

MPLAB® REAL ICE™ JTAG ADAPTOR INSTRUCTION SHEET

The MPLAB REAL ICE JTAG Adaptor (AC244007) facilitates JTAG communication between the MPLAB REAL ICE In-Circuit Emulator and the target board. The kit contains a JTAG adaptor board, ribbon cable, and this instruction sheet.

JTAG Support

- The JTAG adaptor board is supported on MPLAB X IDE 1.60 and above.
- The JTAG adaptor board supports all Microchip PIC32MX devices.
- Not all debug features are available when using JTAG. View the Debug menu to see which functions are active and which are not available (grayed).

Switching from Standard to JTAG Communications

To switch the hardware:

1. While connected to the target using Standard Communications, erase the target device. You may need to add “Erase Device Memory Main Project” to a toolbar using *View>Toolbars>Customize*.

Note: The target device **MUST BE ERASED** before switching from Standard to JTAG communications.

2. Power down the target board.
3. Disconnect the Standard Communications cable from the target, disconnect the USB cable from the emulator, and unplug the Standard Driver Board from the emulator.
4. Connect one end of the ribbon cable to the connector on the JTAG adaptor board (it should plug in only one way) and insert the JTAG adaptor board into the emulator driver board slot.
5. Connect the other end of the ribbon cable to the connector on a target board, such as the Microchip Explorer 16 development board. The plug is keyed to fit only one way.
6. Connect the USB cable to the emulator and power the target board.

To set up MPLAB X IDE for JTAG operation:

1. Select *File>Project Properties*. In the Project Properties dialog, click on your desired configuration, e.g., “Conf: [default]”.
2. Click the down arrow on the “Supported Plugin Board” drop-down box and select “JTAG Driver Board”. Click **OK** to accept the setup.

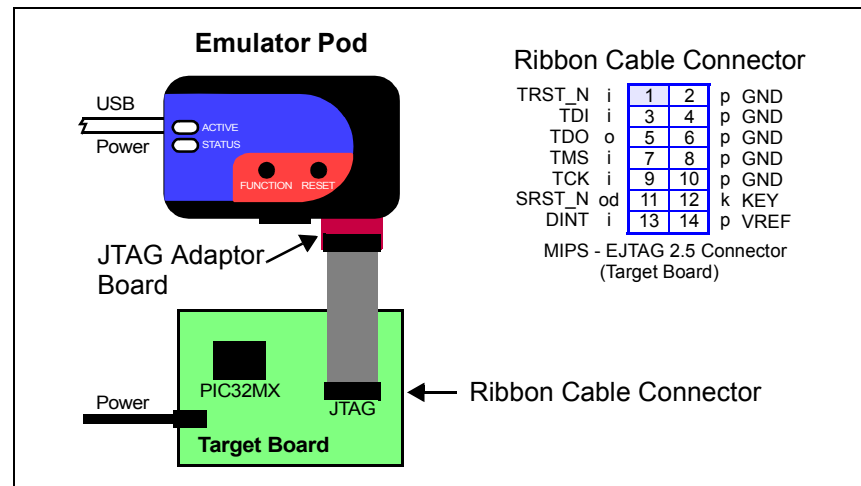
Switching from JTAG to Standard Communications

To switch the hardware, reverse the previous steps under “To switch the hardware”, but do not erase the target device.

Note: The target device **DOES NOT NEED TO BE ERASED** before switching from JTAG to Standard Communications.

To set up MPLAB X IDE for Standard Communication operation, repeat the previous steps under “To set up MPLAB X IDE for JTAG operation”, except select “None” instead of “JTAG Driver Board” from the drop-down box.

FIGURE: JTAG ADAPTOR BOARD CONNECTIONS



Documentation

For the latest information on this board, see the “Emulator Accessories” chapter of the “MPLAB REAL ICE In-Circuit Emulator User’s Guide for MPLAB X IDE” (DS52085) or online help file.

