# 4 CCStudio v4 Setup

In the CCSv4 Target Configuration General Setup window (see figure 2 below) simply select the **Texas Instruments XDS100v2 USB Emulator** connection and then check your device or board in the list. Save this setting and launch the TI Debugger.
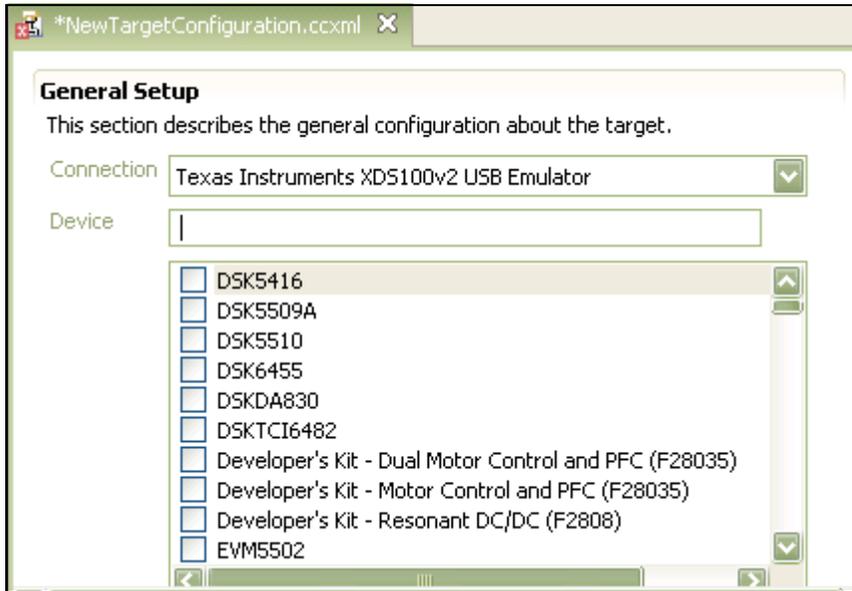


FIGURE 2 - XDS100v2 Target Setup and Selection

Follow these links for more details on XDS100v2 setup using CCStudio v4:

- http://tiexpressdsp.com/index.php/CCSv4.

- http://tiexpressdsp.com/index.php/Target_Configuration_-_Custom_Configurations

## Additional XDS100v2 Information

Follow this link for more details and support on the XDS100 product:

- http://tiexpressdsp.com/index.php/XDS100.

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# QUICK START GUIDE

# Blackhawk™ USB100v2 *(model D)* JTAG Emulator (USB100v2D)

**XDS100v2 JTAG Emulators Require:**

## Code Composer Studio v4 or later[†]

Install CCSv4 before connecting XDS100v2 hardware!

You will also need:

- PC or Notebook computer with at least one free USB v1.1 or v2.0 port.
- Windows® 2000/XP/Vista/7 Operating Systems (32 or 64-bit versions).

## Inventory of Items Included

1. Blackhawk **USB100v2D** Emulator.

2. USB 2.0 Compliant Cable.

3. 20e_cTI-14t_TI Adapter

4. Warranty and Product Registration Cards.

5. 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 v4[†] 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 structual and mechanical integrity and cause permanent damage.

Caution is necessasry 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 v4 is available for download from TI for use with XDS100 products **free-of-charge**. Please visit this TI Wiki page for more information:
http://tiexpressdsp.com/index.php/CCSv4.

## Code Composer Studio v4 Must be Installed FIRST

XDS100v2 Drivers are installed as part of CCS v4 or CCS v4 update. By default, the drivers are installed to the following folder:

`C:\Program Files\Texas Instruments\ccsv4\common\uscif\ftdi`

For more information on CCS v4, refer to the TI documentation and help resources and the following link:

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

# 2 Hardware Installation

### W A R N I N G

**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. **Install Code Composer v4 software FIRST.** DO NOT ATTACH EMULATOR HARDWARE UNTIL CCSv4 IS INSTALLED.
2. Complete step 1, then attach the USB cable to an available USB port on the PC.
3. Then attach the other end of the USB cable (mini-B connector) to the USB Mini-B connector of the **USB100v2D** Emulator (see Figure 1).
4. Follow the Plug and Play installation for the Windows device driver (see section 3 on USB PnP Installation for more information).
5. If your target uses a 14-pin (2x7) header, attach the supplied 14-pin adapter to the emulator's 20-pin socket before connecting to your target (see figure 1). Make sure the target board is **not powered** when connecting!
6. Setup and start Code Composer Studio (see section 4)

### Windows 2000/XP/Vista/7

1. **Install Code Composer Studio v4 FIRST**. DO NOT ATTACH EMULATOR HARDWARE UNTIL CCSv4 IS INSTALLED.
2. Complete step 1, then if not already connected, connect the USB cable to the computer and to the **USB100v2D** emulator.
3. If prompted, follow the Windows "Found New Hardware" wizard prompts.
4. You can select the "automatic" option for locating drivers.
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



**USB Mini-B Connector**

**XDS100v2 PCB Assembly** (small 22 x 40 mm)

**20-pin keyed JTAG Connector** (works with 20e_cTI-14t_TI Pin Converter included)

**LED**
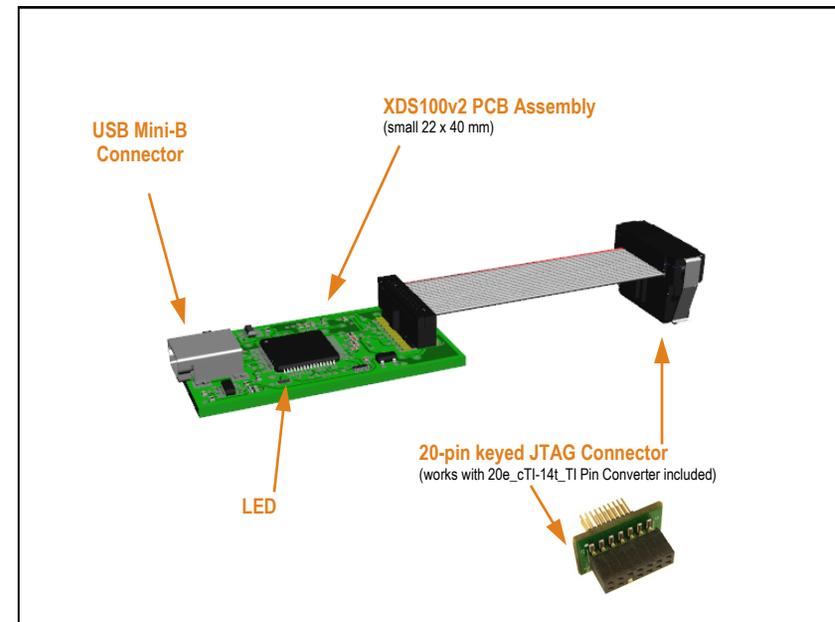
FIGURE 1 - USB100v2D JTAG Emulator (angled view)