

Stellaris® ARM® Cortex™ M4 Training

Actions Items for Participants

Questions/concerns, contact:
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Pre-workshop Actions Items

(You are required to do them before the workshop)



Hardware Requirements

Please bring following items to the training session:

1) A computer/ laptop with:

Windows XP SP3 operating system

At least one functional USB port

CD drive (must have to install StellarisWare during the workshop)

2) A Digital Multi Meter

We recommended that you to bring your own DMM. You can share with your peers if you/they like.

Note: An EK-LM4F232 Evaluation kit will be provided to you for use during the workshop for lab/ exercises. **You will need to return the evaluation kit to us after the workshop.**



Important! Getting the right version of CCS

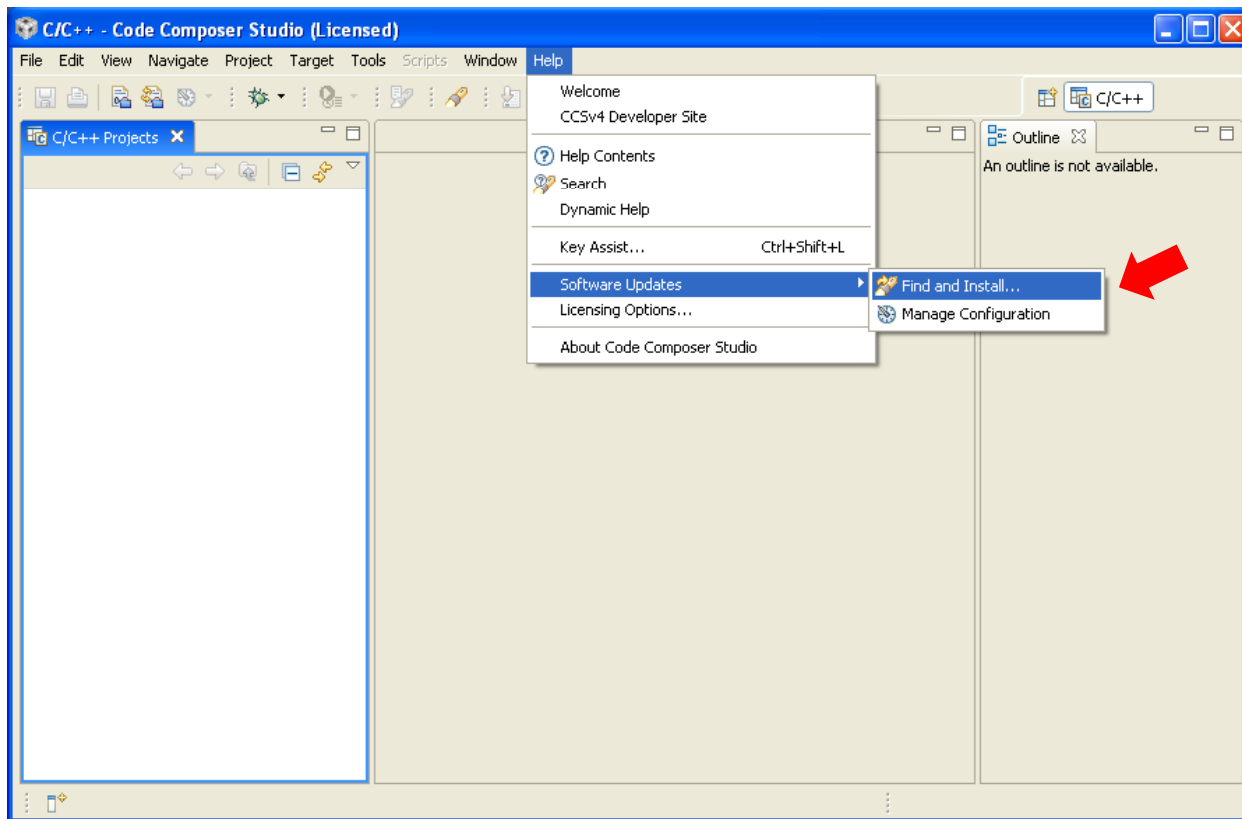
It is important to update your CCS tools to the new version that will support the new Stellaris devices. You have two options:

Option 1: Update your current CCD installation using the “Software Updates” feature of CCS and then run the supplemental installer for the new Stellaris devices.

Option 2: Completely uninstall CSS, then reinstall the latest version of CCS and run the supplemental installer for the new Stellaris devices.

