

CSCE 236 Embedded Systems, Spring 2014

Lab 1 Pre-Assignment

Started: Monday, January 27, 2014

Due: Beginning of class Friday, January 31, 2014

Instructions: This pre-lab assignment is an individual assignment, collaboration is not allowed. If you discuss any problems with others, please note this on the assignment as described in the syllabus. Also note any materials outside of lecture notes, course textbooks, and datasheets that you used. Show your work and describe your reasoning to get partial credit if your solution is incorrect. This pre-lab is due on the date listed above before the start of class.

Name:

Problem 1. *(To be completed at end of assignment) Approximately how much time did the total assignment take? Which problem took longest and how much time did it take?*

Problem 2. *Arduino Setup and Programming* (Note you only need the Arduino for this assignment, you will not need a breadboard or any other components.)

a). *For this problem, you should configure the Arduino programming software on your computer. Then program your Arduino with the sample Blink program. Once you have verified that you can compile and program your board with this sample program, modify it so that it blinks a long on, short off, short on, sort off, long on, short off pattern of blinks. Repeat this 5 times at startup (and then do nothing). Use a loop, do not just copy and paste code. Before doing this, make sure to read through and complete the rest of the questions in this section.*

Note: *For this part you will need to show the instructor during lab this program running (so make sure to bring your Arduino programmed with this program). Please also include a printout of your code stapled to this sheet with the rest of your answers.*

b). *How did you specify the delay for the short and long on/off's in the blinks?*

c). *How did you specify the version of the Arduino you are using in the Arduino programming environment?*

d). *How did you specify the serial port the Arduino is connected to in the software? What is the port name on your computer?*