



Focus Product Selector Guide

Microcontrollers • Digital Signal Controllers • Analog • Memory • Wireless



Microchip: A Partner in Your Success

Microchip is a leading provider of microcontroller and analog semiconductors, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Offering outstanding technical support along with dependable delivery and quality, Microchip serves over 70,000 customers in more than 65 countries who are designing high-volume embedded control applications in the consumer, automotive, office-automation, communications and industrial-control markets worldwide.

8-bit PIC® Microcontrollers

Based on a powerful RISC core, the PIC microcontroller architecture provides users with an easy migration path from 6 to 100 pins among all families, with little or no code change required. Advanced features include sophisticated timing peripherals, integrated analog-to-digital converters and communications peripherals (Ethernet/I²C™/SPI/USB/CAN ports, LIN USARTs, op amp and digital-to-analog converters). For more information visit: www.microchip.com/8bit.

16-bit PIC Microcontrollers

The 16-bit PIC24 Family is comprised of two sub-families. The PIC24F offers a cost-effective low power step up in performance, memory and peripherals for many applications that are pushing the envelope of 8-bit microcontroller capabilities. For more demanding applications, the PIC24H/E offers up to 70 MIPS performance, up to 150°C operation, more memory and additional peripherals, such as CAN communication modules. For more information visit: www.microchip.com/16bit.

dsPIC® Digital Signal Controllers

The dsPIC family of Digital Signal Controllers (DSCs) features a fully implemented digital signal processor (DSP) engine, with up to 70 MIPS performance, C compiler friendly design and a familiar microcontroller architecture and design environment. The dsPIC 16-bit Flash DSCs provide the industry's highest performance, and have features supporting motor control, digital power conversion, speech and audio, intelligent sensing and general purpose embedded control applications. For more information visit: www.microchip.com/dspic.

32-bit PIC Microcontrollers

The PIC32 family adds more performance and more memory while maintaining pin, peripheral and software compatibility with Microchip's 16-bit MCU/DSC families. The PIC32 family operates at up to 105 DMIPS and offers ample code and data space capabilities with up to 512 KB Flash and 128 KB RAM. For more information visit: www.microchip.com/32bit.

Analog and Interface Products

Microchip's integrated analog technology, peripherals and features are engineered to meet today's demanding design requirements. Our broad spectrum of analog products addresses thermal management, power management, battery management, mixed-signal, linear, interface and safety & security solutions. Our broad portfolio of stand-alone analog and interface devices offers highly integrated solutions that combine various analog functions in space-saving packages and support a variety of bus interfaces. Many of these devices support functionality that enhances the analog features currently available on PIC microcontrollers. For more information visit: www.microchip.com/analog.

RF Front End Products

Microchip's selection of RF front end devices enhance the performance and operating range of wireless products at 2.4 and 5 GHz. SST Power amplifier products provide high linear output power as required for 802.11 (Wi-Fi®) and 802.15.4 (ZigBee®) standards with industry leading efficiency and reliability. Our selection of integrated Front End Modules (FEM), combines the function of power amplifier with switches, Low Noise Amplifier (LNA) and filters into a single space saving package. The FEM reduces board complexity and sizes. For more information visit: www.microchip.com/analog.

Wireless Products

Microchip offers radio-frequency products for adding wireless connectivity to embedded PIC microcontroller and dsPIC DSC-based designs for the following technologies: IEEE 802.15.4/ZigBee, Sub-GHz RF, Bluetooth® and IEEE 802.11/Wi-Fi. For more information visit: www.microchip.com/wireless.

Memory Products

Microchip's broad portfolio of memory devices include Serial EEPROM, Serial SRAM, Serial Flash and Parallel Flash Devices. Our innovative, low-power designs and extensive testing have ensured industry leading robustness and endurance along with best-in-class quality at low costs. For more information visit: www.microchip.com/memory.

Real-Time Clocks

Microchip offers a family of highly integrated, low cost Real-Time Clock/Calendar devices with battery backup capability, digital trimming along with onboard EEPROM and SRAM memory. For more information visit: www.microchip.com/clock.

MOST®

Media Oriented Systems Transport (MOST) is the accepted standard in high-bandwidth automotive infotainment systems. MOST is broadly standardized from the physical layer up to the application level. Various speed grades and physical layers are available. MOST carries A/V streaming, packet, isochronous and control data, has a high flexibility and scalability and is approved to carry DVD and Blu-ray™ content using Digital Transmission Content Protection (DTCP). For more information visit: www.microchip.com/automotivesmsc.

PC System & I/O Controllers

Microchip offers a full line of mobile PC solutions including embedded controllers, keyboard controllers (KBC), mobile I/O controllers and docking products. For more information visit: www.microchip.com/pcsystemscontrollersmsc.

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8-BIT PIC® MICROCONTROLLERS

Product	Released (R) Not Released (NR)	Pins		Memory			Voltage Range	Operating Speed		Analog Sensing & Measurement						Digital								Communication					Monitors		Packages (Designator)	Special Features									
		Total	I/O	Program	Self-Read/Write	Data RAM (B)		Data EE (B)	Maximum Speed	Internal Oscillator	LCD Segments	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	Charge Time Measurement Unit	Op Amp	DAC (5b/8b/9b)	PWM	CCP	ECCP	CWG/COG	NCO	PSMC	CLC	8-bit Timer	16-bit Timer	AUSART	EUSART	PC™/SPI			Ethernet (MAC/PHY)	USB 2.0 Device	CAN	BOR/PBOR	PLVD	SR-Latch	5 Ku Pricing¹		
6-Pin	PIC10F200	R	6	4	BL	0.375 KB 0.25 Kw	-	16	-	2V-5.5V	4 MHz	4 MHz	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Smallest form- factor	
	PIC10F202	R	6	4	BL	0.75 KB 0.50 Kw	-	24	-	2V-5.5V	4 MHz	4 MHz	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Smallest form- factor			
	PIC10F204	R	6	4	BL	0.375 KB 0.25 Kw	-	16	-	2V-5.5V	4 MHz	4 MHz	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Smallest form- factor			
	PIC10F206	R	6	4	BL	0.75 KB 0.50 Kw	-	24	-	2V-5.5V	4 MHz	4 MHz	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Smallest form- factor			
	PIC10F220	R	6	4	BL	0.375 KB 0.25 Kw	-	16	-	2V-5.5V	8 MHz	8 MHz	2	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Smallest form- factor			
	PIC10F222	R	6	4	BL	0.75 KB 0.50 Kw	-	23	-	2V-5.5V	8 MHz	8 MHz	2	2	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Smallest form- factor			
	PIC10F320	R	6	4	MR	0.4375 KB 0.25 Kw	RW	32	-	1.8V-5.5V	16 MHz	16 MHz	3	3	-	-	-	-	2	-	1/0	1	1	2	1	2	1	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Temp*			
	PIC10F322	R	6	4	MR	0.875 KB 0.50 Kw	RW	64	-	1.8V-5.5V	16 MHz	16 MHz	3	3	-	-	-	-	2	-	1/0	1	1	2	1	2	1	-	-	-	-	-	-	-	-	-	PDIP (P), 2 × 3 DFN (MC), SOT-23 (OT)	Temp*			
	PIC12F508	R	8	6	BL	0.75 KB 0.50 Kw	-	25	-	2V-5.5V	4 MHz	4 MHz	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), MSOP (MS), 2 × 3 DFN (MC)			
	PIC12F509	R	8	6	BL	1.5 KB 1 Kw	-	41	-	2V-5.5V	4 MHz	4 MHz	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), MSOP (MS), 2 × 3 DFN (MC)			
8-Pin	PIC12F510	R	8	6	BL	1.5 KB 1 Kw	-	38	-	2V-5.5V	8 MHz	8 MHz	3	3	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), MSOP (MS), 2 × 3 DFN (MC)			
	PIC12F519	R	8	6	BL	1.5 KB 1 Kw	-	41	64	2V-5.5V	8 MHz	8 MHz	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), MSOP (MS), 2 × 3 DFN (MC)	Lowest cost Data EE			
	PIC12F1501	R	8	6	EMR	1.75 KB 1 Kw	RW	64	-	1.8V-5.5V	20 MHz	16 MHz	1	4	-	1	-	-	4	-	1/0	1	1	2	1	2	1	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SO), MSOP (MS), 2 × 3 DFN (MC)	Temp*			
	PIC12F609	R	8	6	MR	1.75 KB 1 Kw	-	64	-	2V-15V	20 MHz	4 MHz	8 MHz	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	BOR	SW0	✓	PDIP (P), SOIC (SN), MSOP (MS), 4 × 4 DFN (MD), 3 × 3 DFN (MF)	
	PIC12F615	R	8	6	MR	1.75 KB 1 Kw	-	64	-	2V-15V	20 MHz	4 MHz	8 MHz	4	4	-	1	-	-	-	1	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), MSOP (MS), 4 × 4 DFN (MD), 3 × 3 DFN (MF)			
	PIC12F617	R	8	6	MR	3.5 KB 2 Kw	RW	128	-	2V-5.5V	20 MHz	8 MHz	8 MHz	4	4	-	1	-	-	1	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), MSOP (MS), 3 × 3 DFN (MF)			
	PIC12F752	R	8	6	MR	1.75 KB 1 Kw	RW	64	-	2V-5.5V	20 MHz	8 MHz	8 MHz	4	4	-	2	-	1/0/0	1	-	0/1	-	3	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 3 × 3 DFN (MF)	HV Option			
	PIC12LF1552	R	8	6	EMR	3.5 KB 2 Kw	RW	256	-	1.8V-3.6V	32 MHz	16 MHz	5	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), MSOP (MS), SOIC (SN), 2 × 3 DFN (MC)	Hardware CVD			
	PIC12F629	R	8	6	MR	1.75 KB 1 Kw	-	64	128	2V-5.5V	20 MHz	4 MHz	4 MHz	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 4 × 4 DFN (MD), 6 × 5 DFN (MF)				
	PIC12F1822	R	8	6	EMR	3.5 KB 2 Kw	RW	128	256	1.8V-5.5V	32 MHz	32 MHz	31 MHz	4	4	-	1	-	-	1	-	-	-	2	1	-	1	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 3 × 3 DFN (MF)	Temp*		
14-Pin	PIC12F675	R	8	6	MR	1.75 KB 1 Kw	-	64	128	2V-5.5V	20 MHz	4 MHz	4 MHz	3	3	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 4 × 4 DFN (MD), 6 × 5 DFN (MF)			
	PIC12F1840	R	8	6	EMR	7 KB 4 Kw	RW	256	256	1.8V-5.5V	32 MHz	32 MHz	31 MHz	4	4	-	1	-	-	1	-	-	-	2	1	-	1	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 6 × 5 DFN (MF)	DSM, Temp*			
	PIC12F635	R	8	6	MR	1.75 KB 1 Kw	-	64	128	2V-5.5V	20 MHz	31 MHz	31 MHz	-	-	-	1	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 4 × 4 DFN (MD)	KeiLoq®			
	PIC12F683	R	8	6	MR	3.5 KB 2 Kw	-	128	256	2V-5.5V	20 MHz	8 MHz	31 MHz	3	3	-	1	-	-	1	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SN), 4 × 4 DFN (MD)				
	PIC16F753	NR	14	12	MR	3.5 KB 2 Kw	RW	128	-	2V-5.5V	20 MHz	4/8 MHz	4/8 MHz	8	8	-	2	-	1	0/0/1	1	1	0/1	-	3	1	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 4 × 4 QFN (ML)	HV Option, Slope compensation			
	PIC16F505	R	14	12	BL	1.5 KB 1 Kw	-	72	-	2V-5.5V	20 MHz	4 MHz	4 MHz	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 3 × 3 QFN (MG)				
14-Pin	PIC16F506	R	14	12	BL	1.5 KB 1 Kw	-	67	-	2V-5.5V	20 MHz	4/8 MHz	4/8 MHz	4	4	-	2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 3 × 3 QFN (MG)				
	PIC16F526	R	14	12	BL	1.5 KB 1 Kw	-	67	64	2V-5.5V	20 MHz	4/8 MHz	4/8 MHz	4	4	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 3 × 3 QFN (MG)	Lowest cost Data EE			
	PIC16F1503	R	14	12	EMR	3.5 KB 2 Kw	RW	128	-	1.8V-5.5V	20 MHz	16 MHz	16 MHz	2	8	-	2	-	-	4	-	1/0	1	1	2	1	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), SSOP (SS), 3 × 3 QFN (MG)	Temp*			
	PIC16F610	R	14	12	MR	1.75 KB 1 Kw	-	64	-	2V-15V	20 MHz	4/8 MHz	4/8 MHz	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 4 × 4 QFN (ML)				
	PIC16F616	R	14	12	MR	3.5 KB 2 Kw	-	128	-	2V-15V	20 MHz	4/8 MHz	4/8 MHz	8	8	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 4 × 4 QFN (ML)				
	PIC16F1823	R	14	12	EMR	3.5 KB 2 Kw	RW	128	256	1.8V-5.5V	32 MHz	32 MHz	31 MHz	8	8	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	PDIP (P), SOIC (SL), TSSOP (ST), 4 × 4 QFN (ML)	Temp*			

Products sorted by pin count followed by pricing.
† Pricing subject to change; please contact your Microchip representative for most current pricing.
‡ Software PLVD implemented via ADC.
* Integrated Temperature Indicator. Reference Application Note AN1333 for implementation.
® eXtreme Low Power variants available.

Product	Pins		Memory		Operating Speed		Analog Sensing & Measurement										Digital								Communication						Monitors		Packages (Designator)	Special Features			
	Released (R) Not Released (NR)	Total	Program	Self-Read/Write	Data RAM (B)	Data EE (B)	Voltage Range	Maximum Speed	Internal Oscillator	LCD Segments	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	Charge Time Measurement Unit	Op Amp	DAC (8b/5b/9b)	CPW	ECPP	CW6/COG	NCO	CLC	8-bit Timer	16-bit Timer	AUSART	PC™/SPI	Ethernet (MAC/PHY)	USB 2.0 Device	CAN	BOR/PBOR	PLVD	SR-Latch			5 ku Pricing†		
14-Pin (Cont.)	PCI16F1824 	R	14	12	EMR	7 KB 4 kW	RW	256	256	1.8V-5.5V	32 MHz 31 kHz	-	8	8	2	-	-	-	2	2	-	-	-	4	1	1	1	-	-	-	BOR	SW0	✓	✓	\$0.84 PDP (P), SOIC (SL), TSSOP (ST), 4 x 4 QFN (ML)	DSM, Temp*	
	PCI16F630	R	14	12	MR	1.75 KB 1 kW	-	64	128	2V-5.5V	20 MHz	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-	-	BOR	-	-	✓	\$0.91 TSSOP (ST), 4 x 4 QFN (ML)	Crystal Free USB		
	PCI16F1454 	R	14	12	EMR	7 KB 4 kW	RW	512	-	1.8V-5.5V	48 MHz 31 kHz	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	✓	-	PBOR	SW	-	✓	\$0.91 SOIC (SL), TSSOP (ST), 4 x 4 QFN (ML)	KeLd.co®		
	PCI16F636	R	14	12	MR	3.5 KB 2 kW	-	128	256	2V-5.5V	20 MHz	-	-	-	2	-	-	-	-	-	-	-	-	1	1	-	-	-	-	BOR	-	-	✓	\$0.92 PDP (P), SOIC (SL), TSSOP (ST), 4 x 4 QFN (ML)	DSM, Temp*		
	PCI16F1825 	R	14	12	EMR	14 KB 8 kW	RW	1024	256	1.8V-5.5V	32 MHz 31 kHz	8	8	8	2	-	-	-	2	2	-	-	-	4	1	1	1	-	-	-	BOR	SW0	✓	✓	\$0.92 PDP (P), SOIC (SL), TSSOP (ST), 4 x 4 QFN (ML)	DSM, Temp*	
	PCI16F676	R	14	12	MR	1.75 KB 1 kW	-	64	128	2V-5.5V	20 MHz	8	8	8	1	-	-	-	-	-	-	-	-	1	1	-	-	-	-	BOR	-	-	✓	\$0.98 PDP (P), SOIC (SL), TSSOP (ST), 4 x 4 QFN (ML)	DSM, Temp*		
	PCI16F684	R	14	12	MR	3.5 KB 2 kW	-	128	256	2V-5.5V	20 MHz	8	8	8	2	-	-	-	-	1	-	-	-	2	1	-	-	-	-	BOR	-	-	✓	\$0.98 TSSOP (ST), 4 x 4 QFN (ML)	Crystal Free USB		
	PCI16F688	R	14	12	MR	7 KB 4 kW	R	256	256	2V-5.5V	20 MHz	8	8	8	2	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	BOR	-	-	✓	\$1.04 PDP (P), SOIC (SL), TSSOP (ST), 4 x 4 QFN (ML)	Crystal Free USB	
	PCI16F1455 	R	14	12	EMR	14 KB 8 kW	RW	1024	-	1.8V-5.5V	48 MHz 31 kHz	5	5	5	2	-	-	2	-	-	-	-	-	2	1	1	1	1	✓	-	PBOR	SW	-	✓	\$1.04 PDP (P), TSSOP (ST), SOIC (SL), 4 x 4 QFN (ML)	call for pricing	
	PCI16F1705 	NR	14	12	EMR	14 KB	RW	1024	-	1.8V-5.5V	32 MHz	12	12	12	2	-	2	0	0	1	-	0	1	-	4	4	1	1	1	-	-	BOR	-	-	✓	\$0.39 PDP (P), SOIC (SO), SSOP (GS)	DSM, Temp*
18-Pin	PCI16F54	R	18	12	BL	0.75 KB 0.50 kW	-	25	-	2V-5.5V	20 MHz	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	\$0.97 QFN (ML)	DSM, Temp*	
	PCI16F1826 	R	18	16	EMR	3.5 KB 2 kW	RW	256	256	1.8V-5.5V	32 MHz	12	12	12	2	-	-	-	-	1	-	-	2	1	1	1	1	-	-	-	BOR	SW0	✓	✓	\$1.04 QFN (ML)	DSM, Temp*	
	PCI16F1827 	R	18	16	EMR	7 KB 4 kW	RW	384	256	1.8V-5.5V	32 MHz 31 kHz	12	12	12	2	-	-	-	2	2	-	-	-	4	1	1	2	-	-	-	BOR	SW0	✓	✓	\$1.09 QFN (ML)	DSM, Temp*	
	PCI16F1847 	R	18	16	EMR	14 KB 8 kW	RW	1024	256	1.8V-5.5V	32 MHz 31 kHz	-	8	8	2	-	-	-	2	2	-	-	-	4	1	1	2	1	2	-	PBOR	SW	✓	✓	\$1.09 QFN (ML), LQFN (MV)	DSM, Temp*	
	PCI16F527	R	20	18	EBL	1.5 KB 1 kW	RW	68	64	2V-5.5V	20 MHz	-	8	8	2	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-	BOR	-	-	-	\$0.49 PDP (P), 4 x 4 QFN (ML), SSOP (SS), SOIC (SO)	Temp*	
	PCI16F1507	R	20	18	EMR	3.5 KB 2 kW	RW	128	-	1.8V-5.5V	16 MHz	-	-	12	-	-	-	-	4	-	-	1	0	1	2	1	-	-	-	-	PBOR	SW	-	✓	\$0.69 PDP (P), SOIC (SO), SSOP, 4 x 4 QFN (ML)	Temp*	
	PCI16F720	R	20	18	MR	3.5 KB 2 kW	RW	128	-	1.8V-5.5V	16 MHz 500 kHz	12	12	-	-	-	-	-	-	1	-	-	-	2	1	1	1	-	-	-	BOR	SW0	-	✓	\$0.77 QFN (ML)	Temp*	
	PCI16F1508 	R	20	18	EMR	7 KB 4 kW	RW	256	-	1.8V-5.5V	16 MHz	2	12	12	2	-	-	-	4	-	-	1	0	1	2	1	1	1	-	-	-	PBOR	SW	-	✓	\$0.77 PDP (P), SOIC (SO), SSOP, 4 x 4 QFN (ML)	Temp*
	PCI16F1509 	R	20	18	EMR	14 KB 8 kW	RW	512	-	1.8V-5.5V	16 MHz	2	12	12	2	-	-	-	4	-	-	1	0	1	2	1	1	1	-	-	-	PBOR	SW	-	✓	\$0.81 PDP (P), SOIC (SO), SSOP, 4 x 4 QFN (ML)	Temp*
	PCI16F721	R	20	18	MR	7 KB 4 kW	RW	256	-	1.8V-5.5V	16 MHz 500 kHz	12	12	-	-	-	-	-	-	1	-	-	-	2	1	1	1	1	-	-	-	BOR	SW0	-	✓	\$0.84 QFN (ML)	Temp*
20-Pin	PCI16F631	R	20	18	MR	1.75 KB 1 kW	R	64	128	2V-5.5V	20 MHz	-	-	-	2	-	-	-	-	-	-	-	-	1	1	-	-	-	-	BOR	SW0	✓	✓	\$0.91 QFN (ML)	DSM, Temp*		
	PCI16F677	R	20	18	MR	3.5 KB 2 kW	R	128	256	2V-5.5V	20 MHz	12	12	12	2	-	-	-	-	-	-	-	-	1	1	-	1	-	-	BOR	SW0	✓	✓	\$0.99 QFN (ML)	DSM, Temp*		
	PCI16F1828 	R	20	18	EMR	7 KB 4 kW	RW	256	256	1.8V-5.5V	32 MHz 31 kHz	12	12	12	2	-	-	-	2	2	-	-	-	4	1	1	1	1	-	-	BOR	SW0	✓	✓	\$0.99 QFN (ML)	DSM, Temp*	
	PCI16F1829 	R	20	18	EMR	14 KB 8 kW	RW	1024	256	1.8V-5.5V	32 MHz 31 kHz	12	12	12	2	-	-	-	2	2	-	-	-	4	1	1	2	1	-	-	BOR	SW0	✓	✓	\$1.06 QFN (ML)	DSM, Temp*	
	PCI16F687	R	20	18	MR	3.5 KB 2 kW	R	128	256	2V-5.5V	20 MHz	12	12	12	2	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	BOR	SW0	✓	✓	\$1.07 QFN (ML)	DSM, Temp*	
	PCI16F785	R	20	18	MR	3.5 KB 2 kW	-	128	256	2V-15V	20 MHz	12	12	12	2	-	-	-	2	1	-	-	-	2	1	-	-	-	-	BOR	SW0	-	✓	\$1.12 QFN (ML)	DSM, Temp*		
	PCI16F685	R	20	18	MR	7 KB 4 kW	R	256	256	2V-5.5V	20 MHz	12	12	12	2	-	-	-	-	-	-	-	-	2	1	-	-	-	-	BOR	SW0	✓	✓	\$1.13 QFN (ML)	DSM, Temp*		
	PCI16F689	R	20	18	MR	7 KB 4 kW	R	256	256	2V-5.5V	20 MHz	12	12	12	2	-	-	-	-	-	-	-	-	2	1	1	1	1	-	-	BOR	SW0	✓	✓	\$1.13 QFN (ML)	DSM, Temp*	
	PCI16F690	R	20	18	MR	7 KB 4 kW	R	256	256	2V-5.5V	20 MHz	12	12	12	2	-	-	-	-	-	-	-	-	1	1	1	1	1	-	-	BOR	SW0	✓	✓	\$1.13 QFN (ML)	DSM, Temp*	
	PCI16F691	R	20	18	MR	7 KB 4 kW	R	256	256	2V-5.5V	20 MHz	12	12	12	2	-	-	-	-	-	-	-	-	1	1	1	1	1	-	-	BOR	SW0	✓	✓	\$1.13 QFN (ML)	DSM, Temp*	

Products sorted by pin count followed by pricing.
Pricing subject to change; please contact your Microchip representative for most current pricing.
Software PLVD implemented via ADC.
Integrated Temperature Indicator: Reference Application Note AN1333 for implementation.
2 x eXtreme Low Power variants available.

8-BIT PIC® MICROCONTROLLERS

Product		Pins		Memory		Operating Speed		Analog Sensing & Measurement										Digital						Communication				Monitors		5 Ku Pricing†	Packages (Designator)	Special Features																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
								Self-Read/Write		Data RAM (B)		Data EE (B)		Voltage Range		Maximum Speed		Internal Oscillator		LSD Segments		mTouch™ Channels		8-bit ADC		10-bit ADC							12-bit ADC		Comparators		Charge Time Measurement Unit		Op Amp		DAC (5b/8b/9b)		PWM		CCP		ECSP		CW6/COG		PSMC		CLC		8-bit Timer		16-bit Timer		AUSART		EUSART		PC™/SPI		Ethernet (MAC/PHY)		USB 2.0 Device		CAN		BOR/PBOR		PLVD		SR-Latch		Timer 1 Gate																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Released (R) Not Released (NR)	Total	I/O	Program	Self-Read/Write	Data RAM (B)	Data EE (B)	Voltage Range		Maximum Speed		Internal Oscillator		LSD Segments		mTouch™ Channels		8-bit ADC		10-bit ADC		12-bit ADC		Comparators		Charge Time Measurement Unit		Op Amp		DAC (5b/8b/9b)		PWM		CCP		ECSP		CW6/COG		PSMC		CLC		8-bit Timer		16-bit Timer		AUSART		EUSART		PC™/SPI		Ethernet (MAC/PHY)		USB 2.0 Device		CAN		BOR/PBOR		PLVD		SR-Latch		Timer 1 Gate		5 Ku Pricing†	Packages (Designator)	Special Features																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

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 Software PLVD implemented via ADC.
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 eXtreme Low Power variants available.

8-BIT PIC® MICROCONTROLLERS

Product	Released (R) Not Released (NR)	Pins		Memory			Operating Speed			Analog Sensing & Measurement										Digital						Communication					Monitors		Packages (Designator)	Special Features								
		Total	I/O	Core	Program	Self-Read/Write	Data RAM (B)	Data EE (B)	Voltage Range	Maximum Speed		Internal Oscillator		LCD Segments		8-bit ADC	10-bit ADC	12-bit ADC	Comparators	Charge Time Measurement Unit	Op Amp	DAC (Sb/9b)	PWM	CCP	CWG/COG	NCO	PSC	8-bit Timer	16-bit Timer	Communication					Monitors							
										SR-Latch	Timer 1 Gate	AUSART	EUSART	PC/M ² /SPI	Ethernet (MAC/PHY)															USB 2.0 Device	CAN	PBOR			PVID							
PIC18F23K22	R	28	25	PIC18	8 KB 4 Kw	RW	512	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	-	17	-	17	-	2	✓	-	-	-	-	-	1	1	-	-	3	-	2	2	-	-	PBOR	✓	✓	\$1.41	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML), 4 x 4 UQFN (MW)	Temp*			
PIC18F24J10	R	28	21	PIC18	16 KB 8 Kw	RW	1024	-	2V-3.6V	40 MHz	32 kHz	-	10	-	10	-	2	-	-	-	-	-	-	2	-	-	-	-	2	-	-	1	1	-	-	BOR	-	-	\$1.44	SPDIP (SP), SOIC (SO), QFN (ML)		
PIC16F1788	NR	28	25	ENR	28 KB 16 Kw	RW	2K	256	1.8V-5.5V	32 MHz	32 MHz	-	11	-	11	4	-	2	3/1/0	-	-	-	3	-	-	-	4	2	1	-	1	1	-	-	BOR	SW0	-	✓	\$1.44	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Temp*	
PIC18F24K22	R	28	25	PIC18	16 KB 8 Kw	RW	768	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	-	17	-	17	-	2	✓	-	-	-	-	-	1	1	-	-	3	-	2	2	-	-	PBOR	✓	✓	\$1.48	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML), 4 x 4 UQFN (MW)	Temp*			
PIC16F886	R	28	25	MR	14 KB 8 Kw	RW	368	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	-	11	-	11	-	2	-	-	-	-	-	-	2	-	-	-	-	-	-	1	1	-	-	BOR	SW0	-	✓	\$1.49	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Temp*	
PIC18F25J10	R	28	21	PIC18	32 KB 16 Kw	RW	1024	-	2V-3.6V	40 MHz	32 kHz	-	10	-	10	-	2	-	-	-	-	-	-	2	-	-	-	-	-	-	1	1	-	-	BOR	-	-	\$1.58	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Temp*		
PIC18F25K22	R	28	25	PIC18	32 KB 16 Kw	RW	1536	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	-	17	-	17	-	2	✓	-	-	-	-	-	2	3	-	-	-	4	2	2	2	-	-	PBOR	✓	✓	\$1.62	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Temp*		
PIC18F24J11	R	28	21	PIC18	16 KB 8 Kw	RW	3800	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	2	✓	-	-	-	-	-	2	-	-	-	-	3	-	2	2	-	-	BOR	SW0	-	-	\$1.65	SPDIP (SP), SOIC (SO), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F24K50	R	28	25	PIC18	16 KB 8 Kw	RW	2K	256	1.8V-5.5V	48 MHz	48 MHz	-	14	-	14	-	2	✓	-	-	-	-	1	1	-	-	-	-	2	-	-	1	1	-	-	BOR	-	-	\$1.65	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Temp*	
PIC18F25K20	R	28	25	PIC18	64 KB 32 Kw	RW	3936	1024	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	-	11	-	11	-	2	-	-	-	-	-	1	1	-	-	-	-	3	-	1	1	-	-	PBOR	✓	-	✓	\$1.65	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Temp*	
PIC18F25K50	R	28	25	PIC18	16 KB 16 Kw	RW	2K	256	1.8V-5.5V	48 MHz	48 MHz	-	14	-	14	-	2	✓	-	-	-	-	1	1	-	-	-	-	2	-	-	1	1	-	-	BOR	-	-	\$1.76	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Crystal Free USB	
PIC18F25J11	R	28	21	PIC18	32 KB 16 Kw	RW	3800	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	2	✓	-	-	-	-	-	2	-	-	-	-	3	-	2	2	-	-	BOR	SW0	-	-	\$1.79	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F24J50	R	28	22	PIC18	16 KB 8 Kw	RW	3800	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	2	✓	-	-	-	-	-	2	-	-	-	-	2	3	-	2	2	-	-	BOR	SW0	-	-	\$1.86	SPDIP (SP), SOIC (SO), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode
PIC18F25K22	R	28	25	PIC18	64 KB 32 Kw	RW	3896	1024	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	-	17	-	17	-	2	✓	-	-	-	-	2	3	-	-	-	3	4	-	2	2	-	-	PBOR	✓	✓	\$1.92	SPDIP (SP), SOIC (SO), SSOP (SS), 6 x 6 QFN (ML)	Temp*		
PIC18F25K80	R	28	24	PIC18	32 KB 16 Kw	RW	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	-	8	-	8	-	2	✓	-	-	-	-	4	1	-	-	-	2	3	-	2	1	-	-	PBOR	✓	-	-	\$1.93	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Deep Sleep Mode	
PIC18F25J50	R	28	22	PIC18	32 KB 16 Kw	RW	3800	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	2	✓	-	-	-	-	2	-	-	-	-	2	3	-	2	2	-	-	BOR	SW0	-	-	\$2.00	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F26J11	R	28	21	PIC18	64 KB 32 Kw	RW	3800	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	2	✓	-	-	-	-	2	-	-	-	-	2	3	-	2	2	-	-	BOR	SW0	-	-	\$2.07	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F25K80	R	28	24	PIC18	64 KB 32 Kw	RW	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	-	8	-	8	-	2	✓	-	-	-	-	4	1	-	-	-	2	3	-	2	1	-	-	PBOR	✓	-	-	\$2.21	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Deep Sleep Mode	
PIC18F26J13	R	28	23	PIC18	64 KB 32 Kw	RW	3808	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	3	✓	-	-	-	-	7	3	-	-	-	4	4	-	2	2	-	-	BOR	✓	-	-	\$2.24	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	SPI w/ DMA	
PIC18F26J50	R	28	22	PIC18	64 KB 32 Kw	RW	3800	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	2	✓	-	-	-	-	-	4	1	-	-	2	3	-	2	2	-	-	BOR	SW0	-	-	\$2.28	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F26J53	R	28	22	PIC18	64 KB 32 Kw	RW	3808	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	3	✓	-	-	-	-	7	3	-	-	-	4	4	-	2	2	-	-	BOR	✓	-	-	\$2.45	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	SPI w/ DMA	
PIC18F27J13	R	28	23	PIC18	128 KB 64 Kw	RW	3808	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	3	✓	-	-	-	-	7	3	-	-	-	4	4	-	2	2	-	-	BOR	✓	-	-	\$2.48	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	SPI w/ DMA	
PIC18F27J53	R	28	22	PIC18	128 KB 64 Kw	RW	3808	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	10	-	10	-	3	✓	-	-	-	-	7	3	-	-	-	4	4	-	2	2	-	-	BOR	✓	-	-	\$2.69	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	SPI w/ DMA	
PIC16F1718	NR	28	25	ENR	28 KB	RW	2048	-	1.8V-5.5V	32 MHz	32 MHz	-	17	-	17	-	2	-	2	1/1/0	2	2	0	0/1	1	-	4	4	1	-	1	1	-	-	BOR	-	✓	call for pricing	PDIP (P), SOIC (SO), SSOP (SS), UQFN 4 x 4 (MW), QFN 6 x 6 (ML)	Temp*		
PIC16F559	R	40	32	BL	3 KB 2 Kw	-	134	-	2V-5.5V	20 MHz	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	\$0.85	PDIP (P), TQFP (PT)	Integrated LCD Driver, Temp*		
PIC16LF1904	R	40	36	ENR	7 KB 4 Kw	RW	256	-	1.8V-3.6V	20 MHz	16 MHz	-	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	\$1.19	PDIP (P), TQFP (PT), 5 x 5 UQFN (MW)	Integrated LCD Driver, Temp*	
PIC16LF1907	R	40	36	ENR	14 KB	RW	512	-	1.8V-3.6V	20 MHz	16 MHz	-	14	-	14	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	\$1.25	PDIP (P), TQFP (PT), 5 x 5 UQFN (MW)	Temp*	
PIC16F1517	R	40	36	ENR	14 KB	RW	512	-	1.8V-5.5V	20 MHz	16 MHz	-	28	-	28	-	-	-	-	-	-	-	2	-	-	-	-	2	1	-	1	1	-	-	PBOR	SW	-	✓	\$1.32	PDIP (P), TQFP (PT), 5 x 5 UQFN (MW)	Temp*	
PIC16F1519	R	40	36	ENR	28 KB 16 Kw	RW	1024	-	1.8V-5.5V	20 MHz	16 MHz	-	28	-	28	-	-	-	-	-	-	-	2	-	-	-	-	2	1	-	1	1	-	-	PBOR	SW	-	✓	\$1.37	PDIP (P), TQFP (PT), 5 x 5 UQFN (MW)	Temp*	
PIC16F724	R	40	36	MR	7 KB	RW	192	-	1.8V-5.5V	20 MHz	16 MHz	-	16	14	-	-	-	-	-	-	-	-	2	-	-	-	-	2	1	-	1	1	-	-	BOR	SW0	-	✓	\$1.40	PDIP (P), TQFP (PT), 8 x 8 QFN (ML), 5 x 5 UQFN (MW)	Temp*	
PIC16F1934	R	40	36	ENR	7 KB 4 Kw	RW	256	256	1.8V-5.5V	32 MHz	32 MHz	-	96	16	-	14	-	2	-	-	-	-	2	3	-	-	-	4	1	-	1	1	-	-	PBOR	SW0	✓	✓	\$1.47	PDIP (P), TQFP (PT), 8 x 8 QFN (ML), 5 x 5 UQFN (MW)	Temp*	
PIC18F43K20	R	40	36	PIC18	8 KB 4 Kw	RW	512	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	-	14	-	14	-	2	-	-	-	-	-	1	1	-	-	-	-	1	3	-	1	1	-	-	BOR	✓	-	-	\$1.47	PDIP (P), TQFP (PT), 8 x 8 QFN (ML), 5 x 5 UQFN (MW)	Temp*

