

# Sensors Expo 3-IN-1 Board Design

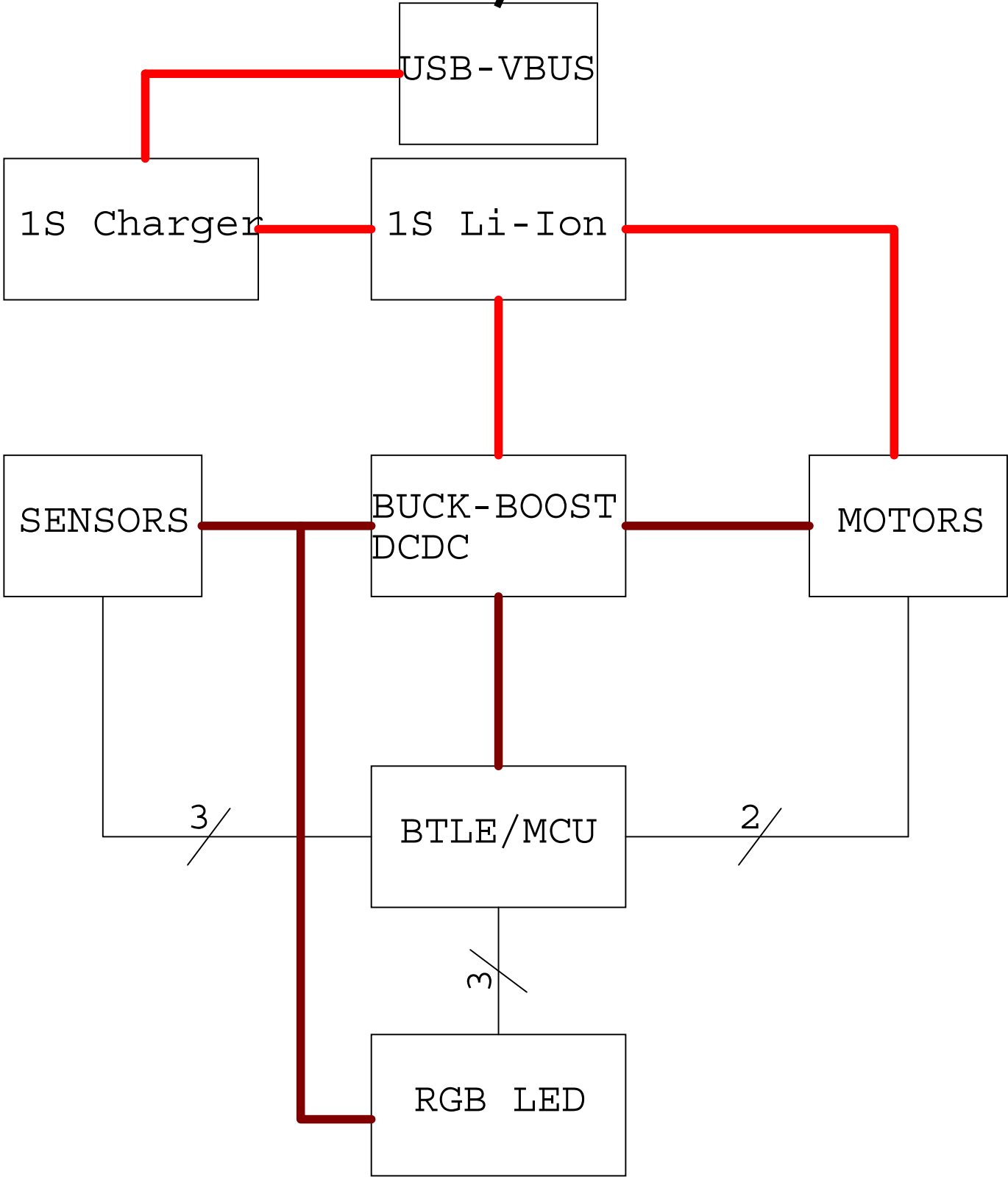
