Economic Outlook and Revenue Assessment Committee (EORAC)

Jayson Ronk, State Government Affairs Director

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Quick Stats

Micron by the Numbers

Headquarters
Boise, Idaho, USA

Fortune 500
Ranked #226 in 2016

Patents
~20,000 and growing

Age
Nearly 40 years strong

FY17 Net Sales
$20.3B

Products
Largest portfolio of memory and storage technologies

Size
3rd largest memory company in the world

Team Members
34,000+ in 17 countries

Segments
Compute, consumer, networking, storage, embedded and mobile products

Market Position
6th largest semiconductor company

Locations
12 manufacturing sites

September 2017, Source: Micron and industry analysts

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And we know memory
With a track record of innovation and industry advancement, Micron's team is changing the way the world accesses and manages data.
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We were made to do this

Creating value for our stakeholders through world-class engineering.

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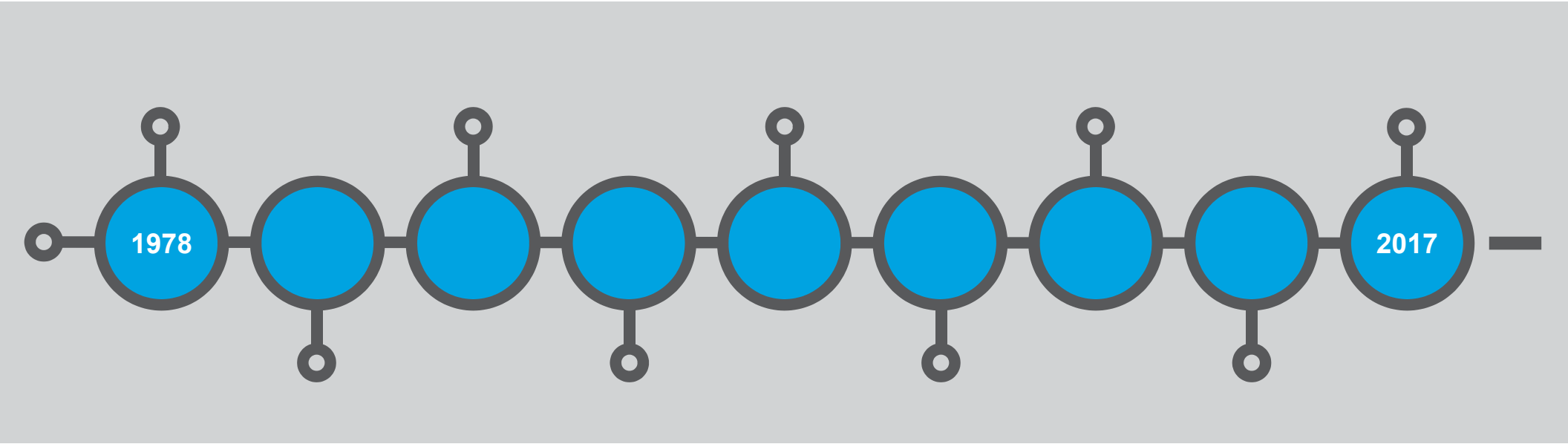

Our long history proves it

Our growth and innovation has made us the influential global presence we are today–committed to being the best memory company in the world.

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Company Timeline

1978 — Micron Technology, Inc. is founded

1980 — Ground broken on Micron's first wafer fabrication plant in Boise

1981 — First 64K DRAM product is shipped

1984 — Micron introduces world's smallest 256K DRAM product

Micron becomes a publicly traded company on NASDAQ

1987 — Micron introduces 1-megabit DRAM product

1994 — Micron is named a Fortune 500 company

1996 — Crucial Technology is created to market and sell memory upgrades to end-users

1998 — Micron acquires Texas Instruments' worldwide memory operations

1999 — The Micron Foundation is established to advance STEM education and support communities