Products sorted by pin count followed by pricing.
† Pricing subject to change; please contact your Microchip representative for most current pricing.

‡ Software PVID implemented via ADC.

* Integrated Temperature Indicator. Reference Application Note AN1333 for Implementation.

 eXtreme Low Power variants available.

8-BIT PIC® MICROCONTROLLERS																																										
Product	Released (R) Not Released (NR)	Pins		Memory		Operating Speed				Analog Sensing & Measurement				Digital								Communication				Monitors		Packages (Designator)	Special Features													
		Total	I/O	Core	Program	Self-Read/Write	Data RAM (B)	Data EE (B)	Voltage Range	Maximum Speed	Internal Oscillator	LCD Segments	mTouch™ Channels	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	Charge Time Measurement Unit	Op Amp	DAC (sb/8b/9b)	PWM	CCP	CWG/COG	NCO	PSMC	CLC	8-bit Timer			AUSART	PC™/SPI	Ethernet (MAC/PHY)	BOR/PBOR	PLVD	SR-Latch	Timer 1 Gate						
PIC16F727 	R	40	36	MR	14 KB 8 KB	RW	368	-	1.8V-5.5V	20 MHz	16 MHz	-	16	14	-	-	-	-	-	-	-	-	2	-	-	-	-	2	1	1	1	1	-	-	BOR	SW0	-	✓	\$1.54	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC16F1784 	R	40	36	EMR	7 KB 4 KB	RW	512	256	1.8V-5.5V	32 MHz	32 MHz	-	-	-	-	14	4	-	3	0/1/0	-	3	-	-	-	3	-	3	-	1	1	1	1	-	-	BOR	SW0	-	✓	\$1.54	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*
PIC16F1937 	R	40	36	EMR	14 KB 8 KB	RW	512	256	1.8V-5.5V	32 MHz	32 MHz	96	16	-	14	2	-	-	-	-	-	2	3	-	-	-	4	1	1	1	1	1	-	-	PBOR	SW0	✓	✓	\$1.54	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC18F44K20 	R	40	36	PC18	16 KB 8 KB	RW	768	256	1.8V-3.6V	64 MHz	16 MHz	31 kHz	14	-	14	-	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	PBOR	✓	-	-	\$1.54	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC16F1787 	R	40	36	EMR	14 KB 8 KB	RW	1024	256	1.8V-5.5V	32 MHz	32 MHz	32 MHz	-	-	-	14	4	-	3	0/1/0	-	3	-	-	-	3	-	3	-	1	1	1	1	-	-	BOR	SW0	-	✓	\$1.61	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*
PIC16F1939 	R	40	36	EMR	28 KB 16 KB	RW	1024	256	1.8V-5.5V	32 MHz	32 MHz	96	16	-	14	2	-	-	-	-	-	2	3	-	-	-	4	1	1	1	1	1	-	-	PBOR	SW0	✓	✓	\$1.61	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC18F45K20 	R	40	36	PC18	32 KB 16 KB	RW	1536	256	1.8V-3.6V	64 MHz	16 MHz	31 kHz	14	-	14	-	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	PBOR	✓	-	-	\$1.61	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC16F884 	R	40	36	MR	7 KB 4 KB	RW	256	256	2V-5.5V	20 MHz	20 MHz	8 MHz 31 kHz	14	-	14	-	2	-	-	-	-	2	-	-	-	-	2	1	1	1	1	1	-	-	BOR	SW0	✓	✓	\$1.63	PDP (P), TOPP (PT), 8×8 QFN (ML)	Temp*	
PIC18F44J10 	R	40	32	PC18	16 KB 8 KB	RW	1024	-	2V-3.6V	40 MHz	40 MHz	31 kHz	13	-	13	-	2	-	-	-	-	2	-	-	-	-	1	2	1	1	1	1	-	-	BOR	-	-	-	\$1.67	PDP (P), TOPP (PT), QFN (ML)	Temp*	
PIC18F43K22 	R	40	36	PC18	8 KB 4 KB	RW	512	256	1.8V-5.5V	64 MHz	64 MHz	31 kHz	28	-	28	-	2	✓	-	-	-	2	✓	-	-	-	1	1	-	1	1	1	1	-	-	PBOR	P	P	P	\$1.68	SPDIP (SP), SOIC (SO), SSOP (SS), 6×6 QFN (ML), 4×4 UQFN (MW)	Temp*
PIC18F1789 	NR	40	36	EMR	28 KB 16 KB	RW	2K	256	1.8V-5.5V	32 MHz	32 MHz	-	14	-	-	14	4	-	3	3/1/0	-	3	-	-	-	4	2	1	1	1	1	1	-	-	BOR	-	-	-	✓	\$1.68	SPDIP (SP), SOIC (SO), SSOP (SS), 6×6 QFN (ML), 4×4 UQFN (MW)	Temp*
PIC18F44K22 	R	40	36	PC18	16 KB 8 KB	RW	768	256	1.8V-5.5V	64 MHz	16 MHz	31 kHz	28	-	28	-	2	✓	-	-	-	2	✓	-	-	-	1	1	-	1	1	1	1	-	-	PBOR	P	P	P	\$1.75	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*
PIC16F887 	R	40	36	MR	14 KB 8 KB	RW	368	256	2V-5.5V	20 MHz	20 MHz	8 MHz 31 kHz	14	-	14	-	2	-	-	-	-	2	-	-	-	-	2	1	1	1	1	1	-	-	BOR	SW0	✓	✓	\$1.78	PDP (P), TOPP (PT), 8×8 QFN (ML)	Temp*	
PIC18F45J10 	R	40	32	PC18	32 KB 16 KB	RW	1024	-	2V-3.6V	40 MHz	40 MHz	31 kHz	13	-	13	-	2	-	-	-	-	2	-	-	-	-	1	2	1	1	1	1	-	-	BOR	-	-	-	\$1.81	PDP (P), TOPP (PT), QFN (ML)	Temp*	
PIC18F46K20 	R	40	36	PC18	64 KB 32 KB	RW	3936	1024	1.8V-3.6V	64 MHz	16 MHz	31 kHz	14	-	14	-	2	-	-	-	-	2	-	-	-	-	1	1	-	1	1	1	1	-	-	PBOR	✓	-	-	\$1.82	PDP (P), TOPP (PT), 8×8 QFN (ML)	Temp*
PIC18F45K22 	R	40	36	PC18	32 KB 16 KB	RW	1536	256	1.8V-5.5V	64 MHz	16 MHz	31 kHz	28	-	28	-	2	✓	-	-	-	2	✓	-	-	-	3	4	2	2	2	2	-	-	PBOR	✓	✓	✓	\$1.89	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC18F44J11 	R	40	34	PC18	16 KB 8 KB	RW	3800	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	2	✓	-	-	-	2	-	-	-	-	2	3	2	2	2	2	-	-	BOR	SW0	-	-	\$1.95	TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F45K50 	R	40	36	PC18	32 KB 16 KB	RW	2K	256	1.8V-5.5V	48 MHz	48 MHz	48 MHz	25	-	25	-	2	✓	-	-	-	2	-	-	-	-	1	1	-	2	2	1	1	-	-	BOR	-	-	-	\$1.99	PDP (P), TOPP (PT), 5 × 5 UQFN (MW)	Crystal Free USB
PIC18F45J11 	R	40	34	PC18	32 KB 16 KB	RW	3800	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	2	✓	-	-	-	2	-	-	-	-	2	3	2	2	2	2	-	-	BOR	SW0	-	-	\$2.09	TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F44J50 	R	40	34	PC18	16 KB 8 KB	RW	3800	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	2	✓	-	-	-	2	-	-	-	-	2	3	2	2	2	2	-	-	BOR	SW0	-	-	\$2.16	TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F45K80 	R	40	35	PC18	32 KB 16 KB	RW	3648	1024	1.8V-5.5V	64 MHz	64 MHz	31 kHz	11	-	-	11	2	✓	-	-	-	2	-	-	-	-	4	1	-	2	2	1	-	-	PBOR	✓	✓	✓	\$2.17	PDP (P), TOPP (PT), QFN (ML)	Deep Sleep Mode	
PIC18F46K22 	R	40	36	PC18	64 KB 32 KB	RW	3896	1024	1.8V-5.5V	64 MHz	16 MHz	31 kHz	28	-	28	-	2	✓	-	-	-	2	-	-	-	-	2	2	-	2	2	2	-	-	PBOR	✓	✓	✓	\$2.17	PDP (P), TOPP (PT), 8×8 QFN (ML), 5×5 UQFN (MW)	Temp*	
PIC18F45J50 	R	40	34	PC18	32 KB 16 KB	RW	3800	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	2	✓	-	-	-	2	-	-	-	-	2	3	2	2	2	2	-	-	BOR	SW0	-	-	\$2.30	TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F46J11 	R	40	34	PC18	64 KB 32 KB	RW	3800	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	2	✓	-	-	-	2	-	-	-	-	2	3	2	2	2	2	-	-	BOR	SW0	-	-	\$2.37	PDP (P), TOPP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F46K80 	R	44	35	PC18	64 KB 32 KB	RW	3648	1024	1.8V-5.5V	64 MHz	64 MHz	31 kHz	11	-	-	11	2	✓	-	-	-	2	-	-	-	-	4	1	-	2	2	1	-	-	PBOR	✓	-	-	\$2.45	PDP (P), TOPP (PT), QFN (ML)	Deep Sleep Mode	
PIC18F46J13 	R	44	34	PC18	64 KB 32 KB	RW	3808	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	3	✓	-	-	-	2	-	-	-	-	7	3	-	2	2	2	-	-	BOR	✓	-	-	\$2.52	TQFP (PT), QFN (ML)	SPI w/DMA	
PIC18F46J50 	R	40	34	PC18	64 KB 32 KB	RW	3800	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	2	✓	-	-	-	2	-	-	-	-	2	3	2	2	2	2	-	-	BOR	SW0	-	-	\$2.58	PDP (P), TOPP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode	
PIC18F46J53 	R	44	33	PC18	64 KB 32 KB	RW	3808	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	3	✓	-	-	-	2	-	-	-	-	4	1	-	2	2	2	-	-	BOR	✓	-	-	\$2.73	TQFP (PT), QFN (ML)	Integrated LCD Driver, SPI w/DMA	
PIC18F47J13 	R	44	34	PC18	128 KB 64 KB	RW	3808	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	3	✓	-	-	-	2	-	-	-	-	4	1	-	2	2	2	-	-	BOR	✓	-	-	\$2.76	TQFP (PT), QFN (ML)	SPI w/DMA	
PIC18F47J53 	R	44	33	PC18	128 KB 64 KB	RW	3808	-	2V-3.6V	48 MHz	48 MHz	8 MHz 31 kHz	13	-	13	-	3	✓	-	-	-	2	-	-	-	-	4	1	-	2	2	2	-	-	BOR	✓	-	-	\$2.97	TQFP (PT), QFN (ML)	Integrated LCD Driver, SPI w/DMA	
PIC16F1719 	NR	40	36	EMR	28 KB	RW	2048	-	1.8V-5.5V	32 MHz	32 MHz	32 MHz	28	-	28	-	2	-	-	3	1/1/0	2	2	0	0/1	1	4	4	1	1	1	1	-	-	BOR	-	-	✓	call for pricing	PDP (P), TOPP (PT), 5×5 UQFN (MW)		

40/44-Pin (Cont.)

Products sorted by pin count followed by pricing.
 † Pricing subject to change; please contact your Microchip representative for most current pricing.
 ‡ Software PLVD implemented via ADC.
 * Integrated Temperature Indicator. Reference Application Note AN1333 for Implementation.
 ‡ eXtreme Low Power variants available.

8-BIT PIC® MICROCONTROLLERS

Product		Pins		Memory			Operating Speed		Analog Sensing & Measurement							Digital				Communication				Monitors		Packages (Designator)	Special Features													
				Program	Self-Read/Write	Data EE (B)	Voltage Range	Maximum Speed	Internal Oscillator	LCD Segments	mTouch™ Channels	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	Charge Time Measurement Unit	Op Amp	DAC (5b/8b/9b)	PWM	CCP	CW6/COG	NCO	CLC					8-bit Timer	16-bit Timer	AUSART	EUSART	PC™/SPI	Ethernet (MAC/PHY)	USB 2.0 Device	CAN	BOR/PBOR	PLVD	SR-Latch	5 Ku Pricing†	
PIC16F1526	R	64	54	EMR	14 KB 8 KW	RW	768	-	1.8V-5.5V	20 MHz	16 MHz	-	30	-	30	-	-	-	-	-	10	-	-	-	6	3	-	2	2	-	-	PBOR	SW0	-	✓	\$1.47	TQFP (PT), QFN (MR)	Temp*		
	R	64	54	EMR	28 KB 16 KW	RW	1536	-	1.8V-5.5V	20 MHz	16 MHz	-	30	-	30	-	-	-	-	-	10	-	-	-	6	3	-	2	2	-	-	PBOR	SW0	-	✓	\$1.54	TQFP (PT), QFN (MR)	Temp*		
	R	64	53	EMR	14 KB 8 KW	RW	512	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	184	17	-	17	-	3	-	-	-	2	3	-	-	4	1	-	2	2	-	-	BOR	SW0	✓	✓	\$1.75	TQFP (PT), QFN (MR)	Temp*		
	R	64	53	EMR	28 KB 16 KW	RW	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	184	17	-	17	-	3	-	-	-	2	3	-	-	4	1	-	2	2	-	-	BOR	SW0	✓	✓	\$1.82	TQFP (PT), QFN (MR)	Temp*		
	R	64	54	PIC18	8 KB 4 KW	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	-	12	-	12	-	2	-	-	-	2	-	-	-	1	3	1	1	1	-	-	PBOR	SW0	-	-	\$2.20	TQFP (PT)			
	R	64	50	PIC18	32 KB 16 KW	RW	2048	-	2V-3.6V	40 MHz	31 kHz	-	11	-	11	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	-	BOR	✓	-	-	\$2.25	TQFP (PT)			
	R	64	54	PIC18	16 KB 8 KW	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	-	12	-	12	-	2	-	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	SW0	-	-	\$2.27	TQFP (PT)			
	R	64	51	PIC18	8 KB 4 KW	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	132	12	-	12	-	2	-	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	✓	-	-	\$2.35	TQFP (PT)	Integrated LCD Driver		
	R	64	54	PIC18	32 KB 16 KW	RW	2048	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	-	12	-	12	-	2	-	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	SW0	-	-	\$2.37	TQFP (PT)			
	PIC18F65J94	R	64	51	PIC18	32 KB 16 KW	RW	4096	-	2V-3.6V	64 MHz	64 MHz	224	24	-	16	3	✓	-	-	-	✓	7	3	-	-	4	4	-	4	2	-	✓	BOR	-	-	✓	\$2.38	QFN (MR), TQFP (PT)	USB & LCD
	PIC18F65K22	R	64	53	PIC18	32 KB 16 KW	RW	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	-	16	-	-	16	3	✓	-	-	-	5	3	-	-	4	4	-	2	2	-	-	BOR	✓	-	-	\$2.39	TQFP (PT), QFN (MR)	
	PIC18F64J90	R	64	51	PIC18	16 KB 8 KW	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	132	12	-	12	-	2	-	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	✓	-	-	\$2.41	TQFP (PT)	Integrated LCD Driver	
	PIC18F66J10	R	64	50	PIC18	64 KB 32 KW	RW	2048	-	2V-3.6V	40 MHz	31 kHz	-	11	-	11	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	-	BOR	✓	-	-	\$2.49	TQFP (PT)		
	PIC18F65J90	R	64	50	PIC18	32 KB 16 KW	RW	2048	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	132	12	-	12	-	2	-	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	✓	-	-	\$2.52	TQFP (PT)	Integrated LCD Driver	
	PIC18F65K90	R	64	53	PIC18	32 KB 16 KW	RW	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	132	16	-	-	16	3	✓	-	-	-	5	3	-	-	4	4	-	2	2	-	-	BOR	✓	-	-	\$2.53	TQFP (PT), QFN (MR)	Integrated LCD Driver
	PIC18F65J50	R	64	49	PIC18	32 KB 16 KW	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	8	-	8	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	✓	BOR	✓	-	-	\$2.63	TQFP (PT)		
PIC18F66J11	R	64	50	PIC18	64 KB 32 KW	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	11	-	11	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	-	BOR	✓	-	-	\$2.63	TQFP (PT)			
PIC18F66J94	R	64	51	PIC18	64 KB 32 KW	RW	4096	-	2V-3.6V	64 MHz	64 MHz	224	24	-	16	3	✓	-	-	-	✓	7	3	-	-	4	4	-	4	2	-	✓	BOR	-	-	✓	\$2.69	QFN (MR), TQFP (PT)	USB & LCD	
PIC18F66J93	R	64	51	PIC18	64 KB 32 KW	RW	3900	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	-	-	12	2	✓	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	✓	-	-	\$2.70	TQFP (PT)	Integrated LCD Driver, RTCC		
PIC18F65K80	R	64	54	PIC18	32 KB 16 KW	RW	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	-	11	-	-	11	2	✓	-	-	4	1	-	-	2	3	-	2	1	-	-	PBOR	✓	-	-	\$2.70	TQFP (PT), QFN (MR)	Deep Sleep Mode		
PIC18F66K22	R	64	53	PIC18	64 KB 32 KW	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	-	16	-	-	16	3	✓	-	-	7	3	-	-	6	5	-	2	2	-	-	BOR	✓	-	-	\$2.70	TQFP (PT), QFN (MR)			
PIC18F67J10	R	64	50	PIC18	128 KB 64 KW	RW	3936	-	2V-3.6V	40 MHz	31 kHz	-	11	-	11	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	-	BOR	✓	-	-	\$2.77	TQFP (PT)			
PIC18F66K90	R	64	53	PIC18	64 KB 32 KW	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	132	16	-	-	16	3	✓	-	-	7	3	-	-	6	5	-	2	2	-	-	BOR	✓	-	-	\$2.84	TQFP (PT), QFN (MR)	Integrated LCD Driver		
PIC18F66J50	R	64	49	PIC18	64 KB 32 KW	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	8	-	8	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	✓	BOR	✓	-	-	\$2.90	TQFP (PT)			
PIC18F67J11	R	64	50	PIC18	128 KB 64 KW	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	11	-	11	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	-	BOR	✓	-	-	\$2.93	TQFP (PT)			
PIC18F67J94	R	64	51	PIC18	128 KB 64 KW	RW	4096	-	2V-3.6V	64 MHz	64 MHz	224	24	-	16	3	✓	-	-	-	✓	7	3	-	-	4	4	-	4	2	-	✓	BOR	-	-	✓	\$2.93	QFN (MR), TQFP (PT)	USB & LCD	
PIC18F67K22	R	64	53	PIC18	128 KB 64 KW	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	-	16	-	-	16	3	✓	-	-	7	3	-	-	6	5	-	2	2	-	-	BOR	✓	-	-	\$2.94	TQFP (PT), QFN (MR)			
PIC18F66K90	R	64	54	PIC18	64 KB 32 KW	RW	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	-	11	-	-	11	2	✓	-	-	4	1	-	-	2	3	-	2	1	-	-	✓	PBOR	✓	-	-	\$2.98	TQFP (PT), QFN (MR)	Deep Sleep Mode	
PIC18F67J93	R	64	51	PIC18	128 KB 64 KW	RW	3900	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	-	-	12	2	✓	-	-	2	-	-	-	1	3	1	1	1	-	-	BOR	✓	-	-	\$3.00	TQFP (PT)	Integrated LCD Driver, RTCC		
PIC18F67K90	R	64	53	PIC18	128 KB 64 KW	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	132	16	-	-	16	3	✓	-	-	7	3	-	-	6	5	-	2	2	-	-	BOR	✓	-	-	\$3.08	TQFP (PT), QFN (MR)	Integrated LCD Driver		
PIC18F67J50	R	64	49	PIC18	128 KB 64 KW	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	8	-	8	-	2	-	-	-	2	3	-	-	2	3	-	2	2	-	✓	BOR	✓	-	-	\$3.19	TQFP (PT)			

Products sorted by pin count followed by pricing.

† Pricing subject to change; please contact your Microchip representative for most current pricing.

‡ Software PLVD implemented via ADC.

* Integrated Temperature Indicator. Reference Application Note AN1333 for Implementation.

 eXtreme Low Power variants available.

8-BIT PIC® MICROCONTROLLERS

Product	Released (R) Not Released (NR)	Pins		Memory		Operating Speed		Analog Sensing & Measurement										Digital				Communication						Monitors		Timer 1 Gate	5 ku Pricing†	Packages (Designator)	Special Features									
		Total	I/O	Core	Program	Self-Read/Write	Data RAM (B)	Data EE (B)	Voltage Range	Maximum Speed	Internal Oscillator	LCD Segments	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	Charge Time Measurement Unit	Op Amp	DAC (5b/8b)	PWM	CCP	CWG/COG	NCO	CLC	8-bit Timer	16-bit Timer	AUSART	EUSART	FC™/SPI					Ethernet (MAC/PHY)	USB 2.0 Device	CAN	BOR/PBOR	PLVD	SR-Latch			
PIC18F8311	R	80	70	PIC18	8 KB 4 Kw	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	-	12	-	12	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	SW0	-	-	TQFP (PT)		
PIC18F8510	R	80	66	PIC18	32 KB 16 Kw	RW	2048	-	2V-3.6V	40 MHz	31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)		
PIC18F8411	R	80	70	PIC18	16 KB 8 Kw	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	-	12	-	12	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	SW0	-	-	TQFP (PT)		
PIC18F8390	R	80	66	PIC18	8 KB 4 Kw	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	192	12	-	12	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver	
PIC18F8511	R	80	70	PIC18	32 KB 16 Kw	RW	2048	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	-	12	-	12	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	SW0	-	-	TQFP (PT)		
PIC18F85J94	R	80	67	PIC18	32 KB 16 Kw	RW	4096	-	2V-3.6V	64 MHz	64 MHz	352	24	-	24	3	✓	-	-	✓	7	3	-	-	-	-	4	4	-	4	2	2	✓	-	-	-	BOR	-	-	-	TQFP (PT)	USB & LCD
PIC18F85K22	R	80	69	PIC18	32 KB 16 Kw	RW	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	24	-	24	3	✓	-	-	-	-	5	3	-	-	-	-	4	4	-	4	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	
PIC18F8490	R	80	66	PIC18	16 KB 8 Kw	RW	1024	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	192	12	-	12	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver	
PIC18F8610	R	80	66	PIC18	64 KB 32 Kw	RW	2048	-	2V-3.6V	40 MHz	31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)		
PIC18F8590	R	80	66	PIC18	32 KB 16 Kw	RW	2048	-	2V-3.6V	40 MHz	8 MHz, 31 kHz	192	12	-	12	2	-	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver	
PIC18F85K90	R	80	69	PIC18	32 KB 16 Kw	RW	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	192	24	-	24	3	✓	-	-	-	5	3	-	-	-	-	4	4	-	4	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver
PIC18F85J50	R	80	65	PIC18	32 KB 16 Kw	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	12	-	12	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)		
PIC18F8611	R	80	66	PIC18	64 KB 32 Kw	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)		
PIC18F86J94	R	80	67	PIC18	64 KB 32 Kw	RW	4096	-	2V-3.6V	64 MHz	64 MHz	352	24	-	24	3	✓	-	-	✓	7	3	-	-	-	-	4	4	-	4	2	2	✓	-	-	-	BOR	-	-	-	TQFP (PT)	USB & LCD
PIC18F86J93	R	80	67	PIC18	64 KB 32 Kw	RW	3900	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	192	12	-	12	2	✓	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver, RTCC	
PIC18F86K22	R	80	69	PIC18	32 KB 16 Kw	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	24	-	24	3	✓	-	-	-	-	7	3	-	-	-	6	5	-	6	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)		
PIC18F87J10	R	80	66	PIC18	128 KB 64 Kw	RW	3936	-	2V-3.6V	40 MHz	31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver, RTCC	
PIC18F86K90	R	80	69	PIC18	64 KB 32 Kw	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	192	24	-	24	3	✓	-	-	-	7	3	-	-	-	6	5	-	6	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver	
PIC18F86J50	R	80	65	PIC18	64 KB 32 Kw	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	12	-	12	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	✓	-	BOR	✓	-	-	TQFP (PT)		
PIC18F87J11	R	80	66	PIC18	128 KB 64 Kw	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)		
PIC18F87J94	R	80	67	PIC18	128 KB 64 Kw	RW	4096	-	2V-3.6V	64 MHz	64 MHz	352	24	-	24	3	✓	-	-	✓	7	3	-	-	-	-	4	4	-	4	2	2	✓	-	-	-	BOR	-	-	-	TQFP (PT)	USB & LCD
PIC18F87K22	R	80	69	PIC18	128 KB 64 Kw	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	24	-	24	3	✓	-	-	-	-	7	3	-	-	-	-	6	5	-	6	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	
PIC18F87J93	R	80	67	PIC18	128 KB 64 Kw	RW	3900	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	192	12	-	12	2	✓	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver, RTCC	
PIC18F87K90	R	80	69	PIC18	128 KB 64 Kw	RW	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	192	24	-	24	3	✓	-	-	-	7	3	-	-	-	6	5	-	6	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated LCD Driver	
PIC18F87J50	R	80	65	PIC18	128 KB 64 Kw	RW	3904	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	-	12	-	12	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	✓	-	BOR	✓	-	-	TQFP (PT)		
PIC18F86J60	R	80	55	PIC18	64 KB 32 Kw	RW	3808	-	2V-3.6V	42 MHz	31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated MAC, 10 Base T PHY	
PIC18F87J60	R	80	55	PIC18	128 KB 64 Kw	RW	3808	-	2V-3.6V	42 MHz	32 kHz, 31 kHz	-	15	-	15	2	-	-	-	-	2	3	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated MAC, 10 Base T PHY	
PIC18F86J72	R	80	51	PIC18	64 KB 32 Kw	RW	3923	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	-	12	2	✓	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	2 x 24-bit ADC, RTCC	
PIC18F87J72	R	80	51	PIC18	128 KB 64 Kw	RW	3923	-	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	-	12	2	✓	-	-	-	2	-	-	-	-	1	3	1	1	1	1	-	-	-	-	BOR	✓	-	-	TQFP (PT)	2 x 24-bit ADC, RTCC	
PIC18F95J94	R	100	85	PIC18	32 KB 16 Kw	RW	4096	-	2V-3.6V	64 MHz	64 MHz	480	24	-	24	3	✓	-	-	✓	7	3	-	-	-	-	4	4	-	4	2	2	-	-	✓	-	BOR	-	-	-	TQFP (PT/PF)	USB & LCD
PIC18F96J94	R	100	85	PIC18	64 KB 32 Kw	RW	4096	-	2V-3.6V	64 MHz	64 MHz	480	24	-	24	3	✓	-	-	✓	7	3	-	-	-	-	4	4	-	4	2	2	-	-	✓	-	BOR	-	-	-	TQFP (PT/PF)	USB & LCD
PIC18F97J94	R	100	85	PIC18	128 KB 64 Kw	RW	4096	-	2V-3.6V	64 MHz	64 MHz	480	24	-	24	3	✓	-	-	✓	7	3	-	-	-	-	4	4	-	4	2	2	-	-	✓	-	BOR	-	-	-	TQFP (PT/PF)	USB & LCD
PIC18F96J60	R	100	70	PIC18	64 KB 32 Kw	RW	3808	-	2V-3.6V	42 MHz	31 kHz	-	16	-	16	2	-	-	-	-	2	3	-	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT)	Integrated MAC, 10 Base T PHY
PIC18F97J60	R	100	70	PIC18	128 KB 64 Kw	RW	3808	-	2V-3.6V	42 MHz	31 kHz	-	16	-	16	2	-	-	-	-	2	3	-	-	-	-	2	3	-	2	2	2	-	-	-	-	BOR	✓	-	-	TQFP (PT), LQFP (PL)	Integrated MAC, 10 Base T PHY

Products sorted by pin count followed by pricing.
† Pricing subject to change; please contact your Microchip representative for most current pricing.
◊ Software PLVD implemented via ADC.
* Integrated Temperature Indicator. Reference Application Note AN1333 for implementation.
⚡ Extreme Low Power variants available.

