91.451, Robotics II
Spring 2007
Profs. Martin and Yanco

Lab 1

<u>Out:</u>   Thursday, 25 January 2007
<u>Due:</u>   Thursday, 1 February 2007

Overview: In this lab, you'll write your first C programs for the Blackfin Handy Board. You'll also use sonar and touch sensors as well as DC and servo motors.

In lab today:

1. Write code to use the board's knob to control the servo position.

2. Write code that uses the sonar to control the speed of the motor. (Your choice on whether it should go faster or slower when the distance is smaller.)

3. Write code that uses the touch sensor to control the direction of the motor.

4. Write code that will start the execution of your program when the start button is pressed and that will stop the execution of the program when the stop button is pressed. When the program exits, you should disable the motors.

All of this code should be in a single program. It's your choice whether to have these things happen one by one or have the option for them to run concurrently based upon the current sensor readings.

What to turn in: Your commented code from this lab.

Before you leave lab today: Make sure that we have your id number so we can get the door activated for your id.