

32-bit Microcontrollers



**PIC32 Microcontroller Families**

**PIC<sup>®</sup>32<sup>®</sup>**

**PIC<sup>®</sup> MCU to the power of 32**

[www.microchip.com/pic32](http://www.microchip.com/pic32)

# Performance-Leading PIC32 Microcontrollers

Building on the heritage of Microchip Technology's world-leading 8- and 16-bit PIC® microcontrollers, the PIC32 family delivers 32-bit performance and more memory to solve increasingly complex embedded system design challenges.

## Broad Portfolio

From simple USB device connectivity to RTOS-driven graphical user interface applications with advanced audio processing, there is a PIC32 device to meet your design challenges.

- Up to 200 MHz/330 DMIPS, MIPS microAptiv™ core with DSP instructions
- Up to 100 MHz/131 DMIPS, MIPS M4K core
- Fast interrupts and context switch
- Dual-panel Flash with live update
- 16 KB to 2 MB Flash
- 4 KB to 512 KB RAM for data and program execution
- Temperature range: -40 to 85°C; -40 to 105°C; -40 to 125°C (planned)
- Low pin count devices with Peripheral Pin Select (PPS) for pin remapping of most digital I/O

## Industry-Leading Compatibility

Create scalable products in a consistent environment.

- Common MPLAB® X development tools
- Pin- and peripheral-compatible with 16-bit PIC MCUs
- Common software stacks across MCUs
- Common tools environment for over 1,000 PIC MCUs

## Fast, Easy Development

Shorten your project design cycle.

- Free MPLAB X Integrated Development Environment supporting all Microchip MCUs
- Free MPLAB XC32/XC32++ Compiler
- MPLAB Harmony Software Framework to get you started with communications, graphics, file system, audio and signal processing
- Work in a familiar environment with a broad third party ecosystem of IDEs, RTOS and debuggers
- Development kits starting at \$34.95 with free C compiler













## More Design Options

Simplify your system design through integration.

- Extensive analog and digital peripherals including 10/100 Ethernet MAC, I<sup>2</sup>C™, I<sup>2</sup>S, 10/12-bit ADCs with up to 48 analog channels, serial communications, SPI, I<sup>2</sup>C and Hi-Speed USB
- Up to 26 DMA channels
- 8/16-bit parallel master port supporting graphic interface and additional memory
- CTMU for improved human interfaces with capacitive buttons or slider control

## PIC32 Software Solutions Support

[www.microchip.com/harmony](http://www.microchip.com/harmony)

<b>USB</b>	USB Host, Device, On-the-Go with Class Drivers 
<b>HMI</b>	Microchip Graphics Library  Capacitive Touch Software Microchip Graphics Display Designer X  mTouch® Capacitive Touch Library
<b>CAN</b>	CAN API Library for PIC32 with Integrated CAN Controller (Included in MPLAB XC32 Compiler) Stand-alone CAN Library: includes support for MCP2515
<b>Audio and Speech</b>	Audio Library for PIC32MX: Speex, ADPCM and WAV; MP3  and AAC Decode  Digital Audio for Apple® devices; Bluetooth® Stack for PIC32; Sample Rate Conversion (SRC) Library; PIC32 Bluetooth Audio Software Suites
<b>Connectivity</b>	Microchip TCP/IP with SSL and BSD  IrDA® Stack IEEE 802.15.4 and Sub-GHz MiWi™ Development Environment PIC32 Bluetooth Audio Software Suites
<b>Encryption</b>	Cryptographic Library 
<b>Basic Libraries</b>	File System Library  DSP Library (Included in MPLAB XC32 Compiler) Floating Point Math Library  Peripheral Library  EEPROM Emulation IEC 60730 Class B Software Fixed Point Math Library  Fixed Point DSP Library 
<b>Boot Loader</b>	Serial Port Boot Loader USB Host Boot Loader Ethernet Boot Loader

Get the latest updates at [www.microchip.com/harmony](http://www.microchip.com/harmony).

 MPLAB Harmony Software Framework compatible.

Additional software libraries listed in the table above are planned to be included in MPLAB Harmony.