16-BIT PIC® MICROCONTROLLERS (PIC24F)																													
Product	Released (R) Not Released (NR)	I/O Pins	Memory			Operating Speed			Analog Sensing & Measurement					Communication			Monitors	Packages (Designator)											
			Core	Program (KB)	Data RAM (B)	EEPROM	DMA #Ch	Voltage Range	Maximum MIPS	Internal Oscillator	Charge Time Measurement Unit	10-bit ADC	1100/500 KSPS	Comparators	LCD Segments	Graphics Controller			Output Compare/PWM	16-bit Timer ²	Digital Communication	USB 2.0 (Peripheral, Host, OTC)	PMP	RTCC/CRC	PPS	5 ku Pricing ¹			
14-Pin	PIC24F04KL100 	R	12	PIC24	4	512	AN1095 ¹¹	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	-	-	1	-	-	2	2	2	1 UART, 1 SPI/IC TM (MSSP)	-	-	-	\$1.06	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), TSSOP (ST)		
	PIC24F04KL200 	R	12	PIC24	4	512	AN1095 ¹¹	-	1.8V3-6V	16	8 MHz, 32 kHz	✓	7	-	2	-	-	1	1	3	1 UART, 1 SPI, 1 IC	-	-	-	\$1.16	BOR, POR, WDT, Deep Sleep, XLP	SPDIP (SP), TSSOP (ST)		
	PIC24F08KL200 	R	12	PIC24	8	512	AN1095 ¹¹	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	7	-	1	-	-	2	2	2	1 UART, 1 SPI/IC (MSSP)	-	-	-	\$1.25	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), TSSOP (ST)		
	PIC24F08KL101 	NR	18	PIC24	8	1024	512	-	1.8V-5.5V	16	8 MHz, 32kHz	✓	-	16	1	-	-	5	5	11	1 UART, 1 SPI/IC (MSSP)	-	✓	-	\$1.08	BOR, HLVD, POR, WDT, OST, XLP	PDP (P), SOIC (SO)		
	PIC24F04KL101 	R	17	PIC24	4	512	AN1095 ¹¹	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	-	-	1	-	-	2	2	2	1 UART, 1 SPI/IC (MSSP)	-	-	-	\$1.15	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ)		
20-Pin	PIC24F04KA201 	R	18	PIC24	4	512	AN1095 ¹¹	-	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	-	2	-	1	1	1	3	1 UART, 1 SPI, 1 IC	-	-	-	\$1.25	BOR, POR, WDT, Deep Sleep, XLP	PDP (P), SOIC (SO), SSOP (SS), QFN (MQL)		
	PIC24F08KL201 	R	17	PIC24	8	512	AN1095 ¹¹	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	12	-	1	-	2	2	2	2	1 UART, 1 SPI/IC (MSSP)	-	-	-	\$1.30	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ)		
	PIC24F08KL301 	R	18	PIC24	8	1024	256	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	-	2	-	2	-	6	3	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.27	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ)		
	PIC24F08KL401 	R	18	PIC24	8	1024	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	12	-	2	-	2	6	3	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.36	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ)		
	PIC24F16KL401 	R	18	PIC24	16	1024	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	12	-	2	-	2	6	3	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.43	BOR, HLVD, POR, PWRT, WDT, XLP	PDP (P), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ)		
	PIC24F08KA101 	R	18	PIC24	8	1536	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	-	2	-	2	-	1	1	3	2 UART, 1 SPI, 1 IC	-	✓	-	\$1.44	BOR, POR, WDT, Deep Sleep, XLP	PDP (P), SOIC (SO), SSOP (SS), QFN (MQL)	
	PIC24F16KA101 	R	18	PIC24	16	1536	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	-	2	-	2	-	1	1	3	2 UART, 1 SPI, 1 IC	-	✓	-	\$1.51	BOR, POR, WDT, Deep Sleep, XLP	PDP (P), SOIC (SO), SSOP (SS), QFN (MQL)	
	PIC24F132MC101 	R	15	PIC24	32	2048	AN1095 ¹¹	-	3V-3.6V	16	7.37 MHz, 32 kHz	✓	6	-	3	-	8	3	5	1	3	1 UART, 1 SPI, 1 IC	-	✓	-	\$1.68	BOR, POR, WDT	PDP (P), SOIC (SO), SSOP (SS), QFN (MQL)	
	PIC24F116MC101 	R	15	PIC24	16	1024	AN1095 ¹¹	-	3V-3.6V	16	7.37 MHz, 32 kHz	✓	4	-	3	-	8	3	3	5	1	3	1 UART, 1 SPI, 1 IC	-	✓	-	\$1.73	BOR, POR, WDT	PDP (P), SOIC (SO), SSOP (SS), QFN (MQL)
	PIC24F16KA301 	R	18	PIC24	16	2048	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	9	3	5	2	3	3	5	2	2 UART, 2 SPI, 2 IC	-	✓	-	\$1.86	PWRT, HLVD, POR, OST, WDT	SPDIP (SP), SSOP (SS), SOIC (SO)	
28-Pin	PIC24F32KA301 	R	18	PIC24	32	2048	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	9	3	5	2	3	3	5	2	2 UART, 2 SPI, 2 IC	-	✓	-	\$2.00	PWRT, HLVD, POR, OST, WDT	SPDIP (SP), SSOP (SS), SOIC (SO)	
	PIC24F08KL302 	R	24	PIC24	8	1024	256	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	-	2	-	3	2	6	3	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.32	BOR, HLVD, POR, PWRT, WDT, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ), 6 x 6 QFN (ML)		
	PIC24F08KL402 	R	24	PIC24	8	1024	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	12	-	2	-	3	6	3	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.40	BOR, HLVD, POR, PWRT, WDT, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ), 6 x 6 QFN (ML)		
	PIC24F16KL402 	R	24	PIC24	16	1024	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	-	12	-	2	-	2	6	3	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.47	BOR, HLVD, POR, PWRT, WDT, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), 5 x 5 QFN (MQ), 6 x 6 QFN (ML)		
	PIC24F08KA102 	R	24	PIC24	8	1536	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	-	2	-	2	1	1	3	2	2 UART, 1 SPI, 1 IC	-	✓	-	\$1.51	BOR, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
	PIC24F16KA102 	R	24	PIC24	16	1536	512	-	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	-	2	-	2	1	1	3	2	2 UART, 1 SPI, 1 IC	-	✓	-	\$1.58	BOR, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
	PIC24F116MC102 	R	21	PIC24	16	1024	AN1095 ¹¹	-	3V-3.6V	16	7.37 MHz, 32 kHz	✓	6	-	3	-	8	3	3	3	1	3	1 UART, 1 SPI, 1 IC	-	✓	-	\$1.68	BOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML), TLA (TL)
	PIC24F132MC102 	R	21	PIC24	32	2048	AN1095 ¹¹	-	3V-3.6V	16	7.37 MHz, 32 kHz	✓	4	-	3	-	8	3	3	3	1	3	1 UART, 1 SPI, 1 IC	-	✓	-	\$1.73	BOR, POR, WDT	PDP (P), SOIC (SO), SSOP (SS), QFN (MQL), VTLA (TL)
	PIC24F16KA202 	R	21	PIC24	16	4096	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	-	10	-	2	-	5	5	5	5	2	2 UART, 2 SPI, 2 IC	-	✓	✓	\$1.74	BOR, LVD, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
	PIC24F08KL102 	NR	24	PIC24	8	1024	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	19	1	-	-	5	5	11	1	3	1 UART, 1 SPI/IC (MSSP)	-	-	-	\$1.75	BOR, HLVD, POR, WDT, OST, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL)
	PIC24F16KA101 	NR	24	PIC24	16	1024	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	19	1	-	-	5	5	11	1	3	1 UART, 1 SPI/IC (MSSP)	-	-	-	\$1.82	BOR, HLVD, POR, WDT, OST, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL)
	PIC24F08KL202 	NR	24	PIC24	8	2048	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	19	3	-	-	5	5	11	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.82	BOR, HLVD, POR, WDT, OST, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL)	
	PIC24F16KA202 	NR	24	PIC24	16	2048	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	19	3	-	-	5	5	11	2	2 UART, 2 SPI/IC (MSSP)	-	-	-	\$1.89	BOR, HLVD, POR, WDT, OST, XLP	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL)	
	PIC24F132GA002 	R	21	PIC24	32	8192	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	-	10	-	2	-	-	5	5	5	2	2 UART, 2 SPI, 2 IC	-	✓	✓	\$2.06	BOR, LVD, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
	PIC24F16KA302 	R	24	PIC24	16	2048	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	10	3	-	-	3	3	5	2	2 UART, 2 SPI, 2 IC	-	-	-	\$2.06	PWRT, HLVD, POR, OST, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
28-Pin	PIC24F32KA302 	R	24	PIC24	32	2048	512	-	1.8V-5.5V	16	8 MHz, 32 kHz	✓	-	10	3	-	-	3	3	5	2	2 UART, 2 SPI, 2 IC	-	-	-	\$2.20	PWRT, HLVD, POR, OST, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
	PIC24F132GA102 	R	21	PIC24	32	8192	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	✓	10	-	3	-	-	5	5	5	2	2 UART, 2 SPI, 2 IC	-	✓	✓	\$2.23	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
	PIC24F132GB002 	R	19	PIC24	32	8192	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	✓	9	-	3	-	-	5	5	5	2	2 UART, 2 SPI, 2 IC	✓	✓	✓	\$2.44	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
	PIC24F16GA002 	R	21	PIC24	64	8192	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	-	10	-	2	-	-	5	5	5	2	2 UART, 2 SPI, 2 IC	-	✓	✓	\$2.48	BOR, LVD, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (ML)	
	PIC24F16GA102 	R	21	PIC24	64	8192	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	✓	10	-	3	-	-	5	5	5	2	2 UART, 2 SPI, 2 IC	-	✓	✓	\$2.65	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
PIC24F16GB002 	R	19	PIC24	64	8192	AN1095 ¹¹	-	2V-3.6V	16	8 MHz, 32 kHz	✓	9	-	3	-	-	5	5	5	2	2 UART, 2 SPI, 2 IC	✓	✓	✓	\$2.86	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)		

* Parts available with High Temperature Options (150°C).

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

Note 2: Two 16-bit timers can be concatenated to form a 32-bit timer.

Products sorted by pin count followed by pricing.

† Pricing subject to change; please contact your Microchip representative for most current pricing.

16-BIT PIC® MICROCONTROLLERS (PIC24F)

Product	Released (R) Not Released (NR)	Memory			Operating Speed			Analog Sensing & Measurement				Communication			PPS	5 Ku Pricing†	Monitors		Packages (Designator)							
		Core	EEPROM		Voltage Range	Internal Oscillator		Charge Time	Measurement Unit	10-bit ADC	10/12-bit ADC	Comparators	LCD Segments	Graphics Controller			Output Compare/PWM	16-bit Timer ⁽²⁾		Communication		System Mgmt. Features				
			Program (KB)	Data RAM (B)		DMA #Ch	Maximum MIPS													USB 2.0 (Peripheral, Host, OTG)						
44-Pin																										
PIC24FJ16GA004	R	35	PIC24	16	4096	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	13	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C ^(M)	-	✓	✓	\$1.93	BOR, LVD, POR, WDT	TQFP (PT), QFN (ML)	
PIC24FJ32MC104	R	35	PIC24	32	2048	AN1095 ⁽¹⁾	-	3V~3.6V	16	7.37 MHz, 32 kHz	✓	14	-	3	-	8	3	5	1 UART, 1 SPI, 1 I ² C	-	✓	✓	\$2.02	BOR POR, WDT	TQFP (PT), TLA, QFN (ML)	
PIC24FJ16KM104	NR	38	PIC24	16	1024	512	-	1.8V~5.5V	16	8 MHz, 32 kHz	✓	-	22	1	-	5	5	11	1 UART, 1 SPI/I ² C (MSSP)	-	-	-	\$2.06	BOR, HLVD, POR, WDT, OST, XLP	TQFP, QFN, UQFN	
PIC24F08KM204	NR	38	PIC24	8	2048	512	-	1.8V~5.5V	16	8 MHz, 32 kHz	✓	-	22	3	-	5	5	11	2 UART, 2 SPI/I ² C (MSSP)	-	✓	-	\$2.06	BOR, HLVD, POR, WDT, OST, XLP	TQFP, QFN, UQFN	
PIC24F16KM204	NR	38	PIC24	16	2048	512	-	1.8V~5.5V	16	8 MHz, 32 kHz	✓	-	22	3	-	5	5	11	2 UART, 2 SPI/I ² C (MSSP)	-	✓	-	\$2.13	BOR, HLVD, POR, WDT, OST, XLP	TQFP, QFN, UQFN	
PIC24FJ32GA004	R	35	PIC24	32	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	13	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	✓	\$2.30	BOR, LVD, POR, WDT	TQFP (PT), QFN (ML)	
PIC24F16KA304	R	38	PIC24	16	2048	512	-	1.8V~5.5V	16	8 MHz, 32 kHz	✓	-	16	3	-	3	3	5	2 UART, 2 SPI, 2 I ² C	-	✓	-	\$2.30	PMWT, HLVD, POR, OST, WDT	TQFP (PT), QFN (ML), UQFN (MV)	
PIC24FJ32KA104	R	35	PIC24	32	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	13	-	3	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	✓	\$2.44	BOR, LVD, POR, WDT, Deep Sleep, XLP	TQFP (PT), QFN (ML)	
PIC24F32KA304	R	38	PIC24	32	2048	512	-	1.8V~5.5V	16	8 MHz, 32 kHz	✓	-	16	3	-	3	3	5	2 UART, 2 SPI, 2 I ² C	-	✓	-	\$2.44	PMWT, HLVD, POR, OST, WDT	TQFP (PT), QFN (ML), UQFN (MV)	
PIC24FJ32GB004	R	33	PIC24	32	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	13	-	3	-	5	5	5	2 UART, 2 SPI, 2 I ² C	✓	✓	✓	\$2.65	BOR, LVD, POR, WDT, Deep Sleep, XLP	TQFP (PT), QFN (ML)	
PIC24FJ64GA004	R	35	PIC24	64	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	13	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	✓	\$2.72	BOR, LVD, POR, WDT	TQFP (PT), QFN (ML)	
PIC24FJ64KA104	R	35	PIC24	64	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	13	-	3	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	✓	\$2.86	BOR, LVD, POR, WDT, Deep Sleep, XLP	TQFP (PT), QFN (ML)	
PIC24FJ64GB004	R	33	PIC24	64	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	13	-	3	-	5	5	5	2 UART, 2 SPI, 2 I ² C	✓	✓	✓	\$3.07	BOR, LVD, POR, WDT, Deep Sleep, XLP	TQFP (PT), QFN (ML)	
PIC24FJ64GA306	R	53	PIC24	64	8192	AN1095 ⁽¹⁾	6	2V~3.6V	16	8 MHz, 32 kHz	✓	-	16	3	240	-	7	7	5	4 UART, 2 SPI, 2 I ² C	-	✓	✓	\$2.77	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT), QFN (MR)
PIC24FJ128GA306	R	53	PIC24	128	8192	AN1095 ⁽¹⁾	6	2V~3.6V	16	8 MHz, 32 kHz	✓	-	16	3	240	-	7	7	5	4 UART, 2 SPI, 2 I ² C	-	✓	✓	\$3.00	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT), QFN (MR)
PIC24FJ64GA006	R	53	PIC24	64	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	16	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	-	\$3.05	BOR, POR, WDT	TQFP (PT)	
PIC24FJ64KA106	R	53	PIC24	64	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	\$3.32	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ128GA006	R	53	PIC24	128	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	16	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	-	\$3.35	BOR, POR, WDT	TQFP (PT)	
PIC24FJ128KA106	R	53	PIC24	128	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	\$3.56	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ64GB106	R	52	PIC24	64	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	\$3.64	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ128GB106	R	52	PIC24	128	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	\$3.93	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ256GA106	R	53	PIC24	256	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	\$3.98	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ128GB206	R	52	PIC24	128	98304	AN1095 ⁽¹⁾	-	2.2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	\$4.30	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ128DA106	R	52	PIC24	128	24576	AN1095 ⁽¹⁾	-	2.2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	✓	9	5	4 UART, 3 SPI, 3 I ² C	✓	-	✓	\$4.34	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ256GB106	R	52	PIC24	256	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	\$4.35	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ256GB206	R	52	PIC24	256	98304	AN1095 ⁽¹⁾	-	2.2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	\$4.65	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ256DA106	R	52	PIC24	256	24576	AN1095 ⁽¹⁾	-	2.2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	✓	9	5	4 UART, 3 SPI, 3 I ² C	✓	-	✓	\$4.69	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ128DA206	R	52	PIC24	128	98304	AN1095 ⁽¹⁾	-	2.2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	✓	9	5	4 UART, 3 SPI, 3 I ² C	✓	-	✓	\$4.76	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ256DA206	R	52	PIC24	256	98304	AN1095 ⁽¹⁾	-	2.2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	✓	9	5	4 UART, 3 SPI, 3 I ² C	✓	-	✓	\$5.11	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
PIC24FJ64GA308	R	69	PIC24	64	8192	AN1095 ⁽¹⁾	6	2V~3.6V	16	8 MHz, 32 kHz	✓	-	16	3	368	-	7	7	5	4 UART, 2 SPI, 2 I ² C	-	✓	✓	\$2.98	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT)
PIC24FJ128GA308	R	69	PIC24	128	8192	AN1095 ⁽¹⁾	6	2V~3.6V	16	8 MHz, 32 kHz	✓	-	16	3	368	-	7	7	5	4 UART, 2 SPI, 2 I ² C	-	✓	✓	\$3.23	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT)
PIC24FJ64GA008	R	69	PIC24	64	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	16	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	-	\$3.30	BOR, POR, WDT	TQFP (PT)	
PIC24FJ64KA108	R	69	PIC24	64	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	\$3.58	BOR, LVD, POR, WDT	TQFP (PT)	
PIC24FJ128GA008	R	69	PIC24	128	8192	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	-	16	-	2	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	-	\$3.60	BOR, POR, WDT	TQFP (PT)	
PIC24FJ128KA108	R	69	PIC24	128	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	\$3.82	BOR, LVD, POR, WDT	TQFP (PT)	
PIC24FJ64GB108	R	68	PIC24	64	16384	AN1095 ⁽¹⁾	-	2V~3.6V	16	8 MHz, 32 kHz	✓	16	-	3	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	\$3.91	BOR, LVD, POR, WDT	TQFP (PT)	

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

products sorted by pin count followed by pricing.

Pricing subject to change; please contact your Microchip representative for most current pricing.

16-BIT PIC® MICROCONTROLLERS (PIC24F)

Product	Released (R) Not Released (NR)	I/O Pins	Memory			Operating Speed			Analog Sensing & Measurement					Communication		PPS	5 ku Pricing [†]	Monitors		Packages (Designator)																						
			Core	Data RAM (B)	EEPROM	DMA #Ch	Voltage Range	Maximum MIPS	Internal Oscillator	Charge Time Measurement Unit	10-bit ADC	1100/500 KSPS	Comparators	LCD Segments	Graphics Controller			Input Capture	16-bit Timer ²⁾		Digital Communication		PMP	RTCC/CRC																		
																					Program (KB)					USB 2.0 (Peripheral, Host, OTC)																
80-Pin (Cont.)	PIC24F128GB108	R	68	PIC24	128	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C ^{†M}	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT)												
	PIC24F1256GA108	R	69	PIC24	256	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT)											
	PIC24F1256GB108	R	68	PIC24	256	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT)											
	PIC24F164GA310	R	85	PIC24	64	8192	AN1095 ⁽¹⁾	6	2V-3.6V	✓	-	24	3	480	-	-	7	7	5	4 UART, 2 SPI, 2 I ² C	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)										
100-Pin	PIC24F128GA310	R	85	PIC24	128	8192	AN1095 ⁽¹⁾	6	2V-3.6V	✓	-	24	3	480	-	-	7	7	5	4 UART, 2 SPI, 2 I ² C	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)										
	PIC24F164GA010	R	85	PIC24	64	8192	AN1095 ⁽¹⁾	-	2V-3.6V	-	16	-	2	-	-	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT)									
	PIC24F164GA110	R	85	PIC24	64	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)									
	PIC24F128GA010	R	85	PIC24	128	8192	AN1095 ⁽¹⁾	-	2V-3.6V	-	16	-	2	-	-	5	5	5	2 UART, 2 SPI, 2 I ² C	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT)									
	PIC24F128GA110	R	85	PIC24	128	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)								
	PIC24F164GB110	R	84	PIC24	64	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)							
	PIC24F128GB110	R	84	PIC24	128	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)							
	PIC24F1256GA110	R	85	PIC24	256	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)						
	PIC24F128GB210	R	84	PIC24	128	98304	AN1095 ⁽¹⁾	-	2.2V-3.6V	✓	24	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)					
	PIC24F128DA110	R	84	PIC24	128	24576	AN1095 ⁽¹⁾	-	2.2V-3.6V	✓	24	-	3	-	✓	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)				
	PIC24F1256GB110	R	84	PIC24	256	16384	AN1095 ⁽¹⁾	-	2V-3.6V	✓	16	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)			
	PIC24F1256GB210	R	84	PIC24	256	98304	AN1095 ⁽¹⁾	-	2.2V-3.6V	✓	24	-	3	-	-	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)		
	PIC24F1256DA110	R	84	PIC24	256	24576	AN1095 ⁽¹⁾	-	2.2V-3.6V	✓	24	-	3	-	✓	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)		
	PIC24F128DA210	R	84	PIC24	128	98304	AN1095 ⁽¹⁾	-	2.2V-3.6V	✓	24	-	3	-	✓	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)	
	PIC24F1256DA210	R	84	PIC24	256	98304	AN1095 ⁽¹⁾	-	2.2V-3.6V	✓	24	-	3	-	✓	9	9	5	4 UART, 3 SPI, 3 I ² C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	TQFP (PT), BGA121 (BG)

* Parts available with High Temperature Options (150°C).

† On amp configured as comparator.

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

2: Two 16-bit timers can be concatenated to form a 32-bit timer.

16-BIT PIC® MICROCONTROLLERS (PIC24H/E)

Product	Released (R) Not Released (NR)	I/O Pins	Memory				Operating Speed		Analog Sensing & Measurement						Communication			PPS	RTCC/CRC	5 ku Pricing [†]	Monitors		Packages (Designator)						
			Core	Program (KB)	Data RAM (B)	EEPROM	DMA #Ch	Maximum MIPS	Internal Oscillator		Charge Time Measurement Unit	10-bit ADC	10/12-bit ADC 1100/500 KSPS	Comparators	Op Amps	Output Compare/PWM	Motor Control PWM Ch.							QEI	Input Capture	Digital Communication		FS USB OTG	PMP
18-Pin PIC24HJ128GP201	R	13	PIC24	12	1	AN1095 ⁽¹⁾	-	3V~3.6V	40	7.37 MHz, 32 KHz	-	-	6 ch	-	2	-	4	3	1 UART, 1 SPI, 1 I ² C [†]	-	-	✓	\$2.09	PBOR, POR, WDT	PDIP (P), SOIC(SO)				
PIC24EP32MC202	R	21	PIC24	32	4	AN1095 ⁽¹⁾	4	3V~3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	\$1.89	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)		
PIC24EP32GP202	R	21	PIC24	32	4	AN1095 ⁽¹⁾	4	3V~3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	\$1.89	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)			
PIC24EP64MC202	R	21	PIC24	64	8	AN1095 ⁽¹⁾	4	3V~3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	\$2.45	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)		
PIC24EP64GP202	R	21	PIC24	64	8	AN1095 ⁽¹⁾	4	3V~3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	\$2.45	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)			
PIC24EP128MC202	R	21	PIC24	128	16	AN1095 ⁽¹⁾	4	3V~3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	\$2.66	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)		
PIC24EP128GP202	R	21	PIC24	128	16	AN1095 ⁽¹⁾	4	3V~3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	\$2.66	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)			

* Parts available with High Temperature Options (150°C).

† On amp configured as comparator.

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

2: Two 16-bit timers can be concatenated to form a 32-bit timer.

Products sorted by pin count followed by pricing.

† Pricing subject to change; please contact your Microchip representative for most current pricing.

16-BIT PIC® MICROCONTROLLERS (PIC24H/E)

Product	Released (R) Not Released (NR)	I/O Pins	Memory			Operating Speed		Analog Sensing & Measurement				Communication		PPS	RTCC/CRC	5 ku Pricing [†]	Monitors		Packages (Designator)											
			Core	Program (KB)	Data RAM (B)	EEPROM	DMA #Ch	Maximum MIPS	Internal Oscillator	Charge Time Measurement Unit	10-bit ADC	1100/500 KSPS	Comparators				Op Amps	Output Compare/PWM		Motor Control PWM Ch.	QEI	Input Capture	16-bit Timer ⁽²⁾	Digital Communication	CAN	FS USB OTG	System Mgmt. Features			
28-Pin (Cont.)	PIC24EP256MC202	R	21	PIC24	256	32	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C ^(M)	-	-	✓	✓	\$3.14	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)	
	PIC24EP56GP202	R	21	PIC24	256	32	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.14	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)		
	PIC24EP512MC202	NR	21	PIC24	512	48	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.50	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)	
	PIC24EP512GP202	NR	21	PIC24	512	48	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	6 ch	1+2*	2	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.50	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)		
36-Pin	PIC24EP64MC203	R	25	PIC24	64	8	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	8 ch	1+2*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.52	PBOR, POR, WDT	VTLA (TL)	
	PIC24EP64GP203	R	25	PIC24	64	8	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	8 ch	1+2*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.52	PBOR, POR, WDT	VTLA (TL)		
	PIC24EP32MC203	R	25	PIC24	32	4	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	8 ch	1+2*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$1.96	PBOR, POR, WDT	VTLA (TL)	
	PIC24EP32GP203	R	25	PIC24	32	4	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	8 ch	1+2*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$1.96	PBOR, POR, WDT	VTLA (TL)		
44-Pin	PIC24EP32MC204	R	35	PIC24	32	4	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.03	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)	
	PIC24EP32GP204	R	35	PIC24	32	4	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.03	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)		
	PIC24EP48MC204	R	35	PIC24	48	8	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.59	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)	
	PIC24EP48GP204	R	35	PIC24	48	8	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.59	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)		
64-Pin	PIC24EP128MC204	R	35	PIC24	128	16	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.80	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)	
	PIC24EP128GP204	R	35	PIC24	128	16	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.80	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)		
	PIC24EP256MC204	R	35	PIC24	256	32	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.28	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)	
	PIC24EP256GP204	R	35	PIC24	256	32	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.28	PBOR, POR, WDT	VTLA(TL), QFN(MML), TOFP(PPT)		
100-Pin	PIC24EP512GP204	NR	35	PIC24	512	48	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.64	PBOR, POR, WDT	QFN(MML), TOFP(PPT)	
	PIC24EP512GP206	NR	35	PIC24	512	48	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	9 ch	1+3*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$3.64	PBOR, POR, WDT	QFN(MML), TOFP(PPT)		
	PIC24EP64MC206	R	53	PIC24	64	8	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	16 ch	1+3*	3	10	6	1	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.73	PBOR, POR, WDT	QFN(MML), TOFP(PPT)	
	PIC24EP64GP206	R	53	PIC24	64	8	AN1095 ⁽¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	-	16 ch	1+3*	3	4	-	4	5	2 UART, 2 SPI, 1 I ² C	-	-	✓	✓	\$2.73	PBOR, POR, WDT	QFN(MML), TOFP(PPT)		
144-Pin	PIC24HJ64GP210A	R	85	PIC24	64	8	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	-	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
	PIC24HJ64GP510A	R	85	PIC24	64	8	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	-	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
	PIC24HJ128GP210A	R	85	PIC24	128	16	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	-	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
	PIC24HJ128GP310A	R	85	PIC24	128	16	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	-	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
100-Pin	PIC24HJ128GP510A	R	85	PIC24	128	8	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	-	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
	PIC24HJ256GP210A	R	85	PIC24	256	16	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	-	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
	PIC24HJ256GP610A	R	85	PIC24	256	16	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch, 2 A/D	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	2	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
	PIC24HJ256GP810A	R	85	PIC24	256	16	AN1095 ⁽¹⁾	8	3V-3.6V	40	7.37 MHz, 32 KHz	-	-	32 ch, 2 A/D	-	-	8	-	8	9	2 UART, 2 SPI, 2 I ² C	2	-	-	-	✓	✓	\$3.88	PBOR, POR, WDT	TOFP (PT, PF)
144-Pin	PIC24EP256GP814	R	122	PIC24	280	28	AN1095 ⁽¹⁾	15	3V-3.6V	60	7.37 MHz, 32 KHz	-	-	32 ch, 2 A/D	3	-	16	-	16	9	4 UART, 2 SPI, 2 I ² C	2	✓	✓	✓	✓	\$6.31	PBOR, POR, WDT	TOFP (PT, PF)	
	PIC24EP512GU814	R	122	PIC24	536	28	AN1095 ⁽¹⁾	15	3V-3.6V	60	7.37 MHz, 32 KHz	-	-	32 ch, 2 A/D	3	-	16	-	16	9	4 UART, 2 SPI, 2 I ² C	2	✓	✓	✓	✓	\$6.99	PBOR, POR, WDT	TOFP (PT, PF)	

* Parts available with High Temperature Options (150°C).

† On amp configured as comparator.

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

Note 2: Two 16-bit timers can be concatenated to form a 32-bit timer.

Products sorted by pin count followed by pricing.