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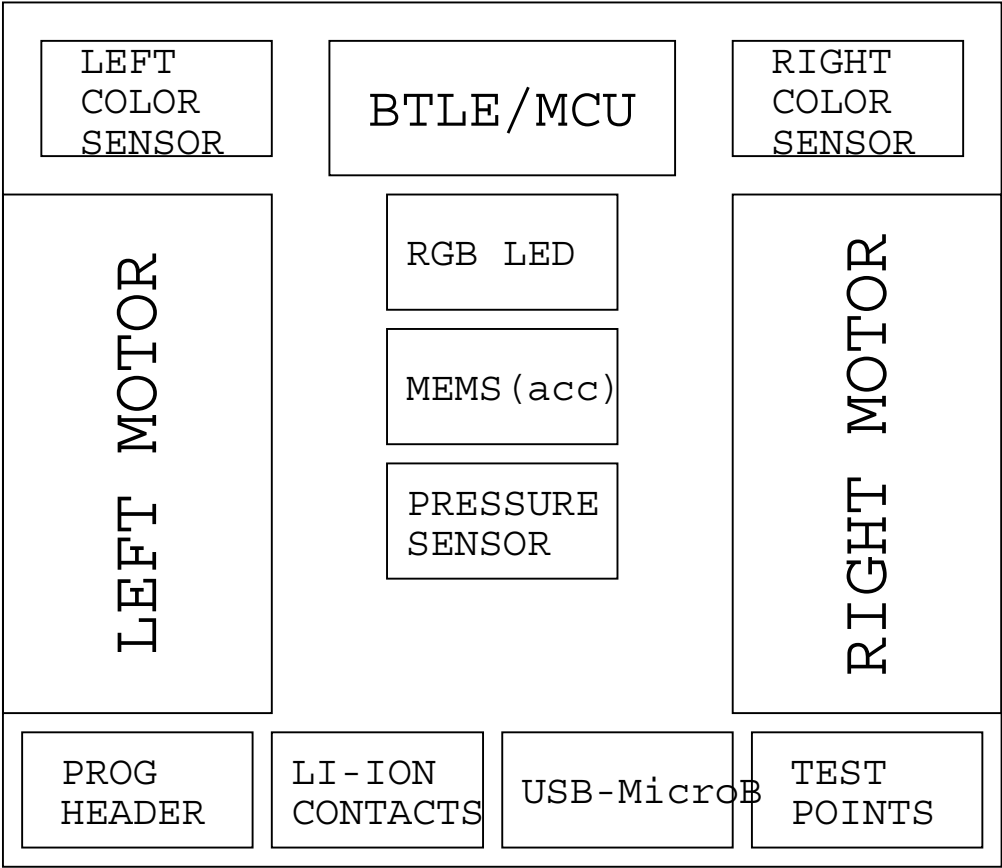
## Revision History

