# eZdsp<sup>™</sup> for the TMS320F28335

# Quick Start Installation Guide

## **Kit Contents**



eZdsp Board



+5V Universal Power Supply



AC Power Cords



eZdsp Code Composer Studio CD ROM



USB Cable

## **System Requirements**

- 500MB of free hard disk space
- Microsoft Windows™ 2000/XP
- 128MB of RAM
- 16-bit color display
- CD-ROM Drive

# **Service and Support**

Web	http://support.spectrumdigital.com
E-Mail	support@spectrumdigital.com

# **Description**

The eZdsp F28335 is a fully integrated evaluation platform for the TMS320F28335 Digital Signal Processor from Texas Instruments. An on-board JTAG emulator allows debug from Code Composer Studio via your PC's USB port.

This kit contains everything you need to get started with TI DSPs. It can also be used with the full version of Code Composer Studio and an external JTAG emulator.

## Install eZdsp Content from the CD-ROM

Before you install the eZdsp software, please make sure you are using **Administrator privileges** and any **virus checking** software is turned off. The eZdsp board should not be plugged in at this point.

 Insert the Code Composer Studio installation CD into the CD-ROM Drive. An install menu (see below) should appear. If it does not, manually run Launch.exe from the CD-ROM. Select the Install Products option from the menu.



 Install any components you need. To debug with the eZdsp you must have 1) a copy of Code Composer Studio, 2) the target content package for your board.

Users of the full Code Composer Studio package can skip the Code Composer installation and simply install the target content packages.



The installation procedure will create an icon on your desktop for F28335 CCStudio.

## Connect the eZdsp to Your PC

- Connect the supplied USB cable to your PC or laptop. We recommend that anyone making hardware modifications connect through a USB hub for safety.
- Connect the included +5V power adapter brick to your AC power source using the AC power cord.
- Apply power to the eZdsp by connecting the power brick to the +5V input on the eZdsp.

- 4. Make sure your eZdsp CD-ROM is installed in your CD-ROM drive. Now connect the eZdsp to your PC using the included USB. After few seconds Windows will launch its "Add New Hardware Wizard" and prompt for the location of the eZdsp drivers.
- Follow the instructions on the screens and let Windows find the USB driver files "r28xxez.inf" and "sdusb2em.sys" on the eZdsp CD-ROM. On XP systems Windows will find the drivers automatically.

# **Starting Code Composer**

To start Code Composer Studio, double click the F28335 eZdsp CCStudio icon on your desktop.



Once CCS has started select **Debug->Connect** from the menu bar. Target **Connect/Disconnect** is a new feature in CCS 3.3.

Note: paid annual software subscription service is not available for eZdsp products.

## F28335 eZdsp Hardware Registration

The eZdsp F28335 hardware can be registered using the on-line registration process at www.spectrumdigital.com. Spectrum Digital, Inc. warrants the products it produces for one (1) year after the date of purchase. For a product to be considered "in warranty", Spectrum Digital must be notified of the defect within one (1) year after being purchased from Spectrum Digital or one of its authorized resellers. Spectrum Digital is not responsible for accidents, improper installation of connections, misuse, neglect or unauthorized modifications. If the product qualifies for warranty repair Spectrum Digital may repair or replace the product at its discretion.

#### **Related Documentation**

A complete list of related documentation is available in the on-line help. The path to this documentation is (assuming you choose c:\CCStudio\_v3.3 as the default path)

c:\CCStudio\_v3.3\docs\pdf\release\_ccs\_full\_master.ht ml

## **Debug Hints and Trouble Shooting**

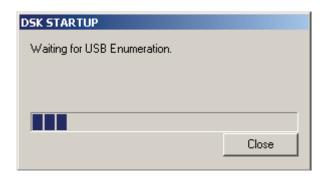
- If installing on Windows XP and your PC is connected to the internet through a firewall the USB install may take up to 15 minutes if you let it complete normally. The work-around for this issue is to simply disconnect your network cable during the USB hardware install.
- Some of the Help Files are links to Adobe Acrobat PDF files. If you intend to access these files you must have Adobe Acrobat installed on your system.
- If you want to verify a successful USB driver install, open your device manager by right clicking on the My Computer icon on your desktop and selecting Properties --> HW --> Device Manager. You should see a new class "SD USB Based Debug Tools" and one Spectrum Digital TMS320F28xx eZdsp installed.
- The DS201 LED comes on when power is applied to the eZdsp. Do not launch Code Composer until the LED is off.

The best place to look for eZdsp troubleshooting and software updates is:

http://support.spectrumdigital.com

## **Error Messages**

Many of the error messages below refer to USB enumeration issues. The following window will appear when launching CCS or the Diagnostic Utility indicating the enumeration status.



### Message:

Failed: Requires Win2K or Win XP. Problem: Your operating system does not support USB.

## 2. Message:

Failed: USB device is NOT enumerated or plugged in. Problem: Windows cannot find the eZdsp. Check power and USB Cable.

#### Message:

Failed: Load USB Application.

Problem: Loader could not download the eZdsp emulation application. The on-board emulation controller could be in a bad state. Cycle power on the eZdsp.

## 4. Message:

Failed: USB Channel in use by another app. Problem: Another application is using the eZdsp USB communication channel. Only one application is allowed to communicate to the eZdsp over the USB channel at the same time. Check for active applications using the Windows Task Manager if open application is not obvious.

## Message:

Waiting for USB Enumeration. Status: This is a status message that indicates that Code Composer Studio is waiting for communication with the on-board JTAG emulator to be established. This should take less than 10 seconds. Do not hit the close button unless it is clear that something is wrong (the progress bar runs forever)

**Notes** 

# **Mouser Electronics**

**Authorized Distributor** 

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