Using MPLAB® ICD 3
In-Circuit Debugger

1. Install the Latest Software
   Install the MPLAB® IDE software onto your PC using the MPLAB IDE CD-ROM or download the software from the MPLAB IDE page of the Microchip web site (www.microchip.com/MPLAB). Check the latest release notes for additional information.

2. Configure PC USB Communications
   Connect the MPLAB ICD 3 circuit debugger to a PC USB port via a USB cable. If the drivers do not install automatically, then install the drivers as instructed in C:\Program Files\Microchip\MPLAB IDE\ICD 3\Drivers\ddri.htm. For information on reserved resources used by the debugger, see the MPLAB ICD 3
   instruction. Note: If a USB hub is used, the hub must be powered with its own power supply.

3. Build Your Project
   1. Launch MPLAB IDE.
   2. Load your project or use the Project Wizard to create a new one.
   3. Build your project based on your configurations and options.
   4. Select the MPLAB ICD 3 as either a debugger (Debugger>Settings>ICD 3) or as a programmer (Programmer>Select Tool>ICD 3).
   5. From that menu, select “Settings”, “Recommended Settings” and “Status”.

4. Connect to Target Device
   1. Disconnect the debugger from the target and PC.
   2. Connect the ICD 3 Test Interface Board to the debugger using the modular cable. If the drivers do not install automatically, then install the drivers as instructed in C:\Program Files\Microchip\MPLAB IDE\ICD 3\Drivers\ddri.htm. Note: If a USB hub is used, the hub must be powered with its own power supply.
   3. Connect the debugger to the PC.
   4. Connect the ICD 3 Test Interface Board to the debugger using the modular cable. If the drivers do not install automatically, then install the drivers as instructed in C:\Program Files\Microchip\MPLAB IDE\ICD 3\Drivers\ddri.htm. Note: If a USB hub is used, the hub must be powered with its own power supply.

5. Program and Debug
   1. Program your device.
   2. As a programmer, MPLAB ICD 3 will automatically run your code. As a debugger, you can run, halt, single step and set breakpoints in your code.

   ICD 3 Test Interface Board
   Use the ICD 3 Test Interface Board to verify that the MPLAB ICD 3 is functioning properly:
   1. Disconnect the debugger from the target and PC.
   2. Connect the ICD 3 Test Interface Board to the debugger using the modular cable.
   3. Connect the debugger to the PC.
   4. Select “MPLAB ICD 3” on either the Debugger or Programmer menu in MPLAB IDE.
   5. From that menu, select “Settings”, “Recommended Settings” and “Status”.

Recommended Settings

- Osc bits set properly
- Run
- Power
- Board
- BOD
- JTAG
- A/V
- Programmer
- Professional

For information on reserved resources used by the debugger, see the MPLAB ICD 3 User’s Guide (DS51766) for more component and setting information.

Reserved Resources

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