

Starter Kit from Microchip Makes It Easy to Develop Low-Power USB Designs with Touch and Motion Sensing

Enables Engineers to Evaluate PIC18 XLP 8-Bit Microcontrollers for Less Than \$60

CHANDLER, Ariz.--(BUSINESS WIRE)-- Microchip Technology Inc. (NASDAQ: MCHP), a leading provider of microcontroller and analog semiconductors, today announced the <u>MPLAB Starter Kit for PIC18 Microcontrollers (part # DM180021)</u>, which contains all of the components, documentation, schematics, debugging and programming capabilities needed to evaluate the high-performance PIC18 8-bit microcontroller (MCU) family in low-power USB and touch-sensing applications. The kit includes a development board featuring a 44-pin PIC18F46J50 MCU with <u>nanoWatt XLP technology</u> for extreme low power, <u>mTouch(TM)</u> capacitive touch sensing, Bosch Sensortec <u>BMA150</u> accelerometer, 64 KB Flash program memory, and much more. This complete evaluation kit is available today at <u>http://www.microchipdirect.com</u>, allowing engineers to evaluate the performance and peripherals of the entire PIC18 family for less than \$60.

Hardware debugging and programming come integrated with the MPLAB Starter Kit for PIC18 Microcontrollers, meaning an additional debugger or programmer is not required. The kit is completely USB-powered, so a separate power supply does not need to be purchased. Pre-programmed touch-sensing code, as well as Microchip's free USB application stack and bootloader, eliminate the need for engineers to develop their own code. Additionally, the board includes demo application software that enables it to read from the memory card (MSD), or function as a USB mouse or joystick (HID), or simple COM port (CDC) using the free Microchip stacks. By simply scrolling through code options using capacitive-touch buttons, engineers can demonstrate the PIC18 MCUs with a MicroSD memory card, potentiometer, acceleration sensor, and OLED display--functions that are essential for a wide range of low-power applications.

The MPLAB Starter Kit for PIC18 Microcontrollers includes the Bosch Sensortec BMA150 digital triaxial accelerometer, which enables the PIC18 Starter Kit board to detect acceleration in 3 perpendicular axes for sensing the board's tilt and motion. The board ships with demo code that enables it to function as a USB mouse or joystick using the accelerometer. Acceleration on all three axes is used to compute the board tilt, which is then converted to movement of the mouse cursor on the X and Y axes. The accelerometer allows the cursor to move slowly when the board is tilted a small amount, and quickly when there is a steeper tilt.

"Our BMA150's small footprint and very low current consumption provides an ideal complement to the PIC18 XLP MCU," according to Jim Baka, Bosch Sensortec Sales Manager for North America. "We are excited about the opportunity to offer our customers a complete system optimized for low power, while leveraging the rich development software suite of Microchip's PIC18 Starter Kit. Building upon the trend of expanded user interface

and extended battery life, engineers now have a powerful tool combining touch and motion in a single platform."

"An increasing number of portable embedded applications require low power, touch sensing and USB communication," said Derek Carlson, vice president of Microchip's Development Tools Group. "The MPLAB Starter Kit for PIC18 Microcontrollers is a complete development system with breakthrough affordability, integrated features and remarkable ease of use."

Pricing & Availability

The <u>MPLAB Starter Kit for PIC18 Microcontrollers (part # DM180021)</u> is priced at \$59.98 and can be purchased today, at <u>http://www.microchipdirect.com</u>. For further information, contact any Microchip sales representative or authorized worldwide distributor, or visit Microchip's Web site at <u>http://www.microchip.com/pic18starter</u>.

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

Note: The Microchip name and logo, and MPLAB, 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.

Photo available through editorial contact, or Flickr: <u>http://www.flickr.com/photos/microchiptechnology/3790168468/sizes/l/</u>

Video Available through YouTube or editorial contact at the following link. Please feel free to embed this video onto your Web site: <u>http://www.microchip.com/get/400386228935185</u>

Tags / Keywords: PIC18, DM180021, Starter Kit, USB, touch sensing, mTouch, Microchip, development tools, 8-bit, MCUs, accelerometer, Bosch, BMA150, XLP, nanoWatt, low power

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

Source: Microchip Technology Inc.