# Financial Results 

 Fourth Quarter Fiscal 2017
## Safe Harbor Statement

During the course of this meeting, we may make projections or other forwardlooking 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

## Business Unit Update

## Compute \& Networking

Mobile

## Storage

## Embedded

- Strong FQ4 revenue growth driven by Cloud and Graphics
- Initial ramp of 1X nm DDR4 product, primarily to Client and Cloud segments
- TSV-stacked DDR4 products in qualification targeting Enterprise and Cloud
- FQ4 Mobile NAND and eMCP revenue nearly doubled Y/Y
- Achieved first OEM qualification on 1X nm LPDRAM, multiple others underway
- Qualified first 3D TLC eMCP and eMMC solutions
- FQ4 revenue up 71\% Y/Y driven by strong demand for SSD solutions
- Broad interest in SATA 5100 SSD from Enterprise and Cloud customers
- Positive demand trends in Client SSDs supported by increasing attach rates
- Automotive demand for driving significant ramp of 20 nm DDR and LPDDR
- Began sampling Automotive-grade 1X nm DRAM
- Record quarterly revenue in industrial and consumer/connected home


## Technology Progress

- 1X nm DRAM and 64L 3D NAND production rollout on plan
- Expect to achieve mature yields on both technologies before end of CY-17
- 1X nm DRAM represented mid-teens percent of FQ4-17 DRAM bit output
- Expect to achieve bit crossover exiting CY-18
- 64L 3D NAND represented mid-teens percent of FQ4-17 trade NAND bit output
- Expect to achieve bit crossover in 2H FY-18
- Advanced DRAM and NAND development proceeding on plan
- Focused on late stages of 1Y nm DRAM development
- 3rd generation 3D NAND production expected to begin later in FY-18


## Industry Outlook

- Expect DRAM and NAND to remain moderately undersupplied in CY-17
- DRAM industry supply bit growth of ~20\%
- NAND industry supply bit growth of high-30\%
- 2018 Outlook:
- DRAM industry supply bit growth of $\sim 20 \%$, supported by demand trends from Cloud; healthy supply-demand balance
- NAND industry supply bit growth approaching $\sim 50 \%$, satisfying currently unfulfilled demand


## Micron's Strategic Priorities

# Cost <br> Competitiveness 

Achieve cost competitiveness versus best-in-class
Execution
Excellence
High-Value Solutions

Drive for execution excellence

## Customers

Accelerate transition to high-value solutions

## Talent

Develop deeper collaboration and partnerships with marquee customers

Invest in talent and embrace a winning culture

# Ernie Maddock 

Chief Financial Officer

## DRAM Revenue

Represented 66\% of Micron Total Revenue in FQ4-17

- Server was approximately $30 \%$
- Mobile was 20\%
- Specialty DRAM was in the mid-20\% range
- Includes Networking, Graphics, Automotive, and Other Embedded technologies
- PC was in the mid-20\% range


## Trade NAND Revenue

Represented 30\% of Micron Total Revenue in FQ4-17

- SSDs were $20 \%$
- Mobile was 20\%
- Includes managed NAND discrete solutions and the majority of our MCPs
- Automotive, Industrial, and Other Embedded applications were approximately $20 \%$
- Consumer represented approximately $40 \%$ *


## Compute \& Networking Business Unit

|  | FQ4-17 | FQ3-17 | FQ4-16 |
| ---: | ---: | ---: | ---: |
| Revenue | $\$ 2.85 B$ | $\$ 2.39 B$ | $\$ 1.25 B$ |
| \% of total company revenue | $46 \%$ | $43 \%$ | $39 \%$ |
| Operating income | $\$ 1.60 \mathrm{~B}$ | $\$ 1.22 \mathrm{~B}$ | $\$ \$ 10 \mathrm{M}$ |
| Operating income $\%$ | $56 \%$ | $51 \%$ |  |

- Record quarterly revenue, more than doubling Y/Y
- Strong demand from cloud customers for data centers
- 20 nm \& initial 1X nm DRAM output drove operating income up 31\% Q/Q


