







MICROCHIP



- Net sales for Q2FY18 expected to be up 3% sequentially which would drive Microchip's first one billion dollar net sales quarter.
- Operating profit for Q2FY18 expected to be between 37.5% and 38.25%
- Non GAAP EPS for Q2FY18 expected to be between \$1.33 to \$1.37 per share.
- Business conditions and backlog continue to be strong. Lead times are long but have stabilized at 4 to 20 weeks.
- We expect significant capacity challenges to persist until the middle of calendar year 2018 until lead times return to normal.
- Long-term non-GAAP financial model is now 62.5% gross margin, 22.5% operating expenses and 40% operating profit.
- Introducing Microchip 2.0- Total system solutions- Smart, connected and Secure.



MICROCHIP 1.0

- 1. Consistent growth
- 2. Perennial market share gains
- 3. High margin business model
- 4. Shareholder friendly with consistently increasing dividends and free cash flow
- 5. Successful M&A strategy



Annual Net Sales Growth

	107 c	onsecut	ive qu	arter	s of p	orofi	tabili	ity!		
		U 🗖 Analog	g 🗆 Mem	ory 🗖 l	icensi	ng 🗖 🛛	MMO			
£793	£ ⁴⁹⁵ £ ⁴⁹¹	£1999 £16	· +403	£405	5401	£709	ENT	41 ³	£115	FX171

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Total MCU (8/16/32) Market Share %





Worldwide Microcontroller Market Share

	2003	2008	2009	2010	2012	2014	2015	2016
<u>No.</u>	<u>Rank</u>	<u>Rank</u>	<u>Rank</u>	<u>Rank</u>	<u>Rank</u>	Rank	<u>Rank</u>	<u>Rank</u>
1	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas	Renesas
2	Motorola	NEC	NEC	Freescale	Freescale	Freescale	NXP	NXP
3	NEC	Freescale	Freescale	Samsung	Infineon	ST-Micro	ST-Micro	Microchip
4	Matsushita	Infineon	Samsung 👝	Microchip	Microchip ——	Microchip	Microchip	ST-Micro
5	Infineon	Samsung 📂	Microchip	Atmel	ST-Micro	NXP	Infineon	ТІ
6	Fujitsu 🟳	Microchip –	ті	ті	ТІ	ті	ті	Infineon
7	Toshiba	ST-Micro	Infineon	Infineon	Atmel	Infineon	Atmel	Cypress
8	Microchip	ТІ	ST-Micro	ST-Micro	NXP	Atmel	Cypress	Samsung
9	Samsung	Fujitsu	Fujitsu	Fujitsu	Fujitsu	Spansion	Samsung	CEC Huada
10	ST-Micro	NXP	NXP	NXP	Samsung	Samsung	CEC Huada	Toshiba
11	Atmel	Toshina	Atmel	Toshiba	Toshiba	Cypress	Datang	Si Labs
12	ТІ	Atmel	Toshiba	Denso	Cypress	Toshiba	Toshiba	Denso
13	Sanyo	Panasonic	Panasonic	Cypress	Denso	Denso	Denso	Datang
14	Philips	Denso	Denso	Panasonic	Panasonic	Datang	Si Labs	SH Fudan
15	Intel	Sony	Cypress	Sony	Sony	Si Labs	SHIC	Panasonic
16	Sony	Cypress	Sony	Datang	Si Labs	CEU-Huada	Tongfang	Holtek
17	Micronas	Intel	Datang	JSC Sitronics	CEC Huada	Panasonic	Panasonic	Nuvoton
18	Oki	Micronas	Intel	Si-Labs	Melfas	SHIC	Holtek	Unigroup
19	Sunplus	Winbond	Si-Labs	Intel	JSC	Tongfang	Winbond	Maxim
20	Winbond	Si-Labs	Rohm		INSIDE	Holtek		Nationz

Based on dollar shipment volume 2003-2016, Source: Gartner and Microchip



Analog Yearly Revenue (k\$)

