





## Installation of the Keil uVision Development Software, version 5

(Runs on Microsoft Windows 7,8,9,and 10)

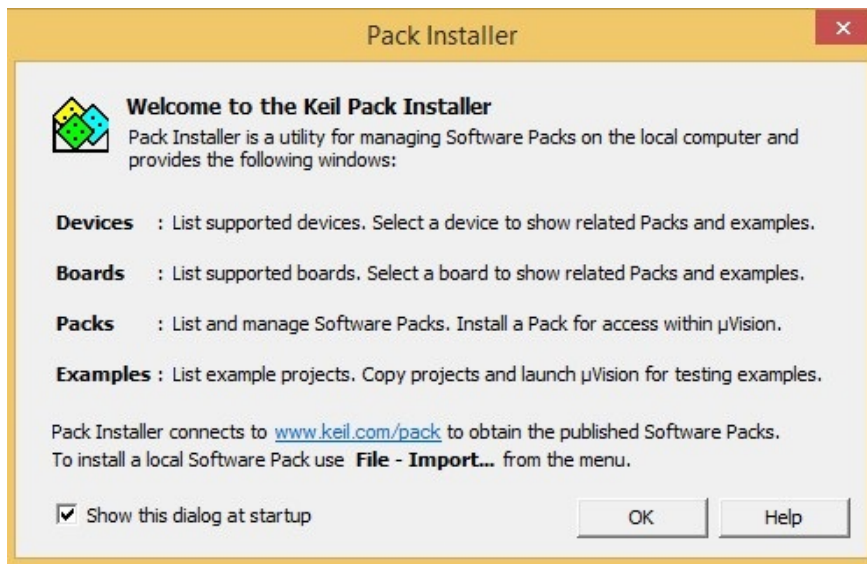
- 1) Go to <https://www.keil.com/download/product/> page and select MDK-Arm. Download the installer program (a file likely named mdk524.exe) and start it. This is a big file, about 850 megabytes, and during installation other big files will download, so download and install when you have a good internet connection.

Select a product from the list below to download the latest version.