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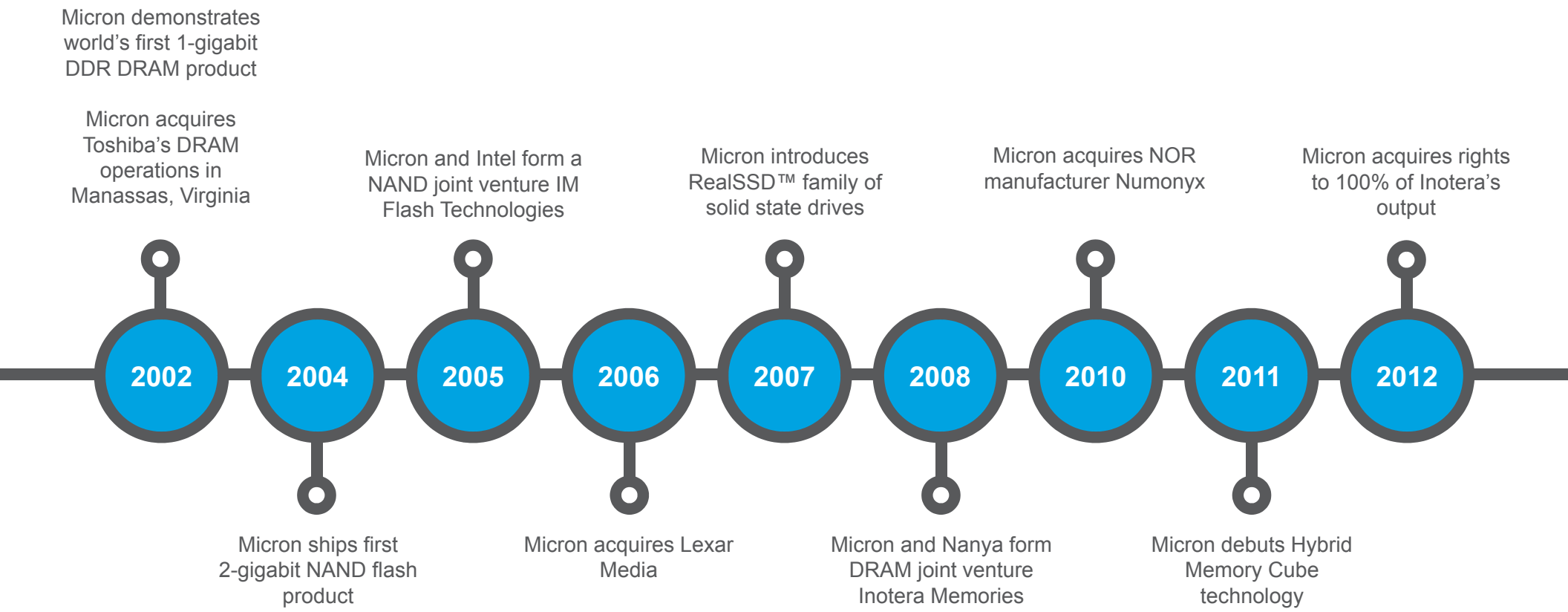
Micron demonstrates world's first 1-gigabit DDR DRAM product
Micron acquires Toshiba's DRAM operations in Manassas, Virginia
2002
2004
Micron ships first 2-gigabit NAND flash product
Micron and Intel form a NAND joint venture IM Flash Technologies
2005
2006
Micron acquires Lexar Media
Micron introduces RealSSD™ family of solid state drives
2007
2008
Micron and Nanya form DRAM joint venture Inotera Memories
Micron acquires NOR manufacturer Numonyx
2010
2011
Micron debuts Hybrid Memory Cube technology
Micron acquires rights to 100% of Inotera's output
2012

Micron announces development of the Automata Processor

Micron acquires Elpida Memory Inc. and Rexchip Electronics Corporation

Micron opens new Singapore Fab for 3D NAND production

Micron acquires Inotera Memories

2013 **2015** **2016** **2017**

Micron announces 100,000 sq ft expansion of its Boise R&D facility

Ground broken on 255,000 sq ft expansion in Singapore for 3D NAND production

Micron's Global Expertise

HEADQUARTERS - Boise, Idaho

AMERICAS

United States

EMEA

Belgium
Finland
France
Germany
Italy
Netherlands
Sweden
United Kingdom

APAC

Australia
China
India
Japan
Malaysia
Singapore
South Korea
Taiwan

FY17 Net Sales | $20.3+B
Employees | ~30,000

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Data is the new currency

In an increasingly complex and connected world, the ability of an organization to collect, manage and analyze data effectively separates the winners from the runners-up.