‡ Pricing subject to change; please contact your Microchip representative for most current pricing.

dsPIC33 DSC GENERAL PURPOSE AND MOTOR CONTROL FAMILY

Product	Released (R) Not Released (NR)	I/O Pins	Memory			Operating Speed		Analog Sensing & Measurement				Output Compare/PWM		Motor Control PWM Ch	QE1	16-bit Timer ⁽²⁾	Communication		PPS	5 ku Pricing [†]	Monitors		Packages (Designator)		
			Core	Program (KB)	EEPROM	DMA #Ch	Voltage Range	Maximum Speed MIPS	Internal Oscillator	Charge Time Measurement Unit	ADC 10/12-bit kSps	DAC	Comparators				Op Amps	Digital Communication			CAN	FS USB OTG		PMP	RTCC/CRC
20-Pin	dsPIC33FJ16GP01*	R	13	dsPIC	16	1	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	4 ch (10-bit)	-	3	-	2	3	-	✓	✓	✓	BOR, POR, WDT	PDI(P), SOIC(SO), QFN (MQL), SSOP (SS)	
	dsPIC33FJ16MC101*	R	15	dsPIC	16	1	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	4 ch (10-bit)	-	3	-	2	3	6	-	✓	✓	✓	BOR, POR, WDT	PDI(P), SOIC(SO), QFN (MQL), SSOP (SS)
	dsPIC33FJ32GP01*	R	13	dsPIC	32	2	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	6 ch	-	3	-	2	3	-	✓	✓	✓	BOR, POR, WDT	PDI(P), SOIC(SO), QFN (MQL), SSOP (SS)	
	dsPIC33FJ32MC101*	R	15	dsPIC	32	2	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	6 ch	-	3	-	2	3	6	-	✓	✓	✓	BOR, POR, WDT	PDI(P), SOIC (SO), SSOP (SS)
	dsPIC33FJ16GP102*	R	21	dsPIC	16	1	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	6 ch (10-bit)	-	3	-	2	3	-	✓	✓	✓	BOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL), VTLA (TL)	
	dsPIC33FJ16MC102*	R	21	dsPIC	16	1	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	6 ch (10-bit)	-	3	-	2	3	6	-	✓	✓	✓	BOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL), VTLA (TL)
	dsPIC33FJ32GP102*	R	21	dsPIC	32	2	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	8 ch	-	3	-	2	3	-	✓	✓	✓	BOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MQL), VTLA (TL)	
	dsPIC33FJ32MC102*	R	21	dsPIC	32	2	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	8 ch	-	3	-	2	3	6	-	✓	✓	✓	BOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP32GP502*	R	21	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)	
	dsPIC33EP32MC502*	R	21	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
28-Pin	dsPIC33EP64MC202*	R	21	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP64GP502*	R	21	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP64MC502*	R	21	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP128MC202*	R	21	dsPIC	128	16	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP128GP502*	R	21	dsPIC	128	16	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP128MC502*	R	21	dsPIC	128	16	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP256MC502*	R	21	dsPIC	256	32	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP256GP502*	R	21	dsPIC	256	32	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP256MC502*	R	21	dsPIC	256	32	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP512MC202*	NR	21	dsPIC	512	48	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
36-Pin	dsPIC33EP512GP502*	NR	21	dsPIC	512	48	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP512MC502*	NR	21	dsPIC	512	48	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	6 ch	-	1+2†	2	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	SPDIP (SP), SOIC (SO), SSOP (SS), QFN (MM), VTLA (TL)
	dsPIC33EP32MC203*	R	25	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+2†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP32GP503*	R	25	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+2†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP32MC503*	R	25	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+2†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP64MC203*	R	25	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+2†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP64GP503*	R	25	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+2†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP64MC503*	R	25	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+2†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP256MC203*	R	25	dsPIC	256	32	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	8 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	VTLA (TL)
	dsPIC33EP256GP104*	R	35	dsPIC	32	2	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	14 ch	-	3	-	2	3	-	✓	✓	✓	BOR, POR, WDT	TQFP (PT), TLA, QFN (ML)	
44-Pin	dsPIC33FJ32MC104*	R	35	dsPIC	32	2	AN1095 ⁽¹⁾	-	3V-3.6V	16	7.37 MHz, 32 KHz	✓	14 ch	-	3	-	2	3	6	-	✓	✓	✓	BOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP32MC204*	R	35	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP32GP504*	R	35	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP32MC504*	R	35	dsPIC	32	4	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP64MC204*	R	35	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP64GP504*	R	35	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP64MC504*	R	35	dsPIC	64	8	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)
	dsPIC33EP128MC204*	R	35	dsPIC	128	16	AN1095 ⁽¹⁾	-	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1+3†	3	4	4	6	-	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), VTLA (TL), QFN (ML)

* Parts available with High Temperature Options (150°C).
† On amp configured as comparator.
Note 1: See Application Note "AN1095: Emulating Data EEPROM".
Note 2: Two 16-bit timers can be concatenated to form a 32-bit timer.
Products sorted by pin count followed by pricing.
† Pricing subject to change; please contact your Microchip representative for most current pricing.

dsPIC33 DSC GENERAL PURPOSE AND MOTOR CONTROL FAMILY

Product	Released (R) Not Released (NR)	I/O Pins	Memory		Operating Speed		Analog Sensing & Measurement			Communication			Motor Control PWM Ch	QEI	16-bit Timer ²⁾	Monitors		Packages (Designator)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
			Core	Program (KB)	Data RAM (B)	EEPROM	DMA #Ch	Voltage Range	Maximum Speed MIPS	Internal Oscillator	Charge Time Measurement Unit	ADC 10/12-bit 1100/500 ksp/s				DAC	Comparators		Op Amps	Output Compare/PWM	Input Capture	FS USB OTG	PMP	RTCC/CRC	PPS	System Mgmt. Features	5 ku Pricing ¹⁾																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
44-Pin (Cont.)	dsPIC33EP128GP504*	R	35	dsPIC	128	16	ANI095 ¹⁾	4	3V-3.6V	70	7.37 MHz, 32 KHz	✓	9 ch	-	1 + 3#	3	4	4	4	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

* Parts available with High Temperature Options (150°C).
† On amp configured as comparator.
‡ See Application Note "AN1095: Emulating Data EEPROM".
§ Two 16-bit timers can be concatenated to form a 32-bit timer.
Products sorted by pin count followed by pricing.
† Pricing subject to change; please contact your Microchip representative for most current pricing.

Product	Released (R) Not Released (NR)	I/O Pins	Memory			Voltage Range	Maximum Speed MIPS	Operating Speed		ADC 10-bit 2000 ksps (‡ 4000 ksps)	Analog		Comparators		Output Compare/PWM	Input Capture	Power Supply PWM Ch ⁽¹⁾	QEI	Communication		PMP	RTCC	PPS	5 Ku Pricing [†]	Monitors	Packages (Designator)
			Core	Program (KB)	Data RAM (B)			EEPROM	DMA #Ch		Internal Oscillator	DAC	Comparators	Digital Communication					CAN							
dsPIC33FJ06GS001	R	13	dsPIC*	6	256	AN1095 ⁽¹⁾	-	3V-3.6V	40	7.37 MHz, 32 kHz	6 ch	2 x 10-bit	2	-	-	4	-	2	1 UART, 1 SPI, 1 I ² C™	-	-	-	✓	\$1.61	BOR, POR, WDT	PDIP (P), SOIC (SO), SSOP (SS)
dsPIC33FJ06GS101A	R	13	dsPIC	6	256	AN1095 ⁽¹⁾	-	3V-3.6V	40	7.37 MHz, 32 kHz	6 ch	-	-	-	1	4	-	2	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$1.75	BOR, POR, WDT	PDIP (P), SOIC (SO), SSOP (SS)
dsPIC33FJ06GS102A	R	21	dsPIC	6	256	AN1095 ⁽¹⁾	-	3V-3.6V	40	7.37 MHz, 32 kHz	6 ch	-	-	-	1	4	-	2	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$1.95	BOR, POR, WDT	SDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)
dsPIC33FJ06GS202A	R	21	dsPIC	6	1024	AN1095 ⁽¹⁾	-	3V-3.6V	40	7.37 MHz, 32 kHz	6 ch	2 x 10-bit	2	1	1	4	-	2	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$2.06	BOR, POR, WDT	SDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)
dsPIC33FJ09GS302	R	21	dsPIC	9	1024	AN1095 ⁽¹⁾	-	3V-3.6V	40	7.37 MHz, 32 kHz	8 ch	2 x 10-bit	2	1	1	6	-	2	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$2.17	BOR, POR, WDT	SDIP (SP), SOIC (SO), SSOP (SS), QFN (MM)
dsPIC33FJ16GS402*	R	21	dsPIC	16	2048	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	8 ch	-	-	-	2	6	-	3	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$2.52	BOR, POR, WDT	SPDIP (SP), SOIC (SO), QFN (MM)
dsPIC33FJ16GS502*	R	21	dsPIC	16	2048	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	8 ch, 2 ADC†	4 x 10-bit	4	2	2	8	-	3	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$3.04	BOR, POR, WDT	SPDIP (SP), SOIC (SO), QFN (MM)
dsPIC33FJ16GS404*	R	35	dsPIC	16	2048	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	8 ch	-	-	-	2	2	6	-	3	1 UART, 1 SPI, 1 I ² C	-	-	✓	\$2.77	BOR, POR, WDT	TQFP (PT), QFN (ML)
dsPIC33FJ16GS504*	R	35	dsPIC	16	2048	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	12 ch, 2 ADC†	4 x 10-bit	4	2	2	8	-	3	1 UART, 1 SPI, 1 I ² C	-	-	-	✓	\$3.42	BOR, POR, WDT	TQFP (PT), QFN (ML)
dsPIC33FJ32GS406	R	58	dsPIC	32	4096	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	16 ch	-	-	-	4	4	12	1	5	2 UART, 2 SPI, 2 I ² C	-	-	-	\$3.07	BOR, POR, WDT	TQFP (PT), QFN (MR)
dsPIC33FJ64GS406	R	58	dsPIC	64	8192	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	16 ch	-	-	-	4	4	12	1	5	2 UART, 2 SPI, 2 I ² C	-	-	-	\$3.35	BOR, POR, WDT	TQFP (PT), QFN (MR)
dsPIC33FJ32GS606	R	58	dsPIC	32	4096	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	16 ch, 2 ADC†	4 x 10-bit	4	4	4	12	2	5	2 UART, 2 SPI, 2 I ² C	-	-	-	-	\$3.36	BOR, POR, WDT	TQFP (PT), QFN (MR)
dsPIC33FJ64GS606	R	58	dsPIC	64	9216	AN1095 ⁽¹⁾	4	3V-3.6V	50	7.37 MHz, 32 kHz	16 ch, 2 ADC†	4 x 10-bit	4	4	4	12	2	5	2 UART, 2 SPI, 2 I ² C	1	-	-	-	\$3.81	BOR, POR, WDT	TQFP (PT), QFN (MR)
dsPIC33FJ32GS608	R	74	dsPIC	32	4096	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	18 ch, 2 ADC†	4 x 10-bit	4	4	4	16	2	5	2 UART, 2 SPI, 2 I ² C	-	-	-	-	\$3.85	BOR, POR, WDT	TQFP (PT)
dsPIC33FJ64GS608	R	74	dsPIC	64	9216	AN1095 ⁽¹⁾	4	3V-3.6V	50	7.37 MHz, 32 kHz	18 ch, 2 ADC†	4 x 10-bit	4	4	4	16	2	5	2 UART, 2 SPI, 2 I ² C	1	-	-	-	\$4.34	BOR, POR, WDT	TQFP (PT)
dsPIC33FJ32GS610	R	85	dsPIC	32	4096	AN1095 ⁽¹⁾	-	3V-3.6V	50	7.37 MHz, 32 kHz	24 ch, 2 ADC†	4 x 10-bit	4	4	4	18	2	5	2 UART, 2 SPI, 2 I ² C	-	-	-	-	\$4.41	BOR, POR, WDT	TQFP (PF, PT)
dsPIC33FJ64GS610	R	85	dsPIC	64	9216	AN1095 ⁽¹⁾	4	3V-3.6V	50	7.37 MHz, 32 kHz	24 ch, 2 ADC†	4 x 10-bit	4	4	4	18	2	5	2 UART, 2 SPI, 2 I ² C	1	-	-	-	\$4.89	BOR, POR, WDT	TQFP (PF, PT)

* Parts available with High Temperature Options (150°C).

† 4 Msps devices with 2 ADCs

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

Note 2: Two 16-bit timers can be concatenated to form a 32-bit timer.

32-BIT PIC32 MICROCONTROLLERS

Product	Released (R) Not Released (NR)	I/O Pins	Memory		DMA Channels General/Dedicated	Operating Speed		Charge Time Measurement Unit	Analog		Timers 16/32-bit	Communication						PMP	Peripheral Pin Select (PPS)	5 Ku Pricing†	Monitors		Packages (Designator)	
			Core	Flash KB + Boot Flash		EEPROM	Voltage Range		Maximum Speed (MHz)	Internal Oscillator		AOC 10-bit kSPS	Comparators	IC/OC/PWM	SP/PS	UARTs	FS USB				Ethernet	CAN		System Mgmt. Features
PIC32MX110F016B	R	21	PIC32	16 + 3	4	AN1095	4/0	2.3V-3.6V	40	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.51	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX210F016B	R	21	PIC32	16 + 3	4	AN1095	4/2	2.3V-3.6V	40	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2	2	2	✓	✓	✓	\$1.62	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX120F032B	R	21	PIC32	32 + 3	8	AN1095	4/0	2.3V-3.6V	50	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.71	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX220F032B	R	21	PIC32	32 + 3	8	AN1095	4/2	2.3V-3.6V	50	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.82	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX130F064B	R	21	PIC32	64 + 3	16	AN1095	4/0	2.3V-3.6V	40	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.03	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX150F128B	R	21	PIC32	128 + 3	32	AN1095	4/0	2.3V-3.6V	50	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.31	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX230F064B	R	21	PIC32	64 + 3	16	AN1095	4/2	2.3V-3.6V	40	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.31	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX250F128B	R	21	PIC32	128 + 3	32	AN1095	4/2	2.3V-3.6V	50	8 MHz, 32 KHz	✓	10 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.59	POR, BOR, LVD, WDT	SPDIP (SP), SOIC (SO), SSOC (SS), QFN (ML)
PIC32MX110F016C	R	25	PIC32	16 + 3	4	AN1095	4/0	2.3V-3.6V	40	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.65	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX210F016C	R	25	PIC32	16 + 3	4	AN1095	4/2	2.3V-3.6V	40	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.76	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX120F032C	R	25	PIC32	32 + 3	8	AN1095	4/0	2.3V-3.6V	50	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.85	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX220F032C	R	25	PIC32	32 + 3	8	AN1095	4/2	2.3V-3.6V	50	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.96	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX130F064C	R	25	PIC32	64 + 3	16	AN1095	4/0	2.3V-3.6V	40	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.17	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX150F128C	R	25	PIC32	128 + 3	32	AN1095	4/0	2.3V-3.6V	50	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.45	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX230F064C	R	25	PIC32	64 + 3	16	AN1095	4/2	2.3V-3.6V	40	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.45	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX250F128C	R	25	PIC32	128 + 3	32	AN1095	4/2	2.3V-3.6V	50	8 MHz, 32 KHz	✓	12 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.73	POR, BOR, LVD, WDT	VTIA (TL)
PIC32MX110F016D	R	34	PIC32	16 + 3	4	AN1095	4/0	2.3V-3.6V	40	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.75	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX210F016D	R	34	PIC32	16 + 3	4	AN1095	4/2	2.3V-3.6V	40	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.85	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX120F032D	R	34	PIC32	32 + 3	8	AN1095	4/0	2.3V-3.6V	50	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$1.95	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX220F032D	R	34	PIC32	32 + 3	8	AN1095	4/2	2.3V-3.6V	50	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.04	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX130F064D	R	34	PIC32	64 + 3	16	AN1095	4/0	2.3V-3.6V	40	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.24	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX150F128D	R	34	PIC32	128 + 3	32	AN1095	4/0	2.3V-3.6V	50	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.52	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX230F064D	R	34	PIC32	64 + 3	16	AN1095	4/2	2.3V-3.6V	40	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.52	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX250F128D	R	34	PIC32	128 + 3	32	AN1095	4/2	2.3V-3.6V	50	8 MHz, 32 KHz	✓	13 ch	3	5/5/5	5/2	2/2	2	2	✓	✓	✓	\$2.80	POR, BOR, LVD, WDT	TQFP (PT), QFN (ML), VTIA (TL)
PIC32MX330F064H	NR	53	PIC32	64 + 12	16	AN1095 ¹⁾	4/0	2.3V-3.6V	80	8 MHz, 32 KHz	✓	28	2	5/5/5	5/2	2/2	2	4	✓	✓	✓	call for pricing	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX430F064H	NR	53	PIC32	64 + 12	16	AN1095 ¹⁾	4/2	2.3V-3.6V	80	8 MHz, 32 KHz	✓	28	2	5/5/5	5/2	2/2	2	4	✓	✓	✓	call for pricing	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX320F032H	R	51	PIC32	32 + 12	8	AN1095 ¹⁾	0/0	2.3V-3.6V	40	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$3.09	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX320F064H	R	51	PIC32	64 + 12	16	AN1095 ¹⁾	0/0	2.3V-3.6V	40	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$3.36	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX420F032H	R	51	PIC32	32 + 12	8	AN1095 ¹⁾	0/2	2.3V-3.6V	40	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$3.36	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX320F128H	R	51	PIC32	128 + 12	16	AN1095 ¹⁾	0/0	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$3.75	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX340F064H	R	51	PIC32	64 + 12	16	AN1095 ¹⁾	4/4	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	✓	✓	-	\$3.89	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX40F128H	R	51	PIC32	128 + 12	32	AN1095 ¹⁾	4/0	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$3.96	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX64F064H	R	51	PIC32	64 + 12	32	AN1095 ¹⁾	4/4	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	✓	✓	-	\$4.10	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX40F128H	R	51	PIC32	128 + 12	32	AN1095 ¹⁾	4/2	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$4.23	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX340F256H	R	51	PIC32	256 + 12	32	AN1095 ¹⁾	4/0	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$4.31	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX64F128H	R	51	PIC32	128 + 12	32	AN1095 ¹⁾	4/4	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	✓	✓	-	\$4.34	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX64F064H	R	51	PIC32	64 + 12	32	AN1095 ¹⁾	4/4	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	✓	✓	-	\$4.34	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX40F256H	R	51	PIC32	256 + 12	32	AN1095 ¹⁾	4/2	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	✓	✓	-	\$4.58	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX64F128H	R	51	PIC32	128 + 12	32	AN1095 ¹⁾	4/4	2.3V-3.6V	80	8 MHz, 32 KHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	✓	✓	-	\$4.58	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

Products sorted by pin count followed by pricing.

† Pricing subject to change; please contact your Microchip representative for most current pricing.

32-BIT PIC32 MICROCONTROLLERS

Product	Released (R) Not Released (NR)	I/O Pins	Memory		DMA Channels General/Dedicated	Operating Speed		Voltage Range	Analog		Timers 16/32-bit	Communication					PMP	Peripheral Pin Select (PPS)	5 ku Pricing†	Monitors		Packages (Designator)					
			Flash KB + Boot Flash	EEPROM		Maximum Speed (MHz)	Internal Oscillator		Charge Time Measurement Unit	ADC 10-bit 1,000 ksp		Comparators	UARTs	FS USB	Ethernet	CAN				System Mgmt. Features							
PIC32MX764F128H	R	51	PIC32	128 + 12	32	AN1095 ¹	4/6	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	10/100	1	✓	✓	-	\$4.69	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX340F512H	R	51	PIC32	512 + 12	32	AN1095 ¹	4/0	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	4	2	-	-	-	✓	✓	-	\$4.77	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX575F256H	R	51	PIC32	256 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	-	1	✓	✓	-	\$4.96	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX440F512H	R	51	PIC32	512 + 12	32	AN1095 ¹	4/2	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	OTG	-	-	✓	✓	-	\$5.04	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX675F256H	R	51	PIC32	256 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	10/100	-	✓	✓	-	\$5.19	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX575F512H	R	51	PIC32	512 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	-	1	✓	✓	-	\$5.42	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX775F256H	R	51	PIC32	256 + 12	64	AN1095 ¹	8/8	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	10/100	-	✓	✓	-	\$5.66	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX675F512H	R	51	PIC32	512 + 12	64	AN1095 ¹	8/8	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	10/100	-	✓	✓	-	\$5.88	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX695F512H	R	51	PIC32	512 + 12	128	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	10/100	-	✓	✓	-	\$6.13	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX795F512H	R	51	PIC32	512 + 12	128	AN1095 ¹	8/8	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	3/0	4	6	OTG	10/100	-	✓	✓	-	\$6.36	POR, BOR, LVD, WDT	TQFP (PT), QFN (MR)
PIC32MX330F064L	NR	85	PIC32	64 + 12	16	AN1095 ¹	4/0	2.3V-3.6V	80	8 MHz, 32 kHz	✓	28	2	5/5/5	5/2	2/2	2	5	-	-	-	✓	✓	-	call for pricing	POR, BOR, LVD, WDT	TQFP (PT, PF), VT1A (TL)
PIC32MX430F064L	NR	85	PIC32	64 + 12	16	AN1095 ¹	4/2	2.3V-3.6V	80	8 MHz, 32 kHz	✓	28	2	5/5/5	5/2	2/2	2	5	OTG	-	-	✓	✓	-	call for pricing	POR, BOR, LVD, WDT	TQFP (PT, PF), VT1A (TL)
PIC32MX534F064L	R	85	PIC32	64 + 12	16	AN1095 ¹	4/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	-	1	✓	✓	-	\$4.37	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX320F128L	R	85	PIC32	128 + 12	16	AN1095 ¹	0/0	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	-	-	-	✓	✓	-	\$4.44	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX340F128L	R	85	PIC32	128 + 12	32	AN1095 ¹	4/0	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	-	-	-	✓	✓	-	\$4.44	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX564F064L	R	85	PIC32	64 + 12	32	AN1095 ¹	4/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	-	1	✓	✓	-	\$4.58	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX440F128L	R	85	PIC32	128 + 12	32	AN1095 ¹	4/2	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	OTG	-	-	✓	✓	-	\$4.70	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX360F256L	R	85	PIC32	256 + 12	32	AN1095 ¹	4/0	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	-	-	-	✓	✓	-	\$4.79	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX564F128L	R	85	PIC32	128 + 12	32	AN1095 ¹	4/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	-	1	✓	✓	-	\$4.82	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX664F064L	R	85	PIC32	64 + 12	32	AN1095 ¹	4/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	-	✓	✓	-	\$4.82	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX460F256L	R	85	PIC32	256 + 12	32	AN1095 ¹	4/2	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	OTG	-	-	✓	✓	-	\$5.05	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX664F128L	R	85	PIC32	128 + 12	32	AN1095 ¹	4/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	-	✓	✓	-	\$5.05	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX764F128L	R	85	PIC32	128 + 12	32	AN1095 ¹	4/6	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	1	✓	✓	-	\$5.17	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX360F512L	R	85	PIC32	512 + 12	32	AN1095 ¹	4/0	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	-	-	-	✓	✓	-	\$5.25	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX575F256L	R	85	PIC32	256 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	-	1	✓	✓	-	\$5.43	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX460F512L	R	85	PIC32	512 + 12	32	AN1095 ¹	4/2	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	2/0	2	2	OTG	-	-	✓	✓	-	\$5.52	POR, BOR, LVD, WDT	TQFP (PT), XBGA (BG)
PIC32MX675F256L	R	85	PIC32	256 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	-	✓	✓	-	\$5.67	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX575F512L	R	85	PIC32	512 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	-	1	✓	✓	-	\$5.89	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX775F256L	R	85	PIC32	256 + 12	64	AN1095 ¹	8/8	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	2	✓	✓	-	\$5.89	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX675F512L	R	85	PIC32	512 + 12	64	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	-	✓	✓	-	\$6.13	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX775F512L	R	85	PIC32	512 + 12	64	AN1095 ¹	8/8	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	2	✓	✓	-	\$6.36	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX695F512L	R	85	PIC32	512 + 12	128	AN1095 ¹	8/4	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	-	✓	✓	-	\$6.61	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG)
PIC32MX795F512L	R	85	PIC32	512 + 12	128	AN1095 ¹	8/8	2.3V-3.6V	80	8 MHz, 32 kHz	-	16 ch	2	5/5/5	5/1	4/0	5	6	OTG	10/100	2	✓	✓	-	\$6.83	POR, BOR, LVD, WDT	TQFP (PT, PF), XBGA (BG), VT1A (TL)

Note 1: See Application Note "AN1095: Emulating Data EEPROM".

THERMAL MANAGEMENT: Temperature Sensors

Product	Description	# Temps. Monitored	Typical/Max Accuracy (°C)	Temp. Range (°C)	Vcc Range (V)	Typical Supply Current (µA)	Alerts	Resistance Error Correction	Beta Compensation	Packages
MCP9501/2/3/4	Temperature Switch replacing MAX6501/2/3/4	1	1.0/3.0	-40 to +125	+2.7 to +5.5	25	-	-	-	5-pin SOT-23
MCP9509/10	ResistorProgrammable Temperature Switch	1	0.5/3.5	-40 to +125	+2.7 to +5.5	30	-	-	-	5-pin SOT-23
MCP9800/1/2/3	SMBus/PC™ Temperature Sensor	1	0.5/1.0	-55 to +125	+2.7 to +5.5	200	1	-	-	5-pin SOT-23
MCP9804	SMBus/PC Temperature Sensor	1	0.25/1.0	-40 to +125	+2.7 to +5.5	200	1	-	-	8-pin DFN, 8-pin MSOP
MCP9808	SMBus/PC Temperature Sensor	1	0.25/0.5	-40 to +125	+2.7 to +5.5	200	1	-	-	8-pin DFN, 8-pin MSOP
MCP98243	SMBus/PC Temperature Sensor with EEPROM	1	0.5/3.0	-40 to +125	+3.0 to +3.6	200	1	-	-	8-pin DFN, 8-pin TDFN, 8-pin TSSOP, 8-pin UDFN
MCP9843	SMBus/PC JEDEC Temperature Sensor	1	0.5/3.0	-40 to +125	+3.0 to +3.6	200	1	-	-	8-pin DFN, 8-pin TDFN, 8-pin TSSOP
TON75A	SMBus/PC Temperature Sensor	1	0.5/3.0	-40 to +125	+2.7 to +5.5	200	1	-	-	8-pin MSOP, 8-pin SOIC 150mil
MCP9700/01	Linear Active Thermistor IC	1	1.0/4.0	-40 to +150	+2.3 to +5.5	6	-	-	-	3-pin SOT-23, 3-pin TO-92, 5-pin SC-70
MCP9700/01A	Linear Active Thermistor IC	1	1.0/2.0	-40 to +150	+2.3 to +5.5	6	-	-	-	3-pin SOT-23, 3-pin TO-92, 5-pin SC-70
ENC1033	SMBus/PC Multi Temperature Sensor	3	1.0/3.0	-40 to +125	+3.0 to +3.6	50	2	✓	-	8-pin MSOP
ENC1043	SMBus/PC Multi Temperature Sensor	3	0.5/1.0	-40 to +125	+3.0 to +3.6	105	-	✓	Configurable	8-pin MSOP
ENC1046	SMBus/PC Multi Temp Sensor with Hottest of Zones	6	0.25/1.0	-40 to +125	+3.0 to +3.6	395	-	✓	Automatic	10-pin MSOP
ENC1047	SMBus/PC Multi Temp Sensor with Hottest of Zones	7	0.25/1.0	-40 to +125	+3.0 to +3.6	395	-	✓	Automatic	10-pin MSOP
ENC1412/3/4	SMBus/PC Multi Temperature Sensor	2/3/4	0.25/1.0	-40 to +125	+3.0 to +3.6	430	2	✓	Automatic	8-pin TDFN, 8-pin MSOP, 10-pin DFN, 10-pin MSOP
ENC1422/3/4	SMBus/PC Multi Temp Sensor with Shutdown	2/3/4	0.25/1.0	-40 to +125	+3.0 to +3.6	430	1	✓	Automatic	8-pin MSOP, 10-pin MSOP
ENC1428	SMBus/PC Multi Temp Sensor with Hottest of Zones	8	0.25/1.0	-40 to +125	+3.0 to +3.6	450	1	✓	Automatic	16-pin QFN

THERMAL MANAGEMENT: Fan Controllers

Product	Description	# Fan Drivers	PWM/Linear Control	# External Temp. Inputs	Typical Accuracy	Typical/Max. Accuracy	Vcc Range (V)	Interface	Alerts	Fan Speed Lookup Table	Packages
EMC2101	Programmable Fan Controller with Thermal Mgt	1	PWM	2	0.5	0.5/1.0	+3.0 to +3.6	SMBus/PC™	✓	✓	8-pin MSOP, 8-pin SOIC
EMC2300	Programmable MultiFan Controller with Thermal Mgt	3	PWM	3	0.25	0.25/3.0	+3.0 to +3.6	SMBus/PC	✓	✓	16-pin SSOP
EMC2112	Programmable Fan Controller with Thermal Mgt	1	Linear	3	0.25	0.25/1.0	+3.3 and +5	SMBus/PC	✓	✓	20-pin QFN
EMC2103-1	Programmable Fan Controller with Thermal Mgt	1	PWM	1	0.5	0.5/1.0	+3.0 to +3.6	SMBus/PC	✓	✓	12-pin QFN
EMC2103-4	Programmable Fan Controller with EEPROM Load	1	PWM	3	0.5	0.5/1.0	+3.0 to +3.6	SMBus/PC	✓	✓	16-pin QFN
EMC2104	Programmable MultiFan Controller with Thermal Mgt	2	PWM	4	0.25	0.25/1.0	+3.0 to +3.6	SMBus/PC	✓	✓	20-pin QFN
EMC2105	Programmable Fan Controller with Thermal Mgt	1	Linear	4	0.25	0.25/1.0	+3.3 and +5	SMBus/PC	✓	✓	20-pin QFN
EMC2113	Programmable Fan Controller with Thermal Mgt	1	PWM	3	0.5	0.5/1.0	+3.0 to +3.6	SMBus/PC	✓	✓	16-pin QFN
EMC2301/2/3/5	Programmable Fan Controller	1/2/3/5	PWM	-	-	-	+3.0 to +3.6	SMBus/PC	✓	-	8-pin MSOP, 10-pin MSOP, 12-pin QFN, 16-pin QFN