# MPLAB Harmony for PIC32

## Introduction

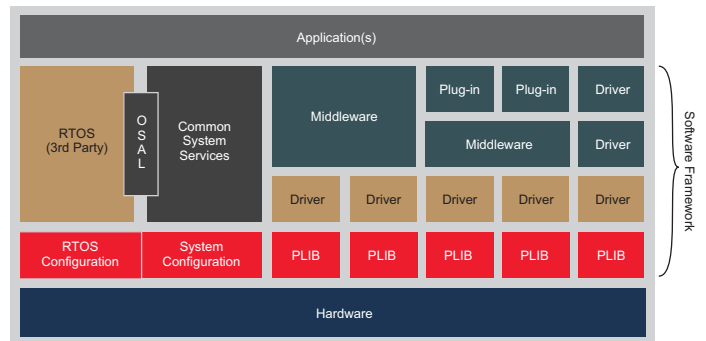
MPLAB Harmony is a flexible, abstracted, fully integrated firmware development environment for PIC32 microcontrollers. It enables robust framework development of interoperable RTOS-friendly libraries with quick and extensive Microchip support for third party software integration. MPLAB Harmony includes a set of peripheral libraries, drivers and system services that are readily accessible for application development. The code development format allows for maximum re-use and reduces time-to-market.

## Benefits

- Faster time-to-market
- Improved code interoperability
- Simplified support
- Improved 32-bit scalability
- Enhanced third party software integration



## MPLAB Harmony Block Diagram



## PIC32 Software Development Tools Available with MPLAB Harmony

Applications	Operating System Abstract Layer (OSAL)	Middleware/ Software Libraries	Device Drivers	Development Software	Third Party Software
<ul style="list-style-type: none"> <li>■ Graphics applications</li> <li>■ TCP/IP applications and utilities</li> <li>■ USB applications</li> </ul>	<ul style="list-style-type: none"> <li>■ OSAL interface with “basic” and “none” implementation</li> <li>■ OSAL implementation for FreeRTOS</li> <li>■ OSAL implementation for Micrium µC/OS-III</li> </ul>	<ul style="list-style-type: none"> <li>■ Graphics</li> <li>■ TCP/IP</li> <li>■ USB</li> <li>■ Cryptographic libraries</li> <li>■ File systems</li> <li>■ System services</li> </ul>	<ul style="list-style-type: none"> <li>■ ADC</li> <li>■ Ethernet media access controller</li> <li>■ Ethernet PHY interface</li> <li>■ Controllerless graphics</li> <li>■ Epson LCD controller</li> <li>■ Non-volatile memory</li> <li>■ SPI, UART, high-speed USB</li> <li>■ Timer, parallel master port</li> </ul>	<ul style="list-style-type: none"> <li>■ MPLAB® X IDE</li> <li>■ MPLAB XC32++</li> </ul>	<ul style="list-style-type: none"> <li>■ FreeRTOS*</li> <li>■ OpenRTOS*</li> <li>■ TCP/IP*</li> <li>■ SSL libraries</li> <li>■ Micrium µC/OS-III</li> </ul>

Additional software components planned  
 \*Sold and front-line support provided directly by Microchip

### Application Layer

- Implements desired overall behavior
- Abstracted hardware access
- Allows for easy port across PIC32 parts

### Common System Services

- Provides common functionality to avoid duplication and conflicts
- Eliminates complex interactions and interdependencies between modules
- OSAL provides OS compatibility and interface
- Manages shared resources
- Supports low-level configuration and board support package

### Middleware Layer

- Implements complex libraries and protocols (USB, TCP/IP, file systems, graphics)
- Provides a highly abstracted application program interface
- Libraries are thread-safe and RTOS-ready
- Built on drivers, PLIBs, system services
- Supports third party library integration