Source: http://www.cioinsight.com/it-strategy/big-data/why-data-is-the-new-business-currency.html

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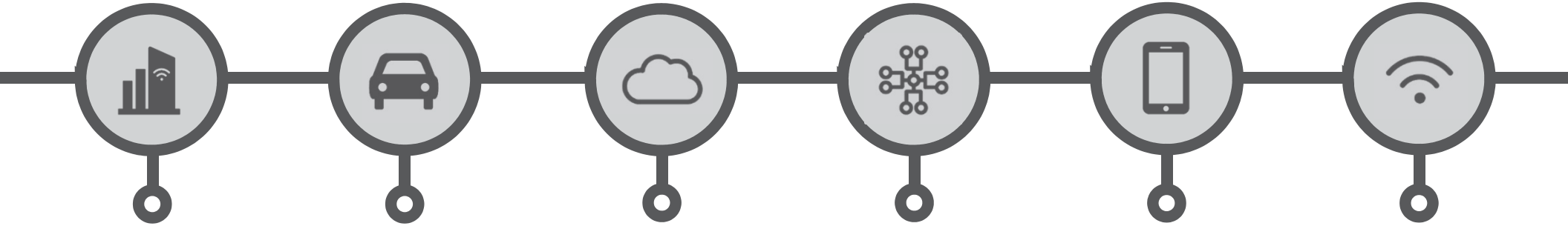
Trends Driving Increased Data Traffic



Enterprise	Automotive	Cloud/ Big Data	Networking	Mobile/ Client	IoT
Online Transaction Processing systems with low-latency in-memory compute	Global sales of autonomous vehicles to reach ~600,000 units by 2025	Data center storage installed capacity to grow ~5X to 1.8 ZB between 2015 and 2020	Global IP traffic grows at a CAGR of 24% from 2016 to 2020	Global mobile data traffic to rise ~7X between 2016 and 2021	27.1 billion networked devices by 2021

Source, September 2017: Cisco, Gartner, IDC, Automobile manufacturers
IoT – Internet of Things

