

# Microchip and Digilent® Announce Embedded Motor Control Cerebot™ MC7 Development Kit for Academia and Hobbyists

Kit is Ideal for Academic and Hobbyist Embedded Motor-Control Applications

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller, analog and Flash-IP solutions, and Digilent<sup>®</sup>, Inc., today announced the availability of a Microchip dsPIC33 Digital Signal Controller (DSC)-based development kit. The Digilent<sup>®</sup> Cerebot™ MC7 Development Kit addresses the growing interest in embedded motor control from the academic and hobbyist markets, and is ideal for learning about microcontrollers and solving real problems. The kit includes a demonstration board that provides four half-bridge circuits, eight RC servo motor connectors, the ability to use Digilent Pmod™ peripheral modules, and an integrated programming/debugging circuit that is compatible with the free MPLAB<sup>®</sup> IDE. Example applications include university embedded-systems and communications classes, senior capstone projects, and numerous other academic and hobbyist projects.

A <u>video</u> demo of the kit can be viewed on YouTube at (feel free to embed on your Web site): http://www.microchip.com/get/8HF8.

The <u>Cerebot MC7</u> board features four half-bridge circuits that are rated for 24V at up to 5A. These half bridges can be used to control two Brushed DC motors, two bi-polar stepper motors, one Brushless DC motor, and one uni-polar stepper motor. An onboard 5V, 4A switching regulator with an input voltage up to 24V simplifies operation of the board, enabling it to operate from a single power supply in embedded applications such as robotics. The onboard dsPIC33 DSC features 128 KB internal Flash program memory and 16 KB internal SRAM, as well as numerous on-chip peripherals, including an advanced 8-channel motor-control PWM unit, an enhanced CAN controller, two Serial Peripheral Interfaces (SPIs), timer/counters, serial-interface controllers, an Analog-to-Digital Converter (ADC), and more. The Cerebot MC7 board combines two push buttons and four LEDs for user I/O, as well as connections for two I<sup>2</sup>C<sup>TM</sup> busses, one of which contains an integrated serial EEPROM device.

"The <u>Cerebot MC7</u> board is an ideal embedded motor control and general-purpose microcontroller experimentation platform for academics and hobbyists," said Clint Cole, president of Digilent Inc. "It's our latest entry in the engineering education market."

"We continue to see an interest in advanced robotic applications in the academic and hobbyist markets," said Cheri Keller, Sr. Manager of Microchip's Worldwide Academic Program. "The <u>Cerebot MC7</u> board is ideal for these types of applications, among many

others requiring the advanced motor-control peripherals found on Microchip's industry-leading dsPIC33 DSCs."

#### **Microchip Development Tool Support**

The free version of Microchip's <u>MPLAB IDE</u> can be downloaded today, from <u>http://www.microchip.com/get/XD44</u>. The <u>MPLAB C Compiler for dsPIC DSCs</u> can be downloaded today, from <u>http://www.microchip.com/get/U0DH</u>.

#### **Development Kit Pricing & Availability**

The Cerebot MC7 Development Kit is available today, for \$119. It can be purchased from Digilent at <a href="http://www.microchip.com/get/3N9U">http://www.microchip.com/get/3N9U</a> or from <a href="microchipDIRECT">microchipDIRECT</a> [<a href="http://www.microchip.com/get/DUMT">http://www.microchip.com/get/DUMT</a> (part # <a href="microchip.com/get/TDFD">TDGL007</a>)]. To learn more about <a href="microchip's Academic Program">Microchip's Academic Program</a>, visit <a href="microchip.com/get/TDFD">http://www.microchip.com/get/TDFD</a> or, to request a free evaluation sample, email Microchip's academic team at <a href="macademic@microchip.com">academic@microchip.com</a>.

### **About Digilent Inc.**

Digilent Inc. is a leader in providing academic and research solutions in high end electronics fields. Their headquarters are in Pullman, Wash., with offices in Taiwan, China and Romania. Currently, over 1,000 universities, training centers and research laboratories in more than 70 countries use Digilent products and services. For more information, please visit the <a href="Digilent Web site">Digilent</a> Web site (<a href="http://www.microchip.com/get/X63J">http://www.microchip.com/get/X63J</a>) or contact Joe Harris at <a href="joe@digilentinc.com">joe@digilentinc.com</a> or 509-334-6306.

## **About Microchip Technology**

Microchip Technology Inc. (NASDAQ: MCHP) is a leading provider of microcontroller, 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, Ariz., Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the <a href="Microchip Web site">Microchip Web site</a> (<a href="http://www.microchip.com/get/BTDP">http://www.microchip.com/get/BTDP</a>).

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Video (feel free to embed on your site): <a href="http://www.microchip.com/get/8HF8">http://www.microchip.com/get/8HF8</a>

High-res photo available through editorial contact or Flickr (feel free to publish): <a href="http://www.microchip.com/get/HVTT">http://www.microchip.com/get/HVTT</a>

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