XDS510USB PLUS JTAG Emulator

Set-up Instructions

The XDS510USB PLUS



XDS510USB PLUS



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 XDS510 USB PLUS 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

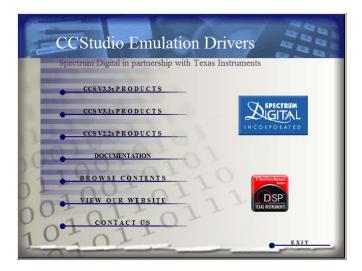
Note: For Windows 2000 and XP you must install Code Composer Studio using Administrator privileges. To run CCS on these systems requires write permission on the registry.

The install CD contains emulation drivers for CCS 2.2x, CCS 3.1x and CCS 3.3x environments along with legacy driver support, SDFlash algos for C2000, and assorted manuals. To install any of the legacy support you must browse the CD and install by selecting the appropriate install program.

The CCS 3.1x and CCS 3.3x driver install supports all Spectrum Digital XDS510 class emulators. Emulation drivers are updated on a regular basis so check the Spectrum Digital web site at support.spectrumdigital.com.

Installing Emulation Drivers

 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.



- 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".
- 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 XDS510 USB PLUS 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 XDS510 USB PLUS device will show up as a "Spectrum Digital XDS510 USB PLUS" under this class. You can view this information under Windows Device Manager.

Setting Up Code Composer

The 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.

- Select the Code Composer Setup icon from the desktop.
- 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 closet configuration. You can then modify this configuration to meet your needs.
- 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.
- 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 XDS510 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.

Once you have configured CCS for an XDS510 USB class emulator you can use the XDS510 USB, XDS510 USB PLUS or XDS510 USB GALVINIC.

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

 Always check the Spectrum Digital web site at <u>support.spectrumdigital.com</u> for latest drivers, release notes, and tech support. CCS version specific drivers are located on the main support page.

Trouble Shooting XDS510 USB PLUS

- Windows install message that there is not enough power for the XDS510 USB. This may occur if you are using an unpowered USB HUB. Solution is to use powered USB HUB.
- The XDS510 USB application loader will report error/status messages. Check these messages to resolve setup or connection issues.
- CCS will not start. XDS510 USB PLUS drivers will create a diagnostic file in the CCS drivers' directory named "Pid1_Xds510UsbPlusLog.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".

SdConfig Extended Support

An extended version of SdConfig in included in the CCS 3.1x and CCS 3.3x installs. This extended version allows GUI based customization of the XDS510 USB PLUS extended capabilities. SdConfigEx is located in the "<ccs_install_dir>\specdig\sdconfigex" directory. You can use the classic version of SdConfig for all SD XDS510 class emulators or SdConfigEx for XDS510 PP/USB class emulators. See the documentation in the SdConfigEx directory for functional details.