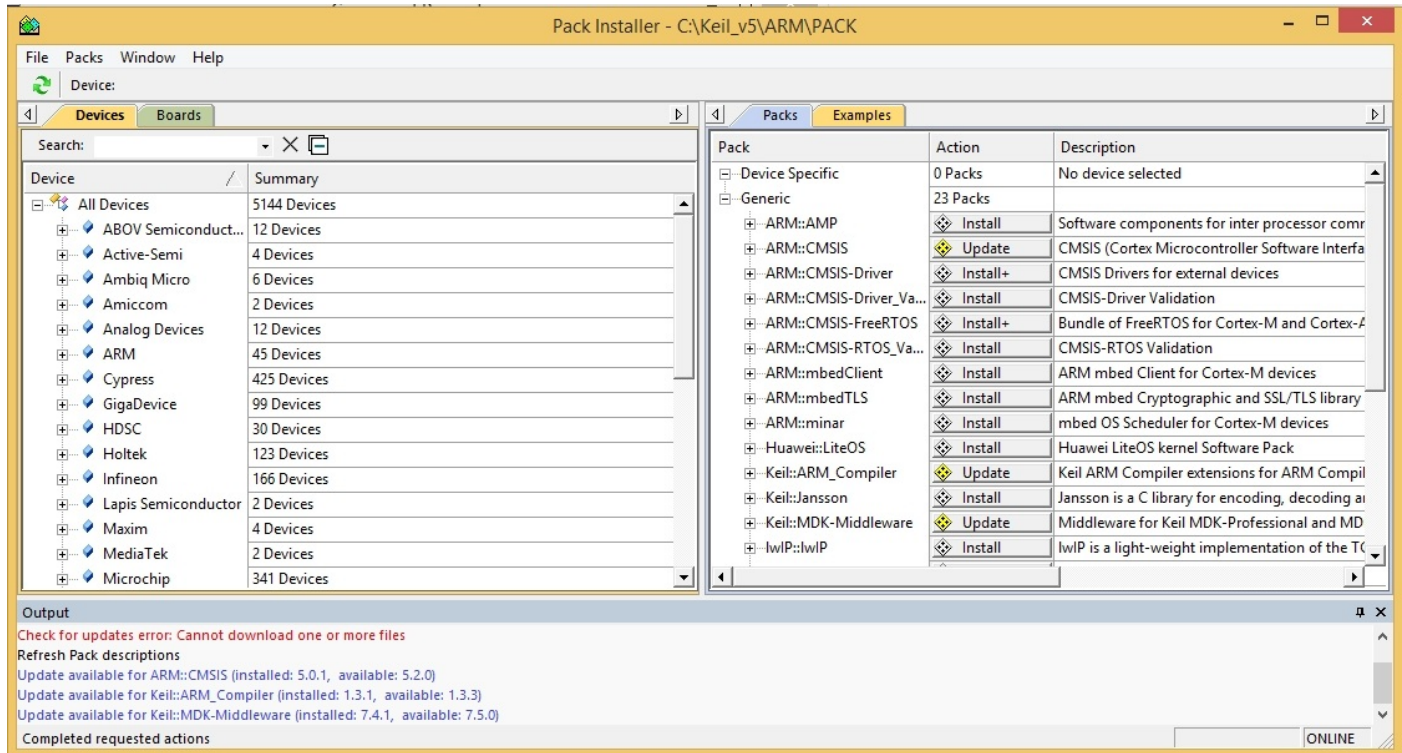
	<b>MDK-Arm</b> Version 5.24a (July 2017) Development environment for Cortex and Arm devices.		<b>C51</b> Version 9.57 (November 2017) Development tools for all 8051 devices.
	<b>C251</b> Version 5.59 (October 2016) Development tools for all 80251 devices.		<b>C166</b> Version 7.56 (October 2016) Development tools for C166, XC166, & XC2000 MCUs.

Keil products use a [License Management](#) system - without a current license the product runs as a Lite/Evaluation edition with a few [Limitations](#).

