

NOTE: This document uses OLD molex pinouts

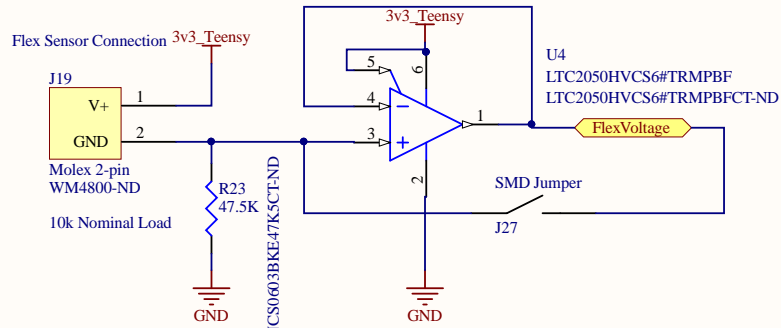
Title: Microcontroller.SchDoc			
Size: A4	Number: 1	Engineer: Nick McComb	
Date: 3/2/2017	Time: 3:34:31 PM	Sheet 1 of 6	Revision: 3.1
File: C:\Users\Nick\Google Drive\Projects\PCB Designs\ROSSEBoxAuxillary\Microcontroller.SchDoc			

Ocean Mixing Group
Oregon State University
Corvallis, OR

Flex Sensor Interpreting

Resistor Divider into voltage follower

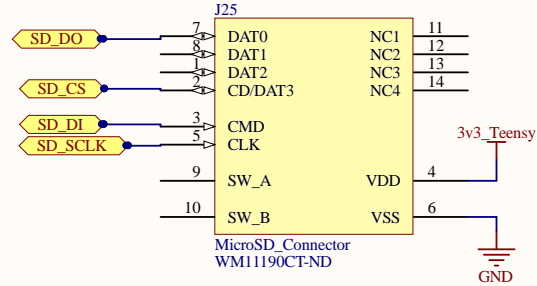
Note: Shutdown pin should be left floating (or tied high)



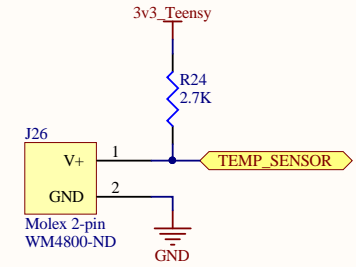
Note: R23 should be a .1% resistor

Note: Designed for Sparkfun P/N 8606: <https://www.sparkfun.com/products/8606>

SD Card Slot



Temp Sensor



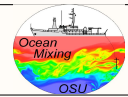
Title: Microcontroller 2.SchDoc

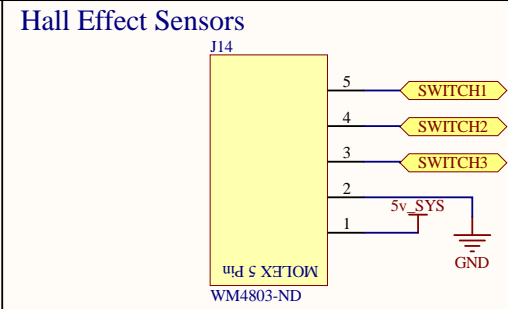
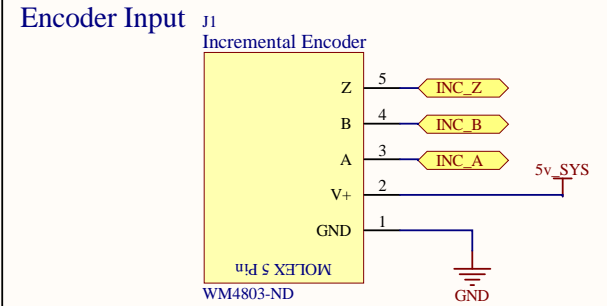
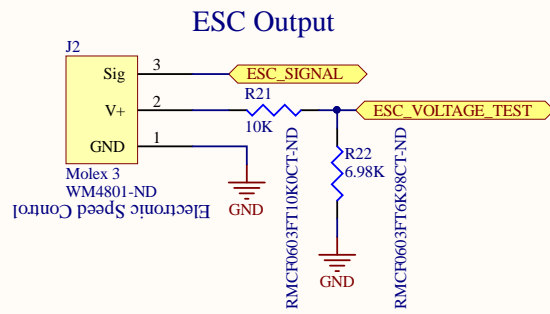
Size: A4 Number: 2 Engineer: Nick McComb