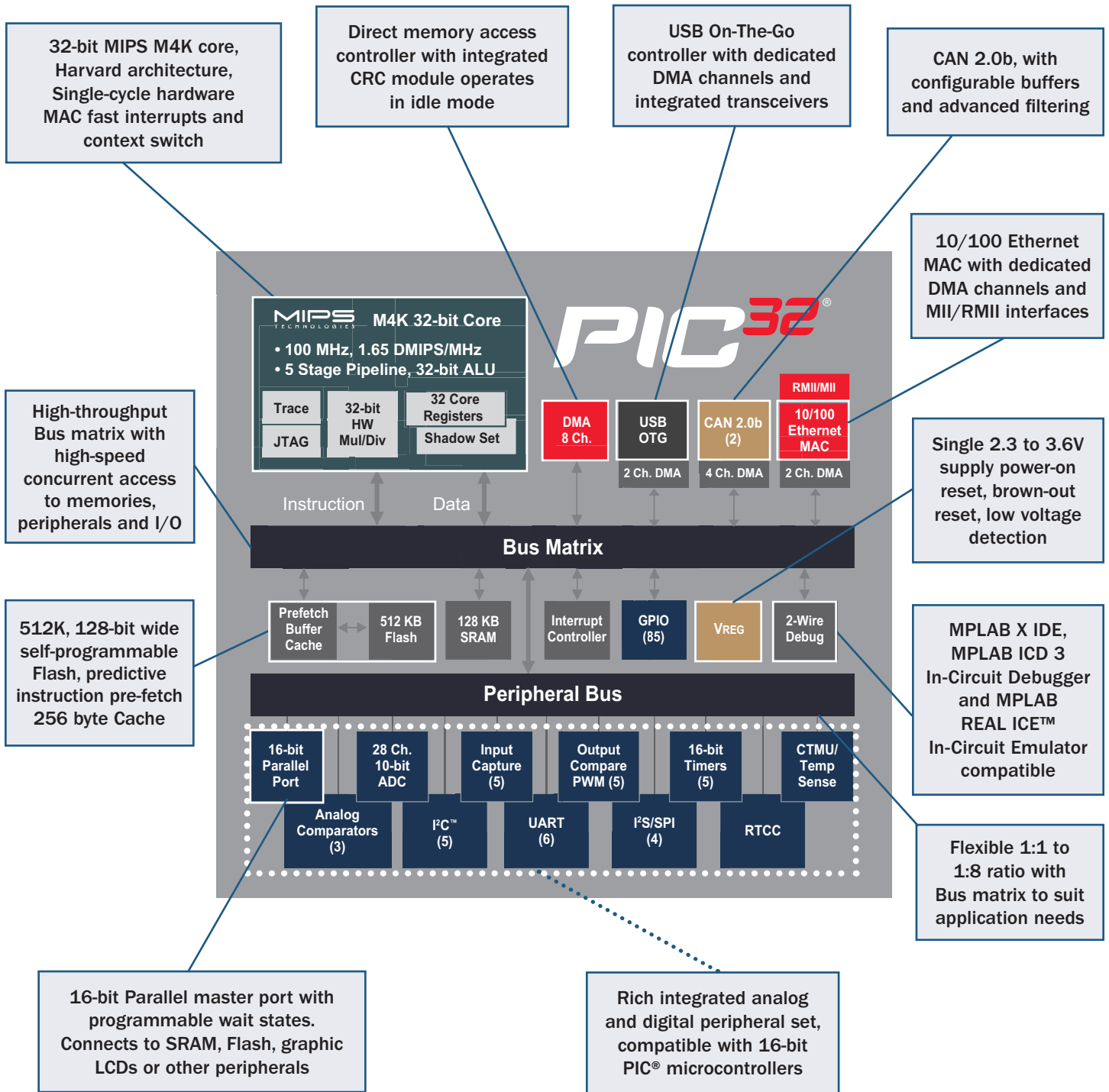
### Device Driver Layer

- Provides highly abstracted interface to peripheral
- Controls access to the peripheral
- Manages multiple hardware instances and software clients with select drivers
- Manages peripheral state and multiple peripheral instances
- Accesses hardware via PLIB
- Supports blocking or non-blocking code

