

# A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



# **Credit Suisse 23rd Annual Technology Conference**

Steve Sanghi, Chairman & CEO December 4<sup>th</sup>, 2019

microchip.com



#### Forward Looking Statement Safe Harbor:

During the course of this presentation, we will make projections or other forward-looking statements regarding the future financial performance of the company (including our guidance) or future events, including our strategy, growth drivers, industry outlook, industry trends, market size and our financial model. These statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements involve risks and uncertainties that could cause our actual results to differ materially, including, but not limited to: any continued economic uncertainty due to monetary policy, political, trade or other issues in the U.S. or internationally, any unexpected fluctuations or weakness in the U.S. and global economies (including China), changes in demand or market acceptance of our products and the products of our customers; our ability to successfully integrate the operations and employees, retain key employees and customers and otherwise realize the expected synergies and benefits of our acquisitions (including our acquisition of Microsemi Corporation); the impact of current and future changes in U.S. corporate tax laws (including the Tax Cuts and Jobs Act of 2017), foreign currency effects on our business; the mix of inventory we hold and our ability to satisfy short-term orders from our inventory; changes in utilization of our manufacturing capacity and our ability to effectively manage and expand our production levels; competitive developments including pricing pressures; the level of orders that are received and can be shipped in a quarter; changes or fluctuations in customer order patterns and seasonality; the impact of any future significant acquisitions that we may make; our ability to obtain a sufficient supply of wafers from third party wafer foundries and the cost of such wafers, the costs and outcome of any current or future litigation or other matters involving our Microsemi business, intellectual property, customers, or other issues; the costs and outcome of any current or future tax audit or investigation regarding our business or the business of Microsemi, our actual average stock price in the December 2019 guarter and the impact such price will have on our share count; fluctuations in our stock price and trading volume which could impact the number of shares we acquire under our share repurchase program and the timing of such repurchases; disruptions in our business or the businesses of our customers or suppliers due to natural disasters (including any floods in Thailand), terrorist activity, armed conflict, war, worldwide oil prices and supply, public health concerns or disruptions in the transportation system; and general economic, industry or political conditions in the United States or internationally. For a detailed discussion of these and other risk factors, please refer to Microchip's filings on Forms 10-K and 10-Q. You can obtain copies of Forms 10-K and 10-Q and other relevant documents for free at Microchip's website (www.microchip.com) or the SEC's website (www.sec.gov) or from commercial document retrieval services. You are cautioned not to place undue reliance on our forward-looking statements, which speak only as of the date such statements are made. Microchip does not undertake any obligation to publicly update any forward-looking statements to reflect events, circumstances or new information after the date of this presentation or to reflect the occurrence of unanticipated events.

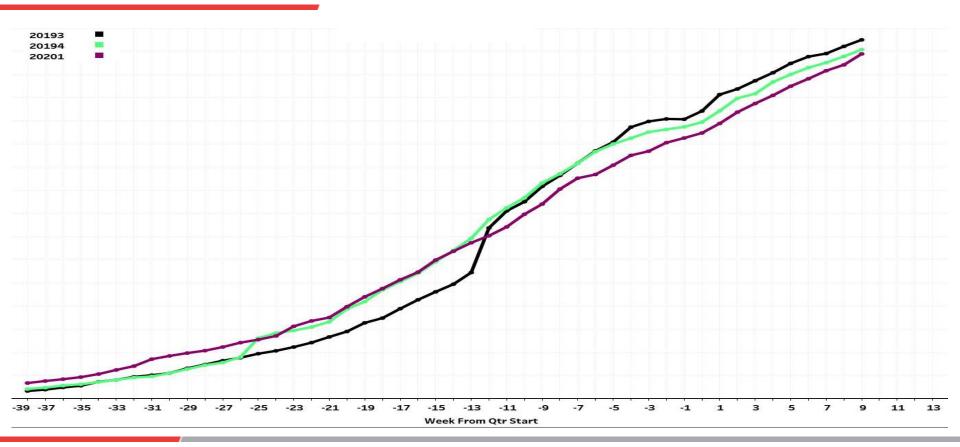
<u>Use of Non-GAAP Financial Measures</u>: In this presentation, we have included certain non-GAAP financial information. Our non-GAAP adjustments include, where applicable, the effect of share-based compensation, expenses related to our acquisition activities (including intangible asset amortization, inventory valuation costs, severance and other restructuring costs, and legal and other general and administrative expenses associated with acquisitions including legal fees and expenses for litigation and investigations related to our Microsemi acquisition), IT security remediation costs, non-cash interest expense on our convertible debentures, losses on the settlement of debt, and gains and losses related to available-for-sale investments. Our determination of our non-GAAP measures might not be the same as similarly titled measures used by other companies, and it should not be construed as a substitute for amounts determined in accordance with GAAP. There are limitations associated with using non-GAAP measures, including that they exclude financial information that some may consider important in evaluating our performance. Management compensates for this by presenting information on both a GAAP and non-GAAP basis for investors and providing reconciliations of the GAAP and non-GAAP results. Reconciliations of certain of our non-GAAP and GAAP results are available on our website at www.microchip.com/investors.



