February 2012

MICROCHIP

Automotive Recommended Product Selector Guide

Featuring:
8- and 16-bit PIC® Microcontrollers
dsPIC® Digital Signal Controllers
Analog & Interface Products
Serial EEPROMs
Real-Time Clock/Calendars
Flash Memory

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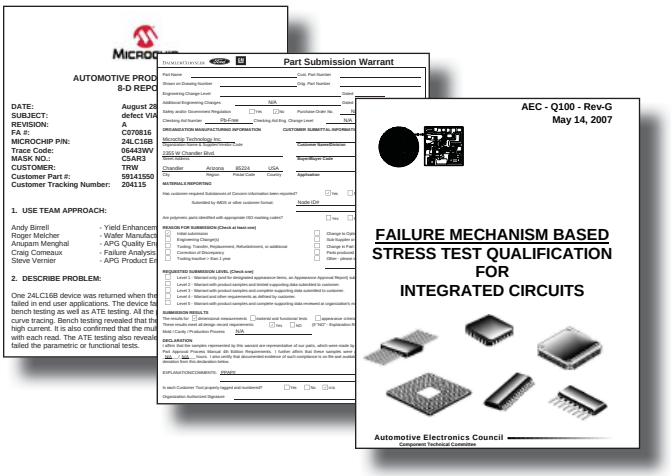
Microchip: A Partner in Your Automotive Success

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 300 automotive customers globally who are designing high-volume embedded control applications from safety and body modules to security, driver information and powertrain modules.

Commitment to the Relentless Quest for Perfection

"Quality Comes First" is at the top of the list of Guiding Values for Microchip Technology. As an ISO/TS-16949 certified supplier since 2003, Microchip's Aggregate System uniquely supports our commitment to exceptional quality. In an environment where enterprise wide commitment to continuous improvement is demonstrated and every employee is responsible for quality.



Microchip supports various automotive quality initiatives:

- Zero Defect Initiatives
- APQP – Advanced Product/Process Quality Planning
- AEC-Q100 Stress Testing
- PPAP – Production Part Approval Process
- 8D Reporting
- Product Change Notification

www.microchip.com/quality

All of the products recommended for automotive use are either Q100 Qualified or Q100 Capable.

Q100 Qualified: Reliability testing that complies with the automotive industry's AEC-Q100 Rev. G has been successfully completed on the specific device of interest. This includes both device and package tests as required by the AEC-Q100 Rev G specification.

Q100 Capable: Although the specific device of interest has not finished AEC-Q100 Rev G reliability testing, it is designed with the same standards, manufactured at the same locations and with the same equipment, and tested to the same quality standards as numerous other devices that have already completed Q100 qualification.

With nearly 20 years of experience in serving the demanding requirements of the automotive customer, Microchip Technology has a proven track record of success in delivering the total product solution to our valued customers that is cost effective and reliable.

Corporate Headquarters
Chandler, Arizona

Product Assembly/Test
Bangkok, Thailand

Fab 2 - Tempe, Arizona

Fab 4 - Gresham, Oregon

Table of Contents

8-bit PIC® Microcontrollers

	Product	Released (R) Not Released (NR)	Pins		Core	Memory					Voltage Range	Operating Speed		LCD Segments	mTouch™ Channels	Analog Sensing & Measurement					Digital				Communication							ECAN	Monitors		SR-Latch	Timer 1 Gate	High Temperature (150ºC)	Packages (Designator)	Special Features	
			Total	I/O		Program	Self-Read	Self-Write	Data RAM (B)	Data EE (B)		Maximum Speed	Internal Oscillator			Charge Time Measurement Unit	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	CCP	ECCP	8-bit Timer	16-bit Timer	AUSART	EUSART	I²C™	SPI	Ethernet (MAC/PHY)	FS-USB		BOR/PBOR	PLVD					
6-Pin	PIC10F200	R	6	4	BL	0.375 KB 0.25 Kw	–	–	16	–	2V-5.5V	4 MHz	4 MHz	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), 2x3 DFN (MC), SOT–23 (OT)	Smallest form–factor	6-Pin
	PIC10F202	R	6	4	BL	0.75 KB 0.50 Kw	–	–	24	–	2V-5.5V	4 MHz	4 MHz	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), 2x3 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	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), 2x3 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	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), 2x3 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	4 MHz, 8 MHz	–	2	–	2	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), 2x3 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	4 MHz, 8 MHz	–	2	–	2	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), 2x3 DFN (MC), SOT–23 (OT)	Smallest form–factor	
	PIC10F320	R	6	4	MR	.4375 KB 0.25 Kw	✓	✓	32	–	1.8V-5.5V	16 MHz	16 MHz	–	3	–	3	–	–	–	–	–	2	1	–	–	–	–	–	–	–	–	SW◊	–	–	–	PDIP (P), 2x3 DFN (MC), SOT–23 (OT)	CLC, CWG, DDS, Temp*	
	PIC10F322	R	6	4	MR	0.875 KB 0.50 Kw	✓	✓	64	–	1.8V-5.5V	16 MHz	16 MHz	–	3	–	3	–	–	–	–	–	2	1	–	–	–	–	–	–	–	–	SW◊	–	–	–	PDIP (P), 2x3 DFN (MC), SOT–23 (OT)	CLC, CWG, DDS, Temp*	
8-Pin	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), 2x3 DFN (MC)	–	8-Pin
	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), 2x3 DFN (MC)	–	
	PIC12F510	R	8	6	BL	1.5 KB 1 Kw	–	–	38	–	2V-5.5V	8 MHz	4 MHz, 8 MHz	–	3	–	3	–	–	1	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), SOIC (SN), MSOP (MS), 2x3 DFN (MC)	–	
	PIC12F519	R	8	6	BL	1.5 KB 1 Kw	–	–	41	64	2V-5.5V	8 MHz	4 MHz, 8 MHz	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), SOIC (SN), MSOP (MS), 2x3 DFN (MC)	Lowest cost Data EE	
	PIC12F1501	NR	8	6	EMR	1.75 KB 1 Kw	✓	✓	64	–	1.8V-5.5V	20 MHz	16 MHz	–	1	–	–	4	–	1	–	–	2	1	–	–	–	–	–	–	–	–	PBOR	SW◊	–	✓	–	PDIP (P), SOIC (SO), MSOP (MS), 2x3 DFN (MC)	4x PWM, CLC, CWG, DDS, Temp*	
	PIC12F609	R	8	6	MR	1.75 KB 1 Kw	–	–	64	–	2V-15V	20 MHz	4 MHz, 8 MHz	–	–	–	–	–	–	1	–	–	1	1	–	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SN), MSOP (MS), 4x4 DFN (MD), 3x3 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	–	–	–	–	–	–	–	–	BOR	SW◊	–	✓	✓	PDIP (P), SOIC (SN), MSOP (MS), 4x4 DFN (MD), 3x3 DFN (MF)	–	
	PIC12F617	R	8	6	MR	3.5 KB 2 Kw	✓	✓	128	–	2V-5.5V	20 MHz	4 MHz, 8 MHz	–	4	–	–	4	–	1	–	1	2	1	–	–	–	–	–	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), SOIC (SN), MSOP (MS), 3x3 DFN (MF)	–	
	PIC12F752	R	8	6	MR	1.75 KB 1 Kw	–	–	64	–	2V-5.5V	20 MHz	4 MHz, 8 MHz	–	4	–	–	4	–	2	1	–	3	1	–	–	–	–	–	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), SOIC (SN), 3x3 DFN (MF)	CWG	
	PIC12F629	R	8	6	MR	1.75 KB 1 Kw	–	–	64	128	2V-5.5V	20 MHz	4 MHz	–	–	–	–	–	–	1	–	–	1	1	–	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SN), 4x4 DFN (MD), 6x5 DFN (MF)		
	PIC12F1822 XLP	R	8	6	EMR	3.5 KB 2 Kw	✓	✓	128	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	4	–	–	4	–	1	–	1	2	1	–	1	1	1	–	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), SOIC (SN), 3x3 DFN (MF)	XLP, Temp*	
	PIC12F675	R	8	6	MR	1.75 KB 1 Kw	–	–	64	128	2V-5.5V	20 MHz	4 MHz	–	3	–	–	3	–	1	–	–	1	1	–	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SN), 4x4 DFN (MD), 6x5 DFN (MF)	–	
	PIC12F1840 XLP	R	8	6	EMR	7 KB 4 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz, 31 KHz	–	4	–	–	4	–	1	–	1	2	1	–	1	1	1	–	–	–	–	PBOR	SW	✓	✓	–	PDIP (P), SOIC (SN), 6x5 DFN (MF)	DSM, Temp*	
	PIC12F635	R	8	6	MR	1.75 KB 1 Kw	–	–	64	128	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	–	–	–	–	–	1	–	–	1	1	–	–	–	–	–	–	–	–	BOR	✓	–	✓	–	PDIP (P), SOIC (SN), 4x4 DFN (MD)	KEELOQ®	
	PIC12F683	R	8	6	MR	3.5 KB 2 Kw	–	–	128	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	3	–	–	3	–	1	1	–	2	1	–	–	–	–	–	–	–	–	PBOR	–	–	✓	–	PDIP (P), SOIC (SN), 4x4 DFN (MD)	–	
14-Pin	PIC16F505	R	14	12	BL	1.5 KB 1 Kw	–	–	72	–	2V-5.5V	20 MHz	4 MHz	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), SOIC (SL), TSSOP (ST), 3x3 QFN (MG)	–	14-Pin
	PIC16F506	R	14	12	BL	1.5 KB 1 Kw	–	–	67	–	2V-5.5V	20 MHz	4/8 MHz	–	4	–	4	–	–	2	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), SOIC (SL), TSSOP (ST), 3x3 QFN (MG)	–	
	PIC16F526	R	14	12	BL	1.5 KB 1 Kw	–	–	67	64	2V-5.5V	20 MHz	4/8 MHz	–	4	–	4	–	–	2	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), SOIC (SL), TSSOP (ST), 3x3 QFN (MG)	Lowest cost Data EE	
	PIC16F1503	NR	14	12	EMR	3.5 KB 2 Kw	✓	✓	128	–	1.8V-5.5V	20 MHz	16 MHz	–	2	–	–	8	–	2	–	–	2	1	–	–	1	1	–	–	–	–	PBOR	SW◊	–	✓	–	PDIP (P), SOIC (SO), SSOP (SS), 3x3 QFN (MG)	4x PWM, CLC, CWG, DDS, Temp*	
	PIC16F610	R	14	12	MR	1.75 KB 1 Kw	–	–	64	–	2V-15V	20 MHz	4/8 MHz	–	–	–	–	–	–	2	–	–	1	1	–	–	–	–	–	–	–	–	BOR	–	✓	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	–	
	PIC16F616	R	14	12	MR	3.5 KB 2 Kw	–	–	128	–	2V-15V	20 MHz	4/8 MHz	–	8	–	–	8	–	2	–	1	2	1	–	–	–	–	–	–	–	–	BOR	SW◊	✓	✓	✓	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	–	
	PIC16F1823 XLP	R	14	12	EMR	3.5 KB 2 Kw	✓	✓	128	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	8	–	–	8	–	2	–	1	2	1	–	1	1	1	–	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	XLP, Temp*	
	PIC16F1824 XLP	R	14	12	EMR	7 KB 4 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	8	–	–	8	–	2	2	2	4	1	–	1	1	1	–	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	DSM, XLP, Temp*	
	PIC16F630	R	14	12	MR	1.75 KB 1 Kw	–	–	64	128	2V-5.5V	20 MHz	4 MHz	–	–	–	–	–	–	1	–	–	1	1	–	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	–	

Products sorted by pin count.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.

XLP - eXtreme Low Power variants available.
*Integrated Temperature Indicator – Reference Application Note AN1333 for implementation.

