Code Composer Studio™ IDE

Quick Start

Installation Requirements

These operating platform requirements are necessary to install the Code Composer Studio Integrated Development Environment (IDE):

Minimum

- 233MHz or higher Pentium™-compatible CPU
- 600MB of free space
- 64MB of RAM
- SVGA (800 x 600) display
- Internet Explorer™ (4.0 or later) or Netscape Navigator™ (4.0 or later)
- Local CD-ROM drive

Recommended

- 128MB of RAM
- 16-bit color
- 500MHz or higher Pentium™-compatible CPU

Supported Operating Systems

- Windows™ 98
- Windows™ NT 4.0 Service Pack 4 or higher
- Windows™ 2000 Service Pack 1

Installing Code Composer Studio (CCS)

Note: *For Windows NT and Windows 2000, you must install and run Code Composer Studio using administrator privileges. If installing hardware, follow the instructions provided with the hardware.*

1 Insert the installation CD into the CD-ROM drive.

An install screen should appear after a few seconds; if not, go to Windows Explorer and run setup.exe from your CD-ROM.

2 Choose the option to install Code Composer Studio.

3 Respond to the dialog boxes as the installation program runs.

A welcome panel appears and describes the program icons that will appear on your desktop. The panel contains links to product demonstrations, and the TI DSP Developers' Village.

CCS v2 will automatically configure your system with a preset configuration unless a previous version of CCS is detected. For the TMS470 system, the default configuration is the ARM7 simulator. If CCS v2 detects a previous version of CCS, it will automatically import that configuration and set it as the new default.

Unless you want to reconfigure your system, the installation is complete and CCS is ready to run.

To start Code Composer Studio, double-click the CCS 2 icon on your desktop.

Changing Your Code Composer Studio Target Setup

You can load a standard configuration file or set up a new system configuration.

To load a standard configuration file:

Invoke the setup application by double clicking on the Setup CCS 2 icon that appears on your desktop. The Import Configuration dialog box appears and displays a list of prebuilt system configurations. Before you start, click the button labeled Clear to remove any previously defined configuration, and then, in the message box, click Yes to confirm the Clear command. The following items are shown on the Import Configuration dialog box.

- Available Configurations – lists the standard board configurations shipped with Code Composer Studio
- Configuration Description – describes the prebuilt configuration
- Filters – drop-down boxes that allow you to narrow the list of available configurations
- Import button – makes the board configuration you selected under Available Configuration the active configuration for Code Composer Studio
- Clear button – removes all board configurations from your system configuration
- Advanced button – allows you to manually add a board configuration (also see To Set Up a New System Configuration in the next section)

1 Select the appropriate board or simulator configuration under Available Configurations. Use

Filters to help narrow the available choices, and then click Import.

2 Repeat the step above for each board or simulator you wish to add to your system. Your configuration may contain more than one target board. Within the Setup interface, the configuration you selected is graphically displayed under My System.

If you select more than one target configuration to the setup, the Parallel Debug Manager (PDM) will be launched. When you launch CCS, the PDM lets you control multiple debug sessions.

3 Click the button labeled Save and Quit. The configuration is saved in the System Registry.

4 Click Yes to the question, "Start Code Composer Studio on Exit?" The Setup utility is closed and Code Composer Studio is started.

To set up a new system configuration:

If you have a custom board or you cannot find your board under the prebuilt configurations, you can manually add your own system configuration. To do this, close the Import Configuration dialog and double-click on the appropriate Available Board/Simulator Types on the CCS Setup window.

Enter your custom configuration data in the Board Properties dialog to choose the appropriate settings for your system.

For more information on setting up a new system configuration, see the CCS Setup online help.

Running the Code Composer Studio Tutorial

The interactive Code Composer Studio tutorial as well as the CCS Getting Started Guide, provides an effective method to learn about the new and existing features of this tool.

1 CCS should now be running. If it is not already running, double-click on the CCS 2 icon on your desktop.

2 From the Code Composer Studio Help menu, select Tutorial.

This next section describes the steps involved in beginning an actual project.

Using Code Composer Studio to Build a Program

To create a new project:

1 Select Project → New from the menu. This opens the Project Creation dialog box. In the Project Name field, type the new project name.

2 In the Location field you can either type the name of the correct project directory where you want the project to reside or you can browse to it.

3 In the Project Type field, select library or executable, depending on the type of output you are creating.

4 In the Target field, select the target you have configured for CCS and click Finish.

To open an existing project:

5 Select Project → Open from the menu. The Project Open dialog box appears. Navigate to the correct project directory. Highlight the project you want to use and choose Open.

Existing projects created under CCS v1.3 will automatically be migrated to the latest format when they are opened within CCS v2.

To add files to a project:

6 Select Project → Add Files to Project in the Add Files to Project dialog box, navigate to the appropriate location, select the file, and click Open.

Note: *Code Generation Tools include runtime library files (e.g., rts.lib). The runtime libraries contain the Standard C Library of functions. If you are going to be using Standard C Library functions, you must add the target-specific runtime libraries to your project.*

Do not try to specify include or header files directly. These files are automatically added to the project by scanning the source files for dependencies.

Building and running the program:

7 **To set tool options:** Select Project → Build Options from the menu. You can change options for the compiler and linker.

8 **To build the program:** Choose Project → Rebuild All to recompile, reassemble, and relink all the files in the project. Messages about this process are shown in a frame at the bottom of the window.

9 **To load the program:** Select File → Load Program to load the executable file (*.out). Select the program you just rebuilt and click Open.

10 **To run the program:** Select Debug → Run.

11 **To debug the program:** Select Debug from the menu bar to access the available debugging commands.

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