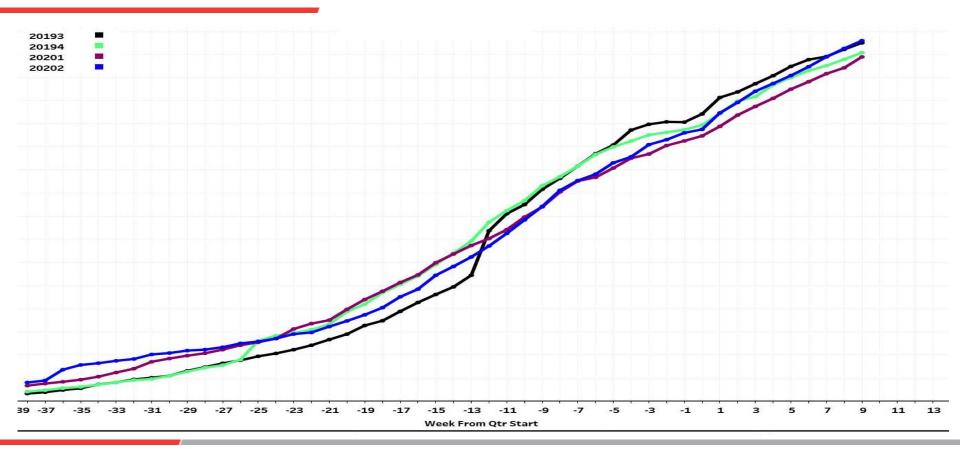
# Q2FY20 Business Results & Q3FY20 Guidance

- Q2FY20 net sales of \$1.338B, up 1.1% sequentially and down 6.6% from a year ago quarter.
- Non- GAAP gross margin of 62.24% near a record high.
- Lowest distribution inventory in fifteen years except one quarter (FQ3 2013).
- Record quarterly dividend declared of 36.65 cents per share.
- Issued revised guidance on December 3, 2019 for net sales to be between down 3% to down 7% sequentially (prior guidance was down 2% to down 10% sequentially).
- Revised guidance for non-GAAP diluted EPS to be between \$1.19 and \$1.30 per share (prior guidance \$1.12 to \$1.32 per share)

