



Winning in the 5G Era

Raj Talluri, SVP & GM of Mobile Business Unit

May 22nd, 2020

©2020 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 orbit logo, the M orbit logo, Intelligence Accelerated™, and 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.



Raj Talluri

SVP, Mobile Business Unit GM

- 25 years of semiconductor industry experience prior to Micron
- 9 years at Qualcomm
- 16 years at Texas Instruments
- Ph.D. in electrical engineering from the University of Texas in Austin

Agenda

5G Opportunity

MBU Strategy

MBU Results



5G Opportunity

5G Presents a Huge Opportunity

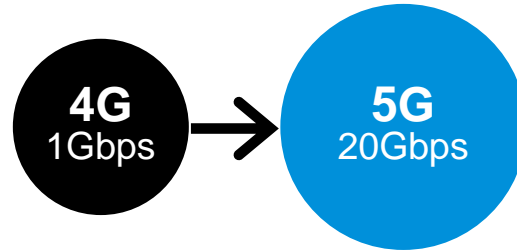
**10x+ Change in
Network
Performance**

**Proliferation of
Connected
Devices**

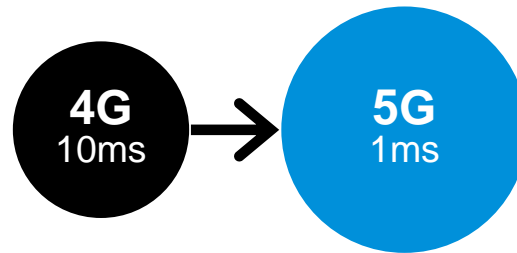
**Mobile Unit
Growth Catalyst**

**Mobile Content
Growth Driver**

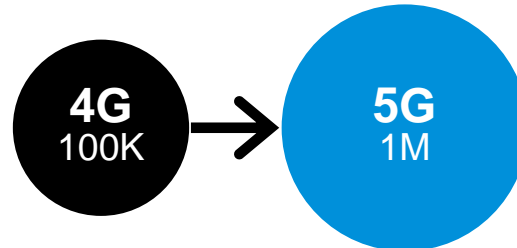
4G→5G Magnitude of Change Is Unlike Anything Before



20x faster download speed
Download a full-length HD movie in seconds
Media-rich experiences: streaming HD and 360° videos or mobile AR and VR any time, anywhere



10x lower latency
Real-time multi-player cloud gaming including VR/AR with no lag
Data streams from trillions of connected devices can be managed, and low latency allows real time robotic control



10x density of devices/km²
Enabling the internet-of-things
Increased connection density for a large number of devices that sense, meter and monitor

5G Will Connect Everything



Mobile Edge

New memory and storage solutions enhance real-time gaming and video-streaming experiences



Automotive

5G speeds & V2X connectivity feed on-board AI for autonomous driving, traffic management and infotainment



Industrial IoT

Enables real time data with <1ms latency, supporting highly dense deployments with up to 1M connections per km²



Networking

20x more 5G infrastructure peak throughput drives memory and storage density



Datacenter

Enterprise and cloud datacenters grow memory and storage to handle mobile connections



5G Enables Streaming Video Everywhere

8K live streaming, VR-enabled content, AR map, AR education and multi-channel broadcasting offering alternative viewing angles

5G streaming video everywhere is data-heavy and requires:

Speed

- Faster download to enable 4K (eventually 8K) streaming
- Faster data processing required
- Higher memory density and bandwidth