POWER MANAGEMENT: Switching Regulators/PWM Controllers

Product	Input Voltage Range (V)	Output Voltage (V)	Operating Temp. Range (°C)	Control Scheme	Switching Frequency (kHz)	Typical Active Current (µA)	Output Current (mA)	Features			Packages
TC1303/04/13	2.7 to 5.5	DC/DC: 0.8 to 4.5 LDO: 1.5 to 3.3	-40 to +85	PFM/PWM	2000	65/600	DC/DC: 500 mA LDO: 300 mA	Synchronous Buck Regulator, LDO w/Power Good with PFM/PWM auto-switching, Power Good output or Power Sequencing			MSOP, DFN
MCP1602/3	2.7 to 5.5	0.8 to 4.5/4.0	-40 to +85	PFM/PWM	2000	35/45	500	Synchronous Buck Regulator PFM, PWM auto-switching, UVLO, Soft-start, Power Good Indicator, Over-temperature/current protection			MSOP, DFN, TSOT
MCP1630/1631/N/HV/VHV	3.0 to 16	-	-40 to +125	PWM	1000/2000	2800/3700	Ext	Current/Voltage mode PWM controllers. Options with integrated 16V LDO, Integrated error amplifier, Current and voltage sense amplifier, Overvoltage comparator and integrated MOSFET driver			MSOP, SSOP, TSSOP, DFN
MCP19035	4.5 to 30	-	-40 to +125	PWM	300	6000	Ext	Voltage mode PWM synchronous buck controller. Integrates LDO, error amplifier, current and voltage sense, UVLO/OVLO/MOSFET Dead Time adj, and MOSFET Drivers			DFN
MCP1640/B/C/D	0.65 to 6	2.0 to 5.5	-40 to +85	PWM or PWM/PFM	500	19	350	Integrated synchronous boost regulator, -0.65V start-up voltage, Soft-start, True load disconnect or input-to-output bypass option			SOT-23, DFN
MCP1650/1/2/3	2.7 to 5.5	2.5 to ext. tx limited	-40 to +125	Constant Frequency	750	120	560/440	Step-up DC/DC Controller with shutdown control, Low battery detect, Power Good Indicator, UVLO, Soft start			MSOP
MCP16301	4.0 to 30	2.0 to 15	-40 to +85	PWM	500	2000	600	Integrated N-channel, UVLO, Soft-start, Overtemperature protection			SOT-23
MCP16321	6 to 24	0.9 to 5	-40 to +125	PWM/PFM	1000	2300	1000	Integrated switches, Internal compensation, Peak current mode control, Soft-start, UVLO, Power Good pin			QFN
MCP16322	6 to 24	0.9 to 5	-40 to +125	PWM/PFM	1000	2300	2000	Integrated switches, Internal compensation, Peak current mode control, Soft-start, UVLO, Power Good pin			QFN
MCP16323	6 to 18	0.9 to 5	-40 to +125	PWM/PFM	1000	2300	3000	Integrated switches, Internal compensation, Peak current mode control, Soft-start, UVLO, Power Good pin			QFN

POWER MANAGEMENT: Hybrid PWM Controllers

Product	Input Voltage Range (V)	Output Voltage (V)	Operating Temp. Range (°C)	Topologies Supported	Integrated MCU	Program Memory Size (kWords)	RAM (bytes)	Features		Packages
MCP19111	4.5 to 32	-	-40 to +125	Buck	✓	4	256	Synchronous buck controller, Integrated MCU, LDO, and synchronous MOSFET driver, User configurable/programmable including MOSFET load time, Switching frequency, Analog loop compensation, and protection thresholds		QFN

POWER MANAGEMENT: Power MOSFETs											
Product	Vds (V)	Configuration	Polarity	Rds (on) @ 4.5V (mΩ, Max.)	Rds (on) @ 10V (mΩ, Max.)	Qg @ 4.5V (nC, Max.)	Id (A, Max. @ 25°C, Tcase)	Vgs (th) (V, Min.)	Qgd (nC, Typ.)	Rg (Ω Typ.)	Package
MCP87018	25	Single	-	2.2	1.9	37	100	1	13	1.5	5 × 6 PDFN
MCP87022	25	Single	-	2.6	2.3	29	100	1	9	1.3	5 × 6 PDFN
MCP87030	25	Single	-	4	3.5	22	100	1	6.7	1.2	5 × 6 PDFN
MCP87050	25	Single	-	6	5	15	100	1	4.7	1.1	5 × 6 PDFN
MCP87055	25	Single	-	7	6	14	60	1	4.5	2.1	3.3 × 3.3 PDFN
MCP87090	25	Single	-	12	10.5	10	64	1.1	2.8	1.8	5 × 6 PDFN, 3.3 × 3.3 PDFN
MCP87130	25	Single	-	16.5	13.5	8	54	1.1	2.6	1.7	5 × 6 PDFN, 3.3 × 3.3 PDFN

POWER MANAGEMENT: Linear Regulators								
Product	Max. Input Voltage (V)	Output Voltage (V)	Output Current (mA)	Typical Active Current (µA)	Typical Dropout Voltage @ Max. I _{out} (mV)	Typical Output Voltage Accuracy (%)	Features	Packages
TC1016/17	6	1.8 to 4.0	80/150	53	150/285	±0.5	Shutdown	SOT-23A, SC70
TC1301A/B	6	1.5 to 3.3	LD01: 300 LD02: 150	103/114	LD01: 104 LD02: 150	±0.5	Dual LDO plus Reset output, Shutdown, Reference bypass, Voltage detect	MSOP, DFN
TC1302AB	6	1.5 to 3.3	LD01: 300 LD02: 150	103/114	LD01: 104 LD02: 150	±0.5	Dual LDO, Shutdown, Reference bypass, Voltage detect	MSOP, DFN
TC2014/5, TC2185	6	1.8 to 5.0	50/100/150	55	45/90/140	±0.4	Shutdown, Reference bypass input	SOT-23A
TC2054/5, TC2186	6	1.8 to 5.0	50/100/150	55	45/90/140	±0.4	Shutdown, Error output	SOT-23A
MCP1700	6	1.2 to 5.0	250	1.6	300	±0.4	Very low I _q	SOT-23A, SOT-89, TO-92
MCP1702/3 /3A	13.2/16/16	1.2 to 5.0	250	2	330/625/625	±0.4	Very low I _q	DFN, TO-92, SOT-23A, SOT-89, SOT-223
MCP1725/6/7	6	0.8 to 5.0	500/1000/1500	120/140/140	210/300/330	±0.5	Shutdown, C _{DELAY} , Power Good	SOIC, DFN
MCP1754/S	16	1.8 to 5.5	150	56	300	±0.4	Power Good, Shutdown	DFN, SOT-23A, SOT-89, SOT-223
MCP1790/1	30	3.0, 3.3, 5.0	70	70	500	±0.2	Load dump, Shutdown, Power Good	SOT-223, DPAK
MCP1801/2	10	0.9 to 6.0	150/300	25	250/800	±0.4	Shutdown, High PSRR	SOT-23A
MCP1804	28	1.8 to 18	150	50	300	±0.5	Shutdown, High PSRR	SOT-23, SOT-89, SOT-223
MCP1824/5/6/7	6	0.8 to 5.0	300/500/1000/1500	120/120/140/140	200/210/300/330	±0.5	Fixed and Adjustable output, Shutdown, Power Good	SOT-23, SOT-223, TO-220, DPAK
MCP1824S/5S/6S/7S	6	0.8 to 5.0	300/500/1000/1500	120/120/140/140	200/210/300/330	±0.5	3-pin high current LDOs	SOT-223, TO-220, DPAK

POWER MANAGEMENT: Charge Pump DC-to-DC Converters							
Product	Input Voltage Range (V)	Output Voltage (V)	Operating Temp. Range (°C)	Max. Input Current (µA)	Typical Output Current (mA)	Features	Packages
TC1044S	1.5 to 12	–V _{IN} or 2*V _{IN}	–40 to +85	160	20	85 kHz oscillator Boost mode	PDIP, SOIC
TC7660	1.5 to 10	–V _{IN} or 2*V _{IN}	–40 to +85	180	20	10 kHz oscillator	PDIP, SOIC
TC7660H	1.5 to 10	–V _{IN} or 2*V _{IN}	–40 to +85	1000	20	120 kHz oscillator	PDIP, SOIC
TC7660S	1.5 to 12	–V _{IN} or 2*V _{IN}	–40 to +85	160	20	45 kHz oscillator Boost mode	PDIP, SOIC
TC7662B	1.5 to 15	–V _{IN} or 2*V _{IN}	–40 to +85	180	20	35 kHz oscillator Boost mode	PDIP, SOIC
TC7662A	3.0 to 18	–V _{IN} or 2*V _{IN}	–40 to +85	200	40	12 kHz oscillator	PDIP, SOIC
MCP1256	1.8 to 3.6	3.3	–40 to +85	100	100	Power Good Sleep mode	MSOP, DFN
MCP1257	1.8 to 3.6	3.3	–40 to +85	100	100	Sleep mode low battery indication	MSOP, DFN
MCP1258	1.8 to 3.6	3.3	–40 to +85	100	100	Low battery indication input/output bypass 1	MSOP, DFN

POWER MANAGEMENT: CPU/System Supervisors				
Product	Description	Operating Temp. Range (°C)	Features	Packages
MCP111(L/2) TC (1/2/3/4)	System Voltage Detectors (No Reset Delay)	–40 to +125 –40 to +85	Wide V _{IC} input range, Wide detection range (custom options available), Low current, CMOS/PushPull active low reset options	5SOT-23, 3TO-92, 3-SOT-23A, 3-SOT-89, 3-SC70
MCP909, MCP100, MCP130, MCP120 MCP13XX, TC1270A and more	System Voltage Supervisors (Available Reset Delays)	–40 to +125 –40 to +85	Wide detection range (custom options available), Low current, Push-Pull/ Open Drain, Active high/low, Watchdog, Manual reset, dual output options, Multiple reset delay options	8SOIC (150 mil), 5SOT-23, 4-SOT-143, 3TO-92, 3-SOT-23, 5-SC70

POWER MANAGEMENT: Power MOSFET Drivers

Product	Configuration	Operating Temp. Range (°C)	Peak Output Current (A)	Output Resistance (Max. @ 25°C)	Max Supply Voltage (V)	Input/Output Delay (ns)	Packages
MCP1401/02 Single	Inverting/Non-inverting	-40 to +125	0.5	18/16	18	40/40	SOT-23
MCP1415/16 Single	Inverting/Non-inverting	-40 to +125	1.5	7.5/5.5	18	50/55	SOT-23
TC4467/8/9 Quad	Inverting/Non-inverting	-40 to +85	1.2	15/15	18	40/40	PDIP, SOIC
TC4426A/27A/28A Dual	Inverting/Non-inverting	-40 to +125	1.5	9/9	18	30/30	PDIP, SOIC, DFN
TC4423A/24A/25A Dual	Inverting/Non-inverting	-40 to +125	3	3 (typ.)/4 (typ.)	18	40 (typ.)/40 (typ.)	PDIP, SOIC, DFN
MCP14E3/E4/E5 Dual	Inverting/Non-inverting	-40 to +125	4	3.5/3.0	18	55/55	PDIP, SOIC, DFN
MCP14E6/E7/E8 Dual	Inverting/Non-inverting/Inverting and Non-inverting	-40 to +125	2	2.2/2.8	18	45/45	PDIP, SOIC, DFN
MCP14E9/E10/E11 Dual	Inverting/Non-inverting/Inverting and Non-inverting	-40 to +125	3	2.2/2.8	18	75/75	PDIP, SOIC, DFN
MCP1406/07 Single	Inverting/Non-inverting	-40 to +125	6	1.8/2.0 (typ.)	18	30/30	TO-220, PDIP, SOIC, DFN
TC4420/29	Inverting/Non-inverting	-40 to +125	6	2.8/2.5	18	55/55	TO-220, PDIP, SOIC, DFN
TC4421A/22A Single	Inverting/Non-inverting	-40 to +125	9	1.25 (typ.)/1.5	18	38/42	TO-220, PDIP, SOIC, DFN
TC4451/52 Single	Inverting/Non-inverting	-40 to +125	12	0.6 (typ.)/1.5	18	15/15	TO-220, PDIP, SOIC, DFN, DPAK
TC4431/32 Single	Inverting/Non-inverting	-40 to +85	1.5	10/10	30	62/78	PDIP, SOIC

POWER MANAGEMENT: Synchronous Buck High-Side Driver

Product	Configuration	Operating Temp Range (°C)	Peak Output Current (A)	Output Resistance (Max.@ 25 °C)	Max Supply Voltage (V)	Input/Output Delay (ns)	Packages
MCP14700/14628	Dual Input/Single Input	-40 to +85	2	2.5/2.5	5 (V _{DS}), 36 (Boot Pin)	18/20	SOIC, DFN

POWER MANAGEMENT: Battery Chargers

Product	Mode	Cell Type	# of Cells	V _{OC} Range (V)	Cell Voltage (V)	Max Charging Current (mA)	Max Voltage Regulation (%)	Int/Ext FET	Features	Packages
MCP73113/14/23	Linear	LiIon/LiPolymer and LiFePO4	1	4 to 16	3.6, 4.1, 4.2, 4.35, 4.4	1100	±0.5	Int	6.5/5.8V Overvoltage protection, UVLO, Thermal regulation	10-pin 3 x 3 DFN
MCP73213/23	Linear	LiIon/LiPolymer and LiFePO4	2	4 to 16	7.2, 8.2, 8.4, 8.7, 8.8	1100	±0.6	Int	13V Overvoltage protection	10-pin 3 x 3 DFN
MCP73630/L	Linear	LiIon/LiPolymer	1	3.75 to 6	4.2	1000/200	±0.75	Int	Softstart, Charge enable pin	6-pin 2 x 2 TDFN
MCP73631/2	Linear	LiIon/LiPolymer	1	3.7 to 6.0	4.2, 4.35, 4.4, 4.5	500	±0.75	Int	UVLO, Thermal regulation, Programmable charge current, Tri-state or open-drain STAT pin	8-pin 2 x 3 DFN, 6-pin SOT-23
MCP73637/8	Linear	LiIon/LiPolymer	1	3.7 to 6.0	4.2, 4.35, 4.4, 4.5	1000	±0.75	Int	Dual input (USB/DC) auto-switching, Thermistor input, Power Good output or Timer enable input	10-pin MSOP, 10-pin 3 x 3 DFN
MCP73671	Linear	LiIon/LiPolymer	1	3.75 to 6.0	4.1, 4.2, 4.35, 4.4	1500 (A/C Adapter) 500 (USB)	±0.5	Int	Simultaneous charging of load and battery, Load-dependent charging, Multiple programmable charge currents	20-pin 4 x 4 QFN

LINEAR: Op Amps

Product	# per Package	GBWP (MHz)	I _Q Typical (µA)	V _{OS} Max (mV)	Operating Voltage (V)	Packages
MCP661/2/3/4/5/9	1/2/1/4/2/4	60	6000	8	2.5 to 5.5	SOIC, MSOP, DFN, TSSOP, QFN, SOT
MCP651/1S/2/3/4/5/9	1/2/1/4/2/4	50	6000	0.2	2.5 to 5.5	SOIC, MSOP, DFN, TSSOP, QFN, SOT
MCP631/2/3/4/5/9	1/2/1/4/2/4	24	2500	8	2.5 to 5.5	SOIC, MSOP, DFN, TSSOP, QFN, SOT
MCP621/1S/2/3/4/5/9	1/1/2/1/4/2/4	20	2500	0.2	2.5 to 5.5	SOIC, MSOP, DFN, TSSOP, QFN, SOT
MCP6H91/2/4	1/2/4	10	2000	4	3.5 to 12.0	DFN, SOIC, TSSOP
MCP6021/2/3/4	1/2/1/4	10	1000	0.5	2.5 to 5.5	PDIP, SOIC, MSOP, TSSOP, SOT
MCP6291/2/3/4/5	1/2/1/4/2	10	1000	3	2.4 to 6.0	PDIP, SOIC, MSOP, TSSOP, SOT
MCP6491	1	7.5	530	1	2 to 5.5	SOT, SC70
MCP6H81/2/4	1/2/4	5.5	700	4	3.5 to 12.0	DFN, SOIC, TSSOP
MCP6281/2/3/4/5	1/2/1/4/2	5	445	3	2.2 to 6.0	PDIP, SOIC, MSOP, TSSOP, SOT
MCP6481	1	4	240	1	2 to 5.5	SOT, SC70
MCP6286	1	3.5	540	1.5	2.2 to 5.5	SOT
MCP601/2/3/4	1/2/1/4	2.8	230	2	2.7 to 6.0	PDIP, SOIC, TSSOP, SOT
MCP6H71/2/4	1/2/4	2.7	480	4	3.5 to 12.0	DFN, SOIC, TSSOP
MCP6271/2/3/4/5	1/2/1/4/2	2	170	3	2.0 to 6.0	PDIP, SOIC, MSOP, TSSOP, SOT
MCP6471	1	2	100	1	2 to 5.5	SOT, SC70
MCP6V01/2/3	1/2/1	1.3	300	0.002	1.8 to 5.5	SOIC, DFN, TDFN
MCP6V06/7/8	1/2/1	1.3	300	0.003	1.8 to 5.5	SOIC, DFN, TDFN

Product	Product	# per Package	GBWP (MHz)	I _Q Typical (µA)	V _{OS} Max (mV)	Operating Voltage (V)	Packages
MCP6126/7/8	MCP6126/7/8	1/2/1	2	620	0.002	2.3 to 5.5	SOIC, MSOP, DFN
MCP6071/2/4	MCP6071/2/4	1/2/4	1.2	110	0.15	1.8 to 6.0	SOIC, TSSOP, DFN, SOT
MCP6H01/2/4	MCP6H01/2/4	1/2/4	1.2	135	4.5	3.5 to 16	SOIC, TSSOP, TDFN, SOT, SC70
MCP6001/2/4	MCP6001/2/4	1/2/4	1	100	4.5	1.8 to 6.0	PDIP, SOIC, MSOP, TSSOP, TDFN, SOT, SC70
MCP6401/2/4	MCP6401/2/4	1/2/4	1	45	4.5	1.8 to 6.0	SOIC, TSSOP, DFN, SOT
MCP6061/2/4	MCP6061/2/4	1/2/4	0.73	60	0.15	1.8 to 6.0	SOIC, TSSOP, DFN, SOT
MCP6241/2/4	MCP6241/2/4	1/2/4	0.55	50	5	1.8 to 5.5	PDIP, SOIC, MSOP, TSSOP, TDFN, SOT, SC70
MCP6031/2/4	MCP6031/2/4	1/2/4	0.385	30	0.15	1.8 to 6.0	SOIC, TSSOP, DFN, SOT
MCP6131	MCP6131	1	0.3	23	0.008	1.8 to 5.5	SOT, SC70
MCP6231/2/4	MCP6231/2/4	1/2/4	0.3	20	5	1.8 to 6.0	PDIP, SOIC, MSOP, TSSOP, TDFN, SOT, SC70
MCP616/7/8/9	MCP616/7/8/9	1/2/1/4	0.19	19	0.15	2.3 to 5.5	PDIP, SOIC, MSOP, TSSOP
MCP606/7/8/9	MCP606/7/8/9	1/2/1/4	0.155	19	0.25	2.5 to 6.0	PDIP, SOIC, TSSOP, SOT
MCP6141/2/3/4	MCP6141/2/3/4	1/2/1/4	0.1	0.6	3	1.4 to 6.0	PDIP, SOIC, MSOP, TSSOP, SOT
MCP6111	MCP6111	1	0.08	7.5	0.008	1.6 to 5.5	SOT, SC70
MCP6041/2/3/4	MCP6041/2/3/4	1/2/1/4	0.014	0.6	3	1.4 to 6.0	PDIP, SOIC, MSOP, TSSOP, SOT
MCP6031/2/3/4	MCP6031/2/3/4	1/2/1/4	0.01	0.9	0.15	1.8 to 5.5	SOIC, MSOP, TSSOP, DFN, SOT
MCP6441/2/4	MCP6441/2/4	1/2/4	0.009	0.45	4.5	1.4 to 6.0	SOIC, MSOP, TSSOP, SOT, SC70

Product	# per Package	Typical Propagation Delay (µs)	I _O Typical (µA)	V _{OS} Max (mV)	Operating Voltage (V)	Temperature Range (°C)	Features	Packages
MCP6541/2/3/4	1/2/1/4	4	1	5	1.6 to 5.5	-40 to +125	Push-Pull, Rail-to-Rail Input/Output	PDIP, SOIC, MSOP, TSSOP, SOT, SC70
MCP6546/7/8/9	1/2/1/4	4	1	5	1.6 to 5.5	-40 to +125	Open-drain, 9V, Rail-to-Rail Input/Output	PDIP, SOIC, MSOP, TSSOP, SOT, SC70
MCP65R41/6	1	4	2.5	10	1.8 to 5.5	-40 to +125	Integrated V _{REF} (1.21V or 2.4V)	SOT-23
MCP6561/2/4	1/2/4	0.047	100	10	1.8 to 5.5	-40 to +125	Push-Pull, Rail-to-Rail Input/Output	SOIC, MSOP, TSSOP, SOT, SC70
MCP6566/7/9	1/2/4	0.047	100	10	1.8 to 5.5	-40 to +125	Open-Drain, Rail-to-Rail Input/Output	SOIC, MSOP, TSSOP, SOT, SC70

MIXED SIGNAL: Successive Approximation Register (SAR) Analog-to-Digital Converters

Product	Resolution (bits)	Maximum Sampling Rate (ksamples/sec)	# of Input Channels	Interface	Input Type	Temperature Range (°C)	Packages
MCP3021/3221	10/12	22	1	PC™	Single-ended	-40 to +125	SOT-23A
MCP3001/2/4/8	10	200	1/2/4/8	SPI	Single-ended	-40 to +85	PDIP, SOIC, MSOP, TSSOP
MCP3201/2/4/8	12	100	1/2/4/8	SPI	Single-ended	-40 to +85	PDIP, SOIC, MSOP, TSSOP
MCP3301/2/4	13	100	1/2/4	SPI	Differential	-40 to +85	PDIP, SOIC, MSOP, TSSOP

MIXED SIGNAL: Digital-to-Analog Converters

Product	Resolution (bits)	DAC Channels	Interface	Voltage Reference	Output Settling Time (µs)	DNL (±LSB)	Typical Operating Current (µA)	Temperature Range (°C)	Packages
MCP47DA1	6	1	PC™	V _{DD}	6	0.25	130	-40 to +125	SOT-23
MCP4706/16/26	8/10/12	1	I ² C	Ext	6	0.05/0.188/0.715	210	-40 to +125	SOT-23
MCP4725	12	1	I ² C	V _{DD}	6	0.75	175	-40 to +125	SOT-23
MCP4728	12	4	I ² C	Int	6	0.75	250	-40 to +125	MSOP
MCP4801/11/21	8/10/12	1	SPI	Int	4.5	0.5/0.5/0.75	330	-40 to +125	PDIP, SOIC, MSOP, 2x3 DFN
MCP4802/12/22	8/10/12	2	SPI	Int	4.5	0.5/0.5/0.75	415	-40 to +125	MSOP, PDIP, SOIC
MCP4901/11/21	8/10/12	1	SPI	Ext	4.5	0.5/0.5/0.75	175	-40 to +125	PDIP, SOIC, MSOP, 2x3 DFN
MCP4902/12/22	8/10/12	2	SPI	Ext	4.5	0.5/0.5/0.75	350	-40 to +125	PDIP, SOIC, TSSOP
TC1320/1	8/10	1	SMBus	Ext	10	0.8/2	350	-40 to +85	MSOP, SOIC

MIXED SIGNAL: Energy Measurement ICs

Product	Dynamic Range	Typical Accuracy	ADC Channels	Gain Selection	Output Type	Typical Supply Current (mA)	Analog Voltage Range (V)	Digital Voltage Range (V)	Temperature Range (°C)	Packages
MCP3911	24-bit resolution	94.5 dB SINAD	2	up to 32	SPI	1.7	2.7 to 3.6	2.7 to 3.6	-40 to +125	SSOP, QFN
MCP3903	24-bit resolution	91 dB SINAD	6	up to 32	SPI	8.3	4.5 to 5.5	2.7 to 3.6	-40 to +125	SSOP
MCP3905A/06A	500:1/1000:1	0.1%	2	up to 32	Active power pulse	3.9	4.5 to 5.5	4.5 to 5.5	-40 to +125	SSOP
MCP3909	1000:1	0.1%	2	up to 16	Active power pulse/SPI	3.9	4.5 to 5.5	4.5 to 5.5	-40 to +125	SSOP

MIXED SIGNAL: Current/DC Power Measurement ICs

Product	# Current Sensors	Description	Full Scale Range (mV)	Current Measurement Max. Accr. (%)	Effective Sampling Interval Min. to Max. (msec)	Bus Voltage Range (V)	# Temp. Monitors (ambient, remote)	Temp. Accuracy Typ./Max. (°C)	Alert/Therm.	Peak Detection	Interface	Packages
PAC1710	1	Current/DC Power Sensor	10, 20, 40, 80	±1	2.5 to 2600	0 to +40	N/A	N/A	1	-	SMBus/I ² C™	10-pin DFN
PAC1720	2	Dual Current/DC Power Sensor	10, 20, 40, 80	±1	2.5 to 2600	0 to +40	N/A	N/A	1	-	SMBus/I ² C	10-pin DFN
EMC1701/2/4	1	Current/DC Power Sensor with temperature Monitoring	10, 20, 40, 80	±1	2.5 to 2600	+3 to +24	1, 0/1/3	±0.25/±1.0	2	✓	SMBus/I ² C	12-pin QFN, 10-pin MSOP, 16-pin QFN, 14-pin SOIC

MIXED SIGNAL: Digital Potentiometers

Product	# of Taps	Memory	Channels	Interface	Resistance (kΩ)	Temperature Range (°C)	Packages
MCP4021/12/13/14	64	Volatile	1	Up/Down	2.1, 5, 10, 50	-40 to +125	DFN, SOT-23
MCP4017/18/19	128	Volatile	1	PC™	5, 10, 50, 100	-40 to +125	SC70
MCP40017/D18/D19	128	Volatile	1	PC	5, 10, 50, 100	-40 to +125	SC70
MCP4021/22/23/24	64	Nonvolatile	1	Up/Down	2.1, 5, 10, 50	-40 to +125	DFN, SOT-23
MCP4141/42	128	Nonvolatile	1	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4241/42	128	Nonvolatile	2	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4131/32	128	Volatile	1	SPI	5, 10, 50, 100	-40 to +125	QFN, DFN
MCP4231/32	128	Volatile	2	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4151/52	256	Volatile	1	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4161/62	256	Nonvolatile	1	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4251/52	256	Volatile	2	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4261/62	256	Nonvolatile	2	SPI	5, 10, 50, 100	-40 to +125	MSOP, QFN, DFN
MCP4341/42	129	Nonvolatile	4	SPI	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4361/62	257	Nonvolatile	4	SPI	5, 10, 50, 100	-40 to +125	TSSOP, QFN

Product	# of Taps	Memory	Channels	Interface	Resistance (kΩ)	Temperature Range (°C)	Packages
MCP4331/32	129	Volatile	4	SPI	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4351/52	257	Volatile	4	SPI	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4431/32	129	Volatile	4	PC	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4441/42	129	Nonvolatile	4	PC	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4451/52	257	Volatile	4	PC	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4461/62	257	Nonvolatile	4	PC	5, 10, 50, 102	-40 to +125	TSSOP, QFN
MCP4531/32	128	Volatile	1	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4631/32	128	Volatile	2	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4541/42	128	Nonvolatile	1	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4641/42	128	Nonvolatile	2	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4651/52	256	Volatile	1	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4651/52	256	Volatile	2	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4561/62	256	Nonvolatile	1	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4661/62	256	Nonvolatile	2	PC	5, 10, 50, 100	-40 to +125	MSOP, DFN

MIXED SIGNAL: Delta Sigma Analog-to-Digital Converters

Product	Resolution (bits)	Maximum Sampling Rate (samples/sec)	# of Input Channels	Interface	Typical Supply Current (µA)	Temperature Range (°C)	Features	Packages
MCP4421/2/3/4	18 to 12	4 to 240	1/2/2/4 Diff	PC™	155	-40 to +125	PGA, Vref	SOIC, TSSOP, MSOP, DFN, SOT
MCP4425/6/7/8	16 to 12	15 to 240	1/2/2/4 Diff	PC	155	-40 to +125	PGA, Vref	SOIC, TSSOP, MSOP, DFN, SOT
MCP3550/1/3	22	13/14/60	1 Diff	SPI	120	-40 to +125	50 & 60 Hz Rejection	SOIC, MSOP

INTERFACE: Controller Area Network (CAN), Infrared, LIN Transceivers, Ethernet, Serial Peripherals, USB

Product	Description	Operating Temperature Range (°C)	Other Features	Packages
MCP2515	Stand-alone CAN controller with SPI interface	-40 to +125	3 Tx Buffers, 2 Rx Buffers, 6 Filters, 2 Masks, Interrupt output, MCP2510 upgrade	PDIP, SOIC, TSSOP, QFN
MCP2551	CAN (Controller Area Network), High-speed CAN transceiver	-40 to +125	1 Mbps max. CAN bus speed, ISO11898 compatible, Industry standard pinout	PDIP, SOIC
MCP2003/4/A, MCP2021/2/A, MCP2050	LIN (Local Interconnect Network) transceivers	-40 to +125	Product options: Stand-alone transceiver, integrated Vref = 3.3V or 5V @ 70 mA, integrated WWDT, integrated ratio-metric battery monitor, Vcc Range = 6 to 18 V, Max Baud Rate = 20 Kbaud, Compliant with LIN 1.3, 2.0 2.1, SAE J2602, Automotive grade	PDIP, SOIC, TSSOP, DFN, QFN
MCP23009/18	8-bit I/O port expander, 16-bit I/O port expander	-40 to +125	PC™ (up to 3.4 MHz) or SPI (up to 10 MHz) interface, 25 mA source/sink per I/O	PDIP, SDIP, SOIC, SSOP
MCP2120/21, MCP2140A, MCP2150/51	Infrared IRDA encoders, Decoders, Protocol handlers	-40 to +85	UART to IR encoder/decoder w/hardware & software baud rate selection, IRDA® standard protocol handler plus encoder/decoder	PDIP, SDIP, SOIC, SSOP
MCP2200, MCP2210	USB Bridge Products: USB-to-UART, USB-to-SPI	-40 to +85	Supports full speed, USB 2.0 compliant, integrated PHY, Tx/Rx buffer size 64-128 bytes each, 8-9 GPIO, Vio Range = 3.0 to 5.5V	SOIC, SSOP, QFN
ENC28B60	Stand-alone 10 Base-T Ethernet controller with SPI interface	-40 to +85	Ethernet controller, 8 KB RAM Buffer, Integrated 10 BASE-T PHY	SPDIP, SOIC, SSOP, QFN
ENC24J600	Stand-alone 10/100 Base-T Ethernet controller with SPI and parallel interface	-40 to +85	Ethernet controller, 24 KB RAM Buffer, Cryptographic Security Engine, 10/100 Base-T PHY	TQFP, QFN
ENC524J600	Stand-alone 10/100 Base-T Ethernet controller with SPI and parallel interface	-40 to +85	Ethernet controller, 24 KB RAM Buffer, Cryptographic Security Engine, 10/100 Base-T PHY	TQFP

