

# XDS560ä JTAG Scan-Based Emulator

## Quick Start Reference Guide

### Installing the XDS560 Emulator

This guide describes the steps to installing the XDS560 Emulator in the following order:

- 1 Install the XDS560 Emulator hardware
- 2 Install the XDS560 Windows™ device driver
- 3 Make sure Code Composer Studio™ IDE is installed on the PC
- 4 Install the XDS560 Emulator software
- 5 Run the XDS560 Confidence test
- 6 Configure Code Composer Studio IDE

The XDS560 Emulator kit contains:

- XDS560 PCI Board
- XDS560 Target Cable
- Installation CD-ROM
- *XDS560 Quick Start Reference Guide* (this document)

Code Composer Studio (CCStudio) IDE installation CDs after version 2.1 may contain updated XDS560 Emulator software.

### Installation Requirements

- Code Composer Studio IDE 2.1 or greater
- 1 full-length PCI slot
- 233MHz or higher Pentium™-compatible CPU (500MHz or higher Pentium III CPU or equivalent is recommended)
- Local CD-ROM drive

### Supported Operating Systems

- Windows 98
- Windows 98 Service Pack I
- Windows 98SE
- Windows ME
- Windows NT™ 4.0 Service Pack 6a
- Windows 2000 Service Pack 1 or higher
- Windows XP Home Edition
- Windows XP Professional Edition

### Minimizing Personal Injury

To minimize the risk of personal injury, always turn off the power to your PC and unplug the power cord before installing the XDS560 Emulator.

### Minimizing Electrical Shock and Fire Hazard

To minimize the risk of electric shock and fire hazard, be sure that all major components that you interface with Texas Instruments devices are limited in energy and certified by one or more of the following agencies: UL, CSA, VDE, or TUV.

### Minimizing Static Shock

Special handling methods and materials should be used to prevent equipment damage. You should be familiar with identification and handling of ESD-sensitive devices before attempting to perform the procedures described in this manual.

## Installing the Hardware

- 1 Shut down the PC and unplug the power cord.
- 2 Remove the cover of your PC.
- 3 Remove the mounting bracket from an unused PCI slot.
- 4 Carefully, but firmly, push the XDS560 PCI board into the PCI slot. Secure the mounting bracket to the PC chassis with a screw.
- 5 Connect the XDS560 cable to the connector on the back of the XDS560 PCI card. Secure the cable with the attached thumb screws.
- 6 Turn on the PC.
- 7 Proceed to follow the steps in *Installing the Device Driver*.

## Installing the Device Driver

After booting the system following installation of the XDS560 hardware, insert the XDS560 CD into the PC's CD-ROM drive. Follow the steps below that are appropriate to the operating system.

*Note: For Windows 2000, Windows NT 4.0, and Windows XP, administrator privileges are required to install the driver.*

- On **Windows NT 4.0**, proceed to install the software by following the steps in *Installing the XDS560 Software*.
- On **Windows 2000**, the Plug and Play manager will detect a **PCI Simple Communication Controller** and display the **Found New Hardware Wizard**.
  - 1 In the wizard, click **Next**.
  - 2 Make sure that **Search for a suitable driver for my device** is selected. Click **Next**.
  - 3 Select the checkbox for **Specify a Location**. Click **Next**.
  - 4 The dialog will prompt you to insert the manufacturer's installation disk. Make sure the XDS560 Installation CD is in your CD-ROM drive.

- 5 Click **Browse**, and select the **\Drivers\Win2000\_XP** directory on the CD to find xds560.inf. Click **Open** after the file has been selected.
  - 6 Click **OK** to close the installation disk dialog.
  - 7 Windows will confirm that it has found a driver for the Texas Instruments XDS560 PCI JTAG Emulator. Click **Next**.
  - 8 Click **Finish**.
  - 9 Proceed to *Installing the XDS560 Software*.
- On **Windows XP**, the Plug and Play manager will detect a **PCI Simple Communication Controller** and display the **Found New Hardware Wizard**.
    - 1 In the wizard, select **Install from a list or specific location**. Click **Next**.
    - 2 Select the checkbox for **Include this location in the search**. Make sure the XDS560 Installation CD is in your CD-ROM drive.
    - 3 Click **Browse**, and select the **\Drivers\Win2000\_XP** directory on the CD. Click **OK** after the directory has been selected.
    - 4 Click **Next**.
    - 5 Windows will confirm that it has found a driver for the Texas Instruments XDS560 PCI JTAG Emulator. Windows may warn you that the XDS560 driver is "unsigned." Simply click **OK** to acknowledge this.
    - 6 Click **Finish**.
    - 7 Proceed to *Installing the XDS560 Software*.
  - On **Windows 98/98SE**, the Plug and Play manager will detect a **PCI Communication Device** and display the **Add New Hardware Wizard**.
    - 1 In the wizard, click **Next**.
    - 2 Make sure that **Search for the best driver for your device** is selected. Click **Next**.
    - 3 Select the checkbox for **Specify a Location**. Make sure the XDS560 Installation CD is in your CD-ROM drive.