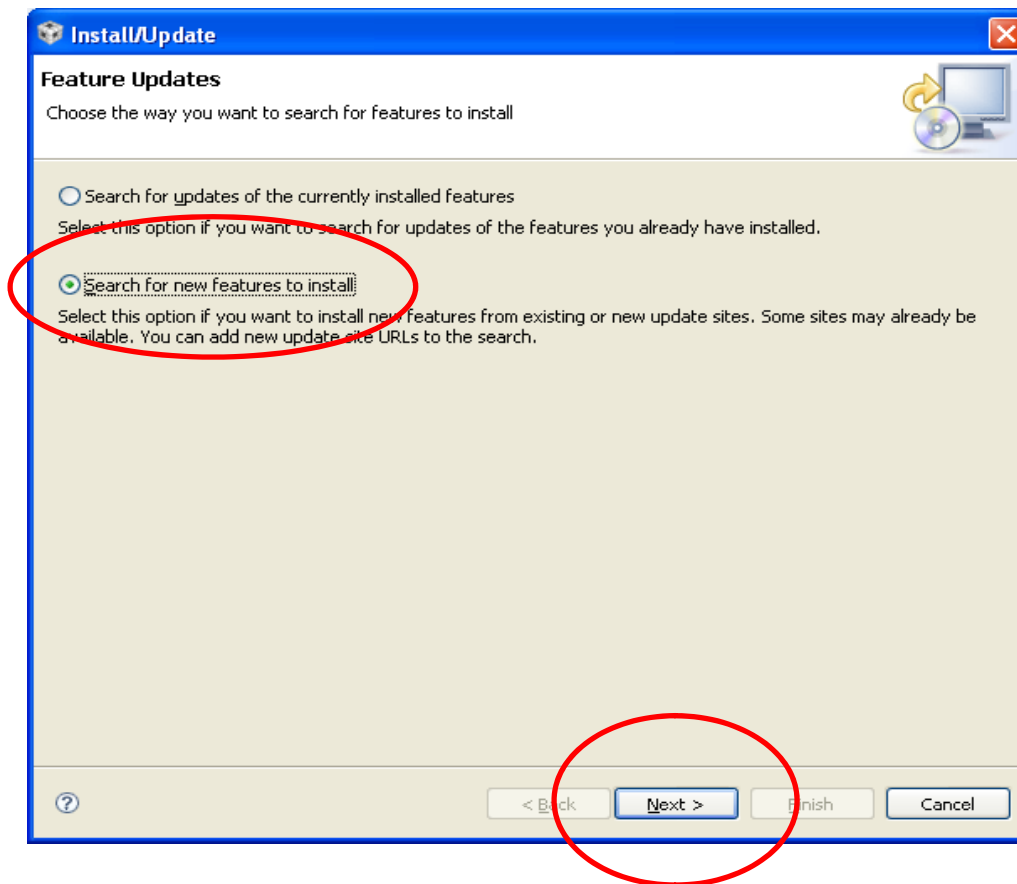
Option 1: Update Current Install of CCS

The first option is to update your current installation of CCS. Open Code Composer Studio and Click on Help-> Software Updates-> Find and Install.



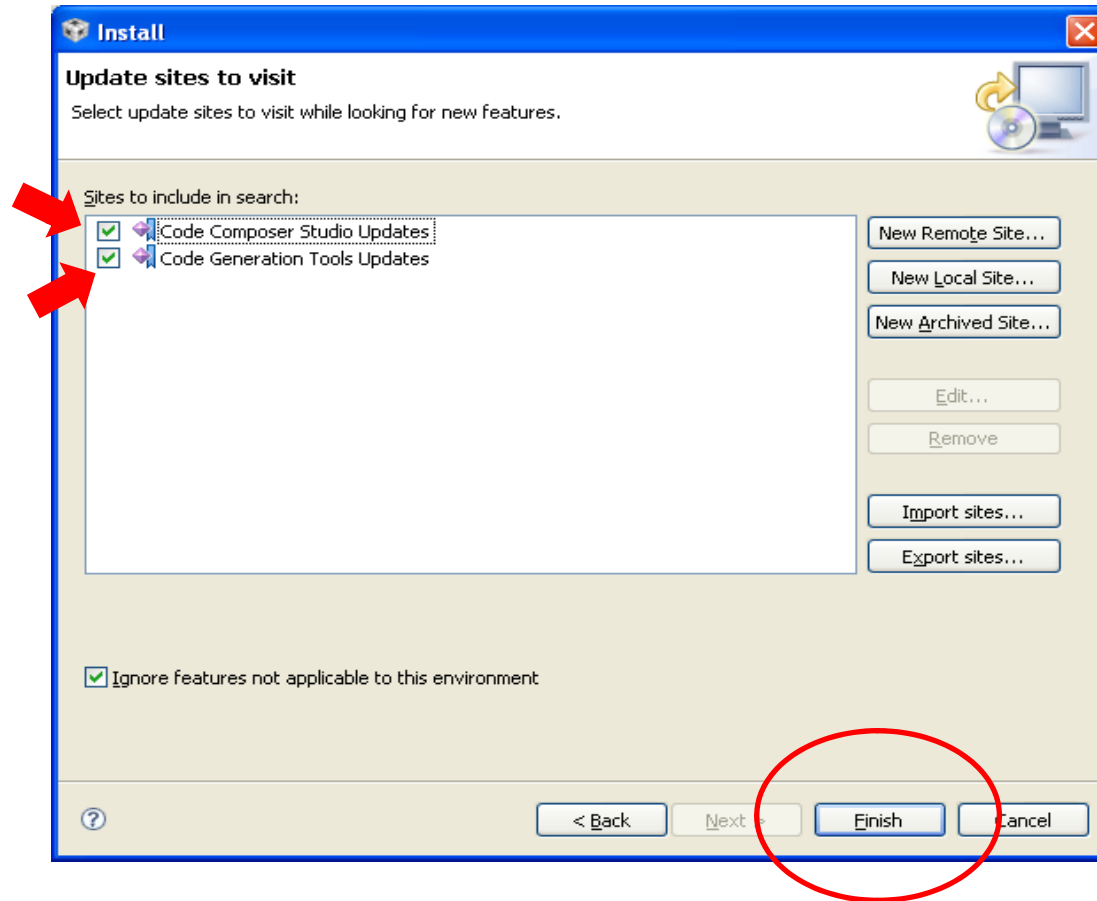
Option 1: Update Current Install of CCS (cont.)