### Peripheral Libraries (PLIB) Layer

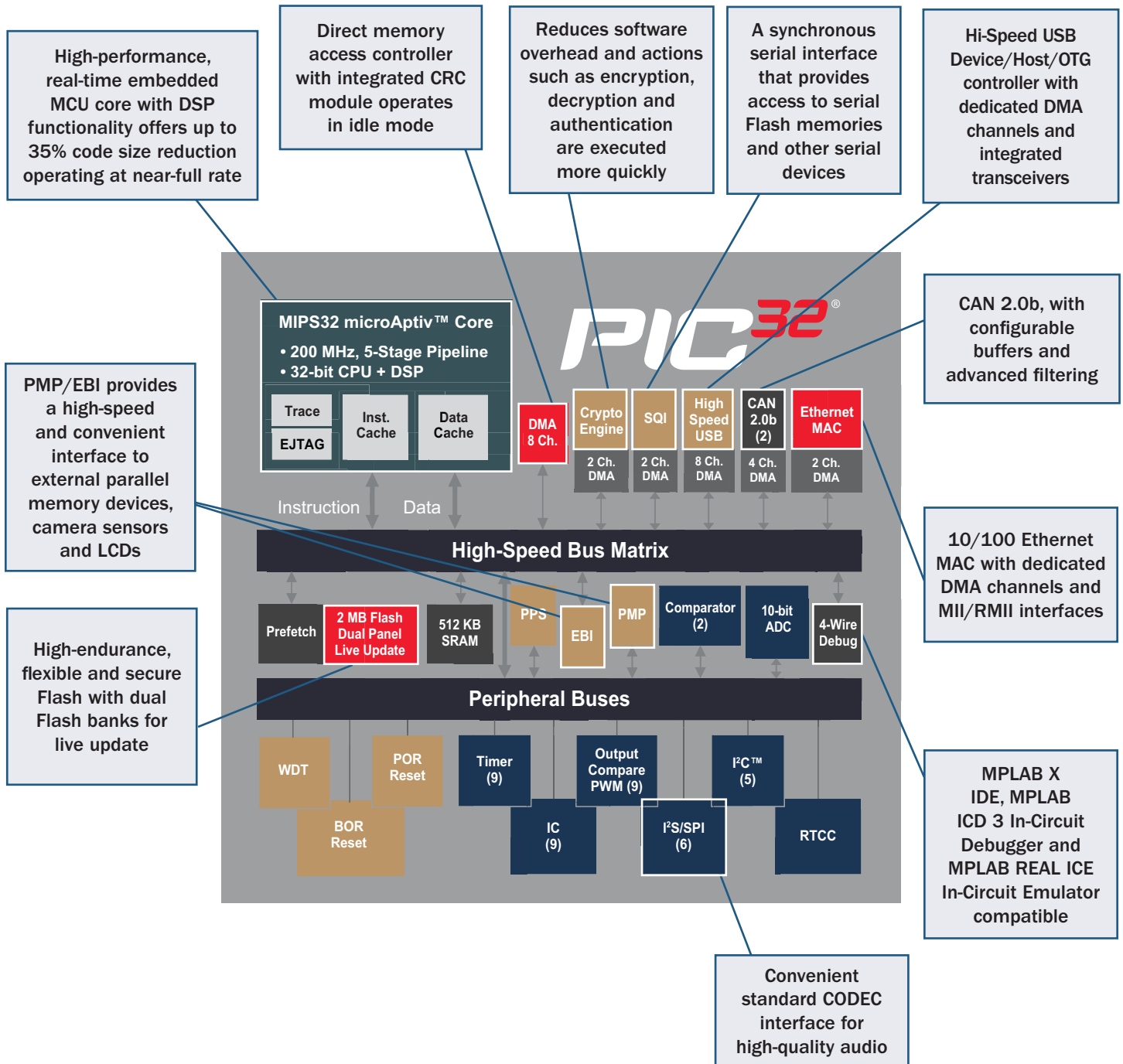
- Provide functional interface for Microchip PIC32 scalability
- Implements part-specific features

# Inside the MIPS® M4K Core PIC32 MCU



**Note:** Not all features are available on all PIC32 devices. Please see product family table for more information.

# Inside the MIPS32® microAptiv Core PIC32 MCU



**Note:** Not all features are available on all PIC32 devices. Please see product family table for more information.



# Developing with the PIC32 Microcontroller

Microchip is the only silicon vendor with a full 8-, 16- and 32-bit microcontroller portfolio supported by a unified development environment. The MPLAB X IDE is free and easy to use.



## PIC32 Starter Kits

Getting started is easy with any of the fully integrated PIC32 Starter Kits. They feature simple installation, a getting started tutorial and a PIC32 starter board which easily connects to your PC via USB. The starter kits include:

- MPLAB X IDE and MPLAB XC 32 C Compiler†
- PIC32 starter board with integrated programmer and debugger
- Code examples, documentation, tutorials and sample projects; optional I/O expansion board allows signal breakouts and connections for PICtail™ Plus daughter cards

†Lite version has no code size limit and full optimizations. After 60 days some optimizations are disabled.

## PIC32 Development Tools

Choose a Platform: **Starter Kit Platform OR Explorer 16 Platform**

### Starter Kit Platform

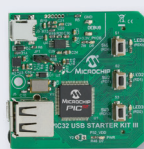
Microstick II  
(DM330013-2)



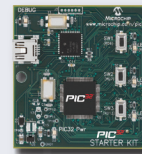
PIC32 USB  
Starter Kit II  
(DM320003-2)



PIC32 USB  
Starter Kit III  
(DM320003-3)



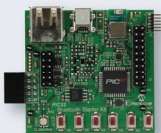
PIC32 Starter Kit  
(DM320001)



Wi-Fi® G Demo Board  
(DV102412)



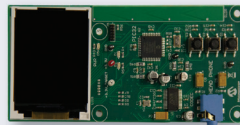
PIC32 Bluetooth  
Starter Kit  
(DM320018)



