Code Composer Studio Installation Guide

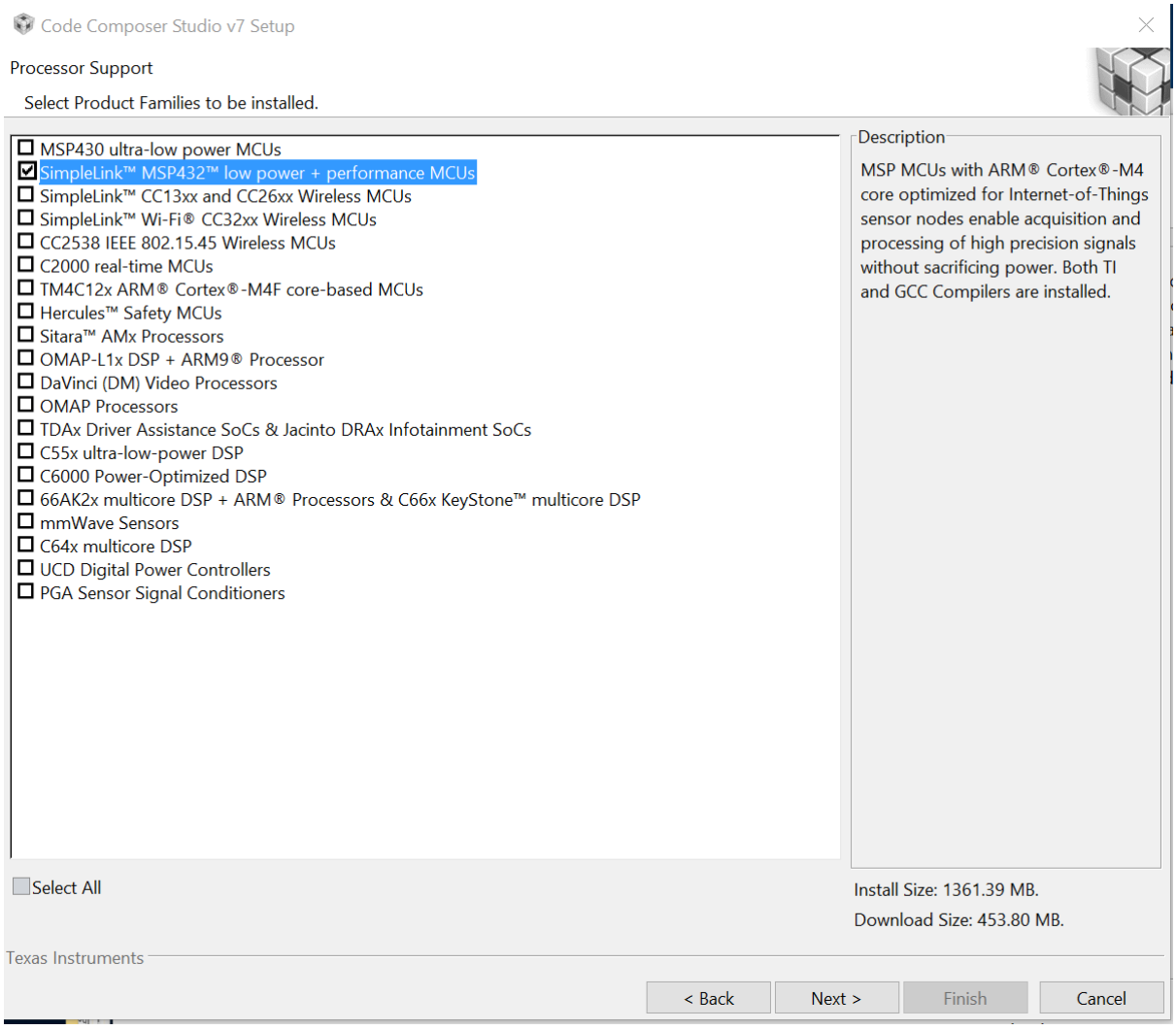
1. CCS Installation

You will develop code for your microcontroller board using Code Composer Studio Integrated Development Environment (IDE). These tools are available at no cost, and you need to install them on your laptop. To obtain these tools, go to http://www.ti.com/tool/CCSTUDIO click on Download, and download the following:

• Code Composer Studio Version 7 (Release 7.4.0) This will give you a large *installer.exe file. Run it to install the IDE on your machine. It is advisable to temporarily disable any antivirus software running on your computer before proceeding with the installation.

