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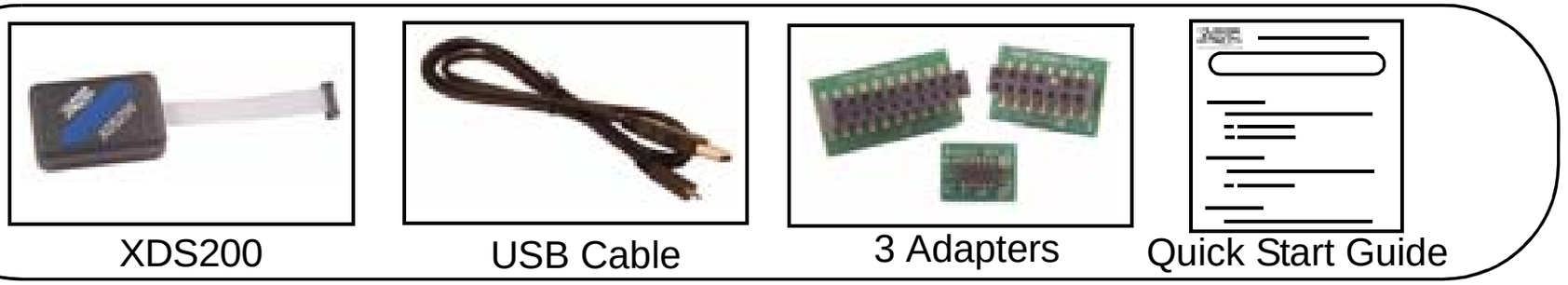
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XDS200 Quick Start Guide



1.0 SYSTEM REQUIREMENTS

To operate the Spectrum Digital XDS200 JTAG Emulator with your system it needs to meet the following requirements:

- 2 GB of free hard disk space
- Microsoft Windows™ XP/Vista/Win 7/Linux
- Minimum 1 GB RAM, 2 GB recommended
- Color Display
- Internet access
- USB port
- Code Composer Studio Rev v5.2 with TI emulator update 5.0.838, or higher

2.0 WHAT'S INCLUDED

The Spectrum Digital XDS200 USB JTAG emulator kit includes:

- XDS200 USB JTAG Emulator with CTI20 header
- USB cable
- 3 Adapters: CTI20-TI14, CTI20-ARM20, CTI20-ARM10
- This Quick Start Guide

Note: *This kit does **NOT** include Code Composer Studio or drivers. This software can be obtained from Texas Instruments (www.ti.com). See installation instructions below.*

3.0 XDS200 USB DEVICE and CODE COMPOSER STUDIO INSTALLATION

Note: *Install **ALL** software prior to connecting the XDS200 to the computer !*