AEC-Q100 Qualified AEC-Q100 Capable

8-bit PIC® Microcontrollers

	Product	Released (R) Not Released (NR)	Pins		Core	Memory					Voltage Range	Operating Speed		LCD Segments	mTouch™ Channels	Analog Sensing & Measurement					Digital				Communication						ECAN	Monitors		SR-Latch	Timer 1 Gate	High Temperature (150°C)	Packages (Designator)	Special Features	
			Total	I/O		Program	Self-Read	Self-Write	Data RAM (B)	Data EE (B)		Maximum Speed	Internal Oscillator			Charge Time Measurement Unit	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	CCP	ECCP	8-bit Timer	16-bit Timer	AUSART	EUSART	I²C™	SPI	Ethernet (MAC/PHY)	FS-USB		BOR/PBOR	PLVD					
14-Pin (Cont.)	PIC16F636	R	14	12	MR	3.5 KB 2 Kw	–	–	128	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	–	–	–	–	–	2	–	–	1	1	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	KEELOQ®	14-Pin (Cont.)
	PIC16F1825 XLP	R	14	12	EMR	14 KB 8 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	8	–	–	8	–	2	2	2	4	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	DSM, XLP, Temp*	
	PIC16F676	R	14	12	MR	1.75 KB 1 Kw	–	–	64	128	2V-5.5V	20 MHz	4 MHz	–	8	–	–	8	–	1	–	–	1	1	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	–	
	PIC16F684	R	14	12	MR	3.5 KB 2 Kw	–	–	128	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	8	–	–	8	–	2	–	1	2	1	–	–	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	–	
	PIC16F688	R	14	12	MR	7 KB 4 Kw	✓	–	256	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	8	–	–	8	–	2	–	–	1	1	–	1	–	–	–	–	–	BOR	–	–	✓	–	PDIP (P), SOIC (SL), TSSOP (ST), 4x4 QFN (ML)	–	
18-Pin	PIC16F54	R	18	12	BL	0.75 KB 0.50 Kw	–	–	25	–	2V-5.5V	20 MHz	0	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), SOIC (SO), SSOP (SS)	–	18-Pin
	PIC16F716	R	18	13	MR	3.5 KB 2 Kw	–	–	128	–	2V-5.5V	20 MHz	0	–	–	–	–	4	–	–	–	1	2	1	–	–	–	–	–	–	–	BOR	–	–	–	–	PDIP (P), SOIC (SO), SSOP (SS)	–	
	PIC16F1826 XLP	R	18	16	EMR	3.5 KB 2 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	12	–	–	12	–	2	–	1	2	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SOIC (SO), SSOP (SS), QFN (ML)	DSM, XLP, Temp*	
	PIC16F1827 XLP	R	18	16	EMR	7 KB 4 Kw	✓	✓	384	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	12	–	–	12	–	2	2	2	4	1	–	1	2	2	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SOIC (SO), SSOP (SS), QFN (ML)	DSM, XLP, Temp*	
	PIC16F1847 XLP	R	18	16	EMR	14 KB 8 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 KHz	–	12	–	–	12	–	2	2	2	4	1	–	1	2	2	–	–	–	PBOR	SW	✓	✓	–	PDIP (P), SOIC (SO), SSOP (SS), QFN (ML), UQFN (MV)	DSM, Temp*	
20-Pin	PIC16F1507	R	20	18	EMR	3.5 KB 2 Kw	✓	✓	128	–	1.8V-5.5V	20 MHz	16 MHz	–	–	–	–	12	–	–	–	–	2	1	–	–	–	–	–	–	–	PBOR	SW	–	✓	–	PDIP (P), SOIC (SO), SSOP, 4x4 QFN (ML)	4x PWM, CLC, CWG, DDS, Temp*	20-Pin
	PIC16F720	R	20	18	MR	3.5 KB 2 Kw	✓	✓	128	–	1.8V-5.5V	16 MHz	16 MHz, 500 kHz	–	12	–	12	–	–	–	1	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	Temp*	
	PIC16F1508 XLP	R	20	18	EMR	7 KB 4 Kw	✓	✓	256	–	1.8V-5.5V	20 MHz	16 MHz	–	2	–	–	12	–	2	–	–	2	1	–	1	1	1	–	–	–	PBOR	SW	–	✓	–	PDIP (P), SOIC (SO), SSOP, 4x4 QFN (ML)	4x PWM, CLC, CWG, DDS, XLP, Temp*	
	PIC16F1509 XLP	R	20	18	EMR	14 KB 8 Kw	✓	✓	512	–	1.8V-5.5V	20 MHz	16 MHz	–	2	–	–	12	–	2	–	–	2	1	–	1	1	1	–	–	–	PBOR	SW	–	✓	–	PDIP (P), SOIC (SO), SSOP, 4x4 QFN (ML)	4x PWM, CLC, CWG, DDS, XLP, Temp*	
	PIC16F721	R	20	18	MR	7 KB 4 Kw	✓	✓	256	–	1.8V-5.5V	16 MHz	16 MHz, 500 kHz	–	12	–	12	–	–	–	1	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	Temp*	
	PIC16F631	R	20	18	MR	1.75 KB 1 Kw	✓	–	64	128	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	–	–	–	–	–	2	–	–	1	1	–	–	–	–	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	–	
	PIC16F677	R	20	18	MR	3.5 KB 2 Kw	✓	–	128	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	12	–	–	12	–	2	–	–	1	1	–	–	1	1	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	–	
	PIC16F1828 XLP	R	20	18	EMR	7 KB 4 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	12	–	–	12	–	2	2	2	4	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	DSM, XLP, Temp*	
	PIC16F1829 XLP	R	20	18	EMR	14 KB 8 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	–	12	–	–	12	–	2	2	2	4	1	–	1	2	2	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	DSM, XLP, Temp*	
	PIC16F687	R	20	18	MR	3.5 KB 2 Kw	✓	–	128	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	12	–	–	12	–	2	–	–	1	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	✓	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	–	
	PIC16F785	R	20	18	MR	3.5 KB 2 Kw	–	–	128	256	2V-15V	20 MHz	8 MHz, 31 kHz	–	12	–	–	12	–	2	1	–	2	1	–	–	–	–	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	2-phase PWM, 2x Op Amp	
	PIC16F685	R	20	18	MR	7 KB 4 Kw	✓	–	256	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	12	–	–	12	–	2	–	1	2	1	–	–	–	–	–	–	–	BOR	SW◊	✓	✓	✓	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	–	
	PIC16F689	R	20	18	MR	7 KB 4 Kw	✓	–	256	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	12	–	–	12	–	2	–	–	1	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	✓	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	–	
	PIC16F690	R	20	18	MR	7 KB 4 Kw	✓	–	256	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	12	–	–	12	–	2	–	1	2	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	✓	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	–	
	PIC18F13K22 XLP	R	20	18	PIC18	8 KB 4 Kw	✓	✓	256	256	1.8V-5.5V	64 MHz	64 MHz, 31 kHz	–	12	–	–	12	–	2	–	1	1	3	–	1	1	1	–	–	–	PBOR	SW◊	✓	–	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	XLP, Temp*	
	PIC18F13K50 XLP	R	20	15	PIC18	8 KB 4 Kw	✓	✓	512	256	1.8V-5.5V	48 MHz	32 MHz, 31 kHz	–	9	–	–	9	–	2	–	1	1	3	–	1	1	1	–	1	–	PBOR	SW◊	✓	–	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), XLP, Temp*	
	PIC18F14K22 XLP	R	20	18	PIC18	16 KB 8 Kw	✓	✓	512	256	1.8V-5.5V	64 MHz	64 MHz, 31 kHz	–	12	–	–	12	–	2	–	1	1	3	–	1	1	1	–	–	–	PBOR	SW◊	✓	–	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	XLP, Temp*	
	PIC18F14K50 XLP	R	20	15	PIC18	16 KB 8 Kw	✓	✓	768	256	1.8V-5.5V	48 MHz	32 MHz, 31 kHz	–	9	–	–	9	–	2	–	1	1	3	–	1	1	1	–	1	–	PBOR	SW◊	✓	–	–	PDIP (P), SSOP (SS), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), XLP, Temp*	
28-Pin	PIC16F1782	NR	28	25	EMR	3.5 KB 2 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz	–	–	–	–	–	–	11	3	2	–	2	1	–	1	1	1	–	–	–	BOR	SW◊	–	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), UQFN (MV)	2x PSMC, 2x Op Amp 8b DAC	28-Pin
	PIC16F1783	NR	28	25	EMR	7 KB 4 Kw	✓	✓	512	256	1.8V-5.5V	32 MHz	32 MHz	–	–	–	–	–	–	11	3	2	–	2	1	–	1	1	1	–	–	–	BOR	SW◊	–	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), UQFN (MV)	2x PSMC, 2x Op Amp 8b DAC	
	PIC16F1786	NR	28	25	EMR	14 KB 8 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz	–	–	–	–	–	–	11	3	2	–	2	1	–	1	1	1	–	–	–	BOR	SW◊	–	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), UQFN (MV)	2x PSMC, 2x Op Amp 8b DAC	
	PIC16F57	R	28	20	BL	3 KB 2 Kw	–	–	72	–	2V-5.5V	20 MHz	0	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	SPDIP (SP), SOIC (SO), SSOP (SS)	–	

Products sorted by pin count.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.

XLP - eXtreme Low Power variants available.
*Integrated Temperature Indicator – Reference Application Note AN1333 for implementation.

AEC-Q100 Qualified AEC-Q100 Capable

8-bit PIC® Microcontrollers

	Product	Released (R) Not Released (NR)	Pins		Core	Memory					Voltage Range	Operating Speed		LCD Segments	mTouch™ Channels	Analog Sensing & Measurement					Digital				Communication							ECAN	Monitors		SR-Latch	Timer 1 Gate	High Temperature (150°C)	Packages (Designator)	Special Features	
			Total	I/O		Program	Self-Read	Self-Write	Data RAM (B)	Data EE (B)		Maximum Speed	Internal Oscillator			Charge Time Measurement Unit	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	CCP	ECCP	8-bit Timer	16-bit Timer	AUSART	EUSART	I²C™	SPI	Ethernet (MAC/PHY)	FS-USB		BOR/PBOR	PLVD					
28-Pin (Cont.)	PIC16F722A	R	28	25	MR	3.5 KB 2 Kw	✓	–	128	–	1.8V-5.5V	20 MHz	16 MHz	–	11	–	11	–	–	–	2	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	28-Pin (Cont.)
	PIC16LF1902	R	28	25	EMR	3.5 KB 2 Kw	✓	✓	128	–	1.8V-3.6V	20 MHz	16 MHz	72	11	–	–	11	–	–	–	–	1	1	–	–	–	–	–	–	–	–	SW◊	–	–	–	SPDIP (SP), SOIC (SO), SSOP (SS), 4x4 UQFN (MV)	Integrated LCD Driver, XLP, Temp*	
	PIC16F723A	R	28	25	MR	7 KB 4 Kw	✓	–	192	–	1.8V-5.5V	20 MHz	16 MHz	–	11	–	11	–	–	–	2	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	
	PIC16LF1903	R	28	25	EMR	7 KB 4 Kw	✓	✓	256	–	1.8V-3.6V	20 MHz	16 MHz	72	11	–	–	11	–	–	–	–	1	1	–	–	–	–	–	–	–	–	SW◊	–	–	–	SPDIP (SP), SOIC (SO), SSOP (SS), 4x4 UQFN (MV)	Integrated LCD Driver, XLP, Temp*	
	PIC16LF1906	R	28	25	EMR	14 KB 8 Kw	✓	✓	512	–	1.8V-3.6V	20 MHz	16 MHz	72	11	–	–	11	–	–	–	–	1	1	–	1	–	–	–	–	–	–	SW◊	–	–	–	SPDIP (SP), SOIC (SO), SSOP (SS), 4x4 UQFN (MV)	Integrated LCD Driver, XLP, Temp*	
	PIC16F1516	R	28	25	EMR	14 KB 8 Kw	✓	✓	512	–	1.8V-5.5V	20 MHz	16 MHz	–	17	–	–	17	–	–	2	–	2	1	–	1	1	1	–	–	–	PBOR	SW	–	✓	–	SPDIP (SP), SSOP (SS), SOIC (SO), 4x4 UQFN (MV)	XLP, Temp*	
	PIC16F1518	R	28	25	EMR	28 KB 16 Kw	✓	✓	1024	–	1.8V-5.5V	20 MHz	16 MHz	–	17	–	–	17	–	–	2	–	2	1	–	1	1	1	–	–	–	PBOR	SW	–	✓	–	SPDIP (SP), SSOP (SS), SOIC (SO), 4x4 UQFN (MV)	XLP, Temp*	
	PIC16F882	R	28	25	MR	3.5 KB 2 Kw	✓	✓	128	128	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	2	1	–	1	1	–	–	–	BOR	SW◊	✓	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML)	–	
	PIC16F726	R	28	25	MR	14 KB 8 Kw	✓	–	368	–	1.8V-5.5V	20 MHz	16 MHz	–	11	–	11	–	–	–	2	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	
	PIC16F1933	R	28	25	EMR	7 KB 4 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	60	11	–	–	11	–	2	2	3	4	1	–	1	1	1	–	–	–	PBOR	SW◊	✓	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	
	PIC18F23K20	R	28	25	PIC18	8 KB 4 Kw	✓	✓	512	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	1	3	–	1	1	1	–	–	–	BOR	✓	–	–	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP	
	PIC16F1936	R	28	25	EMR	14 KB 8 Kw	✓	✓	512	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	60	11	–	–	11	–	2	2	3	4	1	–	1	1	1	–	–	–	PBOR	SW◊	✓	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	
	PIC18F24K20	R	28	25	PIC18	16 KB 8 Kw	✓	✓	768	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	XLP	
	PIC16F883	R	28	25	MR	7 KB 4 Kw	✓	✓	256	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	2	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	–	
	PIC16F1938	R	28	25	EMR	28 KB 16 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	60	11	–	–	11	–	2	2	3	4	1	–	1	1	1	–	–	–	PBOR	SW◊	✓	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	
	PIC18F25K20	R	28	25	PIC18	32 KB 16 Kw	✓	✓	1536	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	XLP	
	PIC18F23K22	R	28	25	PIC18	8 KB 4 Kw	✓	✓	512	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	17	✓	–	17	–	2	1	1	1	3	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	SPDIP (SP), SOIC (SO), SSOP (SS), 6x6 QFN (ML), 4x4 UQFN (MV)	XLP, Temp*	
	PIC18F24K22	R	28	25	PIC18	16 KB 8 Kw	✓	✓	768	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	17	✓	–	17	–	2	1	1	1	3	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML), 4x4 UQFN(MV)	XLP, Temp*	
	PIC16F886	R	28	25	MR	14 KB 8 Kw	✓	✓	368	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	2	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	✓	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	–	
	PIC18F25K22	R	28	25	PIC18	32 KB 16 Kw	✓	✓	1536	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	17	✓	–	17	–	2	2	3	3	4	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	XLP, Temp*	
	PIC18F24J11	R	28	21	PIC18	16 KB 8 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	10	–	2	–	2	2	3	–	2	2	2	–	–	–	BOR	SW◊	–	–	–	SPDIP (SP), SOIC (SO), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F26K20	R	28	25	PIC18	64 KB 32 Kw	✓	✓	3936	1024	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	11	–	–	11	–	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	XLP, Temp*	
	PIC18F25J11	R	28	21	PIC18	32 KB 16 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	10	–	2	–	2	2	3	–	2	2	2	–	–	–	BOR	SW◊	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F24J50	R	28	22	PIC18	16 KB 8 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	10	–	2	–	2	2	3	–	2	2	2	–	1	–	BOR	SW◊	–	–	–	SPDIP (SP), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F26K22	R	28	25	PIC18	64 KB 32 Kw	✓	✓	3896	1024	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	17	✓	–	17	–	2	2	3	3	4	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	SPDIP (SP), SSOP (SS), SOIC (SO), 6x6 QFN (ML)	XLP, Temp*	
	PIC18F25K80	R	28	24	PIC18	32 KB 16 Kw	✓	✓	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	–	8	✓	–	–	8	2	4	1	2	3	–	2	1	1	–	–	1	PBOR	✓	–	–	✓	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	CAN 2.0, CTMU, Deep Sleep Mode, XLP	
	PIC18F25J50	R	28	22	PIC18	32 KB 16 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	10	–	2	–	2	2	3	–	2	2	2	–	1	–	BOR	SW◊	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F26J11	R	28	21	PIC18	64 KB 32 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	10	–	2	–	2	2	3	–	2	2	2	–	–	–	BOR	SW◊	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F2680	R	28	25	PIC18	64 KB 32 Kw	✓	✓	3328	1024	2V-5.5V	40 MHz	8 MHz, 31 kHz	0	–	–	–	8	–	0	1	0	1	3	–	1	1	1	–	–	1	PBOR	SW◊	–	–	✓	PDIP (P), SOIC (SO)	CAN 2.0	
	PIC18F26K80	R	28	24	PIC18	64 KB 32 Kw	✓	✓	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	–	8	✓	–	–	8	2	4	1	2	3	–	2	1	1	–	–	1	PBOR	✓	–	–	✓	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	CAN 2.0, CTMU, Deep Sleep Mode, XLP	
	PIC18F2450	R	28	23	PIC18	16 KB 8 Kw	✓	✓	768	–	2V-5.5V	48 MHz	32 kHz	–	–	–	–	10	–	–	1	–	1	2	–	1	–	–	–	1	–	PBOR	SW◊	–	–	–	SPDIP (SP), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed)	
	PIC18F26J13	R	28	23	PIC18	64 KB 32 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	–	10	3	7	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	SPI w/DMA, XLP	

Products sorted by pin count.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.

- eXtreme Low Power variants available.
*Integrated Temperature Indicator – Reference Application Note AN1333 for implementation.