• After agreeing to the license agreement, you will be prompted to change the installation location of the software on your system. You can change it to c:\ti\ccv7

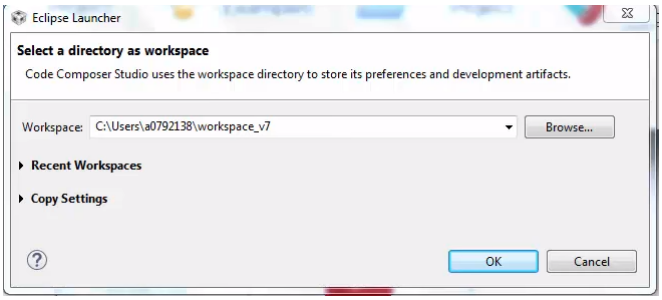
• You will now be prompted to choose product families to install. Select the SimpleLink MSP432 low power + performance MCUs option and click next.



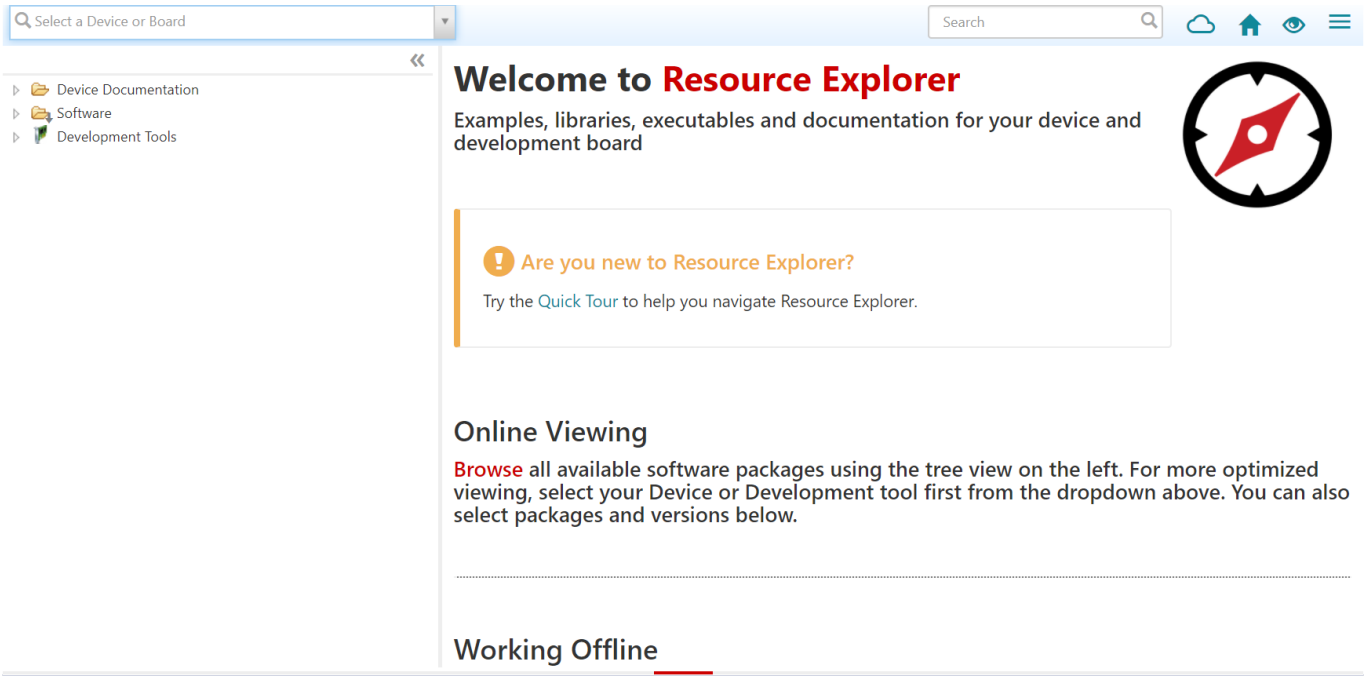
• Do not make any changes to the Debug Probe prompt and hit finish to kick off the installation.