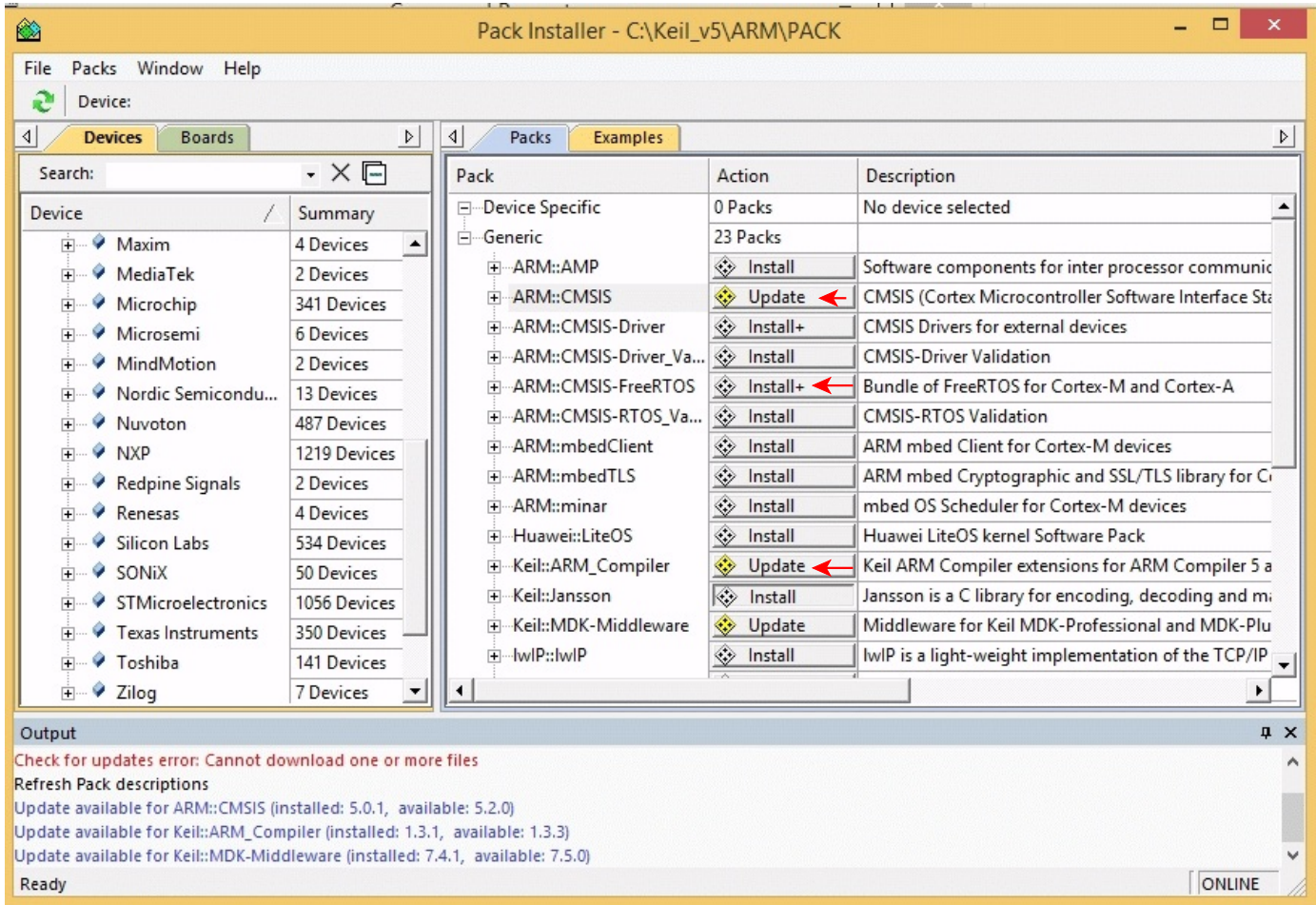
- 2) You will be asked where to place files. The defaults should be ok.
- 3) A welcome window will display. Click ok.



- 4) The main install window will look something like this. The installer will look for updates. While doing the install for these figures it failed to connect to a third party web site and hence the note (in red) that it could not download one or more files. This will not likely involve software packages that we are concerned with, so you should be able to ignore an error at this point.



Depending on your screen size etc. you can adjust the width of the various columns of information displayed to allow reading it as well as the window itself.

