

Microstick for dsPIC33F and PIC24H Devices

Overview

The Microstick for dsPIC33F and PIC24H⁽¹⁾ devices is designed to provide an easy to use, economical development environment for 16-bit digital signal controllers and 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.

Note 1: Supported devices are dsPIC33FJ64MC802, dsPIC33FJ128MC802, PIC24HJ64GP502, and PIC24HJ128GP502.

Getting Started

Everything you need to get started can be found at <http://www.microchip.com/microstick>.

Installing MPLAB® IDE and C Compilers

MPLAB® Integrated Development Environment (IDE) should be installed prior to using Microstick for dsPIC33F and PIC24H Devices. This board is designed to run with MPLAB IDE version 8.50 or later. While MPLAB IDE provides assembler tools for development, most of the code examples provided for Microchip devices are written in 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⁽¹⁾ and available for download at: <http://www.microchip.com/MPLAB>.

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

Code Examples and More Information

For code examples and more information, please visit the *Microstick for dsPIC33F and PIC24H Devices* product page at: <http://www.microchip.com/microstick>

Running and Debugging Applications

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

1. Load the code example into MPLAB IDE by double clicking the *.mcw project file.
2. Inform MPLAB IDE what device is plugged in to the Microstick Board by selecting the appropriate device from the Configure>Select Device>Device menu.
3. Build the project by selecting Project>Build All.
4. Connect the Microstick Board to the development computer via a USB cable.
5. Enable the MPLAB IDE debugger by selecting Debugger>Select Tool>Starter Kits.
6. Download your code into a device on the Microstick Board by selecting Debugger>Program.
7. Run the application previously downloaded by selecting Debugger>Run.

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

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
Indianapolis - 317-773-8323
Los Angeles - 949-462-9523
Phoenix - 480-792-7200
Santa Clara - 408-961-6444
Toronto - 905-673-0699

Europe

Austria - Wels - 43-7242-2244-39
Denmark - Copenhagen - 45-4450-2828
France - Paris - 33-1-69-53-63-20
Germany - Munich - 49-89-627-144-0
Italy - Milan - 39-0331-742611
Netherlands - Drunen - 31-416-690399
Spain - Madrid - 34-91-708-08-90
UK - Wokingham - 44-118-921-5869

Asia/Pacific

Australia - Sydney - 61-2-9868-6733
China - Beijing - 86-10-8528-2100
China - Chengdu - 86-28-8665-5511
China - Chongqing - 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

02/18/11



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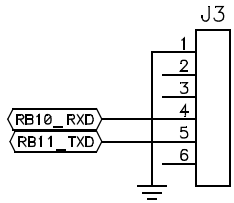
DS51897C



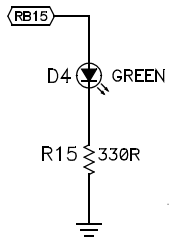
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Board Schematic

