



THE WORLD LEADER IN DSP AND ANALOG

Code Composer Studio™ IDE

Quick Start Reference Guide

Installing the Software

Installation of Code Composer Studio Integrated Development Environment (IDE) consists of two steps: **installing** the software on your system and **running** the Code Composer Studio setup application. The setup application configures the driver interface and enables Code Composer Studio to communicate with your DSP simulator or target board. The requirements for the operating platform are:

Minimum

- Pentium 90 IBM™ PC or compatible
- Microsoft Windows™ 95, 98 or NT 4.0
- 100 megabytes of hard-disk space
- 16 megabytes of RAM
- SVGA (800 x 600) display

Recommended

- Pentium™ 133 IBM PC or compatible
- Netscape Navigator™ 3.0 or later, or Internet Explorer™ 3.0 or later (to read release notes, to register, etc.)
- 64 megabytes of RAM
- SVGA (1024 x 768) display

Installing Code Composer Studio for Windows 95/98/NT

Note: For Windows NT, you must install Code Composer Studio using administrator privileges.

- 1 Insert the installation CD into the CD-ROM drive.
An install screen should appear; 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.

The installation procedure creates CCS (platform/version) and Setup CCS(platform/version) program icons on your desktop.

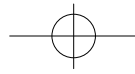
Setting Up Code Composer Studio

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

The Code Composer Studio Setup utility runs when you reboot your computer after installing Code Composer Studio (provided the checkbox was selected). You can also invoke the setup application by double clicking on the [Setup CCS](#) icon that appears on your desktop. The [Import Configuration](#) dialog box appears and displays a list of prebuilt system configurations.

- [Available Configurations](#) – lists the standard board configurations shipped with Code Composer Studio
- [Additional Information](#) – describes the prebuilt configuration
- [Filters](#) – drop-down boxes that allow you to narrow the list of available configurations
- [Add to System Configuration](#) button – makes the board configuration you selected the active configuration for Code Composer Studio
- [Clear System Configuration](#) button – removes all board configurations from your system configuration

- 1 Select the appropriate board or simulator configuration. Use the filters to help narrow the available choices, and then click [Add to System Configuration](#). If your exact configuration is not available, choose [Close](#) and go to step 4.
- 2 Repeat the step above for each board or simulator you wish to add to your system (up to one of each). Click [Close](#) after you have finished adding configurations to your system.
- 3 If the configuration you selected is correct, the boards/simulators you have added will appear in the [System Configuration](#) window. Select [File -> Save](#), [File -> Exit](#), and continue to run Code Composer Studio.
- 4 To manually add your own system configuration, close the [Import Configuration](#) window and double-click on the appropriate [Available Board/Simulator Types](#).



- Use the **Simulator** configuration if the DSP hardware is not available or if you do not want to start development on a target system.
- Follow the prompts in order to choose the appropriate settings for your system.
- If prompted for a simulator configuration file, click on the double dots to the right of the configuration file name and browse to the appropriate file. If a bad configuration file is chosen, the simulator will give unpredictable results.
- Once the proper settings have been configured, click **Finish**. Select **File -> Save**, **File -> Exit**, and continue by starting up Code Composer Studio.

Running the Code Composer Studio Tutorial

The best way to learn Code Composer Studio is to run the tutorial..

- 1 Double-click on the CCS icon on your desktop.**
- 2** From the Code Composer Studio menu, select **Help -> Tutorial -> Code Composer Studio Tutorial**.

Note: For assistance with specific tasks, see the on-line help.

Starting a Project

- 1 To create a new project:** Select **Project -> New** from the menu. This opens the **Save New Project As** dialog box. Navigate to the correct project directory where you want the project to reside. In the **File Name** field, type the new project file name and press **Save**.

Note: If an existing project is already open, its compiler, assembler, and linker options are copied to the new project and the existing project is automatically closed. If a project is not open, the new project inherits the default project options. The title bar changes to display the name of the new project and a **Project View** is created for you to add files to the project list.

- 2 To open an existing project:** 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**.

- 3 To add files to the project:** Select **Project -> Add Files to Project** or select **View -> Project** to open the **Project View** window, right click on the project name, and select **Add Files**. If the file type is not correct, type or select the correct extension in the **Files of Type** drop-down field. Every project is divided into the following five file types:

- include – contains all header/include files: *.h
- libraries – contains all library files: *.lib, *.o*
- source – contains all source files: *.c, *.s*, *.a*
- linker command files - contains information about memory sections and linker options: *.cmd
- DSP/BIOS Config - contains all DSP/BIOS configuration files: *.cdb

Note: Code Generation Tools include *rtc.src* and some compiled library files, e.g., *rts.lib*. This library contains the Standard C Library of functions. If you are going to be using Standard C Library functions, you must add the target-specific RTS library 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.

- 4 To set tool options:** Select **Project -> Options** from the menu. You can change options for the compiler, assembler and linker.
- 5 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.
- 6 To load the program:** Select **File -> Load Program** to load the executable file.
- 7 To debug the program:** Select **Debug** from the menu bar and choose the debugging activity you want.

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