

# Microchip Expands Low-Cost 8-bit PIC® Microcontroller Portfolio with New Devices Featuring Dual ADC Peripheral

PIC16LF1554/9 Combine Low Power and Dual ADCs with Hardware Support for Advanced Touch-Sensing and General-Purpose Sensor 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 PIC12/16LF155X <u>8-bit microcontroller</u> (MCU) family with the <u>PIC16LF1554</u> and <u>PIC16LF1559</u> (PIC16LF1554/9) devices. The PIC16LF1554/9 includes two independent 10-bit 100K samples per second Analog-to-Digital Converters (ADC) with hardware Capacitive Voltage Divider (CVD) support for <u>capacitive-touch</u> <u>sensing</u>. This unique ADC configuration enables more efficient sensor acquisition and assists with advanced touch-sensing techniques for extremely noisy environments, low-power applications, matrix keypads and water-resistant designs.

Watch a short video: <a href="http://www.microchip.com/get/W8EW">http://www.microchip.com/get/W8EW</a>

The 14- and 20-pin PIC16LF1554/9 MCUs combine up to 17 ADC channels with automated hardware CVD modules to implement capacitive sensing and other front-end sampling applications with minimal software overhead. These devices also include up to 14 KB Flash/512 Bytes RAM, a 32 MHz internal oscillator, two PWM modules, along with I<sup>2</sup>C<sup>TM</sup>, SPI and EUSART for communications. Additionally, they are eXtreme Low Power (XLP) compliant with active and sleep currents of 35 μA/MHz and 30 nA, respectively, for applications where energy conservation is paramount. These features, combined with the low cost and small footprint of the PIC16LF1554/9, make it well suited for a wide range of applications in the consumer-electronic (e.g., remote controls, audio players, cell phone accessories, small appliances, wearable devices such as headphones, watches and fitness wristbands), medical (e.g., blood-pressure monitors and wearable heart-rate monitors), automotive markets (e.g., automotive interior controls and control panels) and industrial markets (e.g., RFID and sensors), among others.

"The PIC16LF155X family is designed to enable basic application functions for a wide variety of end equipment," said Fanie Duvenhage, director of Microchip's Human-Machine Interface Division. "The multiple Analog-to-Digital structure coupled with the high number of input channels makes the family stand out in applications that require advanced touch-sensing. The hardware CVD simplifies capacitive touch-sensing designs considerably and reduces the related code by more than 40%."

## **Development Support**

Microchip's full suite of development tools support the PIC16LF1554/9 MCUs, including the MPLAB® X Integrated Development Environment (IDE), PICkit™ 3 (part # PG164130,

# \$44.95), MPLAB XC8 Compiler for 8-bit PIC MCUs and MPLAB® Code Configurator.

## **Pricing & Availability**

The <u>PIC16LF1554</u> MCUs are available now for sampling and production in 14-pin PDIP, TSSOP, SOIC and 16-pin QFN (4 x 4 x .9 mm) packages. The <u>PIC16LF1559</u> MCUs are available now for sampling and production in 20-pin PDIP, SSOP and QFN (4 x 4 x .9 mm) packages. Pricing starts at \$0.63 each, in 10,000-unit quantities.

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/get/08KC">http://www.microchip.com/get/08KC</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: <a href="http://www.microchip.com/get/6UM4">http://www.microchip.com/get/6UM4</a>
- Block Diagram: <a href="http://www.microchip.com/get/VXGF">http://www.microchip.com/get/VXGF</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/get/DUEA">http://www.microchip.com/get/DUEA</a>.

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Tags / Keywords: <u>ADC</u>, <u>CIP</u>, <u>PIC</u>, <u>CVD</u>, <u>Hardware CVD</u>, <u>17 Channels</u>, <u>mTouch</u>, <u>Microcontroller</u>, <u>MCU</u>, <u>8-bit</u>, <u>Dual ADC</u>

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