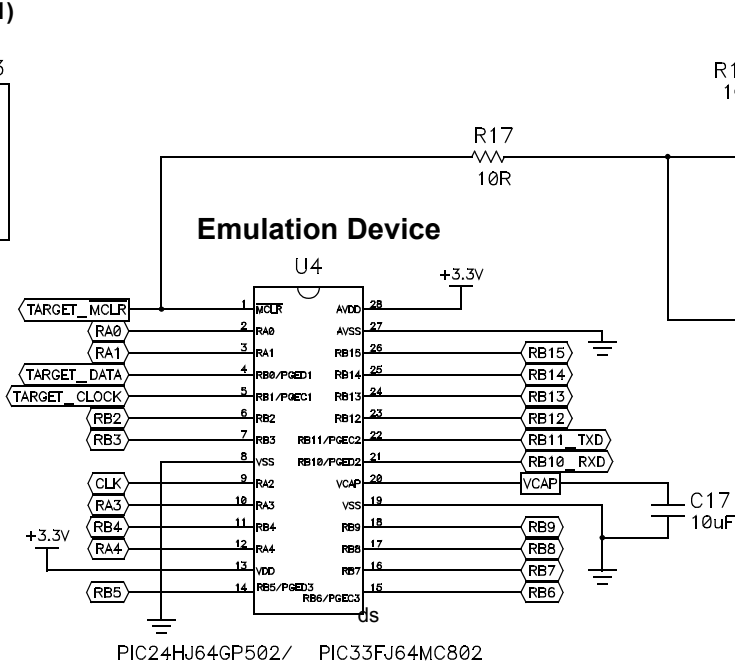
Optional Header⁽¹⁾



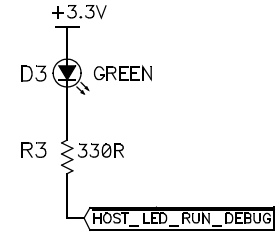
User LED



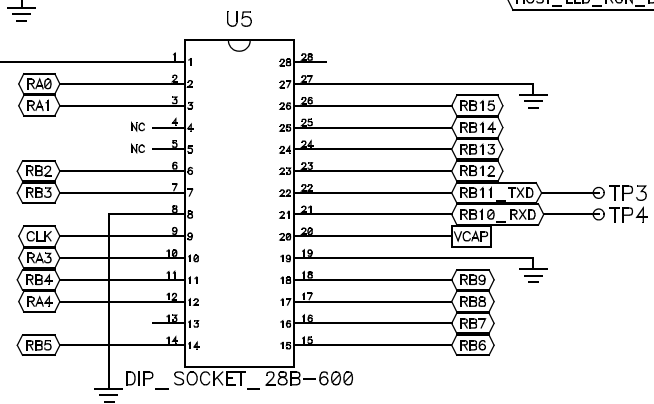
Emulation Device



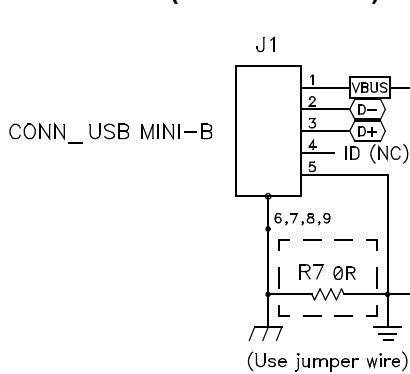
Status LEDs



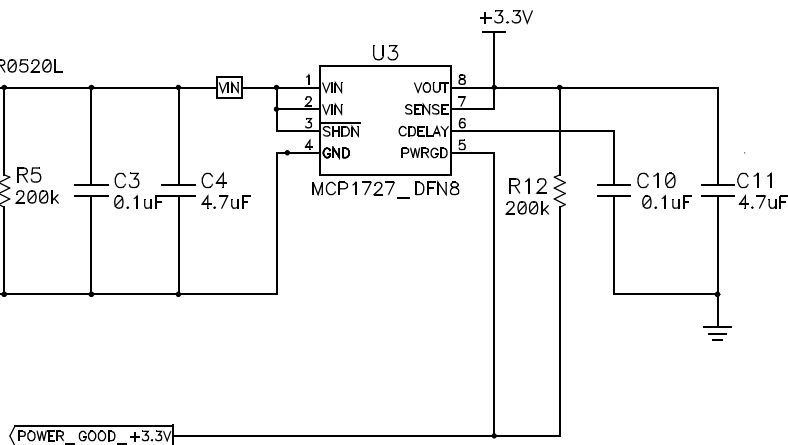
Socket



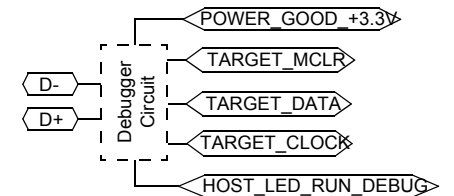
USB Interface (BUS Powered)



3.3V LDO Linear Regulator



Debugger Circuit



Note 1: The PGEC2/PGED2 pins can be used for debugging via J3 instead of the default PGEC1/PGED1 pins via the USB connection.