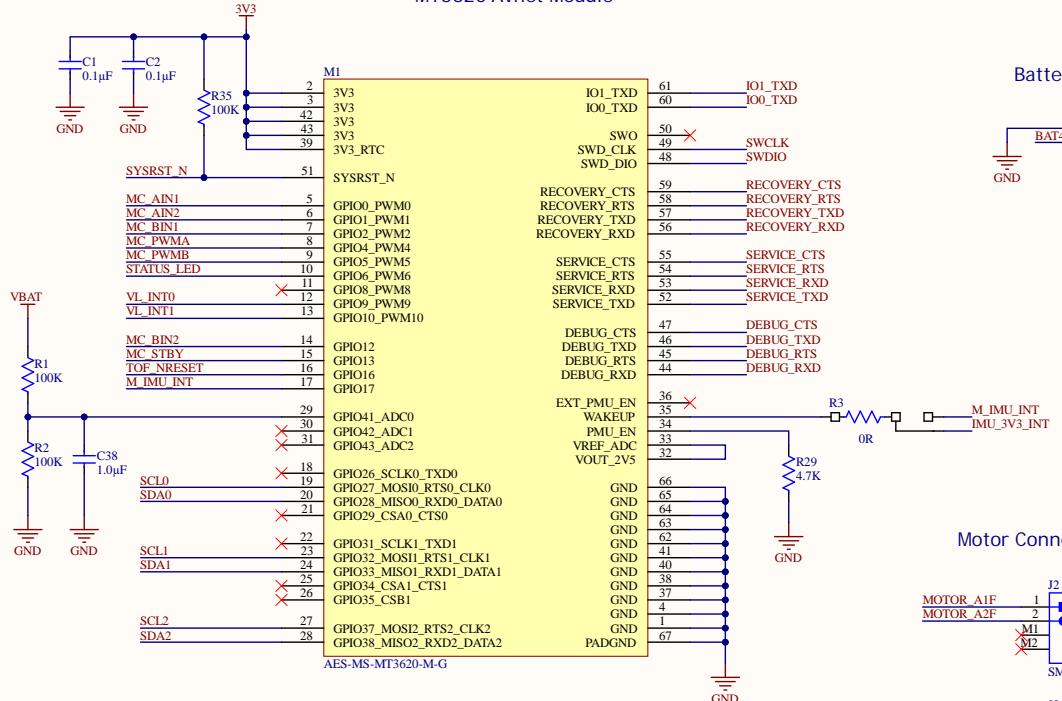
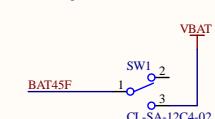