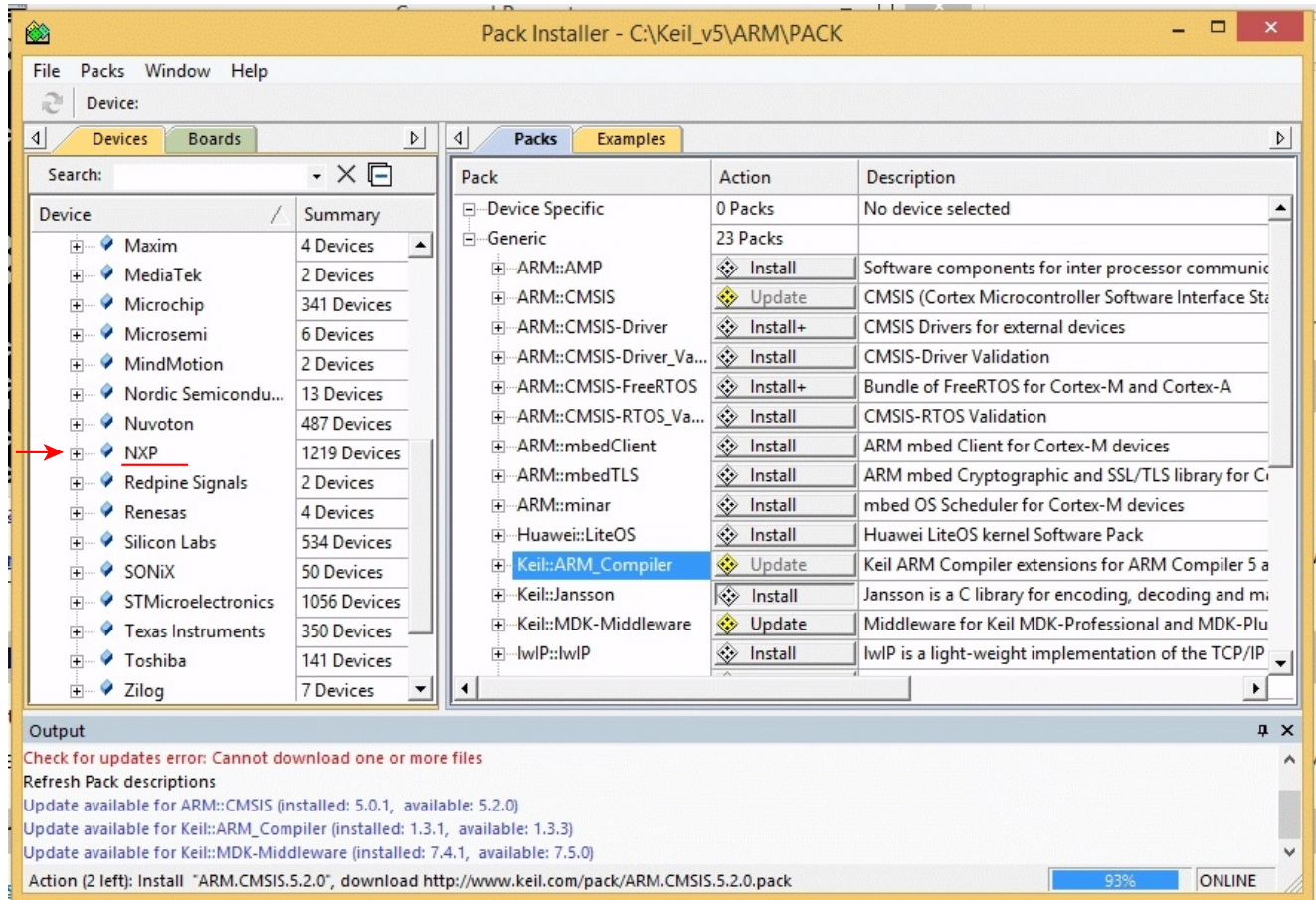


- Under Packs in the right hand part of the screen you should click to select Update of the CMSIS core package, Install the Bundle of Free RTOS, and Update the Keil ARM compiler extensions as noted above. The other items will not be needed for our project and most are not useable with the free version of uVision.

Note at lower left that it states Ready and at lower right ONLINE. When you select items to install or update the word Ready will change to a phrase showing what is loading or is selected to load. To the right near the ONLINE word will be a progress indicator.