In the Install/Update dialog, select “**Search for new features to install**” and click **Next**. This is very important since the update to the compiler for the M4F devices is considered a new feature and not an update to the currently installed features.



Option 1: Update Current Install of CCS (cont.)

In the Install dialog, select both the **Code Composer Studio Updates** and **Code Generation Tools Updates** to be included in the search. Click **Finish**.



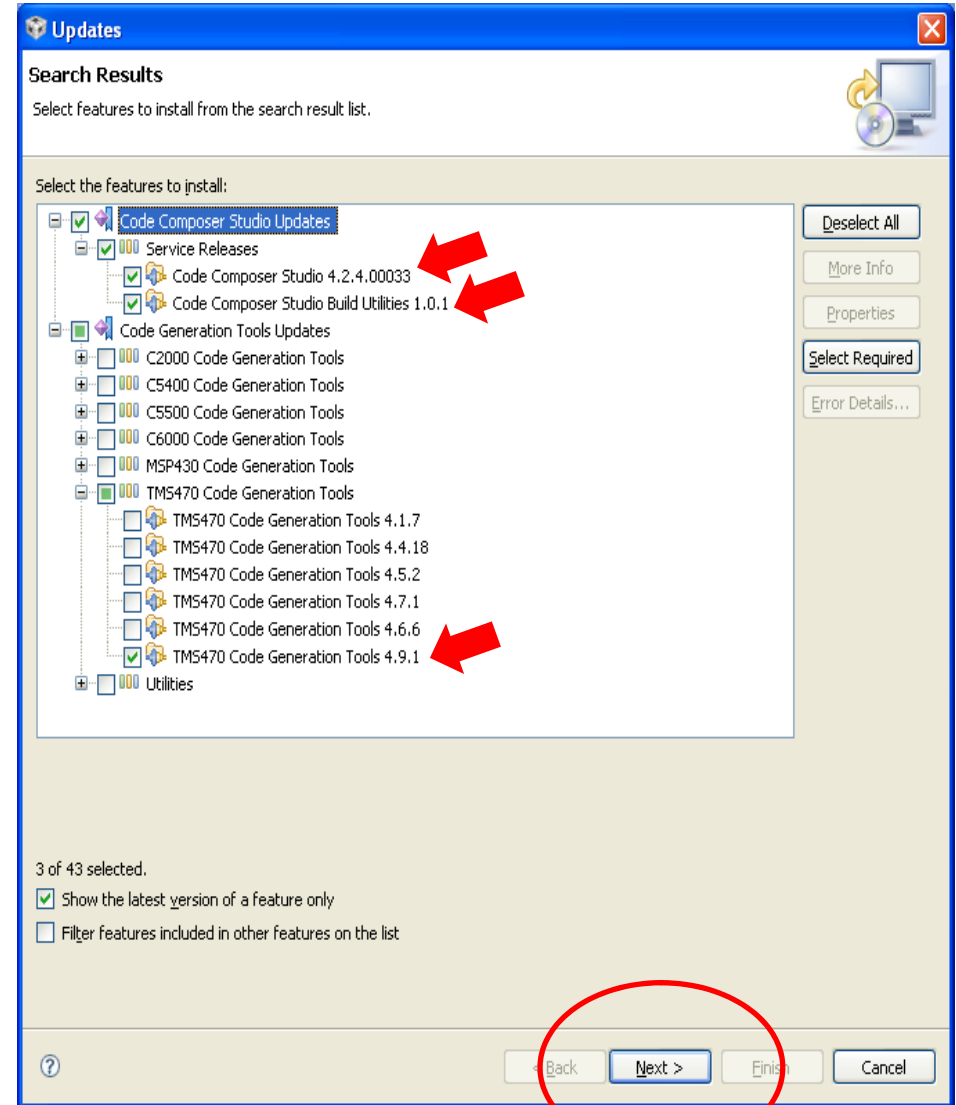
Option 1: Update Current Install of CCS (cont.)