Rev	Contents
0.01	Starting Schematic

# POWER/COMM



# PCB LAYOUT

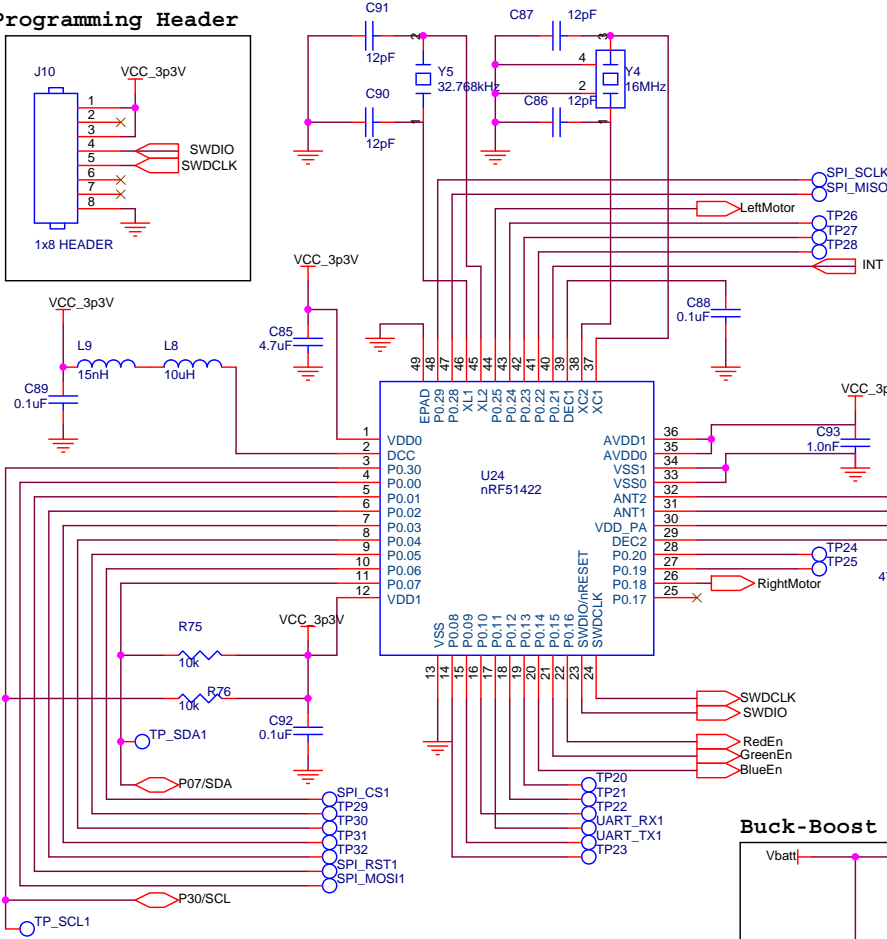


# EXT MODULES

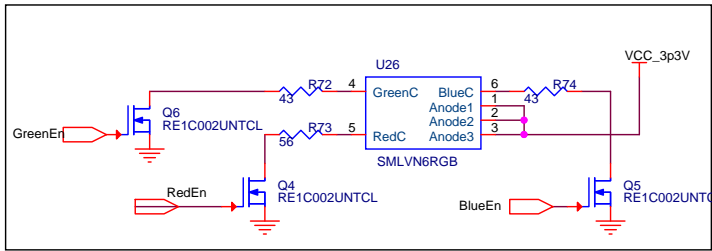


# Pressure/Color/Accelerometer Demo

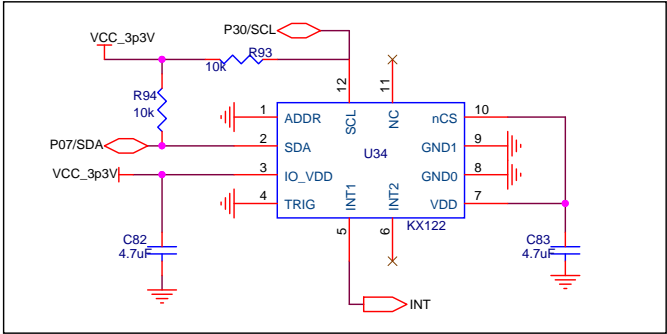