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	Product	Released (R) Not Released (NR)	Pins		Core	Memory					Voltage Range	Operating Speed		LCD Segments	mTouch™ Channels	Analog Sensing & Measurement					Digital				Communication						ECAN	Monitors		SR-Latch	Timer 1 Gate	High Temperature (150°C)	Packages (Designator)	Special Features	
			Total	I/O		Program	Self-Read	Self-Write	Data RAM (B)	Data EE (B)		Maximum Speed	Internal Oscillator			Charge Time Measurement Unit	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	CCP	ECCP	8-bit Timer	16-bit Timer	AUSART	EUSART	I²C™	SPI	Ethernet (MAC/PHY)	FS-USB		BOR/PBOR	PLVD					
28-Pin (Cont.)	PIC18F26J50	R	28	22	PIC18	64 KB 32 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	10	–	2	–	2	2	3	–	2	2	2	–	1	–	BOR	SW◊	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), Peripheral Pin Select, Deep Sleep Mode, XLP	28-Pin (Cont.)
	PIC18F26J53	R	28	22	PIC18	64 KB 32 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	–	10	3	7	3	4	4	–	2	2	2	–	1	–	BOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), SPI w/DMA, XLP	
	PIC18F27J13	R	28	23	PIC18	128 KB 64 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	–	10	3	7	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	SPI w/DMA, XLP	
	PIC18F27J53	R	28	22	PIC18	128 KB 64 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	10	✓	–	–	10	3	7	3	4	4	–	2	2	2	–	1	–	BOR	✓	–	–	–	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	USB 2.0 (Full Speed), SPI w/DMA, XLP	
	PIC18F2550	R	28	24	PIC18	32 KB 16 Kw	✓	✓	2048	256	2V-5.5V	48 MHz	8 MHz, 31 kHz	–	10	–	–	10	–	2	2	–	1	3	–	1	1	1	–	1	–	PBOR	SW◊	–	–	–	PDIP (P), SPDIP(SP), SOIC (SO)	USB 2.0 (Full Speed)	
	PIC18F2553	R	28	24	PIC18	32 KB 16 Kw	✓	✓	2048	256	2V-5.5V	48 MHz	8 MHz, 31 kHz	–	–	–	–	–	10	2	2	–	1	3	–	1	1	1	–	1	–	PBOR	SW◊	–	–	–	SPDIP(SP), SOIC (SO)	USB 2.0 (Full Speed)	
40/44-Pin	PIC16F1784	NR	40	36	EMR	7 KB 4 Kw	✓	✓	512	256	1.8V-5.5V	32 MHz	32 MHz	–	–	–	–	–	14	4	3	–	2	1	–	1	1	1	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), TQFP (PT), UQFN (MV)	3x PSMC, 3x Op Amp, 8b DAC	40/44-Pin
	PIC16F1787	NR	40	36	EMR	14 KB 8 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz	–	–	–	–	–	14	4	3	–	2	1	–	1	1	1	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), TQFP (PT), UQFN (MV)	3x PSMC, 3x Op Amp, 8b DAC	
	PIC16F59	R	40	32	BL	3 KB 2 Kw	–	–	134	–	2V-5.5V	20 MHz	0	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	PDIP (P), TQFP (PT)	–	
	PIC16LF1904	R	40	36	EMR	7 KB 4 Kw	✓	✓	256	–	1.8V-3.6V	20 MHz	16 MHz	116	14	–	–	14	–	–	–	–	1	1	–	1	–	–	–	–	–	–	–	–	–	PDIP (P), TQFP (PT), 5x5 UQFN (MV)	Integrated LCD Driver, XLP, Temp*	
	PIC16LF1907	R	40	36	EMR	14 KB 8 Kw	✓	✓	512	–	1.8V-3.6V	20 MHz	16 MHz	116	14	–	–	14	–	–	–	–	1	1	–	1	–	–	–	–	–	–	–	–	–	PDIP (P), TQFP (PT), 5x5 UQFN (MV)	Integrated LCD Driver, XLP, Temp*	
	PIC16F1517	R	40	36	EMR	14 KB 8 Kw	✓	✓	512	–	1.8V-5.5V	20 MHz	16 MHz	–	28	–	–	28	–	–	2	–	2	1	–	1	1	1	–	–	–	PBOR	SW	–	✓	–	PDIP (P), TQFP (PT), 5x5 UQFN (MV)	XLP, Temp*	
	PIC16F1519	R	40	36	EMR	28 KB 16 Kw	✓	✓	1024	–	1.8V-5.5V	20 MHz	16 MHz	–	28	–	–	28	–	–	2	–	2	1	–	1	1	1	–	–	–	PBOR	SW	–	✓	–	PDIP (P), TQFP (PT), 5x5 UQFN (MV)	XLP, Temp*	
	PIC16F724	R	40	36	MR	7 KB 4 Kw	✓	–	192	–	1.8V-5.5V	20 MHz	16 MHz	–	16	–	14	–	–	–	2	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC16F1934	R	40	36	EMR	7 KB 4 Kw	✓	✓	256	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	96	16	–	–	14	–	2	2	3	4	1	–	1	1	1	–	–	–	PBOR	SW◊	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC18F43K20	R	40	36	PIC18	8 KB 4 Kw	✓	✓	512	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	14	–	–	14	–	2	1	1	1	3	–	1	1	1	–	–	–	BOR	✓	–	–	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP	
	PIC16F727	R	40	36	MR	14 KB 8 Kw	✓	–	368	–	1.8V-5.5V	20 MHz	16 MHz	–	16	–	14	–	–	–	2	–	2	1	1	–	1	1	–	–	–	BOR	SW◊	–	✓	✓	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC16F1937	R	40	36	EMR	14 KB 8 Kw	✓	✓	512	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	96	16	–	–	14	–	2	2	3	4	1	–	1	1	1	–	–	–	PBOR	SW◊	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC18F44K20	R	40	36	PIC18	16 KB 8 Kw	✓	✓	768	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	14	–	–	14	–	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	✓	–	–	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP	
	PIC16F1939	R	40	36	EMR	28 KB 16 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	96	16	–	–	14	–	2	2	3	4	1	–	1	1	1	–	–	–	PBOR	SW◊	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC18F45K20	R	40	36	PIC18	32 KB 16 Kw	✓	✓	1536	256	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	14	–	–	14	–	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	✓	–	–	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP	
	PIC16F884	R	40	36	MR	7 KB 4 Kw	✓	✓	256	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	14	–	–	14	–	2	1	1	2	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML)	–	
	PIC18F43K22	R	40	36	PIC18	8 KB 4 Kw	✓	✓	512	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	28	✓	–	28	–	2	1	1	1	3	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML) 5x5 UQFN (MV)	XLP, Temp*	
	PIC18F44K22	R	40	36	PIC18	16 KB 8 Kw	✓	✓	768	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	28	✓	–	28	–	2	1	1	1	3	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC16F887	R	40	36	MR	14 KB 8 Kw	✓	✓	368	256	2V-5.5V	20 MHz	8 MHz, 31 kHz	–	14	–	–	14	–	2	1	1	2	1	–	1	1	1	–	–	–	BOR	SW◊	✓	✓	✓	PDIP (P), TQFP (PT), 8x8 QFN (ML)	–	
	PIC18F46K20	R	40	36	PIC18	64 KB 32 Kw	✓	✓	3936	1024	1.8V-3.6V	64 MHz	16 MHz, 31 kHz	–	14	–	–	14	–	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	✓	–	–	–	PDIP (P), TQFP (PT), 8x8 QFN (ML)	XLP	
	PIC18F45K22	R	40	36	PIC18	32 KB 16 Kw	✓	✓	1536	256	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	28	✓	–	28	–	2	2	2	3	4	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	
	PIC18F44J11	R	40	34	PIC18	16 KB 8 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	13	–	2	–	2	2	3	–	2	2	2	–	–	–	BOR	SW◊	–	–	–	TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F45J11	R	40	34	PIC18	32 KB 16 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	13	–	2	–	2	2	3	–	2	2	2	–	–	–	BOR	SW◊	–	–	–	TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F44J50	R	40	34	PIC18	16 KB 8 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	13	–	2	–	2	2	3	–	2	2	2	–	1	–	BOR	SW◊	–	–	–	TQFP (PT), QFN (ML)	USB 2.0 (Full Speed), Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F45K80	R	40	35	PIC18	32 KB 16 Kw	✓	✓	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	–	15	✓	–	–	15	2	4	1	2	3	–	2	1	1	–	–	1	PBOR	✓	✓	✓	✓	PDIP (P), TQFP (PT), QFN (ML)	CAN 2.0, CTMU, Deep Sleep Mode, XLP	

Products sorted by pin count.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.

XLP - eXtreme Low Power variants available.
*Integrated Temperature Indicator – Reference Application Note AN1333 for implementation.

AEC-Q100 Qualified AEC-Q100 Capable

8-bit PIC® Microcontrollers

	Product	Released (R) Not Released (NR)	Pins		Core	Memory					Voltage Range	Operating Speed		LCD Segments	mTouch™ Channels	Analog Sensing & Measurement					Digital				Communication						ECAN	Monitors		SR-Latch	Timer 1 Gate	High Temperature (150°C)	Packages (Designator)	Special Features	
			Total	I/O		Program	Self-Read	Self-Write	Data RAM (B)	Data EE (B)		Maximum Speed	Internal Oscillator			Charge Time Measurement Unit	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	CCP	ECCP	8-bit Timer	16-bit Timer	AUSART	EUSART	I²C™	SPI	Ethernet (MAC/PHY)	FS-USB		BOR/PBOR	PLVD					
40/44-Pin (Cont.)	PIC18F46K22	R	40	36	PIC18	64 KB 32 Kw	✓	✓	3896	1024	1.8V-5.5V	64 MHz	16 MHz, 31 kHz	–	28	✓	–	28	–	2	2	2	3	4	–	2	2	2	–	–	–	PBOR	✓	✓	✓	–	PDIP (P), TQFP (PT), 8x8 QFN (ML), 5x5 UQFN (MV)	XLP, Temp*	40/44-Pin (Cont.)
	PIC18F45J50	R	40	34	PIC18	32 KB 16 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	13	–	2	–	2	2	3	–	2	2	2	–	1	–	BOR	SW◊	–	–	–	TQFP (PT), QFN (ML)	USB 2.0 (Full Speed), Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F46J11	R	40	34	PIC18	64 KB 32 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	13	–	2	–	2	2	3	–	2	2	2	–	–	–	BOR	SW◊	–	–	–	PDIP (P), TQFP (PT), QFN (ML)	Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F4450	R	40	34	PIC18	16 KB 8 Kw	✓	✓	768	–	2V-5.5V	48 MHz	31 kHz	–	13	–	–	13	–	–	1	–	1	2	–	1	–	–	–	1	–	PBOR	SW◊	–	–	–	PDIP (P), TQFP (PT), QFN (ML)	USB 2.0 (Full Speed)	
	PIC18F4680	R	40	36	PIC18	64 KB 32 Kw	✓	✓	3328	1024	2V-5.5V	40 MHz	8 MHz, 31 kHz	0	–	–	–	11	–	2	1	1	1	3	–	1	1	1	–	–	1	PBOR	SW◊	–	–	✓	PDIP (P), TQFP (PT), QFN (ML)	CAN 2.0	
	PIC18F46K80	R	44	35	PIC18	64 KB 32 Kw	✓	✓	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	–	15	✓	–	–	15	2	4	1	2	3	–	2	1	1	–	–	1	PBOR	✓	–	–	✓	PDIP (P), TQFP (PT), QFN (ML)	CAN 2.0, CTMU, Deep Sleep Mode, XLP	
	PIC18F46J13	R	44	34	PIC18	64 KB 32 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	–	13	3	7	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT), QFN (ML)	SPI w/DMA, XLP	
	PIC18F46J50	R	40	34	PIC18	64 KB 32 Kw	✓	✓	3800	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	13	–	2	–	2	2	3	–	2	2	2	–	1	–	BOR	SW◊	–	–	–	PDIP (P), TQFP (PT), QFN (ML)	USB 2.0 (Full Speed), Peripheral Pin Select, Deep Sleep Mode, XLP	
	PIC18F46J53	R	44	33	PIC18	64 KB 32 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	–	13	3	7	3	4	4	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT), QFN (ML)	Integrated LCD Driver, SPI w/DMA, XLP	
	PIC18F47J13	R	44	34	PIC18	128 KB 64 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	–	13	3	7	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT), QFN (ML)	SPI w/DMA, XLP	
	PIC18F47J53	R	44	33	PIC18	128 KB 64 Kw	✓	✓	3808	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	13	✓	–	–	13	3	7	3	4	4	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT), QFN (ML)	Integrated LCD Driver, SPI w/DMA, XLP	
	PIC18F4550	R	40	35	PIC18	32 KB 16 Kw	✓	✓	2048	256	2V-5.5V	48 MHz	8 MHz, 31 kHz	–	13	–	–	13	–	2	1	1	1	3	–	1	1	1	–	1	–	PBOR	SW◊	–	–	–	PDIP (P), TQFP (PT), QFN (ML)	USB 2.0 (Full Speed)	
	PIC18F4523	R	40	36	PIC18	32 KB 16 Kw	✓	✓	1536	256	2V-5.5V	40 MHz	8 MHz, 31 kHz	–	13	–	–	–	13	2	1	1	1	3	–	1	1	1	–	–	–	PBOR	SW◊	–	–	–	PDIP (P), TQFP (PT), QFN (ML)	–	
	PIC18F4553	R	40	35	PIC18	32 KB 16 Kw	✓	✓	2048	256	2V-5.5V	48 MHz	8 MHz, 31 kHz	–	13	–	–	–	13	2	1	1	1	3	–	1	1	1	–	1	–	PBOR	SW◊	–	–	–	PDIP (P), TQFP (PT), QFN (ML)	USB 2.0 (Full Speed)	
64-Pin	PIC16F1526	R	64	54	EMR	14 KB 8 Kw	✓	✓	768	–	1.8V-5.5V	20 MHz	16 MHz	–	30	–	–	30	–	–	10	–	6	3	–	2	2	2	–	–	–	PBOR	SW◊	–	✓	–	TQFP (PT), QFN (MR)	XLP, Temp*	64-Pin
	PIC16F1527	R	64	54	EMR	28 KB 16 Kw	✓	✓	1536	–	1.8V-5.5V	20 MHz	16 MHz	–	30	–	–	30	–	–	10	–	6	3	–	2	2	2	–	–	–	PBOR	SW◊	–	✓	–	TQFP (PT), QFN (MR)	XLP, Temp*	
	PIC16F1946	R	64	53	EMR	14 KB 8 Kw	✓	✓	512	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	184	17	–	–	17	–	3	2	3	4	1	–	2	2	2	–	–	–	BOR	SW◊	✓	✓	–	TQFP (PT), QFN (MR)	XLP, Temp*	
	PIC16F1947	R	64	53	EMR	28 KB 16 Kw	✓	✓	1024	256	1.8V-5.5V	32 MHz	32 MHz, 31 kHz	184	17	–	–	17	–	3	2	3	4	1	–	2	2	2	–	–	–	BOR	SW◊	✓	✓	–	TQFP (PT), QFN (MR)	XLP, Temp*	
	PIC18F63J90	R	64	51	PIC18	8 KB 4 Kw	✓	✓	1024	–	2V-3.6V	40 MHz	8 MHz, 31 kHz	132	12	–	–	12	–	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver	
	PIC18F65K22	R	64	53	PIC18	32 KB 16 Kw	✓	✓	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	–	16	✓	–	–	16	3	5	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	QFN (MR), TQFP (PT)	XLP	
	PIC18F65K90	R	64	53	PIC18	32 KB 16 Kw	✓	✓	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	132	16	✓	–	–	16	3	5	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	QFN (MR), TQFP (PT)	Integrated LCD Driver, XLP	
	PIC18F65J50	R	64	49	PIC18	32 KB 16 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	8	–	–	8	–	2	2	3	2	3	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT)	USB 2.0 (Full Speed)	
	PIC18F66J11	R	64	50	PIC18	64 KB 32 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	11	–	–	11	–	2	2	3	2	3	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	–	
	PIC18F66J90/3	R	64	51	PIC18	64 KB 32 Kw	✓	✓	3900	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	✓	–	12	12	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, RTCC	
	PIC18F65K80	R	64	54	PIC18	32 KB 16 Kw	✓	✓	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	–	15	✓	–	–	15	2	4	1	2	3	–	2	1	1	–	–	1	PBOR	✓	–	–	✓	TQFP (PT), QFN (MR)	CAN 2.0, CTMU, Deep Sleep Mode, XLP	
	PIC18F66K22	R	64	53	PIC18	64 KB 32 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	–	16	✓	–	–	16	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	QFN (MR), TQFP (PT)	XLP	
	PIC18F66K90	R	64	53	PIC18	64 KB 32 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	132	16	✓	–	–	16	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	QFN (MR), TQFP (PT)	Integrated LCD Driver, XLP	
	PIC18F66J50	R	64	49	PIC18	64 KB 32 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	8	–	–	8	–	2	2	3	2	3	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT)	USB 2.0 (Full Speed)	
	PIC18F67J11	R	64	50	PIC18	128 KB 64 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	11	–	–	11	–	2	2	3	2	3	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	–	
	PIC18F67K22	R	64	53	PIC18	128 KB 64 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	–	16	✓	–	–	16	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	QFN (MR), TQFP (PT)	XLP	
	PIC18F66K80	R	64	54	PIC18	64 KB 32 Kw	✓	✓	3648	1024	1.8V-5.5V	64 MHz	8 MHz, 31 kHz	–	11	✓	–	–	15	2	4	1	2	3	–	2	1	1	–	–	1	PBOR	✓	–	–	✓	TQFP (PT), QFN (MR)	CAN 2.0, CTMU, Deep Sleep Mode, XLP	

Products sorted by pin count.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.