PIC32 Ethernet  
Starter Kit II  
(DM320004-2)



MPLAB Starter Kit for  
PIC32MX1XX/2XX  
(DM320013)



PIC32MZ Embedded  
Connectivity Starter Kit  
(DM320006)



PIC32MZ Embedded  
Connectivity Starter Kit  
with Crypto Engine  
(DM320006-C)



### OPTIONAL

Multimedia  
Expansion Board  
(DM320005)



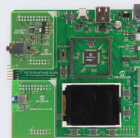
Multimedia  
Expansion Board II  
(DM320005-2)



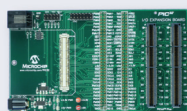
PIC32MX270F256D Plug-in Module for  
Bluetooth Audio Development Kit  
(MA320013)\*



PIC32 Bluetooth® Audio  
Development Kit  
(DV320032)



PIC32 I/O  
Expansion Board  
(DM320002)



PIC32 GUI Development Board  
with Projected Capacitive Touch  
(DM320015)

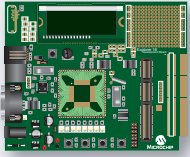


\*MA320013 does not work with the Explorer 16 Development Board

# Developing with the PIC32 Microcontroller

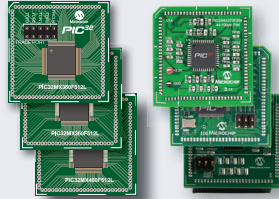
## Explorer 16 Platform

Explorer 16  
Development Board  
(DM240001)



+

PIC32 Plug-in Modules  
(MA320001/2/3/11/12/14)  
(MA320002-2)



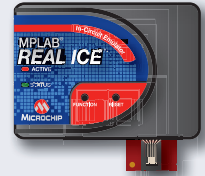
AND

MPLAB ICD 3  
In-Circuit Debugger  
(DV164035)



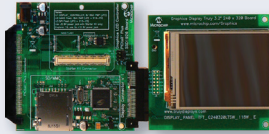
OR

MPLAB REAL ICE  
In-Circuit Emulation  
System (DV244005)



## PICtail™ Boards Common to Both Development Platforms

Graphics Daughter Board  
with 3.2" Display Kit  
(AC164127-3)



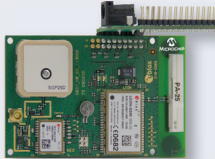
CAN/LIN PICtail Plus  
Daughter Board  
(AC164130-2)



Low-Cost Controllerless (LCC)  
Graphics PICtail Plus Board  
(AC164144)



M2M PICtail  
Daughter Board  
(AC320011)



PIC32 VGA Camera Sensor  
(VCS) PICtail Plus Board  
(AC164150)



MRF24WB0MA Wi-Fi  
Daughter Board  
(AC164136-4)



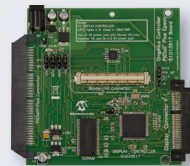
MRF24J40MA PICtail Plus  
2.4 GHz RF Card  
(AC164134)



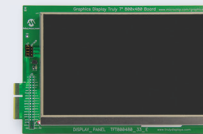
PIC32MX CTMU  
Evaluation Board  
(AC323027)



Graphics Controller PICtail  
Plus Epson S1D13517 Board  
(AC164127-7)



Graphics Display Truly 7"  
800 × 480 (WVGA) PICtail  
Plus Board (AC164127-9)



... and many more!

## Third Party Application Software and Hardware Support

- Ashling Microsystems
- AVIX-RT
- chipKIT.net
- CMX Systems
- Diligent Inc.
- E.E. Tools
- EasyCode
- easyGUI
- eflightworks
- ELNEC
- expresslogic
- FreeRTOS
- Fubarino
- Green Hills Software Inc.
- HCC-Embedded
- Interniche Technologies Inc.
- Lauterbach
- Macraigor Systems
- Micrium
- Micro/sys Inc.
- OLIMEX Ltd.
- OpenRTOS
- Pumpkin
- RoweBots Research Inc.
- Schmalzhaus
- SEGGER
- Serious Integrated
- Softlog
- SparkFun Electronics
- TechToys Company
- Virtual Fab
- woflSSL

MPLAB Harmony Software Framework compatible.

For up-to-date information about our 32-bit portfolio, related development tools and technical support, visit: [www.microchip.com/PIC32](http://www.microchip.com/PIC32).

