4 CCStudio v5.3 Setup

In the CCS v5.3 Target Configuration General Setup window (see figure 2 below) simply select the **`Texas Instruments XDS2xx USB Emulator`** connection and then check your device or board in the list. Save this setting and launch the TI Debugger.

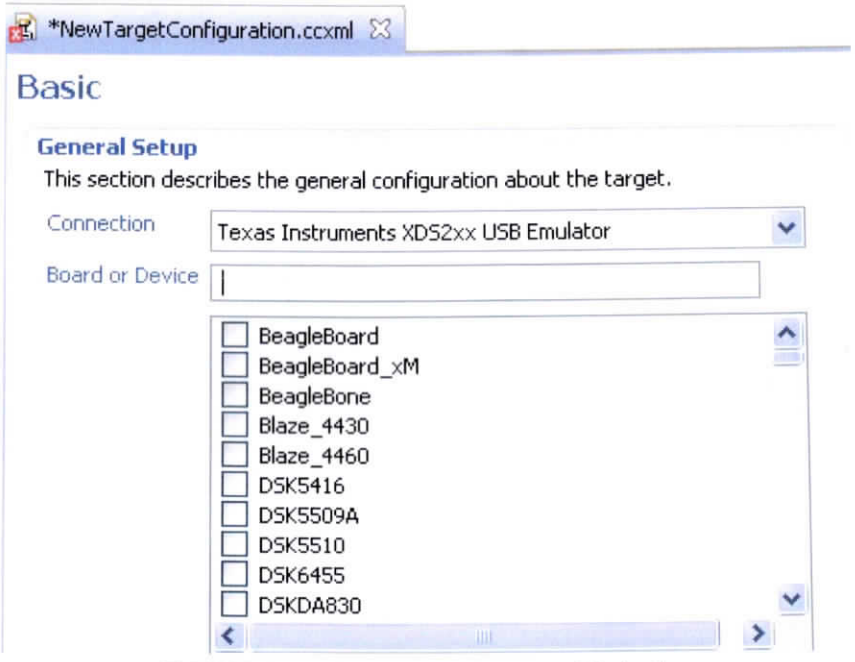

FIGURE 2 - XDS200 Target Setup and Selection

Follow these links for more details on XDS200 setup using CCStudio:

- https://software-dl.ti.com/ccs/esd/documents/ccs_downloads.html
- https://www.ti.com/tool/CCSTUDIO

Additional XDS200 Information

Follow this link for more details and support on the XDS200 product:

- https://www.ti.com/tool/TMDSEMU200-U

Blackhawk
123 Gaither Drive, Mt. Laurel, NJ 08054-1701
www.blackhawk-dsp.com

QUICK START GUIDE

Blackhawk™ XDS200 DEBUG Probe (TMDSEMU200-U)

XDS200-class JTAG Emulators Require:

Code Composer Studio v5.3† or later††

Install CCSv5.3 or later before connecting the XDS200 hardware!

You will also need:

- PC or Notebook computer with at least one free USB v1.1 or v2.0 port.
- Windows® XP/Vista/7/8*/10* or Linux Operating Systems (32 or 64-bit versions).

*For Windows 8/10, CCS v5.4 and later is recommended.

Inventory of Items Included

1. Blackhawk XDS200 Emulator.
2. USB 2.0 Compliant Cable.
3. 20e_cTI-14t_TI pin converter
4. 20e_cTI-20t_ARM pin converter
5. 20e_cTI-10t_ARM pin converter
6. Warranty and Product Registration Information.
7. Quick Start Guide.
8. TI EVAL 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 v5.3† 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.

† If running CCS v5.2, you MUST update to the latest **TI Emulation** package using: `Help->Check for Updates`. This not a Blackhawk update.

††CCStudio v5.3 or newer is available for download from TI for use with XDS200 products. Please visit this TI page for more information: https://software-dl.ti.com/ccs/esd/documents/ccs_downloads.html

1 Emulation Driver Installation

Code Composer Studio v5.3** or later Must be Installed FIRST

XDS200 Drivers are installed as part of CCSv5.3 or later. These files are supplied by TI. By default, the drivers are installed to the following folder:

`C:\ti\ccsv5\ccs_base\emulation\windows\xds2xx_drivers`

For more information on the XDS200 and CCS v5, refer to the TI documentation and help resources and the following links:

https://software-dl.ti.com/ccs/esd/documents/ccs_downloads.html
https://www.ti.com/tool/TMDSEMU200-U

** If using CCS v5.2, you must first update the "TI Emulation" feature to the latest version for XDS200 support (`Help->Check for Updates`). This is a TI CCS update you need, not a Blackhawk update.

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. **Install Code Composer v5.3 or later software FIRST.** DO NOT ATTACH EMULATOR HARDWARE UNTIL CCS v5 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 XDS200 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. Connect the emulator's 20-pin socket to the proper adapter fitting your target header (see figure 1).

   Make sure the target board is **not powered** when connecting!
6. Setup and start Code Composer Studio (see section 4).

USB PnP Installation 3

Windows XP/Vista/7/8

1. **Install Code Composer Studio v5.3 or later FIRST.** DO NOT ATTACH EMULATOR HARDWARE UNTIL CCSv5 IS INSTALLED.
2. Complete step 1, then if not already connected, connect the USB cable to the computer and to the XDS200 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, the Windows Device Manager will show the XDS200 device under the **`Ports (COM &LPT)`** as **`XDS2xx Emulator CDC Serial Port (COM##)`** and **`XDS2xx User CDC Serial Port (COM##)`**.
6. Now follow the Code Composer Studio Setup—Section 4.

Linux (32 and 64-bit)

1. **Install Code Composer Studio v5.3 or later FIRST.** DO NOT ATTACH EMULATOR HARDWARE UNTIL CCSv5 IS INSTALLED.
2. Complete step 1, then if not already connected, connect the USB cable to the computer and to the XDS200 emulator.
3. Run the Linux command, `lsusb`, in a terminal window and verify the device in listed the output. For example:

   Bus 001 Device 002: ID 0451:bef0 Texas Instruments, Inc.
4. Now follow the Code Composer Studio Setup—Section 4.

FIGURE 1 - XDS200 JTAG Emulator (multiple views)