INTERFACE: USB Port Power Controllers with Charger Emulation

Product	Description	USB Port Power Switch (55 mW)	Hi-Speed USB 2.0 Switch	Battery Charger Emulation Profiles	8 Resistor Set Current Limits	Indicator Output	Current Measurement	Interface	Packages
UCS1001.1/2	USB Port Power Controller with Charger Emulation	1	1	9	Up to 2.5A	Charging/Attach Detect	-	Discrete I/O	20-pin 4 x 4 QFN
UCS1002.1	Programmable USB Port Power Controller with Charger Emulation	1	1	9 plus 1 programmable	Up to 2.5A	Charging	✓	PC™ / SMBus	20-pin 4 x 4 QFN

INTERFACE: mTouch™ AR1000 Resistive Touch Screen Controllers

Product	Type	Communication	Touch Screens Supported	A/D	Resolution	Power	Points per second	Operating Temp. Range (°C)	Static Protection	5 ku Pricing†	Special Features	Packages
AR1021	Analog Resistive	SPI, I²C™	All Manufacturers 4, 5 and 8 wire	Internal 10bit Ratiometric	1024 x 1024	2.5V DC ±5% 5.5V DC ±5%	140 pps	-40 to +85	Per schematic	\$1.32	Controller driven calibration & Universal for all touch screens	20-pin SSOP (SS), SOIC (SO), QFN (ML)
AR1011	Analog Resistive	UART	All Manufacturers 4, 5 and 8 wire	Internal 10bit Ratiometric	1024 x 1024	2.5V DC ±5% 5.5V DC ±5%	140 pps	-40 to +85	Per schematic	\$1.39	Controller driven calibration & Universal for all touch screens	20-pin SSOP (SS), SOIC (SO), QFN (ML)
AR1100	Analog Resistive	USB, UART	All Manufacturers 4, 5 and 8 wire	Internal 10bit Ratiometric	1024 x 1024	3.3V DC ±5% 5.5V DC ±5%	150 pps	-40 to +85	Per schematic	\$1.61	Controller driven calibration & Universal for all touch screens	20-pin SSOP (SS), SOIC (SO), QFN (ML)
AR1100BRD	Analog Resistive	USB, RS-232	All Manufacturers 4, 5 and 8 wire	Internal 10bit Ratiometric	1024 x 1024	3.3V DC ±5% 5.5V DC ±5%	150 pps	-40 to +85	Per schematic	\$12.78	Controller driven calibration & Universal for all touch screens	Board Module

SAFETY & SECURITY: Smoke Detector and Horn Driver ICs

Product	Horn Driver	Detection Method	Low Battery Detection	Alarm Memory	Alarm Interconnect	Hush/Sensitivity Timer	Operating Temperature Range (°C)	Packages
RE46C140/1/3/4/5	Yes	Photo	Yes	No	Yes	140/4/5	-25 to +75	PDIP, SOIC
RE46C12X & 152	Yes	Ion	Yes	No	Not 120	122/7,152	-10 to +60	PDIP
RE46C10X & 11X	Yes	Just Driver	5/7/9/19	NA	9/19	None	See Datasheet	See Datasheet
RE46C162/3, 5/6/7/8	Yes	Ion/Photo	Yes	Yes	Yes	Yes	-25 to +75	PDIP, SOIC
RE46C180	Yes	Ion	Yes	Yes	Yes	Yes	-10 to +60	PDIP, SOIC
RE46C190	Yes	Photo	Yes	Yes	Yes	Yes	-10 to +60	SOIC
RE46C317/8	Yes	Just Driver	No	No	No	No	-10 to +60	PDIP, SOIC

MOTOR DRIVERS: Stepper Motors, DC Motors and 3 Phase BLDC Fan Controllers

Product	Motor Type	Input Voltage Range (V)	Internal/External FETs	Output Current (mA)	Control Scheme	Motor Speed Output	Protections	Temp. Operating Range (°C)	Features	Packages
MTS60C19A	One Bipolar Stepper Motor or Two DC Motors	10.0 to 40.0	Internal	750	Direct PWM Input, Current Limit Control, Microstepping	No	Overcurrent, Overtemperature, Under Voltage	-20 to +85	Dual Full Bridge Motor Driver for Stepper Motors, Pin Compatible with Allegro 6219	24-SOP
MTS2916A	One Bipolar Stepper Motor or Two DC Motors	10.0 to 40.0	Internal	750	Direct PWM Input, Current Limit Control, Microstepping	No	Overcurrent, Overtemperature, Under Voltage	-20 to +85	Dual Full Bridge Motor Driver for Stepper Motors, Pin Compatible with Allegro 2916	24-SOP
MTD6505	3-Phase Brushless DC Motor	2.0 to 5.5	Internal	750	Sensorless Sinusoidal	Frequency Generator	Overcurrent, Overvoltage, Short Circuit, Overtemperature, Motor Lock-up	-40 to +125	180° Sinusoidal Sensorless Drive, Direction Control, Programmable BEMF Coefficient Range, Fsw = 30 kHz	10-UDFN (3 x 3)
MTD6501C/D/G	3-Phase Brushless DC Motor	2.0 to 14.0	Internal	800/500/800	Sensorless Sinusoidal	Frequency Generator	Overcurrent, Short Circuit Overtemperature, Motor Lock-up	-30 to +95	180° Sinusoidal Sensorless Drive, Direction Control, Boost Mode (D), Fsw = 20 kHz (C/D), 23 kHz (G)	8-SOP (C, G), 10-MSOP (D)
MTD6502B	3-Phase Brushless DC Motor	2.0 to 5.5	Internal	750	Sensorless Sinusoidal	Frequency Generator	Overcurrent, Short Circuit Overtemperature, Motor Lock-up	-40 to +125	180° Sinusoidal Sensorless Drive, Direction Control, Fsw = 30 kHz	10-TDFN (3 x 3)

REAL-TIME CLOCK/CALENDAR (RTCC)

Part	Product	Pins	Timing Features				Memory ⁽¹⁾			Power		Unique Features ⁽²⁾	5 ku Pricing [†]	Packages
			Digital Trimming (Adj./Range)	Alarm Settings	WDT	Outputs	SRAM (Bytes)	EERPOM (Kbits)	ID/MAC (Bits)	Min Vcc	Min Icc			
MCU	MCP7940M	8	±127 ppm	1 sec.	-	IRQ/CLK	64	0	0	1.8	-	-	\$0.46	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY), PDIP (P)
	MCP7940N	8	±127 ppm	1 sec.	-	IRQ/CLK	64	0	0	1.8	1.3	Power Fail Timestamp	\$0.59	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY), PDIP (P)
	MCP7940X	8	±127 ppm	1 sec.	-	IRQ/CLK	64	0	64	1.8	1.3	Power Fail Timestamp	\$0.66	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY)
	MCP7941X	8	±127 ppm	1 sec.	-	IRQ/CLK	64	1	64	1.8	1.3	Power Fail Timestamp	\$0.72	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY)
	MCP7951X	10	±255 ppm	0.01 sec.	-	IRQ/CLK	64	1	128	1.8	1.3	Power Fail Timestamp	\$0.90	SOIC (SL), TSSOP (ST)
SP	MCP7952X	10	±255 ppm	0.01 sec.	-	IRQ/CLK	64	2	128	1.8	1.3	Power Fail Timestamp	\$0.96	MSOP (MS), TDFN (MN)
	MCP795W1X	14	±255 ppm	0.01 sec.	✓	1. CLK 2. IRQ 3. WDT RST	64	1	128	1.8	1.3	Power Fail Timestamp, Event Detects (x 2)	\$1.22	SOIC (SL), TSSOP (ST)
	MCP795W2X	14	±255 ppm	0.01 sec.	✓	1. CLK 2. IRQ 3. WDT RST	64	2	128	1.8	1.3	Power Fail Timestamp, Event Detects (x 2)	\$1.28	SOIC (SL), TSSOP (ST)

Note 1: All part numbers with an "X" have three ID programming options: [0 = Blank ID], [1 = EU-48™ MAC Address], [2 = EU-64™ MAC Address]

2: The Power Fail Timestamp in all RTCCs occur at Battery Switchover.

Products sorted by pin count followed by pricing.

† Pricing subject to change; please contact your Microchip representative for most current pricing.

SERIAL MEMORY PRODUCTS

Bus	Product	Released (R) Not Released (NR)	Density	Organization	Max. Clock Frequency	Operating Voltage	Temperature Range	E/W Endurance (Minimum)	Data Retention (Minimum)	Max. Write Spreads	Max. Standby Current (@ 5.5V, 85°C)	Write Protect		Protected Array Size	5 ku Pricing†	Special/Unique Features	Packages
												Hardware	Software				
Serial SRAM																	
SPI	23X640	R	64 Kb	x 8	20 MHz	1.5V-1.95V 2.7V-3.6V	-40°C to +125°C	∞	Volatile	0 ms	4 µA	-	-	-	\$0.51	Zero write cycle time. Infinite endurance. Volatile RAM. Byte/page/sequential read-write modes	PDP (P), SOIC (SN), TSSOP (ST)
	23X256	R	256 Kb	x 8	20 MHz	1.5V-1.95V 2.7V-3.6V	-40°C to +125°C	∞	Volatile	0 ms	4 µA	-	-	-	\$0.87	Zero write cycle time. Infinite endurance. Volatile RAM. Byte/page/sequential read-write modes	PDP (P), SOIC (SN), TSSOP (ST)
	23XX512	R	512 Kb	x 8	20 x 4 MHz	1.7V-2.2V 2.5V-5.5V	-40°C to +125°C	∞	Volatile	0 ms	4 µA	-	-	-	\$1.24	Fast Speed: Quad SPI available (80 MHz); Infinite endurance; Zero write times, 5V capable	SOIC (SN), PDP (P), TSSOP (ST)
	23XX1024	R	1024 Kb	x 8	20 x 4 MHz	1.7V-2.2V 2.5V-5.5V	-40°C to +125°C	∞	Volatile	0 ms	4 µA	-	-	-	\$1.73	Fast Speed: Quad SPI available (80 MHz); Infinite endurance; Zero write times, 5V capable	SOIC (SN), PDP (P), TSSOP (ST)
Serial NVSRAM																	
SPI	23LOV512	R	512 Kb	x 8	20 MHz	-	-40°C to +125°C	∞	20 Years via battery	0 ms	4 µA	-	-	-	\$1.40	Battery backed nonvolatile SRAM; Infinite endurance; Zero write times	SOIC (SN), PDP (P), TSSOP (ST)
	23LOV1024	R	1024 Kb	x 8	20 MHz	-	-40°C to +125°C	∞	20 Years via battery	0 ms	4 µA	-	-	-	\$1.98	Battery backed nonvolatile SRAM; Infinite endurance; Zero write times	SOIC (SN), PDP (P), TSSOP (ST)
Serial EEPROM																	
UNI/O® Bus	11XX010	R	1 Kb	x 8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	-	✓	W, ½, ¼	\$0.23	Single I/O for all clock, data, control and write protection	PDP (P), SOIC (SN), MSOP (MNY), DFN (MC), TO-92 (TO), 3-SOT23 (TT), WLCSP (CS)
	11XX020/E48	R	2 Kb	x 8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	-	✓	W, ½, ¼	\$0.25	Single I/O for all clock, data, control and write protection, Unique EU-48V/EUI64™, MAC address option available	PDP (P), SOIC (SN), MSOP (MNY), DFN (MC), TO-92 (TO), 3-SOT23 (TT), WLCSP (CS)
	11XX040	R	4 Kb	x 8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	-	✓	W, ½, ¼	\$0.26	Single I/O for all clock, data, control and write protection	PDP (P), SOIC (SN), MSOP (MNY), DFN (MC), TO-92 (TO), 3-SOT23 (TT), WLCSP (CS)
	11XX080	R	8 Kb	x 8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	-	✓	W, ½, ¼	\$0.30	Single I/O for all clock, data, control and write protection	PDP (P), SOIC (SN), MSOP (MNY), DFN (MC), TO-92 (TO), 3-SOT23 (TT), WLCSP (CS)
	11XX160	R	16 Kb	x 8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	-	✓	W, ½, ¼	\$0.33	Single I/O for all clock, data, control and write protection	PDP (P), SOIC (SN), MSOP (MNY), DFN (MC), TO-92 (TO), 3-SOT23 (TT), WLCSP (CS)
	24XX00	R	128 b	x 8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	4 ms	1 µA	-	-	-	\$0.17	100 kHz operation from 1.7V to 4.5V	PDP (P), SOIC (SN), TSSOP (ST), DFN (MC), 5-SOT-23 (OT)
	24XX01/014	R	1 Kb	x 8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.18	Address pin option: connect up to 8 devices on bus, Very low voltage option	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), SC70 (LT)
	24XX02/024/E48	R	2 Kb	x 8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.20	Address pin option - connect up to 8 devices on bus, Very low voltage option, Unique EU-48/EUI64 MAC address option available	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), SC70 (LT)
	34XX02	R	2 Kb	x 8	1 MHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½	\$0.18	1 MHz @ 2.5V, Permanent and restable software WP - DIMM-DDR2/3	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6-SOT-23 (OT),
	24XX00	R	128 b	x 8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	4 ms	1 µA	-	-	-	\$0.17	100 kHz operation from 1.7V to 4.5V	PDP (P), SOIC (SN), TSSOP (ST), DFN (MC), 5-SOT-23 (OT)
	24XX01/014	R	1 Kb	x 8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.18	Address pin option: connect up to 8 devices on bus, Very low voltage option	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), SC70 (LT)
	24XX02/024/E48	R	2 Kb	x 8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.20	Address pin option: connect up to 8 devices on bus, Very low voltage option, Unique EU-48/EUI64 MAC address option available	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), SC70 (LT)
LC™	34XX02	R	2 Kb	x 8	1 MHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½	\$0.18	1 MHz @ 2.5V, Permanent and restable software WP - DIMM-DDR2/3	PDP (P), SOIC (SN), TSSOP (ST), NSOP (MS), DFN (MNY), 6-SOT-23 (OT)
	24XX04	R	4 Kb	x 8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.21	400 kHz @ 2.5V, 16 byte page write buffer, No address pins	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), WLCSP (CS)
	24XX08	R	8 Kb	x 8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.23	400 kHz @ 2.5V, 16 byte page write buffer, No address pins	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 5-SOT-23 (OT),
	24XX16	R	16 Kb	x 8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W, ½	\$0.25	400 kHz @ 2.5V, 16 byte page write buffer, No address pins	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), WLCSP (CS)
	24XX32A	R	32 Kb	x 8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W, ¼	\$0.31	400 kHz @ 2.5V, 32 byte page write buffer, connect up to 8 devices on bus	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), WLCSP (CS)
	24XX64/65	R	64 Kb	x 8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M, 10M	200 Years	5 ms	1 µA	✓	-	W, ¼	\$0.38	1 MHz @ 2.5V, 32/64 byte page, Relocatable 4 Kb block with 10M cycles endurance	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), 5-SOT-23 (OT), WLCSP (CS)
	24XX128	R	128 Kb	x 8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W	\$0.54	1 MHz @ 2.5V, 64 byte page, Connect up to 8 devices on bus	PDP (P), SOIC (SN), TSSOP (ST), MSOP (MNY), DFN (MC), WLCSP (CS)
	24XX256	R	256 Kb	x 8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W	\$0.83	1 MHz @ 2.5V, 64 byte page, Connect up to 8 devices on bus	PDP (P), SOIC (SN), TSSOP (ST), SOU (SM), MSOP (MS), DFN (MF), WLCSP (CS)
	24XX512	R	512 Kb	x 8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	-	W	\$1.50	1 MHz @ 2.5V, 128 byte page, Connect up to 8 devices on bus	PDP (P), SOIC (SN), TSSOP (ST), DFN (MF), SOU (SM), WLCSP (CS)
	24XX1025/26	R	1 Mb	x 8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	5 µA	✓	-	W	\$3.14	1 MHz @ 2.5V, 128 byte page, Connect up to 4 devices on bus	PDP (P), SOIC (SN), SOU (SM)
	24XX1024	NR	1 Mb	x 8	1 MHz	2.5V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	5 µA	✓	-	W	-	1 MHz @ 2.5V, 256 byte page,Connect up to 4 devices on bus	PDP (P), SOIC (SN), TSSOP (ST), DFN (MF), SOU (SM)

1: All devices are Pb-Free and RoHS compliant.
2: ESD protection is 4kV (HBM); > 400V (MM) on all pins.
3: Write Protect (WP), W = Whole Array, ½ = Half Array, ¼ = Quarter Array.
4: Factory program and unique ID options available.
5: Die and wafer options available on all devices.
† Pricing Subject to change; please contact your Microchip representative for most current pricing.

Product	Released (R) Not Released (NR)	Density	Organization	Max. Clock Frequency	Operating Voltage	Temperature Range	E/W Endurance (Minimum)	Data Retention (Minimum)	Max. Write Spreads	Max. Standby Current (@ 5.5V, 85°C)	Write Protect	Protected Array Size	5 ku Pricing†	Special/Unique Features	Packages
Bus															
Serial EERPOM (Cont.)															
Microwire	93XX46A/B/C	R	1 Kb	× 8 / × 16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	-	\$0.18	ORG pin to select word size on 46C version	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	93XX56A/B/C	R	2 Kb	× 8 / × 16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	-	\$0.20	ORG pin to select word size in 56C version	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	93XX66A/B/C	R	4 Kb	× 8 / × 16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	-	\$0.21	ORG pin to select word size in 66C version	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	93XX76A/B/C	R	8 Kb	× 8 / × 16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	✓	\$0.30	ORG pin to select word size in 76C version	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	93XX86A/B/C	R	16 Kb	× 8 / × 16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	✓	\$0.33	ORG pin to select word size in 86C version	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	25XX010A	R	1 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.30	5 MHz @ 2.5V, Status register, 16 byte page	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
SPI	25XX020A/E4B	R	2 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.31	5 MHz @ 2.5V, Status register, 16 byte page, Unique EU-48™/EU-64™ MAC address option available	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	25XX040A	R	4 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.33	5 MHz @ 2.5V, Status register, 16 byte page	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), 6SOT-23 (OT)
	25XX080C/D	R	8 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.40	16/32 byte page, 5 MHz @ 2.5V, Status register	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY)
	25XX160C/D	R	16 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.41	16/32 byte page, 5 MHz @ 2.5V, Status register	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY)
	25XX320A	R	32 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.45	5 MHz @ 2.5V, Status register, 32 byte page	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY)
	25XX640A	R	64 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.46	5 MHz @ 2.5V, Status register, 32 byte page	PDIP (P), SOIC (SN), TSSOP (ST), MSOP (MS), DFN (MNY), MF,
	25XX128	R	128 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$0.74	5 MHz @ 2.5V, Status register, 64 byte page	PDIP (P), SOIC (SN), TSSOP (ST), DFN (MF)
	25XX256	R	256 Kb	× 8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	\$1.01	5 MHz @ 2.5V, Status register, 64 byte page	PDIP (P), SOIC (SN), TSSOP (ST), DFN (MF), SOU (SM)
	25XX512	R	512 Kb	× 8	20 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	10 µA	✓	\$1.53	10 MHz @ 2.5V, Deep power down, Status register, Page/sector/chip erase	PDIP (P), SOIC (SN), DFN (MF), SOU (SM)
	25XX1024	R	1 Mb	× 8	20 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	12 µA	✓	\$2.59	10 MHz @ 2.5V, Deep power down, Status register, Page/sector/chip erase	PDIP (P), DFN (MF), SOU (SM)

1: All devices are Pb-Free and RoHS compliant.
2: ESD protection > 4kV (HBM); > 400V (MM) on all pins.
3: Write Protect (WP); W = Whole Array, ½ = Half Array, ¼ = Quarter Array.
4: Factory program and unique ID options available.
5: Die and wafer options available on all devices.
† Pricing subject to change; please contact your Microchip representative for most current pricing.

SERIAL FLASH MEMORY

Product	Released (R) Not Released (NR)	Density	Organization	Max. Clock Frequency	Operating Voltage	Temperature Range	E/W Endurance (Minimum)	Data Retention (Minimum)	Write Speed (Typical)	Write Protect			Special/Unique Features	Packages*
										Max. Standby Current	Hardware	Protected Array Size		
Bus	SST25VF512A	R	512 Kb	64K × 8	33 MHz	2.7~3.6V 0°C to 70°C -40°C to +85°C -20 to +85°C	100,000 cycles (typical)	100 years	14 μs (Byte Program)	8 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN, 8B-XFPGA
	SST25VF010A	R	1 Mb	128K × 8	33 MHz	2.7~3.6V 0°C to 70°C -40°C to +85°C -20 to +85°C	100,000 cycles (typical)	100 years	14 μs (Byte Program)	8 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN, 8B-XFPGA
	SST25VF020B	R	2 Mb	256K × 8	80 MHz	2.7~3.6V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF020B	R	2 Mb	256K × 8	40 MHz	2.3~3.6V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF020A	NR	2 Mb	256K × 8	40 MHz	1.65~1.95V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	20 years	3 ms (Page Program)	10 μA	✓	Various	Single-input page program, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF040B	R	4 Mb	512K × 8	80 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN, 8B-XFPGA
	SST25VF040B	R	4 Mb	512K × 8	40 MHz	2.3~3.6V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF080B	R	8 Mb	1M × 8	80 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN, 8B-XFPGA
	SST25VF080B	R	8 Mb	1M × 8	40 MHz	2.3~3.6V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF016B	R	16 Mb	2M × 8	75 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF032B	R	32 Mb	4M × 8	80 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (typical)	100 years	7 μs (Word Program)	5 μA	✓	Various	Auto address increment programming, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF040B	NR	4 Mb	512K × 8	40 MHz	1.65~1.95V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	20 years	1 ms (Page Program)	10 μA	✓	Various	Dual output and dual I/O read, Single- and dualinput page program, Fast read, program and erase	8L-SQIC, 8C-WSQIN
×1, ×2	SST25VF080B	NR	8 Mb	1M × 8	40 MHz	1.65~1.95V 0°C to 70°C -40°C to +85°C	100,000 cycles (typical)	20 years	1 ms (Page Program)	10 μA	✓	Various	Dual output and dual I/O read, Single- and dualinput page program, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST25VF064C	R	64 Mb	8M × 8	80 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (typical)	100 years	1.5 ms (Page Program)	5 μA	✓	Various	Dual output and dual I/O read, Single- and dualinput page program, One-time programmable area, Fast read, program and erase	8L-SQIC, 8C-WSQIN, 16L-SQIC
×4	SST26VF016	R	16 Mb	2M × 8	80 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (minimum)	100 years	1 ms (Page Program)	8 μA	✓	Various	SQ ¹⁶ Quad I/O read/program/erase, Burst read, Index jump feature, Individual block read and write protection, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST26VF032	R	32 Mb	4M × 8	80 MHz	2.7~3.6V -40°C to +85°C	100,000 cycles (minimum)	100 years	1 ms (Page Program)	8 μA	✓	Various	SQ Quad I/O read/program/erase, Burst read, Index jump feature, Individual block read and write protection, Fast read, program and erase	8L-SQIC, 8C-WSQIN
×1, ×2, ×4	SST26VF080B	NR	8 Mb	1M × 8	104 MHz	1.65~1.95V 0°C to 70°C -40°C to +85°C	100,000 cycles (minimum)	100 years	1 ms (Page Program)	3 μA	✓	Various	x1, x2, x4 read, Single- and quadinput page program, Burst read, Write suspend, Individual block read and write protection, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST26VF016B	NR	16 Mb	2M × 8	104 MHz	1.65~1.95V 0°C to 70°C -40°C to +85°C	100,000 cycles (minimum)	100 years	1 ms (Page Program)	3 μA	✓	Various	x1, x2, x4 read, Single- and quadinput page program, Burst read, Write suspend, Individual block read and write protection, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST26VF032B/BA	NR	32 Mb	4M × 8	104 MHz	2.7~3.6V 0°C to 70°C -40°C to +85°C	100,000 cycles (minimum)	100 years	1 ms (Page Program)	15 μA	✓	Various	x1, x2, x4 read, Single- and quadinput page program, Burst read, Write suspend, Individual block read and write protection, Fast read, program and erase	8L-SQIC, 8C-WSQIN
	SST26VF064B/BA	NR	64 Mb	8M × 8	104 MHz	2.7~3.6V 0°C to 70°C -40°C to +85°C	100,000 cycles (minimum)	100 years	1 ms (Page Program)	15 μA	✓	Various	x1, x2, x4 read, Single- and quadinput page program, Burst read, Write suspend, Individual block read and write protection, Fast read, program and erase	8L-SQIC, 8C-WSQIN

* Only standard packages are listed here. Please inquire with your local sales office for devices in die form or in chip-scale packages.

LPC FIRMWARE FLASH/FIRMWARE HUB FLASH MEMORY

Product	Released (R) Not Released (NR)	Density	Organization	Max. Clock Frequency	Operating Voltage	Temperature Range	E/W Endurance (Minimum)	Data Retention (Minimum)	Write Speed (Typical)	Write Protect			Special/Unique Features	Packages
										Max. Standby Current	Hardware	Protected Array Size		
Bus														
×4	SST49LF08A	R	8 Mb	1M × 8	33 MHz	0°C to 70°C	100,000 cycles (minimum)	100 years	14 µs (Byte Program)	14 µA	✓	Various	Firmware Hub (FWH) device for PCBIOS application, provide protection for the storage and update of code and data	32L-PLCC, 32L-TSOP
	SST49LF016C	R	16 Mb	2M × 8	33 MHz	0°C to 70°C	100,000 cycles (minimum)	100 years	14 µs (Byte Program)	14 µA	✓	Various	Firmware Hub (FWH) device for PCBIOS application, provide protection for the storage and update of code and data	32L-PLCC, 32L-TSOP
	SST49LF080A	R	8 Mb	1M × 8	33 MHz	0°C to 70°C	100,000 cycles (minimum)	100 years	14 µs (Byte Program)	14 µA	✓	Various	LPC Flash devices comply with the standard Intel Low Pin Count (LPC) Interface Specification 1.1, provide protection for the storage and update of code and data	32L-PLCC, 32L-TSOP
	SST49LF160C	R	16 Mb	2M × 8	33 MHz	0°C to 70°C	100,000 cycles (minimum)	100 years	14 µs (Byte Program)	14 µA	✓	Various	LPC Flash devices comply with the standard Intel Low Pin Count (LPC) Interface Specification 1.1, provide protection for the storage and update of code and data	32L-PLCC

Product*	Released (R) Not Released (NR)	Density	Organization	Max. Clock Frequency	Operating Voltage	Temperature Range	E/W Endurance (Minimum)	Data Retention (Minimum)	Write Speed (Typical)	Write Protect			Special/Unique Features	Packages**
										Max. Standby Current	Hardware	Software	Protected Array Size	
Bus														
SST39SF010A	R	1 Mb	128K x 8	45/70 ns	4.5-5.5V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Byte Program)	30 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 32L-PLCC, 32L-PDIP, 32L-TSOP
SST39LF010	R	1 Mb	512K x 8	45 ns	3.0-3.6V	0°C to 70°C	100,000 cycles	100 years	14 µs (Byte Program)	1 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 32L-TSOP, 32L-PLCC
SST39WF010	R	1 Mb	512K x 8	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Byte Program)	1 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 32L-TSOP, 32L-PLCC
SST39LF020	R	2 Mb	512K x 8	45 ns	3.0-3.6V	0°C to 70°C	100,000 cycles	100 years	14 µs (Byte Program)	1 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 32L-TSOP, 32L-PLCC
SST39WF020A	R	2 Mb	256K x 8	45/55/70 ns	4.5-5.5V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Byte Program)	30 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 32L-PLCC, 32L-PDIP, 32L-TSOP
SST39LF020	R	2 Mb	512K x 8	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Byte Program)	1 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 32L-TSOP, 32L-PLCC
SST39SF040	R	4 Mb	512K x 8	45/70 ns	4.5-5.5V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Byte Program)	30 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 32L-PLCC, 32L-PDIP, 32L-TSOP
SST39LF040	R	4 Mb	512K x 8	45 ns	3.0-3.6V	0°C to 70°C	100,000 cycles	100 years	14 µs (Byte Program)	1 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 32L-TSOP, 32L-PLCC
SST39WF040	R	4 Mb	512K x 8	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Byte Program)	1 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 32L-TSOP, 32L-PLCC
SST39F168X	R	16 Mb	2M x 8	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Byte Program)	3 µA	✓	-	64 KB	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48L-TSOP
SST39LF200A	R	2 Mb	128K x 16	55 ns	3.0-3.6V	0°C to 70°C	100,000 cycles	100 years	14 µs (Word Program)	3 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48L-TSOP
SST39WF200A	R	2 Mb	128K x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	14 µs (Word Program)	3 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48L-TSOP, 48B-WFBGA
SST39LF40XC	R	4 Mb	256K x 16	55 ns	3.0-3.6V	0°C to 70°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	-	8 KB	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure 48B-FBGA, 48L-TSOP, 48B-WFBGA
SST39WF400B	R	4 Mb	256K x 16	70 ns	1.65-1.95V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48B-WFBGA, 48B-XFBGA
SST39F140XC	R	4 Mb	256K x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	-	8 KB	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure 48B-FBGA, 48L-TSOP, 48B-WFBGA
SST39WF800B	R	8 Mb	512K x 16	70 ns	1.65-1.95V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	-	-	N/A	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48B-WFBGA, 48B-XFBGA
SST39LF80XC	R	8 Mb	512K x 16	55 ns	3.0-3.6V	0°C to 70°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	-	N/A	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure 48B-FBGA, 48L-TSOP, 48B-WFBGA
SST39WF80XC	R	8 Mb	512K x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	-	N/A	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure 48B-FBGA, 48L-TSOP, 48B-WFBGA
SST39WF160X	R	16 Mb	1M x 16	70 ns	1.65-1.95V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	✓	-	32 KB	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48B-WFBGA, 48B-XFBGA
SST39F160XC	R	16 Mb	1M x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	-	8 KB	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure 48B-FBGA, 48L-TSOP, 48B-WFBGA
SST39F160X	R	16 Mb	2M x 8	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Byte Program)	3 µA	✓	-	64 KB	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48L-TSOP
SST39F320XB	R	32 Mb	2M x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Word Program)	4 µA	✓	-	32 KB	Fast read, program and erase; Low power; Small erase sector 48B-FBGA, 48L-TSOP
SST39F320XC	R	32 Mb	2M x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs (Word Program)	4 µA	✓	-	8 KB	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure 48B-FBGA, 48L-TSOP
SST39F640X	R	64 Mb	4M x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs/1.75 µs (Write Buffer Program)	3 µA	✓	✓	32 KB/ 8 KB	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure; Security features 48B-FBGA, 48L-TSOP
SST39F640XB	NR	64 Mb	4M x 16	70 ns	2.7-3.6V	0°C to 70°C -40°C to +85°C	100,000 cycles	100 years	7 µs/1.75 µs (Write Buffer Program)	3 µA	✓	✓	32 KB/ 8 KB	Fast read, program and erase; Low power; Small erase sector; Industry standard command set and boot block structure; Security features 48B-FBGA, 48L-TSOP

*X is a wildcard to indicate "top" or "bottom" boot block support. Please refer to the respective datasheets for more details.
**Only standard packages are listed here. Please inquire with your local sales office for devices in die form or in chip-scale packages.