# PIC32 Microcontroller Product Families

## PIC32MX Devices

Device	Flash KB + Boot Flash (KB)	SRAM (KB)	Pin Count	Speed (MHz)	I <sup>2</sup> S/SPI	I <sup>2</sup> C™	UARTs	DMA Channels General/Dedicated	CTMU/PPS	USB (Full/Hi-Speed)	10/100 Ethernet	CAN 2.0b	IC/OC/PWM	10-bit ADC 1 Msps	Analog Comparator	Timers 16b/32b	RTCC	Parallel Master Port	JTAG Program, Debug, Boundary Scan	Temp. Range (°C)	
PIC32MX110F016B	16 + 3	4	28	40	2/2	2	2	4/0	Y	N	N	N	5/5/5	10	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX110F016C	16 + 3	4	36											12							
PIC32MX110F016D	16 + 3	4	44											13							
PIC32MX120F032B	32 + 3	8	28	40/50	2/2	2	2	4/0	Y	N	N	N	5/5/5	10	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX120F032C	32 + 3	8	36											12							
PIC32MX120F032D	32 + 3	8	44											13							
PIC32MX130F064B	64 + 3	16	28	40	2/2	2	2	4/0	Y	N	N	N	5/5/5	10	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX130F064C	64 + 3	16	36											12							
PIC32MX130F064D	64 + 3	16	44											13							
PIC32MX150F128B	128 + 3	32	28	40/50	2/2	2	2	4/0	Y	N	N	N	5/5/5	10	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX150F128C	128 + 3	32	36											12							
PIC32MX150F128D	128 + 3	32	44											13							
PIC32MX170F256B	256 + 3	64	28	40/50	2/2	2	2	4/0	Y	N	N	N	5/5/5	10	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX170F256D	256 + 3	64	44											13							
PIC32MX210F016B	16 + 3	4	28											40							2/2
PIC32MX210F016C	16 + 3	4	36	12																	
PIC32MX210F016D	16 + 3	4	44	13																	
PIC32MX220F032B	32 + 3	8	28	40/50	2/2	2	2	4/2	Y	FS	N	N	5/5/5	9	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX220F032C	32 + 3	8	36											12							
PIC32MX220F032D	32 + 3	8	44											13							
PIC32MX230F064B	64 + 3	16	28	40	2/2	2	2	4/2	Y	FS	N	N	5/5/5	9	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX230F064C	64 + 3	16	36											12							
PIC32MX230F064D	64 + 3	16	44											13							
PIC32MX250F128B	128 + 3	32	28	40/50	2/2	2	2	4/2	Y	FS	N	N	5/5/5	9	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX250F128C	128 + 3	32	36											12							
PIC32MX250F128D	128 + 3	32	44											13							
PIC32MX270F256B	256 + 3	64	28	40/50	2/2	2	2	4/2	Y	FS	N	N	5/5/5	9	3	5/2	Y	Y	Y	-40 to +105	
PIC32MX270F256D	256 + 3	64	44											13							
PIC32MX320F032H	32 + 12	8	64											40							2/2
PIC32MX320F064H	64 + 12	16	64	40																	
PIC32MX320F064H	64 + 12	16	64	80																	
PIC32MX320F128H	128 + 12	16	64	80	2/2	2	2	0/0	N	N	N	N	5/5/5	16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX320F128L	128 + 12	16	100																		80
PIC32MX330F064H	64 + 12	16	64																		100
PIC32MX330F064L	64 + 12	16	100	100																	
PIC32MX340F128H	128 + 12	32	64	80	2/2	2	2	4/0	N	N	N	N	5/5/5	16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX340F128L	128 + 12	32	100																		80
PIC32MX340F256H	256 + 12	32	64																		80
PIC32MX360F256L	256 + 12	32	100	80																	
PIC32MX340F512H	512 + 12	32	64	80	2/2	2	2	4/0	N	N	N	N	5/5/5	16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX360F512L	512 + 12	32	100																		80
PIC32MX350F128H	128 + 12	32	64	100	2/2	2	2	4/0	Y	N	N	N	5/5/5	28 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX350F128L	128 + 12	32	100/124																		100
PIC32MX350F526H	256 + 12	64	64																		100
PIC32MX350F526L	256 + 12	64	100/124	100																	
PIC32MX370F512H	512 + 12	128	64	100	2/2	2	2	4/0	Y	N	N	N	5/5/5	28 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX370F512L	512 + 12	128	100/124																		100

AEC-Q100 qualified for grade 2 and 3. Check individual product pages for details.



