For More Information

The complete schematic and user's guide for the PICDEM PIC18 Explorer Board, as well as the data sheet for the PIC18F66K80 family of microcontrollers are available on the Microchip web site: **http://www.microchip.com/PIC18K**

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
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

Europe
Austria - Weis - 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

08/04/10

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

DS51925A

PIC18F66K80 Plug-in Module for PICDEM™ PIC18 Explorer Board

Overview

The PIC18F66K80 Plug-in Module (PIM) is an accessory to the PICDEM™ PIC18 Explorer Board that allows users to easily experiment with the PIC18F66K80 family of microcontrollers. PIC18F66K80 is the superset member of the family and this PIM can be used to evaluate and develop with the PIC18F66K80 products. The PIM takes the place of the on-board PIC18F8722 device. This enables users to quickly evaluate the new PIC18FK Flash devices without having to buy a completely new demo board.

Getting Started with the PIM

1. Make sure the on-board PIC18F66K80 is programmed to allow the $\overline{\text{MCLR}}$ Reset pin to function as a Reset pin. If the $\overline{\text{MCLR}}$ is configured to be used for general purpose I/O, the on-board PIC18F66K80 may interfere with PIM usage, even when the board is switched to ICE mode.
2. Verify that the PICDEM PIC18 Explorer Board is not powered.
3. Set switch, S4, to the "ICE" position. This will hold the on-board PIC18F8722 in Reset, allowing the PIM to function instead.
4. Line up the PIM so its 3-pin female header aligns with the 3-pin riser on the PICDEM PIC18 Explorer Board, then plug the PIM into the demo board.
5. Apply power to the demo board. Be sure that V_{DD} is correct for the device being used (5V for PIC18F66K80). If it is not correct, disconnect power and check that the 3-pin female header is aligned properly with the demo board's 3-pin riser.

Changes to PICDEM PIC18 Explorer Board Configuration

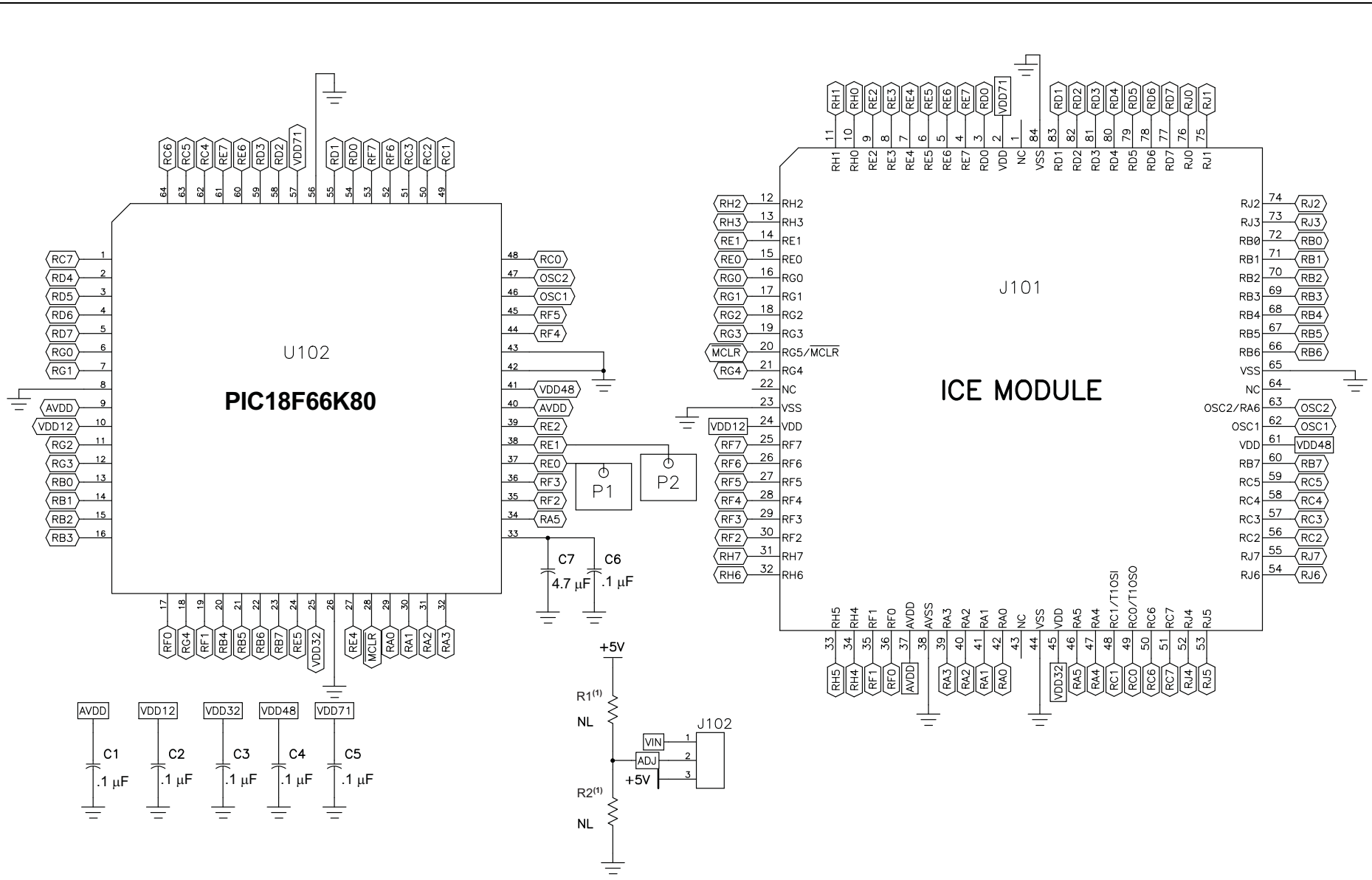
The difference of available I/O pins between the PICDEM PIC18 Explorer Board's PIC18F8722 device and the PIM's PIC18F66K80 device causes some changes in the operation of the PICDEM PIC18 Explorer Board.

1. Most I/O lines connected to the PICDEM PIC18 Explorer Board's PICtail™ connector, J3/J5/J7/J11 silkscreen, will map 1:1 with PIC18F66K80 I/O pins.
2. The UART pinout is different on the PIC18F66K80 compared to other PIC18 devices. In order to use serial communication through the serial port on the PIC18 Explorer Board, pin, RG0, must be connected to RC7 and pin, RG1, must be connected to RC6. This can be done with two jumpers connecting the two pins using the two debug headers on the Explorer Board.
3. The PIC18F66K80 can operate between 1.8V and 5V. The supplied voltage can be adjusted by populating the PIM board's R101 and R102 resistors. For more detailed information on varying the device voltage, see *"PICDEM™ PIC18 Explorer Demonstration Board User's Guide"*, **Section 2.3.3 "Calculating Other V_{DD} Values"**.

Demonstration Firmware

The PIM is programmed with firmware demonstrating basic features on the PIC18 Explorer Board. The source for the PIC18F66K80 PIM demo code may be downloaded from the Microchip web site.

Board Schematic



Note 1: Not installed by default.