WIRELESS PRODUCTS																
Product	Pin Count	Frequency Range (GHz)	Sensitivity (dBm)	Power Output (dBm)	RSSI	Tx Power Consumption (mA)	Rx Power Consumption (mA)	Clock	Sleep	IMAC	MAC Features	Protocols	Encryption	Interface	Volume Pricing†	Packages
IEEE 802.11 Modules																
MRF24WB0MA	36	2.412-2.484	-91	10	Yes	156	85	25 MHz	0.1 µA ⁽¹⁾	Yes	802.11b	WiFi® Connection Manager, Announce, DNS, DDNS, DHCP FTP HTTP NBNS, SNMP SNTF SSL, TCP UDP ZeroConf ⁽²⁾	WPA, WPA2, WEP	4-wire SPI	\$12.48	36/Module
MRF24WB0MB	36	2.412-2.484	-91	10	Yes	156	85	25 MHz	0.1 µA ⁽¹⁾	Yes	802.11b	WiFi Connection Manager, Announce, DNS, DDNS, DHCP FTP HTTP NBNS, SNMP SNTF SSL, TCP UDP ZeroConf ⁽²⁾	WPA, WPA2, WEP	4-wire SPI	\$12.48	36/Module
RN171	49	2.412-2.484	-83	12	Yes	130	30	44 MHz	4 µA	Yes	802.11b/g, Wi-Fi Direct, SoftAP WPS, WebScan	DHCP DNS, ARP ICMP FTP client, HTTP client, TCP UDP	WEP, WPA, WPA2	UART, SPI Slave, WiFi	\$18.11	49/Module
MRF24WG0MA	36	2.412-2.484	-95	18	Yes	240	156	25 MHz	0.1 mA ⁽¹⁾	Yes	802.11b/g, Wi-Fi Direct, SoftAP WPS	WiFi Connection Manager, Announce, DNS, DDNS, DHCP FTP HTTP NBNS, SNMP SNTF SSL, TCP UDP ZeroConf ⁽²⁾	WPA2-PSK, WPA-PSK, WEP	4-wire SPI	\$18.75	36/Module
MRF24WG0MB	36	2.412-2.484	-95	18	Yes	240	156	25 MHz	0.1 mA ⁽¹⁾	Yes	802.11b/g, Wi-Fi Direct, SoftAP WPS	WiFi Connection Manager, Announce, DNS, DDNS, DHCP FTP HTTP NBNS, SNMP SNTF SSL, TCP UDP ZeroConf ⁽²⁾	WPA2-PSK, WPA-PSK, WEP	4-wire SPI	\$18.75	36/Module
RN131C	44	2.412-2.484	-85	18	Yes	210 (+18 dBm)	40	44 MHz	4 µA	Yes	802.11b/g, Wi-Fi Direct, SoftAP WPS, WebScan	DHCP DNS, ARP ICMP FTP client, HTTP client, TCP UDP	WEP, WPA, WPA2	UART, SPI Slave, WiFi	\$24.90	44/Module
RN131G	44	2.412-2.484	-85	18	Yes	210 (+18 dBm)	40	44 MHz	4 µA	Yes	802.11b/g, Wi-Fi Direct, SoftAP WPS, WebScan	DHCP DNS, ARP ICMP FTP client, HTTP client, TCP UDP	WEP, WPA, WPA2	UART, SPI Slave, WiFi	\$27.75	44/Module
IEEE 802.15.4 Transceivers/Modules																
MRF24J40	40	2.405-2.48	-95	0	Yes	23	19	20 MHz	2 µA	Yes	CSMA-CA	-	AES128	4-wire SPI	\$2.36	40/QFN
MRF24J40MA	12	2.405-2.48	-95	0	Yes	23	19	20 MHz	2 µA	Yes	CSMA-CA	-	AES128	4-wire SPI	\$4.94	12/Module
MRF24J40MB	12	2.405-2.48	-102	20	Yes	130	25	20 MHz	5 µA	Yes	CSMA-CA	-	AES128	4-wire SPI	\$10.66	12/Module
MRF24J40MC	12	2.405-2.48	-108	20	Yes	120	25	20 MHz	12 µA	Yes	CSMA-CA	-	AES128	4-wire SPI	\$10.66	12/Module
1. Indicates "off" current for sleep column. 2. Supported in the provided stack.																
WIRELESS PRODUCTS																
Product	Pin Count	Frequency Range (GHz)	Sensitivity (dBm)	Power Output (dBm)	Power Consumption			Sleep		MAC	Profiles	Interface	Volume Pricing†	Packages		
Bluetooth®																
RN421-/RM	35	2.4 to 2.48	-80	4	Standby/Idle 25 mA, Connected (normal mode) 3 mA, Connected (low power sniff) 8 mA			Standby/Idle (deep sleep enabled) 26 µA		Yes	SPP DUN, HID, IAP HCI, RFComm, L2CAP, SDP	UART, USB, Bluetooth®	\$12.50	35/Module		
RN521-/RM*	40	2.4 to 2.48	-85	4	TBD			Standby/Idle (deep sleep enabled) 26 µA		Yes	AZDP AVRCP SPP HFP/HSP/IAP	(audio) Analog speaker, microphone, iS master mode, S/PDIF, (data) UART, USB, GPIO	\$16.04	40/Module		
RN411-/RM	35	2.4 to 2.48	-80	15	Standby/Idle 25 mA, Connected (normal mode) 30 mA, Connected (low power sniff) 8 mA			Standby/Idle (deep sleep enabled) 250 µA		Yes	SPP DUN, HID, IAP HCI, RFComm, L2CAP, SDP	UART, USB, Bluetooth	\$18.75	35/Module		
**Not yet released.																
Sub-GHz Transceivers/Modules																
Product	Pin Count	Frequency Range (MHz)	Sensitivity (dBm)	Power Output (dBm)	RSSI	Tx Power Consumption (mA)	Rx Power Consumption (mA)	Clock	Sleep	Interface	Volume Pricing†	Packages				
MRF49XA	16	433/868/915	-110	7	Yes	15 mA @ 0 dBm	11	10 MHz	0.3 µA	4-wire SPI	\$1.71	16/TSSOP				
MRF89XA	32	868/915/950	-113	12.5	Yes	25 mA @ 0 dBm	3	12.8 MHz	0.1 µA	4-wire SPI	\$1.76	32/TQFN				
MRF89XAMB	12	868	-113	12.5	Yes	25 mA @ 0 dBm	3	12.8 MHz	0.1 µA	4-wire SPI	\$5.20	12/Module				
MRF89XAMB	12	915	-113	12.5	Yes	25 mA @ 0 dBm	3	12.8 MHz	0.1 µA	4-wire SPI	\$5.20	12/Module				
rfPIC™ Transmitters + PIC® MCUs																
Product	I/O Pins	Frequency Range (MHz)	Program Memory (Bytes)	EEPROM (bytes)	RAM (bytes)	Digital Timer	Watch Dog Timer	Max. Speed (MHz)	ICSP™	Modulation	Data Rate (kbps)	Output Power (dBm)	Operating Voltage	Volume Pricing†	Packages	
PIC12F529T48A	6	418-868	2.3 K	-	201	1	1	8	Yes	OOK/FSK	100	10	2.0-3.7	\$0.85	14/TSSOP	
PIC12F529T39A	6	310-928	2.3 K	-	201	1	1	8	Yes	OOK/FSK	100	10	2.0-3.7	\$0.95	14/TSSOP	
PIC12LF1840T48A	6	418-868	7.1 K	256	256	2	1	32	Yes	OOK/FSK	100	10	1.8-3.6	\$1.12	14/TSSOP	
PIC12LF1840T39A	6	310-928	7.1 K	256	256	2	1	32	Yes	OOK/FSK	100	10	1.8-3.6	\$1.27	14/TSSOP	
rfPIC12F675F	6	380-450	1.7 K	128	64	1	1	20	Yes	ASK/FSK	40	10	2.0-5.5	\$2.11	20/SSOP	
rfPIC12F675H	6	850-930	1.7 K	128	64	1	1	20	Yes	ASK/FSK	40	10	2.0-5.5	\$2.11	20/SSOP	
rfPIC12F675K	6	290-350	1.7 K	128	64	1	1	20	Yes	ASK/FSK	40	10	2.0-5.5	\$2.11	20/SSOP	

1. Indicates "off" current for sleep column.
2. Supported in the provided stack.

USB: SuperSpeed USB 3.0 Hubs					
USB 3.0 Hub Controller Family for Computing and Consumer Applications					
Product	Features	Downstream USB Ports	Industrial Temp. Option (-40 to 85°C)	Pin	Packages
USB532B	USB 3.0 Superspeed hub, two port, OTP flash programmable with advanced battery charging support	2	USB532B1	64	QFN
USB533B	USB 3.0 Superspeed hub, three port, OTP flash programmable with advanced battery charging support	3	USB5533B1	64	QFN
USB534B	USB 3.0 Superspeed hub, four port, OTP flash programmable with advanced battery charging support	4	USB5534B1	64	QFN
USB537B	USB 3.0 hybrid hub, seven total ports, four USB 3.0 with three additional USB 2.0 downstream ports, OTP flash programmable with advanced battery charging support	USB 3.0: 4 USB 2.0: 3	USB5537B1	72	QFN

USB: Hi-Speed USB 2.0 Hubs					
Low-Power, Small-Footprint, Cost-Effective USB 2.0 Hub Controller Family					
Product	Features	Downstream USB Ports	Industrial Temp. Option (-40 to 85°C)	Pin	Packages
USB2422	Small-footprint, two port value hub, commercial and industrial temperature with USB battery charging 1.1	2	USB24221	24	QFN
USB2412	Small-footprint, low-power, standard commercial temperature range	2	-	28	QFN
USB2512B	Low-power, extended commercial temperature range, USB Battery Charging 1.1	2	USB2512B1	36	QFN
USB2513B	Low-power, small-footprint, extended commercial temperature range, USB Battery Charging 1.1 (USB2513B/2514B only), SNOSC's proprietary PortMap, PortSwap, TrueSpeed, PHYBoost and MultiTRAK™ technologies	3	USB2513B1	36	QFN
USB2514B	Low-power, small-footprint, extended commercial temperature range, USB Battery Charging 1.1 (USB2513B/2514B only), SNOSC's proprietary PortMap, PortSwap, TrueSpeed, PHYBoost and MultiTRAK™ technologies	4	USB2514B1	36/64	QFN, VFBGA
USB2517	Low-power, small-footprint, extended commercial temperature range, USB Battery Charging 1.1 (USB2513B/2514B only), SNOSC's proprietary PortMap, PortSwap, TrueSpeed, PHYBoost and MultiTRAK™ technologies	7	USB25171	64	QFN
USB2524	MultiSwitch™ technology combining Hi-Speed USB hub and switching functionality in a single-chip, cost-effective solution	2 upstream/4 downstream	-	56	QFN
USB2532	Low-power, small-footprint, extended commercial temperature range, USB Battery Charging 1.2, PortMap, PortSwap, TrueSpeed, PHYBoost, MultiTRAK, VarSense and FlexConnect technologies	2	USB25321	36	SQFN
USB2533	Low-power, small-footprint, extended commercial temperature range, USB Battery Charging 1.2, PortMap, PortSwap, TrueSpeed, PHYBoost, MultiTRAK, VarSense and FlexConnect technologies	3	USB25331	36	SQFN
USB2534	Low-power, small-footprint, extended commercial temperature range, USB Battery Charging 1.2, PortMap, PortSwap, TrueSpeed, PHYBoost, MultiTRAK, VarSense and FlexConnect technologies	4	USB25341	36	SQFN
USB3613	Ultra small, extremely low power, mobile embedded USB 2.0 hub with HSC host connectivity, LPM compatibility and advanced battery charging support	USB 2.0: 2 HSC: 1	USB36131	30	WLCSOP
USB3813	Ultra small, extremely low power, mobile embedded USB 2.0 hub with USB 2.0 host connectivity, LPM compatibility and advanced battery charging support	USB 2.0: 2 HSC: 1	USB38131	30	WLCSOP
USB4604	Advanced USB 2.0 hub with USB 2.0 downstream ports and HSC or USB host connectivity, I/O bridging, low power and advanced battery charging support	USB 2.0 4	USB46041	48	QFN
USB4624	Advanced USB 2.0 hub with USB 2.0/HSC downstream ports and HSC or USB host connectivity, I/O bridging, low power and advanced battery charging support	USB 2.0: 2 HSC: 2	USB46241	48	QFN

USB: Hi-Speed USB 2.0 Portable Hubs					
Ultra-Small Hubs for Portable Applications					
Product	Features	Industrial Temp. Option (-40 to 85°C)	Upstream Interface	Pin/Ball	Packages
USB3803C	Ultra-small, extremely low standby power, high-performance, built-in ESD protection, USB Battery Charging 1.2 detection	USB38031	USB	25	WLCSOP
USB3503A	Ultra-small, extremely low standby power, high-performance, built-in ESD protection, USB Battery Charging 1.2 detection	USB35031	HSC	25	WLCSOP

USB: Hi-Speed USB to Ethernet Controllers				
USB 2.0 to 10/100 or 10/100/1000 Ethernet Controllers				
Product	Features	Industrial Temp. Option (-40 to 85°C)	Pin	Packages
LAN9500A	10/100, NetDetach™ technology, EEPROM-less operation, UniClock™ technology	LAN9500Ai	56	QFN
LAN7500	10/100/1000 Gigabit controller with integrated USB and Ethernet PHYs, single-chip, high-performance, cost-effective, EEPROM-less operation, UniClock technology	LAN7500i	56	QFN
LAN9730	HSC Ethernet controller, multiple low-power modes, HSC interface reduces pin count and power budget, drivers fully backward compatible to existing USB 2.0 software for seamless transition, industrial temperature for rugged environments	LAN9730i	56	QFN

USB: Hi-Speed USB to Ethernet Controllers					
USB 2.0 Hub and 10/100 Ethernet Controllers with Superior ESD Protection					
Product	Features	Downstream USB Ports	Industrial Temp. Option (-40 to 85°C)	Pin	Packages
LAN9512	Industry's first fully-integrated, single-chip device, UniClock™ technology, EEPROM-less design option	2	LAN95121	64	QFN
LAN9513	Industry's first fully-integrated, single-chip device, UniClock™ technology, EEPROM-less design option	3	LAN95131	64	QFN
LAN9514	Industry's first fully-integrated, single-chip device, UniClock™ technology, EEPROM-less design option	4	LAN95141	64	QFN

USB: Hi-Speed USB Flash Media Controllers Standalone USB 2.0, Multi-Format Flash Media Controllers					
Product	Features	Socket Type	Supports	Industrial Temp. Option (-40 to 85°C)	Pin Packages
USB2240	Ultra Hi-Speed, cost-effective, external or internal ROM option, secure memory format options	Single	SD™/MultiMediaCard™/xDPicture Card™/Memory Stick®	USB2240i	36 QFN
USB2241	Ultra Hi-Speed, cost-effective, external or internal ROM option, secure memory format options	Single	SD/MultiMediaCard/SmartMedia/Memory Stick	USB2241i	36 QFN
USB2242	Ultra Hi-Speed, cost-effective, external or internal ROM option, secure memory format options	Single	Memory Stick	USB2242i	36 QFN
USB2244	Ultra Hi-Speed, cost-effective, external or internal ROM option, secure memory format options	Single	SD/MultiMediaCard	USB2244i	36 QFN
USB2250	Ultra Hi-Speed, cost-effective, external or internal ROM option, secure memory format options	Multi	SD/MultiMediaCard/SmartMedia/xDPicture Card/Memory Stick/Compact Flash® and external memory	USB2250i	128 VQFP
USB2251	Ultra Hi-Speed, cost-effective, external or internal ROM option, secure memory format options	Multi	SD/MultiMediaCard/SmartMedia/xDPicture Card/Memory Stick/Compact Flash and external memory	USB2251i	128 VQFP

USB: Transceivers Hi-Speed USB 2.0 Transceivers					
Product	Features	Interface	Reference Clock	Pin/Ball	Packages
USB3310	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR® technology	1.8V ULPI	Multi-frequency	24-pin	QFN
USB3311	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V ULPI	26 MHz	24-pin /25-ball	QFN, VFBGA
USB3313	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V-3.3V ULPI	26 MHz	25-ball	VFBGA
USB3315	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V-3.3V ULPI	24 MHz	24-pin	QFN
USB3316	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V ULPI	19.2 MHz	24-pin /25-ball	QFN, VFBGA, UFBGA
USB3317	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V-3.3V ULPI	26 MHz	24-pin /25-ball	QFN, VFBGA
USB3318	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V-3.3V ULPI	13 MHz	24-pin	QFN
USB3319	Highly-integrated, small footprint, internal ESD protection circuits, integrated 3.3V LDO regulator, integrated USB switch, external passive components minimized, flexPWR technology	1.8V ULPI	13 MHz	24-pin /25-ball	QFN, VFBGA
USB3320	Full-featured, USB OTG transceiver, integrated Vbus over-voltage protection, USB switch, ESD protection circuits and 3.3V LDO regulator, ULPI 60 MHz clock-in mode including crystal support, flexPWR technology	1.8V-3.3V ULPI	Multi-frequency	32-pin	QFN
USB3321	Small-footprint, integrated Vbus over-voltage protection, USB switch, ESD protection circuits and 3.3V LDO regulator, ULPI 60 MHz clock-in mode, flexPWR technology	1.8V ULPI	26 MHz	25-ball	WLCSP
USB3322	Small-footprint, integrated Vbus over-voltage protection, USB switch, ESD protection circuits and 3.3V LDO regulator, ULPI 60 MHz clock-in mode, flexPWR technology	1.8V ULPI	12 MHz	25-ball	WLCSP
USB3326	Small-footprint, integrated Vbus over-voltage protection, USB switch, ESD protection circuits and 3.3V LDO regulator, ULPI 60 MHz clock-in mode, flexPWR technology	1.8V ULPI	19.2 MHz	25-ball	WLCSP
USB3327	Small-footprint, integrated Vbus over-voltage protection, USB switch, ESD protection circuits and 3.3V LDO regulator, ULPI 60 MHz clock-in mode, flexPWR technology	1.8V ULPI	27 MHz	25-ball	WLCSP
USB3329	Small-footprint, integrated Vbus over-voltage protection, USB switch, ESD protection circuits and 3.3V LDO regulator, ULPI 60 MHz clock-in mode, flexPWR technology	1.8V ULPI	13 MHz	25-ball	WLCSP
USB3330	Small-footprint, integrated Vbus over-voltage protection, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere™ technology	1.8V ULPI	Multi-frequency	25-ball	WLCSP
USB3331	Small-footprint, integrated Vbus over-voltage protection, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, integrated USB switch, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V ULPI	26 MHz	25-ball	WLCSP
USB3333	Small-footprint, integrated Vbus over-voltage protection, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V-3.3V ULPI	19.2 MHz/26 MHz	25-ball	WLCSP
USB3336	Small-footprint, integrated Vbus over-voltage protection, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, integrated USB switch, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V ULPI	19.2 MHz	25-ball	WLCSP
USB3338	Small-footprint, integrated Vbus over-voltage protection, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V ULPI	38.4 MHz	25-ball	WLCSP
USB3340	Highly-integrated, small footprint, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, integrated USB switch, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V-3.3V ULPI	Multi-frequency	32-pin	QFN
USB3341	Highly-integrated, small footprint, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, integrated USB switch, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V ULPI	26 MHz	24-pin	QFN
USB3343	Highly-integrated, small footprint, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V-3.3V ULPI	26 MHz crystal	24-pin	QFN
USB3346	Highly-integrated, small footprint, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, integrated USB switch, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V ULPI	19.2 MHz	24-pin	QFN
USB3347	Highly-integrated, small footprint, internal ESD protection circuits, integrated 1.8V & 3.3V LDO regulators, ULPI 60 MHz clock-in mode, flexPWR technology, battery charger detection supported through RapidCharge Anywhere technology	1.8V ULPI	27 MHz	24-pin	QFN

USB: Switches Hi-Speed USB 2.0 Switches			
Product	Features	Pin	Packages
USB3740	Ultra-small package options, high-bandwidth, extremely low operating power, low on resistance	10	QFN

USB: Hi-Speed USB Hub and Flash Media Controllers								
Hi-Speed USB 2.0 Hub and Multi-Format Flash Media Reader Combos								
Product	Features	Socket Type	Supports	Downstream USB Ports	Industrial Temp. Option (-40 to 85° C)	Packages		
USB2680	Ultra Hi-Speed, cost-effective, low-power, small footprint	Dual	SD™/MultiMediaCard™ /xD-Picture Card™/Memory Stick®	2	USB2680I	64 QFN		
USB2640	Ultra Hi-Speed, cost-effective, low-power, small footprint	Single	SD/MultiMediaCard/Memory Stick	2	USB2640I	48 QFN		
USB2641	Ultra Hi-Speed, cost-effective, low-power, small footprint	Single	SD/MultiMediaCard/xD-Picture Card/Memory Stick	2	USB2641I	48 QFN		
USB2601/2602	Integrated card power FETs and Hi-Speed USB 2.0 hub	Multi	SD/MultiMediaCard/SmartMedia™/Memory Stick® /CompactFlash® and external memory	3	-	VTQFP		
USB4640	Ultra-fast digital, Hi-Speed Interchip Interface (HSIC)	Single	SD/MultiMediaCard/xD-Picture Card/Memory Stick	2	USB4640I	48 QFN		
USB: Hi-Speed USB 2.0 Portable Power								
Product	Features			Pin	Packages			
USB3750	Ultra-small package options, VBUS overvoltage and ESD protection, USB Battery Charging v1.2 detection			16	QFN			
USB3751	Ultra-small package options, VBUS overvoltage and ESD protection, USB Battery Charging v1.2 detection			16	QFN			
USB: HSIC Controllers								
Hi-Speed USB Interchip Controllers for On-Board USB Connectivity								
Product	Features			Upstream Port	Downstream Port	Bridge Function	Pin/Ball	Packages
USB4640	HSIC Flash media reader hub multi-function controller			HSIC	USB	SD™/MultiMediaCard™/Memory Stick®	48	QFN
USB3503	3-port HSIC hub for portable applications, ultra-small, extremely low standby power, high-performance, builtin ESD protection, USB Battery Charging 1.2 detection			HSIC	USB	USB pass-thru	25	WLCSP
LAN9730	HSIC Ethernet controller, multiple low-power modes, HSIC interface reduces pin count and power budget, drivers fully backward compatible to existing USB 2.0 software for seamless transition, industrial temperature for rugged environments			HSIC	N/A	10/100 Ethernet	56	QFN
SEC4410	USB secure authentication and encrypted storage token with AES encryption, 35 MB/s transfer rates and 32-bit controller			HSIC	N/A	SD/MultiMediaCard/ISO-7816	64/72	QFN
ETHERNET: Hi-Speed USB to Ethernet Controllers								
USB 2.0 to 10/100 or 10/100/1000 Ethernet Controllers								
Product	Features			Industrial Temp. Option (-40 to 85° C)		Pin	Packages	
LAN9500A	10/100, NetDetach™ technology, EEPROM-less operation, UniClock™ technology			LAN9500AI		56	QFN	
LAN7500	10/100/1000 Gigabit controller integrated USB and Ethernet PHYs, single-chip, high-performance, cost-effective, EEPROM-less operation, UniClock technology			LAN7500I		56	QFN	
LAN9730	HSIC Ethernet controller, multiple low-power modes, HSIC interface reduces pin count and power budget, drivers fully backward compatible to existing USB 2.0 software for seamless transition, industrial temperature for rugged environments			LAN9730I		56	QFN	
ETHERNET: Hi-Speed USB and Ethernet Controllers								
USB 2.0 and 10/100 Ethernet Controllers with Superior ESD Protection								
Product	Features			Downstream USB Ports	Industrial Temp. Option (-40 to 85° C)	Pin	Packages	
LAN9512	Industry's first fully-integrated, single-chip device, ±8 kV/±15 kV ESD protection, UniClock™ technology, EEPROM-less design option			2	LAN9512I	64	QFN	
LAN9513	Industry's first fully-integrated, single-chip device, ±8 kV/±15 kV ESD protection, UniClock technology, EEPROM-less design option			3	LAN9513I	64	QFN	
LAN9514	Industry's first fully-integrated, single-chip device, ±8 kV/±15 kV ESD protection, UniClock technology, EEPROM-less design option			4	LAN9514I	64	QFN	
ETHERNET: PCI Ethernet Controllers								
High-Performance 10/100 Ethernet Controllers Supporting HP Auto-MDIX								
Product	Features			Bus Interface (Bits)	Industrial Temp. Option (-40 to 85° C)	Pin	Packages	
LAN9420	33 MHz, PCI 3.0-compliant interface			32	LAN9420I	128	VTQFP	
ETHERNET: Local Bus Ethernet Controllers								
10/100 Ethernet Controllers Supporting HP Auto-MDIX								
Product	Features			BUS Interface (Bits)	Industrial Temp. Option (-40 to 85° C)	Pin	Packages	
LAN9221	Small-footprint, advanced performance options, supports a wide range of software drivers, supports local bus interface from 1.8V to 3.3V, integrated checksum offload engine			16	LAN9221I	56	QFN	
LAN9220	Small-footprint, advanced performance options, supports a wide range of software drivers, supports local bus interface from 1.8V to 3.3V, integrated checksum offload engine			16	-	56	QFN	
LAN9218	High-throughput performance options			32	LAN9218I	100	TQFP	
LAN9217	External MII, high-throughput performance options			16	-	100	TQFP	

ETHERNET: Ethernet Switches

Product	Features	Ports	Host Interface	Industrial Temp. Option (-40 to 85 °C)	Pin	Packages
LAN9303	High-performance, small-footprint, full-featured	3	Single MII/RMII	LAN9303i	56	QFN
LAN9303M	High-performance, small-footprint, full-featured	3	Dual MII/RMII	LAN9303MI	72	QFN
LAN9311	Local bus, IEEE 1588 support	2	16-bit local bus	LAN9311i	128	VTQFP, XVTQFP
LAN9312	Local bus, IEEE 1588 support	2	32-bit local bus	-	128	VTQFP, XVTQFP
LAN9313	MI1 interface, IEEE 1588 support	3 (1-port MI1)	Single MI1	LAN9313i	128	VTQFP, XVTQFP

ETHERNET: Ethernet Transceivers

Product	Features	Industrial Temp. Option (-40 to 85 °C)	Host Interface	Pin	Packages
LAN8710A	Full-featured, small-footprint, variable I/O, low power consumption	LAN8710Ai	MI1/RMII	32	QFN
LAN8720A	Full-featured, small-footprint, variable I/O, low power consumption	LAN8720Ai	RMII	24	QFN
LAN8740A	Small-footprint, full-featured variable I/O with Energy Efficient Ethernet, Wake-on-LAN for overall system power reduction, cable diagnostics for ease of network installation and maintenance (Devices available for sampling)	LAN8740i	MI1/RMII	32	SQFN
LAN8741A	Small-footprint, full-featured variable I/O with Energy Efficient Ethernet, Wake-on-LAN for overall system power reduction, cable diagnostics for ease of network installation and maintenance (Devices available for sampling)	LAN8741i	MI1/RMII	32	SQFN
LAN8742A	Small-footprint, full-featured variable I/O with Energy Efficient Ethernet, Wake-on-LAN for overall system power reduction, cable diagnostics for ease of network installation and maintenance (Devices available for sampling)	LAN8742i	RMII	24	SQFN
LAN8810	Single-chip Ethernet physical layer transceiver (PHY), compliant with IEEE 802.3ab (1000BASE-T), IEEE 802.3u (Fast Ethernet) and ISO 802.3 (10BASE-T)	LAN8810i	GMII	72	QFN
LAN8820	Single-chip Ethernet physical layer transceiver (PHY), compliant with IEEE 802.3ab (1000BASE-T), IEEE 802.3u (Fast Ethernet) and ISO 802.3 (10BASE-T) (Devices available for sampling)	LAN8820i	RGMI1	56	QFN

NETWORKING: ARCNET Controllers

Product	Features	Speed	Pin	Packages
COM20019i	Controller with operating temperature range of -40° to 85°C	312.5 Kbps	28/48	PLCC/TQFP
COM20020i	Controller with operating temperature range of -40° to 85°C	5 Mbps	28/48	PLCC/TQFP
COM20022i	Controller with operating temperature range of -40° to 85°C	10 Mbps	48	TQFP
TMC2005	5-port hub	156.25K-10 Mbps	64	TQFP
HYC0068A RLF	High-impedance transceiver	2.5 Mbps	20	SIP
HYC2000	High-impedance transceiver	156.25-625 Kbps	8	SIP
HYC5000	High-impedance transceiver	2.5M-10 Mbps	8	SIP

NETWORKING: Circlink® Controllers

Product	Features	Speed	Pin	Packages
TMC2074	Peripheral and standalone	5 Mbps	128	VTQFP
TMC2072	Peripheral	5 Mbps	100	TQFP
TMC2084	Standalone	5 Mbps	48	TQFP

AUTOMOTIVE: MOST® (Media Oriented Systems Transport) Network Interface Controllers

Product	Features	Interface	Temperature Range	Pin	Packages
OS81110 INIC	Fully-encapsulated, single-chip, embedded network management, supports MOST embedded Ethernet channel and isochronous channels (MOST150)	MOST150 FOT or MOST150 coax transceiver, PC™, PS™/SPDIF, TSI, SPI, MediaLB®	-40° to 105°C	48	QFN
OS81082 INIC	Fully-encapsulated, single-chip, embedded network management (MOST50)	MOST50 electrical (UTP), PC, PS, MediaLB	-40° to 95°C	64	ETQFP
OS81092 INIC	ROM version of OS81082 INIC (MOST50)	MOST50 electrical (UTP), PC, PS, MediaLB	-40° to 105°C	48	QFN
OS81050 INIC	Fully-encapsulated, single-chip with embedded network management (MOST25)	MOST25 FOT, PC, PS, MediaLB	Standard range: -40° to 85°C Extended range: -40° to 105°C	44	QFP, ETQFP
OS81060 INIC	ROM version of OS81050 INIC (MOST25)	MOST25 FOT, PC, PS, MediaLB	-40° to 105°C (targeted)	40	QFN

AUTOMOTIVE: Power Management Companion For Diagnostics, Status Monitoring and Power Supply				
Product	Features	Interface	Temperature Range	Pin Packages
MPM85000	Power management companion for diagnostics, status monitoring and power supply	LIN 2.0, I ² C™	-40° to 105°C	24 QFN

AUTOMOTIVE: Multimedia I/O Companion Multimedia I/O Port Expander				
Product	Features	Interface	Temperature Range	Pin Packages
OS89650	Low-cost multimedia I/O port expander, DTPC co-processor	MediaLB 3-pin and 6-pin, Host Bus Interface (HBI), 2 x multi-channel streaming ports, 2 x TSI, 2 x SPI, I ² C™	-40° to 105°C	128 ETQFP
OS89652	Low-cost multimedia I/O port expander	MediaLB 3-pin and 6-pin, Host Bus Interface (HBI), 2 x multi-channel streaming ports, 2 x TSI, 2 x SPI, I ² C	-40° to 105°C	128 ETQFP
OS89656	Low-cost multimedia I/O port expander well-suited for streaming applications	MediaLB 3-pin, streaming port PS™ (FSYN, FCLK, 4 x IN, 4 x Out, @ 51.2 Fs), serial transport stream interface (TSI), I ² C	-40° to 105°C	48 QFN
OS89654	Low-cost multimedia I/O port expander well-suited for streaming applications, DTPC co-processor	MediaLB 3-pin, streaming port PS (FSYN, FCLK, 4 x IN, 4 x Out, @ 51.2 Fs), serial transport stream interface (TSI), I ² C	-40° to 105°C	48 QFN

AUTOMOTIVE: Ethernet Controllers 10/100 Ethernet Controllers with USB 2.0, HSIC or HBI				
Product	Features	Interface	Temperature Range	Pin Packages
LAN89218	High-performance, single-chip controller with HP Auto-MDIX support*	MAC/PHY, 10BASE-T/100BASE-TX, 32- and 16-bit Host Bus Interface (HBI)	-40° to 85°C	100 TQFP
LAN89530	HiSpeed USB 2.0 to 10/100 Ethernet controller	USB 2.0	-40° to 85°C	56 QFN
LAN89730	HiSpeed HSIC to 10/100 Ethernet controller	HSIC	-40° to 85°C	56 QFN

*HP Auto MDIX eliminates the need for special "crossover" cables when connecting LAN devices together.