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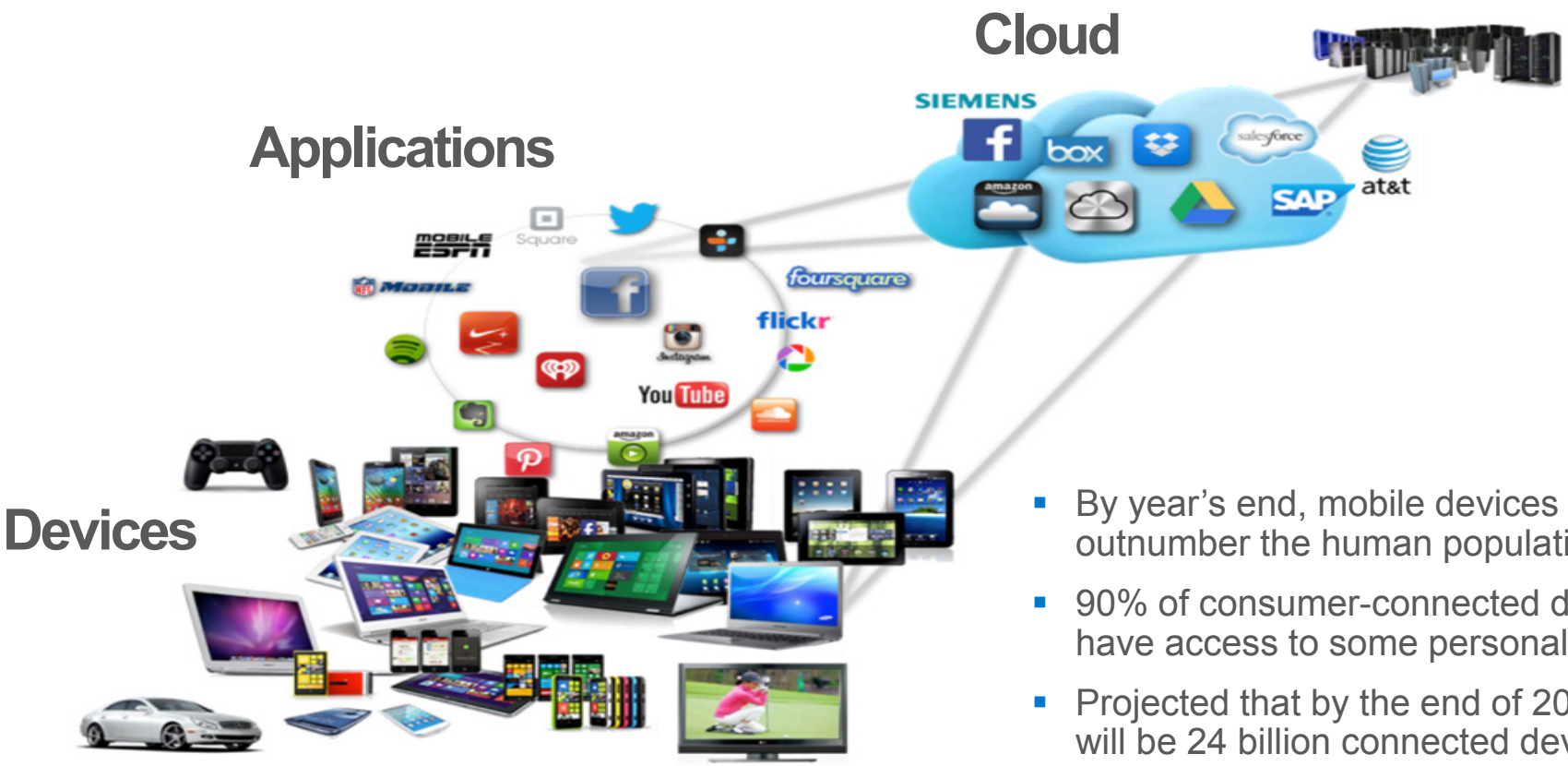
The Interconnected World



- By year's end, mobile devices will outnumber the human population
- 90% of consumer-connected devices will have access to some personal cloud
- Projected that by the end of 2020, there will be 24 billion connected devices