XLP - eXtreme Low Power variants available.
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	Product	Released (R) Not Released (NR)	Pins		Core	Memory					Voltage Range	Operating Speed		LCD Segments	mTouch™ Channels	Analog Sensing & Measurement					Digital				Communication							ECAN	Monitors		SR-Latch	Timer 1 Gate	High Temperature (150°C)	Packages (Designator)	Special Features	
			Total	I/O		Program	Self-Read	Self-Write	Data RAM (B)	Data EE (B)		Maximum Speed	Internal Oscillator			Charge Time Measurement Unit	8-bit ADC	10-bit ADC	12-bit ADC	Comparators	CCP	ECCP	8-bit Timer	16-bit Timer	AUSART	EUSART	I²C™	SPI	Ethernet (MAC/PHY)	FS-USB		BOR/PBOR	PLVD					
64-Pin (Cont.)	PIC18F67J90/3	R	64	51	PIC18	128 KB 64 Kw	✓	✓	3900	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	✓	–	12	12	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, RTCC	64-Pin (Cont.)
	PIC18F67K90 XLP	R	64	53	PIC18	128 KB 64 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	132	16	✓	–	–	16	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	QFN (MR), TQFP (PT)	Integrated LCD Driver, XLP	
	PIC18F67J50	R	64	49	PIC18	128 KB 64 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	8	–	–	8	–	2	2	3	2	3	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT)	USB 2.0 (Full Speed)	
80-Pin	PIC18F85K22 XLP	R	80	69	PIC18	32 KB 16 Kw	✓	✓	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz		24	✓	–	–	24	3	5	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	XLP	80-Pin
	PIC18F85K90 XLP	R	80	69	PIC18	32 KB 16 Kw	✓	✓	2048	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	192	24	✓	–	–	24	3	5	3	4	4	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, XLP	
	PIC18F85J50	R	80	65	PIC18	32 KB 16 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	–	–	–	12	–	2	2	3	2	3	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT)	USB 2.0 (Full Speed)	
	PIC18F86J11	R	80	66	PIC18	64 KB 32 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	–	–	–	15	–	2	2	3	2	3	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	–	
	PIC18F86J90/3	R	80	67	PIC18	64 KB 32 Kw	✓	✓	3900	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	192	12	✓	–	12	12	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, RTCC	
	PIC18F86K22 XLP	R	80	69	PIC18	64 KB 32 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz		24	✓	–	–	24	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	XLP	
	PIC18F86K90	R	80	69	PIC18	64 KB 32 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	192	24	✓	–	–	24	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, XLP	
	PIC18F86J50 XLP	R	80	65	PIC18	64 KB 32 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	–	–	–	12	–	2	2	3	2	3	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT)	USB 2.0 (Full Speed)	
	PIC18F87J11	R	80	66	PIC18	128 KB 64 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	–	–	–	15	–	2	2	3	2	3	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	–	
	PIC18F87K22 XLP	R	80	69	PIC18	128 KB 64 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz		24	✓	–	–	24	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	XLP	
	PIC18F87J90/3	R	80	67	PIC18	128 KB 64 Kw	✓	✓	3900	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	192	12	✓	–	12	12	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, RTCC	
	PIC18F87K90 XLP	R	80	69	PIC18	128 KB 64 Kw	✓	✓	4096	1024	1.8V-5.5V	64 MHz	31 kHz, 500 kHz, 16 MHz	192	24	✓	–	–	24	3	7	3	6	5	–	2	2	2	–	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated LCD Driver, XLP	
	PIC18F87J50	R	80	65	PIC18	128 KB 64 Kw	✓	✓	3904	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	–	–	–	–	12	–	2	2	3	2	3	–	2	2	2	–	1	–	BOR	✓	–	–	–	TQFP (PT)	USB 2.0 (Full Speed)	
	PIC18F86J60	R	80	55	PIC18	128 KB 64 Kw	✓	✓	3808	–	2V-3.6V	42 MHz	32 kHz, 31 kHz	–	–	–	–	15	–	2	2	3	2	3	–	2	1	1	1	–	–	BOR	✓	–	–	–	TQFP (PT)	Integrated MAC, 10 Base T PHY	
	PIC18F86J72	R	80	51	PIC18	64 KB 32 Kw	✓	✓	3923	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	✓	–	–	12	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	2x 24-bit ADC, RTCC	
	PIC18F87J72	R	80	51	PIC18	128 KB 64 Kw	✓	✓	3923	–	2V-3.6V	48 MHz	8 MHz, 31 kHz	132	12	✓	–	–	12	2	2	–	1	3	1	1	1	1	–	–	–	BOR	✓	–	–	–	TQFP (PT)	2x 24-bit ADC, RTCC	

Products sorted by pin count.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.

XLP – eXtreme Low Power variants available.
*Integrated Temperature Indicator – Reference Application Note AN1333 for implementation.

AEC-Q100 Qualified AEC-Q100 Capable

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16-bit PIC® Microcontrollers (PIC24F)

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory				Voltage Range	Operating Speed		Analog Sensing & Measurement				LCD Segments	Graphics Controller	Output Compare/PWM	Input Capture	16-bit Timer[2]	Communication		PMP	RTCC/CRC	PPS	High Temperature (150°C)	Monitors	Packages (Designator)	
					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						Digital Communication	FS USB OTG					System Mgmt. Features		
14-Pin	PIC24F04KA200 XLP	R	12	PIC24	4	512	AN1095[1]	–	1.8V3.6V	16	8 MHz, 32 kHz	✓	7	–	2	–	–	1	1	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	–	BOR, POR, WDT, Deep Sleep, XLP	SPDIP (SP),TSSOP (ST)	14-Pin
20-Pin	PIC24F04KA201 XLP	R	18	PIC24	4	512	AN1095[1]	–	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	–	2	–	–	1	1	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	–	BOR, POR, WDT, Deep Sleep, XLP	PDIP (P), SSOP (SS), SOIC (SO), QFN (MQL)	20-Pin
	PIC24F08KA101 XLP	R	18	PIC24	8	1536	512	–	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	–	2	–	–	1	1	3	2 UART, 1 SPI, 1 I²C	–	–	✓	–	–	BOR, POR, WDT, Deep Sleep, XLP	PDIP (P), SSOP (SS), SOIC (SO), QFN (MQL)	
	PIC24F16KA101 XLP	R	18	PIC24	16	1536	512	–	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	–	2	–	–	1	1	3	2 UART, 1 SPI, 1 I²C	–	–	✓	–	–	BOR, POR, WDT, Deep Sleep, XLP	PDIP (P), SSOP (SS), SOIC (SO), QFN (MQL)	
	PIC24FJ16MC101	R	15	PIC24	16	1024	AN1095[1]	–	3V-3.6V	16	7.37 MHz, 32 kHz	✓	4	–	3	–	–	8	3	3	1 UART, 1 SPI, 1 I²C	–	–	✓	✓	–	BOR, POR, WDT	PDIP (P), SSOP (SS), SOIC (SO), QFN (MQL)	
	PIC24F16KA301	R	18	PIC24	16	2048	512	–	1.8V-5.5V	16	8 MHz, 32 kHz	✓	–	9	3	–	–	3	3	5	2 UART, 2 SPI, 2 I²C	–	–	✓	–	–	PWRT, HLVD, POR, OST, WDT	SPDIP (P), SSOP (SS), SOIC (SO)	
	PIC24F32KA301	R	18	PIC24	32	2048	512	–	1.8V-5.5V	16	8 MHz, 32 kHz	✓	–	9	3	–	–	3	3	5	2 UART, 2 SPI, 2 I²C	–	–	✓	–	–	PWRT, HLVD, POR, OST, WDT	SPDIP (P), SSOP (SS), SOIC (SO)	
28-Pin	PIC24F08KA102 XLP	R	24	PIC24	8	1536	512	–	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	–	2	–	–	1	1	3	2 UART, 1 SPI, 1 I²C	–	–	✓	–	–	BOR, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	28-Pin
	PIC24F16KA102 XLP	R	24	PIC24	16	1536	512	–	1.8V-3.6V	16	8 MHz, 32 kHz	✓	9	–	2	–	–	1	1	3	2 UART, 1 SPI, 1 I²C	–	–	✓	–	–	BOR, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	
	PIC24FJ16MC102	R	21	PIC24	16	1024	AN1095[1]	–	3V-3.6V	16	7.37 MHz, 32 kHz	✓	6	–	3	–	–	8	3	3	1 UART, 1 SPI, 1 I²C	–	–	✓	✓	–	BOR, POR, WDT	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML) TLA (TL)	
	PIC24FJ16GA002	R	21	PIC24	16	4096	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	–	10	–	2	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	
	PIC24FJ32GA002	R	21	PIC24	32	8192	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	–	10	–	2	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	
	PIC24F16KA302	R	24	PIC24	16	2048	512	–	1.8V-5.5V	16	8 MHz, 32 kHz	✓	–	10	3	–	–	3	3	5	2 UART, 2 SPI, 2 I²C	–	–	✓	–	–	PWRT, HLVD, POR, OST, WDT	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	
	PIC24F32KA302	R	24	PIC24	32	2048	512	–	1.8V-5.5V	16	8 MHz, 32 kHz	✓	–	10	3	–	–	3	3	5	2 UART, 2 SPI, 2 I²C	–	–	✓	–	–	PWRT, HLVD, POR, OST, WDT	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	
	PIC24FJ32GA102 XLP	R	21	PIC24	32	8192	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	10	–	3	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
	PIC24FJ32GB002 XLP	R	19	PIC24	32	8192	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	9	–	3	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
	PIC24FJ64GA002	R	21	PIC24	64	8192	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	–	10	–	2	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	SPDIP (SP), SSOP (SS), SOIC (SO), QFN (ML)	
	PIC24FJ64GA102 XLP	R	21	PIC24	64	8192	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	10	–	3	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
	PIC24FJ64GB002 XLP	R	19	PIC24	64	8192	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	9	–	3	–	–	5	5	5	2 UART, 2 SPI, 2 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT, Deep Sleep, XLP	SPDIP (SP), SOIC (SO), QFN (ML)	
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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), QFN (ML)	44-Pin
	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 I²C	–	✓	✓	✓	–	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 I²C	–	–	✓	–	–	PWRT, HLVD, POR, OST, WDT	TQFP (PT), QFN (ML), UQFN (MV)	
	PIC24FJ32GA104 XLP	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 I²C	–	✓	✓	✓	–	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 I²C	–	–	✓	–	–	PWRT, HLVD, POR, OST, WDT	TQFP (PT), QFN (ML), UQFN (MV)	
	PIC24FJ32GB004 XLP	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 I²C	✓	✓	✓	✓	–	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), QFN (ML)	
	PIC24FJ64GA104 XLP	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, Deep Sleep, XLP	TQFP (PT), QFN (ML)	
	PIC24FJ64GB004 XLP	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 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT, Deep Sleep, XLP	TQFP (PT), QFN (ML)	
64-Pin	PIC24FJ64GA306 XLP	NR	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT), QFN (MR)	64-Pin
	PIC24FJ128GA306 XLP	NR	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT), QFN (MR)	
	PIC24FJ64GA106	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	

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.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.
XLP - eXtreme Low Power variants available.

AEC-Q100 Qualified AEC-Q100 Capable

16-bit PIC® Microcontrollers (PIC24F)

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory: Program (KB)	Memory: Data RAM (B)	Memory: EEPROM	Memory: DMA #Ch	Voltage Range	Operating Speed: Maximum MIPS	Operating Speed: Internal Oscillator	Analog Sensing & Measurement: Charge Time Measurement Unit	Analog Sensing & Measurement: 10-bit ADC	Analog Sensing & Measurement: 10/12-bit ADC 1100/500 KSPS	Analog Sensing & Measurement: Comparators	LCD Segments	Graphics Controller	Output Compare/PWM	Input Capture	16-bit Timer[2]	Communication: Digital Communication	Communication: FS USB OTG	PMP	RTCC/CRC	PPS	High Temperature (150°C)	Monitors: System Mgmt. Features	Packages (Designator)	
64-Pin (Cont.)	PIC24FJ128GA106	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	64-Pin (Cont.)
	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 I²C	✓	✓	✓	✓	–	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 I²C	✓	✓	✓	✓	–	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 I²C	–	✓	✓	✓	–	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 I²C	✓	✓	✓	✓	–	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 I²C	✓	✓	✓	✓	–	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	9	5	4 UART, 3 SPI, 3 I²C	✓	–	✓	✓	–	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	9	5	4 UART, 3 SPI, 3 I²C	✓	–	✓	✓	–	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	9	5	4 UART, 3 SPI, 3 I²C	✓	–	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), QFN (MR)	
80-Pin	PIC24FJ64GA308 XLP	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT)	80-Pin
	PIC24FJ128GA308 XLP	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT)	
	PIC24FJ64GA108	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 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT)	
	PIC24FJ128GA108	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 I²C	–	✓	✓	✓	–	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 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT)	
	PIC24FJ128GB108	R	68	PIC24	128	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT)	
	PIC24FJ256GA108	R	69	PIC24	256	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT)	
	PIC24FJ256GB108	R	68	PIC24	256	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT)	
100-Pin	PIC24FJ64GA310 XLP	R	85	PIC24	64	8192	AN1095[1]	6	2V-3.6V	16	8 MHz, 32 kHz	✓	–	24	3	480	–	7	7	5	4 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT), BGA121 (BG)	100-Pin
	PIC24FJ128GA310 XLP	R	85	PIC24	128	8192	AN1095[1]	6	2V-3.6V	16	8 MHz, 32 kHz	✓	–	24	3	480	–	7	7	5	4 UART, 2 SPI, 2 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT, XLP, Deep Sleep	TQFP (PT), BGA121 (BG)	
	PIC24FJ64GA110	R	85	PIC24	64	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I2C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ128GA110	R	85	PIC24	128	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ64GB110	R	84	PIC24	64	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ128GB110	R	84	PIC24	128	16384	AN1095[1]	–	2V-3.6V	16	16 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ256GA110	R	85	PIC24	256	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	–	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ128GB210	R	84	PIC24	128	98304	AN1095[1]	–	2.2V-3.6V	16	8 MHz, 32 kHz	✓	24	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ128DA110	R	84	PIC24	128	24576	AN1095[1]	–	2.2V-3.6V	16	8 MHz, 32 kHz	✓	24	–	3	–	✓	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ256GB110	R	84	PIC24	256	16384	AN1095[1]	–	2V-3.6V	16	8 MHz, 32 kHz	✓	16	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ256GB210	R	84	PIC24	256	98304	AN1095[1]	–	2.2V-3.6V	16	8 MHz, 32 kHz	✓	24	–	3	–	–	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ256DA110	R	84	PIC24	256	24576	AN1095[1]	–	2.2V-3.6V	16	8 MHz, 32 kHz	✓	24	–	3	–	✓	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ128DA210	R	84	PIC24	128	98304	AN1095[1]	–	2.2V-3.6V	16	8 MHz, 32 kHz	✓	24	–	3	–	✓	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	
	PIC24FJ256DA210	R	84	PIC24	256	98304	AN1095[1]	–	2.2V-3.6V	16	8 MHz, 32 kHz	✓	24	–	3	–	✓	9	9	5	4 UART, 3 SPI, 3 I²C	✓	✓	✓	✓	–	BOR, LVD, POR, WDT	TQFP (PT), BGA121 (BG)	

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.
All devices are Pb-Free and RoHS compliant.
◊ - Software PLVD implemented via ADC.
XLP - eXtreme Low Power variants available.

