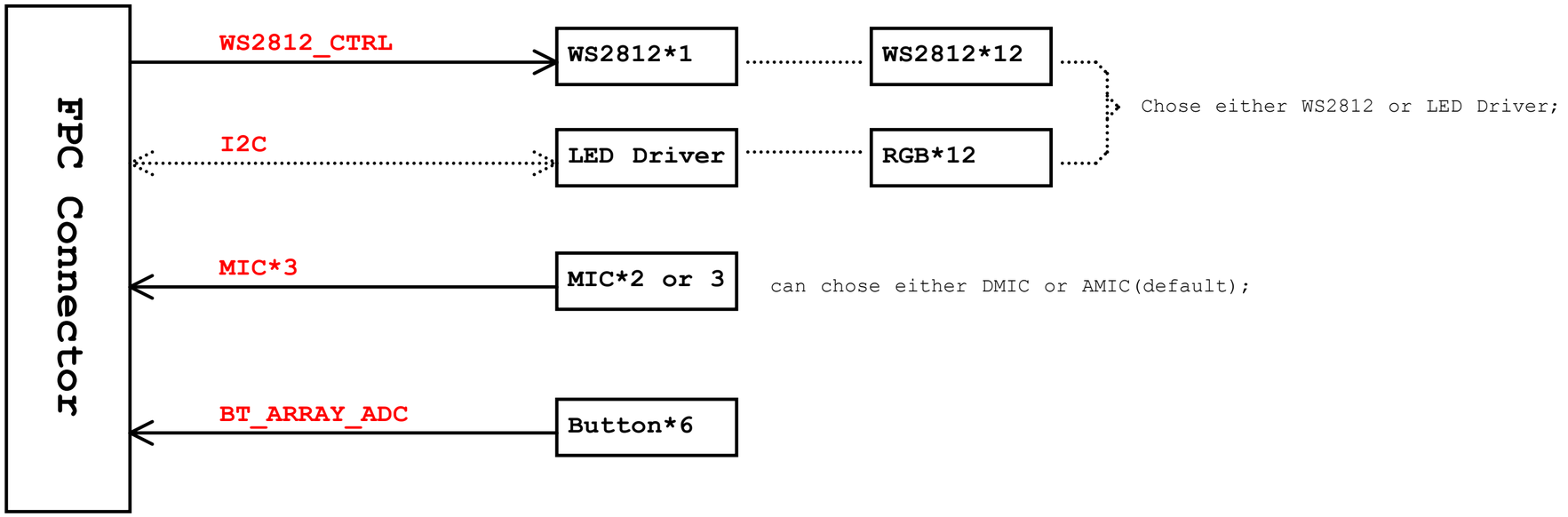
System Block:



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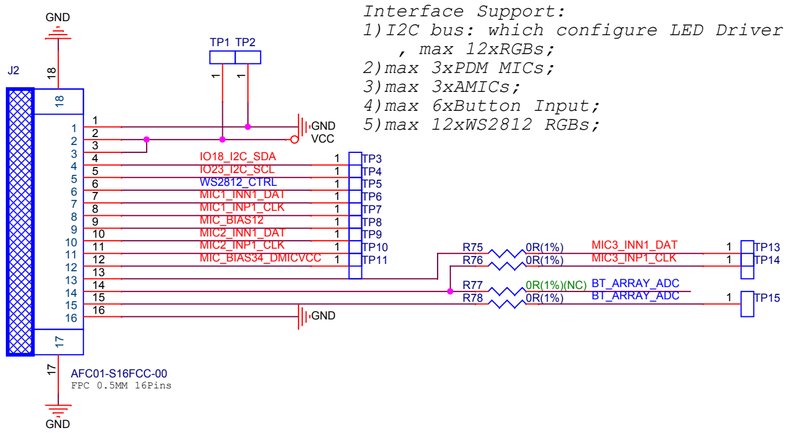
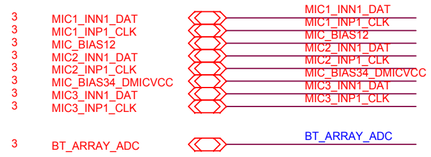
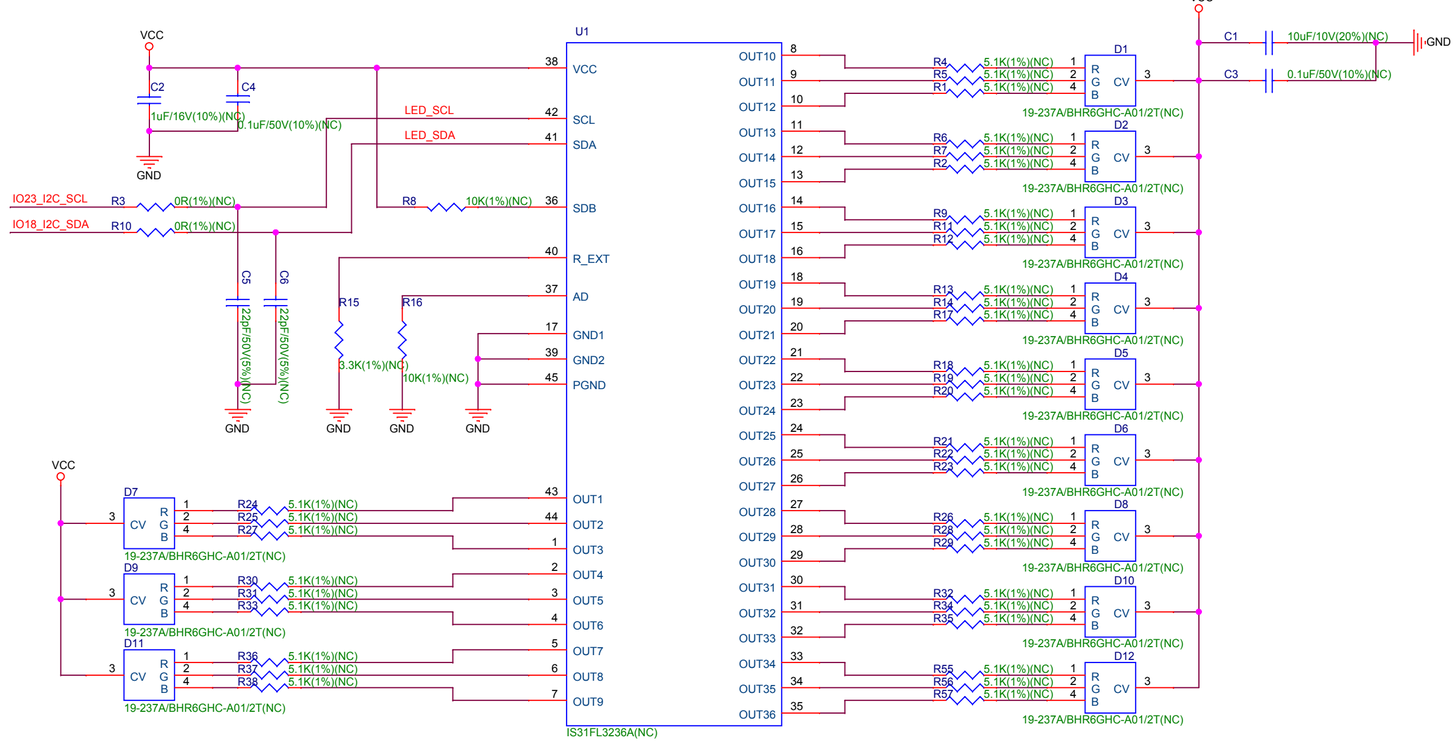


Interface Support:
1)I2C bus: which configure LED Driver , max 12xRGBs;
2)max 3xPDM MICs;
3)max 3xAMICs;
4)max 6xButton Input;
5)max 12xWS2812 RGBs;

Notes:
1. Default,we use VCC(power coming from USB or Battery) to power LED Driver and LEDs ,thus we can saved one Power Regulator .
2. I2C of LED Driver is pull-up on the main-board by VDD3V3 .
3. Pull-up resistor for Button_Array_ADC is populated on main-board .