Sources: Wards Auto, Forbes, SAP, IBM

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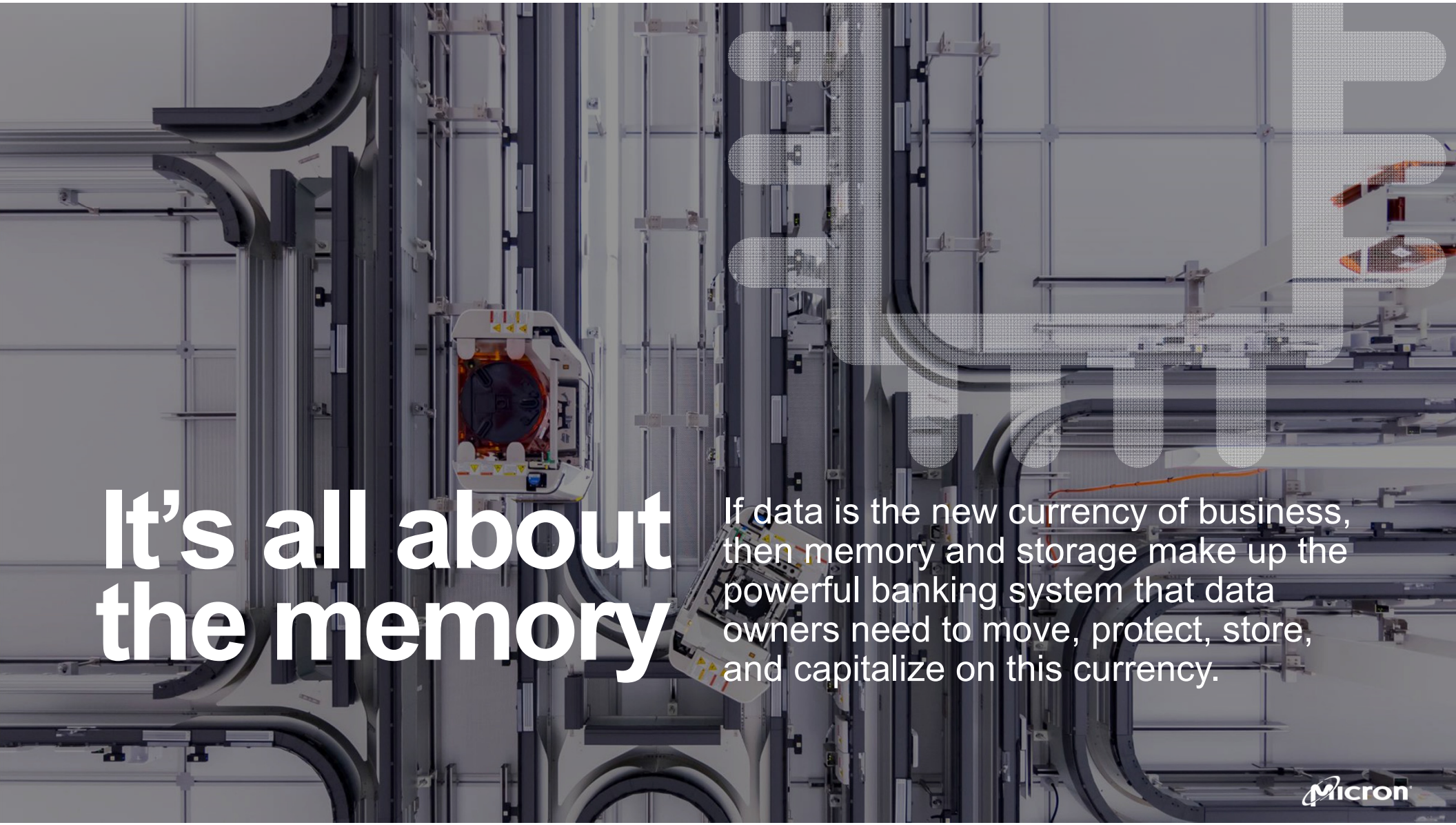

It’s all about the memory

If data is the new currency of business, then memory and storage make up the powerful banking system that data owners need to move, protect, store, and capitalize on this currency.

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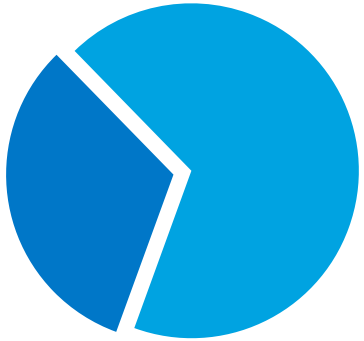
Worldwide Memory[1] $135B Market

(+57% Y/Y)



Semiconductor Market in 2017

$420B

(+20% Y/Y)

DRAM

- Mobile $30B
- Non-Mobile $39B

$69B

(+67% Y/Y)

Non-Volatile

- Storage $27B
- Non-Storage $39B

$66B

(+48% Y/Y)

Non-Memory Markets $285B

- Logic $203B +7% Y/Y
- Discrete $20B +10% Y/Y
- Analog $23B +11% Y/Y
- Other $39B +10% Y/Y