## Programming Header



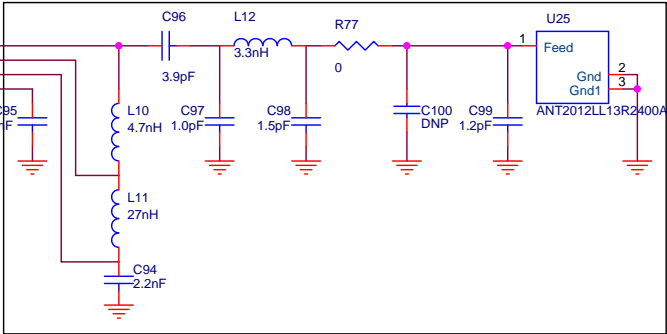
## RGB LED



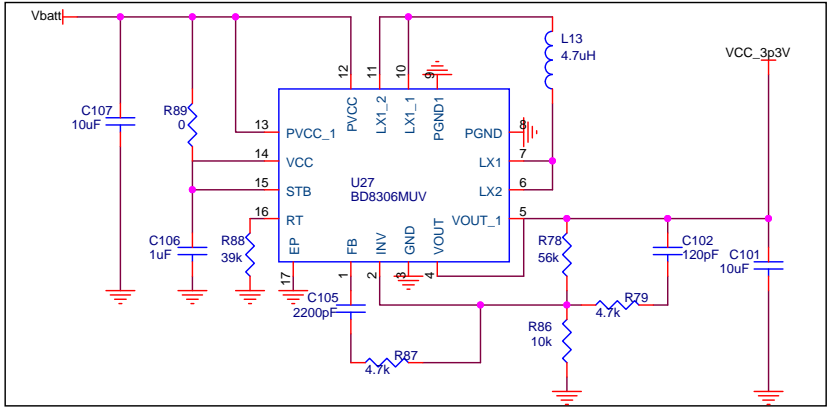
## 3DOF Accelerometer



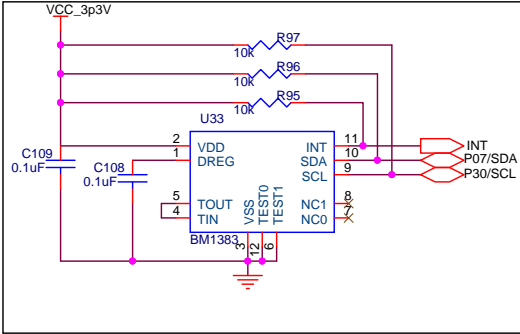
## Bluetooth Transmission Conditioning Circuitry