AEC-Q100 Qualified AEC-Q100 Capable

16-bit PIC® Microcontrollers (PIC24H/E)

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory				Voltage Range	Operating Speed		Analog Sensing & Measurement				Output Compare/PWM	Input Capture	16-bit Timer[2]	Communication			PMP	RTCC/CRC	PPS	High Temperature (150°C)	Monitors	Packages (Designator)	
					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				Digital Communication	CAN	FS USB OTG					System Mgmt. Features		
18-Pin	PIC24HJ12GP201	R	13	PIC24	12	1024	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	6 ch	–	2	4	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	✓	–	PBOR, POR, WDT	PDIP (P), SOIC (SO)	18-Pin
28-Pin	PIC24HJ12GP202	R	21	PIC24	12	1024	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	–	2	4	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	✓	–	PBOR, POR, WDT	SOIC (SO), SPDIP (SP),QFN (MM), SSOP(SS)	28-Pin
	PIC24HJ32GP202	R	21	PIC24	32	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	–	2	4	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	✓	✓	PBOR, POR, WDT	SOIC (SO), SPDIP (SP), QFN (MM)	
	PIC24HJ32GP302	R	21	PIC24	32	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	–	–	✓	✓	✓	✓	PBOR, POR, WDT	SOIC (SO), SPDIP (SP), QFN (MM)	
	PIC24HJ64GP202	R	21	PIC24	64	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	–	–	✓	✓	✓	✓	PBOR, POR, WDT	SOIC (SO), SPDIP (SP), QFN (MM)	
	PIC24HJ64GP502	R	21	PIC24	64	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	1	–	✓	✓	✓	✓	PBOR, POR, WDT	SOIC (SO), SPDIP (SP), QFN (MM)	
	PIC24HJ128GP202	R	21	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	–	–	✓	✓	✓	✓	PBOR, POR, WDT	SOIC (SO), SPDIP (SP), QFN (MM)	
	PIC24HJ128GP502	R	21	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	10 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	1	–	✓	✓	✓	✓	PBOR, POR, WDT	SOIC (SO), SPDIP (SP), QFN (MM)	
44-Pin	PIC24HJ16GP304	R	35	PIC24	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	–	2	4	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	44-Pin
	PIC24HJ32GP204	R	35	PIC24	32	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	–	2	4	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	
	PIC24HJ32GP304	R	35	PIC24	32	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	–	–	✓	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	
	PIC24HJ64GP204	R	35	PIC24	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	–	–	✓	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	
	PIC24HJ64GP504	R	35	PIC24	64	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	1	–	✓	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	
	PIC24HJ128GP204	R	35	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	–	–	✓	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	
	PIC24HJ128GP504	R	35	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	13 ch	2	4	4	5	2 UART, 2 SPI, 1 I²C	1	–	✓	✓	✓	✓	PBOR, POR, WDT	TQFP (PT), QFN (ML)	
64-Pin	PIC24HJ64GP206A	R	53	PIC24	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	18 ch	–	8	8	9	2 UART, 2 SPI, 1 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT), QFN (MR)	64-Pin
	PIC24HJ64GP506A	R	53	PIC24	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	18 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT), QFN (MR)	
	PIC24HJ128GP206A	R	53	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	18 ch	–	8	8	9	2 UART, 2 SPI, 1 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT), QFN (MR)	
	PIC24HJ128GP306A	R	53	PIC24	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	18 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT), QFN (MR)	
	PIC24HJ128GP506A	R	53	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	18 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT), QFN (MR)	
	PIC24HJ256GP206A	R	53	PIC24	256	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	18 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
100-Pin	PIC24HJ64GP210A	R	85	PIC24	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	100-Pin
	PIC24HJ64GP510A	R	85	PIC24	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	PIC24HJ128GP210A	R	85	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	PIC24HJ128GP310A	R	85	PIC24	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	PIC24HJ128GP510A	R	85	PIC24	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	PIC24HJ256GP210A	R	85	PIC24	256	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	PIC24HJ256GP610A	R	85	PIC24	256	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	–	2 ADC 32 ch	–	8	8	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	PIC24EP256GU810	R	83	PIC24	280	28672	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	–	2 ADC 32 ch	3	16	16	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	✓	BOR, POR, WDT	TQFP (PT, PF)	
	PIC24EP512GU810	R	83	PIC24	536	53248	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	–	2 ADC 32 ch	3	16	16	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	✓	BOR, POR, WDT	TQFP (PT, PF)	
144-Pin	PIC24EP256GU814	R	122	PIC24	280	28672	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	–	2 ADC 32 ch	3	16	16	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	✓	BOR, POR, WDT	TQFP (PH), LQFP (PL)	144-Pin
	PIC24EP512GU814	R	122	PIC24	536	53248	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	–	2 ADC 32 ch	3	16	16	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	✓	BOR, POR, WDT	TQFP (PH), LQFP (PL)	

Note 1: See Application Note "AN1095 - Emulating Data EEPROM".
2: Two 16-bit timers can be concatenated to form a 32-bit timer.

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

dsPIC30F DSC Families

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory: Program KB	Memory: Data RAM (B)	Memory: EEPROM	Voltage Range	Operating Speed: Maximum Speed MIPS	Operating Speed: Internal Oscillator	Analog: ADC	Analog: DAC	Analog: Comparators	Output Compare/PWM	Input Capture	Motor Control PWM Ch	Power Supply PWM Ch	QEI	Codec (I²S, AC97)	16-bit Timer[1]	Communication: Digital Communication	Communication: CAN	High Temperature (150°C)	Monitors: System Mgmt. Features	Packages (Designator)	
18-Pin	dsPIC30F3012	R	12	dsPIC	24	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	8 x 12-bit @ 200 (ksps)	–	–	2	2	–	–	–	–	3	1 UART, 1 SPI, 1 I²C	–	–	PBOR, LVD, POR, WDT	PDIP (P), SOIC (SO), QFN (ML)	18-Pin
28-Pin	dsPIC30F2010	R	20	dsPIC	12	512	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	6 x 10-bit @ 1000 (ksps)	–	–	2	4	6	–	1	–	3	1 UART, 1 SPI, 1 I²C	–	–	PBOR, LVD, POR, WDT	SOIC (SO), SPDIP (SP), QFN (ML), PDIP (P)	28-Pin
	dsPIC30F3013	R	20	dsPIC	24	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	10 x 12-bit @ 200 (ksps)	–	–	2	2	–	–	–	–	3	2 UART, 1 SPI, 1 I²C	–	–	PBOR, LVD, POR, WDT	SOIC (SO), SPDIP (SP), QFN (ML)	
	dsPIC30F4012	R	20	dsPIC	48	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	6 x 10-bit @ 1000 (ksps)	–	–	2	4	6	–	1	–	5	1 UART, 1 SPI, 1 I²C	1	–	PBOR, LVD, POR, WDT	SOIC (SO), SPDIP (SP), QFN (ML)	
40-Pin	dsPIC30F4013	R	30	dsPIC	48	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	13 x 12-bit @ 200 (ksps)	–	–	4	4	–	–	–	1	5	2 UART, 1 SPI, 1 I²C	1	–	PBOR, LVD, POR, WDT	PDIP (P), TQFP (PT), QFN (ML)	40-Pin
	dsPIC30F4011	R	30	dsPIC	48	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	9 x 10-bit @ 1000 (ksps)	–	–	4	4	6	–	1	–	5	2 UART, 1 SPI, 1 I²C	1	–	PBOR, LVD, POR, WDT	PDIP (P), TQFP (PT), QFN (ML)	
64-Pin	dsPIC30F5015	R	52	dsPIC	66	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	16 x 10-bit @ 1000 (ksps)	–	–	4	4	8	–	1	–	5	1 UART, 2 SPI, 1 I²C	1	–	PBOR, LVD, POR, WDT	TQFP (PT)	64-Pin
	dsPIC30F6011A	R	52	dsPIC	132	6144	2048	2.5V-5.5V	30	7.37 MHz, 32 kHz	16 x 12-bit @ 200 (ksps)	–	–	8	8	–	–	–	–	5	2 UART, 2 SPI, 1 I²C	2	–	PBOR, LVD, POR, WDT	TQFP (PT)	
80-Pin	dsPIC30F5016	R	68	dsPIC	66	2048	1024	2.5V-5.5V	30	7.37 MHz, 32 kHz	16 x 10-bit @ 1000 (ksps)	–	–	4	4	8	–	1	–	5	1 UART, 2 SPI, 1 I²C	1	–	PBOR, LVD, POR, WDT	TQFP (PF)	80-Pin
	dsPIC30F6014A	R	68	dsPIC	144	8192	4096	2.5V-5.5V	30	7.37 MHz, 32 kHz	16 x 12-bit @ 200 (ksps)	–	–	8	8	–	–	–	1	5	2 UART, 2 SPI, 1 I²C	2	–	PBOR, LVD, POR, WDT	TQFP (PF)	
	dsPIC30F6010A	R	68	dsPIC	144	8192	4096	2.5V-5.5V	30	7.37 MHz, 32 kHz	16 x 10-bit @ 1000 (ksps)	–	–	8	8	8	–	1	–	5	2 UART, 2 SPI, 1 I²C	2	–	PBOR, LVD, POR, WDT	TQFP (PF)	

Note 1: Two 16-bit timers can be concatenated to form a 32-bit timer.

dsPIC33 DSC SMPS and Digital Power Conversion Family

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory: Program KB	Memory: Data RAM (B)	Memory: EEPROM	Memory: DMA #Ch	Voltage Range	Operating Speed: Maximum Speed MIPS	Operating Speed: Internal Oscillator	Analog: ADC 10-bit 2000/4000 ksps	Analog: DAC	Analog: Comparators	Output Compare/PWM	Input Capture	Power Supply PWM Ch[1]	QEI	16-bit Timer[2]	Communication: Digital Communication	Communication: CAN	PMP	RTCC	PPS	High Temperature (150°C)	Monitors: System Mgmt. Features	Packages (Designator)	
18-Pin	dsPIC33FJ06GS101	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 I²C	–	–	–	✓	–	BOR, POR, WDT	SOIC (SO)	18-Pin
28-Pin	dsPIC33FJ06GS102	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 I²C	–	–	–	✓	–	BOR, POR, WDT	QFN (MM), SOIC(SO), SPDIP (SP)	28-Pin
	dsPIC33FJ06GS202	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 I²C	–	–	–	✓	–	BOR, POR, WDT	QFN (MM), SOIC(SO), SPDIP (SP)	
	dsPIC33FJ16GS402	R	21	dsPIC	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	8 ch	–	–	2	2	6	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	–	BOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ16GS502	R	21	dsPIC	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	8 ch, 2 ADC*	4 x 10-bit	4	2	2	8	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	–	BOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
44-Pin	dsPIC33FJ16GS404	R	35	dsPIC	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	8 ch	–	–	2	2	6	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	–	BOR, POR, WDT	QFN (ML), TQFP (PT)	44-Pin
	dsPIC33FJ16GS504	R	35	dsPIC	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	12 ch, 2 ADC*	4 x 10-bit	4	2	2	8	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	–	BOR, POR, WDT	QFN (ML), TQFP (PT)	
64-Pin	dsPIC33FJ32GS406	R	58	dsPIC	32	4096	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	16 ch	–	–	4	4	12	1	5	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	BOR, POR, WDT	QFN (MR), TQFP (PT)	64-Pin
	dsPIC33FJ64GS406	R	58	dsPIC	64	8192	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	16 ch	–	–	4	4	12	1	5	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	BOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ32GS606	R	58	dsPIC	32	4096	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	16 ch, 2 ADC*	4 x 10-bit	4	4	4	12	2	5	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	BOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ64GS606	R	58	dsPIC	64	9216	AN1095[1]	4	3V-3.6V	40	7.37 MHz, 32 kHz	16 ch, 2 ADC*	4 x 10-bit	4	4	4	12	2	5	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	BOR, POR, WDT	QFN (MR), TQFP (PT)	
80-Pin	dsPIC33FJ32GS608	R	74	dsPIC	32	4096	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	18 ch, 2 ADC*	4 x 10-bit	4	4	4	16	2	5	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	BOR, POR, WDT	TQFP (PT)	80-Pin
	dsPIC33FJ64GS608	R	74	dsPIC	64	9216	AN1095[1]	4	3V-3.6V	40	7.37 MHz, 32 kHz	18 ch, 2 ADC*	4 x 10-bit	4	4	4	16	2	5	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	BOR, POR, WDT	TQFP (PT)	
100-Pin	dsPIC33FJ32GS610	R	85	dsPIC	32	4096	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	24 ch, 2 ADC*	4 x 10-bit	4	4	4	18	2	5	2 UART, 2 SPI, 2 I²C	–	–	–	–	–	BOR, POR, WDT	TQFP (PF, PT)	100-Pin
	dsPIC33FJ64GS610	R	85	dsPIC	64	9216	AN1095[1]	4	3V-3.6V	40	7.37 MHz, 32 kHz	24 ch, 2 ADC*	4 x 10-bit	4	4	4	18	2	5	2 UART, 2 SPI, 2 I²C	1	–	–	–	–	BOR, POR, WDT	TQFP (PF, PT)	

Note 1: See Application Note "AN1095 - Emulating Data EEPROM".
2: Two 16-bit timers can be concatenated to form a 32-bit timer.