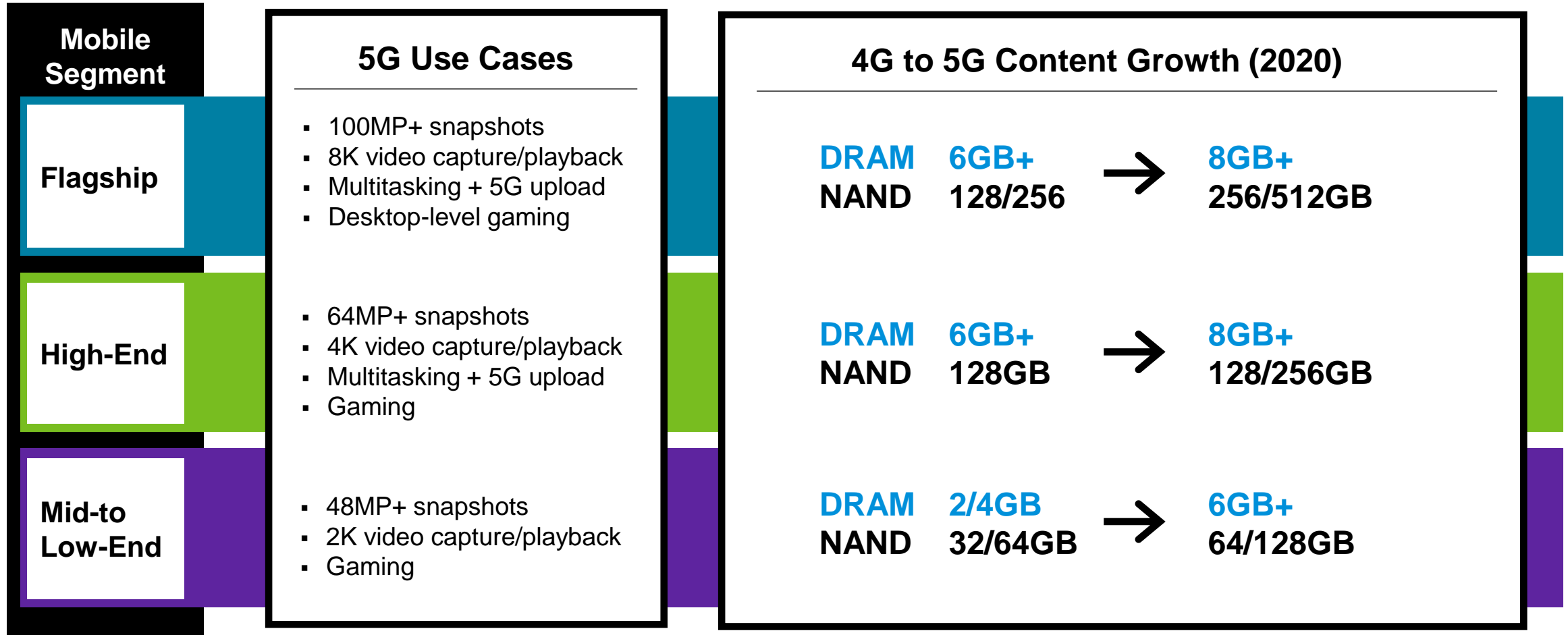
Capacity

- Support more devices and more data-intensive video
- Fuel increased video consumption
- Spurs smartphone replacement demand and aspiration for more storage capacity

Latency

- No-lag video and immediate initiation of any download requests
- Faster data caching required
- Faster memory with lower latency

5G Use Cases Will Drive Content Growth



5G Is a Catalyst for Mobile Unit Growth

~450M 5G unit shipments forecasted for 2021



Slightly negative due to slowing
replacement cycle and COVID-19

2016 to 2020

(Before)



5G-driven resumption of
smartphone replacement

2021 to 2024

(After)

5G Will Drive Strong Mobile Bit Growth

2019-2022 Mobile Industry Bit CAGR Forecast

~15%
DRAM

~30%
NAND

A person is seen from behind, holding a smartphone up to capture a photograph of a vibrant city skyline at night. The skyline is filled with numerous illuminated skyscrapers, their lights creating a bokeh effect in the background. The person's arm and hand are visible in the foreground, holding the phone steady. The phone's screen shows a clear image of the city buildings.

MBU Strategy

Micron Is Well-Positioned to Win in 5G Era

Team

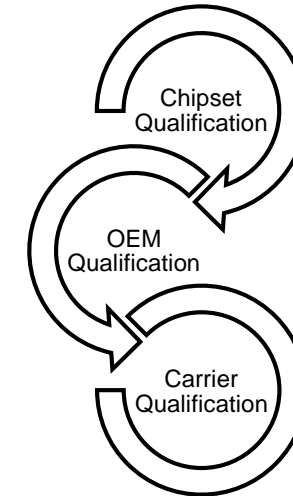
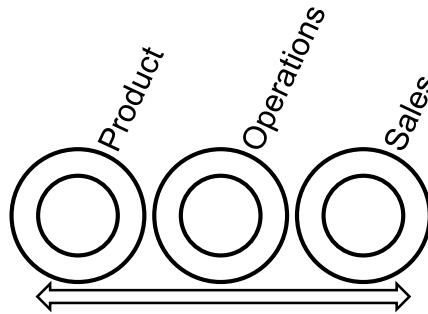
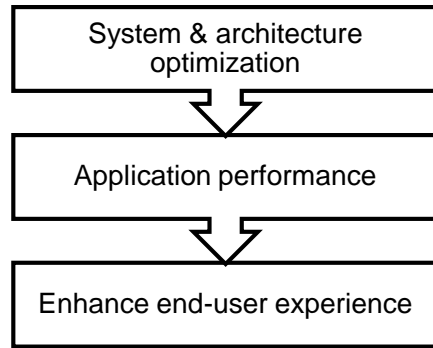
Execution