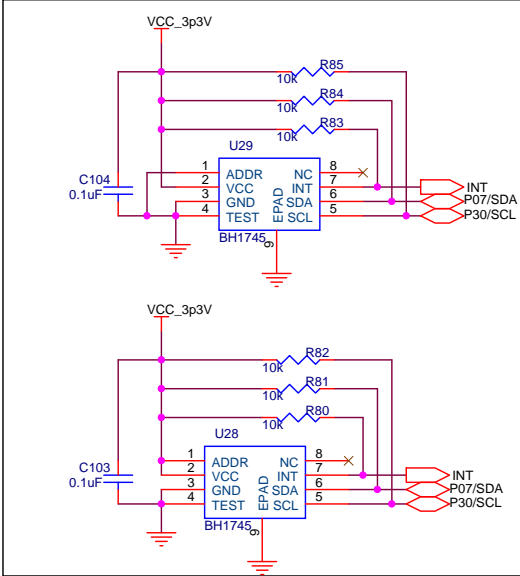
## Buck-Boost Circuitry



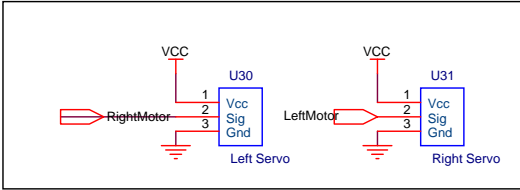
## Pressure Sensor



## Color Sensors



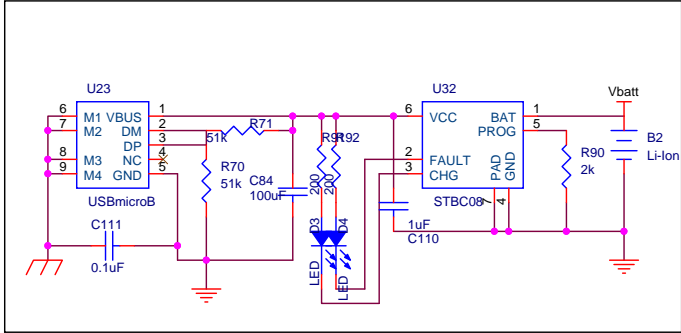
## Servo Motors



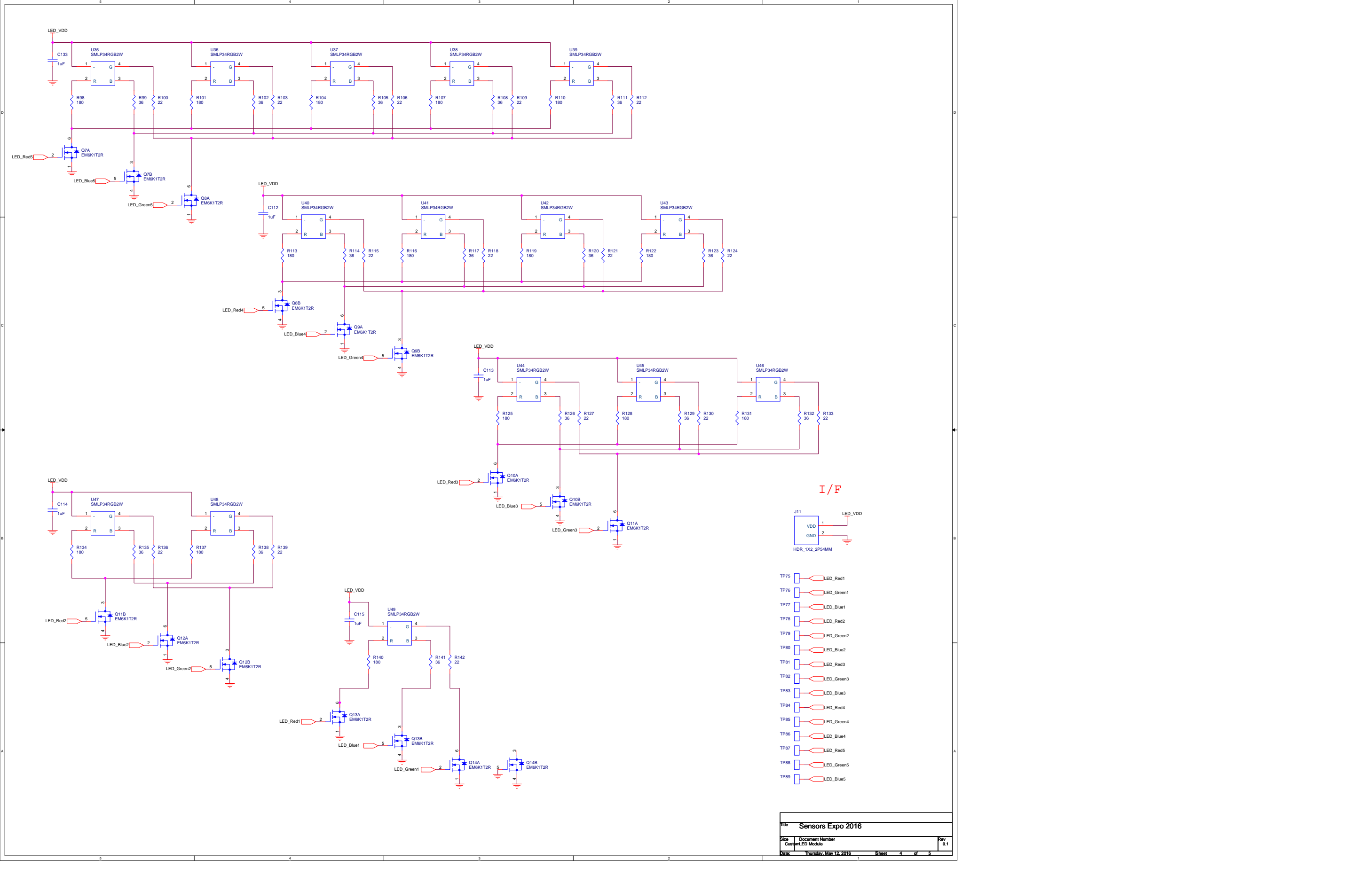
# GENERAL CONSIDERATIONS

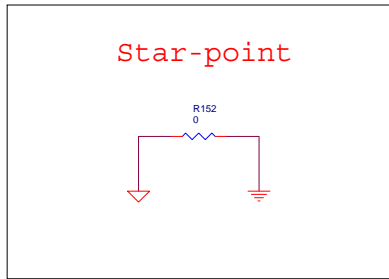
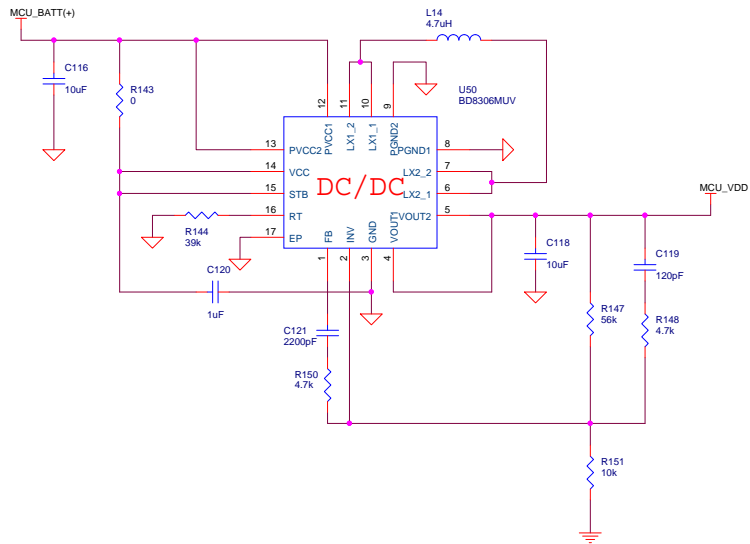
- 1) Test Points (SPI\_\*) needs to be in a single row cluster at 100 mil pitch (Refer to Components Placement Documentation)
- 2) J10 (Programming Header) is a 1x8 100mil pitch
- 3) All Test Points with no explicit placement instruction may be placed anywhere on the board
- 4) U28, U29 needs to be placed based on the component placement documentation
- 5) U30/U31 needs to be placed based on the component placement documentation
- 6) U26 needs to be placed based on the component placement
- 7) TP\_SDA1 and TP\_SCL1 needs to be placed together with 100mil pitch
- 8) U25 needs to follow layout guidelines for best antenna performance (Refer to datasheet)

