Americas

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Asia/Pacific

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China - Chongging - 86-23-8980-9588

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Microstick II Information Sheet

The Microstick II is designed to provide an easy to use, economical development environment for 16-bit and 32-bit microcontrollers. The board includes an integrated debugger/programmer, a socket for the device under test and pins that facilitate insertion into a prototyping board for extremely flexible development. Microstick II is designed to support any 16- or 32-bit Microchip 28-pin SPDIP packaged MCU that matches the power and debugger/programmer interface pins shown on the enclosed schematic.

Installing MPLAB® IDE and C Compilers

MPLAB® Integrated Development Environment (IDE) should be installed prior to using the Microstick. This board is designed to run MPLAB IDE version 8.76 or later. While MPLAB IDE provides assembler tools for development, most of the code examples provided for Microchip devices are written in the C language and require a C compiler to be installed. Microchip's 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.

Code Examples and More Information

For code examples and more information, please visit the Microstick II product page at: http://www.microchip.com/microstick.

Running and Debugging Applications

After downloading the code examples and installing the development tools, please use the following procedure to build, run and debug your software:

- 1. If using MPLAB 8.xx IDE, do the following; otherwise, skip to step 2:
 - a) Select *Programmer* > *Select Tool*, and then choose **Starter Kit on Board**.
 - b) Build the project by selecting *Project > Build All*.
 - c) Download your code to the DSC or MCU by selecting *Programmer > Program*.
- 2. If using MPLAB X IDE, do the following:
 - a) Select Run > Set Project Configuration > Customize.
 - b) Under Hardware Tools, select Starter Kits (PKOB), and then click Apply followed by OK.
 - c) Select <u>Run > Run Project</u> to download the code to the target device, and then click the **Reset Release** icon.

For more information on building, running and debugging your application, refer to the MPLAB help.

Schematics VDD VDD MCLR) VDD TP₁ 10k J6 C20 C18 0.1uF 0.1uF GND PIN21 RXD 28 28 J3 PIN22_TXD 2 27 27 PIN2 3 26 26 PIN26 PIN3 LED Jumper 25 **PGEDA** PIN25 RED 5 24 **PGECA** PIN24 6 23 PIN6 PIN23 R41 Socket 7 22 PIN7 PIN22_TXD 470R 8 21 8 21 PIN21_RXD 9 9 20 PIN9 VCAP C19 10 10 19 19 PIN10 10uF 11 11 18 PIN11 PIN18 17 12 PIN17 PIN12 13 13 16 16 PIN16 VDD 15 14 PGEDB **PGECB Breadboard Headers** PGED_MASTER VDD Debug C17 USB_D-PGEC_MASTER 0.1uF Circuit USB_D+ $\langle \overline{\text{MCLR}} \rangle$ S1 PGECA PGEC_MASTER PGECB **PGEDA** PGED_MASTER PGEDB