\$1,000,000 -	1																	
\$950,000 -																		_
\$900,000 -																		
\$850,000 -																	-	H
\$800,000 -																	-	H
\$750,000 -																	-	H
\$700,000 -																	-	H
\$650,000 -	<u> </u>																-	H
\$600,000 -																-	-	H
\$550,000 -	+															-	-	H
\$500,000 -																-	-	H
\$450,000 -	+													_		-	-	H
\$400,000 -	+												-	\vdash		-		H
\$350,000 -	+												-	\vdash		-	-	H
\$300,000 -												-		H	H	-		H
\$250,000 -	<u> </u>											-		H	H	-		H
\$200,000 -												-	-	H	H		-	H
\$150,000 -	<u> </u>											-		H	H	-		H
\$100,000 -											-	-	-	H	H		-	H
\$50,000 -							_	_	-			-		H	H	-		H
\$0 -						,					,							-
	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	9 FY10	FY11	FY12	FY13	FY14	4 FY1	5 F	Y16	FY1	7





*Excludes share-based compensation and acquisition-related expenses. A reconciliation of our GAAP to non-GAAAP results is available at www.microchip.com.

(%)



Expanding Our Solutions Through Acquisitions





Microchip 2.0

Be The Very Best Embedded Control Solutions Company Ever





- 1. Total System Solution in Embedded Control
- 2. Leading customer preference to design with our MCUs
- 3. Multiple growth drivers
- 4. Record gross margin target with multiple drivers
- 5. Record low opex target with multiple leverage drivers
- 6. End market mix skewed to Industrial and Automotive
- 7. New LT model with industry leading operating profits



MICROCHIP 2.0

1. Total System Solution in Embedded Control

- 2. Leading customer preference to design with our MCUs
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Keypad



Automotive PEPS System



MICROCHIP



Card Reader







LoRa Gateway





MICROCHIP 2.0

- **1. Total System Solution in Embedded Control**
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Which of the following 8-bit chip families would you consider for your next embedded project?



EE Times embedded

2017 Embedded Markets Study

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Which of the following 16-bit chip families would you consider for your next embedded project?





2017 Embedded Markets Study

es embedded



Which of the following 32-bit chip families would you consider for your next embedded project?

5%		SiLABS Precision32 (ARM)				
5%		Qualcomm (any)	30%			STMicro STM32 (ARM)
4%		Energy Micro EFM32	%	20%		Microchip PIC 32-bit (MIPS)
4%		Microsemi SmartFusion2 SoC FPGA (Cortex-M3)		17%		Xilinx Zyng (with dual ARM Cortex-A9)
4%		Infineon XMC4000 (ARM)		1770		
4%		MD Fusion, Athlon, Sempron, Turion, Opteron, Geode		17%		Freescale i.MX (ARM)
4%		Atmel AT91xx		16%		NXP LPC (ARM)
4%		FreescalePowerQUICC		16%		FreescaleKinetis (ARM/Cortex-M4/M0)
4%		Renesas RH850		10/0		
4%		Freescale PowerPC 55xx		14%		Atmel SAMIXX (ARM)
3%		Microsemi FPGA (Cortex-M1, softcore)		14%		TI Sitara (ARM)
3%		Freescale PowerPC 5xx, 6xx		13%		Intel Atom, Pentium, Celeron, Core 2, Core iX
3%		Intel Itanium		15/0		
3%		Freescale Vybrid (ARM)		12%		Altera (Intel FPGA) SoC-FPGA (with dual ARM Cortex-A9)
2%		Freescale 68K, ColdFire		12%		Arduino
2%		Microsemi SmartFusion SoC FPGA (Cortex-M3)		11%		Altera (Intel FPGA) Nios II (soft core)
2%		IBIVI POWERPC 4XX, 7XX				
2%		Infineon XMC1000 (ARM Cortex-M0)		11%		TTSImpleLink (ARM)*
2%		Marvell Infineon Tricore		11%		TI TM4Cx (ARM)
2%		Xilinx Virtex-5 (with PowerPC 405)		11%		Atmel (AVR32)
1%	f.	Infineon AURIX (TriCore-based)		10%		Atmel AT91xx/ATSAMxx (ARM)
1%		Cirrus Logic EP73xx, EP93xx (ARM)		10/0		
1%		AMD Alchemy (MIPS)		9%		Lypress PSOC 4 ARM Cortex-MU/PSoC 5 ARM Cortex-M3
1%		SPARC (any)		8%		Renesas RX
1%		Xilinx Virtex-4 (with PowerPC 405)		3%	8	Broadcom (any)
1%		Spansion (formerly Fujitsu) FM3 (ARM)		70/		TI (2000 MCU-
1%		Infineon TriCore		/%		11 C2000 MCUS
1%		Infineon TriCore-based 32-bit families AUDO MAX	■ 2017 (N = 617)	%	79	Xilinx MicroBlaze (soft-core)
1%		AMCC PowerPC 4xx	. ,	6	6%	NVIDIA Tegra
4%		Other (please specify)		1		TI Horoulos (ADM)
				0	6%	THEICULES (ARIVI)

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2017 Embedded Markets Study

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What's most important when choosing a microprocessor?