**Technology &
Product Leadership**



Industry's Best Talent

Organized to drive product and customer success



Expertise from silicon to customer systems

Experts in applications, trends and solution architectures

In-depth understanding of application architecture to device level

Go-to market coordination across Micron

Align product and engineering roadmaps

Optimize supply allocation across customers

Collaboration across the ecosystem

Validated architectural solutions

Proven hardware interoperability

The New Micron Is Rapidly Improving Execution

More mobile industry firsts, enhancing our customer value proposition

Product	FY18	FY19	FY20
Memory	1x nm LPDDR4 <u>Lagged industry by 1+ years</u>	1z nm LPDDR4x <u>1st to ramp in mobile</u>	LPDDR5 <u>1st to support 6400Mbps speed and 12Gb monolithic die</u>
Storage	UFS2.1 <u>Lagged industry by 1+ years</u>	UFS3.0 <u>Caught up with 2.1, missed 3.0</u>	UFS3.1 <u>In line with market launch</u>
MCPs	<u>Limited portfolio</u>	uMCP4 <u>Caught up, full portfolio support</u>	uMCP5 <u>1st to deliver uMCP5 samples featuring LPDDR5 and UFS3.1</u>

Mobile Tech & Product Leadership

Complete Mobile Portfolio

Qualified with all major chipsets

Memory

LPDDR5, LPDDR4x

Storage Solutions

UFS3.1, UFS2.x, eMMC

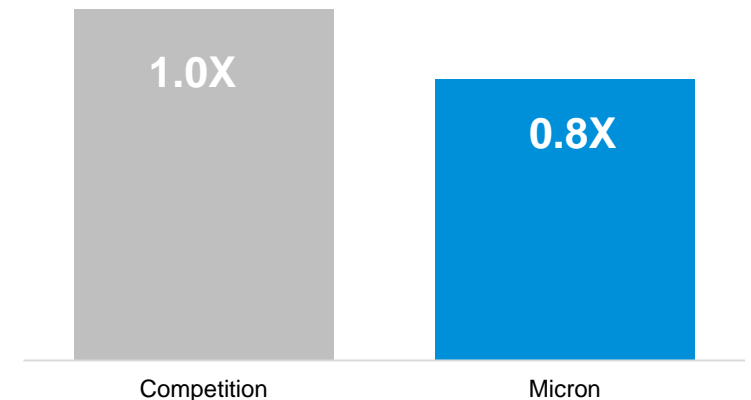
Multichip Packages (MCPs)

uMCP5, uMCP4x, eMCP4x

Redefining the End-User Experience

- AI & machine learning
- Rapid high-resolution photo/video capture
- Longer battery life
- Shorter app launch times
- Multitasking capability

LP5 Power Consumption 8k Video Recording (lower = better)



Competition refers to LP5 products
offered by our industry competitors



A person wearing a grey hoodie is shown from the side, looking down at a smartwatch on their left wrist. The background is a blurred cityscape at night with colorful bokeh lights. The text "MBU Results" is overlaid in the lower-left area.