Date: 3/2/2017 Time: 3:34:31 PM Sheet 2 of 6 Revision: 3.1

File: C:\Users\Nick\Google Drive\Projects\PCB Designs\ROSSEBoxAuxillary\Microcontroller 2.SchDoc

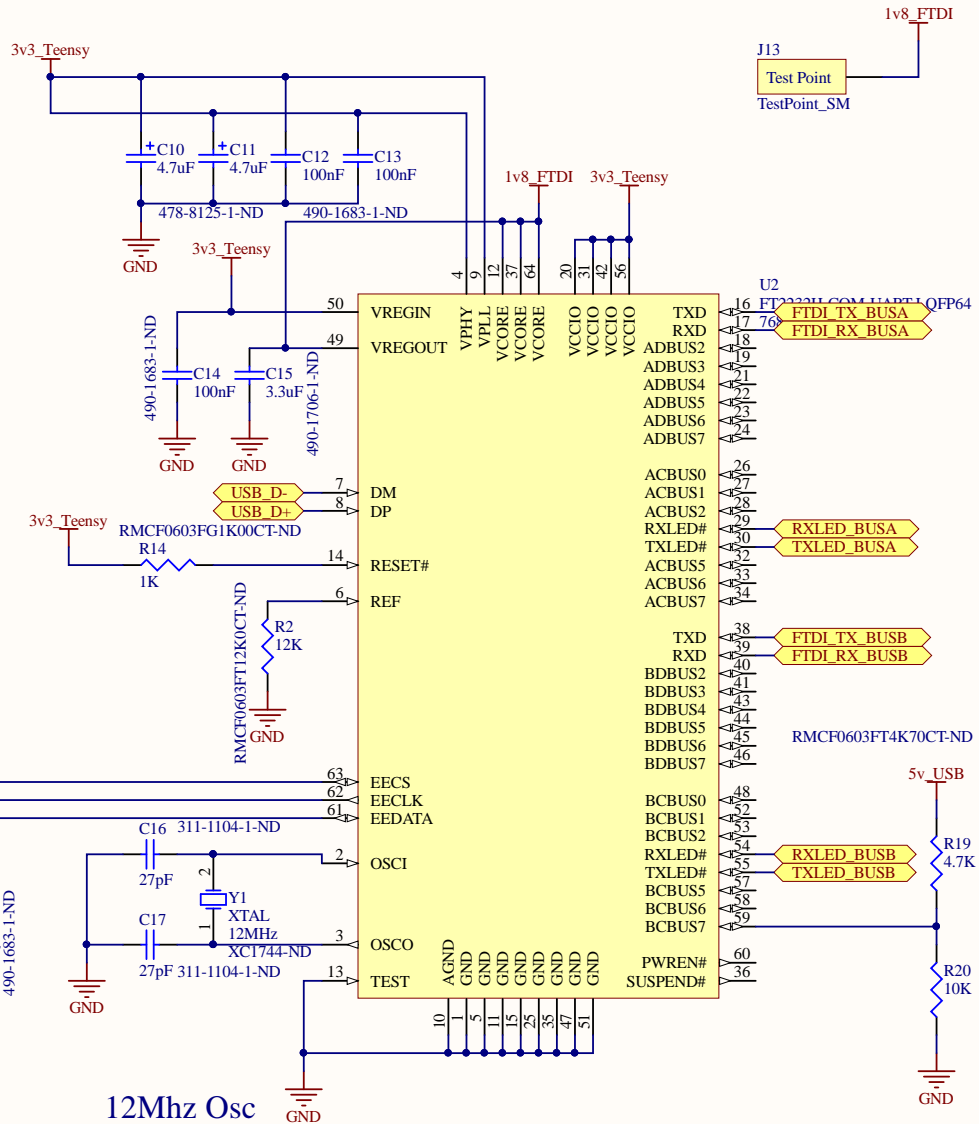
Ocean Mixing Group
Oregon State University
Corvallis, OR