# PIC32 Microcontroller Product Families

## PIC32MX Devices (Continued)

Device	Flash KB + Boot Flash (KB)	SRAM (KB)	Pin Count	Speed (MHz)	I <sup>2</sup> S/SPI	I <sup>2</sup> C™	UARTs	DMA Channels General/Dedicated	CTMU/PPS	USB (Full/Hi-Speed)	10/100 Ethernet	CAN 2.0b	IC/OC/PWM	10-bit ADC 1 Msps	Analog Comparator	Timers 16b/32b	RTCC	Parallel Master Port	JTAG Program, Debug, Boundary Scan	Temp. Range (°C)	
PIC32MX420F032H	32 + 12	8	64	40	0/1		2	0/2	N					16 ch							
PIC32MX430F064H	64 + 12	16	64	100	2/2		4	4/2	Y					28 ch							
PIC32MX430F064L			2/2		5																
PIC32MX440F128H	128 + 12	32	64	80	0/1									16 ch							
PIC32MX440F128L			100		0/2																
PIC32MX440F256H	256 + 12	32	64	80	0/1		2		N					16 ch							
PIC32MX460F256L			100		0/2																
PIC32MX440F512H	512 + 12	32	64	80	0/1	2		4/2		FS	N	N	5/5/5	2	5/2	Y	Y	Y	Y	-40 to +105	
PIC32MX460F512L			100		0/2																
PIC32MX450F128H	128 + 12	32	64	100			4							28 ch							
PIC32MX450F128L			100/124				5														
PIC32MX450F256H	256 + 12	64	64	100	2/2		4		Y					28 ch							
PIC32MX450F256L			100/124				5														
PIC32MX470F512H	512 + 12	128	64	100			4							28 ch							
PIC32MX470F512L			100/124				5														
PIC32MX534F064H	64 + 12	16	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX534F064L			100		0/4																5
PIC32MX564F064H	32	32	64	80	0/3	4	4/4		N	FS	N	1	5/5/5	16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX564F064L			100		0/4																5
PIC32MX564F128H	128 + 12	32	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX564F128L			100		0/4																5
PIC32MX575F256H	256 + 12	64	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX575F256L			100		0/4																5
PIC32MX575F512H	512 + 12	64	64	80	0/3	4	8/4							16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX575F512L			100		0/4																5
PIC32MX664F064H	64 + 12	32	64	80	0/3	4		4/4						16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX664F064L			100		0/4																5
PIC32MX664F128H	128 + 12	32	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX664F128L			100		0/4																5
PIC32MX675F256H	256 + 12	64	64	80	0/3	4			N	FS	Y	N	5/5/5	16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX675F256L			100		0/4																5
PIC32MX675F512H	512 + 12	64	64	80	0/3	4	8/4							16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX675F512L			100		0/4																5
PIC32MX695F512H	512 + 12	128	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX695F512L			100		0/4																5
PIC32MX764F128H	128 + 12	32	64	80	0/3	4		4/6						16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX764F128L			100		0/4																5
PIC32MX775F256H	256 + 12	64	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX775F256L			100		0/4																5
PIC32MX775F512H	512 + 12	64	64	80	0/3	4	8/8		N	FS	Y		5/5/5	16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX775F512L			100		0/4																5
PIC32MX795F512H	512 + 12	128	64	80	0/3	4								16 ch	2	5/2	Y	Y	Y	-40 to +105	
PIC32MX795F512L			100		0/4																5

AEC-Q100 qualified for grade 2 and 3. Check individual product pages for details.

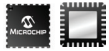
# PIC32 Microcontroller Product Families