After the search is complete (this could take a few minutes) you will see a list of new features.

Please select:

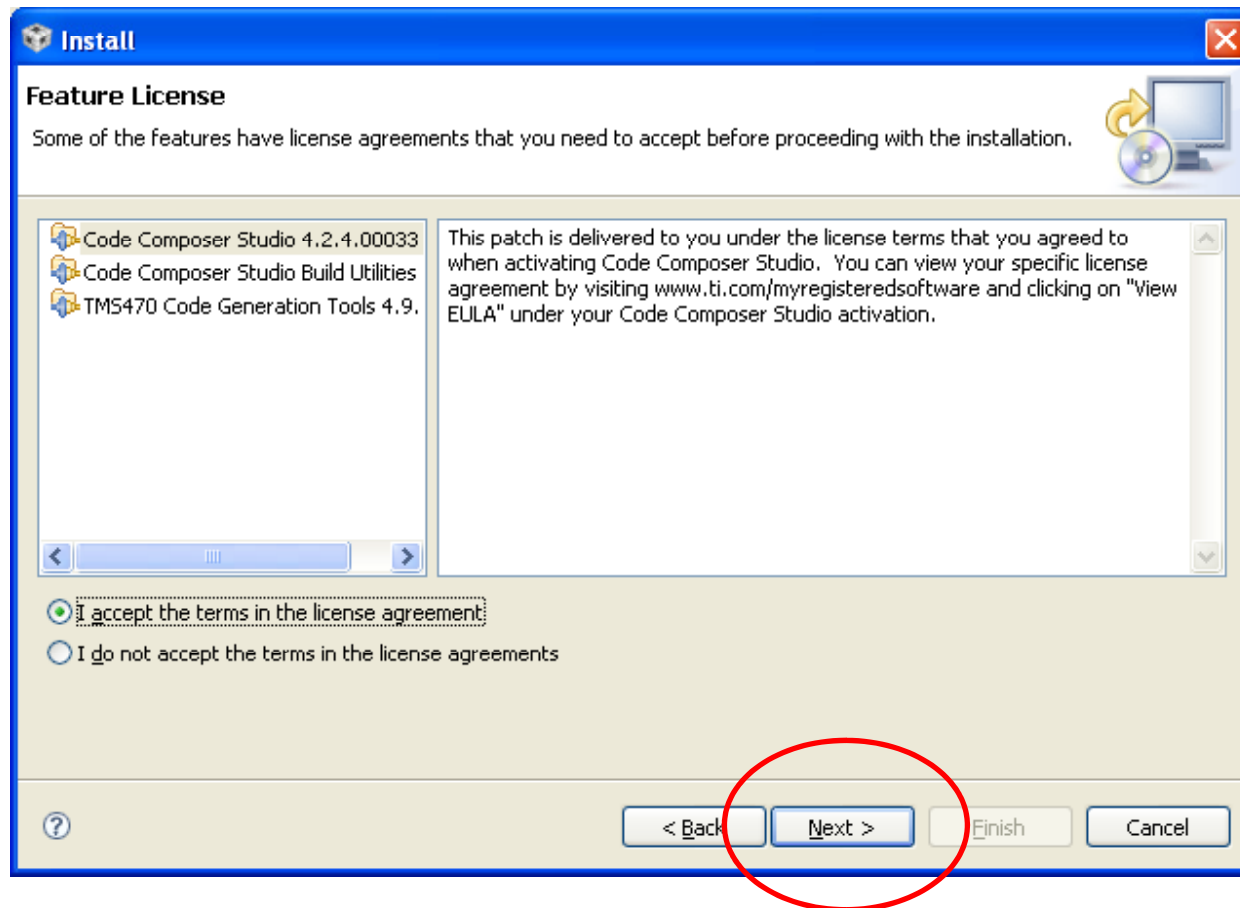
- 1) **Code Composer Studio 4.2.4.000033**
- 2) **Code Composer Studio Build Utilities 1.0.1**
- 3) **TMS470 Code Generation Tools 4.9.1**