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

dsPIC33 DSC General Purpose Family

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory				Voltage Range	Operating Speed		Analog Sensing & Measurement				Output Compare/PWM	Input Capture	Codec (I²S, AC97)	16-bit Timer[2]	Communication		PMP	RTCC/CRC	PPS	High Temperature (150°C)	Monitors	Packages (Designator)	
					Program KB	Data RAM (B)	EEPROM	DMA #Ch		Maximum Speed MIPS	Internal Oscillator	Charge Time Measurement Unit	ADC 10/12-bit 1100/500 ksps	DAC	Comparators					Digital Communication	CAN					System Mgmt. Features		
18-Pin	dsPIC33FJ16GP101	R	15	dsPIC®	16	1024	AN1095[1]	–	3V-3.6V	16	7.37 MHz, 32 kHz	✓	4 Ch (10bit)	–	3	2	3	–	3	1 UART, 1 SPI, 1 I²C	–	–	✓	✓	–	BOR, POR, WDT	QFN (MQL), SOIC (SO), PDIP (P), SSOP (SS)	18-Pin
	dsPIC33FJ12GP201	R	13	dsPIC®	12	1024	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	6 ch	–	–	2	4	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	–	PBOR, POR, WDT	PDIP (P), SOIC (SO)	
28-Pin	dsPIC33FJ16GP102	R	21	dsPIC	16	1024	AN1095[1]	–	3V-3.6V	16	7.37 MHz, 32 kHz	✓	6 Ch (10bit)	–	3	2	3	–	3	1 UART, 1 SPI, 1 I²C	–	–	✓	✓	–	BOR, POR, WDT	QFN (ML), SOIC (SO), SPDIP (SP), SSOP (SS) TLA (TL)	28-Pin
	dsPIC33FJ12GP202	R	21	dsPIC	12	1024	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	–	–	2	4	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	–	PBOR, POR, WDT	QFN (MM), SOIC(SO), SPDIP (SP), SSOP (SS)	
	dsPIC33FJ32GP202	R	21	dsPIC	32	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	–	–	2	4	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ32GP302	R	21	dsPIC	32	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	–	2	4	4	–	5	2 UART, 2 SPI, 1 I²C	–	–	–	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ64GP202	R	21	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	–	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	–	✓	–	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ64GP802	R	21	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	2 x 16-bit @ 100 (ksps)	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	1	✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ128GP202	R	21	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	–	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	–	✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ128GP802	R	21	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	10 ch	2 x 16-bit @ 100 (ksps)	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	1	✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
44-Pin	dsPIC33FJ16GP304	R	35	dsPIC	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	–	–	2	4	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	✓	BOR, POR, WDT	QFN (ML), TQFP (PT)	44-Pin
	dsPIC33FJ32GP204	R	35	dsPIC	32	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	–	–	2	4	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ32GP304	R	35	dsPIC	32	4096	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	–	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	–	–	–	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ64GP204	R	35	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	–	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	–	✓	–	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ128GP204	R	35	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	–	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	–	✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ64GP804	R	35	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	2 x 16-bit @ 100 (ksps)	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	1	✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ128GP804	R	35	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	13 ch	2 x 16-bit @ 100 (ksps)	2	4	4	1	5	2 UART, 2 SPI, 1 I²C	1	✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
64-Pin	dsPIC33FJ64GP206A	R	53	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch	–	–	8	8	1	9	2 UART, 2 SPI, 1 I²C	–	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	64-Pin
	dsPIC33FJ64GP306A	R	53	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ128GP206A	R	53	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch	–	–	8	8	1	9	2 UART, 2 SPI, 1 I²C	–	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ128GP306A	R	53	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ64GP706A	R	53	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch 2 ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ256GP506A	R	53	dsPIC	256	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	1	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ128GP706A	R	53	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	18 ch 2 ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
80-Pin	dsPIC33FJ64GP708A	R	69	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	24 ch 2 ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	TQFP (PT)	80-Pin
	dsPIC33FJ128GP708A	R	69	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	24 ch 2 ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	TQFP (PT)	
100-Pin	dsPIC33FJ64GP310A	R	85	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	32 ch	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	100-Pin
	dsPIC33FJ128GP310A	R	85	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	32 ch	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	–	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ64GP710A	R	85	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	32 ch 2 ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ256GP510A	R	85	dsPIC	256	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	32 ch	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	1	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ128GP710A	R	85	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	32 ch 2ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ256GP710A	R	85	dsPIC	256	30720	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz	–	32 ch 2 ADC	–	–	8	8	1	9	2 UART, 2 SPI, 2 I²C	2	–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	

Note 1: See Application Note "AN1095 - Emulating Data EEPROM".
2: Two 16-bit timers can be concatenated to form a 32-bit timer.

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

dsPIC33 DSC Motor Control and Power Conversion Family

	Product	Released (R) Not Released (NR)	I/O Pins	Core	Memory				Voltage Range	Operating Speed		Analog Sensing & Measurement				Output Compare/PWM	Input Capture	Motor Control PWM Ch	QEI	16-bit Timer[2]	Communication			PMP	RTCC/CRC	PPS	High Temperature (150°C)	Monitors	Packages (Designator)	
					Program KB	Data RAM (B)	EEPROM	DMA #Ch		Maximum Speed MIPS	Internal Oscillator	Charge Time Measurement Unit	ADC 10/12-bit 1100/500 ksps	DAC	Comparators						Digital Communication	CAN	FS USB OTG					System Mgmt. Features		
20-Pin	dsPIC33FJ16MC101	R	15	dsPIC®	16	1024	AN1095[1]	–	3V-3.6V	16	7.37 MHz, 32 kHz	✓	4 ch (10-bit)	–	3	2	3	6	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	✓	–	BOR, POR, WDT	SOIC (SO), PDIP (P), SSOP (SS)	20-Pin
	dsPIC33FJ12MC201	R	15	dsPIC	12	1024	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	4 ch	–	–	2	4	4+2	1	3	1 UART, 1 SPI, 1 I²C	–	–	–	–	✓	–	PBOR, POR, WDT	SOIC (SO), PDIP (P), SSOP (SS)	
28-Pin	dsPIC33FJ16MC102	R	21	dsPIC	16	1024	AN1095[1]	–	3V-3.6V	16	7.37 MHz, 32 kHz	✓	6 ch (10-bit)	–	3	3	3	6	–	3	1 UART, 1 SPI, 1 I²C	–	–	–	✓	✓	–	BOR, POR, WDT	QFN (ML), SOIC (SO), SPDIP (SP), SSOP (SS), TLA (TL)	28-Pin
	dsPIC33FJ12MC202	R	21	dsPIC	12	1024	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz	–	6 ch	–	–	2	4	6+2	1	3	1 UART, 1 SPI, 1 I²C	–		–	–	✓	–	PBOR, POR, WDT	QFN (MM), SOIC(SO), SPDIP (SP), SSOP (SS)	
	dsPIC33FJ32MC202	R	21	dsPIC	32	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz		6 ch	–	–	2	4	6+2	1	3	1 UART, 1 SPI, 1 I²C	–		–	–	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ32MC302	R	21	dsPIC	32	4096	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz		6 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	–		✓	–	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ64MC202	R	21	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		6 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	–		✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ64MC802	R	21	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		6 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	1		✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ128MC202	R	21	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		6 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	–		✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
	dsPIC33FJ128MC802	R	21	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		6 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	1		✓	✓	✓	✓	PBOR, POR, WDT	QFN (MM), SOIC (SO), SPDIP (SP)	
44-Pin	dsPIC33FJ16MC304	R	35	dsPIC	16	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	–	–	2	4	6+2	1	3	1 UART, 1 SPI, 1 I²C	–		–	–	✓	✓	BOR, POR, WDT	QFN (ML), TQFP (PT)	44-Pin
	dsPIC33FJ32MC204	R	35	dsPIC	32	2048	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	–	–	2	4	6+2	1	3	1 UART, 1 SPI, 1 I²C	–		–	–	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ32MC304	R	35	dsPIC	32	4096	AN1095[1]	–	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	–		✓	–	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ64MC204	R	35	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	–		✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ128MC204	R	35	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	–	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	–		✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ64MC804	R	35	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	2 x 16-bit @ 100 (ksps)	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	1		✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
	dsPIC33FJ128MC804	R	35	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		9 ch	2 x 16-bit @ 100 (ksps)	2	4	4	6+2	2	5	2 UART, 2 SPI, 1 I²C	1		✓	✓	✓	✓	PBOR, POR, WDT	QFN (ML), TQFP (PT)	
64-Pin	dsPIC33FJ64MC506A	R	53	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		16 ch	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	64-Pin
	dsPIC33FJ128MC506A	R	53	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		16 ch	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ64MC706A	R	53	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		16 ch 2 ADC	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33FJ128MC706A	R	53	dsPIC	128	16384	AN1095[1]	8	3V-3.3V	40	7.37 MHz, 32 kHz		16 ch 2 ADC	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	QFN (MR), TQFP (PT)	
	dsPIC33EP256MU806	R	53	dsPIC	280	28672	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	24 ch, 2-A/D	–	3	16	16	8	2	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	–	BOR, POR, WDT	QFN (MR), TQFP (PT)	
80-Pin	dsPIC33FJ64MC508A	R	69	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		16 ch	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	TQFP (PT)	80-Pin
	dsPIC33FJ128MC708A	R	69	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		18 ch 2 ADC	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	2		–	–	–	✓	PBOR, POR, WDT	TQFP (PT)	
100-Pin	dsPIC33FJ64MC510A	R	85	dsPIC	64	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		24 ch	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	100-Pin
	dsPIC33FJ128MC510A	R	85	dsPIC	128	8192	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		24 ch	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ64MC710A	R	85	dsPIC	64	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		24 ch 2 ADC	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	2		–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ256MC510A	R	85	dsPIC	256	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		16 ch	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	1		–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ128MC710A	R	85	dsPIC	128	16384	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		24 ch 2 ADC	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	2		–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33FJ256MC710A	R	85	dsPIC	256	30720	AN1095[1]	8	3V-3.6V	40	7.37 MHz, 32 kHz		24 ch 2 ADC	–	–	8	8	8	1	9	2 UART, 2 SPI, 2 I²C	2		–	–	–	✓	PBOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33EP256MU810	R	83	dsPIC	280	28672	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	32 ch, 2 A/D	–	3	16	16	12	2	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	–	BOR, POR, WDT	TQFP (PT, PF)	
	dsPIC33EP512MU810	R	83	dsPIC	536	53248	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	32 ch, 2 A/D	–	3	16	16	12	2	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	–	BOR, POR, WDT	TQFP (PT, PF)	
144-Pin	dsPIC33EP256MU814	R	122	dsPIC	280	28672	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	32 ch, 2 A/D	–	3	16	16	14	2	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	–	BOR, POR, WDT	TQFP (PH), LQFP (PL)	144-Pin
	dsPIC33EP512MU814	R	122	dsPIC	536	53248	AN1095[1]	15	3V-3.6V	60	7.37 MHz, 32 kHz	–	32 ch, 2 A/D	–	3	16	16	14	2	9	4 UART, 4 SPI, 2 I²C	2	1	✓	✓	✓	–	BOR, POR, WDT	TQFP (PH), LQFP (PL)	

Note 1: See Application Note "AN1095 - Emulating Data EEPROM".
2: Two 16-bit timers can be concatenated to form a 32-bit timer.

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

Thermal Management – Temperature Sensors

Product	Typical Accuracy (°C)	Max. Accuracy @ 25°C (°C)	Max. Temperature Range (°C)	High Temperature (150ºC)	Vcc Range (V)	Max. Op Current (µA)	Features	Packages
MCP9501/2/3/4	±0.5	±3	-55 to +125	–	+2.7 to +5.5	40	Cross to MAX6501/2/3/4, Open-drain and push-pull output options	SOT-23A
MCP9509/10	±0.5	NS	-40 to +125	–	+2.7 to +5.5	50	Resistor-programmable temperature switch	SOT-23A
MCP9700/01	±1	±4	-40 to +150	✓	+2.3 to +5.5	12	Linear Active Thermistor® IC	SOT-23A, TO-92, SC70
MCP9700/01A	±1	±2	-40 to +125	–	+2.3 to +5.5	12	Linear Active Thermistor® IC	SOT-23A, TO-92, SC70
TC1046	±0.5	±2	-40 to +125	–	+2.7 to +4.4	60	High precision temperature-to-voltage converter, 6.25 mV/°C	SOT-23A
TC1047A	±0.5	±2	-40 to +125	–	+2.5 to +5.5	60	High precision temperature-to-voltage converter, 10 mV/°C	SOT-23A
MCP9800/1/2/3	±0.5	±1	-55 to +125	–	+2.7 to +5.5	400	SMbus/I²C™ compatible interface, 0.0625°C to 0.5°C adj. resolution, power-saving one-shot temperature measurement	SOIC, MSOP, SOT-23A
MCP9804	±0.25	±1	-40 to +125	–	+2.7 to +5.5	400	User programmable temperature limits with alert output, 1°C temp. accuracy from -40°C to +125°C	MSOP, DFN
MCP9843	±0.5	±1	-20 to +125	–	+3.0 to +3.6	400	JEDEC compatible register set, SMbus/I²C™ compatible interface, programmable, shut-down modes and EVENT output	TSSOP, DFN
MCP98243	±1	±3	-40 to +125	–	+3.0 to +3.6	500	Serial output temperature sensor with integrated EEPROM	TSSOP, DFN, TDFN

Power Management – Switching Regulators/PWM Controllers

Product	Input Voltage Range (V)	Output Voltage (V)	Operating Temperature Range (°C)	Control Scheme	Switching Frequency (kHz)	Typical Active Current (µA)	Output Current (mA)	Features	Packages
MCP1630/V 1631/V	3.0 to 5.5	–	-40 to +125	PWM	1000/2000	2800/3700	Ext	Current/Voltage mode PWM controller,UVLO, Short Circuit and Over-temperature Protection, Integrated MOSFET driver	MSOP, SSOP, TSSOP, DFN
MCP1631HV/VHV	3.5 to 16	–	-40 to +125	PWM	2000	3700	Ext	Current/Voltage mode PWM controller with integrated 16V LDO, UVLO, Integrated error, current and voltage sense amplifier, overvoltage comparator and MOSFET driver	SSOP, TSSOP
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
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, -.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

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
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
MCP1790/1	30	3.0, 3.3, 5.0	70	70	500	±0.2	Load dump, Shutdown, Power Good	SOT-223, DDPAK
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	13.2/16	1.2 to 5.0	250	2	330/625	±0.4	Very low I_Q	DFN, TO-92, SOT-23A, 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, DDPAK
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	SOIC, DFN, SOT-223, TO-220, DDPAK
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
TC1301A/B	6	1.5 to 3.3	LDO1: 300 LDO2: 150	103/114	LDO1: 104 LDO2: 150	±0.5	Dual LDO plus Reset output, Shutdown, Reference bypass, Voltage detect	MSOP, DFN
TC1302A/B	6	1.5 to 3.3	LDO1: 300 LDO2: 150	103/114	LDO1: 104 LDO2: 150	±0.5	Dual LDO, Shutdown, Reference bypass, Voltage detect	MSOP, DFN

All devices are Pb-Free and RoHS compliant.