MBU Results

Mobile Business Unit Results

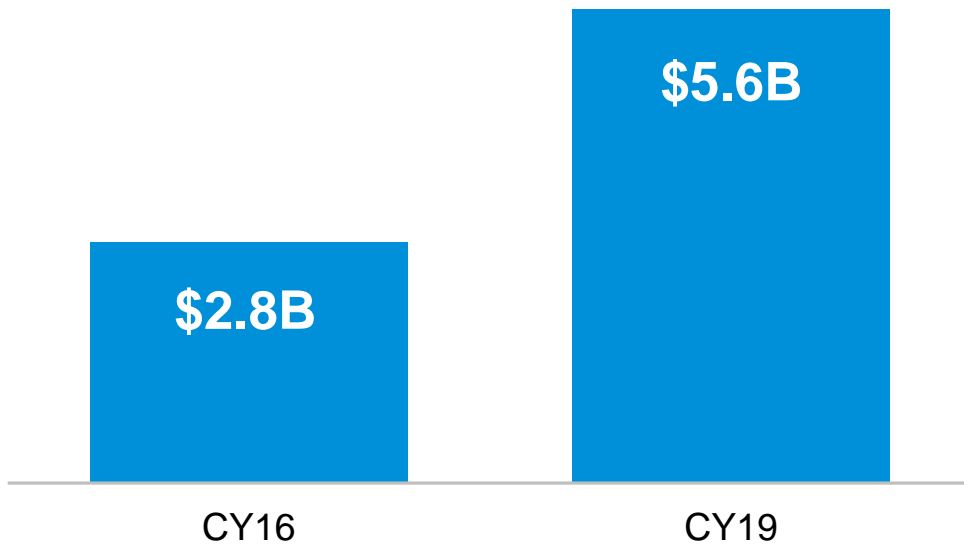
**Market Share
Opportunity**

**Gaining in
High-Value
Solutions**

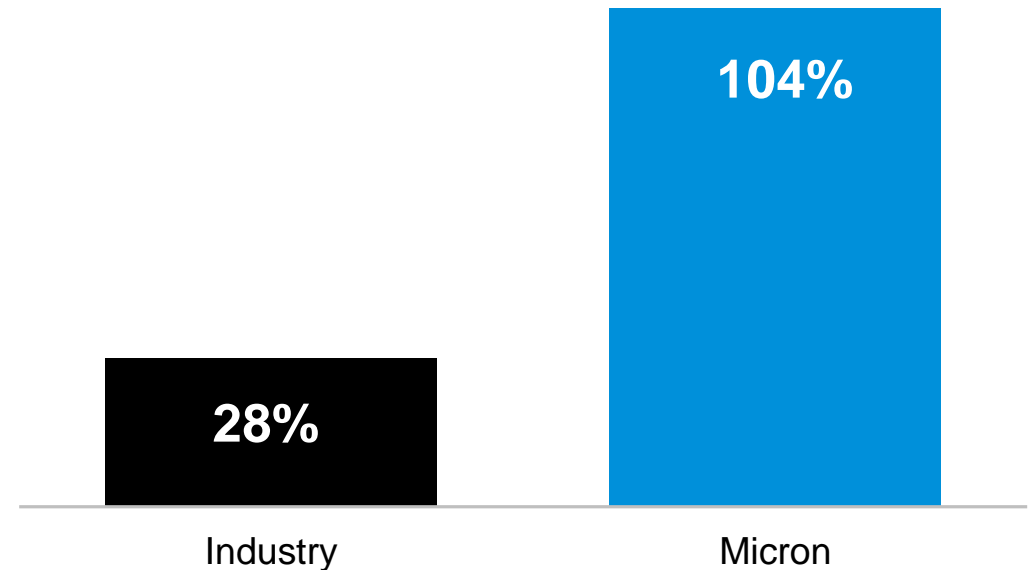
**Strong Cross-Cycle
Profitability**

Strong Revenue Growth Outpacing the Industry

Micron MBU Revenues



**Mobile Revenue Growth
CY16 to CY19**



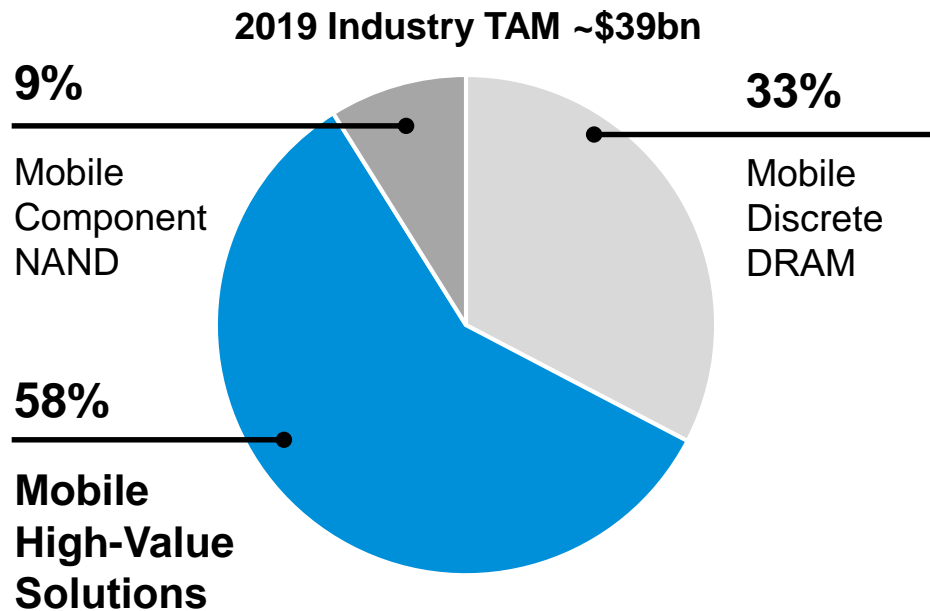
Sources: Micron, Yole

Micron CY16 MBU revenues represents sum of FQ2-16 through FQ1-17

Micron CY19 MBU revenues represents sum of FQ2-19 through FQ1-20

Gaining in Mobile High-Value Solutions

High value solutions make up the majority of the mobile market.

