

July 28, 2009



# Analog Resistive Touch-Screen Controllers for Embedded Markets Announced by Microchip Technology

## Universal Touch-Screen Controllers Provide Fully Processed, Reliable Touch Coordinates for a Variety of Consumer, Industrial and Medical Applications

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the [mTouch\(TM\) AR1000 Resistive Touch-Screen Controllers](#)--the embedded industry's most innovative analog resistive touch-screen controllers. Adding to Microchip's comprehensive portfolio of mTouch capacitive and inductive touch-sensing solutions, the AR1000 controllers further solidify Microchip's position of having the broadest touch-controller product offering in the semiconductor industry. By providing built-in decoding and advanced filtering, as well as controller-driven calibration, the controllers lower costs and reduce time to market for any embedded resistive-touch design.

Prior to the AR1000 controller, embedded systems implementing resistive-touch user interfaces were limited to basic Analog-to-Digital Converters (ADCs) that required extensive development and integration. The AR1000 controllers eliminate this type of trial-and-error engineering by providing sophisticated, proprietary touch-screen decoding algorithms that enable applications to receive fully processed, reliable touch coordinates. Combining Microchip's capabilities in microcontroller manufacturing with the recently acquired Hampshire Company's 15+ years of experience designing resistive touch-screen controllers, the AR1000 controllers enable low-risk product development, lower total system cost and shorter time to market for embedded resistive-touch designs. Popular due to its low cost, acceptance of finger, glove or stylus-pen inputs, and overall ease of manufacturing and integration, resistive touch-sensing technology is suitable for applications such as mobile phones, industrial automation, retail point-of-sale, gaming/entertainment, and automobile navigation systems.

"The AR1000 controllers give designers the flexibility they need to quickly and easily implement analog resistive touch-screen interfaces," said Steve Drehobl, vice president of Microchip's Security, Microcontroller and Technology Development Division. "The controllers meet the needs of today's touch solutions with low cost and reduced development time, while delivering the Microchip brand promises of quality, reliability and performance."

The AR1000 controllers provide universal 4-, 5- and 8-wire support, as well as support for SPI, I<sup>2</sup>C(TM) and UART communication interfaces. They are well suited for resistive-touch designs in the consumer (mobile communication devices, Personal Digital Assistants, Global Positioning Systems, media players, printers), medical (patient-monitoring equipment),

industrial (kiosks, touch-screen monitors, portable instruments, point-of-sale terminals), and automotive markets (navigation systems), among others.

## Development Support

Microchip also announced the [mTouch AR1000 Development Kit \(part # DV102011\)](#) today, which provides everything designers need to get started using AR1000 controllers. The kit includes the AR1000 development board, a 7" four-wire resistive touch screen, a [PICkit\(TM\) Serial Analyzer](#) and all necessary interface cables, as well as a CD containing technical documentation and all necessary software. The CD also includes an easy-to-use AR1000 configuration utility, which has a Graphical User Interface (GUI) that enables designers to test all user-configurable options with the AR1000 controllers. The kit is priced at \$99.99 and can be ordered today, at <http://www.microchipdirect.com>.

For additional design support, Microchip offers an online Touch-Sensing Solutions Design Center (<http://www.microchip.com/mtouch>). This comprehensive Web site provides a wide range of technical tools and resources that designers can use for developing capacitive, inductive and resistive touch-sensing applications--all in one, convenient location.

## Packaging, Pricing & Availability

The AR1000 series controllers are available in 20-pin QFN, SOIC and SSOP packages. Prices start at \$1.15 each, in 10,000-unit quantities. Samples are available today, at <http://sample.microchip.com>. Volume production quantities can be ordered today, at <http://www.microchipdirect.com>. For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <http://www.microchip.com/ar1000> or <http://www.microchip.com/mtouch>.

## 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 <http://www.microchip.com>. 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 <http://www.microchip.com>.

Note: The Microchip name and logo are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. mTouch is a trademark of Microchip Technology Inc. in the U.S.A. and other countries. All other trademarks mentioned herein are the property of their respective companies.

Photos and Block Diagram available through editorial contact, or Flickr:

Product Photo

<http://www.flickr.com/photos/microchiptechnology/3726603601/sizes//>

Block Diagram

<http://www.flickr.com/photos/microchiptechnology/3727413108/sizes//>

mTouch AR1000 Development Kit photo

<http://www.flickr.com/photos/microchiptechnology/3727419783/sizes//>

Tags / Keywords: Microchip, PIC microcontroller, dsPIC Digital Signal Controller, Hampshire Company, resistive touch, touch-screen, analog, user interface, MPLAB, AR1000, mTouch, PICkit, DV102011

RSS Feed for Microchip Product News: <http://www.microchip.com/RSS/recent-PRProduct.xml>

Source: Microchip Technology Inc.