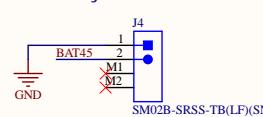
## MT3620 Avnet Module



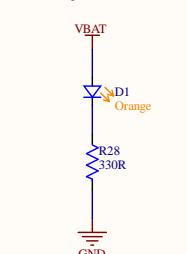
## Battery Power Switch



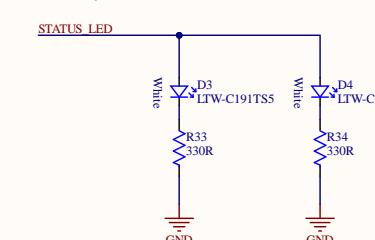
## Battery Connector



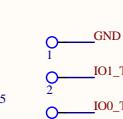
## Battery Power LED



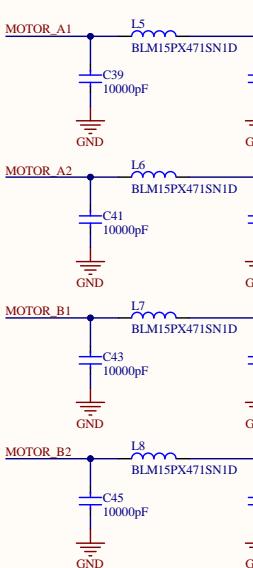
## PWM Capable Status LEDs



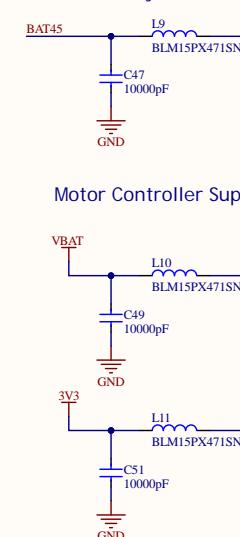
## Test Points



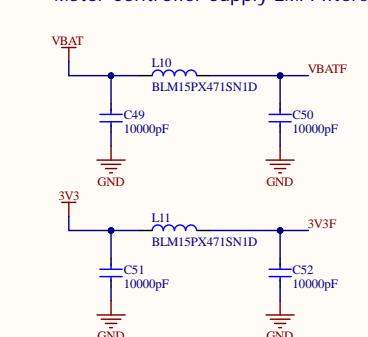
## Motor EMI Filters



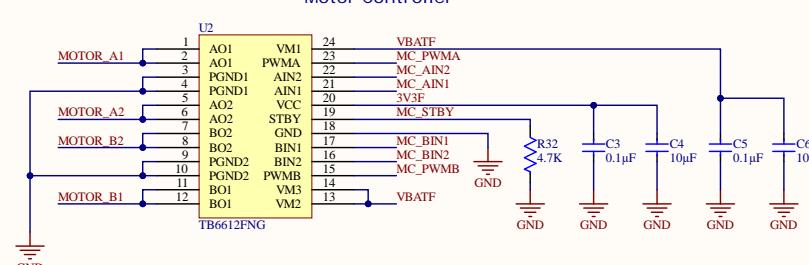
## Battery EMI Filter



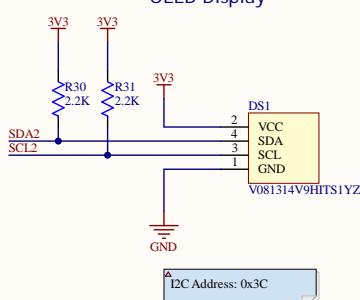
## Motor Controller Supply EMI Filters



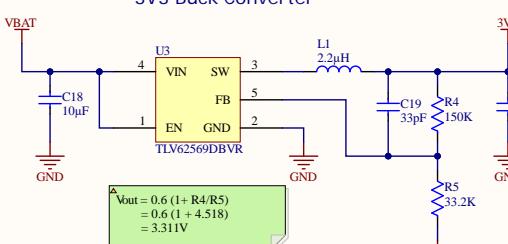
## Motor Controller



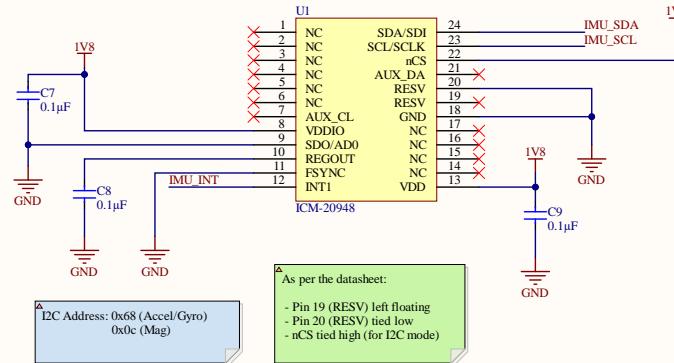
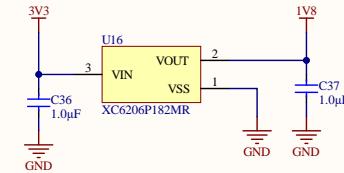
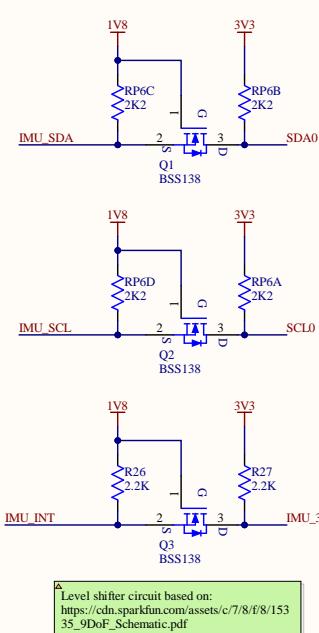
## OLED Display