After you have selected the above features to install, click **Next**



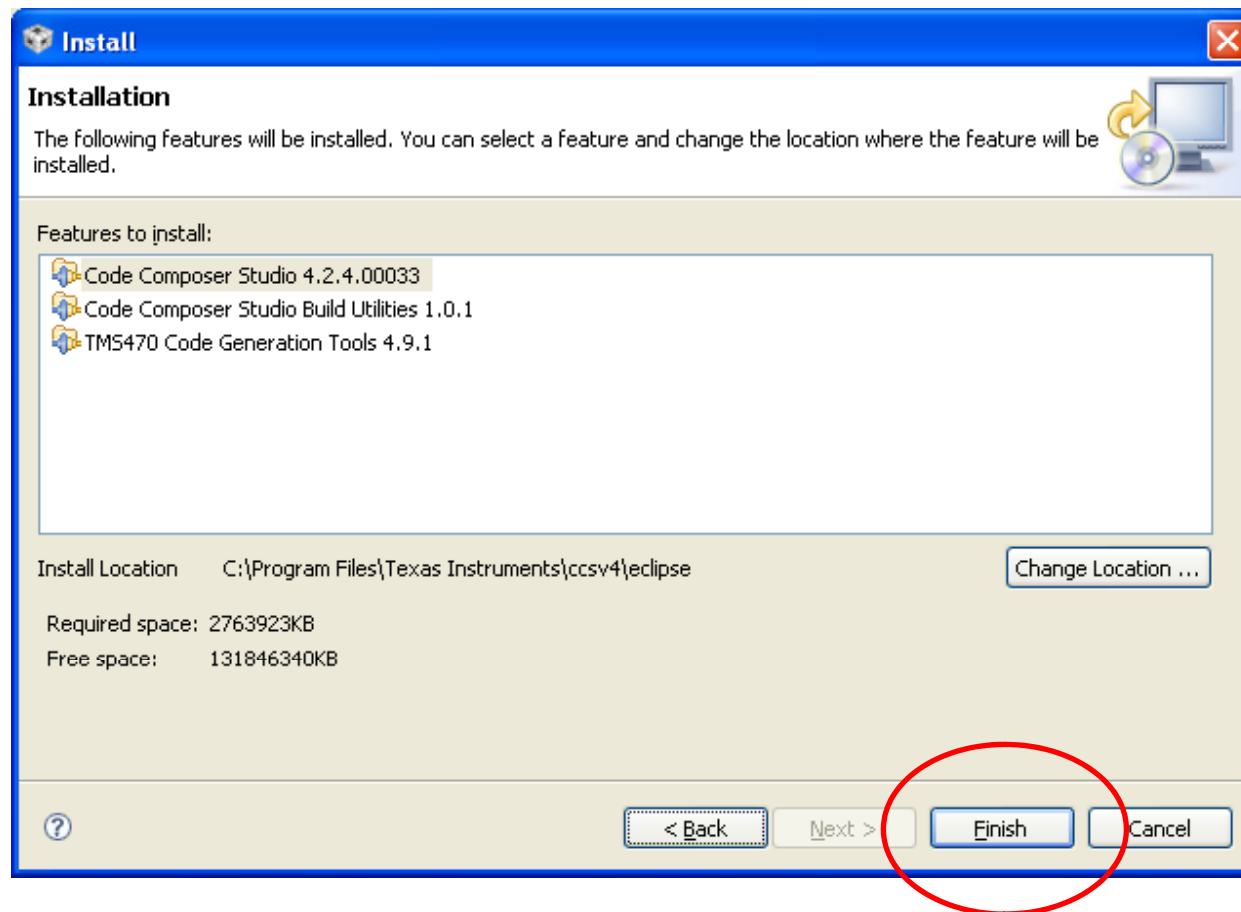
Option 1: Update Current Install of CCS (cont.)

To continue, you must accept the feature license agreement. Click **Next** after you have made your selection.