- 4 Click [Browse](#), and select the `\Drivers\Win98_ME` directory on the CD. Click [OK](#) after the directory has been selected.
  - 5 Click [Next](#).
  - 6 Windows will confirm that it has found a driver for the Texas Instruments XDS560 PCI JTAG Emulator. Click [Next](#).
  - 7 Click [Finish](#).
  - 8 Proceed to *Installing the XDS560 Software*.
- On **Windows ME**, the Plug and Play manager will detect a [PCI Communication Device](#) and display the [Add New Hardware Wizard](#).
    - 1 In the wizard, select [Specify the location of the driver](#). Click [Next](#).
    - 2 Make sure that [Search for the best driver for your device](#) is selected.
    - 3 Select the checkbox for [Specify a Location](#). Make sure the XDS560 Installation CD is in your CD-ROM drive.
    - 4 Click [Browse](#), and select the `\Drivers\Win98_ME` directory on the CD. Click [OK](#) after the directory has been selected.
    - 5 Click [Next](#).
    - 6 Windows will confirm that it has found a driver for the Texas Instruments XDS560 PCI JTAG Emulator. Click [Next](#).
    - 7 Click [Finish](#).
    - 8 Proceed to *Installing the XDS560 Software*.

## Installing the XDS560 Software

This installation assumes that the Code Composer Studio IDE has already been installed on the PC. If not, please follow the directions for installing CCStudio first. After completing the installation procedure, you may return to this guide to complete the installation procedure of the XDS560 Emulator.

Users with Code Composer Studio IDE version 2.0 can upgrade to version 2.1 through the CCStudio Update Advisor tool. To access Update Advisor, start the CCStudio application and select [Help → CCS on the Web → Update Advisor](#).

After confirming that CCStudio IDE version 2.1 has been installed, install the XDS560 software.

- 1 Insert the XDS560 installation CD into the CD-ROM drive. An install dialog should appear; if not, run [setup.exe](#) in the root directory of the CD.
- 2 Follow the setup dialog.
- 3 After completing the software driver installation, proceed to *Run the XDS560 Diagnostic*.

## Run the XDS560 Diagnostic

Verify that the XDS560 hardware and Windows device driver have been installed correctly by running the XDS560 diagnostic.

- 1 Run the XDS560 Diagnostic. It can be found under the Windows start menu under [Start → Texas Instruments → XDS560 → XDS560 Diagnostic](#).
- 2 Click [Run](#).
- 3 Verify that all tests pass. If any tests fails, consult the driver troubleshooting guide. It can be found under the Windows start menu under [Start → Texas Instruments → XDS560 → Documentation → Driver Troubleshooting](#).
- 4 Proceed on to *Configuring Code Composer Studio IDE*.

## Configuring Code Composer Studio IDE

*Note:* Online help for Code Composer Studio IDE setup is available by using the help menu from Code Composer Studio IDE Setup.

To manually configure your system, invoke the setup application by double-clicking the [Setup CCS 2](#) icon that appears on your desktop.

- 1 The Import Configuration dialog box may start when the setup application starts. If it does not start, you may manually start it by selecting [File → Import...](#), click the button labeled [Clear](#) to remove any previously defined configuration, and then, in the message box, click [Yes](#) to confirm the Clear command.
- 2 In the Available Configuration List in the Import Configuration Dialog, select the desired XDS560 configuration. Use Filters to help narrow the

available choices. If the proper XDS560 configuration is located, then click [Import](#) and proceed to Step 6.

- 3 If the desired XDS560 configuration was not found in the Available Configuration List, close the Import Configuration dialog and double-click on the appropriate [driver](#) for the XDS560 Emulator and your target processor in the Available Board/Simulator Types pane. If an appropriate driver is found, proceed to Step 5.
- 4 If an XDS560 driver for your target processor cannot be found in the middle pane, click on [Install a Device Driver](#) in the right pane. Select an appropriate `tixds560**.dvr` file. Click [Open](#). In the Device Driver Properties dialog, give the driver an appropriate name, and click [OK](#). This will place the driver in the middle pane. Now double-click on this [driver](#) to add it to your board configuration.
- 5 In the Board Properties dialog, choose the appropriate settings for your system. For more information on setting up a new system configuration, see the CCStudio Setup Online Help.
  - Give the board a name. Click [Next](#).
  - On the Board Properties tab, select [Automatic](#), [Legacy](#), or [User Defined](#) for the TCLK frequency. Automatic, which is the default, will attempt to determine the maximum frequency that target board and environment will support each time the CCStudio IDE is started. On some systems, the automatic selection may not generate a frequency suitable for your target board. The Legacy option directs the XDS560 Emulator to generate TCLK at the same frequency as the XDS510 emulator.
- In the Emulation Name field, specify which XDS560 Emulator in your system should be used. The last digit in the name indicates the board number, where 0 represents the first PCI board found. Click [Next](#).
- Add the devices on your target board to the emulation path. Click [Next](#).
- Specify the GEL file appropriate to your board and DSP. Click [Finish](#).
- 6 Repeat the previous steps to add additional processors to your system.
- 7 From the menu, select [File → Save](#), and then [File → Exit](#). You may now run the Code Composer Studio IDE with your XDS560 Emulator.



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