AEC-Q100 Qualified AEC-Q100 Capable

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
MCP11(1/2)	System Voltage Detectors	-40 to +125	Wide V_{CC} Input Range, Wide Detection Range (Custom Options Available), Low Current, CMOS/Push-Pull Active Low Reset Options	3/SOT-23A, 3/SOT-89, 3/SC-70
MCP809, 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	3/SOT-23, 3/TO-92, 3/SC-70, 8/SOIC 150mil, 5/SOT-23, 4/SOT-143

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, DFN, SOIC
TC4420/29	Inverting/Non-inverting	-40 to +125	6	2.8/2.5	18	55/55	TO-220, PDIP, DFN, SOIC
TC4421A/22A Single	Inverting /Non-inverting	-40 to +125	9	1.25 (typ.)/1.5	18	38/42	PDIP, SOIC, TO-220, DFN
TC4451/52 Single	Inverting /Non-inverting	-40 to +125	12	0.6 (typ.)/1.5	18	15/15	SOIC, PDIP, DFN, TO-220, DDPAK
TC4431/32 Single	Inverting /Non-inverting	-40 to +85	1.5	10/10	30	62/78	PDIP, SOIC

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

Linear – Op Amps

Product	# per Package	GBWP (MHz)	I_Q Typical (µA)	V_{OS} Max (mV)	Operating Voltage (V)	High Temperature (150ºC)	Packages
MCP661/2/3/5	1/2/1/2	60	6000	8	2.5 to 5.5	–	SOIC, MSOP, DFN
MCP651/2/5	1/2/2	50	6000	0.2	2.5 to 5.5	–	SOIC, MSOP, DFN
MCP631/2/3/5	1/2/1/2	24	2500	8	2.5 to 5.5	–	SOIC, MSOP, DFN
MCP621/2/5	1/2/2	20	2500	0.2	2.5 to 5.5	–	SOIC, MSOP, DFN
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
MCP6281/2/3/4/5	1/2/1/4/2	5	445	3	2.2 to 6.0	–	PDIP, SOIC, MSOP, TSSOP, SOT
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
MCP6271/2/3/4/5	1/2/1/4/2	2	170	3	2.0 to 6.0	–	PDIP, SOIC, MSOP, TSSOP, SOT
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
MCP6071/2/4	1/2/4	1.2	110	0.15	1.8 to 6.0	–	SOIC, TSSOP, DFN, SOT

Product	# per Package	GBWP (MHz)	I_Q Typical (µA)	V_{OS} Max (mV)	Operating Voltage (V)	High Temperature (150ºC)	Packages
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	1/2/4	1	45	4.5	1.8 to 6.0	✓	SOIC, TSSOP, TDFN, SOT, SC70
MCP6061/2/4	1/2/4	0.73	60	0.15	1.8 to 6.0	–	SOIC, TSSOP, DFN, SOT
MCP6241/2/4	1/2/4	0.55	50	5	1.8 to 5.5	–	PDIP, SOIC, MSOP, TSSOP, TDFN, SOT, SC70
MCP6051/2/4	1/2/4	0.385	30	0.15	1.8 to 6.0	–	SOIC, TSSOP, DFN, SOT
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	1/2/1/4	0.19	19	0.15	2.3 to 5.5	–	PDIP, SOIC, MSOP, TSSOP
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	1/2/1/4	0.1	0.6	3	1.4 to 6.0	–	PDIP, SOIC, MSOP, TSSOP, SOT
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	1/2/1/4	0.01	0.9	0.15	1.8 to 5.5	–	SOIC, MSOP, TSSOP, DFN, SOT
MCP6441	1	0.009	0.45	4.5	1.4 to 6.0	–	SOT, SC70

Linear – Comparators

Product	# per Package	Typical Propagation Delay (µs)	I_Q Typical (µA)	Vos 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	Input Type	Interface	Max. Supply Current (µA)	Temperature Range (°C)	Packages
MCP3021/3221	10/12	22	1	Single-ended	I^2C™	250	-40 to +125	SOT-23A
MCP3001/2/4/8	10	200	1/2/4/8	Single-ended	SPI	500-550	-40 to +85	PDIP, SOIC, MSOP, TSSOP
MCP3201/2/4/8	12	100	1/2/4/8	Single-ended	SPI	400-550	-40 to +85	PDIP, SOIC, MSOP, TSSOP
MCP3301/2/4	13	100	1/2/4	Differential	SPI	450	-40 to +85	PDIP, SOIC, MSOP, TSSOP

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
MCP3901	24-bit resolution	91 dB SINAD	2	up to 32	SPI	2.6	4.5 to 5.5	2.7 to 5.5	-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 – 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
MCP4725	12	1	I^2C™	V_{DD}	6	0.75	175	-40 to +125	SOT-23
MCP4728	12	4	I^2C™	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	2x3 DFN, MSOP, PDIP, SOIC
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	2x3 DFN, MSOP, PDIP, SOIC
MCP4902/12/22	8/10/12	2	SPI	Ext	4.5	0.5/0.5/0.75	350	-40 to +125	PDIP, SOIC, TSSOP

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

Mixed Signal – Digital Potentiometers

Product	# of Taps	Memory	Channels	Interface	Resistance (kΩ)	Temperature Range (°C)	Packages
MCP4011/12/13/14	64	Volatile	1	Up/Down	2.1,5, 10, 50	-40 to +125	DFN, SOT-23
MCP4017/18/19	128	Volatile	1	I²C™	5, 10, 50, 100	-40 to +125	SC-70
MCP40D17/D18/D19	128	Volatile	1	I²C™	5, 10, 50, 100	-40 to +125	SC-70
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	I²C™	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4441/42	129	Nonvolatile	4	I²C™	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4451/52	257	Volatile	4	I²C™	5, 10, 50, 100	-40 to +125	TSSOP, QFN
MCP4461/62	257	Nonvolatile	4	I²C™	5, 10, 50, 102	-40 to +125	TSSOP, QFN
MCP4531/32	128	Volatile	1	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4631/32	128	Volatile	2	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4541/42	128	Nonvolatile	1	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4641/42	128	Nonvolatile	2	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4551/52	256	Volatile	1	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4651/52	256	Volatile	2	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4561/62	256	Nonvolatile	1	I²C™	5, 10, 50, 100	-40 to +125	MSOP, DFN
MCP4661/62	256	Nonvolatile	2	I²C™	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
MCP3421/2/3/4	18 to 12	4 to 240	1/2/2/4 Diff	I²C™	155	-40 to +125	PGA, VREF	SOT, DFN, MSOP, SOIC, TSSOP
MCP3425/6/7/8	16 to 12	15 to 240	1/2/2/4 Diff	I²C™	155	-40 to +125	PGA, VREF	SOT, DFN, MSOP, SOIC, TSSOP
MCP3550/1/3	22	13/14/60	1 Diff	SPI	120	-40 to +125	50 & 60 Hz Rejection	SOIC, MSOP

Interface – mTouch™ AR1000 Resistive Touch Screen Controllers

Product	Type	Communication	Touch Screens Supported	A/D	Resolution	Power	Points per second	Baud Rate	Operating Temperature Range (°C)	Static Protection	Special Features	Package
AR1010	Analog Resistive	UART	All Manufacturers 4, 5 and 8 wire	Internal 10-bit Ratiometric	1024 X 1024	3.3V DC ±5% 5.5V DC ±5%	140 pps	Standard 9600	-40 to +85	Per schematic	Controller driven calibration & Universal for all touch screens	20-pin SSOP (SS), SOIC (SO), QFN (ML)
AR1020	Analog Resistive	SPI, I²C™	All Manufacturers 4, 5 and 8 wire	Internal 10-bit Ratiometric	1024 X 1024	3.3V DC ±5% 5.5V DC ±5%	140 pps	Standard 9600	-40 to +85	Per schematic	Controller driven calibration & Universal for all touch screens	20-pin SSOP (SS), SOIC (SO), QFN (ML)

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
MCP202(1/2)	LIN (Local Interconnect Network), LIN Transceiver with Voltage Regulator	-40 to +125	VREG = 5.0 ± 3%, 3.3 ± 3% @ 50 mA, VCC Range = 7.4 to 18V, Max Baud Rate = 20 Kbaud, Supports LIN Specs; 1.3, 2.0, 2.1, SAE J2602, Exceeds Automotive OEM ESD/EMC Requirements	PDIP, SOIC, TSSOP, DFN
MCP200(3/4)	Stand-alone LIN Transceiver	-40 to +125	VCC Range = 6 to 27V, Max Baud Rate = 20 Kbaud, Supports LIN Specs 1.3, 2.0, 2.1,SAE J2602, Exceeds Automotive OEM ESD/EMC Requirements	PDIP, SOIC, DFN
MCP23X09/18	8-bit I/O Port Expander, 16-bit I/O Port Expander	-40 to +125	I²C (up to 3.4 MHz) or SPI (up to 10 MHz) interface, 25 mA source/sink per I/O	PDIP, SDIP, SOIC, SSOP
MCP212(0/2), MCP2140A, MCP215(0/5)	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	UART to USB Protocol Converter	-40 to +85	USB 2.0 Compliant, 8 GPIO, Supports High-speed USB (12 Mbps)	SOIC, SSOP, QFN

AEC-Q100 Qualified AEC-Q100 Capable

All devices are Pb-Free and RoHS compliant.

Real-Time Clock/Calendar (RTCC)

Bus	Product	Timing Features				Memory[1]			Power		Unique Features[2]	Pins	Packages	Bus
		Digital Trim (Adj/Range)	Alarm Settings	WDT	Outputs	SRAM (Bytes)	EEPROM (Kbits)	ID/MAC (Bits)	Minimum Voltages	I_{BAT} (nA)				
I²C™ (400 kHz)	MCP7941X	+1 ppm/±127 ppm	2 (1 sec.)	–	MFP ($\overline{IRQ}$/CLK)	64	1	64	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp	8	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY)	I²C™ (400 kHz)
	MCP7940X	+1 ppm/±127 ppm	2 (1 sec.)	–	MFP ($\overline{IRQ}$/CLK)	64	0	64	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp	8	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY)	
	MCP7940N	+1 ppm/±127 ppm	2 (1 sec.)	–	MFP ($\overline{IRQ}$/CLK)	64	0	0	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp	8	SOIC (SN), TSSOP (ST), MSOP (MS), TDFN (MNY)	
SPI (10 MHz)	MCP795W2X	+1 ppm/+255 ppm	2 (0.01 sec)	✓	1. CLK 2. IRQ 3. WDT RST	64	2	128	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp, Event Detects (x2)	14	SOIC (SL), TSSOP (ST)	SPI (10 MHz)
	MCP795W1X	+1 ppm/+255 ppm	2 (0.01 sec)	✓	1. CLK 2. IRQ 3. WDT RST	64	1	128	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp, Event Detects (x2)	14	SOIC (SL), TSSOP (ST)	
	MCP795B2X	+1 ppm/+255 ppm	2 (0.01 sec)	✓	1. CLK 2. IRQ 3. WDT RST	64	2	128	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp, Event Detects (x2), 32 KHz Boot Clock	14	SOIC (SL), TSSOP (ST)	
	MCP795B1X	+1 ppm/+255 ppm	2	✓	1. CLK 2. IRQ 3. WDT RST	64	1	128	V_{CC}: 1.8V, V_{BAT}: 1.3V	<700	Power Fail Timestamp, Event Detects (x2), 32 KHz Boot Clock	14	SOIC (SL), TSSOP (ST)	

1. All part numbers with an "X" have 3 ID programming options: 0 = Blank ID; 1 = EUI-48™ MAC Address; 2 = EUI-64™ MAC Address
2. The Power Fail Timestamp in all RTCCs occur at Battery Switchover.

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 Speeds	Max. Standby Current (@5.5V, 85°C)	Write Protect		Protected Array Size	High Temperature (150°C)	Special/Unique Features	Packages	Bus
												Hardware	Software					
Serial EEPROM																		
UNI/O® Bus	11XX010	R	1 Kb	x8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	–	✓	W, ½, ¼	–	Single I/O for all clock, data, control and write protection	3-SOT-23 (TT), SOIC (SN), PDIP (P), DFN (MNY), MSOP (MS), TO-92 (TO), WLCSP (CS)	UNI/O® Bus
	11XX020	R	2 Kb	x8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	–	✓	W, ½, ¼	–	Single I/O for all clock, data, control and write protection	3-SOT-23 (TT), SOIC (SN), PDIP (P), DFN (MNY), MSOP (MS), TO-92 (TO), WLCSP (CS)	
	11XX040	R	4 Kb	x8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	–	✓	W, ½, ¼	–	Single I/O for all clock, data, control and write protection	3-SOT-23 (TT), SOIC (SN), PDIP (P), DFN (MNY), MSOP (MS), TO-92 (TO), WLCSP (CS)	
	11XX080	R	8 Kb	x8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	–	✓	W, ½, ¼	–	Single I/O for all clock, data, control and write protection	3-SOT-23 (TT), SOIC (SN), PDIP (P), DFN (MNY), MSOP (MS), TO-92 (TO), WLCSP (CS)	
	11XX160	R	16 Kb	x8	100 kHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	–	✓	W, ½, ¼	–	Single I/O for all clock, data, control and write protection	3-SOT-23 (TT), SOIC (SN), PDIP (P), DFN (MNY), MSOP (MS), TO-92 (TO), WLCSP (CS)	
I²C™	24XX00	R	128 b	x8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	4 ms	1 µA	–	–	–	–	100 KHz operation from 1.7V to 4.5V	SOIC (SN), TSSOP (ST), 5-SOT-23 (OT), DFN (MC), PDIP (P)	I²C™
	24XX01B/014	R	1 Kb	x8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	–	W, ½	✓	Address pin option - connect up to 8 devices on bus, Very low voltage option	SOIC (SN), TSSOP (ST), PDIP (P), 5-SOT-23 (OT), DFN (MNY), MSOP (MS), SC70 (LT)	
	24XX02B/024	R	2 Kb	x8	400 kHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W, ½	–	Address pin option - connect up to 8 devices on bus, Very low voltage option	SOIC (SN), TSSOP (ST), PDIP (P), 5-SOT-23 (OT), DFN (MNY), MSOP (MS), SC70 (LT)	
	34XX02	R	2 Kb	x8	1 MHz	1.7V-5.5V 1.5V-3.6V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½	–	1 MHz @ 2.5V, Permanent and restable software WP - DIMM-DDR2/3	SOIC (SN), TSSOP (ST), PDIP (P), 6-SOT-23 (OT), DFN (MNY), MSOP (MS)	
	24XX04B	R	4 Kb	x8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W, ½	–	400 KHz @ 2.5V, 16 byte page write buffer, No address pins	SOIC (SN), PDIP (P), TSSOP (ST), 5-SOT-23 (OT), DFN (MNY), MSOP (MS), WLCSP (CS)	
	24XX08B	R	8 Kb	x8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W, ½	–	400 KHz @ 2.5V, 16 byte page write buffer, No address pins	SOIC (SN), TSSOP (ST), 5-SOT-23 (OT), PDIP (P), DFN (MNY), MSOP (MS)	
	24XX16B	R	16 Kb	x8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W, ½	–	400 KHz @ 2.5V, 16 byte page write buffer, No address pins	SOIC (SN), TSSOP (ST), PDIP (P), 5-SOT-23 (OT), DFN (MNY), MSOP (MS), WLCSP (CS)	
	24XX32A	R	32 Kb	x8	400 kHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W, ¼	–	400 KHz @ 2.5V, 32 byte page write buffer, connect up to 8 devices on bus	SOIC (SN), TSSOP (ST), PDIP (P), 5-SOT-23 (OT), DFN (MNY), MSOP (MS), WLCSP (CS)	
	24XX64/65	R	64 Kb	x8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M, 10M	200 Years	5 ms	1 µA	✓	–	W, ¼	–	1 MHz @ 2.5V, 32/64 byte page, Relocatable 4 Kb block with 10M cycles endurance	SOIC (SN), TSSOP (ST), PDIP (P), 5-SOT-23 (OT), DFN (MNY), MSOP (MS), WLCSP (CS)	
	24XX128	R	128 Kb	x8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W	–	1 MHz @ 2.5V, 64 byte page, connect up to 8 devices on bus	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MNY), MSOP (MS), WLCSP (CS)	
	24XX256	R	256 Kb	x8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W	–	1 MHz @ 2.5V, 64 byte page, connect up to 8 devices on bus	SOIC (SN), TSSOP (ST), SOIJ (SM), PDIP (P), DFN (MF), MSOP (MS), WLCSP (CS)	
	24XX512	R	512 Kb	x8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	1 µA	✓	–	W	–	1 MHz @ 2.5V, 128 byte page, connect up to 8 devices on bus	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MF), SOIJ (SM), WLCSP (CS)	
	24XX1025/26	R	1 Mb	x8	1 MHz	1.7V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	5 µA	✓	–	W	–	1 MHz @ 2.5V, 128 byte page, connect up to 4 devices on bus	SOIC (SN), TSSOP (ST), PDIP (P), SOIJ (SM)	

1. All devices are Pb-Free and RoHS compliant.
2. ESD protection > 4 kV (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.