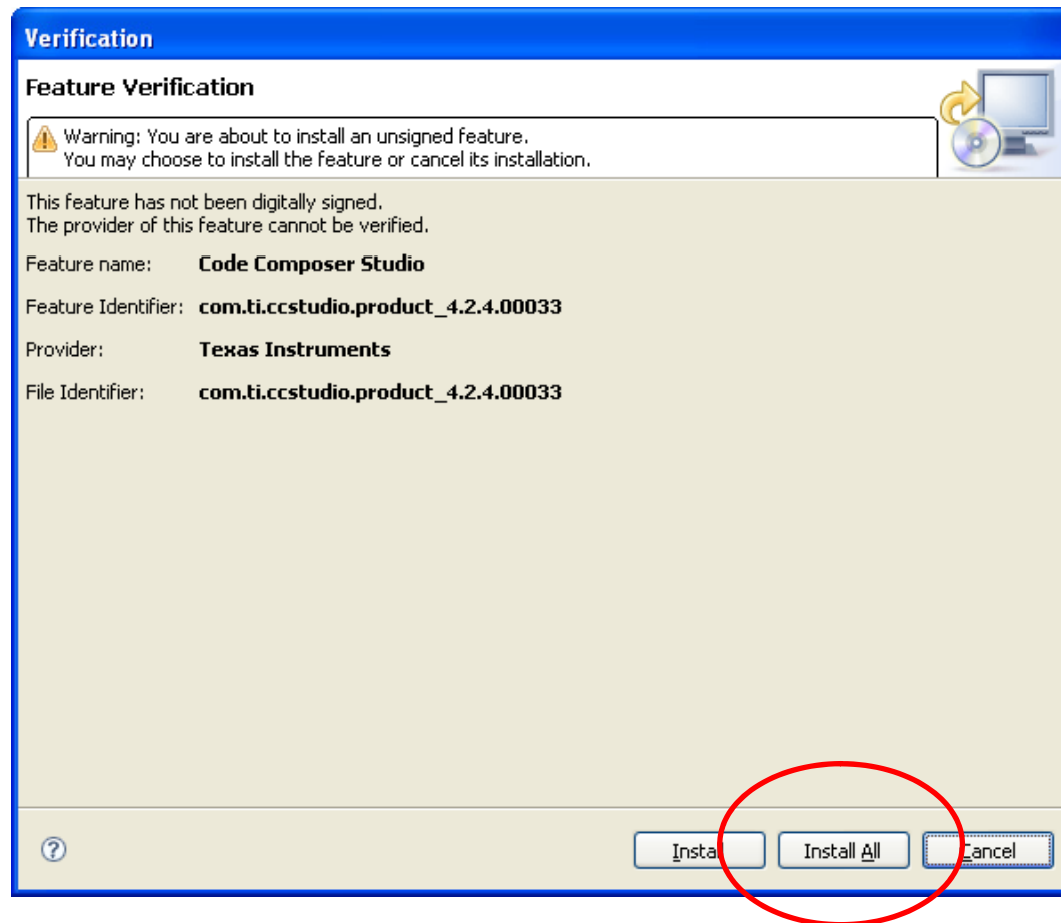
Option 1: Update Current Install of CCS (cont.)

The final dialog will review your selected installations. Click on **Finish** to start the installation.



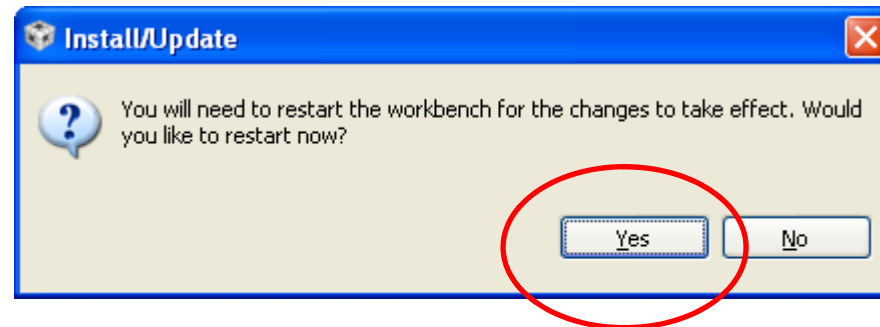
Option 1: Update Current Install of CCS (cont.)

After the installation procedure starts, you will get a request for Feature Verification. Click on **Install All** to continue.



Option 1: Update Current Install of CCS (cont.)

After the installation has completed, you will be asked to restart the workbench for the changes to take effect. Click on Yes to continue.



The CCS update of the IDE and Code Generation Tools (CGT) is now complete.

IMPORTANT! Please see the step on slide 14 “**Install LM4F Support Package**” to install the new device support for LM4F to complete your CCS tools update for LM4F!

Option 2: New Install of CCS v4.2.400033

Note: You must uninstall the previous version(s) of CCS from your computer before installing CCS v4.2.4.00033. If you do not wish to do this, see option 1 on slide 5.

Please visit

http://processors.wiki.ti.com/index.php/Download_CCS page to download CCS v4.2.4.00033 DVD image.

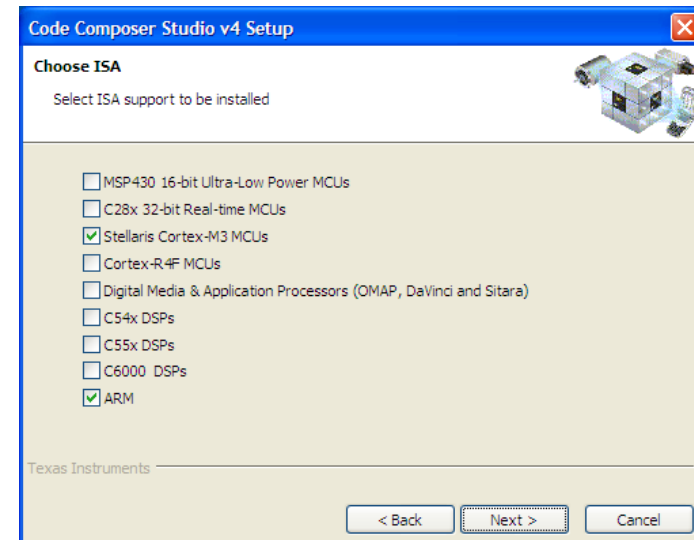
Please use the default installation path.

