Stellaris® ARM® Cortex[™] M4 Training

How to Install Drivers for

EK-LM4F232 Evaluation Board?

Step by Step Instructions

In order to debug and download the custom application in the microcontroller's Flash memory and use Virtual COM Port connectivity, you must first install the following drivers on the host computer:

- Stellaris Virtual Serial Port
- Stellaris ICDI JTAG/SWD
- Stellaris ICDI DFU
- **Note:** This document describes the procedure to install drivers on the Windows XP operating system. There might be some variation for installing the drivers on other Windows operating systems, although the procedure should be similar.

To see which drivers are installed on the host computer, check the hardware properties using the Windows Device Manager. Do the following:

- 1. Right-click My Computer from the Windows Start button and select Properties from the dropdown menu.
- 2. In the System Properties window, click the Hardware tab.
- 3. Click the Device Manager button. The Device Manager window displays a list of hardware devices installed on your computer and allows you to set the properties for each device.

When the board is connected to the computer for the first time, the computer detects the onboard ICDI interface and the Stellaris® LM4F232 microcontroller. Drivers that are not yet installed display a yellow exclamation mark in the Device Manager window.

When you plug in the evaluation board for the first time, Windows starts the Found New Hardware Wizard as shown below. Select "No, not this time" and click on "Next" button to continue.





On the next screen, wizard will ask if you want to install the drivers for the Stellaris Virtual Serial Port. Select "Install from a list or specific location (Advanced)" and then click Next.



Make sure the "Documentation and Software" CD that came with the evaluation kit is in your CD-ROM drive. Or that you have extracted the drivers to a known location your computer's hard drive. Select "Search for the best driver in these locations," and check the "Search removable media (floppy, CD-ROM...)" option. Click Next.





A warning may pop up during the installation process regarding the driver not being signed, click "Continue Anyway" to proceed.

Hardware Installation		
!	The software you are installing for this hardware: Stellaris Virtual Serial Port has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.) Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.	
	Continue Anyway STOP Installation	

The wizard displays a "Please wait while the wizard searches..." status window. No user action is required.



The wizard then displays a "Please wait while the wizard installs the software..." status window as the software is installed.





After the installation of the Stellaris Virtual Serial Port drivers, click Finish to close the dialog box.

Found New Hardware Wizard		
	Completing the Found New Hardware Wizard The wizard has finished installing the software for: Stellaris Virtual Serial Port	
	Click Finish to close the wizard.	
	K Back Finish Cancel	

You have just installed the drivers for the Stellaris Virtual Serial Port.

The Found New Hardware Wizard appears again for the Stellaris ICDI JTAG/SWD Interface and then one more time for the Stellaris ICDI DFU Device drivers. Follow the same instructions to install the drivers for these two devices.

You can confirm the three device driver installations by launching the Windows Device Manager and right-clicking to select "Scan for Hardware Changes." This updates the Device Manager properties list. The Stellaris Virtual Serial Port, Stellaris ICDI JTAG/SWD Interface, and Stellaris



ICDI DFU Device now appear in the list. This indicates that the drivers have been successfully installed.

These drivers provide the debugger with access to the JTAG/SWD interface, and the host PC access to the Virtual COM Port. With these drivers installed, Windows automatically detects any new Stellaris boards (with a Stellaris-based ICDI) that you connect to your computer, and installs the required drivers for you.