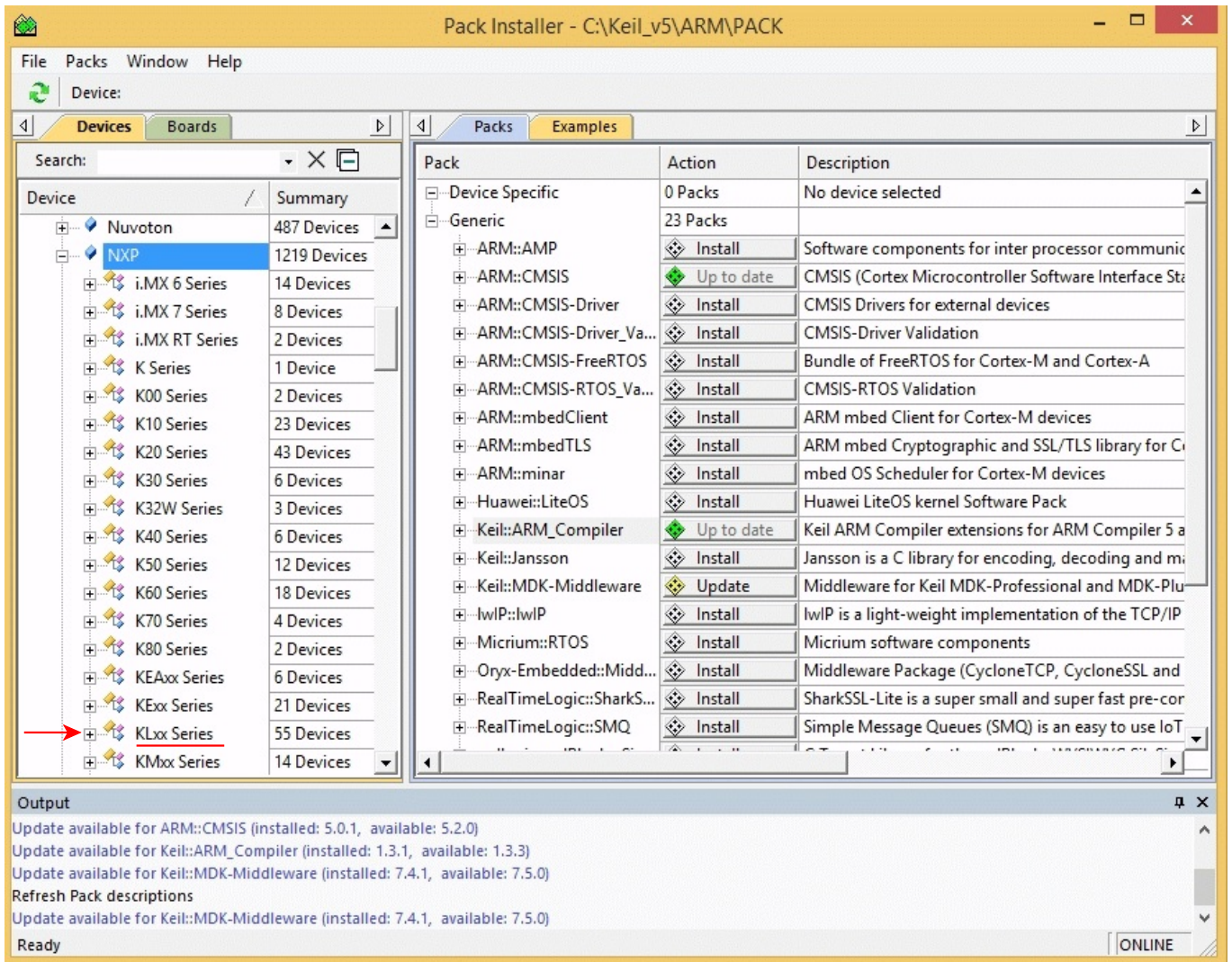
After selecting items to update/install here is an example screen shot:



Note the progress information at the bottom.

- 6) After the selected items have downloaded, expand the NXP selection shown under the Devices tab in the left hand part of the window.