EE

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Which vendor has the best ecosystem for your needs?





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- 1. Microcontroller market growth and share gains
- 2. Analog growth and attach opportunity
- 3. Wireless and Wired Connectivity IoT
- 4. Security
- 5. Automotive Networking, HMI, Access Control, Lighting and Body Electronics
- 6. Technology licensing



Gross Margin Drivers

- 1. Increasing Fab utilization
- 2. Savings from Micrel Fab closure
- 3. Increasing back end plants utilization
- 4. Porting Atmel products to Microchip assembly/test technology
- 5. Transfer of Micrel and Atmel's U.S. test areas to Thailand
- 6. Stable to rising pricing environment
- 7. Richening product mix

Operating expense leverage MICROCHIP **Operating expense leverage**

- 1. Synergy in roadmaps on MCU, analog, wireless and memory
- 2. Convergence of Microchip and Atmel to common process technology platforms
- 3. Synergy in common development of IP libraries
- 4. Synergy in development of tools ecosystem
- 5. Synergy in marketing trade shows, technical conferences, website, training
- 6. Lower incremental opex for sales growth



~ \$4.6B Returned To Shareholders





Revenue by End Market





Industrial (35% of Sales)





Automotive (25% of sales)





Consumer (24% of sales)





Computing (9% of sales)





Communications (5% of sales)





Defense and Aerospace (2% of sales)





Financial Results, Guidance and Long-Term Model

	Actual Results									
	Q1 FY17	Q1 FY17 Q2 FY17 Q3 FY17 Q4 FY17 Q1								
Net Sales	\$844.0	\$873.8	\$881.2	\$902.7	\$972.1					
Gross Profit	\$471.1	\$499.9	\$509.7	\$534.7	\$587.2					
Gross Margin	55.8%	57.2%	57.8%	59.2%	60.4%					
Operating Expen	se \$240.0	\$233.6	\$220.6	\$213.6	\$222.9					
Operating Incom	e \$231.1	\$266.3	\$289.1	\$321.2	\$364.3					
Operating Margin	n 27.4%	30.5%	32.8%	35.6%	37.5%					
Net Income	\$194.0	\$219.6	\$246.5	\$276.9	\$319.1					
Diluted EPS	\$0.84	\$0.94	\$1.05	\$1.16	\$1.31					
EBITDA	\$264.1	\$298.8	\$321.3	\$356.5	\$395.6					
2 FY18 Guidance			Long T	erm Moo	del					
let Sales	\$1	,001.3	Revenu	le Growt	: h 7% ·					
Gross Margin %	60.5% -6	60.75%	Gross	Margin	62.					
Operating Expense	22.5% t	to 23%	Operat	ense 22.						
Operating Margin	37.5% to 3	8.25%	Operat	ing Marc	ain 40.					
Diluted EPS	\$1.33 ·	- \$1.37		<u> </u>						

Microchip does not utilize a GAAP long-term model. All figures in long-term model are non-GAAP. Excludes share-based compensation, acquisition related charges, non-recurring items. A reconciliation of our GAAP to non-GAAAP results is available at www.microchip.com.



Non-GAAP Net Sales





Non-GAAP Gross Profit









Non-GAAP Net Income and Diluted EPS Growth





Free Cash Flow as a % of Revenue



* Run rate for FY18 represent Q1 FY18 actual results multiplied by four. Free cash flow = operating cash flow minus capital expenditures.



EBITDA





EBITDA and Net Leverage



* EBITDA as calculated in accordance with Microchip's Credit Facility. Net leverage excludes 2037 convertible debt, consistent with Credit Facility



Summary

- A consistent revenue grower and market share gainer with multiple growth drivers
- High margin business model and shareholder friendly
- Currently strong business conditions with September quarter revenue guidance expected to be up approximately 3% sequentially and 14.6% year-over-year
- Significant capacity challenges to persist through the middle of calendar year 2018 before lead times are normal.
- Premium long-term non-GAAP financial model to 62.5% gross margin, 22.5% operating expenses and 40% operating income.
- Executing on Microchip 2.0- Total system solutions- Smart, connected and Secure.



Thank You!