP net income attributable to Micron	\$ 1,735	\$ 603	\$ 803
Stock-based compensation	98	112	82
Inventory accounting policy change to FIFO	_	133	_
Change in inventory cost absorption		160	_
3D XPoint inventory write-down		49	
Patent license charges		128	_
Restructure and asset impairments	453	5	4
Amortization of debt discount and other costs	7	8	4
Other	15	7	9
Estimated tax effects of above and non-cash changes in net deferred income taxes	(135)	(77)	39
Non-GAAP net income attributable to Micron	\$ 2,173	\$ 1,128	\$ 941
GAAP interest (income) expense, net	\$ 38	\$ 32	\$ 28
Amortization of debt discount and other costs	(7)	(8)	(4)
Non-GAAP interest (income) expense, net	\$ 31	\$ 24	\$ 24
GAAP income tax (provision) benefit	\$ (65)	\$ (48)	\$ (68)
Estimated tax effects of non-GAAP adjustments and other tax adjustments	(135)	 (77)	39
Non-GAAP income tax (provision) benefit	\$ (200)	\$ (125)	\$ (29)



Amounts in millions	FQ3-21	FQ2-21	FQ3-20
GAAP shares used in diluted EPS calculations	1,145	1,144	1,129
Adjustment for stock-based compensation and capped calls	9	10	13
Non-GAAP shares used in diluted EPS calculations	1,154	1,154	1,142
GAAP diluted earnings per share	\$ 1.52	\$ 0.53	\$ 0.71
Effects of non-GAAP adjustments	0.36	0.45	0.11
Non-GAAP diluted earnings per share	\$ 1.88	\$ 0.98	\$ 0.82
GAAP net income	\$ 1,735	\$ 603	\$ 805
Interest (income) expense, net	38	32	28
Provision (benefit) for income taxes	65	48	68
Depreciation and amortization of property, plant, and equipment and intangibles	1,557	1,549	1,422
Non-GAAP adjustments			
Stock-based compensation	98	112	82
Inventory accounting policy change to FIFO	_	133	_
Change in inventory cost absorption	_	160	_
3D XPoint inventory write-down		49	_
Patent license charges	_	128	_
Restructure and asset impairments	453	5	4
Other	8	_	2
Adjusted EBITDA	\$ 3,954	\$ 2,819	\$ 2,411



#### **Non-GAAP Reconciliations**

Amounts in millions	FQ3-21	FQ2-21		FQ3-20
Net cash provided by operating activities	\$ 3,560	\$	3,057	\$ 2,023
Investments in capital expenditures, net				
Expenditures for property, plant, and equipment, net*	(2,185)		(3,000)	(1,937)
Payments on equipment purchase contracts	(16)		(26)	(20)
Amounts funded by partners	159		143	35
Adjusted free cash flow	\$ 1,518	\$	174	\$ 101

Amounts in millions	FQ3-21		FQ2-21	
Cash and short-term investments	\$	8,349	\$	7,184
Current and noncurrent restricted cash		67		67
Long-term marketable investments		1,399		1,316
Current and long-term debt		(6,715)		(6,621)
Net cash	\$	3,100	\$	1,946

\*Expenditures for property, plant and equipment, net include proceeds from sales of property, plant, and equipment of \$74 million for FQ3-21, \$18 million for FQ2-21, and \$7 million for FQ3-20.



### FQ4-21 Guidance

**Non-GAAP Reconciliations** 

	GAAP	Adjustments		Non-GAAP
Revenue	\$8.2 billion ± \$200 million	—		$8.2 \text{ billion } \pm 200 \text{ million}$
Gross margin	46.0% ± 1%	1%	А	47.0% ± 1%
Operating expenses	$955 \text{ million} \pm 25 \text{ million}$	\$55 million	В	$900 \text{ million} \pm 25 \text{ million}$
Diluted EPS*	\$2.23 ± \$0.10	\$0.07	A,B,C	\$2.30 ± \$0.10

Adju	Adjustments (amounts in millions)						
А	Stock-based compensation – cost of goods sold	\$ 45					
А	Other – cost of goods sold	6					
В	Stock-based compensation – research and development	30					
В	Stock-based compensation – sales, general, and administrative	25					
С	Tax effects of the above items and non-cash changes in net deferred income taxes	(25)					
		\$ 81					

\*GAAP and non-GAAP EPS based on ~1.15 billion diluted shares.

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.