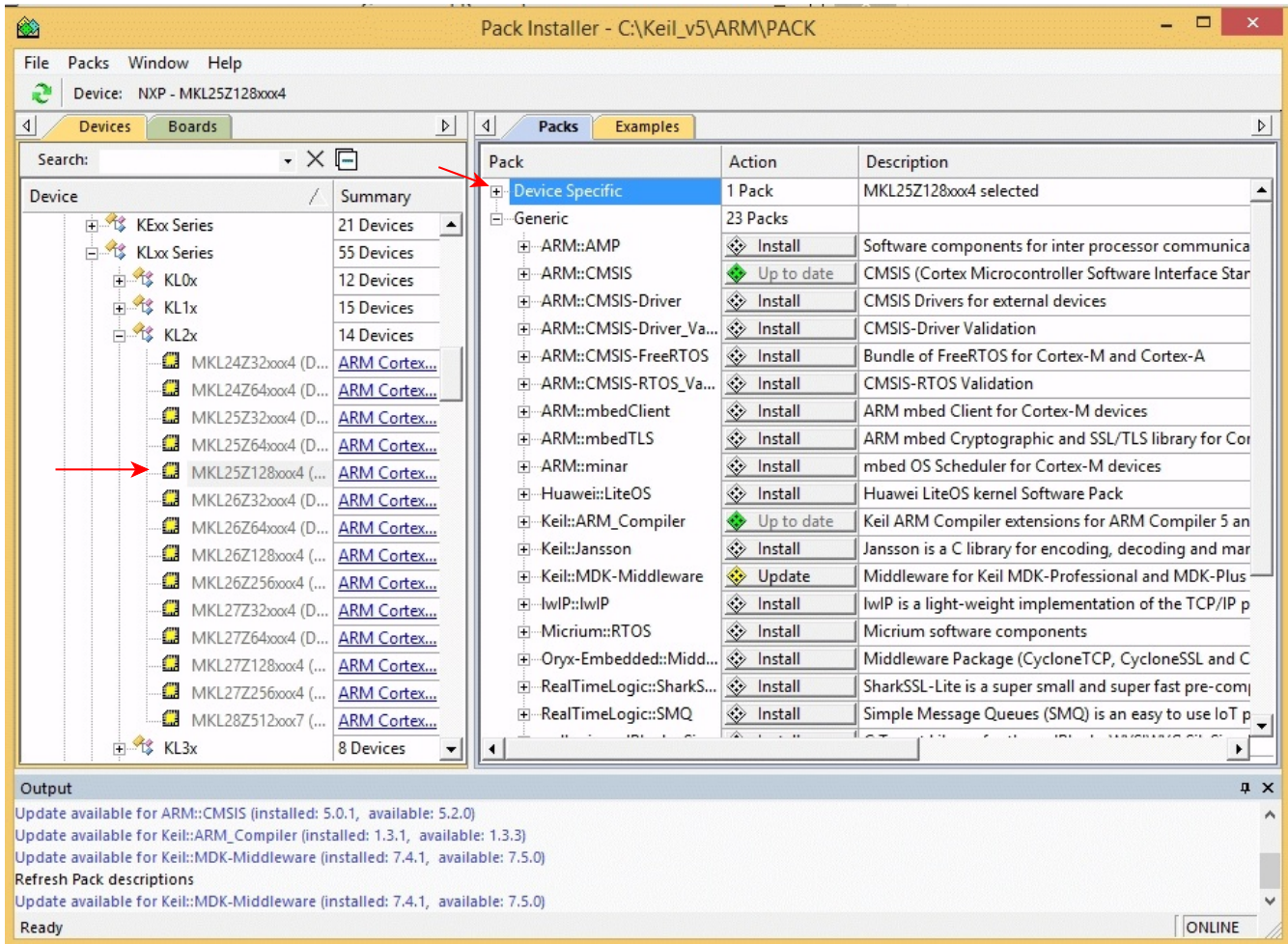
The expanded view might look like this:



Click to expand the KLxx Series selection.