# Microchip Total Billings + Backlog: FQ3'19, FQ4'19 & FQ1'20

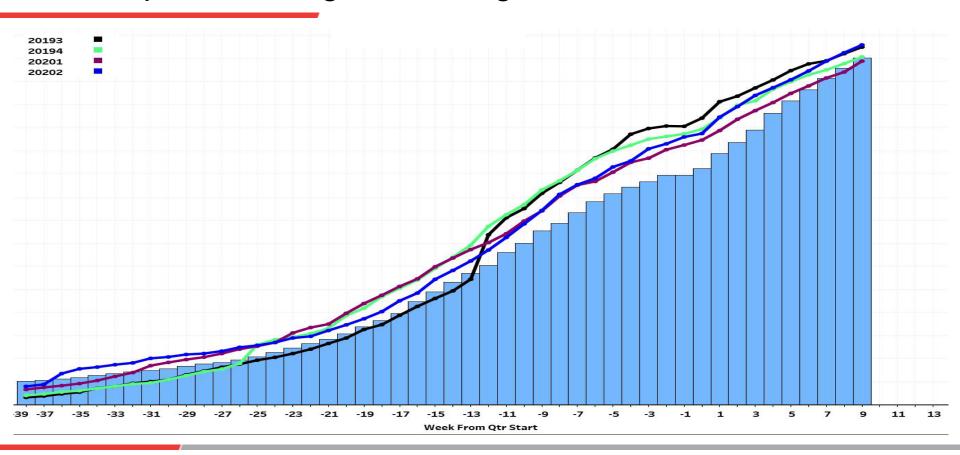


# Microchip Total Billings + Backlog: FQ2'20 Added

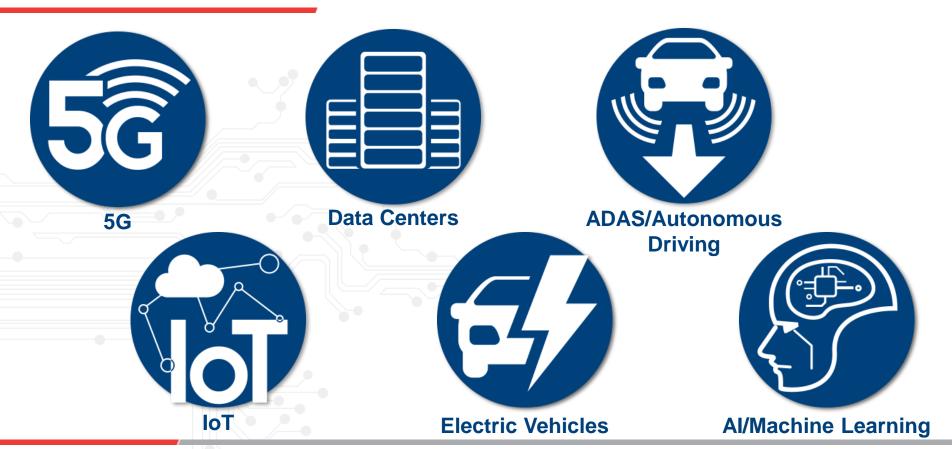




# Microchip Total Billings + Backlog: FQ3'20 Added



# Six Megatrends



# Microchip in 5G

# **5G Infrastructure**

# **5G Enabled Markets**

# Radio & Small Cell

Precision Oscillators
Network Synchronization
SAW Filters
Power over Ethernet
Ethernet Switch/PHY
FPGA
Security
AC-DC, DC-DC

### **Baseband**

Precision Oscillators
Network Synchronization
FPGA
Security
AC-DC, DC-DC

### X-Haul

Ethernet PHYs w/ Security & Timing
OTN / Ethernet Fronthaul Processors
Precision Oscillators
Network Synchronization
FPGA
Security
AC-DC, DC-DC



# **Edge Compute**

FPGA / MPU / MCU
Flash/Storage Controllers
PCIe Switch
Network Synchronization
FPGA
Security
AC-DC, DC-DC

### **Medical Devices**

FPGAs MPU / MCU SAW Filters Security AC-DC, DC-DC

### **Automotive**

Ethernet, PCIe® FPGA / MPU / MCU SAW Filters Timing Security AC-DC, DC-DC

## **Industry 4.0**

Ethernet, FPGA MPU / MCU SAW Filters Timing Security AC-DC, DC-DC

### **Smart Home**

MPU / MCU SAW Filters Security AC-DC, DC-DC



# Microchip in IoT

# **Smart Factory**



#### **Sensor & Actuators**

Environmental sensors Motor Control Machine Vision Precision Analog/Power

### Security/Authentication

Data Protection/Encryption
Hardware Root of Trust
Secure Boot/Firmware Update
Secure Provisioning

#### **Asset Management**

LoRa® Battery Management

# Al/Machine Learning

Object Detection/ Identification Predictive Maintenance Human Safety / OSHA

### Time Sensitive Networking

EtherCAT® Clock/Timing LoRa 5G 10Base T1S Power over Ethernet Ethernet Switches CoaXPress®

# **Smart Home / Smart Building**



#### Voice & HMI

Voice/Audio Chips Touch Screens Capacitive Touch Buttons Graphics Proximity Detection

