

UTAustinX: UT.6.01x Embedded Systems - Shape the World

KarenWest (/dashboard)

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After we have completed the lab in simulation, we will switch over and debug it on the real board. Again, Lab 2 does not require you to design any hardware or write any software, so in this lab we will simply run the existing software on the actual LaunchPad.

- 0) Open the Lab2 project file, which is the file **Lab2.uvproj** in the Lab2 directory.
- 1) In Keil, execute **Project->OptionsForTarget**. In the **Target** tab, select **TExaS** in the **Operating System** drop-down menu. In the **Debug** tab, click the Use radio on the right and select the **Stellaris ICDI**.
- 2) Compile the project by executing **Project->Build Target**
- 3) Download the object code into Flash EEPROM by executing Flash->Download
- 4) Start the debugger by executing **Debug->Start/StopDebuggingSession**
- 5) Show the TExaS real board grader by executing **Debug->OSsupport->TExaSGrader2.0**
- 6) Run your program executing by **Debug->Run**. At this point you can push the switches and watch the LEDs.
- 7) When you are ready to grade, press reset, and then run. Invoke the grader by clicking the **Grading** button (follow directions in the ActionMsg Window)

HOW TO GET A GRADE ON THE REAL BOARD



PROFESSOR JONATHAN VALVANO: Let me show you how to get a grade in the real board.

We begin by taking this number from edX. Then we go over to Keil, and we make sure that we are going to run on the $01/28/2014\ 05:29\ PM$ real board.

So I click Options over to debug.

0:00 / 0:00 1.0x

And I see I'm using the Stellaris ICDI, which is a real board debugger.

Ωk

We begin by compiling or building the project.

Because it's a real board, we have to download which is to burn the object

code into the ROM, and now we're going to debug the real board.

Over on this side is the interaction with the real board grader.

To grade, we're going to have to run the program--

no you can see the program is running on the real board--

and then in this window here, I'm going to paste in the number from edX.

So when I'm ready to grade, I push the

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