

4 CCStudio Setup

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

These instructions apply to CCStudio v2.2 - v3.3, but the import dialog varies slightly between versions. Refer to the USB560m Installation Guide if more information is needed.

1. Run CCStudio Setup. And for CCStudio v3.0 and earlier, start the “Import a Configuration” dialog.
2. Find and select “bh-usb560(m)emulator” from the “Platform” pull down menu located at the top of the middle CCSetup window or in the center of the import dialog box (this will list the USB560m imports).
3. You can narrow down the import options further by using the “Family” pull down (i.e. select “C55xx” to list all TMS320C55x device imports).
4. When you find your target, or an import close to it, 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 (i.e. to add or change a GEL file).
6. When finished, save the setup and start CCStudio.

B.) Using Create Board for CCStudio v3.1 and later

1. Run CCStudio Setup.
2. Select the “Create Board” tab and drag the “BH USB560-M 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 (i.e. “Blackhawk USB560m-C5509”).
3. Now, highlight the new connection name you added under My System and add the available processor(s) from the middle window to match your hardware.
4. Save your setup and start CCS.

C.) Changing an XDS560 PCI import for CCStudio v2.2-v3.0

1. Run CCStudio Setup and import a setup for the TI XDS560 PCI card that matches your target (refer to section (A.) above for importing).
2. Highlight the board you added under My System, right click with the mouse and choose properties.
3. Locate the Emulator Name field under board properties tab and change the name from “XDS560 0” to “BH560USBM 0”. If you need to change other properties (GEL, DSP, etc.) , you can do that too.
4. Save CCSetup and start CCS.

QUICK START GUIDE

Blackhawk™ USB560 JTAG Emulator (USB560m)

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 2.2[†] or later.
- CD ROM Drive.

Inventory of Items Included

1. Blackhawk USB560 JTAG Emulator POD (USB560m).
2. USB 2.0 Compliant Cable.
3. 5 Volt DC power supply.
4. AC power cord.
5. 20-pin cTI JTAG cable.
6. 20e_cTI-14t_TI Pin Converter.
7. 20e_cTI-20t_ARM Pin Converter.
8. 20e_cTI-60t_TI Pin Converter.
9. Installation CD ROM.
10. Warranty and Product Registration Cards.
11. 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 2.2[†] 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.

[†] For CCStudio v2.0 and v2.1 (only), download the XDS560 emulation driver subsystem from the TI web site: https://www-a.ti.com/downloads/sds_support/XDS560Update.html. These files are included with CCS v2.2 and later. A TI USCIF Update (v35.23.10.0) is necessary for CCStudio v3.2 or earlier, which is included with our driver installations on CD ROM and Web Site.

1 Emulation Driver Installation

The **USB560m** JTAG Emulator shipped with its emulation drivers on CD ROM media that are needed by Windows and CCStudio for operation.

1. Insert the Emulation Driver CDROM into your PC's CDROM drive.
2. Follow the installation wizard, and when done, you are ready to install the emulator hardware.

If the installation executable fails to start automatically, run `X:\Setup\Setup.exe`, where [X] is the drive letter for your CD ROM drive.

2 Hardware Installation

WARNING

Be careful to connect interface cables 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 cables into position. Forcing them may damage the cables or the interconnected boards and systems.

1. Place the **USB560m** module in desired location.
2. Connect the 5v DC power plug of the power supply to the 5-volt DC input on the **USB560m** (see figure 1).
3. Attach the USB cable to an available USB port on the PC and to the USB connector on the **USB560m** (see figure 1).

Use of a USB hub for isolation between the PC and the emulator is STRONGLY recommended.

4. Once the emulator is powered and attached to the PC, the Windows Found New Hardware Wizard will start.
5. Follow the Windows Plug and Play Found New Hardware Wizard installation for the Windows device driver (refer to section 3 on *USB PnP Installation*).
6. After enumeration, attach the JTAG cable assembly to the target board. **Make sure the target is not powered when connecting!**
7. Setup and start CCStudio as described in section 4, *CCStudio Setup*.

USB PnP Installation 3

Windows 2000/XP/Vista

1. Make sure the **USB560m** Emulator is powered.
2. If not already connected, connect the USB cable to the **USB560m** and to the computer.
3. Follow the Windows "Found New Hardware" wizard prompts.
4. You can select the "automatic" option for locating drivers.
5. If the automatic option did not locate them, you can manually specify the location. *These files were installed to your system during the Emulation Driver Installation - section 1. The typical location for these files is folder: C:\CCStudio_v3.3\blackhawk\drivers.1 , where <C:\CCStudio_v3.3> is the location selected in section 1.*
6. When completed, the Blackhawk Control Panel and Windows Device Manager will show the device. The Blackhawk Control Panel can be activated from its icon, located in the Windows Control Panel Dialog Box.
7. Now follow the Code Composer Studio Setup in section 4.

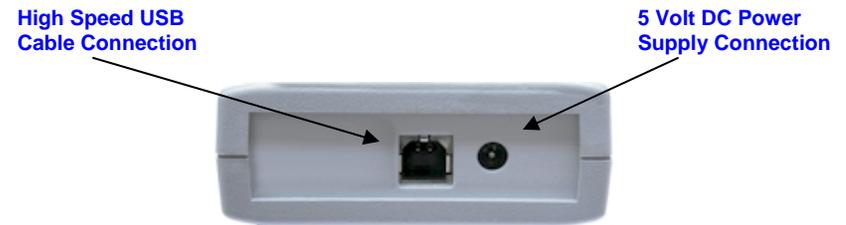


FIGURE 1—USB & Power End Panel

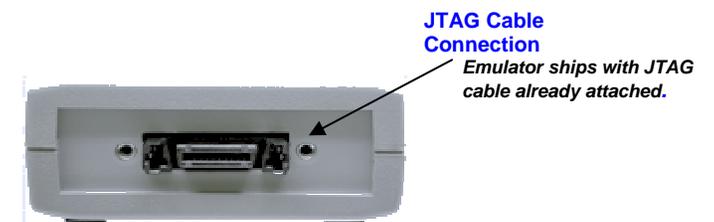


FIGURE 2—JTAG End Panel