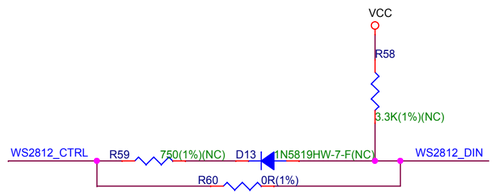


LED Driver:

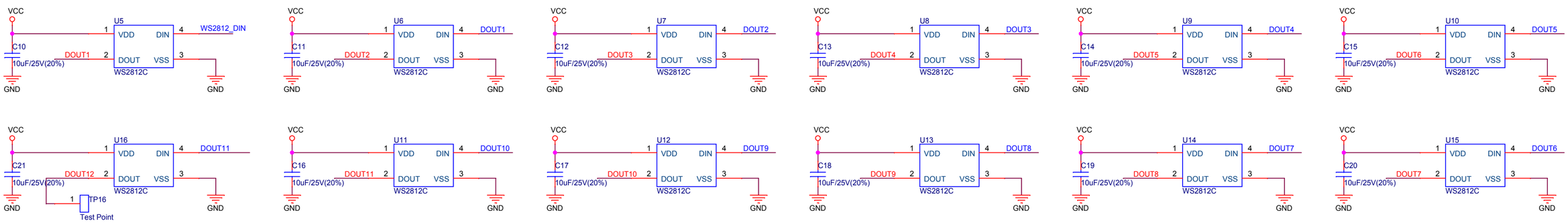


AD=0: I2C slave address:0'b 0111 100x;

WS2812 RGB:



Notes:
1. LED Driver or WS2812 RGBs can be picked one of these two at the same time;
2. Stacked Pad will be used to Layout LEDs(for LED Driver) and WS2812 RGBs.
3. If VCC=5V(default): R59/D13/R58 ON, R60 NC;
4. If VCC=3.3V: R59/D13/R58 NC, R60 ON;



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2 MIC1_INN1_DAT
2 MIC1_INP1_CLK
2 MIC_BIAS12
2 MIC2_INN1_DAT
2 MIC2_INP1_CLK
2 MIC_BIAS34_DMICVCC
2 MIC3_INN1_DAT
2 MIC3_INP1_CLK

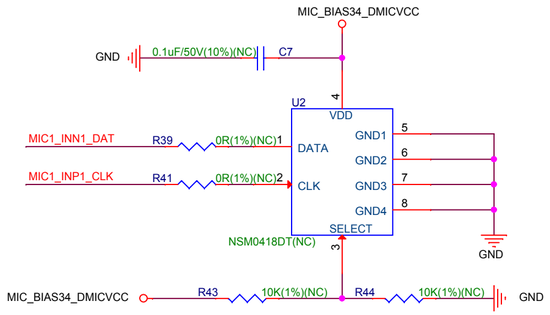
MIC1_INN1_DAT
MIC1_INP1_CLK
MIC_BIAS12
MIC2_INN1_DAT
MIC2_INP1_CLK
MIC_BIAS34_DMICVCC
MIC3_INN1_DAT
MIC3_INP1_CLK

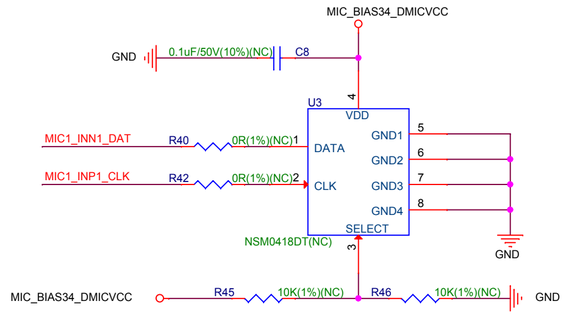
2 BT_ARRAY_ADC

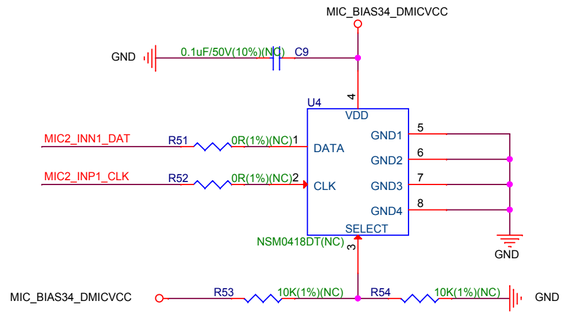
BT_ARRAY_ADC

DMIC Array:

