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Microchip Expands mTouch™ Sensing Portfolio with Turnkey Controllers for Multitouch, Proximity Detection and Haptic Feedback

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, analog, mixed-signal and Flash-IP solutions, today announced the expansion of its **mTouch™ Sensing Solutions** portfolio, with four turnkey controllers for multitouch projected-capacitive touchscreens and touchpads, proximity detection, and haptic touch feedback.

The **MTCH6301** is a turnkey projected-capacitive touch controller that makes it easy for designers to add popular multitouch and gesture interfaces—eliminating the learning curve and time of creating a design from scratch. This controller's sophisticated combination of Self and Mutual capacitive scanning for XY touchscreens and touchpads enables a host of features, including: single and dual-touch drawing, the reporting of 11 single-finger gestures and the detection of up to 10 touches. The MTCH6301 supports sensor designs with up to 13 x 18 channels and cover lenses up to 5 mm. Additionally, Microchip offers its free "Projected Capacitive Configuration Utility" with automatic tuning, enabling fast customization for different screen sizes and top-layer thicknesses. Microchip also provides designers with the firmware library, so they can make further customizations.

The **MTCH101** and **MTCH112** are turnkey controllers in small packages that provide an easy way to add robust proximity detection with a range of up to 8 inches. Additionally, these low-cost controllers maximize battery life with power consumption as low as 5 microamps. The MTCH101/112 also provide advanced noise avoidance and cancelling technology, and can operate standalone or connected to any microcontroller via I^2C™, making it easy to add touchless operation or user detection to any design. This is particularly useful for mobile devices that must reduce 3G/4G transmission power in the presence of a user, in order to pass the FCC's Specific Absorption Rate (SAR) test. Proximity detection also enables reduced system power consumption, by inducing sleep when no users are present.

The **MTCH810** is the first in a family of controllers based on Microchip's license of Immersion's TouchSense® haptic feedback technology. This controller enables the easy addition of haptic tactile feedback to any capacitive-touch button or slider interface. It integrates a single-channel haptic driver output with an industry-standard I^2C slave interface that connects to any MCU—all in a small, 8-pin package. Designers can differentiate their products while improving the user experience by utilizing any of the 14 different haptic effects that are pre-programmed into the MTCH810 controller, such as single vibrate and double vibrate.

"We're pleased to be working with Microchip to support the increasing demand for haptic-enabled touch experiences," said Immersion's Sr. Vice President of Sales & Marketing,

Dennis Sheehan. “By incorporating Immersion’s tactile feedback technology into Microchip’s touch solutions, OEMs and designers will be able to easily create more intuitive and compelling user interfaces with haptics.”

Pricing & Availability

The **MTCH6301** projected-capacitive controller is available in 44-pin QFN and TQFP packages, and pricing starts at $1.86 each, in 10,000-unit quantities. The **MTCH101**/**112** proximity-detection controllers start at $0.25 each, in 10,000-unit quantities. The MTCH101 is offered in a 6-pin, SOT-23 package, while the MTCH112 is packaged in the 8-pin SOIC and DFN. The **MTCH810** haptic-feedback controller is available in a 3x3 mm, 8-pin DFN package, and pricing starts at $0.87 each, in 10,000-unit quantities.

All of four of these controllers are available today for sampling, and volume production is expected in December. For additional information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip’s Web site at **http://www.microchip.com/get/LFNJ**. To purchase products mentioned in this press release, go to **microchipDIRECT** or contact one of Microchip’s authorized distribution partners.

Resources

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

- MTCH6301 Photo: **http://www.microchip.com/get/3HRU**
- MTCH810 Photo: **http://www.microchip.com/get/85BA**
- MTCH101/112 Photo: **http://www.microchip.com/get/RRU2**

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