### Security/Authentication

Data Protection/Encryption Hardware Root of Trust Secure Boot/Firmware Update Secure Provisioning

#### Wireless

Wi-Fi® LoRa Bluetooth® zigbee®

### Al/Machine Learning

Facial Recognition Predictive Maintenance

### **Sensor & Actuators**

Environmental Sensors Motor Control Camera Systems Precision Analog/Power

# **Smart City / Smart Utility**



# Connectivity

LoRa Power over Ethernet DALI, DMX, 5G

### Lighting

Lighting Control Coordination

### Security/Authentication

Data Protection/Encryption Hardware Root of Trust Secure Boot/Firmware Update Secure Provisioning

#### Sensor & Actuators

Environmental Sensors Motor control GPS/ Micropositioning Flow Meters Electric Meters Precision Analog/Power

# Al/Machine Learning

Object Recognition/ Identification Predictive Maintenance Advertisement Signage Road Signage Waste Management



# Microchip in Data Center

### Simplified IT



Wireless Maintenance Graphical/Touch Displays Front/Rear Panel I/O





### **System Management**



Temp Sensing
Power/Current Sensing
Predictive Fan Control
BMC Lite/BMC Companion
GPIO Expansion

### **Storage & Compute Infrastructure**



IO Controllers and Host Bus Adapters
RAID IO Controllers and RAID Adapters
SAS Expanders
PCIe Switches, Fabrics, and Retimers
Tachyon IO Controllers
Universal Backplane Management

### **Storage End Point Solutions**





Flashtec<sup>™</sup> SSD Controllers Performance & Mainstream Flashtec NVRAM Drives

#### **Power Conversion**



Digital Server Power Supply
AC-DC, DC-DC, PFC
DEPA Controllers
Power Modules
PWM/POL Controllers
PMIC
LDO/Switchers

#### Security/Authentication



Data Protection/Encryption
Hardware Root of Trust
Secure Boot/Firmware Update
Secure Provisioning
Authenticated Devices
Secure Debug

### **Timing & Sync Solutions**



Network Synchronization NTP & PTP Grand Masters PCle® Gen4/5 Generators/Buffers Atomic Clocks GNSS Security Crystal & MEMS Oscillators