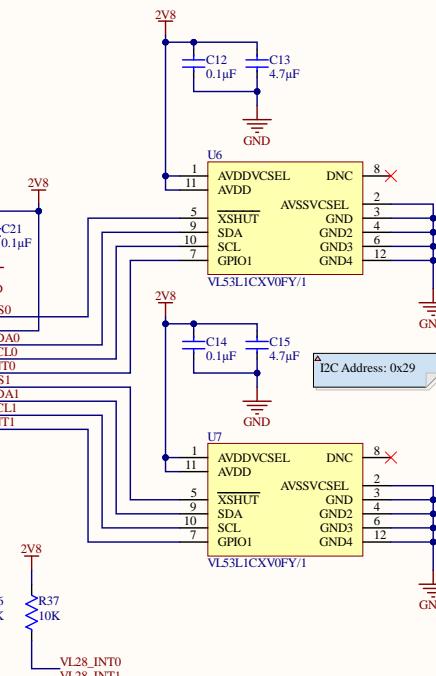
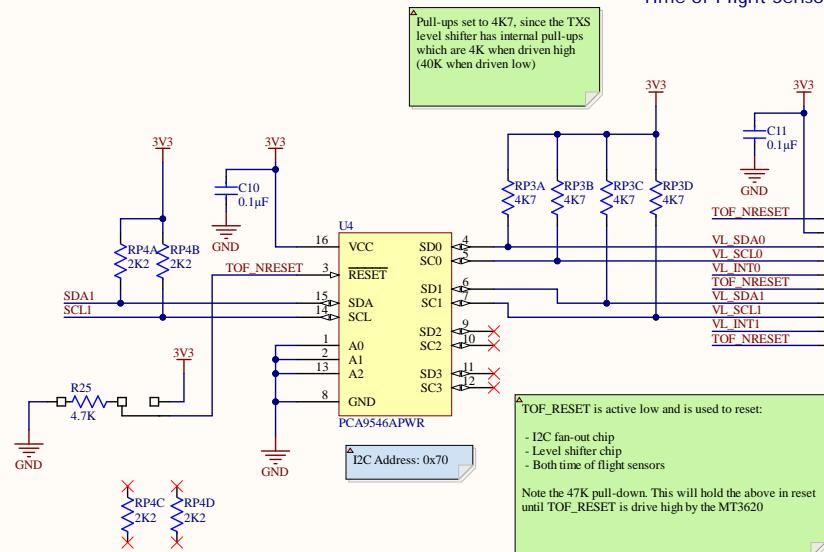
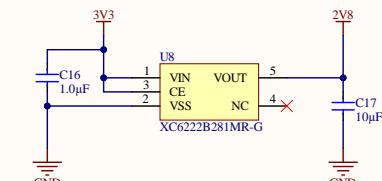
## 3V3 Buck Converter



A

**IMU****IMU 1V8 LDO****IMU I2C Level Shifters and Pull-ups**

B

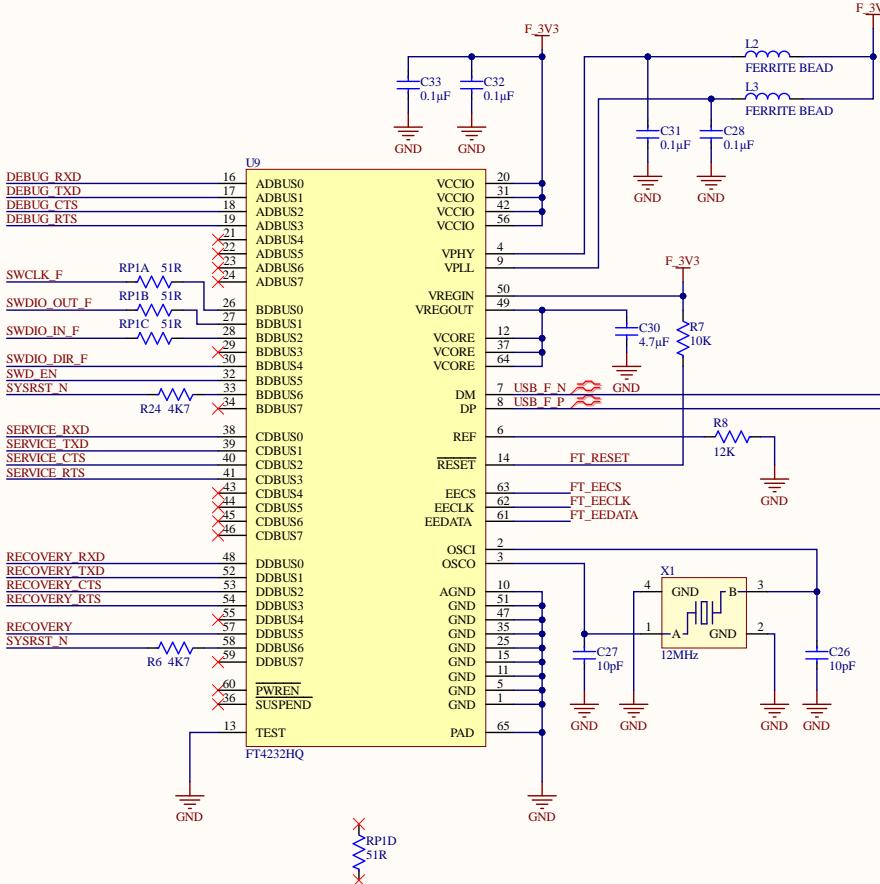
**Time of Flight Sensors****ToF 2V8 LDO**

