

# C2000 Series XDS510LC USB JTAG Emulator

## Set-up Instructions

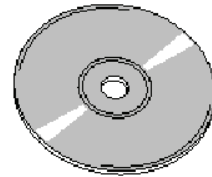
The C2000 Series XDS510LC USB contains:



C2000 XDS510LC



USB Cable



Driver CD ROM

### System Hardware and Software Requirements

These operating platform requirements are necessary to install the Code Composer Studio (CCS) integrated Development Environment and support the C2000 XDS510LC USB emulator. The requirements for the operating platform are:

#### Minimum Configuration

- 500 MHz. or faster Pentium or compatible
- 600MB of free hard disk space
- SVGA (640x480) color display
- Local CD-ROM Drive

#### Recommended

- 500MB of RAM
- SVGA (1024 x 768) color display
- 2GHz. or faster Pentium or compatible

#### Supported Operating System CCS 3.x

- Windows 2000 Service Pack 4
- Windows XP Pro Service Pack 1&2
- Windows XP Home Service Pack 1&2
- Windows Vista

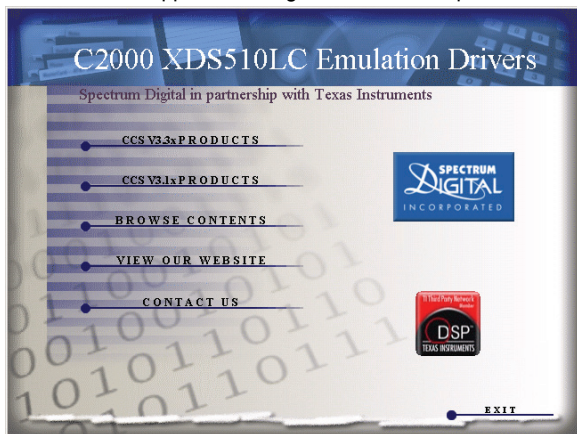
**Note:** For Windows 2000 and XP you must install Code Composer Studio using Administrator privileges. To run CCS on these systems requires write permission on the registry.

The install CD contains emulation drivers for CCS 3.1x and CCS 3.3x environments.

Emulation drivers are updated on a regular basis so check the Spectrum Digital web site at [support.spectrumdigital.com](http://support.spectrumdigital.com).

## Installing Emulation Drivers

1. Insert the installation CD into the CD-ROM Drive. An install screen should appear; if not, go to Windows Explorer and



run launch.exe from the CD-ROM.

2. Select the CCStudio product. For CCS 3.x platinum there is only one choice and it includes all processors in one install. When installing emulation drivers the default install should be changed to same directory as you targeted CCStudio install. For CCS 3.3x this is normally "c:\CCStudio\_v3.3" and for CCS 3.1x this is normally "c:\CCStudio\_v3.1".
3. Plug the supplied USB cable into an available port on your PC or HUB. Use of a USB HUB is recommended as it provides added isolation between your debug environment and PC.
4. Plug the emulator into the other end of the supplied USB cable. Windows will recognize a new USB device and pop-up the new hardware found wizard. Follow the instructions and let Windows find the USB drivers located on the install CD. If properly installed Windows will create a new device class named "SD USB Based Debug Tools". The C2000 XDS510LC USB device will show up as a "Spectrum Digital XDS2000 USB" under this class. You can view this information under Windows Device Manager.

## Setting Up Code Composer

The C2000 XDS510LC, XDS510 USB, XDS510 USB PLUS and XDS510 USB GALVANIC share common drivers and configurations. When setting up CCS, SdConfig, SdFlash etc. always select the common XDS510 USB class emulator support.

1. Select the Code Composer Setup icon from the desktop.
2. From CC Setup you can either import a new configuration or select from an existing one. From the filters pane select the platform "xds510usb". This will give you a list of predefined configurations for the XDS510 USB class emulator. If one of these configurations does not exactly match your target then select the closest configuration. You can then modify this configuration to meet your needs.
3. If you want to change the configuration of your setup simply right mouse click on the configuration under **System Configuration** then select **Properties**. You can modify the individual properties for your setup. The I/O Port under Board Properties should be set to 0x510 for the XDS510 USB emulator.
4. Save your configuration and exit CC Setup.

## Running Code Composer

You can now start Code Composer by double-clicking on the appropriate CCS icon. When CCS starts the XDS510 USB application loader will download the emulation driver application. Once the emulation application is loaded, the C2000 XDS510LC USB emulator will enumerate and CCS will start. If there is a problem during the load or enumerate phase then the loader app will display an error/status message.

If you are running CCS 3.x, once CCS has started, select **Debug->Connect** from the menu bar. Target **Connect/Disconnect** is a new feature in CCS 3.x, for more details go to your CCS online help.

## Support

1. Always check the Spectrum Digital web site at [support.spectrumdigital.com](http://support.spectrumdigital.com) for latest drivers, release notes, and tech support. CCS version specific drivers are located on the main support page.

## Trouble Shooting XDS2000 USB

1. Windows install message that there is not enough power for the C2000 XDS510LC USB. This may occur if you are using an unpowered USB HUB. Solution is to use powered USB HUB.
2. The C2000 XDS510LC USB application loader will report error/status messages. Check these messages to resolve setup or connection issues.
3. CCS will not start. C2000 XDS510LC USB drivers will create a diagnostic file in the CCS drivers' directory named "Pid1\_XDS2000UsbLog.txt". Open this file and check the error messages. The "Pidx\_" prefix identifies the internal processor id. There is one log per processor. You can disable logs by deleting or renaming the file "SdDoUsbLog".