

Microchip Expands Computing Capabilities with Two Embedded Controller Families that Support eSPI Bus Technology

The MEC17XX and MEC14XX Families Allow for Increased Functionality and Flexibility in Computing Designs

CHANDLER, Ariz., Sept. 27, 2017 (GLOBE NEWSWIRE) -- The MEC17XX and MEC14XX families of embedded controllers with enhanced Serial Peripheral Interface (eSPI), the host interface supported by the latest PC computing chip sets, are now available from Microchip Technology Inc. (NASDAQ:MCHP). Both families support the eSPI bus technology that is required for new, upcoming computing applications. The MEC17XX family is based on an ARM® Cortex®-M4F core and has advanced hardware-accelerated cryptography algorithms to efficiently support the secure boot of a computer. The family offers several additional features including two UARTS and an extended industrial operating temperature range that make the family ideal for industrial computing. In addition, Microchip's popular MIPS-based MEC14XX family has been expanded to include functionality for supporting the new eSPI Slave Attached Flash (SAF) feature, which allows the Microchip embedded controller to be directly connected to an SPI Flash memory using an on-board master controller.

These new embedded controllers are part of an expanded family of devices that have been an integral part in the computing industry's transition from LPC to eSPI. The MEC17XX adds security through cryptography functionality to advance secure boot, a security feature developed to ensure a system boots only from software that is trusted by the manufacturer. Furthermore, the addition of two UARTS and support for industrial temperature is necessary for industrial computing applications.

"Microchip was the one of the first companies to support Intel® Corporation's enhanced Serial Peripheral Interface (eSPI) along with SMBus and Low Pin Count (LPC) interfaces," said Ian Harris, vice president of Microchip's Computing Products Group. "We have worked closely with our industry partners and our customers to continue to stay on the forefront of defining, implementing and validating new embedded controllers for computing applications."

The latest members of the MEC14XX family add a new level of design functionality for computing engineers by adding SAF, which is an optimal solution for USB Type-C™ power delivery. The latest MEC1428 devices are pin and register compatible with the MEC140X and MEC141X families, which allows designers to easily add eSPI and additional features and have more flexibility in their designs. Both families retain eSPI Master Attached Flash (MAF) capability. All of Microchip's computing embedded controllers are supported by a variety of development and debug tools and evaluation boards, plus datasheets and other documentation.

The eSPI interface has numerous benefits including allowing for multiple input/output signals to be configured to support either 3.3V or 1.8V, which reduces the system cost by eliminating the need for external voltage translators. These features allow for seamless migration of intellectual property (IP) across multiple x86 computing platforms including those based on Intel's Atom™ processors, Intel's iCore™ processors and Ryzen™ processors from Advanced Micro Devices (AMD).

"The flexibility and rich feature set of our devices supporting the eSPI Interface and enabling the secure boot methodology are expected to serve the needs of the market well into the future," continued Harris.

For more information about MEC17XX and MEC142XX, visit: www.microchip.com/MEC1701

Pricing and Availability

The four-part MEC17XX family is available today in a variety of WFBGA package options, starting at \$2.59 each in 10,000 unit quantities. The family features industrial-qualified parts as well as the option of additional EEPROM memory. The MEC1428 is available today in a variety of package options, starting at \$2.16 each in 10,000 unit quantities.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's website. To purchase products mentioned in this press release, go to Microchip's easy-to-use online sales channel [microchipDIRECT](#) or contact one of Microchip's authorized distribution partners.

Resources

High-res images available through Flickr or editorial contact (feel free to publish):

- PR graphic: www.flickr.com/photos/microchiptechnology/37288858156/in/photostream/
- Chip shot: www.flickr.com/photos/microchiptechnology/37288858386/in/photostream/

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 www.microchip.com.

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