C2000Ware Quick Start Guide

C2000Ware for C2000™ microcontrollers is a cohesive set of development software and documentation designed to minimize software development time. From device-specific drivers and libraries to device peripheral examples, C2000Ware provides a solid foundation to begin development and evaluation of your product.

C2000Ware requires:

- CCS v6.2.0 or newer
- C2000 Compiler v16.9.0 or newer

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1 Package Structure

The C2000Ware softwareblah package is organized into the following directory structure:

Table 1. C2000Ware Root Directories

Directory Name	Description
.metadata	Contains the C2000Ware resource explorer standalone GUI files. Do not modify.
boards	Contains the hardware design schematics, BOM, gerber files, and documentation for C2000 controlCARDS, controlSTICKs, Experimenter Kit, and LaunchPads
device_support	Contains all device-specific support files, bit field headers, bit field device peripheral examples (including LaunchPad™ demos), and device development user's guides.
docs	Contains the C2000Ware package user's guides and the HTML index page of all package documentation.
driverlib	Contains the device-specific driver library and driver-based peripheral examples.
libraries	Contains the device-specific and core libraries.
uninstallers	Contains the C2000Ware uninstaller.
utilities	Contains development utility applications such as flash programmers, windows drivers, and third party software.

1.1 Documentation

Within C2000Ware, there is an extensive amount of development documentation ranging from board design documentation, to library user's guides, to driver API documentation. The "boards" directory contains all the hardware design, BOM, gerber files, and more for controlCARDs to Launchpads. To assist with locating the necessary documentation, an HTML page is provided that contains a full list of all the documents in the C2000Ware package. Locate this page in the "docs" directory.

1.2 Devices

C2000Ware contains the necessary software and documentation to jumpstart development for C2000 microcontrollers. Each device includes device-specific common source files, peripheral example projects, bit field headers, and if available, a device peripheral driver library. Additionally, documentation is provided for each device on how to set up a CCS project, as well as give an overview of all the included example projects and assist with troubleshooting. For devices with a driver library, documentation is also included that details all the peripheral APIs available.

To learn more about C2000 microcontrollers, visit www.ti.com/c2000.

1.3 Libraries

The libraries included in C2000Ware range from fixed point and floating point math libraries, to specialized DSP libraries, as well as calibration libraries. Each library includes documentation and examples, where applicable. Additionally, the flash API files and boot ROM source code are located in the "libraries" directory.

2 C2000Ware GUI

C2000Ware provides a graphical user interface (GUI) for intuitive navigation of software, libraries, user's guides, and other package content. Within Code Composer Studio™ (CCS) v7.0 and newer, go to "View->Resource Explorer" to locate the C2000Ware GUI explorer.

C2000Ware uses the new online Resource Explorer, which includes many updated features. This includes full package navigation on the web or in CCS without requiring installation of C2000Ware. Additionally, on the web there is the ability to import to CCS Cloud and download individual files or examples.

View C2000Ware Resource Explorer on the web: dev.ti.com/tirex/#/

The C2000Ware Standalone GUI (without requiring CCS) is currently in development.

3 Updating C2000Ware

Within the C2000Ware installation directory there is an update checking application, “C2000WareUpdater.exe”, which checks for a newer version of C2000Ware. The updater (currently Windows only) will periodically check automatically in the background for any newly available C2000Ware packages. A notification will appear detailing any updates found. When the updater is run manually, a window opens to display either that the current version installed is the latest version or that a newer version is available for download. If a new version is available, the option is given to download and install the new version. The application will then proceed to download the latest C2000Ware installer to the specified download directory. Upon completing the download, the installer will automatically run and continue with the standard installer steps.

4 Code Composer Studio

Code Composer Studio is an integrated development environment (IDE) that supports TI's microcontroller and embedded processors portfolio. Code Composer Studio comprises a suite of tools used to develop and debug embedded applications. The latest version of Code Composer Studio can be obtained at the following link:

http://www.ti.com/ccstudio

All projects and examples in C2000Ware are built for and tested with TI’s Code Composer Studio. Although Code Composer Studio is not included with the C2000Ware installer, it is easily obtainable in a variety of versions.

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