☐ AEC-Q100 Qualified ▭ AEC-Q100 Capable

Serial Memory Products

Serial EEPROM (Cont.)

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 Speeds	Max. Standby Current (@5.5V, 85°C)	Write Protect: Hardware	Write Protect: Software	Protected Array Size	High Temperature (150°C)	Special/Unique Features	Packages	Bus
Microwire	93XX46A/B/C	R	1 Kb	x8/x16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	–	–	–	–	ORG pin to select word size on 46C version	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	Microwire
	93XX56A/B/C	R	2 Kb	x8 / x16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	–	–	–	–	ORG pin to select word size in 56C version	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	
	93XX66A/B/C	R	4 Kb	x8 / x16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	–	–	–	–	ORG pin to select word size in 66C version	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	
	93XX76A/B/C	R	8 Kb	x8 / x16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	✓	–	W	–	ORG pin to select word size in 76C version	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	
	93XX86A/B/C	R	16 Kb	x8 / x16	3 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	1 µA	✓	–	W	–	ORG pin to select word size in 86C version	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	
SPI	25XX010A	R	1 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 16 byte page	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	SPI
	25XX020A	R	2 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 16 byte page, Unique EUI-48™/EUI-64™ MAC address option available	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	
	25XX040A	R	4 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 16 byte page	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MC), MSOP (MS), 6-SOT-23 (OT)	
	25XX080C/D	R	8 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	16/32 byte page, 5 MHz @ 2.5V, Status register	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MNY), MSOP (MS)	
	25XX160C/D	R	16 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	16/32 byte page, 5 MHz @ 2.5V, Status register	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MNY), MSOP (MS)	
	25XX320A	R	32 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 32 byte page	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MNY), MSOP (MS)	
	25XX640A	R	64 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 32 byte page	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MNY, MF), MSOP (MS)	
	25XX128	R	128 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 64 byte page	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MF)	
	25XX256	R	256 Kb	x8	10 MHz	1.8V-5.5V	-40°C to +150°C	1M	200 Years	5 ms	1 µA	✓	✓	W, ½, ¼	✓	5 MHz @ 2.5V, Status register, 64 byte page	SOIC (SN), TSSOP (ST), PDIP (P), DFN (MF), SOIJ (SM)	
	25XX512	R	512 Kb	x8	20 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	5 ms	10 µA	✓	✓	W, ½, ¼	–	10 MHz @ 2.5V, Deep power down, Status register, Page/Sector/Chip erase	SOIC (SN), PDIP (P), DFN (MF), SOIJ (SM)	
	25XX1024	R	1 Mb	x8	20 MHz	1.8V-5.5V	-40°C to +125°C	1M	200 Years	6 ms	12 µA	✓	✓	W, ½, ¼	–	10 MHz @ 2.5V, Deep power down, Status register, Page/Sector/Chip erase	PDIP (P), DFN (MF), SOIJ (SM)	

1. All devices are Pb-Free and RoHS compliant.
2. ESD protection > 4 kV (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.

SST Serial Flash Memory

Bus	Product	Released (R) Not Released (NR)	Density	Organization	Max. Clock Frequency	Operating Voltage	Temperature Range	E/W Endurance (Typical)	Data Retention (Minimum)	Write Speed (Typical)	Max. Standby Current	Write Protect: Hardware	Write Protect: Software	Write Protect: Protected Array Size	PPAP Availability	Description	Packages*	Bus
x1	SST25VF040B	R	4 Mb	512K x 8	50 MHz	2.7-3.6V	-40°C to 85°C	100,000 cycles	100 years	7 µs (Word Program)	5 µA	✓	✓	Various	N	512K x 8, 4 KB Sector	8-SOIC, WSON	x1
	SST25VF080B	R	8 Mb	1M x 8	50 MHz	2.7-3.6V	-40°C to 85°C	100,000 cycles	100 years	7 µs (Word Program)	5 µA	✓	✓	Various	N	1M x 8, 4 KB Sector	8-SOIC, WSON	
	SST25VF016B	R	16 Mb	2M x 8	50 MHz	2.7-3.6V	-40°C to 85°C	100,000 cycles	100 years	7 µs (Word Program)	5 µA	✓	✓	Various	N	2M x 8, 4 KB Sector	8-SOIC, WSON	

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

AEC-Q100 Qualified AEC-Q100 Capable

SST Parallel Flash Memory

Bus	Product	Released (R) Not Released (NR)	Density	Organization	Read Access Speed	Operating Voltage	Temperature Range	E/W Endurance (Typical)	Data Retention (Minimum)	Write Speed (Typical)	Max. Standby Current	Write Protect: Hardware	Write Protect: Software	Write Protect: Protected Array Size	PPAP Availability	Description	Packages*	Bus
x16	SST39VF400A	R	4 Mb	256K x16	70 ns	2.7-3.6V	-40°C to +85°C	100,000 cycles	100 years	14 µs (Word Program)	3 µA	–	–	N/A	N	256K x16, 2 KW Sector	48-TFBGA, TSOP	x16
	SST39WF400B	R	4 Mb	256K x16	70 ns	1.65-1.95V	-40°C to+85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	–	–	N/A	2nd half 2013	256K x 16, 2K/32 KW Sector	48-TFBGA	
	SST39VF800A	R	8 Mb	512K x16	70 ns	2.7-3.6V	-40°C to +85°C	100,000 cycles	100 years	14 µs (Word Program)	3 µA	–	–	N/A	N	512K x 16, 2 KW Sector	48-TFBGA, TSOP	
	SST39WF800B	R	8 Mb	512K x16	70 ns	1.65-1.95V	-40°C to+85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	–	–	N/A	2nd half 2013	512K x 16, 2K/32 KW Sector	48-TFBGA	
	SST39VF801C	R	8 Mb	512K x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	8 KW	2nd half 2013	512K x 16, Bottom Boot, Standard Command Sets and Blocks	48-TFBGA, TSOP	
	SST39VF802C	R	8 Mb	512K x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	8 KW	2nd half 2013	512K x 16, Top Boot, Standard Command Sets and Blocks	48-TFBGA, TSOP	
	SST39VF1601	R	16 Mb	1M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	32 KW	N	1M x 16, 2K/32 KW Sector, Bottom Boot	48-TFBGA, TSOP	
	SST39VF1601C	R	16 Mb	1M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	8 KW	2nd half 2013	1M x 16, Bottom Boot, Standard Command Sets and Blocks	48-TFBGA, TSOP	
	SST39VF1602	R	16 Mb	1M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	32 KW	N	1M x 16, 2K/32 KW Sector, Top Boot	48-TFBGA, TSOP	
	SST39VF1602C	R	16 Mb	1M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	8 KW	2nd half 2013	1M x 16, Top Boot, Standard Command Sets and Blocks	48-TFBGA, TSOP	
	SST39WF1601	R	16 Mb	1M x16	70 ns	1.65-1.95V	-40°C to+85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	✓	–	32 KW	2nd half 2013	1M x 16, 2K/32 KW Sector, Bottom Boot	48-TFBGA	
	SST39WF1602	R	16 Mb	1M x16	70 ns	1.65-1.95V	-40°C to+85°C	100,000 cycles	100 years	28 µs (Word Program)	5 µA	✓	–	32 KW	2nd half 2013	1M x 16, 2K/32 KW Sector, Top Boot	48-TFBGA	
	SST39VF3201	R	32 Mb	2M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	32 KW	N	2M x 16, 2K/32 KW Sector, Bottom Boot	48-TFBGA, TSOP	
	SST39VF3202	R	32 Mb	2M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	32 KW	N	2M x 16, 2K/32 KW Sector, Top Boot	48-TFBGA, TSOP	
	SST39VF6401B	R	64 Mb	4M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	32 KW	N	4M x 16, 2K/32 KW Sector, Bottom Boot	48-TFBGA, TSOP	
	SST39VF6402B	R	64 Mb	4M x16	70 ns	2.7-3.6V	-40°C to+85°C	100,000 cycles	100 years	7 µs (Word Program)	3 µA	✓	–	32 KW	N	4M x 16, 2K/32 KW Sector, Top Boot	48-TFBGA, TSOP	

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

AEC-Q100 Qualified AEC-Q100 Capable

Terms and Definitions

1 KB	1024 bytes
1 Kw	1024 words
18F/PIC18	16-bit instruction word – 75/83 instructions
AEC-Q100 Qualified	Device has successfully passed AEC-Q100 qualification requirements
AEC-Q100 Capable	Device is manufactured in a process that allows it to meet AEC-Q100 qualification requirements
ADC	Analog-to-Digital Converter
AUSART	Addressable Universal Synchronous Asynchronous Receiver Transceiver
BL/Baseline	12-bit instruction word – 33 instructions
BOR/PBOR	Brown Out Reset/Programmable Brown Out Reset
CCP/ECCP	Capture Compare PWM/Enhanced Capture Compare PWM
CLC	Configurable Logic Cell
COG	Complementary Output Generator
Comp	Capacitive Sensing implemented via Comparator
CRC	Cyclical Redundancy Check
CSM	mTouch™ – Capacitive Sensing Module
CSP	Chip Scale Package
CTMU	mTouch – Charge Time Measurement Unit
CVD	Charge Voltage Divide (Capacitive Sensing Implemented via ADC)
CWG	Complimentary Waveform Generator
DAC	Digital-to-Analog Converter
DDS	Direct Digital Synthesis
DSM	Data Signal Modulator
dsPIC®	16-bit Core with DSP
ECAN	Enhanced Controller Area Network Electrically Erasable
EEPROM	Programmable Read Only Memory
EFT	Electrical Fast Transient
EMC	Electromagnetic Compatibility
EMI	Electromagnetic Interference
EMR/Enhanced-MidRange	14-bit instruction word – 49 instructions (denoted as PIC1XF1XXX)
ESD	Electrostatic Discharge
EUSART	Enhanced Universal Synchronous Asynchronous Receiver Transceiver
EWDT/WDT	Extended Watch Dog Timer/Watch Dog Timer
HV	High Voltage
ICD	In-Circuit Debug
ICE	In-Circuit Emulation
ICSP™	In-Circuit Serial Programming™
IDE	Integrated Development Environment
LCD	Liquid Crystal Display
LDO	Low Drop-Out voltage regulator
LF	Low Power Flash
MI²C/I²C	Master Inter-Integrated Circuit bus/Inter-Integrated Circuit bus
MIPS	Million Instructions Per Second
MR/Mid-Range	14-bit instruction word – 35 instructions
MSSP/SSP	Master/Synchronous Serial Port (I²C & SPI Peripheral)
mTouch™	Proprietary Touch Sensing Technology
NCO	Numerically Controlled Oscillator
PIC24	16-bit Core
PIC32	32-bit Core
PLVD	Programmable Low Voltage Detect
POR/POOR	Power ON Reset/Power ON/OFF Reset
PSMC	Programmable Switch Mode Controller
PWM	Pulse Width Modulation
RAM	Random Access Memory
RTCC	Real-Time Clock Calendar
Source/Sink Current	All Products Support 25 mA per I/O
SR Latch	Set Reset Latch
SRAM	Static Random Access Memory
SPI	Serial Peripheral Interface
T1G	Timer 1 Gate
USART	Universal Synchronous Asynchronous Receiver Transceiver
USB	Universal Serial Bus
USB (Full Speed)	12 Mb/s Data Rate
USB OTG	USB On-The-Go
XLP	nanoWatt XLP eXtreme Low Power Technology

Product Packages

Small Outline

Bumped Die (WLCSP)


Die/Wafer (WLCSP)


3-lead SC70 (LB)


5-lead SC70 (LT)


3-lead SOT-23 (TT/CB)


5-lead SOT-23 (OT)


6-lead SOT-23 (OT/CH)


3-SOT-223 (DB)


4-lead SOT-143 (RC)


3-lead DDPAK (EB)


5-lead DDPAK (ET)


3-lead SOT-89 (MB)


3-lead TO-92 (TO/ZB)


5-lead TO-220 (AT)

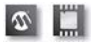
Dual Flat No Lead DFN


8-lead DFN (MC) 2x3x0.9 mm


8-lead TDFN (MN) 2x3x0.75 mm


8-lead UDFN (MU) 2x3x0.5 mm


8-lead DFN (MF) 3x3x0.9 mm


8-lead DFN (MD) 4x4x0.9 mm


8-lead DFN (MF) 6x5x0.9 mm

Quad Flat No Lead QFN

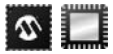

16-lead QFN (MG) 3x3x0.9 mm


20-lead QFN (ML) 4x4x0.9 mm


20-lead QFN (MQ) 5x5x 0.9 mm


28-lead UQFN (MV) 4x4x0.5 mm


28-lead QFN (MQ) 5x5x0.9 mm


28-lead QFN (MM & ML) 6x6x0.9 mm


40-lead UQFN (MV) 5x5x0.5 mm


44-lead QFN (ML) 8x8x0.9 mm

64-lead QFN (MR) 9x9x0.9 mm

Plastic Shrink Small Outline SSOP


8-lead MSOP (MS)


10-lead MSOP (UN)


16-lead QSOP (QR)


20-lead SSOP (SS)


28-lead SSOP (SS)

Plastic Thin Shrink Small Outline TSSOP


8-lead TSSOP (ST)


14-lead TSSOP (ST)


20-lead TSSOP (ST)

Packages are shown approximate size.
Additional packages are available – contact your local Microchip sales office for additional information.
For detailed dimensions, view our Package Drawing and Dimensions Specification at: www.microchip.com/packaging

Product Packages

Plastic Small Outline SOIC


8-lead SOIC (SN)


8-lead SOIC (SM)


14-lead SOIC (SL)


16-lead SOIC (SL)


18-lead SOIC (SO)


20-lead SOIC (SO)


28-lead SOIC (SO)

Plastic Thin Quad Flatpack TQFP


44-lead TQFP (PT)
10x10x1 mm


64-lead TQFP (PT)
10x10x1 mm


64-lead TQFP (PF)
14x14x1 mm


80-lead TQFP (PT)
12x12x1 mm


80-lead TQFP (PF)
14x14x1 mm


100-lead TQFP (PT)
12x12x1 mm


100-lead TQFP (PF)
14x14x1 mm


144-lead TQFP (PH)
16x16x1 mm

Plastic Quad Flatpack QFP


32-lead LQFP (LQ)
7x7x1.4 mm


44-lead MQFP (PQ)
10x10x2 mm


144-lead LQFP (PL)
20x20x1.4 mm

Ball Grid Array BGA


100-ball BGA (BG)
10x10x1.1 mm


121-ball BGA (BG)
10x10x0.8 mm

Plastic Dual In-Line PDIP


8-lead PDIP (P)


14-lead PDIP (P)


18-lead PDIP (P)


20-lead PDIP (P)


24-lead PDIP (P)


28-lead SPDIP (SP)


40-lead PDIP (P)

Packages are shown approximate size.
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For detailed dimensions, view our Package Drawing and Dimensions Specification at: www.microchip.com/packaging

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