

4 CCStudio Setup

CCStudio v3.3

A.) Importing a Pre-defined Setup or Factory Board

1. Run CCStudio Setup.
2. Find and select, **xds100 emulator**, from the “platform” pull down menu located at the top of the middle CCSetup window. (this will list only the **USB100** controller imports).
3. You can narrow down the import options between all supported DSP families by using the “device” pull down (i.e. select “F28xx” to list all TMS320F28xx device imports).
4. When you find your target, or an import that closely matches your target, highlight the entry and choose the option to “add it to your system”.
5. If this import setup does not completely match your target, you can edit the properties manually, such as to add a GEL file specific to you H/W.
6. When finished, save the setup and start CCStudio.

B.) Using Create Board

1. Run CCStudio Setup.
2. Select the “Create Board” tab and drag the **TI XDS100 USB Emulator Connection** to **My System** on the left. This will prompt you for a connection name. You can enter any string you want, but at a minimum, it typically includes the emulator name and target DSP or board name.
3. Now, highlight the new connection name you added under **My System** and add the available processor(s) shown in the middle window to match your hardware.
4. Save your setup and start CCS.

CCStudio v4.0

Follow this link for more details on XDS100 setup using CCStudio v4:

<http://tiexpressdsp.com/index.php/CCSv4>.

QUICK START GUIDE

Blackhawk™ USB100 JTAG Emulator (USB100)

Installation Requirements

- PC or Notebook computer with at least one free USB v1.1 or v2.0 port.
- Windows® 2000/XP/Vista Operating Systems (32 or 64-bit versions).
- Texas Instruments Code Composer Studio Version 4
For CCStudio 3.3, Service Release 12[†] or later is required.

Inventory of Items Included

1. Blackhawk **USB100** Emulator.
2. USB 2.0 Compliant Cable.
3. Warranty and Product Registration Cards.
4. Quick Start Guide.

Other Items Required

1. Target Board System — a self-powered board with a TI DSP and compatible JTAG header connection conforming to IEEE 1149.1 Standard.
2. Copy of Code Composer Studio Version 3.3 SR12[†] or later.

IMPORTANT ENVIRONMENTAL CONSIDERATIONS

This equipment is designed to be operated under the following environmental conditions:

Temperature between 0°C – 55°C. Relative Humidity of 20% - 70% non-condensing.

Operation of the unit outside of the above range may affect structural and mechanical integrity and cause permanent damage.

Caution is necessary to minimize ESD (Electro-static Discharge) which can damage electronic components. Use in a controlled environment where ESD materials and practices are employed is highly recommended.

[†] CCStudio v3.3 SR12 is available for download from the TI web site via CCS update advisor or from this link: https://www-a.ti.com/downloads/sds_support/CCSv3.3ServiceReleases.htm.

1 Emulation Driver Installation

CCStudio v3.3 SR 12 or later

For other CCS 3.3 versions see this link:

http://tiexpressdsp.com/wiki/index.php?title=XDS100#XDS100_Installation_Instructions

The **USB100** Emulator emulation drivers that are needed by Windows and CCStudio for operation, are packaged with CCStudio SR12. SR12 can be obtained using one of the following two methods.

1. Use the CCStudio Update Advisor, Check for Updates feature.
2. Use this link (*requires a my.TI login*):

https://www-a.ti.com/downloads/sds_support/CCSv3.3ServiceReleases.htm

CCStudio v4

Drivers are installed as part of CCStudio v4. For more information on CCStudio v4, please see following link:

<http://tiexpressdsp.com/index.php/CCSv4>

2 Hardware Installation

WARNING

Be careful to connect interface connector with the correct orientation. Pin 1 on the interface cable should match Pin 1 on the DSP system connector. The JTAG cable assembly features a "keyed" connector to minimize the chance of error.

Do not force connector into position. Forcing them may damage the connector or the interconnected boards and systems.

1. Attach the USB cable to an available USB port on the PC.
2. Then attach the other end of the USB cable (Female-A connector) to the USB-A connector of the **USB100** Emulator (see Figure 1).
3. Follow the Plug and Play installation for the Windows device driver (see section 3 on USB PnP Installation for more information).
4. You can now attach the emulator's JTAG cable assembly (the 14-pin, 2x7 JTAG connector or the 20-pin, 2x10 JTAG connector shown in figure 1) to the corresponding header on the target board. Make sure the target board is **not powered** when connecting!
5. Setup and start Code Composer Studio (see section 4 on CCStudio Setup).

USB PnP Installation 3

Windows 2000/XP/Vista

1. If not already connected, connect the USB cable to the computer and to the **USB100** emulator.
2. Follow the Windows "Found New Hardware" wizard prompts.
3. You can select the "automatic" option for locating drivers.
4. If the automatic option did not locate them, you can manually specify the location. *These files were installed to your system during Code Composer Service Pack 12 Installation—section 1. The typical location for these files is folder: C:\CCStudio_v3.3\ftdi\bin.*
5. When completed, Windows Device Manager will show the device under the Universal Serial Bus controllers as TI XDS100 Channel A and TI XDS100 Channel B.
6. Now follow the Code Composer Studio Setup—Section 4

Optional:

If the steps above do not install the drivers, run the following Batch file to complete the driver installation for the USB100 board, "C:\CCStudio_v3.3\cc\bin\ftdi\install_ftdi.bat"

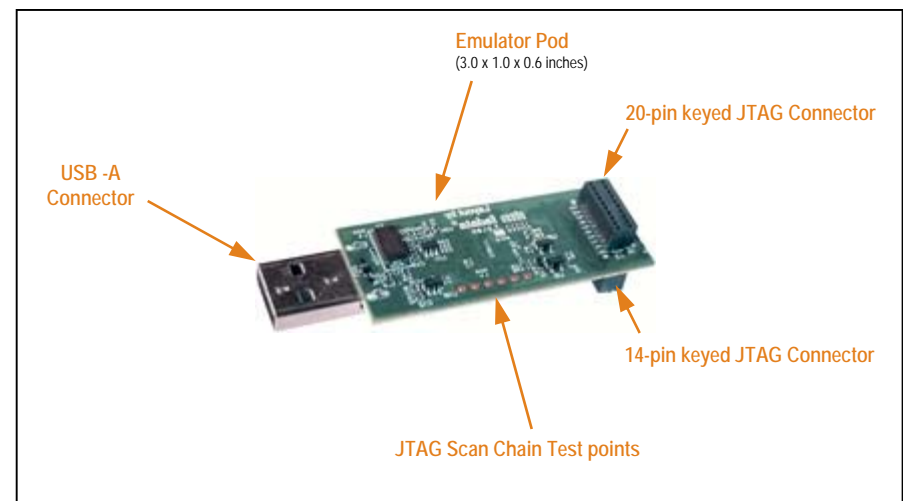


FIGURE 1—USB100 JTAG Emulator (angled view)