EE 2920 Week 1 Lab: Tool Setup

1 dedicated lab period, 1 lab period to complete

Name:_____

Objectives

- Basic software setup
- Basic hardware operation

Prelab **student check off**

- Download the Code Composer Studio IDE software ☐
  Instructions are available in the file "CC Studio Software Setup"
  Note: installation may take some time and must be completed prior to the lab class time!
- Review of the MSP432 (see MSP432 Overview) ☐
- Review of Coding Guidelines (see Coding Guide) ☐
- Review of Debugging (see Debug Guide) ☐

Assignment

Part 1: **Create and execute an MSP432 project**

Instructions are available in the file "MSP Project Setup"

Part 2: **Modify your design**

Hook up 3 LEDs in your design. Two of the LEDs must be on the same port, the third LED must be on a separate port. Blink the LEDs in any order you wish.

Part 3: **Analysis**

Header Files: Our MSP version of blink (blink.c) includes msp432.h. Track down all files that are included as a result of including this file when we "make" our project.
** Document the file list in your lab report

Delay Calculation: The default clock rate for the MSP432 Launchpad board is 3MHz. Calculate the expected blink rate for our code. Provide an explanation for the discrepancy. ** Document your blink rate calculations and provide an explanation for the discrepancy in your lab report.

Check Off

You must demonstrate your working design(s) prior to the end of the lab period

- Demo your MSP432 project 40% _____
- Demo your modified project 40% _____

Lab Report (informal)

- Due at 4:00 pm, 1 day after lab – in the box outside my office
- Include this cover sheet
- Include a properly documented informal lab report. 20% _____