## Mobile Business Unit

|  | FQ4-17 | FQ3-17 | FQ4-16 |  |
| ---: | ---: | ---: | ---: | ---: |
| Revenue | $\$ 1.18 \mathrm{~B}$ | $\$ 1.13 \mathrm{~B}$ | $\$ 671 \mathrm{M}$ |  |
| \% of total company revenue | $19 \%$ | $20 \%$ | $21 \%$ |  |
| Operating income (loss) | $\$ 364 \mathrm{M}$ | $\$ 304 \mathrm{M}$ | $(\$ 35 \mathrm{M})$ |  |
| Operating income (loss) $\%$ | $31 \%$ | $27 \%$ | $(5 \%)$ |  |

- Record quarterly revenue, up 76\% Y/Y
- Positive progress driven by progress on mobile NAND solutions


## Storage Business Unit

|  | FQ4-17 | FQ3-17 | FQ4-16 |
| ---: | ---: | ---: | ---: |
| Revenue | $\$ 1.30 \mathrm{~B}$ | \$1.32B | $\$ 758 \mathrm{M}$ |
| \% of total company revenue | $21 \%$ | $24 \%$ | $24 \%$ |
| Operating income (loss) | $\$ 250 \mathrm{M}$ | $\$ 276 \mathrm{M}$ | $(\$ 57 \mathrm{M})$ |
| Operating income (loss) $\%$ | $19 \%$ | $21 \%$ | $(8 \%)$ |

- FQ4-17 revenue up 71\% Y/Y
- Global SSD revenue market share nearly doubled in FY-17


## Embedded Business Unit

|  | FQ4-17 | FQ3-17 | FQ4-16 |  |
| ---: | ---: | ---: | ---: | ---: |
| Revenue | $\$ 827 \mathrm{M}$ | $\$ 700 \mathrm{M}$ | $\$ 513 \mathrm{M}$ |  |
| \% of total company revenue | $13 \%$ | $13 \%$ | $16 \%$ |  |
| Operating income | $\$ 348 \mathrm{M}$ | $\$ 256 \mathrm{M}$ | $\$ 141 \mathrm{M}$ |  |
| Operating income $\%$ | $42 \%$ | $37 \%$ | $27 \%$ |  |

- Record quarterly performance, with revenue up 61\% Y/Y
- Automotive remains a key driver with increased memory content in cars
- Solid demand from Home Automation and Automotive


## FQ4 2017 Summary

- Revenue of $\$ 6.14$ billion
- GAAP results
- Gross margin of 51\%
- Net income of $\$ 2.37$ billion
- Diluted earnings per share of $\$ 1.99$
- Non-GAAP results
- Gross margin of 51\%
- Net income of $\$ 2.39$ billion
- Diluted earnings per share of \$2.02
- Operating cash flow of $\$ 3.20$ billion


## Other Financial Metrics

- Capital expenditures, net of partner contributions
- $\$ 1.5$ billion spent in FQ4-17
- $\$ 5.1$ billion spent in FY-17 with $40 \%$ - 45\% for DRAM and ~30\% for non-volatile
- Free cash flow*
- $\$ 1.7$ billion in FQ4-17
- $\$ 3.3$ billion in FY-17
- Deployed 50\% of free cash flow in FY-17 to de-levering activities
- FQ4-17 cash, marketable investments, and restricted cash of $\$ 6.2$ billion


## FY 2018 Investment Plans

## FY 2018 Capex Guidance

 Net to Micron \$7.5B +/-5\%
## DRAM Memory

$$
35 \%-45 \%
$$

## Non-Volatile Memory 35\%-45\%

## Technology and Product Enablement

Remaining investments

## FY 2018 Capital Management Priorities

- Continue to deploy free cash flow towards opportunistic retirement of debt
- Opportunity to reach interim target of $\$ 8$ - $\$ 9$ billion gross debt in FY-18
- Potential for \$0.18 to \$0.23 EPS improvement from FY-17 / FY-18 debt reduction activities (annualized)
- Potential to be net cash positive exiting FY-18