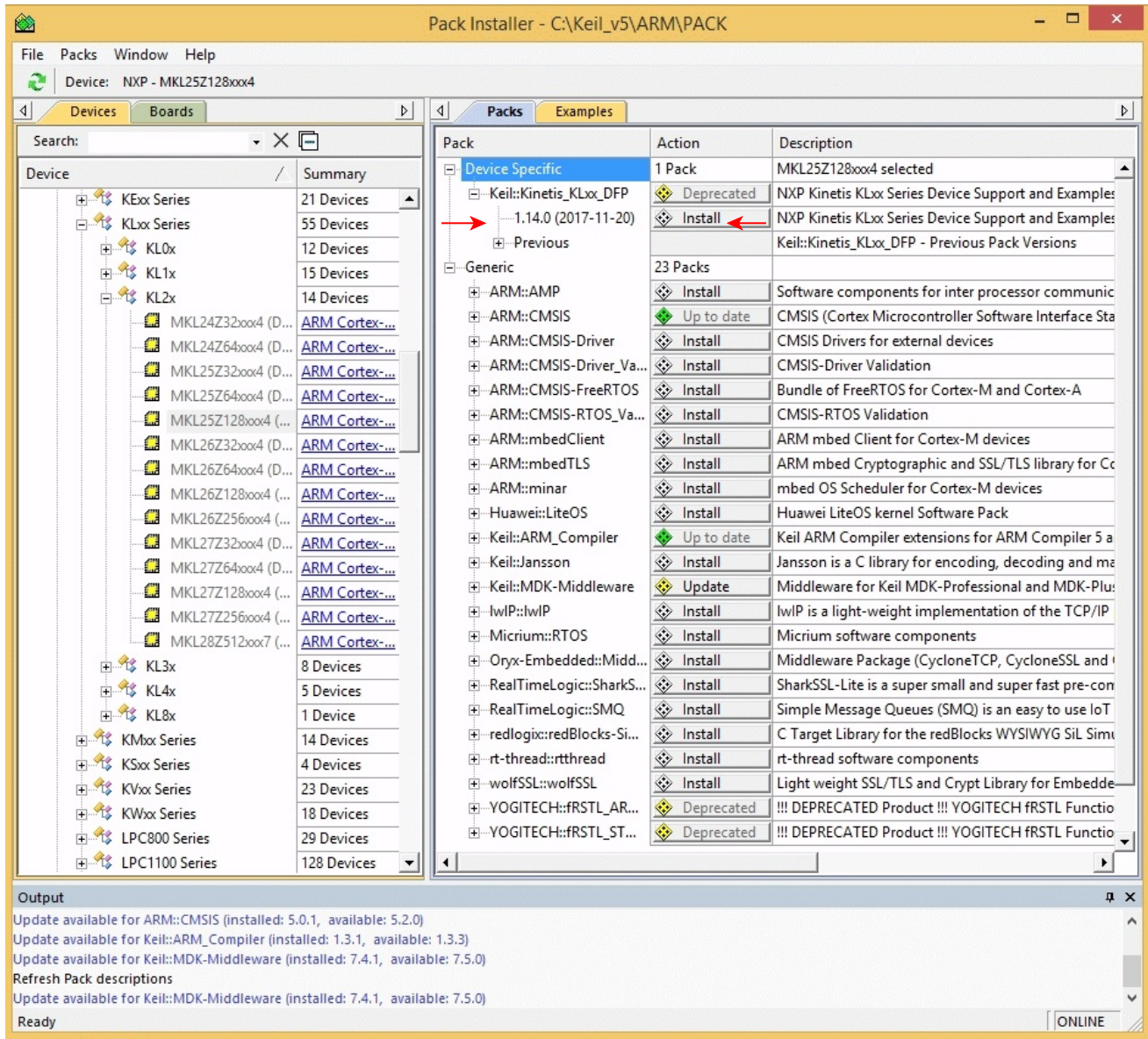


Our interest is the MKL25Z128xxx4. Click on it in under the Devices tab.



And then under the Packs tab click on the + box left of Device Specific.

7) Click Install for NXP Kinetis KLxx Series Device Support and Examples:



