

ECPE/CIVL 259: Fall 2016
Project 1: Microcontroller Worksheet

1. Open Code Composer Studio V6.
2. Create a new workspace on your U:\ drive.
3. Create a new CCS Project:
 - a. New -> CCS Project
 - b. Project name = microTest (or whatever makes you happy)
 - c. Target = **Tiva TMC4C123GH6PM**
 - d. Connection: **Stellaris In-Circuit Debug Interface**
 - e. Click Advanced and make sure it is Executable
 - f. Project Templates = **Empty Project**
Note that you want the one without main.c!
4. Copy **blinky.c** into the project, which is located at:
C:\TivaWare\examples\boards\dk-tm4c123g\blinky
5. Edit the file:
 - a. Change the #include to match our device.
 - b. The LED is on Port F for this board. Change PORTG to PORT F in the code.
6. Right click on the project and select Properties
 - a. Select Resources -> Linked Resources and create a new path variable **SW_ROOT** for **C:\TivaWare**
 - b. Select CCS Build -> ARM Compiler -> Include Options and add dir **"\${SW_ROOT}"**
 - c. Select CCS Build -> ARM Linker -> File Search Path:
 - i. add library file "\${SW_ROOT}\driverlib\ccs\Debug**driverlib.lib**"
 - ii. add dir **"\${SW_ROOT}/driverlib/ccs/Debug"**
 - d. Click OK.
7. Click on Project -> Build Project.
8. Connect the board to your system.
9. Click on Run -> Debug.
10. You should see the light blink.
11. On Canvas, read the manual for the LaunchPad board. Determine the LED pins.
Modify the code to change the light color.
12. Demonstrate to an instructor for check-off.