Esduino Angle Acquisition System User Manual
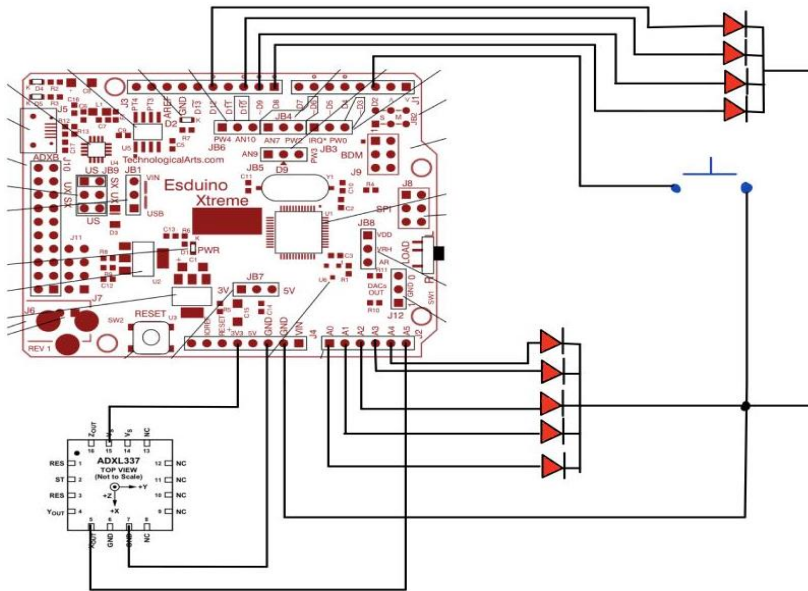

Figure 1: Pin Map

1. Connect your components as shown in figure 1. It is noted that resistors are not necessary for these components and the device will function properly without them.

2. Upload the Codewarrior file provided in the zipped folder or found in the appendix of the project report to the microcontroller.

3. Connect your microcontroller to the PC and note the COM port it uses. This can be done by pressing the windows key (start) > device managers > Ports(COM & LPT) as shown in figure 2.

4. To switch through each mode, only the push of the button is needed (Mode 0: Data Acquisition turned off, Mode 1: BCD LEDs, Mode 2: Gauge LEDS).

5. Run the Matlab Code to display the plot. Ensure that you change the code to match the right COM port from. This can be done by adjusting the COM number in like 12 of the Matlab code.
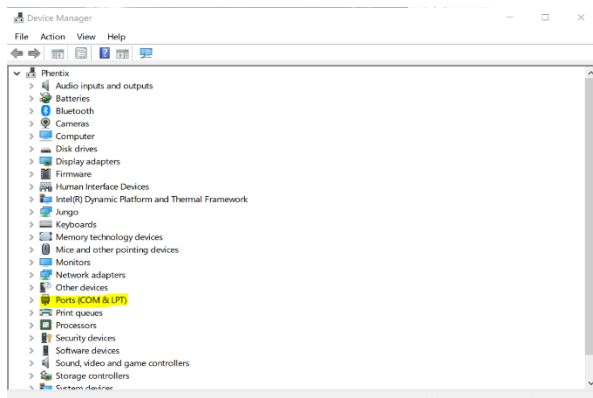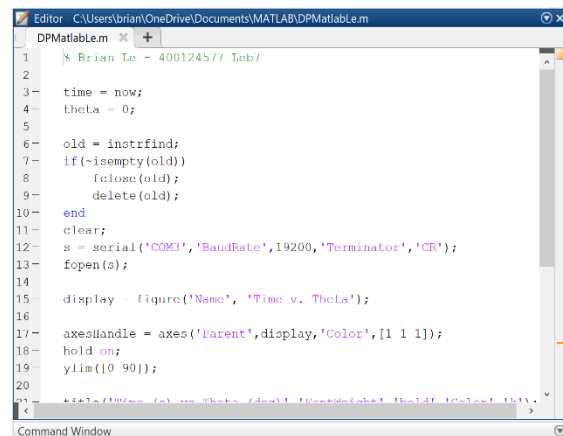

Figure 2: COM Port

Figure 3: Matlab