## FQ1 2018 Guidance

Non-GAAP

|  | FQ1-18 Guidance |
| :--- | ---: |
| Revenue | $\$ 6.10-\$ 6.50$ billion |
| Gross margin | $50 \%-54 \%$ |
| Operating expenses | $\$ 575-\$ 625$ million |
| Operating income | $\$ 2.65-\$ 2.85$ billion |
| Diluted EPS* | $\$ 2.09-\$ 2.23$ |

## Q\&A

## Financial Summary <br> Non-GAAP

| Dollars in millions, except per share | FQ4-17 | \% of Sales | FQ3-17 | \% of Sales | FQ4-16 | \% of Sales |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Net sales | $\$ 6,138$ | $100 \%$ | $\$ 5,566$ | $100 \%$ | $\$ 3,217$ | $100 \%$ |
| Gross margin | 3,147 | $51 \%$ | 2,671 | $48 \%$ | 598 | $19 \%$ |
| Operating income | 2,546 | $41 \%$ | 2,071 | $37 \%$ | 66 | $2 \%$ |
| Income tax (provision) benefit | $(60)$ |  | $(64)$ |  | 20 |  |
| Net income (loss) attributable to Micron | 2,386 | $39 \%$ | 1,896 | $34 \%$ | $(9)$ | $0 \%$ |
| Diluted earnings (loss) per share | 2.02 |  | 1.62 |  | $(0.01)$ |  |
| Cash provided by operating activities | 3,203 |  | 2,407 |  | 896 |  |
| Cash, marketable investments, and <br> restricted cash | 6,152 |  | 4,899 |  | 4,934 |  |

## Financial Summary <br> Non-GAAP

| Dollars in millions, except per share | FY-17 | \% of Sales | FY-161 | \% of Sales |
| :--- | ---: | ---: | ---: | ---: |
| Net sales | $\$ 20,322$ | $100 \%$ | $\$ 12,399$ | $100 \%$ |
| Gross margin | 8,639 | $43 \%$ | 2,592 | $21 \%$ |
| Operating income | 6,232 | $31 \%$ | 450 | $4 \%$ |
| Income tax (provision) benefit | $(173)$ |  | 6 |  |
| Net income attributable to Micron | 5,648 | $28 \%$ | 273 | $2 \%$ |
| Diluted earnings per share | 4.96 |  | 0.26 |  |
| Cash provided by operating activities ${ }^{2}$ | 8,514 |  | 3,168 |  |
| Cash, marketable investments, and restricted cash | 6,152 |  | 4,934 |  |

${ }^{1}$ Fiscal 2016 amounts have been adjusted to conform with current period presentation to exclude stock-based compensation and amortization of acquisition related intangibles from non-GAAP reporting.


## Non-GAAP Reconciliations

## Consolidated Results

## Non-GAAP Reconciliations

| Amounts in millions, except per share amounts | FQ4-17 |  | FQ3-17 |  | FQ4-161 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GAAP net income (loss) attributable to Micron | \$ | 2,368 | \$ | 1,647 | \$ | (170) |
| Non-GAAP adjustments: |  |  |  |  |  |  |
| Flow-through of Inotera inventory step up |  | 11 |  | 36 |  | - |
| Stock-based compensation |  | 57 |  | 57 |  | 43 |
| Restructure and asset impairments |  | (27) |  | 12 |  | 51 |
| Amortization of debt discount and other costs |  | 32 |  | 30 |  | 32 |
| Loss on debt repurchases and conversions |  | 37 |  | 61 |  | - |
| (Gain) loss from changes in currency exchange rates |  | 12 |  | 22 |  | 11 |
| Other |  | 3 |  | 3 |  | 4 |
| Estimated tax effects of above and changes in net deferred income taxes |  | (107) |  | 28 |  | 20 |
| Total non-GAAP adjustments |  | 18 |  | 249 |  | 161 |
| Non-GAAP net income (loss) attributable to Micron | \$ | 2,386 | \$ | 1,896 | \$ | (9) |
|  |  |  |  |  |  |  |
| GAAP shares used in diluted EPS calculations |  | 1,187 |  | 1,177 |  | 1,037 |
| Effect of capped calls and other adjustments |  | (6) |  | (8) |  | - |
| Non-GAAP shares used in diluted EPS calculations |  | 1,181 |  | 1,169 |  | 1,037 |
|  |  |  |  |  |  |  |
| GAAP diluted earnings (loss) per share | \$ | 1.99 | \$ | 1.40 | \$ | (0.16) |
| Effects of above |  | 0.03 |  | 0.22 |  | 0.15 |
| Non-GAAP diluted earnings (loss) per share | \$ | 2.02 | \$ | 1.62 | \$ | (0.01) |

