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Microchip's New 8-bit PIC® Microcontrollers Combine High Integration, Low Power and a Highly Efficient Method to Implement Touch Sensing

New 28-pin MCUs Feature eXtreme Low Power Technology and 10-bit ADC With Automated Touch Sampling

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, analog and Flash-IP solutions, today announced the expansion of its 8-bit **eXtreme low Power (XLP)** Enhanced Midrange Core PIC® microcontrollers (MCUs), with the new **PIC16F1512/13** devices.

These new 28-pin MCUs offer a combination of advanced digital and analog peripherals, along with XLP for the extended battery life that many applications require. These features make the general-purpose PIC16F1512/13 MCUs ideal for a broad range of applications in the appliance, medical, consumer and automotive markets, among many others. Along with industry-leading active current down to 30 µA/MHz and sleep current down to 20 nA, these MCUs integrate a 17x10-bit ADC, EUSART, I^{2}C™/SPI, 2x Capture Compare PWMs, 7 KB Flash and 256B RAM.

Compared to other members of the PIC16F151X family, these two new devices deliver increased analog capability, including a 10-bit Analog-to-Digital Converter (ADC) with hardware Capacitive Voltage Divider (CVD) support for **mTouch™ capacitive touch sensing** implementation. The additional control logic enables automated touch sampling, which reduces software size and lowers CPU usage. It also provides an automatic control of guard-ring drive and a programmable sample-and-hold capacitance to better match larger touch or proximity sensors.

"The new PIC16F1512/13 devices support a wide range of applications that require best-in-industry low-power modes, with the added ability to reduce software overhead and improve performance when touch sensing is required," said Steve Drehobl, vice president of Microchip's MCU8 Division."

Development Support

The PIC16F1512/13 MCUs are supported by Microchip's full suite of standard development tools, including the free MPLAB® X Integrated Development Environment (IDE), the MPLAB PM3 Universal Device Programmer (part # DV007004, $895.00), and the PICkit™ 3 (part # PG164130, $44.95) and MPLAB ICD 3 (part # DV164035, $189.99) debuggers/programmers. The PIC16F15XX MCUs are also supported by Microchip's F1

Evaluation tools, including the **F1 Evaluation Platform** (part # DM164130-1, $39.99) and the F1 Evaluation Kit, which includes the PICkit 3 (part #DV164132, $69.99). Additionally, the MPLAB XC8 Compiler for 8-bit PIC MCUs is available. All of these tools can be ordered today, at **http://www.microchip.com/get/NTJN**.

Packaging, Pricing & Availability

The **PIC16F1512** and **PIC16F1513** MCUs are both available today for sampling and volume production in 28-pin SSOP, SOIC, SPDIP and 4 x 4 x 0.5 mm UQFN packages. Pricing starts at $0.58 each in high-volume quantities. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at **http://www.microchip.com/get/6WVQ**. To purchase products mentioned in this press release, go to **microchipDIRECT** or contact one of Microchip's authorized distribution partners.

Resources

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Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, 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, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at **http://www.microchip.com/get/E7A4**.

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Microchip Technology Inc.
Editorial Contact:
Terri Thorson, 480-792-4386
terri.thorson@microchip.com
Reader Inquiries:
1-888-624-7435
http://www.microchip.com/get/6WVQ

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