Source: Gartner Q3-17 and Micron

[1]Memory includes DRAM, NAND and NOR, Emerging and other memories along with SSD non-NAND

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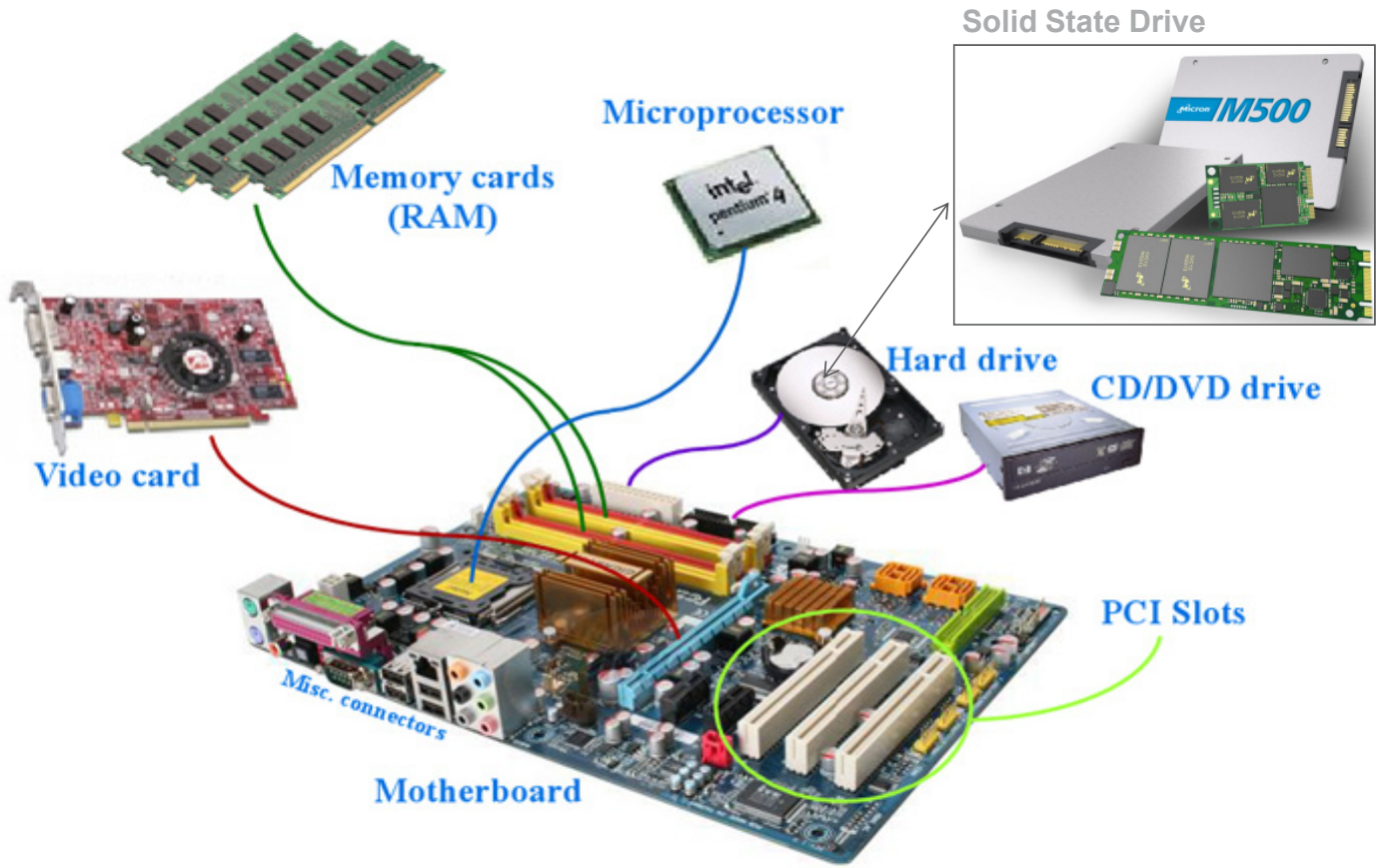
Inside a Computer