## PIC32MZ Devices

Device	Flash KB + Boot Flash (KB)	SRAM (KB)	Pin Count	Speed (MHz)	I <sup>2</sup> S/SPI	I <sup>2</sup> C™	UARTs	DMA Channels General/Dedicated	PPS	USB (Full/Hi-Speed)	10/100 Ethernet	CAN 2.0b	IC/OC/PWM	10-bit ADC	ADC S/H	Analog Comparator	Timers 16b/32b	RTCC	SQI	EBI	Parallel Master Port	JTAG Program, Debug, Boundary Scan	Encryption	Temp. Range (°C)	
PIC32MZ2048ECG144	2048 + 160	512	144	200	6	5	6	8/12	Y	HS	Y	N	9/9/9	48 ch	1	2	9/4	Y	Y	Y	Y	Y	N	-40 to +85	
PIC32MZ2048ECH144	2048 + 160							8/16	Y	HS	Y	2													
PIC32MZ2048ECG124	2048 + 160	512	124	200	6	5	6	8/12	Y	HS	Y	N	9/9/9	48 ch	1	2	9/4	Y	Y	Y	Y	Y	N	-40 to +85	
PIC32MZ2048ECH124	2048 + 160							8/16	Y	HS	Y	2													
PIC32MZ2048ECG100	2048 + 160	512	100	200	6	5	6	8/12	Y	HS	Y	N	9/9/9	40 ch	1	2	9/4	Y	Y	Y	Y	Y	N	-40 to +85	
PIC32MZ2048ECH100	2048 + 160							8/16	Y	HS	Y	2													
PIC32MZ2048ECG064	2048 + 160	512	64	200	4	4	6	8/12	Y	HS	Y	N	9/9/9	24 ch	1	2	9/4	Y	Y	N	Y	Y	N	-40 to +85	
PIC32MZ2048ECH064	2048 + 160							8/16	Y	HS	Y	2													
PIC32MZ1024ECG144	1024 + 160	512	144	200	6	5	6	8/12	Y	HS	Y	N	9/9/9	48 ch	1	2	9/4	Y	Y	Y	Y	Y	N	-40 to +85	
PIC32MZ1024ECH144	1024 + 160							8/16	Y	HS	Y	2													
PIC32MZ1024ECG124	1024 + 160	512	124	200	6	5	6	8/12	Y	HS	Y	N	9/9/9	48 ch	1	2	9/4	Y	Y	Y	Y	Y	N	-40 to +85	
PIC32MZ1024ECH124	1024 + 160							8/16	Y	HS	Y	2													
PIC32MZ1024ECG100	1024 + 160	512	100	200	6	5	6	8/12	Y	HS	Y	N	9/9/9	40 ch	1	2	9/4	Y	Y	Y	Y	Y	N	-40 to +85	
PIC32MZ1024ECH100	1024 + 160							8/16	Y	HS	Y	2													
PIC32MZ1024ECG064	1024 + 160	512	64	200	4	4	6	8/12	Y	HS	Y	N	9/9/9	24 ch	1	2	9/4	Y	Y	N	Y	Y	N	-40 to +85	
PIC32MZ1024ECH064	1024 + 160							8/16	Y	HS	Y	2													
PIC32MZ2048ECM144	2048 + 160	512	144	200	6	5	6	8/18	Y	HS	Y	2	9/9/9	48 ch	1	2	9/4	Y	Y	Y	Y	Y	Y	Y	-40 to +85
PIC32MZ2048ECM124	2048 + 160																								
PIC32MZ2048ECM100	2048 + 160	512	100	200	6	5	6	8/18	Y	HS	Y	2	9/9/9	40 ch	1	2	9/4	Y	Y	Y	Y	Y	Y	-40 to +85	
PIC32MZ2048ECM064	2048 + 160		64		4	4								24 ch											N
PIC32MZ1024ECM144	1024 + 160	512	144	200	6	5	6	8/18	Y	HS	Y	2	9/9/9	48 ch	1	2	9/4	Y	Y	Y	Y	Y	Y	-40 to +85	
PIC32MZ1024ECM124	1024 + 160		124																						
PIC32MZ1024ECM100	1024 + 160	512	100	200	6	5	6	8/18	Y	HS	Y	2	9/9/9	40 ch	1	2	9/4	Y	Y	Y	Y	Y	Y	-40 to +85	
PIC32MZ1024ECM064	1024 + 160		64		4	4								24 ch											N

Please contact your Microchip representative for availability.

# Package Options



28-pin QFN  
6 × 6 mm (ML)



28-pin SSOP  
10.2 × 7.8 mm (SS)



28-pin SOIC  
17.9 × 10.3 mm (SO)



28-pin SPDIP  
36 × 7.5 mm (SP)



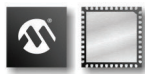
36-pin VTLA  
5 × 5 mm (TL)



44-pin VTLA  
6 × 6 mm (TL)



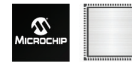
44-pin TQFP  
10 × 10 mm (PT)



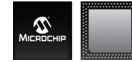
44-pin QFN  
8 × 8 mm (ML)



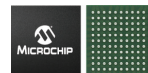
64-lead TQFP  
10 × 10 mm (PT)



64-lead QFN  
9 × 9 mm (MR)



124-lead VTLA (TL)  
9 × 9 mm



121-ball BGA  
10 × 10 mm (BG)



100-lead TQFP  
12 × 12 mm (PT)



100-lead TQFP  
14 × 14 mm (PF)



144-lead TQFP (PH)  
16 × 16 × 1 mm



144-lead LQFP (PL)  
20 × 20 × 1.4 mm

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