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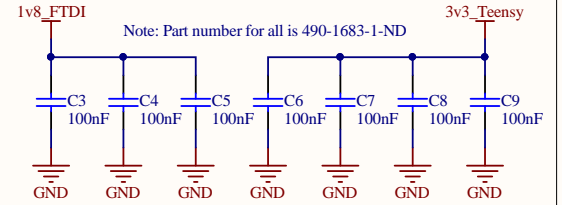
Dual UART FTDI Chip



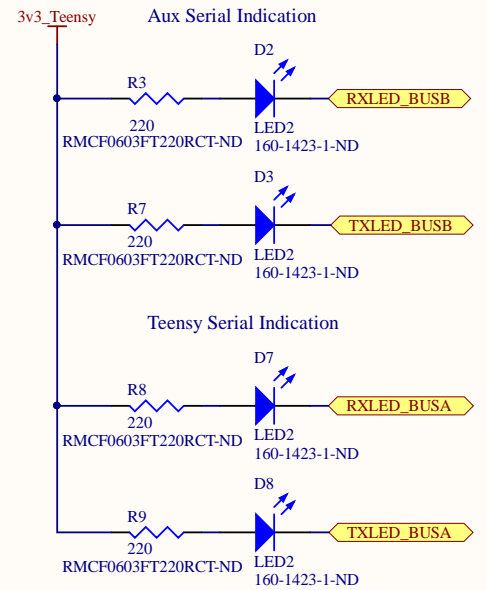
FTDI EEPROM

12Mhz Osc

Filtering Caps

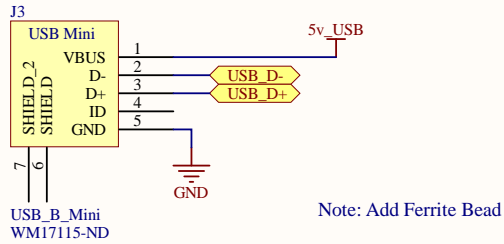


Status LEDs

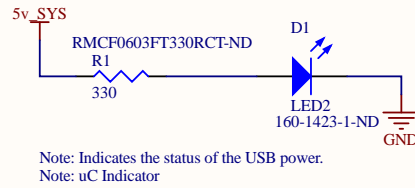


Title FTDI.SchDoc			Ocean Mixing Group Oregon State University Corvallis, OR	
Size: A4	Number: 4	Engineer: Nick McComb		
Date: 3/2/2017	Time: 3:34:31 PM	Sheet 4 of 6	Revision: 3.1	
File: C:\Users\Nick\Google Drive\Projects\PCB Designs\ROSSEBoxAuxillary\FTDI.SchDoc				

Microcontroller USB Connection



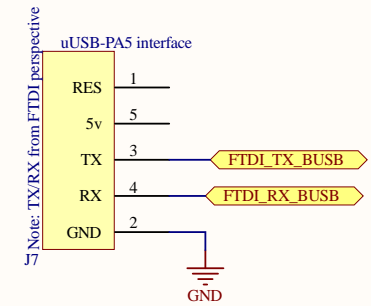
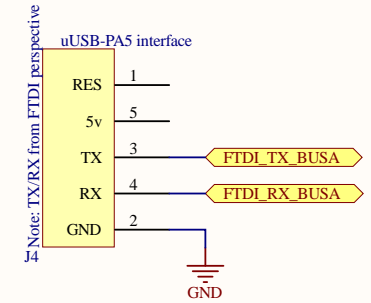
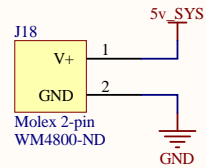
FTDI Status Indicators



USB To Serial Backup

Note: Backup, do not populate unless onboard FTDI chips do not work

Main Power Input



1

2

3

4

J8

Mounting Hole

MountingHole

J9

Mounting Hole

MountingHole

J10

Mounting Hole

MountingHole

J11

Mounting Hole

MountingHole

A

A

B

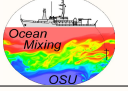
B

C

C

D

D

Title Hardware.SchDoc			<i>Ocean Mixing Group</i> <i>Oregon State University</i> <i>Corvallis, OR</i>	
Size: A4	Number: 6	Engineer: Nick McComb		
Date: 3/2/2017 Time: 3:34:31 PM Sheet 6 of 6 Revision: 3.1				
File: C:\Users\Nick\Google Drive\Projects\PCB Designs\ROSSEBoxAuxillary\Hardware.SchDoc				

