Embedded Systems (Spring 2019)

Lab 2 - ESOS and the ECE 4723/6723 Target Board

Christian Bush, Spencer Callicott, Will Carroll,

Landon Casey, Jack Fletcher

Schematic Errata

Component R6 needs a jumper connection from the signal side to LCD V0 or opposing pin of R7. There is no connection from R6 to R7 as evidenced by a continuity test. This connection should be a junction between R6, R7 and the LCD V0 pin.

SDA and SCL need a jumper connection to the microcontroller. They are not currently connected to anything other than the pullup resistors.

A jumper needs to be wired from MCLR (pin 1) on the serial header, to RTS# (pin 6) on the FTDI header.

The pin MCUTX on the FTDI header was connected to RB11 which is an input pin but should be an output pin.

esos\_sensor.c has a few errors, specifically the macro MAX16BITS is not defined, however UINT16MAX is, which represents the same thing. Also there were typos where \*u16\_data should have been \*pu16\_data.  
  
The VREF chip is incorrect for the given board voltage. A 3.0V VREF was supplied with 3.3V, so the potentiometer clips the top 10% to 0xFFF.