In the installation wizard, make sure that you select Stellaris Cortex M3 & ARM. You can select more options if you like.

IMPORTANT! Please see the step below “Install LM4F Support Package” (on slide 14) to install the new device support for LM4F to complete your CCS tools update for LM4F!



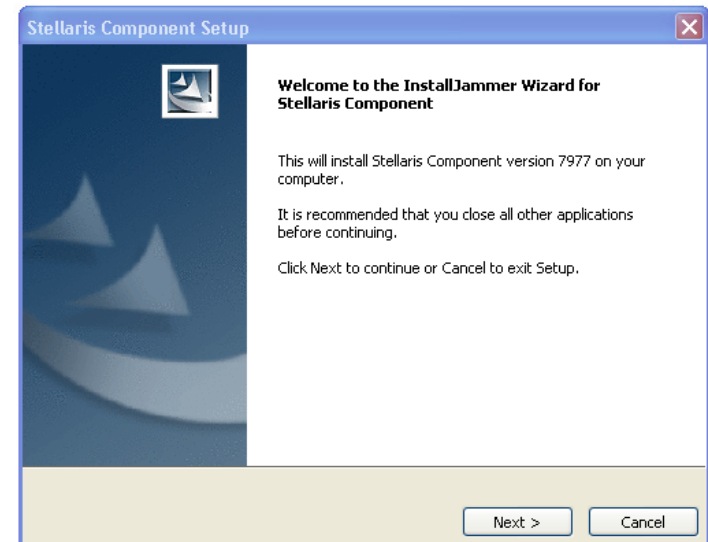
CCSv4 Release Archive			
Release	Build #	Date	Download
CCSv4.2.x			
4.2.4	4.2.4.00033	Jul 18, 2011	DVD image Code Size Limited



Install LM4F Support Package



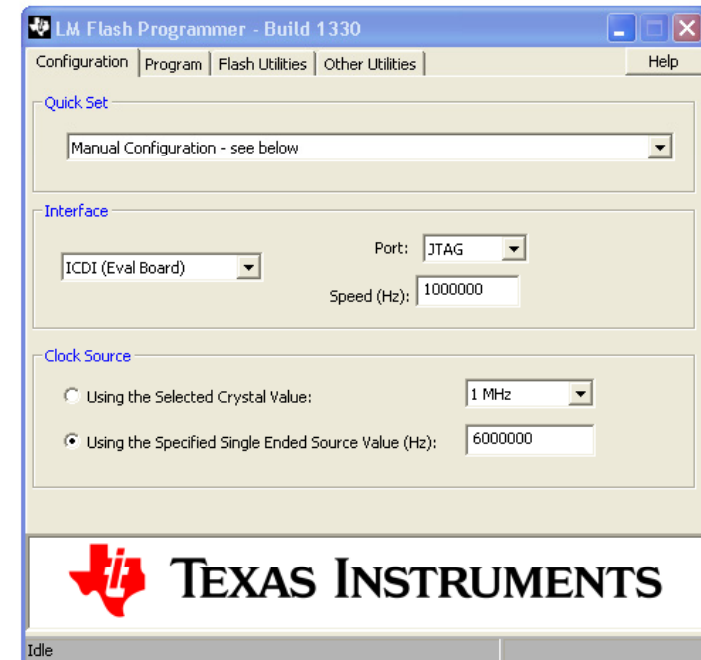
- Please install LM4F Support Package ([ti_stellaris_setup.exe](#)) on your computer.
- [ti_stellaris_setup.exe](#) should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.
- The support package will update/add files in various CCS folders. It is strongly recommended that you use the default installation path.



Install LM Flash Programmer

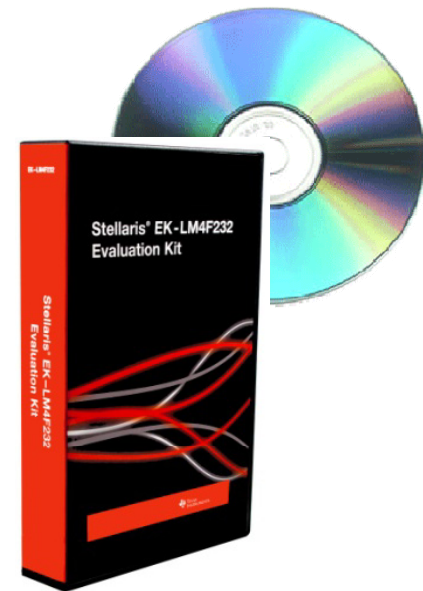


- Please install LM Flash Programmer ([LMFlashProgrammer.msi](#)) on your computer.
- [LMFlashProgrammer.msi](#) should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.



