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Microchip Adds Smallest and Lowest-Cost PIC® Microcontroller with I2C™ to Its Portfolio

PIC12LF1552 Combines Low Power, I^2C and Hardware CVD in 8 pins for General-Purpose and Touch-Sensing Applications

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, mixed-signal, analog and Flash-IP solutions, today announced a new addition to its PIC12/16F15XX **8-bit microcontroller** (MCU) family. The low-cost, low pin count **PIC12LF1552** is Microchip's smallest (2x3 mm UDFN package) and lowest-cost PIC® MCU with hardware I^2C™ support, and includes a four channel 10-bit Analog-to-Digital Converter (ADC) with hardware Capacitive Voltage Divider (CVD) support for **capacitive touch sensing**. Additionally, this new MCU features 3.5 KB Flash program memory, 256 Bytes RAM, a 32 MHz internal oscillator, low-voltage operation from 1.8V to 3.6V, and low power consumption for active and sleep currents of 50 µA/MHz and 20 nA, respectively.

Watch a short video: **http://www.microchip.com/get/AH99**

The hardware CVD enables a more efficient implementation of capacitive sensing for touch applications. This "Core-Independent Peripheral" includes additional control logic that enables automated sampling, which reduces software size and minimizes CPU usage. It also provides automatic control of guard-ring drive and a programmable sample-and-hold capacitance, to better match larger touch or proximity sensors. These capabilities, combined with the low cost and small footprint of the PIC12LF1552, make it well suited for applications such as temperature-monitoring devices, small remote controls (e.g., garage doors and window blinds), smartphone buttons (e.g., input interfaces for Android™ and Windows® 8 phones utilizing hardware CVD), room light control (e.g., switching and dimming, both taking advantage of hardware CVD), and coffeemakers (e.g., input interfaces and water-level monitoring, which both could utilize the hardware CVD and the integrated communication capabilities), among others.

"The low-cost PIC12LF1552 extends Microchip's PIC12/PIC16F15XX family by providing I^2C in our most compact 8-pin package, to address a wide variety of space-constrained and cost-sensitive applications," said Steve Drehobl, vice president of Microchip's MCU8 Division. "Designers can also make use of the integrated hardware CVD to improve their design's efficiency if capacitive touch or proximity sensing is required."

Development Support

Microchip's full suite of development tools support the PIC12LF MCUs, including the **MPLAB® X Integrated Development Environment (IDE)**, and **PICkit™ 3** (part #

PG164130, $44.95), **MPLAB REAL ICE™** In-Circuit Emulator (part # DV244005, $499.98), and **MPLAB® ICD 3** (part # DV164035, $189.99) programmers. Additionally, the **MPLAB XC8 Compiler for 8-bit PIC MCUs** now supports this device.

Availability

The PIC12LF1552 MCU is offered in 8-pin PDIP, SOIC, MSOP and 2x3x0.5 mm UDFN packages. It is available today for sampling and volume production.

For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at **http://www.microchip.com/get/LFWT**. To purchase products mentioned in this press release, go to **microchipDIRECT** or contact one of Microchip's authorized distribution partners.

Resources

Watch a short video on this new MCU (feel free to embed/post): **http://www.microchip.com/get/AH99**

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

- Product Photo: **http://www.microchip.com/get/ML7W**
- Block Diagram: **http://www.microchip.com/get/96G4**

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- Microchip 8-bit MCU Landing Page: **http://www.microchip.com/get/SHE2**
- Microchip mTouch™ Solutions Landing Page: **http://www.microchip.com/get/AKQ8**

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 **http://www.microchip.com/get/DT6F**.

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

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