CCS setup manual

**Introduction:**

Code Composer Studio (CCS) is used for communication with DSP. Following the steps bellow to complete installation and initial setup will save your time.

This manual is created on 1/26/2021, the CCS version is 10.2.0. The setup steps maybe different for new version.

**Installation:**

1. Download CCS from the official website: <https://www.ti.com/> or this download page: <https://software-dl.ti.com/ccs/esd/documents/ccs_downloads.html?_ticdt=MTYxMTM5MjUxMXwwMTc3MWE5ZDAyOWIwMDBmMDE5ODVlZjI2ZTQ1MDMwODMwMDI2MDdiMDA5Nzh8R0ExLjMuMTI4ODIzNzM4MS4xNjExMDU5MjM0fDA>.

Offline installer is highly recommended. You may need to registered a TI account using your .edu email address and fill out a form requesting CCS software. Just follow TI's instructions.

1. Prepare to install. You need to turn off all your antivirus softwares and network firewalls, including windows secure center --> anti-virus and firewall --> real time protection. Then reboot your device.
2. Unpack the compressed file, and run the set up .exe.
3. Follow the instructions and try to make all the options in this page "OK". Go back to step 2 if needed.
4. Default installation path is highly recommended. Choose custom installation and select the components you need. Most of the components can also be installed later in CCS. For our system, just make sure you have C200 real-time CMUs selected.
5. Click "Next" all the way down.
6. You may need to specify a path as your CCS workspace. Keep this path in mind and you'd better not change it later.

**Setup for DSP:**

1. Suppose that you have your CCS installed successfully. Run it and open "Resource Explorer" in the Getting Started page.
2. In the left tree widget, find two items:
   1. "Software/C200Ware(xxx)" and install it.
   2. "sci\_echoback" and import it to CCS IDE (You have to install C2000 first).
3. Run the "sci\_ex3\_echoback.c" in the sci\_echoback project on FLASH. The run button is a little hammer.
4. Right click the project, copy and paste. Remember to name it, keep all the occurred options as default.
5. Replace cmd file with ours. You may need the origin one for later use, so remember to rename it before replace. The path is:

${CCSINSTALLPATH}\C2000Ware\_3\_03\_00\_00\_Software\device\_support\f2837xd\common\cmd

1. Copy our "Headers", "Functions" and "main.c" file to your new project directory. By default, your new project is in your CCS Workspace. Delete the existed "sci\_ex3\_echoback.c".
2. Right click your new project and click "Properties" in the popped up menu. Use the "Add" button with green plus.
   1. In "Predefined symbols", you need to add "\_LAUNCHXL\_F28379D"
   2. In "Include Path", you need to add "${workspace\_loc:/${ProjName}/Functions}" and "${workspace\_loc:/${ProjName}/Headers}".
3. Now build your DSP code. It's same as the echoback. (Make sure you have your DSP connected to your computer.)
4. If you succeed, you will see "\*\*\*\* Build Finished \*\*\*\*" in your console.
5. Click "debug" button. It's a spider. Wait until the debug process finishes. Click Resume button. Then you can communicate with DSP.