${ }^{1}$ Fiscal 2016 amounts have been adjusted to conform with current period presentation to exclude stock-based compensation and amortization of acquisition related intangibles from non-GAAP reporting.

## Consolidated Results

## Non-GAAP Reconciliations

| Amounts in millions, except per share amounts | FY-17 |  | FY-161 |  |
| :---: | :---: | :---: | :---: | :---: |
| GAAP net income (loss) attributable to Micron | \$ | 5,089 | \$ | (276) |
| Non-GAAP adjustments: |  |  |  |  |
| Flow-through of Inotera inventory step up |  | 107 |  | - |
| Stock-based compensation |  | 215 |  | 191 |
| Inotera acquisition costs |  | 13 |  | 3 |
| Restructure and asset impairments |  | 34 |  | 92 |
| Amortization of debt discount and other costs |  | 125 |  | 126 |
| Loss on debt repurchases and conversions |  | 100 |  | 4 |
| (Gain) loss from changes in currency exchange rates |  | 74 |  | 24 |
| (Gain) loss from business acquisition activities |  | (71) |  | (5) |
| Other |  | 21 |  | 29 |
| Estimated tax effects of above and changes in net deferred income taxes |  | (59) |  | 85 |
| Total non-GAAP adjustments |  | 559 |  | 549 |
| Non-GAAP net income attributable to Micron | \$ | 5,648 | \$ | 273 |
|  |  |  |  |  |
| GAAP shares used in diluted EPS calculations |  | 1,154 |  | 1,036 |
| Effect of capped calls and other adjustments |  | (14) |  | 14 |
| Non-GAAP shares used in diluted EPS calculations |  | 1,140 |  | 1,050 |
|  |  |  |  |  |
| GAAP diluted earnings (loss) per share | \$ | 4.41 | \$ | (0.27) |
| Effects of above |  | 0.55 |  | 0.53 |
| Non-GAAP diluted earnings per share | \$ | 4.96 | \$ | 0.26 |

${ }^{1}$ Fiscal 2016 amounts have been adjusted to conform with current period presentation to exclude stock-based compensation and amortization of acquisition related intangibles from non-GAAP reporting.