# **Memory Infrastructure**





Smart Memory Controllers CXL/GenZ Controllers & Bridges

### **Data Center Interconnect**



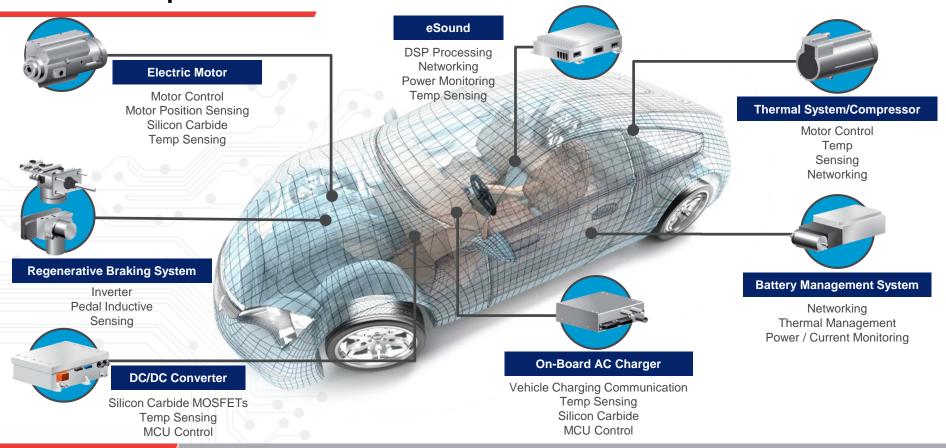


Terabit Ethernet PHYs & OTN Processors w/ Security & 400GE/FlexE

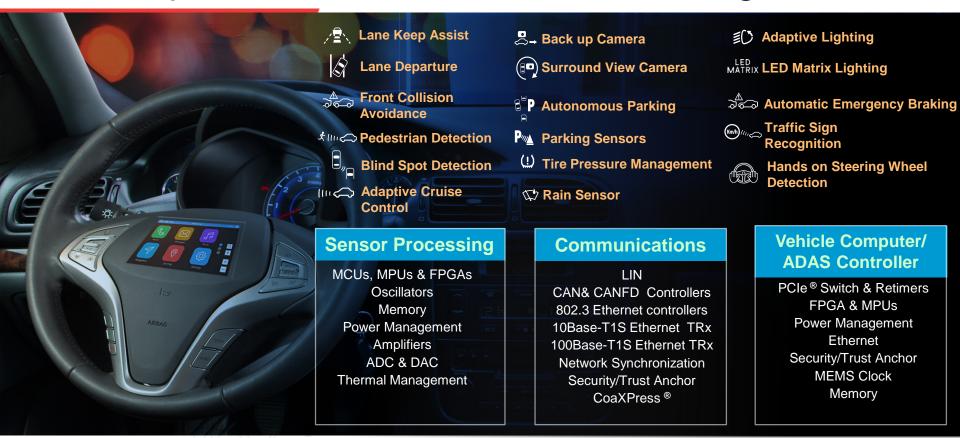


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# Microchip in Electric Vehicles



# Microchip in ADAS & Autonomous Driving





# Microchip in Al/Machine Learning

# **Smart Embedded Vision**

FPGA: Performance / watt MCU: Broad portfolio Analog: Broad portfolio Security: Best in class







Medical Vision

**Physical Security** 

Machine Vision

# **Preventive Maintenance**

MCU: Broad portfolio Analog: Broad portfolio Security: Best in class





Power Grid

HVAC



# **ML Training & Inference**

PCIe® switch: Low latency, high port count Storage controller: Market leading portfolio FPGA: Compute on the Edge Network connectivity: Terabit Ethernet PHYs Analog, Power, Security





Data Center

Automotive

# **Audio, Gesture Recognition and Control**

memBrain™ Silicon IP Audio processing Touch solutions MCU: Broad portfolio Analog: Broad portfolio Security: Best in class







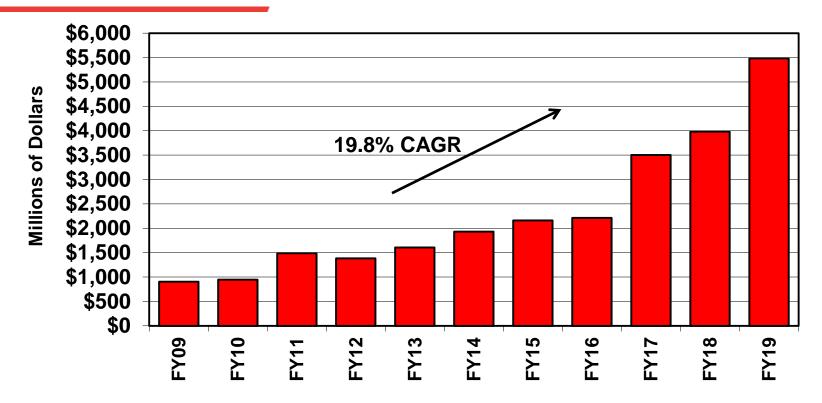
Automotive

Smart City

**Smart Home** 



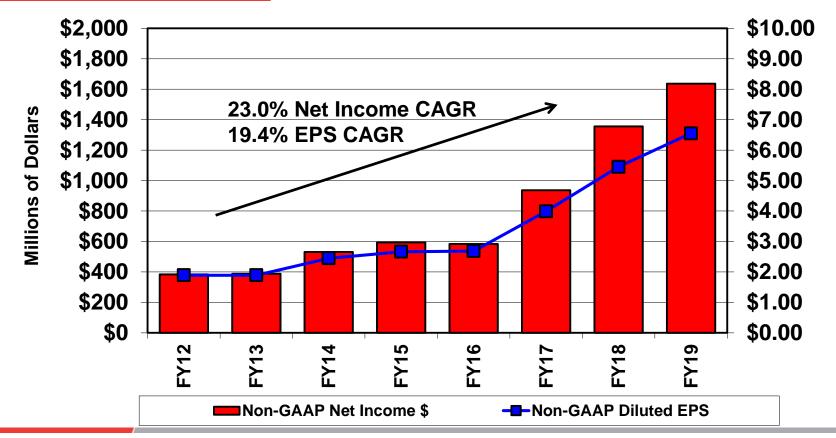
# Annual End Market Demand\*



<sup>\*</sup> End market demand is defined as the net dollar amount of our products, licensing revenue and other services delivered to our direct (non-distributor) customers and by our distributors to their customers.