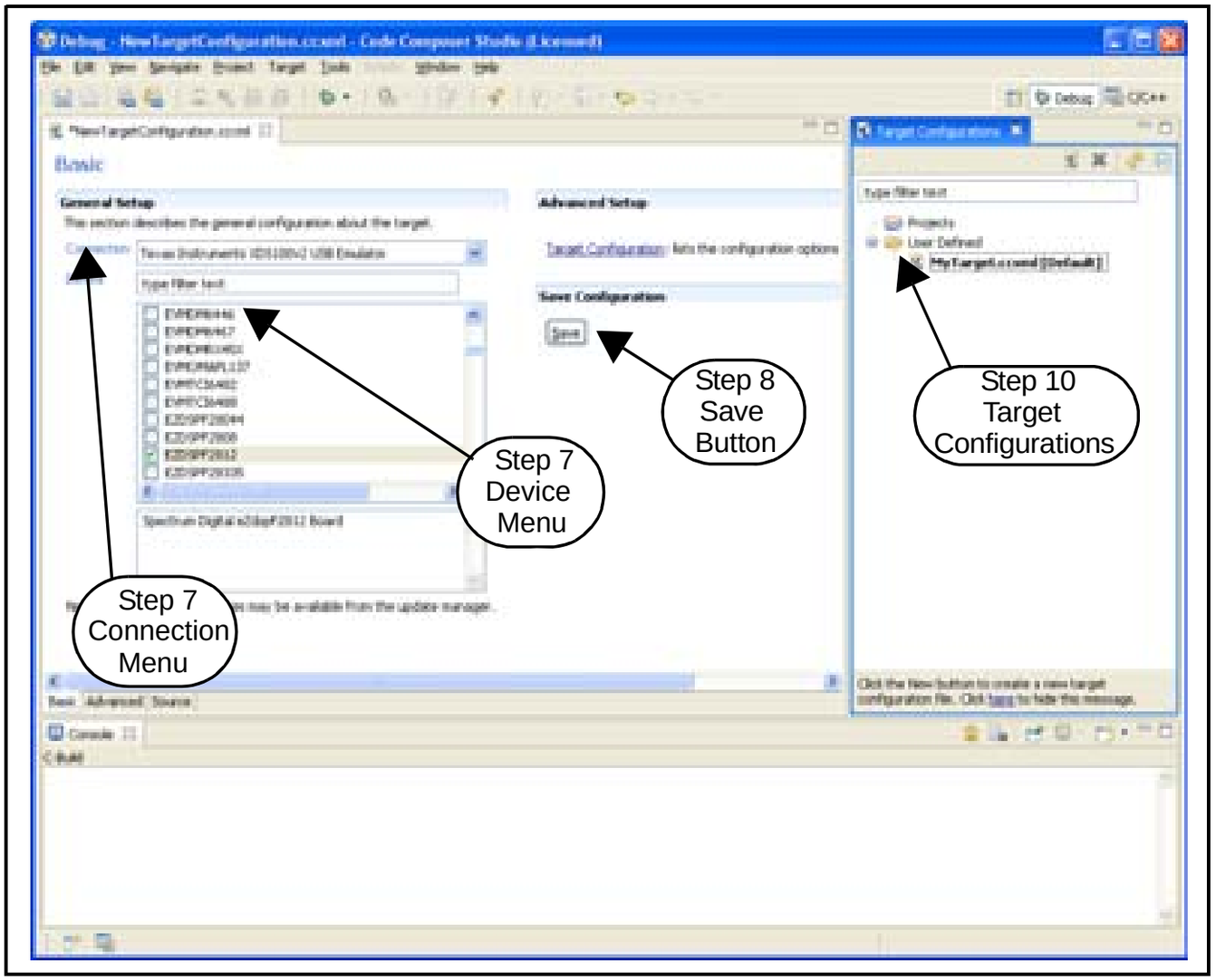
This setup guide assumes the user has already acquired and installed Code Composer Studio (CCS). If CCS has not been installed, then do so now. CCS is **not** included in the Spectrum Digital XDS200 USB JTAG Emulator kit. The Spectrum Digital XDS200 supports CCS 5.x, which can be downloaded from the TI web site.

The user must be logged onto Windows with “Administrative Rights” and any anti-virus software must be disabled during installations. Please contact your system administrator if help is needed in this area.

3.1 TARGET CONNECTION and CCS v5 CONFIGURATION INSTRUCTIONS

1. All XDS200 USB drivers and CCS v5 drivers are included with the CCS v5 software installation, or as an update.
2. Connect the included USB cable to a USB port on the host computer, then connect the USB cable to the XDS200. Windows will recognize the new hardware connection and complete the XDS200 installation automatically on Windows 7 and higher. On Windows XP follow the hardware installer instructions and answer “Yes” or “default” if prompted.
3. The target processor board should be unpowered at this time. Connect the XDS200 female CTI20 pin JTAG connector to the CTI20 pin male JTAG connector on the target board. If your target board does not use the CTI20 pin connector attach one of the 3 adapters that came with the XDS200 emulator to meet your requirements.
4. Launch Code Composer Studio v5 from the shortcut on the desktop. (This was created when CCS v5 was installed.)
5. The Code Composer Studio v5 window will appear. Click the “File” menu, then select “New-->Target Configuration File”
6. The “New Target Configuration” window will appear. Enter a file name that describes the emulator connection and/or Texas Instruments processor being used and then click “Finish”.

7. The “Basic” configuration setup window will appear. Select “Texas Instruments XDS2xx USB Emulator” from the “Connection” menu and select the target processor being used from the “Device” menu. (See the screen shot below.)



8. Click the “Save” button to save the configuration.
9. Apply power to the target processor board.
10. Click the “View” menu and select “Target Configurations” to expose the configuration(s) that have been built or imported. A new tab labeled “Target configurations” will become available in the CCS window.