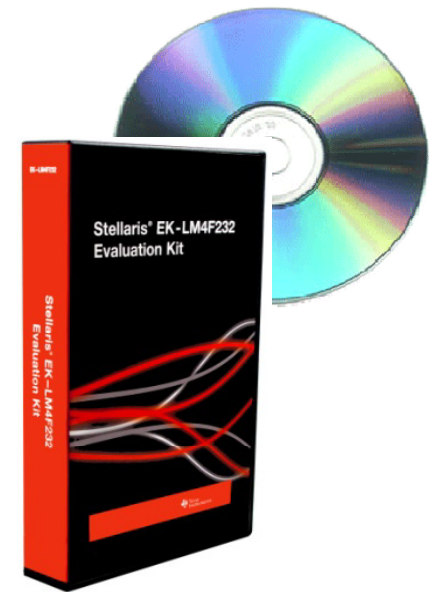
Install StellarisWare®

- Please download & install StellarisWare ([Stellarisware.exe](#)) on your computer.
- [Stellarisware.exe](#) should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.
- StellarisWare contains drivers, DriverLib, examples that we will be using during the workshop.
- The procedure to install these drivers is very straight forward. Just run the setup file and extract the files to the default path “[C:/StellarisWare](#)”
- **Tip:** If you already have a previous version of StellarisWare installed on your computer, you can simply rename your old StellarisWare directory to something else (ex. StellarisWare_old) and proceed with the installation.



Download ICDI Drivers

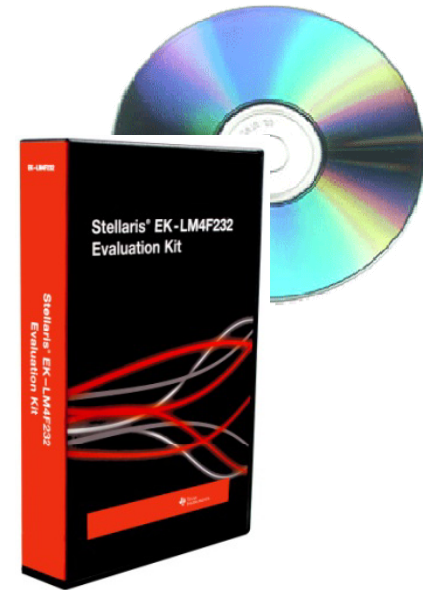
- During the workshop, you will need to install the following drivers on your computer.
 - 1) Stellaris Virtual Serial Port
 - 2) Stellaris ICDI JTAG/SWD Interface
 - 3) Stellaris ICDI DFU
- The drivers ([stellaris_icdi_drivers.zip](#)) should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.
- **Note:** You will be able to install drivers only when EK-LM4F232 board is connected to your computer. This will be done during the workshop.
- **Tip:** Please review [how_to_install_drivers.pdf](#). It provides step by step instructions on how to install drivers. This will help all of us utilize the workshop time more effectively.



[how_to_install_drivers.pdf](#) should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.

Download Labs

- Please download section 2 & 3 of the following labs. Extract the zip files on your computer's Desktop.
- Low Power Lab ([hib_lab.zip](#))
- Analog Peripherals Lab ([adc_lab.zip](#))
- USB Lab ([usb_lab.zip](#))
- These zip files should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.



In-workshop Actions Items

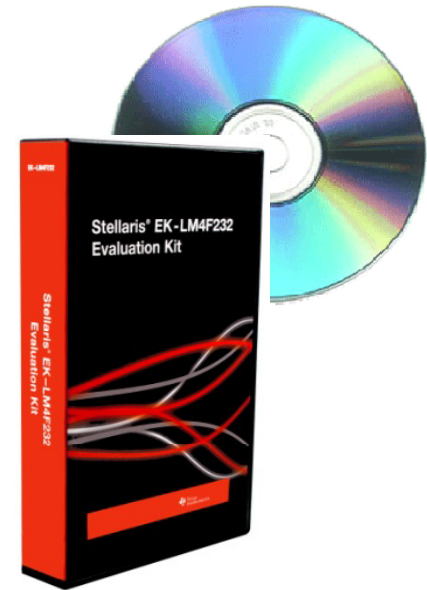
(You are required to perform these actions during the workshop)



Install Drivers for EK-LM4F232 Kit

- During the workshop, you will install the following drivers on your computer.
 - 1) Stellaris Virtual Serial Port
 - 2) Stellaris ICDI JTAG/SWD Interface
 - 3) Stellaris ICDI DFU
- The procedure to install these drivers is very straight forward. When the evaluation board is connected to the computer for the first time, a “New Hardware Found” wizard will pop up three times (once for each driver). Browse to “[C:\StellarisWare\windows_drivers](#)” and let Windows install the drivers for you.
- **Tip:** Please review [how_to_install_drivers.pdf](#). It provides step by step instructions on how to install drivers. This will help all of us utilize the workshop time more effectively.

[how_to_install_drivers.pdf](#) should be located in the folder that you have extracted on your computer i.e. at [C:/pre_workshop_actions](#) directory.



That's it!

- See you at the workshop!