# Annual Non-GAAP Net Income & Diluted EPS Growth



# Non-GAAP Financial Results, Guidance & Long-Term Model\*

	Actual Results													
	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18	Q1 FY19	Q2 FY19	Q3 FY19	Q4 FY19	Q1 FY20	Q2 FY20
Net Sales	\$844.0	\$873.8	\$881.2	\$902.7	\$972.1	\$1,012.1	\$994.2	\$1,002.3	\$1,216.8	\$1,513.3	\$1,416.0	\$1,329.8	\$1,322.6	\$1,337.8
<b>Gross Profit</b>	\$471.1	\$499.9	\$509.7	\$534.7	\$587.2	\$617.8	\$610.6	\$618.4	\$756.7	\$933.7	\$881.1	\$826.9	\$820.1	\$832.7
Gross Margin	55.8%	57.2%	57.8%	59.2%	60.4%	61.0%	61.4%	61.7%	62.2%	61.7%	62.2%	62.2%	62.0%	62.2%
<b>Operating Expenses</b>	\$240.0	\$233.6	\$220.6	\$213.6	\$222.9	\$227.3	\$218.9	\$222.8	\$283.2	\$354.5	\$351.1	\$342.8	\$341.6	\$341.9
Operating Income	\$231.1	\$266.3	\$289.1	\$321.2	\$364.3	\$390.5	\$391.7	\$395.6	\$473.5	\$579.3	\$530.0	\$484.1	\$478.5	\$490.8
<b>Operating Margin</b>	27.4%	30.5%	32.8%	35.6%	37.5%	38.6%	39.4%	39.5%	38.9%	38.3%	37.4%	36.4%	36.2%	36.7%
Net Income	\$194.0	\$219.6	\$246.5	\$276.9	\$319.1	\$344.1	\$341.2	\$351.3	\$405.8	\$454.6	\$405.6	\$370.4	\$357.6	\$365.7
Diluted EPS	\$0.84	\$0.94	\$1.05	\$1.16	\$1.31	\$1.41	\$1.36	\$1.40	\$1.61	\$1.81	\$1.66	\$1.48	\$1.41	\$1.43
EBITDA	\$264.1	\$298.8	\$321.3	\$356.5	\$395.6	\$422.5	\$425.9	\$429.6	\$537.5	\$574.0	\$556.3	\$544.4	\$537.1	\$540.2

Q3 FY20 Guidance	<b>Updated on 12/3/19</b>	Original from 11/5/19			
Net Sales	\$1,244 - \$1,298	\$1,204 - \$1,311			
Gross Margin %	61.0% - 61.4%	61.0% - 61.4%			
Operating Expense %	26.4% to 27.4%	26.2% to 28.0%			
Operating Margin	33.6% to 35.0%	33.0% to 35.2%			
Diluted EPS	\$1.19 - \$1.30	\$1.12 - \$1.32			

Long Term Model Including Microsemi				
Gross Margin	63.0%			
Operating Expenses	22.5%			
Operating Margin	40.5%			

<sup>\*</sup> Amounts above are reflected in millions of dollars except for diluted EPS and percentages. Microchip does not utilize a GAAP long-term model. All figures are Non-GAAP except for net sales. Figures prior to Q4 FY19 and are measured off of end market demand (instead of GAAP net sales). In Q4 FY19, based on discussions with the SEC, Microchip changed to providing Non-GAAP guidance based on GAAP revenue. Excludes share-based compensation, acquisition related charges, and other items. A reconciliation of our GAAP to non-GAAAP results is available at www.microchip.com.

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# Summary

- A consistent revenue grower with multiple growth drivers across six megatrends of the industry
- High margin business model and shareholder friendly
- Revised guidance to narrow the range and improve the mid point of the net sales and non-GAAP diluted EPS guidance
- Premium long-term non-GAAP financial model of 63% gross margin, 22.5% operating expenses and 40.5% operating income



# Thank You!

