#### Americas

Atlanta - 678-957-9614 Boston - 774-760-0087 Chicago - 630-285-0071 Cleveland - 216-447-0464 Dallas - 972-818-7423 Detroit - 248-538-2250 Kokomo - 765-864-8360 Los Angeles - 949-462-9523 Phoenix - 480-792-7200 Santa Clara - 408-961-6444 Toronto - 905-673-0699 Asia/Pacific

Europe

Austria - Weis - 43-7242-2244-39

France - Paris - 33-1-69-53-63-20

Spain - Madrid - 34-91-708-08-90

UK - Wokingham - 44-118-921-5869

Italy - Milan - 39-0331-742611

Germany - Munich - 49-89-627-144-0

Netherlands - Drunen - 31-416-690399

08/04/10

Denmark - Copenhagen - 45-4450-2828

Australia - Sydney - 61-2-9868-6733 China - Beijing - 86-10-8528-2100 China - Chengdu - 86-28-8665-5511 China - Chongging - 86-23-8980-9588 China - Hong Kong SAR - 852-2401-1200 China - Nanjing- 86-25-8473-2460 China - Qingdao - 86-532-8502-7355 China - Shanghai - 86-21-5407-5533 China - Shenyang - 86-24-2334-2829 China - Shenzhen - 86-755-8203-2660 China - Wuhan - 86-27-5980-5300 China - Xiamen - 86-592-2388138 China - Xian - 86-29-8833-7252 China - Zhuhai - 86-756-3210040 India - Bangalore - 91-80-3090-4444 India - New Delhi - 91-11-4160-8631 India - Pune - 91-20-2566-1512 Japan - Yokohama - 81-45-471-6166 Korea - Daegu - 82-53-744-4301 Korea - Seoul - 82-2-554-7200 Malaysia - Kuala Lumpur - 60-3-6201-9857 Malaysia - Penang - 60-4-227-8870 Philippines - Manila - 63-2-634-9065 Singapore - 65-6334-8870 Taiwan - Hsin Chu - 886-3-6578-300 Taiwan - Kaohsiung - 886-7-213-7830 Taiwan - Taipei - 886-2-2500-6610 Thailand - Bangkok - 66-2-694-1351



Microchip Technology Inc. • 2355 West Chandler Blvd. • Chandler, AZ 85224-6199

#### www.microchip.com

The Microchip name and logo, the Microchip logo, and MPLAB are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries. All other trademarks mentioned herein are property of their respective companies.

© 2011, Microchip Technology Incorporated, Printed in the U.S.A. All Rights Reserved. 08/10

## **PIC32 USB Starter Kit II Information Sheet**

The PIC32 USB Starter Kit II (DM320003-2) provides a low-cost method for the development and testing of USB Host and Device applications with PIC32 devices. This evaluation kit includes the PIC32 USB Starter Kit II board, standard A to mini-B USB cable for the debugger, standard A to micro-B cable for the USB application development, three user-programmable LEDs and three push button switches.

# Installing MPLAB<sup>®</sup> IDE and C Compilers

The MPLAB Integrated Development Environment (IDE) should be installed prior to using the PIC32 USB Starter Kit II. While MPLAB IDE provides the assembler tools for development, the Microchip demonstration code requires installation of a C compiler. Microchip's MPLAB C Compiler seamlessly integrates into MPLAB IDE. Both the MPLAB IDE and MPLAB C Compiler are free (see the note below) and are available for download at www.microchip.com/Compilers, respectively.

**Note:** Standard Evaluation (Free) – All optimization levels are enabled for 60 days, but then revert to optimization level 1 only.

### Microchip Demonstration Code and More Information

For the free Microchip demonstration code and more information, please visit the PIC32 USB Starter Kit II page at: www.microchip.com. From the Design menu, click **Development Tools**. Then, from the Starter Kits menu, click **Starter Kits**, and then click **PIC32 USB Starter Kit II**. From the downloads section, select **PIC32 USK Port I/O Demo**.

## Running the PIC32 USK Port I/O Demonstration Code

After downloading and installing the Microchip development tools, please use the following procedure to run the included Port\_IO demonstration code:

- 1. Load the Microchip Port\_IO demonstration code into MPLAB by double clicking the \*.mcp project file.
- Connect the mini-B USB cable to the mini-B debugger port on the PIC32 USB Starter Kit II board. Then, connect the other end of the USB cable to the USB port on the development PC.

Note: If prompted, the driver for PIC32 USB Starter Kit II is located at: <installation\_dir>\Microchip\MPLAB IDE\PIC32MXSKit\Drivers.

- Choose the PIC32 Starter Kit debugger tool in MPLAB IDE by selecting <u>Debugger ></u> <u>Select Tool > PIC32 Starter Kit</u>.
- 4. Build the project by selecting <u>Project > Build All</u>.
- Download your code into the evaluation board microcontroller by selecting <u>Debugger ></u> <u>Programming> Program All Memories</u>.
- Run the demonstration code that was previously downloaded by selecting <u>Debugger ></u> <u>Run</u>.

Note: For more details, refer to the README.txt file in the demonstration folder.