CS 328 Embedded Systems **Lab Exercise #3** **Spring 2015**

Stepping Motors

Purpose: To become familiar with controlling stepping motors by adapting existing code to the control of a small stepping motor with a driver board.

Background: Your instructor will provide you with a stepping motor and driver board. Documentation for this combination is located at:

http://www.mpja.com/Stepmotor-and-Driver-Board-Raspberry-Pi-Arduino-Compatible-Sensor/productinfo/30032%20MS/

Further documentation for this mini-stepper motor and UNL 2003 driver board is found in pdf format at:

http://www.mpja.com/download/30032msb.pdf

Both sites are linked through the course page on lms.dwc.edu.

Goal: Develop C code for the TMS123 microcontroller that will home drive the stepping motor through a specified number of degrees.

Reporting Requirements: Demonstrate your working code to your instructor. Submit a report that contains working code + comments, along with a short lab report to lms.dwc.edu. Your report should provide an overview of the code highlights so that in future course offerings your instructor can use your report as project documentation.