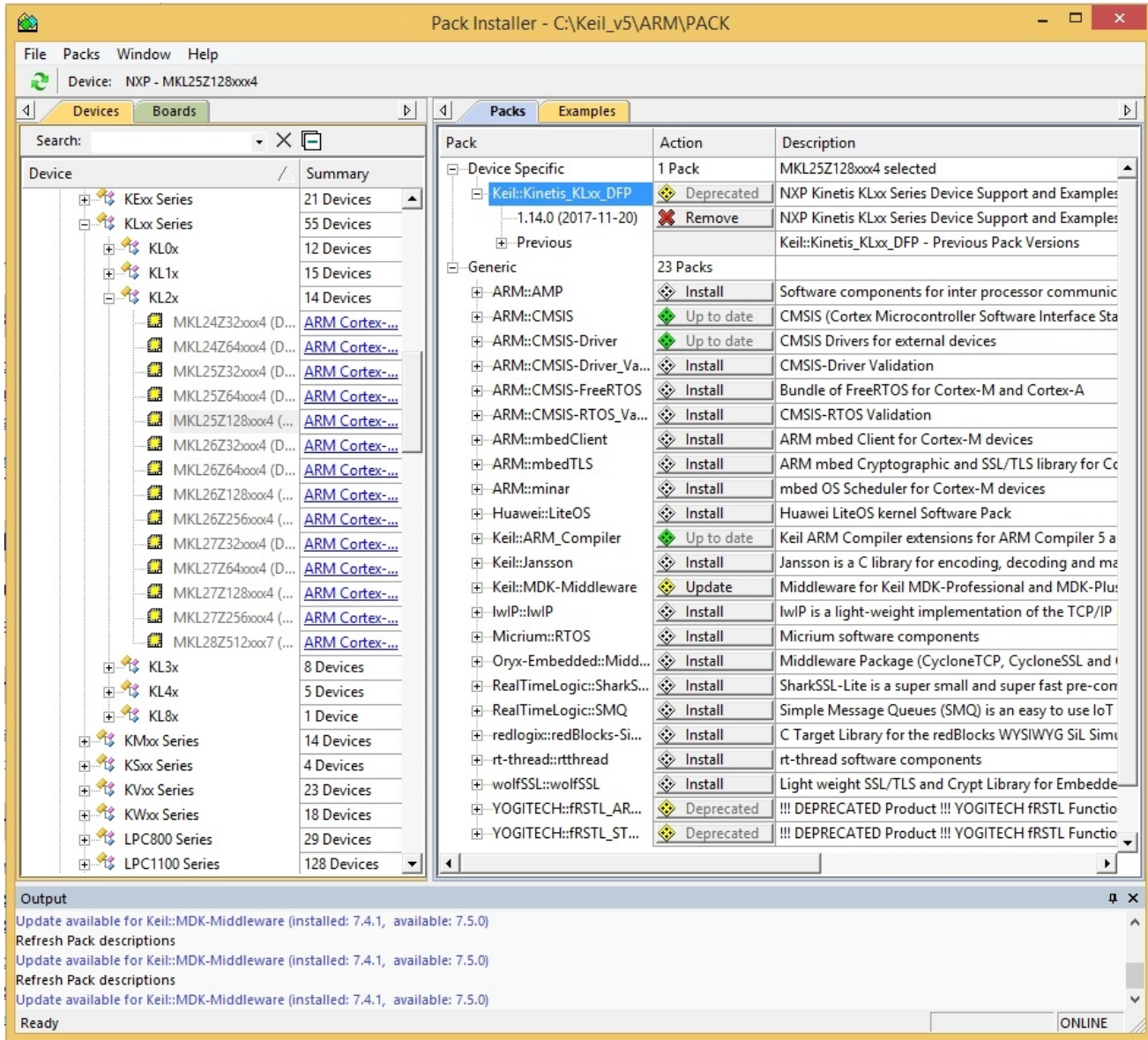
The CMSIS and ARM Compiler packs have green diamonds by them because they are up to date. There is still the option of installing other packs but those should not be required for the ENGR-355 project.

After the Device Support and Examples pack is loaded the display will change as shown on the next page.



Note that a Remove option now is displayed for the Device Support and Examples package. That is normal and ok.

(in this screen snapshot the Bundle of FreeRTOS for Cortex-M and Cortex-A is not installed, but if that is displayed at this point go ahead and install it.)



That completes the installation of software and libraries that are needed. Close the installer.

The next step is to create a project and work on a design. See a companion document for info regarding project creation.