

Important Caveat

When using the **LAN560** JTAG Emulator via its USB port to debug target hardware with Code Composer Studio, it will use the same settings as the **USB560m** JTAG Emulator. The **LAN560** is designed to setup and operate the same as the **USB560m** when using the USB port to debug.

4 Quick Diagnostic

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

These instructions apply to CCStudio v2.2 - v3.1, but the import dialog varies slightly between versions. Refer to the LAN560 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)” 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 on only the **USB560m** imports).
3. You can narrow down the import options further by using the “device” pull down (i.e. select “C55x” to list all TMS320C55x 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 to add or change a GEL file, modify the TCK rate, or add/remove/order CPU and Bypass definitions.
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 MySystem 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 MySystem and add the available processor(s) from the middle window to match your h/w.
4. Save you setup and start CCStudio.

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 MySystem, 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 “BH560**USBM** 0”. If you need to change other properties (GEL, DSP, etc.) , you can do that too.
4. Save CCSetup and start CCStudio.

QUICK START GUIDE

Blackhawk™ LAN560 JTAG Emulator (LAN560)

►► USB DEBUG INSTALL ◀◀

This USB debug installation portion of the **LAN560** Quick Start Guide series is intended to show how to configure the **LAN560** Emulator for operation with Code Composer Studio using its LAN port.

For network administration or CCStudio debugging via the LAN interface, please refer to those specific Quick Start Guides also included with the **LAN560** JTAG Emulator.

Inventory of Items Included

1. Blackhawk LAN560 JTAG Emulator POD (**LAN560**) and 12 inch JTAG cable.
2. High-Speed USB 2.0 Compliant Cable
3. Ethernet RJ45 Patch Cable
4. 5 Volt DC power supply
5. AC power cord (s)
6. 20-pin cTI JTAG cable.
7. 20e_cTI-14t_TI Pin Converter
8. 20e_cTI-20t_ARM Pin Converter
9. Installation CD
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.

Installation Requirements

- PC or Notebook computer with one free USB v1.1 or v2.0 port for USB debug or **LAN560** administration and/or free Ethernet port for LAN debug[†].
- Windows® 2000 or XP/Vista Operating System
- Texas Instruments Code Composer Studio Version 2.2 or later.
- CD-ROM Drive.

[†] Ethernet connections to a local area network from the **LAN560**'s Ethernet port is made using a standard RJ45 patch cable (supplied). For direct connection (PC to **LAN560**) an RJ45 cross-over cable is required (not supplied). **LAN560** administration of TCP/IP address and subnet mask is done via USB port on the emulator.

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.

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1 Emulation Driver Installation

The LAN560 JTAG Emulator shipped with its drivers on CDROM media that are needed by Windows and Code Composer Studio for operation.

1. Insert the Emulation Driver CD.
2. Follow the installation wizard, and when done, you are ready to install the emulator hardware.

NOTE

If the installation executable fails to start automatically, run `X:\Setup\Setup.exe`, where [X] is the drive letter for your CDROM 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.
Make sure the target is not powered when connecting!

1. Place the LAN560 module in desired location.
2. Connect the 5v DC power plug of the power supply to the 5-volt DC input on the LAN560 (see figure 1).
3. Attach the USB cable to an available USB port on the PC and to the USB connector on the LAN560 (see figure 1).
4. If not already connected, attach the JTAG cable assembly to the corresponding "D" connector of the LAN560 (see figure 2).
5. Connect the power supply A/C wall cord to A/C power, which will power the LAN560 and initiate Plug and Play installation for the Windows device driver (see step 3 on USB PnP Installation).
6. Follow the Windows Plug and Play Found New Hardware Wizard Installation for the Windows Device Driver (see step 3 on USB PnP Installation).

USB PnP Installation 3

Windows 2000/XP/Vista

1. Make sure the LAN560 Emulator is powered.
2. Connect the USB cable to the emulator and to the computer.
3. Follow the Windows "New Hardware" prompts selecting the location where the Blackhawk USB device drivers exist. *These file were installed to your system during the Emulation Driver Installation—section 1. Typical location for these files is folder:*
`C:\CCStudio_v3.3\blackhawk\drivers.1\LAN.`
4. 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.
5. Now follow the Code Composer Studio Setup—Section 4

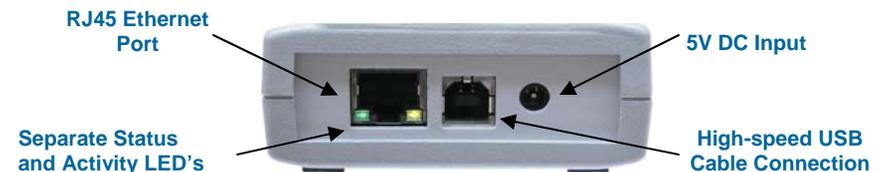


FIGURE 1—LAN, USB & Power Endplate

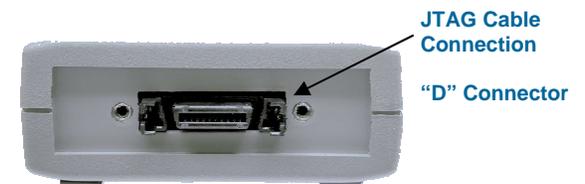


FIGURE 2—JTAG End Plate