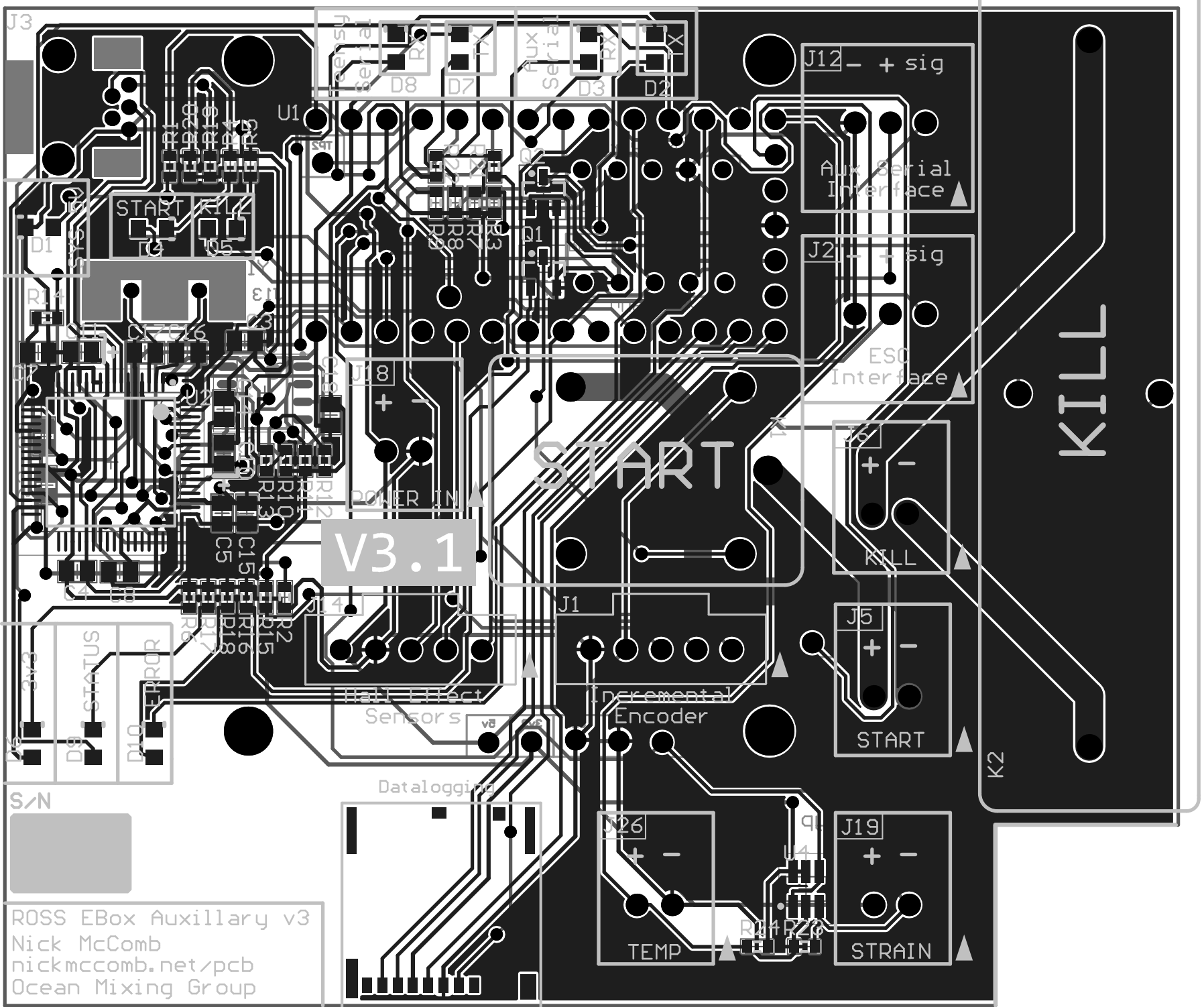
1

2

3

4

8.43



7.15

ROSS EBox Auxillary v3
 Nick McComb
 nickmccomb.net/pcb
 Ocean Mixing Group