

# Microchip Technology Unveils Inductive Touch Sensing Analog Front End (AFE)

# Fully Integrated AFE Makes It Easier and More Cost-Effective to Develop Inductive Touch Sensing User Interfaces

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced from the Sensors Expo in Chicago the MCP2036 Analog Front End (AFE) for inductive touch-sensing applications. Complementing the Company's royalty-free mTouch(TM) Inductive Touch-Sensing Solutions, the fully-integrated MCP2036 AFE works with almost any 8-, 16- or 32-bit PIC<sup>(R)</sup> microcontroller (MCU) or dsPIC<sup>(R)</sup> Digital Signal Controller (DSC), making it even easier and more cost-effective for designers to enhance user interfaces with inductive touch-sensing technology. This inductive-touch AFE includes a multiplexer, a frequency mixer, an amplifier, a driver, and a voltage reference, which drastically lowers component count and reduces design size and cost. Additionally, the AFE can be easily configured for a variety of applications in the appliance, industrial and automotive markets, among others.

Inductive touch sensing's fundamental operating principles enable it to work through a front panel, such as plastic, stainless steel or aluminum. The technology also works through thick gloves and on surfaces where liquids are present. These characteristics make inductive touch sensing suitable for applications in the appliance market because of the possibility of a stainless steel front panel; the industrial market because of the technology's robustness; and the automotive market because of the technology's sleek aesthetics and ability to reduce accidental-touch triggers.

"Microchip's inductive-touch technology provides unique capabilities that complement our capacitive touch-sensing products," said Steve Drehobl, vice president of Microchip's Security, Microcontroller and Technology Development Division.

Drehobl continued, "With the MCP2036 AFE, we are continuing to make it easier and less expensive for engineers to make use of these unique features for applications requiring metal finishing and robust operation in wet environments."

## **Design Support**

Designers wanting to learn more about implementing touch sensing into their applications can visit Microchip's online touch-sensing design center at <a href="http://www.microchip.com/mtouch">http://www.microchip.com/mtouch</a>. This comprehensive Web site provides a host of application notes, source code and other technical resources related to developing touch-sensing designs.

MCP2036 AFE Packaging, Pricing & Availability

The MCP2036 AFE is available in a 16-pin, 4 mm x 4 mm QFN package, as well as 14-pin PDIP and SOIC packages. The device is priced starting at \$0.33 each, in 10,000-unit quantities. Samples are available today at <a href="http://sample.microchip.com">http://sample.microchip.com</a>. Volume-production quantities are also available today at <a href="http://www.microchipdirect.com">http://www.microchipdirect.com</a>.

For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <a href="http://www.microchip.com/mcp2036">http://www.microchip.com/mcp2036</a>.

### Microchip Customer Support

Microchip is committed to supporting its customers by helping design engineers develop products faster and more efficiently. Customers can access four main service areas at <a href="http://www.microchip.com">http://www.microchip.com</a>. The Support area provides a fast way to get questions answered; the Sample area offers evaluation samples of any Microchip device; microchipDIRECT provides 24-hour pricing, ordering, inventory and credit for convenient purchasing of all Microchip devices and development tools; finally, the Training area educates customers through webinars, sign-ups for local seminar and workshop courses, and information about the annual MASTERs events held throughout the world.

### About Microchip Technology

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller and analog semiconductors, 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 <a href="http://www.microchip.com">http://www.microchip.com</a>.

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\*\*Photo and Block Diagram available through editorial contact, or Flickr:

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