## USB-Battery Charger

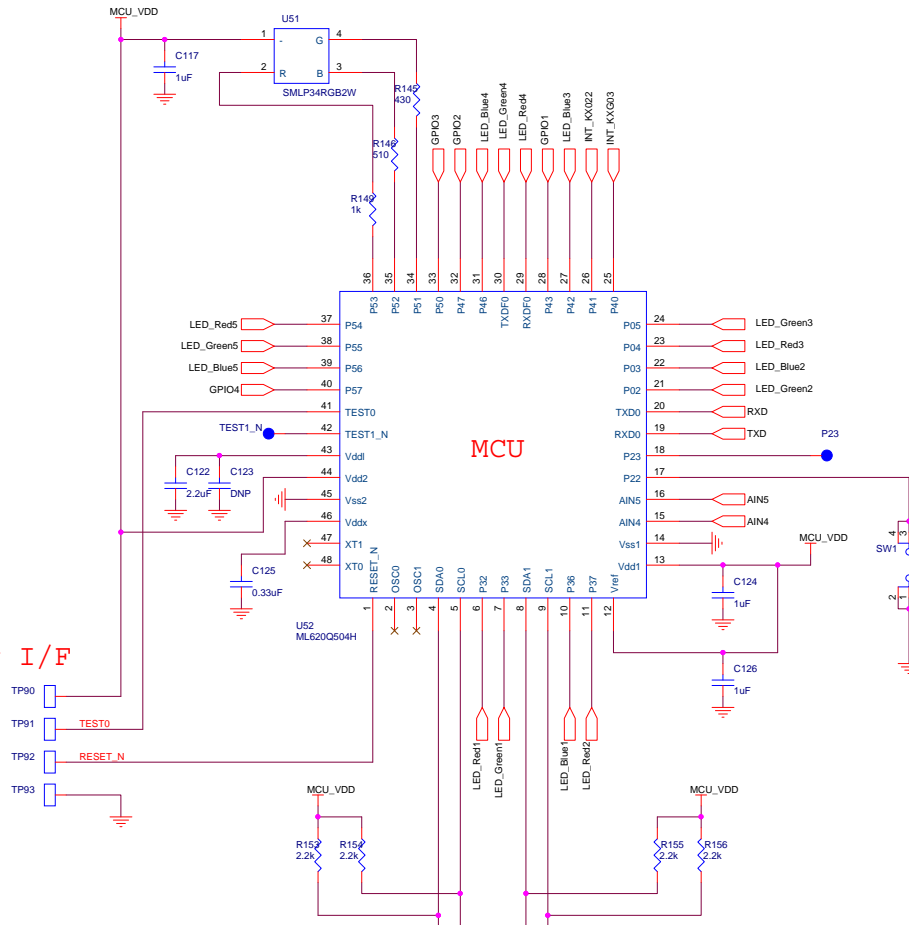


2016 Sensor Expo Demo			
Title			
BM1383 / BH1745 / KX122 Demonstration			
Size			
Document Number	0000	Rev	0.01
CustomROHM_DEMO_2016			
Date:			
Thursday, May 12, 2016	Sheet	3	of 5

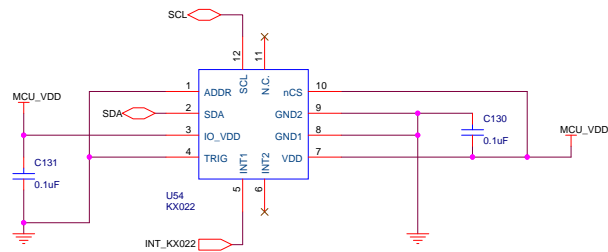
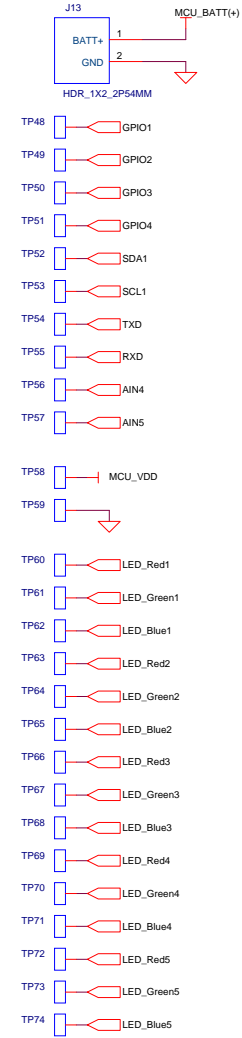




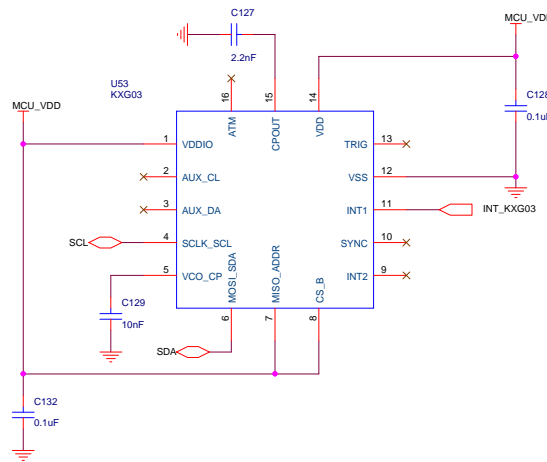
Debug I/F



I/F



Accelerometer (KX022 address: 0x1E)



Gyro (KXG03 address: 0x4F)