AUTOMOTIVE: Ethernet Switch 10/100 Managed Ethernet Switch with HP Auto-MDIX Support				
Product	Features	Interface	Temperature Range	Pin Packages
LAN89303	High-performance, small footprint, full-featured, single MII/RMII/Turbo MII support	IIII/RMII, 2 x 10/100 PHYS, 3 x 10/100 MACs	-40° to 85°C	56 QFN

AUTOMOTIVE: Ethernet Transceiver 10/100 Ethernet Transceiver with HP Auto-MDIX Support*, Featuring flexPWR® Technology				
Product	Features	Interface	Temperature Range	Pin Packages
LAN88730	Small footprint, low-power consumption, full-featured	10BASE-T/100BASE-TX, MII/RMII	LAN88730AM: -40° to 85°C LAN88730BM: -40° to 105°C	32 QFN

*HP Auto MDIX eliminates the need for special "crossover" cables when connecting LAN devices together.

AUTOMOTIVE: Hi-Speed USB 2.0 Hub USB 2.0 Hub Featuring MultiTRAK™ Technology				
Product	Features	Interface	Temperature Range	Pin Packages
USB89212	Versatile, cost-effective, energy-efficient, incorporating MultiTRAK™, PortMap, PortSwap, PHYBoost technologies	SMBus/I ² C™	-40° to 85°C	2 36 QFN
USB89213		SMBus/I ² C	-40° to 85°C	3 36 QFN
USB89214		SMBus/I ² C	-40° to 85°C	4 36 QFN

AUTOMOTIVE: Hi-Speed USB 2.0 Hub and Flash Media Card Controllers USB 2.0 Hub and Card Controller Combos				
Product	Features	Socket Type	Supports	Temperature Range USB Ports Pin Packages
USB89240	Features PortMap, PortSwap and PHYBoost technologies	Single	SD™/SD High Capacity™/MultiMediaCard™/Memory Stick®/MS PRO™, MS PRO-HG™	-40° to 85°C 2 48 QFN
USB89242	USB bridge/card reader combo with USB to SDIO and USB to I ² C™ bridging functionality and PortMap, PortSwap and PHYBoost technologies	Single	SD/SD High Capacity/MultiMediaCard/Memory Stick/MS PRO, MS PRO-HG	-40° to 85°C 2 48 QFN
USB89262	USB bridge/card reader combo with USB to SDIO and USB to I ² C bridging functionality and PortMap, PortSwap and PHYBoost technologies	Dual	SD/SD High Capacity/MultiMediaCard/Memory Stick/MS PRO, MS PRO-HG	-40° to 105°C 2 64 QFN

AUTOMOTIVE: Hi-Speed USB 2.0 Transceiver USB 2.0 Transceiver with 1.8V ULPI Interface				
Product	Features	Interface	Temperature Range	Pin Packages
USB89340	Multi-frequency reference clock	1.8V ULPI	-40° to 105°C	32 QFN

AUTOMOTIVE: Hi-Speed USB 2.0 Battery Charger Standalone USB Battery Charger						
Product	Features		Temperature Range	Supports	Pin	Packages
UCS81001	USB battery charger supporting BCL 2, China charging, Apple® and RIM® charging profiles as well as programmable charging profiles for unforeseen peripherals		-40° to 85°C	USB, I ² C™, SMBus	28	QFN
UCS81002	USB battery charger supporting BCL 2, China charging, Apple and RIM charging profiles as well as programmable charging profiles for unforeseen peripherals		-40° to 85°C	USB, I ² C, SMBus	28	QFN

AUTOMOTIVE: Wireless Audio Radio Frequency Digital Audio Transceiver						
Product	Features		Typical Sink Mode Power Consumption	PA Output Power	Audio	Qualification
KLR83012	Wirelessly streams uncompressed lossless audio up to 25m over robust 2.4 GHz radio link, multi-point to multi-point connectivity, strong Wi-Fi® coexistence, data channel for audio playback control, very low power consumption		20 mW	1.5 dBm	16 bit, 44.1 Ks/s stereo	AEC Q100

AUTOMOTIVE: Capacitive Touch Sensors						
Product	Features	Input Channels	LED Drivers	Proximity Included	Interface	Packages
CA981188	Reset, wake and alert, automatic recalibration, base capacitance compensation	8	8	✓	I ² C™/SPI/SMBus BC-Link™	QFN

PC SYSTEM & I/O CONTROLLERS: Notebook PC Products Embedded Controller and I/O Devices for Notebook PC Platforms						
Product	Features	I/O Ports		System Interface	Pin	Packages
MEC1621	32bit embedded controller with 192K bytes embedded flash, 1K bytes EEPROM, 16K bytes SRAM, ADC, temp sensing, connected standby support	3 PS/2, 3 SMBus, 2 SPI, 16 PWM, 6 tachs, 1 serial (2-pin), 16 ADC channels, 4 temp inputs, 3 LED, 1 HDMI-CEC, 146 GPIOs, 3 SMSC BC-Link™		LPC/SMBus	176/225	LFBGA, LFBGA
MEC1620	32bit embedded controller with 192K bytes embedded flash, 1K bytes EEPROM, 16K bytes SRAM, ADC, connected standby support	3 PS/2, 3 SMBus, 2 SPI, 16 PWM, 8 tachs, 1 serial (2-pin), 16 ADC channels, 3 LED, 1 HDMI-CEC, 153 GPIOs, 3 SMSC BC-Link		LPC/SMBus	176	LFBGA, LFBGA
MEC1308	8-bit embedded controller with 64K bytes SRAM, SPI Flash Memory Interface, ADC, Consumer IR, SMSC BC-Link technology	4 PS/2, 2 SMBus, 4 PWMs, 2 tachs, 1 serial (2-pin), 55 GPIOs, RC-6 CIR, 1 SMSC BC-Link		LPC/SMBus	128/144	VTQFP, TFBGA
MEC1312	8-bit embedded controller with 96K bytes SRAM, SPI Flash Memory Interface, PECI, ADC, PID Fan Control, SMSC BC-Link technology	4 PS/2, 3 SMBus, PECI, 4 PWMs, 2 tachs, 1 serial (2-pin), 63 GPIOs, 1 SMSC BC-Link		LPC/SMBus	128	VTQFP
SI01028	Super I/O controller, small form factor package	3 serial, 24 GPIOs		LPC	64	QFN
LP047N217	Super I/O controller for notebook and embedded PC applications	1 serial, 1 parallel, 14 GPIOs, I ² A® - CIR		LPC	64/56	STQFP
LP047N217N	Super I/O controller for notebook and embedded PC applications	1 serial, 1 parallel, 14 GPIOs		LPC	64/56	STQFP, QFN
ECE1088	GPIO expander with SMSC BC-Link technology	20 GPIOs		SMBus or SMSC BC-Link	28	QFN
ECE1099	GPIO expander with Keyscan and SMSC BC-Link technology	32 GPIOs, 23.8 Keyscan		SMBus or SMSC BC-Link	40	QFN
ECE1105	GPIO expander with Keyscan, PS/2 and SMSC BC-Link technology	40 GPIOs, 23.8 Keyscan, 2 PS/2		SMBus or SMSC BC-Link	48	QFN

PC SYSTEM & I/O CONTROLLERS: Desktop PC Products Embedded Controller and Highly-Integrated Super I/O Devices for Desktop PC Platforms						
Product	Features	I/O Ports		System Interface	Pin	Packages
SCH5636	Desktop embedded controller, embedded SRAM for custom applications, closed-loop fan control, PECI 3.0 support, temperature and voltage monitoring	FDC, parallel, 2 serial, 8042 KB controller, 2 SMBus, 4 PWMs, 4 tachs, 60 GPIOs		LPC	128	QFP
SCH5627	Desktop embedded controller, SMBus master for PCH temperature support, PECI 3.0 support, voltage monitoring	FDC, parallel, 2 serial, 8042 KB controller, 2 SMBus, 4 PWMs, 4 tachs, 60 GPIOs		LPC	128	QFP
SCH5627P	Desktop embedded controller with "XLS5" power savings mode, SMBus master for PCH temperature support, PECI 3.0 support and voltage monitoring	FDC, parallel, 2 serial, 8042 KB controller, 2 SMBus, 4 PWMs, 4 tachs, 60 GPIOs		LPC	128	QFP
SCH5147	Super I/O controller, LPC hardware monitoring, PECI support, voltage monitoring	FDC, parallel, 2 serial, 8042 KB controller, 2 SMBus, 3 PWMs, 3 tachs, 29 GPIOs		LPC	128	QFP

PC SYSTEM & I/O CONTROLLERS: Server/Workstation Products Embedded Controller and Super I/O Devices for Server and Workstation PC Platforms						
Product	Features	I/O Ports		System Interface	Pin	Packages
SCH4304	Super I/O controller, X-Bus interface, RTC and auto fan control over SensorBus™ sensor interface	FDC, parallel, 2 serial, 8042 KB controller, SMBus, 3 PWMs, 8 tachs, 51 GPIOs		LPC	128	QFP

PC SYSTEM & I/O CONTROLLERS: Embedded I/O Products Highly-Integrated Super I/O Devices with Long Product Lifecycles for Embedded PC Platforms						
Product	Features	I/O Ports		System Interface	Pin	Packages
SCH3112	Super I/O controller with SMBus hardware and voltage monitoring	2 serial, parallel, FDC, 8042 KB controller, 40 GPIOs		LPC	128	VTQFP
SCH3114	Super I/O controller with SMBus hardware and voltage monitoring	4 serial, parallel, FDC, 8042 KB controller, 40 GPIOs		LPC	128	VTQFP
SCH3116	Super I/O controller with SMBus hardware and voltage monitoring	6 serial, parallel, FDC, 8042 KB controller, 40 GPIOs		LPC	128	VTQFP
LP047M10X	Super I/O controller, full legacy I/O support	2 serial ports, parallel, 8042 KB controller, FDC, 37 GPIOs		LPC	100	QFP
SI010N268	Super I/O controller for ISA or LPC designs, X-Bus interface for I/O memory and RWH emulation	4 serial ports, parallel, FDC, WDT, 33 GPIOs		LPC/ISA	128	VTQFP
FDC37B78X	Super I/O controller, real-time clock, consumer IR, watchdog timer, 5V operation	2 serial ports, parallel, FDC, 8042 KB controller, parallel IRQs, serial IRQs, 20 GPIOs		ISA	128	QFP

CAPACITIVE TOUCH SENSORS

Product	Input Channels	LED Drivers	Additional Features		Proximity Included	Interface	Pin	Packages
CAP1114	14	11	Slider, reset and alert, automatic recalibration, base capacitance compensation		✓	PC™/ SMBus	32	QFN
CAP1188	8	8	Reset, wake and alert, automatic recalibration, base capacitance compensation		✓	PC/ SPI/ SMSC BC-Link™	24	QFN
CAP1128	8	2	Reset, wake and alert, automatic recalibration, base capacitance compensation		✓	PC/ SPI/ SMSC BC-Link	20	QFN
CAP1166	6	6	Reset, wake and alert, automatic recalibration, base capacitance compensation		✓	PC/ SPI/ SMSC BC-Link	20	QFN
CAP1126	6	2	Reset, wake and alert, automatic recalibration, base capacitance compensation		✓	PC/ SPI/ SMSC BC-Link	16	QFN
CAP1133	3	3	Alert, automatic recalibration, base capacitance compensation		✓	PC/ SMBus	10	DFN
CAP1106	6	0	Alert, automatic recalibration, base capacitance compensation		✓	PC/ SMSC BC-Link	10	DFN
CAP1105	5	0	Automatic recalibration, base capacitance compensation		✓	SPI	10	DFN
CAP1214	14	11	Slider, reset and alert, automatic recalibration, base capacitance compensation, audio output		✓	PC/ SMBus	32	QFN

WIRELESS AUDIO: Highly Integrated Wireless Audio Baseband Processors

Product	Additional Features		Frequency	Interface	Pin	Packages
DARR82	Supports streaming of four wireless uncompressed stereo audio channels simultaneously or complete wireless 7.1 channel surround sound system, latency < 20 ms, point-to-multi-point transmission in home audio networking, SD & HD audio, excellent Wi-Fi® and Bluetooth® coexistence, bi-directional audio support, control data channel up to 100kpbs, integrated MCU and SRC		Dualband 2.4/5.8GHz	PS, S/PDIF, PC™, SPI	80	LQFP
DARR83	Supports streaming of four wireless uncompressed stereo audio channels simultaneously or complete wireless 7.1 channel surround sound system, latency < 20 ms, point-to-multi-point transmission in home audio networking, SD & HD audio, excellent Wi-Fi and Bluetooth coexistence, bi-directional audio support, control data channel up to 100kpbs, integrated MCU and SRC, integrated audio class USB		Triband 2.4/5.2/5.8GHz	PS, S/PDIF, PC, SPI, USB 2.0	129	FBGA
DARR84	Supports streaming of two wireless uncompressed stereo audio channels simultaneously, supports a microphone input for voice applications, latency < 20 ms, point-to-multi-point transmission, SD & HD audio, excellent Wi-Fi and Bluetooth coexistence using Wireless DMA™ technology, control data channel up to 100 kpbs, integrated MCU and SRC, integrated codec and headphone amplifier for headset applications		Triband 2.4/5.2/5.8GHz	PS, S/PDIF, PC, SPI/Analog In	129	FBGA
DM870A	Networked media processor, highly-flexible interface processor well-suited for secure, real time encoding/decoding and processing of multi-channel media content, offering industry standard networking and I/O interfaces, enables rapid product development by OEMs and ODMs, API structure on the software packages allows for easy product customization resulting in a faster time to market.		2.4GHz, 802.11 b/g	PS, S/PDIF, PC, USB, SD/SDIO, Ethernet, TFT for Display, SPI, QCIIR 656 out	320	LFPGA
DM875	Reduced feature set version of the DM870A with no LCD and video output capability, well-suited for customer applications that support standard software APIPlay® software package		2.4GHz, 802.11 b/g	PS, S/PDIF, PC, USB, SD/SDIO, Ethernet, SPI, TFT for Display, SPI, QCIIR 656 out	320	LFPGA
DM860A	Available as an alternative to DM870A with no Wi-Fi capability.		–		320	LFPGA

WIRELESS AUDIO: Reference Designs

Product	Features	Frequency	Interface	Pin	Module Dimensions
DWAM82	Uncompressed wireless digital audio transmitter OEM modules based on the DARR82 and DARR83 chipsets, supports up to four stereo audio streams, data encryption, bi-directional control messaging, automatic pairing, WLAN detection, automatic frequency allocation	Single-band, 5.8 GHz	PS, S/PDIF, PC™, SPI	26-pin FFC Connector	42 × 42 mm Square PCB
DWAM83	Uncompressed wireless digital audio transmitter OEM modules based on the DARR82 and DARR83 chipsets, supports up to four stereo audio streams, data encryption, bi-directional control messaging, automatic pairing, WLAN detection, automatic frequency allocation	Tri-band, 2.4/5.2/5.8 GHz	PS, S/PDIF, PC, SPI	26-pin FFC Connector	35 × 35 mm Square PCB
DWUS883	Uncompressed wireless digital audio transmitter OEM modules based on the DARR82 and DARR83 chipsets, supports up to four stereo audio streams, data encryption, bi-directional control messaging, automatic pairing, WLAN detection, automatic frequency allocation	Tri-band, 2.4/5.2/5.8 GHz	USB	–	49 × 18 mm
DWPCIE83	Uncompressed wireless digital audio transmitter OEM module based on the DARR82 chip, supports up to two stereo audio streams, data encryption, bi-directional control messaging, automatic pairing, WLAN detection, automatic frequency allocation, well-suited for receiver applications such as speakers	Tri-band, 2.4/5.2/5.8 GHz	USB	–	30 × 26.8 mm
LC0582	Uncompressed wireless digital audio transmitter OEM module based on the DARR82 chip, supports up to two stereo audio streams, data encryption, bi-directional control messaging, automatic pairing, WLAN detection, automatic frequency allocation, well-suited for receiver applications such as speakers	Single-band, 2.4 GHz	PS, S/PDIF, PC, SPI	26-pin Pin Header Connector	30 × 50 mm Rectangle

WIRELESS AUDIO: Highly-Integrated Wireless Audio Modules					
Product	Features	Frequency	Interface	Pin	Module Dimensions
DWHS84	Uncompressed wireless digital audio ready-to-go headset and headphone application reference design that supports audio and microphone inputs to process gaming and VOIP headsets/headphone applications, supports multiple RF bands making it well-suited to effectively manage the interference commonly associated with Wi-Fi®, Bluetooth® and microwave ovens, using our Wireless DNA architecture, integrates 1MB SPI Flash, enabling SMSC's KleerNet™ interoperability platform which allows for connectivity across products and brands	Tri-band 2.4/5/2/75.8 GHz	PS, S/PDIF, I2C™, SPI	–	54 × 54.5 mm
DWLC84	Uncompressed wireless digital audio transceiver OEM module based on the DARR84 chip, supports up to two stereo audio streams, data encryption, bi-directional control messaging, automatic pairing, WLAN detection, excellent Wi-Fi and Bluetooth coexistence using Wireless DNA architecture, well-suited for applications such as speakers and soundbars with subwoofers	Tri-band 2.4/5/2/75.8 GHz	PS, S/PDIF, I2C, SPI	–	30 × 42 mm
CX870	Single-board, networked, media player module based on the DM870A media processors, enables fast product developments with Ethernet, USB and Wi-Fi connectivity, connects to standard legacy components in various audio, video/LCD and control formats.	2.4GHz, 802.11 b/g	PS, S/PDIF, I2C, USB, SD/SDIO, Ethernet, TFT for Display, SPI, CCIR 656 out	64-pin PCB Low Density Connector	46 × 85.8 mm

WIRELESS AUDIO: Radio Frequency Digital Audio Transceivers					
Product	Features	Typical Sink Mode Power Consumption	PA Output Power	Audio	Qualification
KLR3012	Wirelessly streams uncompressed lossless audio up to 25m over robust 2.4 GHz radio link, multi-point to multi-point connectivity, strong Wi-Fi® coexistence, data channel for audio playback control, very low power consumption	20 mW	1.5 dBm	16 bit, 44.1 Ks/s stereo	JEDEC

SECURITY: Smart Card Readers and Encrypted Storage				
Smart Card Reader Family for Readers, Tokens, POS Terminals and Computing				
Product	Features	USB Interface	Pin	Packages
SEC1100	USB single-port smart card reader with integrated self clock	USB 1.1	16	QFN
SEC1200	USB Dual-port smart card reader with with UART/SPI interface and integrated self clock	USB 1.1	24/48	QFN
SEC1300	USB keyboard and LCD controller with smart card reader and self clock (Device available for sampling)	USB 1.1	64	QFN, Bare Die
SEC2410	USB secure authentication and encrypted storage token with AES encryption, 35 MB/s transfer rates and 32-bit controller	USB 2.0	64/72	QFN
SEC4410	USB secure authentication and encrypted storage token with AES encryption, 35 MB/s transfer rates and 32-bit controller	HSIC	64/72	QFN

TERMS AND DEFINITIONS					
1 KB	1024 bytes	EMBL	Enhanced Baseline	MSSP/SSP	Master/Synchronous Serial Port (I2C & SPI Peripheral)
1 Kw	1024 words	EEPROM	Electrically Erasable Programmable Read Only Memory	mTouch	Proprietary Touch Sensing Technology
18F/PIC18	16-bit instruction word: 75/83 instructions	EFT	Electrical Fast Transient	NCO	Numerically Controlled Oscillator
ADC	Analog to Digital Converter	EMC	Electromagnetic Compatibility	Op Amp	Operational Amplifier
AUSART	Addressable Universal Synchronous Asynchronous Receiver Transceiver	EMI	Electromagnetic Interference	PIC10/12/16/18	8-bit Core
BL/Baseline	Asynchronous Receiver Transceiver	EMF/Enhanced Mid-Range	14-bit instruction word: 49 instructions (denoted as PIC1XF1XXX)	PIC24	16-bit Core
BOR/PBOR	Brown Out Reset/Programmable Brown Out Reset	ESD	Electrostatic Discharge	PIC32	32-bit Core
CAN	Controller Area Network	EUSART	Enhanced Universal Synchronous Asynchronous Receiver Transceiver	PLVD	Programmable Low Voltage Detect
CCP/ECCP	Capture Compare PWM/Enhanced Capture Compare PWM	EWDT/WDT	Extended Watch Dog Timer/Watch Dog Timer	POR/POOR	Power ON Reset/Power ON/OFF Reset
CLC	Configurable Logic Cell	HV	High Voltage	PWM	Pulse Width Modulation
COG	Complementary Output Generator	ICD	In-Circuit Debug	RAM	Random Access Memory
Comp	Capacitive Sensing implemented via Comparator	ICE	In-Circuit Emulation	RTCC	Real-Time Clock Calendar
CRC	Cyclical Redundancy Check	ICSPTM	In-Circuit Serial Programming™	Source/Sink Current SR Latch	All Products Support 25 mA per I/O
CSM	mTouch: Capacitive Sensing Module	IDE	Integrated Development Environment	SPI	Static Random Access Memory
CSP	Chip Scale Package	Inst Amp	Instrumentation Amplifier	T1G	Serial Peripheral Interface
CTMU	mTouch™: Charge Time Measurement Unit	LCD	Liquid Crystal Display	USART	Timer 1 Gate
CVD	Charge Voltage Divide (Capacitive Sensing Implemented via ADC)	LDO	Low Drop-Out voltage regulator		Universal Synchronous Asynchronous Receiver Transceiver
CWG	Complementary Waveform Generator	LF	Low Power Flash		Universal Serial Bus
DAC	Digital-to-Analog Converter	MIP2C/I2C™	Master Inter-Integrated Circuit bus/Inter-Integrated Circuit bus	USB (Full Speed)	12 Mb/s Data Rate
DAM	Data Signal Modulator	MIPS	Million Instructions Per Second	USB OTG	USB On-The-Go
dsPIC®	16-bit Core with DSP	MR/Mid-Range	14-bit instruction word: 35 instructions	XLP	nanoWatt XLP eXtreme Low Power Technology

TERMS AND DEFINITIONS

1 KB	1024 bytes	EBL	Enhanced Baseline	MSSP/SSP	Master/Synchronous Serial Port (I2C & SPI Peripheral)
1 Kw	1024 words	EEPROM	Electrically Erasable Programmable Read Only Memory	mTouch	Proprietary Touch Sensing Technology
18F/PIC18	16-bit instruction word: 75 /83 instructions	EFT	Electrical Fast Transient	NCO	Numerically Controlled Oscillator
ADC	Analog to Digital Converter	EMC	Electromagnetic Compatibility	Op Amp	Operational Amplifier
AUSART	Addressable Universal Synchronous Asynchronous Receiver Transceiver	EMI	Electromagnetic Interference	PIC10/12/16/18	8-bit Core
BL/Baseline	12-bit instruction word: 33 instructions	EMF/Enhanced Mid-Range	14-bit instruction word: 49 instructions (denoted as PIC1XF1XXX)	PIC24	16-bit Core
BOR/PBOR	Brown Out Reset/Programmable Brown Out Reset	ESD	Electrostatic Discharge	PIC32	32-bit Core
CAN	Controller Area Network	EUSART	Enhanced Universal Synchronous Asynchronous Receiver Transceiver	PLVD	Programmable Low Voltage Detect
CCP/ECOP	Capture Compare PWM/Enhanced Capture Compare PWM	EWDT/WDT	Extended Watch Dog Timer/Watch Dog Timer	POR/POOR	Power ON Reset/Power ON/OFF Reset
CLC	Configurable Logic Cell	HV	High Voltage	PSMC	Programmable Switch Mode Controller
COG	Complementary Output Generator	ICD	In-Circuit Debug	PWM	Pulse Width Modulation
Comp	Capacitive Sensing implemented via Comparator	ICE	In-Circuit Emulation	RAM	Random Access Memory
CRC	Cyclical Redundancy Check	ICSP™	In-Circuit Serial Programming™	RTCC	Real-Time Clock Calendar
CSM	Chip Scale Package	IDE	Integrated Development Environment	Source/ Sink Current	All Products Support 25 mA per I/O
CSP	mTouch: Capacitive Sensing Module	Inst Amp	Instrumentation Amplifier	SR Latch	Set Reset Latch
CTMU	mTouch™: Charge Time Measurement Unit	LCD	Liquid Crystal Display	SRAM	Static Random Access Memory
CVD	Charge Voltage Divide (Capacitive Sensing Implemented via ADC)	LDO	Low Drop-Out voltage regulator	SPI	Serial Peripheral Interface
CWG	Complementary Waveform Generator	LF	Low Power Flash	T1G	Timer 1 Gate
DAC	Digital-to-Analog Converter	MIPC/I2C™	Master Inter-Integrated Circuit bus/Inter-Integrated Circuit bus	USART	Universal Synchronous Asynchronous Receiver Transceiver
DSM	Data Signal Modulator	MIPS	Million Instructions Per Second	USB	Universal Serial Bus
dsPIC®	16-bit Core with DSP	MR/Mid-Range	14-bit Instruction word: 35 instructions	USB (Full Speed)	12 Mb/s Data Rate
				USB OTG	USB On-The-Go
				XLP	nanoWatt XLP eXtreme Low Power Technology

Small Outline	Dual Flat No Lead DFN	Quad Flat No Lead QFN	Plastic Shrink Small Outline SSOP	Plastic Small Outline SOIC
Bumped Die (WLCSP)	 8-lead DFN (MC) 2 x 3 x 0.9 mm	 16-lead QFN (MG) 3 x 3 x 0.9 mm	 8-lead MSOP (MS)	 8-lead SOIC (SN)
Die/Wafer (WLCSP)	 8-lead TDFN (MN) 2 x 3 x 0.75 mm	 20-lead QFN (ML) 4 x 4 x 0.9 mm	 10-lead MSOP (UN)	 8-lead SOIC (SM)
3-lead SC70 (LB)	 8-lead UDFN (MU) 2 x 3 x 0.5 mm	 20-lead QFN (MQ) 5 x 5 x 0.9 mm	 16-lead QSOP (QR)	 14-lead SOIC (SL)
5-lead SC70 (LT)	 8-lead DFN (MF) 3 x 3 x 0.9 mm	 28-lead UQFN (MV) 4 x 4 x 0.5 mm	 20-lead SSOP (SS)	 16-lead SOIC (SL)
3-lead SOT-23 (TT/CB)	 8-lead DFN (MD) 4 x 4 x 0.9 mm	 28-lead QFN (MQ) 5 x 5 x 0.9 mm	 28-lead SSOP (SS)	 18-lead SOIC (SO)
5-lead SOT-23 (OT)	 8-lead DFN (MF) 6 x 5 x 0.9 mm	 28-lead QFN (MM & ML) 6 x 6 x 0.9 mm	Plastic Thin Shrink Small Outline TSSOP	
6-lead SOT-23 (OT/CH)	 36-lead VTLA (TL) 5 x 5 x 0.9 mm	 40-lead UQFN (MV) 5 x 5 x 0.5 mm		
3-SOT-223 (DB)	 44-lead VTLA (TL) 6 x 6 x 0.9 mm	 44-lead QFN (ML) 8 x 8 x 0.9 mm		
4-lead SOT-143 (RC)	 124-lead VTLA (TL) 9 x 9 x 0.9 mm	 64-lead QFN (MR) 9 x 9 x 0.9 mm	 14-lead TSSOP (ST)	 28-lead SOIC (SO)
			 20-lead TSSOP (ST)	

Packages are shown approximate size.

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Product Packages

Plastic Thin Quad Flatpack TQFP		Plastic Quad Flatpack QFP		Plastic Dual In-Line PDIP		Additional Package Options						
	44-lead TQFP (PT) 10 x 10 x 1 mm		80-lead TQFP (PF) 14 x 14 x 1 mm		32-lead LQFP (LQ) 7 x 7 x 1.4 mm		8-lead PDIP (P) 8-lead WSON (A6/QAE) 5 x 6 mm		NOR Flash Memory		RF Devices	
	64-lead TQFP (PT) 10 x 10 x 1 mm		100-lead TQFP (PT) 12 x 12 x 1 mm		44-lead MQFP (PQ) 10 x 10 x 2 mm		14-lead PDIP (P) 32-lead PDIP (P2/PHE) 600 mil		32-lead PDIP (P2/PHE) 600 mil		8-lead XSON (Q7/QX8E) 2 x 2 x 0.5 mm	
	64-lead TQFP (PF) 14 x 14 x 1 mm		100-lead TQFP (PF) 14 x 14 x 1 mm		144-lead LQFP (PL) 20 x 20 x 1.4 mm		18-lead PDIP (P) 20-lead PDIP (P)		32-lead PLCC (PE/NHE) 0.452" x 0.552"		6-lead UQFN (QU/QU6E) 3 x 1.6 x 0.5 mm	
	80-lead TQFP (PT) 12 x 12 x 1 mm	Ball Grid Array BGA			144-lead TQFP (PH) 16 x 16 x 1 mm		20-lead PDIP (P)		40-lead TSOP (W8/EIE) 10 x 20 mm		16-lead LFLGA (MF/MLCF) 4 x 4 x 1.4 mm	
	80-lead TQFP (PT) 12 x 12 x 1 mm				144-lead TQFP (PH) 16 x 16 x 1 mm		24-lead PDIP (P)		40-lead TSOP (W8/EIE) 10 x 20 mm		8051-based Microcontrollers	
					100-ball BGA (BG) 10 x 10 x 1.1 mm		28-lead SPDIP (SP)		48-lead WFBGA (3T/MAQE) 4 x 6 x 0.73 mm		48-lead TFBGA (8T/B3KE) 6 x 8 x 1.2 mm	
					121-ball BGA (BG) 10 x 10 x 0.8 mm		40-lead PDIP (P)		48-lead TSOP (W9/EKE) 12 x 20 x 1.2 mm			

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China - Qingdao

Tel: 86-532-8502-7355

China - Shanghai

Tel: 86-21-5407-5533

China - Shenyang

Tel: 86-24-2334-2829

China - Shenzhen

Tel: 86-755-8864-2200

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