

# Mobile Computing Designers Can Easily Reuse IP Across Multiple x86 Platforms With New Microchip Family of Highly Configurable Low-Power Embedded Controllers

Scalable Family of Devices Supports Intel® Corporation's New Enhanced Serial Peripheral Interface (eSPI) and Existing Low Pin Count Interface (LPC) to Communicate With the System Host

CHANDLER, Ariz., Sept. 2, 2015 /PRNewswire/ -- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced the MEC14XX family of highly configurable low-power embedded controllers customized to the needs of x86-based notebook and tablet platform designers.



To learn more about these products, visit <a href="http://www.microchip.com/MEC14XX-060115a">http://www.microchip.com/MEC14XX-060115a</a>.

The scalable family of MEC14XX devices is one of the first to support both the Intel<sup>®</sup> Corporation's new Enhanced Serial Peripheral Interface (eSPI) and the existing Low Pin Count interface (LPC). To ease the mobile computing industry's transition to the new interface and lower-voltage designs, Microchip's MEC14XX family also provides a flexible arrangement that allows multiple I/O signals to be configured to support either 3.3V or 1.8V, reducing the system bill-of-materials cost by eliminating the need for external voltage translators.

"Microchip's work with Intel in development and co-validation has helped ensure that the new eSPI interface will be available on schedule in future generations of Intel platforms," said Ahmad Zaidi VP/GM, Embedded IP Subsystems and Chipsets Group at Intel Corporation.

These features of the MEC14XX family also allow for a seamless migration of intellectual property (IP) reuse across multiple x86 computing platform architectures, such as Intel  $Atom^{TM}$ , Intel iCore and AMD-based systems. This is also Microchip's first embedded controller family targeted for general x86 computing that includes Microchip's award-winning MPLAB® development tool support.

"We have worked closely with our industry partners and our customers to stay on the forefront of defining, implementing and validating the new eSPI system interface," said Ian Harris, vice president of Microchip's Computing Products Group. "The current LPC interface has served the computing market for more than 15 years, but has limitations as computing platforms continue to transition to lower voltages and as devices transition to smaller lithographies. We are proud of our contributions to the new eSPI interface, and expect it to serve the needs of the market well into the future."

The MEC14XX devices are offered with a choice of 128 KB, 160 KB or 192 KB of closely coupled SRAM for code and data that loads from SPI-flash. Designers can leverage the host SPI-flash (used for BIOS storage) for non-volatile EC firmware storage, as a cost-effective system solution. The added choice of either the MEC140X LPC interface devices or the MEC1418, which supports both the LPC and eSPI interfaces, allows the designer to select the most cost-effective device for a particular platform and provides manufacturers the ability to preserve their investments as the industry transitions. All members of the Microchip MEC14XX family are pin and register compatible.

# **Development Support**

Each member of the MEC14XX family is based on Microchip's <u>32-bit PIC<sup>®</sup> MCU</u> architecture and is supported by Microchip's development tools. Examples include the MPLAB<sup>®</sup> XC Compilers, the MPLAB REAL ICE<sup>™</sup> In-Circuit Emulator (part # DV244005, \$499.98), the MPLAB ICD 3 In-Circuit Debugger (part # DV164035, \$199.95) and the PICkit<sup>™</sup> 3 Starter Kit (part # DV164130, \$64.95). Development tools are available via any Microchip sales representative or authorized worldwide distributor, or from <u>microchipDIRECT</u> (<a href="http://www.microchip.com/microchipDIRECT-060115a">http://www.microchip.com/microchipDIRECT-060115a</a>).

# **Pricing & Availability**

The MEC1404 (128 KB SRAM) and MEC1408 (192 KB SRAM) embedded controllers supporting the Intel LPC interface are available today for sampling and volume production, starting at \$1.68 each in 10,000-unit quantities. The MEC1418 (192 KB SRAM) embedded controller, supporting both the Intel LPC and eSPI interfaces, is available today for sampling and volume production at \$2.05 each, in 10,000-unit quantities. All MEC14XX devices are currently offered in a 128-VTQFP package.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <a href="http://www.microchip.com/MEC14XX-060115a">http://www.microchip.com/MEC14XX-060115a</a>. To purchase products mentioned in this press release, go to <a href="microchipDIRECT">microchipDIRECT</a> or contact one of Microchip's authorized distribution partners.

### Resources

High-res Images Available Through Flickr or Editorial Contact (feel free to publish):

- Chip Graphic: http://www.microchip.com/Chip-Graphic-060115a
- Block Diagram: <a href="http://www.microchip.com/Block-Diagram-060115a">http://www.microchip.com/Block-Diagram-060115a</a>

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# **About Microchip Technology**

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, providing low-risk product development, lower total system cost and faster time to market for thousands of diverse customer applications worldwide. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at <a href="http://www.microchip.com/Microchip-060115a">http://www.microchip.com/Microchip-060115a</a>.

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<u>Tags / Keywords:</u> eSPI, LPC, embedded controller, keyboard controller, KBC, PIC32, MPLAB, MIPS, SIO, Super IO, x86, low pin count interface

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