CPU (Central Processing Unit)



Inside a Smartphone

Micron Memory Enables the Digital Interconnected World

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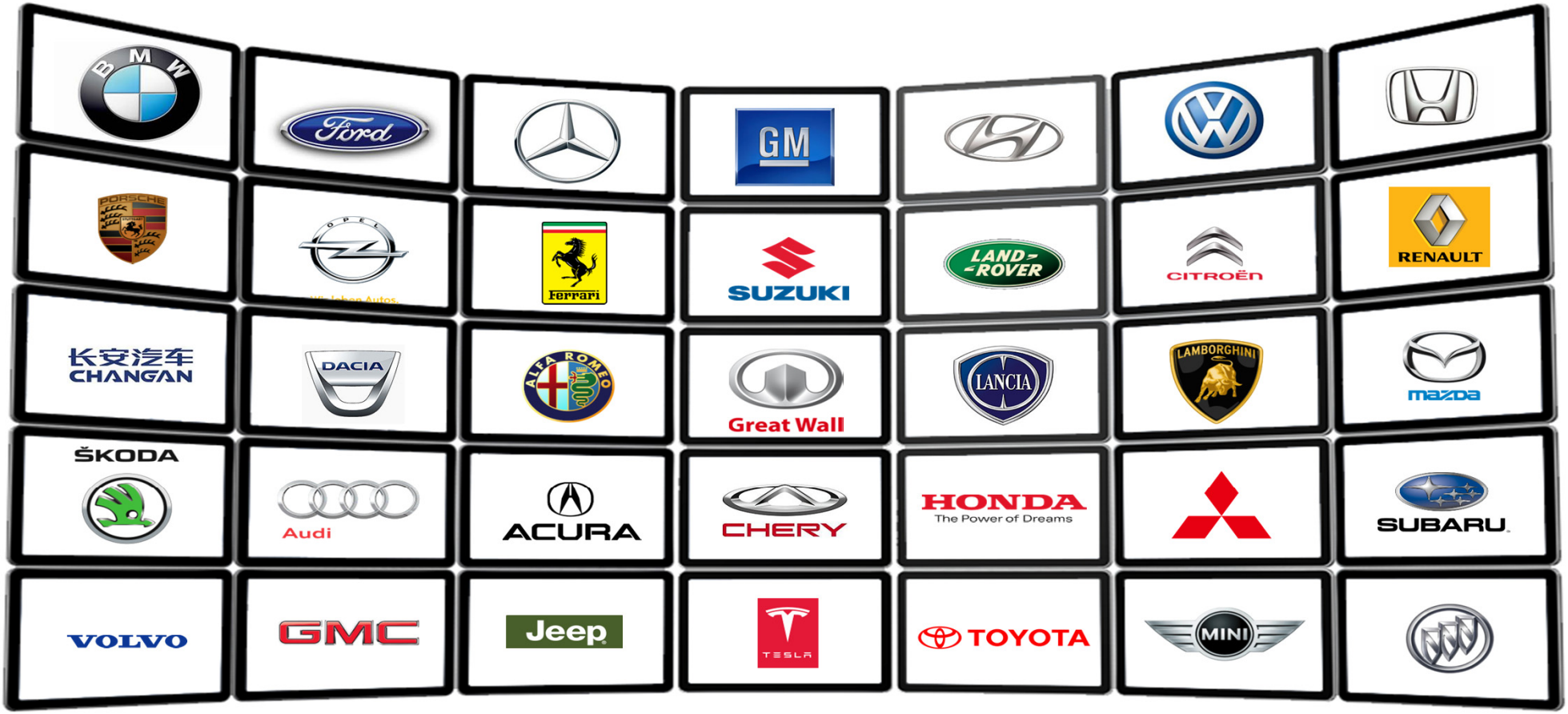
Whatever You Drive – Micron is Inside