The installation will take some time. Once it is completed, you can choose to create desktop shortcut for ease of access.

• Upon launching CCS, you will be prompted to choose a workspace. The workspace is a folder on your computer where all your files and projects will get stored. You can change the default workspace path to whatever you like and click OK.



2. Driverlib Installation



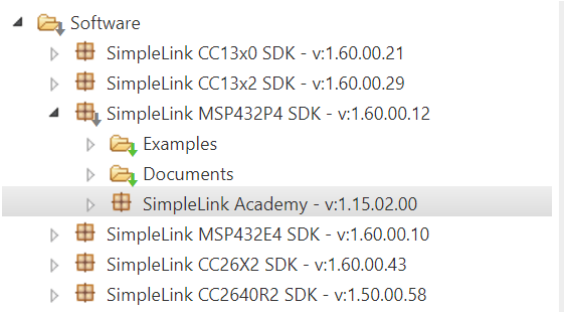
• When starting development, the place to begin is Resource Explorer. Resource Explorer can be accessed by going to View -> Resource Explorer. This tool allows you to access the latest software, documentation, tools and other resources. It may take a few seconds to load.

• Click on Software -> Simplelink MSP432P4 SDK v 1.60.00.12.

• On the right hand side of the window, scroll down and click on the  icon to download the SimpleLink MSP432P4 SDK kit.

3. Academic Kit Installation

• Click on SimpleLink Academy – v:1.15.02.00 under Software dropdown.



• Again, as before, on the right hand side of the window, scroll down and click on the  icon to download the SimpleLink Academy package.

4. Prepare your first project

- You will test the installation by downloading and compiling an application. We will use the application we have discussed in Lecture 2. This application is stored on GitHub. You will need a github account before you are able to complete the download.
- Select 'View - Project Explorer' from the top-level menu. You will see a new pane called 'Project Explorer'. Right-click in this pane and select 'Import' - 'Import' to get access to an import wizard.
- In the import wizard, Select 'Git' and double-click 'Projects from Git'.
- The tool then asks you to select a source code location. Double-click on the entry 'Clone URI' to get access to a Git Repository Window.
- Fill it out as follows. In 'URI', type 'https://github.com/vt-ece2534-s18/msp432-impatient-led'. You will notice that this automatically fills out several other elds.
- To download from GitHub, you also need to enter your GitHub account information. Add your GitHub username and your GitHub password. Select the option 'Store in Secure Store' so that you will have to enter your password only once. Click Next.
- The wizard then asks you to select the 'branch' you would like to download. Select the single available 'master' branch.
- The wizard nally picks a location on your harddisk to download into. By default, it will use a 'git' subdirectory on your windows Home Directory. That choice is OK.
- The wizard then asks you how to import the project. You can follow the default option, 'Import existing Eclipse projects'.
- In the last window, select 'finish' while ensuring that a project 'msp4320-impatient-led' is selected for installation.
- When the download process completes, you will notice that your Project Explorer has now its rst project, msp432p4-impatient-led'. Great. You just created your rst CCS project.
- You will now test the CCS installation by compiling this project. Click on the project name (msp432p4-impatient-led), and next click on the hammer.
- When the compilation finishes, the 'console' will show several compilation commands. The last few lines should read 'Finished building target: msp432p4-impatient-led.out' and 'Build nished'. That indicates everything was installed correctly. You are now ready to program the MSP432P4!