## Consolidated Statement of Operations

## FQ4 2017 Non-GAAP Reconciliation

| Amounts in millions | GAAP |  | Adjustments |  |  | Non-GAAP |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net sales | \$ | 6,138 | \$ | - |  | \$ | 6,138 |
| Cost of goods sold |  | 3.026 |  | (35) | A, B, I |  | 2,991 |
| Gross margin |  | 3,112 |  | 35 |  |  | 3,147 |
| Selling, general, and administrative |  | 193 |  | (22) | C |  | 171 |
| Research and development |  | 447 |  | (14) | D, I |  | 433 |
| Restructure and asset impairments |  | (27) |  | 27 | E |  | - |
| Other operating (income) expense |  | (3) |  | - |  |  | (3) |
| Total operating expenses |  | 610 |  | (9) |  |  | 601 |
| Operating income |  | 2,502 |  | 44 |  |  | 2,546 |
|  |  |  |  |  |  |  |  |
| Interest expense, net |  | (132) |  | 32 | F |  | (100) |
| Other non-operating income (expense), net |  | (49) |  | 49 | G,H |  | - |
|  |  | 2,321 |  | 125 |  |  | 2,446 |
| Income tax (provision) benefit |  | 47 |  | (107) | J |  | (60) |
| Equity in net income (loss) of equity method investees |  | 1 |  | - |  |  | 1 |
| Net income |  | 2,369 |  | 18 |  |  | 2,387 |
| Net income attributable to noncontrolling interests |  | (1) |  | = |  |  | (1) |
| Net income attributable to Micron | \$ | 2,368 | \$ | 18 |  | \$ | 2,386 |

## Consolidated Statement of Operations

FQ4 2017 Non-GAAP Reconciliation (continued)

| Amounts in millions |  |  |  |
| :---: | :---: | :---: | :---: |
| A | Flow-through of Inotera inventory step up | \$ | 11 |
| B | Stock-based compensation - cost of goods sold |  | 22 |
| C | Stock-based compensation - sales, general, and administrative |  | 22 |
| D | Stock-based compensation - research and development |  | 13 |
| E | Restructure and asset impairments |  | (27) |
| F | Amortization of debt discount and other costs |  | 32 |
| G | Loss on debt repurchases and conversions |  | 37 |
| H | (Gain) loss from changes in currency exchange rates |  | 12 |
| 1 | Other |  | 3 |
| J | Estimated tax effects of above and non-cash changes in net deferred income taxes |  | (107) |
|  |  | \$ | 18 |

## Consolidated Statement of Operations

## FY 2017 Non-GAAP Reconciliation

| Amounts in millions | GAAP |  | Adjustments |  |  | Non-GAAP |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net sales | \$ | 20,322 | \$ | - |  | \$ | 20,322 |
| Cost of goods sold |  | 11,886 |  | (203) | A,B,K |  | 11,683 |
| Gross margin |  | 8,436 |  | 203 |  |  | 8,639 |
|  |  |  |  |  |  |  |  |
| Selling, general, and administrative |  | 743 |  | (88) | C, E |  | 655 |
| Research and development |  | 1,824 |  | (55) | D, K |  | 1,769 |
| Restructure and asset impairments |  | 18 |  | (18) | F |  | - |
| Other operating (income) expense |  | (17) |  | - |  |  | (17) |
| Total operating expenses |  | 2,568 |  | (161) |  |  | 2,407 |
| Operating income |  | 5,868 |  | 364 |  |  | 6,232 |
|  |  |  |  |  |  |  |  |
| Interest expense, net |  | (560) |  | 125 | G |  | (435) |
| Other non-operating income (expense), net |  | (112) |  | 112 | H,I,J,K |  | - |
|  |  | 5,196 |  | 601 |  |  | 5,797 |
| Income tax (provision) benefit |  | (114) |  | (59) | L |  | (173) |
| Equity in net income (loss) of equity method investees |  | 8 |  | 17 | M, K |  | 25 |
| Net income |  | 5,090 |  | 559 |  |  | 5,649 |
| Net income attributable to noncontrolling interests |  | (1) |  | - |  |  | (1) |
| Net income attributable to Micron | \$ | 5,089 | \$ | 559 |  | \$ | 5,648 |

## Consolidated Statement of Operations

## FY 2017 Non-GAAP Reconciliation (continued)

| Amounts in millions |  |  |
| :--- | :--- | :---: |
|  |  |  |
| A | Flow-through of Inotera inventory step up | 107 |
| B | Stock-based compensation - cost of goods sold | 88 |
| C | Stock-based compensation - sales, general, and administrative | 75 |
| D | Stock-based compensation - research and development | 52 |
| E | Inotera acquisition costs | 13 |
| F | Restructure and asset impairments | 18 |
| G | Amortization of debt discount and other costs | 125 |
| H | Loss on debt repurchases and conversions | 100 |
| I | (Gain) loss from changes in currency exchange rates | 74 |
| J | (Gain) loss from business acquisition activities | $(71)$ |
| K | Other | 21 |
| L | Estimated tax effects of above and non-cash changes in net deferred income taxes | $(59)$ |
| M | Impairment of equity method investments | 16 |
|  |  | $\$ 559$ |

