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Machine-to-Machine (M2M) PICtail[™] Plus Daughter Board Information Sheet

Thank you for purchasing the Microchip M2M PICtail[™] Plus Daughter Board. This information sheet highlights some important details that will help you successfully use the board as quickly as possible.

Getting Started

The M2M demonstration requires the use of the Multimedia Expansion Board (MEB) (P/N: DM320005) and a Microchip starter kit. A complete list of supported starter kits and information on software and documentation is available from the M2M webpage, which can be accessed by visiting www.microchip.com and browsing to *Development Tools > PIC32 Boards and Kits*.

Installing MPLAB[®] IDE and C Compilers

Before you use the M2M PICtail Plus Daughter Board, it is important that you have installed the Microchip MPLAB Integrated Development Environment (IDE). MPLAB IDE provides the assembler tools you will use for development. You will also need a C compiler for the TCP/IP demonstration code. The MPLAB C Compiler seamlessly integrates into MPLAB IDE. Both the MPLAB IDE and C Compiler are free (see the note below) and are available for download at http://www.microchip.com/MPLAB and http://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.

Running the Demonstration:

- 1. Make sure MPLAB IDE and the C32 compiler are installed.
- 2. Download a M2M demonstration project file for the desired Microchip starter kit from the M2M webpage.
- 3. Connect the Multimedia Expansion Board (MEB) to a supported starter Kit.
- 4. Connect the daughter board to the MEB Board.
- 5. Connect the daughter board power cable to the MEB power input.
- 6. Connect the 9V power supply to the daughter board.
- 7. Connect starter kit to a USB port on the development computer using the USB cable provided.
- 8. Using MPLAB IDE, open the M2M demonstration project that was previously downloaded.
- Choose the PIC32 Starter Kit debugger tool in MPLAB IDE by selecting <u>Debugger > Select</u> <u>Tool</u>, and then click **PIC32 Starter Kit**.
- 10. Build the project by selecting <u>Project > Build All</u>.
- 11. Download your code into the evaluation board microcontroller by selecting <u>Debugger ></u> <u>Programming > Program All Memories</u>.
- 12. Run the demonstration code previously downloaded by selecting <u>Debugger > Run</u>.
- 13. The Microchip M2M demonstration code previously programmed into the starter board starts with a button labeled "Next" displayed on the main screen, which must be touched to initialize the GSM, GPRS, and GPS features. Touch calibration is required if this is the first use of the code.

Your Multimedia Expansion Board and M2M PICtail Plus Daughter Board should now be up and running.

Note: For detailed instructions, please refer to the Microchip application note AN1373 *"Using PIC32 MCUs to Develop GSM/GPRS/GPS Solutions".*