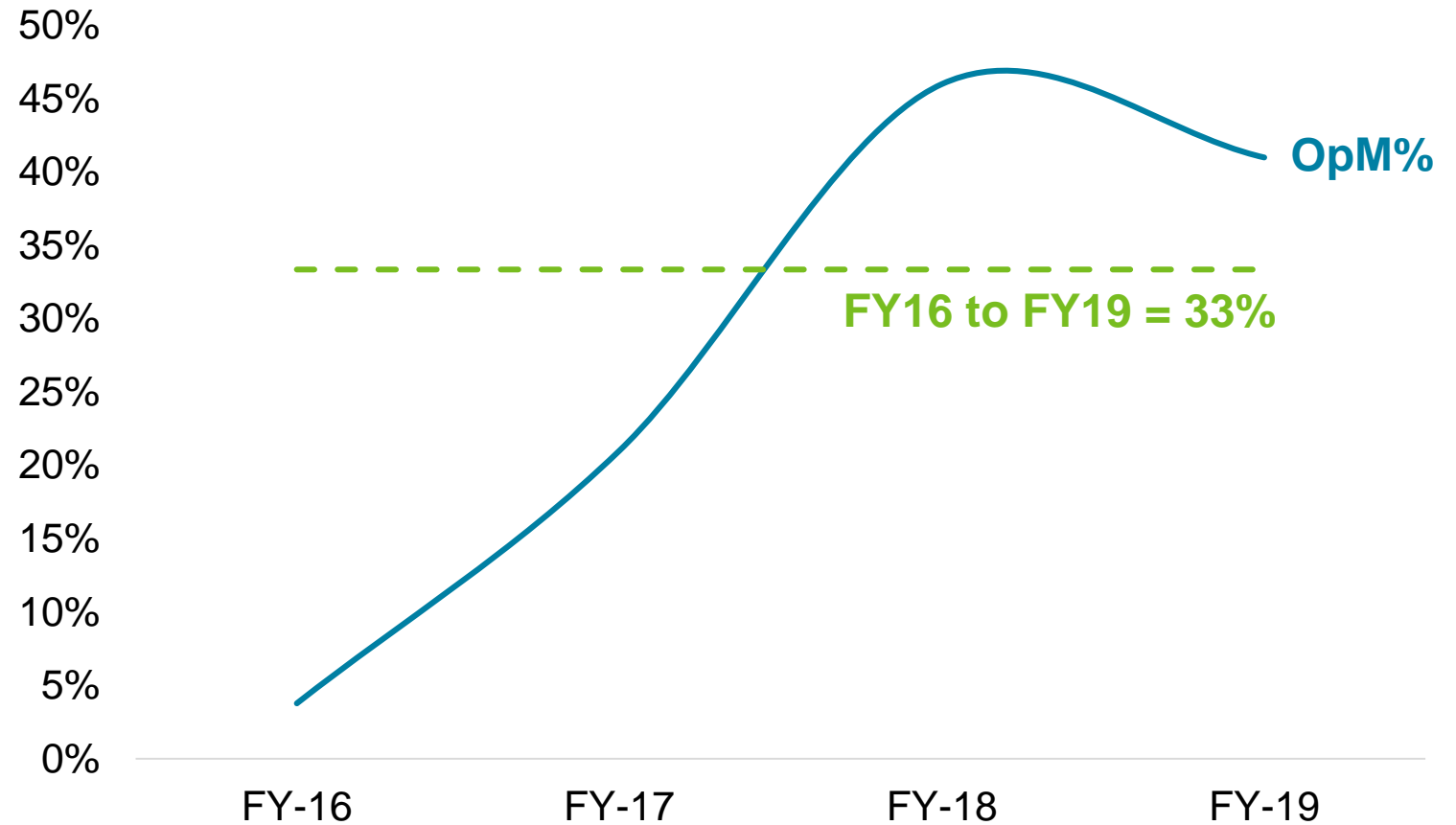


Mobile High-value solutions are defined as MCP plus managed discrete NAND
Source: Micron

Micron's mobile high-value solution revenue **more than tripled** from 2016 to 2019, outpacing the industry.

We have more opportunity ahead.

MBU Strong Cross-Cycle Profitability FY16-FY19



Winning in the 5G Era



**5G is
transformational**



**Micron & MBU
are positioned
to win**



**Our business
results continue
to improve**