## Summary Key Data

## Non-GAAP Financial Data and Guidance

| \% of Revenue DRAM | FQ4-17 66\% | FQ4-16 |  | FQ4-17 Non-GAAP (amounts in millions, except per share) | FQ1-18 Non-GAAP Guidance |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Trade NAND* | 30\% | 32\% | Revenue | \$6,138 | \$6.10-\$6.50 billion |
| Sales Bit Growth | $\begin{gathered} \text { FQ4-17 } \\ \text { Q/Q } \end{gathered}$ | $\begin{aligned} & \text { FQ4-17 } \\ & \text { Y/Y } \end{aligned}$ | Gross margin | 51\% | 50\%-54\% |
| DRAM | 5\% | 32\% | Operating expenses | \$601 | \$575-\$625 million |
| Trade NAND* | 3\% | 78\% | Operating income | \$2,546 | \$2.65-\$2.85 billion |
| ASP Change | FQ4-17 | FQ4-17 | Earnings per share | \$2.02 | \$2.09-\$2.23 |
| DRAM | Q/Q | Y/Y $57 \%$ |  | FQ4-17 Non-GAAP (amounts in millions) | FQ1-18 Non-GAAP Estimates |
| Trade NAND* | 5\% | 2\% | Net interest expense | \$100 | ~\$90 million |
| Cost/Bit Change | $\begin{gathered} \text { FQ4-17 } \\ \text { Q/Q } \end{gathered}$ | $\begin{gathered} \text { FQ4-17 } \\ \text { Y/Y } \\ \hline \end{gathered}$ | Diluted shares | 1,181 | $\sim 1,191$ million <br> Refer to the Convertible Notes |
| DRAM | (4\%) | (20\%) |  |  | Dilution Overview provided |
| Trade NAND* | 6\% | (27\%) | Tax (provision) benefit | (\$60) | $\sim(\$ 90$ million $)$ |
| Gross Margin | FQ4-17 | FQ4-16 | Operating cash flow | \$3,203 | - |
| DRAM | 59\% | 20\% | Depreciation and amortization | \$1,063 | - |
| Trade NAND* | 40\% | 17\% | Capital expenditures (Capital cash flow) (a) | \$1,513 | FY-18: $\$ 7.5$ billion +/- 5\% |

## Convertible Notes Dilution Overview

FQ4 2017 (shares in millions)

| Stock Price | \$29 | \$30 | \$31 | \$32 | \$33 | \$34 | \$35 | \$36 | \$37 | \$38 | \$39 | \$40 | \$41 | \$42 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2032 C Notes | 16 | 16 | 16 | 16 | 16 | 17 | 17 | 17 | 17 | 17 | 17 | 18 | 18 | 18 |
| 2032 D Notes | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 14 |
| 2033 E Notes | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 |
| 2033 F Notes | 17 | 17 | 18 | 18 | 18 | 18 | 19 | 19 | 19 | 19 | 20 | 20 | 20 | 20 |
| 2043 G Notes | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 7 | 8 | 9 | 10 | 10 | 11 |
| Total dilutive shares | 52 | 53 | 55 | 56 | 57 | 60 | 62 | 63 | 63 | 64 | 67 | 69 | 69 | 71 |
| Benefit from capped calls | -18 | -18 | -17 | -16 | -16 | -16 | -15 | -15 | -14 | -14 | -14 | -13 | -13 | -13 |
| Net dilution | 34 | 35 | 38 | 40 | 41 | 44 | 47 | 48 | 49 | 50 | 53 | 56 | 56 | 58 |

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