MPLAB® REAL ICE™ JTAG ADAPTOR INSTRUCTION SHEET

The MPLAB REAL ICE JTAG Adaptor (AC244007) facilitates JTAG communication between the MPLAB REAL ICE In-Circuit Emulator and the target board. The kit contains a JTAG adaptor board, ribbon cable, and this instruction sheet.

JTAG Support

- The JTAG adaptor board is supported on MPLAB X IDE 1.60 and above.
- The JTAG adaptor board supports all Microchip PIC32MX devices.
- Not all debug features are available when using JTAG. View the Debug menu to see which functions are active and which are not available (grayed).

Switching from Standard to JTAG Communications

To switch the hardware:

1. While connected to the target using Standard Communications, erase the target device. You may need to add “Erase Device Memory Main Project” to a toolbar using *View>Toolbars>Customize*.

Note: The target device MUST BE ERASED before switching from Standard to JTAG communications.

2. Power down the target board.
3. Disconnect the Standard Communications cable from the target, disconnect the USB cable from the emulator, and unplug the Standard Driver Board from the emulator.
4. Connect one end of the ribbon cable to the connector on the JTAG adaptor board (it should plug in only one way) and insert the JTAG adaptor board into the emulator driver board slot.
5. Connect the other end of the ribbon cable to the connector on a target board, such as the Microchip Explorer 16 development board. The plug is keyed to fit only one way.
6. Connect the USB cable to the emulator and power the target board.

To set up MPLAB X IDE for JTAG operation:

1. Select *File>Project Properties*. In the Project Properties dialog, click on your desired configuration, e.g., “Conf: [default]”.
2. Click the down arrow on the “Supported Plugin Board” drop-down box and select “JTAG Driver Board”. Click **OK** to accept the setup.

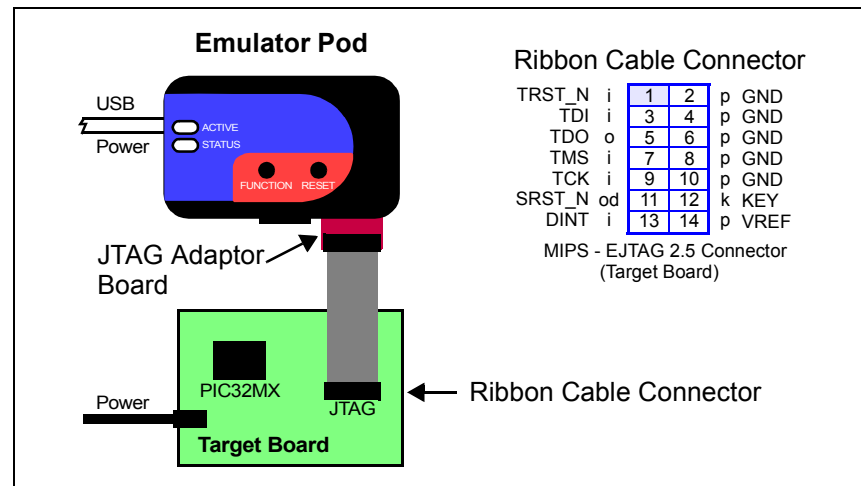
Switching from JTAG to Standard Communications

To switch the hardware, reverse the previous steps under “To switch the hardware”, but do not erase the target device.

Note: The target device DOES NOT NEED TO BE ERASED before switching from JTAG to Standard Communications.

To set up MPLAB X IDE for Standard Communication operation, repeat the previous steps under “To set up MPLAB X IDE for JTAG operation”, except select “None” instead of “JTAG Driver Board” from the drop-down box.

FIGURE: JTAG ADAPTOR BOARD CONNECTIONS



Documentation

For the latest information on this board, see the “Emulator Accessories” chapter of the “MPLAB REAL ICE In-Circuit Emulator User’s Guide for MPLAB X IDE” (DS52085) or online help file.