11. Expand the “User Defined” folder. Right-click on the configuration that has been created and click “Launch Selected Configuration”.
12. CCS will now attempt to connect to the target processor through the XDS200.
13. Code Composer Studio may now be used to download code and debug code on the target board.

4.0 XDS200 LEDs

The XDS200 has two LEDs which provide status information about the operation of the XDS200. The position of the LEDs and their functions are shown below.

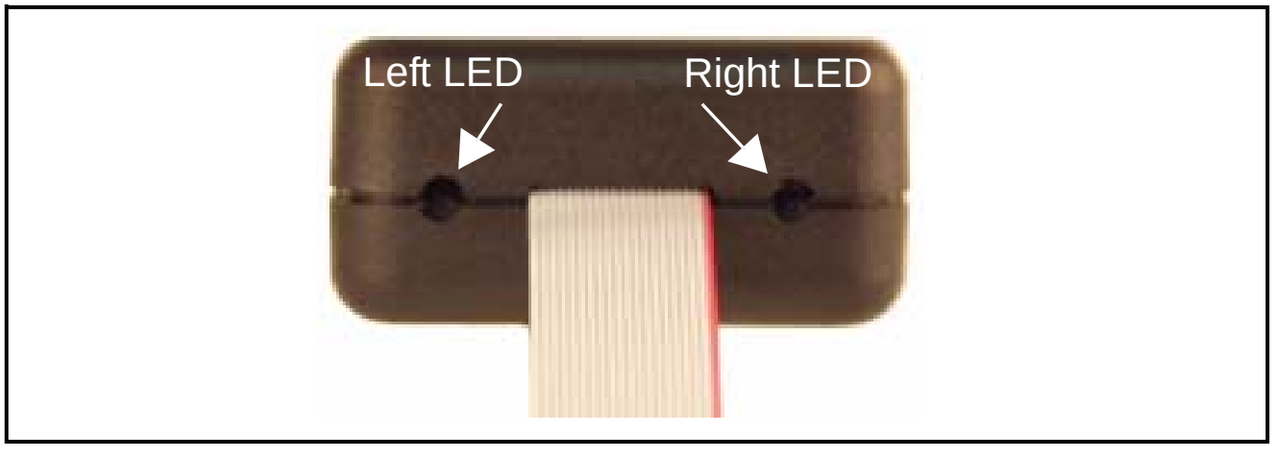


Table 1: XDS200 LEDs

Position	Color	Function
Left	Green	On = XDS200 has booted & ready for emulation download
		Off = XDS200 emulation driver has been downloaded. This occurs during CCS target launch
Right	Green	Flashes on when there is emulation driver activity

5.0 CTI20 Header and Adapter Pin Outs

The table below shows the pin outs for the CTI20 header and adapters.

Table 2: XDS200 CTI20 Header and Adapter Pin Outs

Pin #	CTI20 Header	TI14 Adapter	ARM20 Adapter	ARM10 Adapter
1	TMS	TMS	VTRef	VTRef
2	nTRST	TRST	Vsupply	TMS
3	TDI	TDI	nTRST	GND
4	TDIS (GND)	TDIS (GND)	GND	TCK
5	TVRef	TVRef	TDI	GND
6	KEY	KEY	GND	TDO
7	TDO	TDO	TMS	GND
8	GND	GND	GND	TDI
9	RTCK	RTCK	TCK	TDIS (GND)
10	GND	GND	GND	nRESET
11	TCK	TCK	RTCK	
12	GND	GND	GND	
13	EMU0	EMU0	TDO	
14	EMU1	EMU1	GND	
15	nRESET		nRESET	
16	GND		GND	
17	EMU2		DBGRQ	
18	EMU3		GND	
19	EMU4		DBACK	
20	GND		GND	

6.0 SUPPORT RESOURCES

1. If you have problems or need additional information regarding the embedded emulation please refer to the XDS200 USB wiki on the TI web site. The URL for this site is:

   http://processors.wiki.ti.com/index.php/xds200

2. Code Composer Studio support is available via a forum at

   http://community.ti.com/forums/138.aspx

3. More information about other Spectrum Digital emulators can be found at:

   www.spectrumdigital.com

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