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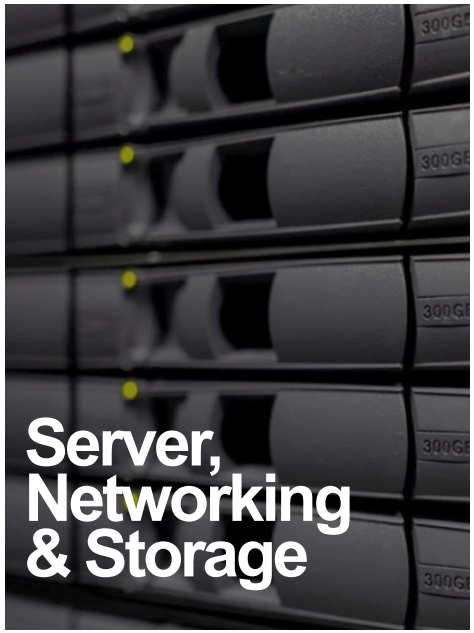
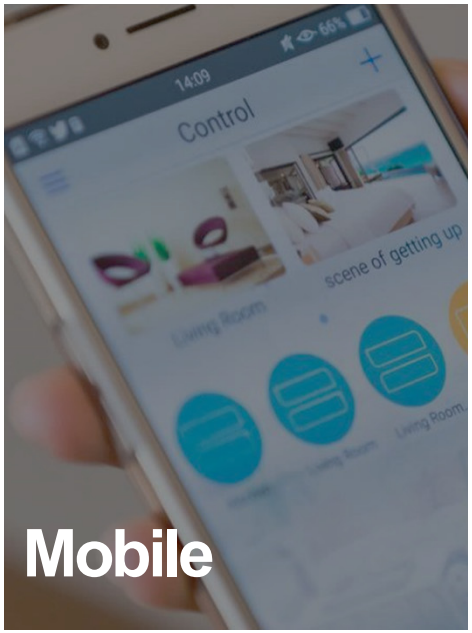
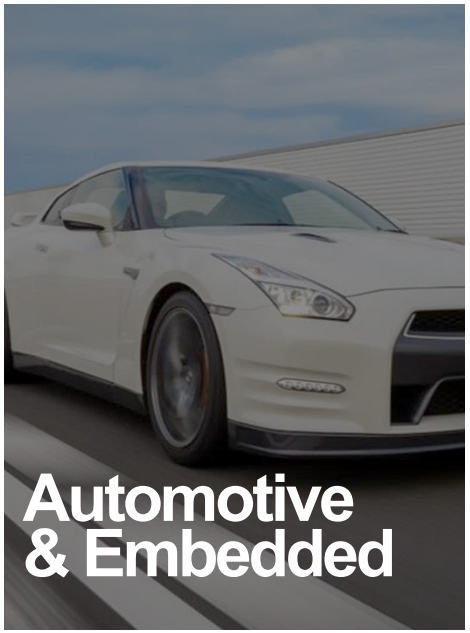
Key Growth Markets & Solutions







	Server, Networking & Storage	Mobile	Automotive & Embedded
2017 TAM	$50B - $55B	$50B - $55B	$12B - $15B
Bit CAGR 2016-2020	DRAM: ~30% NAND: ~55%	DRAM: ~20% NAND: ~40%	DRAM: ~30% NAND: ~45%
Key End Markets	Graphics, Client, Cloud, Enterprise, Networking	Tablets, Mobile	Auto, Industrial
Micron Solutions	GDx, HMC, DIMM, SSD	LPDRAM, MCP and Discrete Managed NAND	Embedded DRAM and NAND

Source: Micron and industry analysts

Server, Networking & Storage: Enterprise & Cloud Server, Networking, Graphics (DRAM), Client, Enterprise & Datacenter SSD (NAND)
Mobile: Smartphones and Tablets
Automotive & Embedded: ADAS, Infotainment, other memory in connected vehicles and industrial, consumer, connected home, and connected devices

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Building 51 & Building 37

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