

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MEC14XX Family

Low-Power Embedded Controllers for Computing Applications

Modernize Your Computing Platforms

As Intel[®] Processors fully transition towards the more flexible and efficient eSPI host interface, computing products must progress along with it. The MEC14XX family of devices provides low-power, highly configurable embedded controllers for an effortless transition.

Microchip offers a flexible array of solutions for all mobile platforms including notebooks, tablets, SBCs and industrial controllers. All MEC14XX devices are pin compatible with each other to provide easy migration from LPC-based to eSPI-based designs.



Key Features

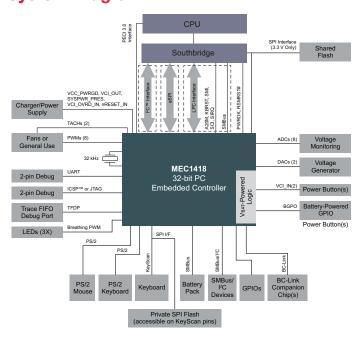
- MIPS32 M14K microcontroller core
- Fully supported by MPLAB Microchip development tools
- 192 KB of SRAM
- eSPI (MEC1418 and MEC1428), LPC, PECI, PS2 and I²C interface
- Flexible Support of 1.8V and 3.3V I/O
- Host interface inflection from LPC to eSPI
- Secure Boot ROM with CRC 32 and AES 128
- Master and slave attached Flash available

Microchip's eSPI Advantage

- Pioneered eSPI system with industry partners
- Validated with both Intel and AMD platforms
- Fully supports all of eSPI channels



System Diagram







Development Tools

The MEC14XX family is supported by Microchip's award winning development tools including the MPLAB® XC32 Compiler and MPLAB REAL ICE™ In-Circuit Emulator, the MPLAB ICD 3 In-Circuit Debugger, and the PICkit™ 3 Programmer/Debugger. The MEC1418 and MEC1428 also have demo boards with various features that illustrate the functionality of the embedded controllers. The demo boards can be found at www.microchipdirect.com/EVB-MEC1418MECC and www.microchipdirect.com/EVB-MEC1428MECC respectively.



MEC14XX Products

Product	Host Interface	SRAM Memory	Keyboard Matrix Scan Controller	SMBus 2.0 Ports	PC Ports/ Controllers	PS/2Controllers	GPIOs	SPI Interfaces	SPI Flash Support	DACs	ADCs	PWMs	TACHs	UART	Operating Temperature	Package
MEC1408	LPC, I ² C	192 KB	18 x 8	6	5/3	2	106	3	3.3V	2	8	8	2	Full	0°C to 70°C	128-VTQFP 144-WFBGA
MEC1418	eSPI, LPC, I ² C	192 KB	18 x 8	6	5/3	2	106	3	3.3V	2	8	8	2	Full	0°C to 70°C -40°C to 85°C	128-VTQFP 144-WFBGA
MEC1428	eSPI, LPC, I ² C	192 KB	18 x 8	7	6/5	2	108	3	1.8V 3.3V	0	8	8	4	Full	0°C to 70°C -40°C to 85°C	128-WFBGA 128-VTQFP 144-WFBGA

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