C

Microsoft Azure Sphere

NAME OF THIS PROJECT  
**Balancing\_Robot\_1\_1.PjrPcb**TITLE OF THIS SHEET  
**Balancing Robot - Sensors**

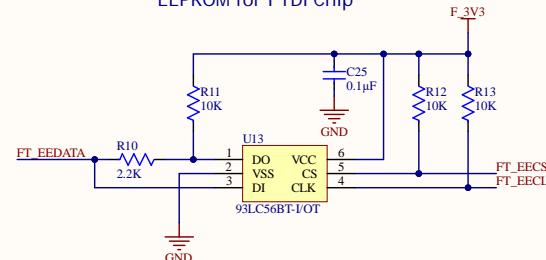
### FTDI USB Interface



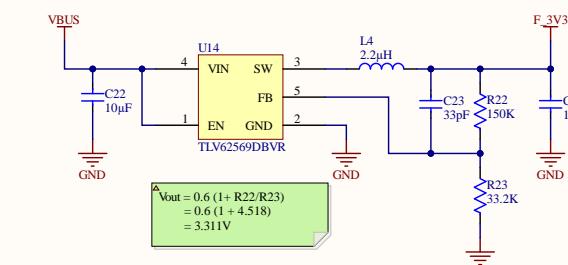
### FTDI pin functions (Port C)

38	CDBUS0	TXD
39	CDBUS1	RXD
40	CDBUS2	RTS#
41	CDBUS3	CTS#
42	CDBUS4	DTR#
43	CDBUS5	DSR#
44	CDBUS6	DCD#
45	CDBUS7	RI#/ TXDEN#
46	CDBUS7	RI#/ TXDEN#

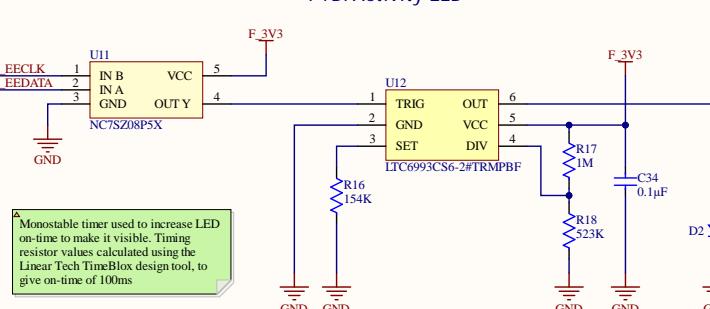
### EEPROM for FTDI Chip



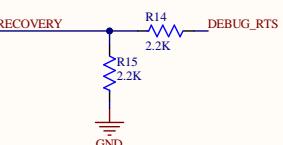
### 3V3 Buck Converter



### FTDI Activity LED



### FTDI Recovery



Monostable timer used to increase LED on-time to make it visible. Timing resistor values calculated using the Linear Tech TimeBlox design tool, to give on-time of 100ms

### SWD\_DIO Tri-state Buffer