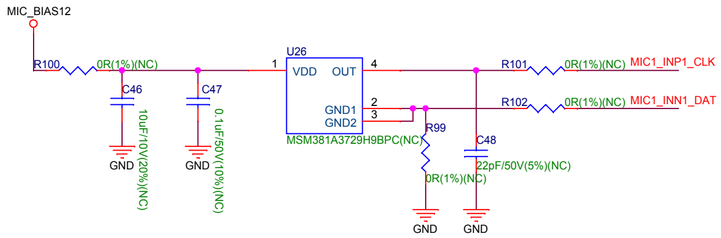
Notes:
1. Default: NSM0418DT(NeoMEMS);
2. Alternative: MSM261D4030H1AP(MEMSensing Microsystems);

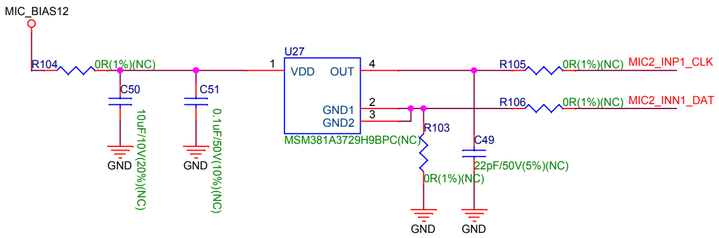


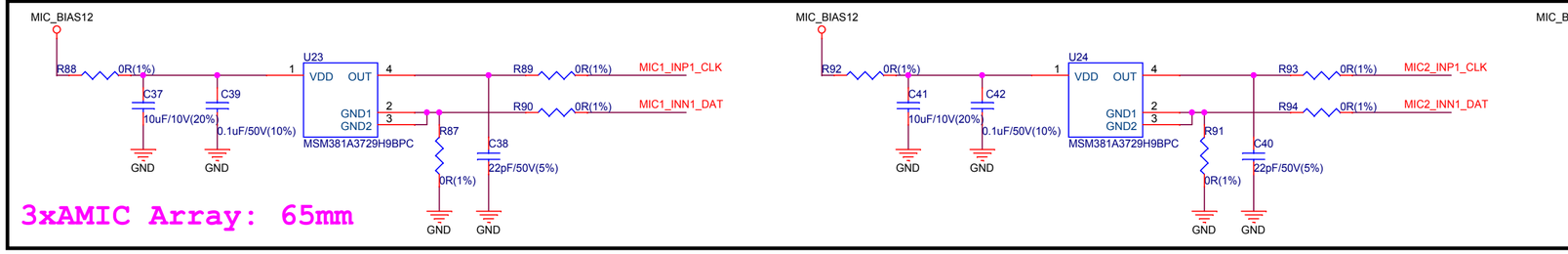


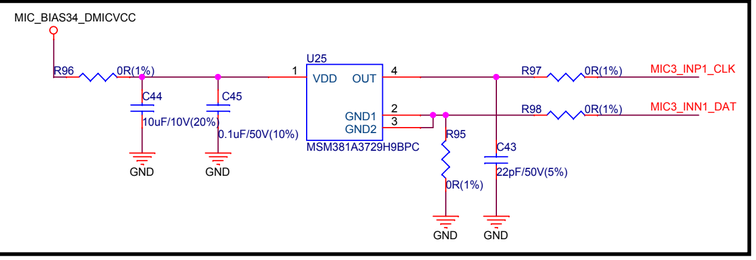


2xAMIC Array: 55mm

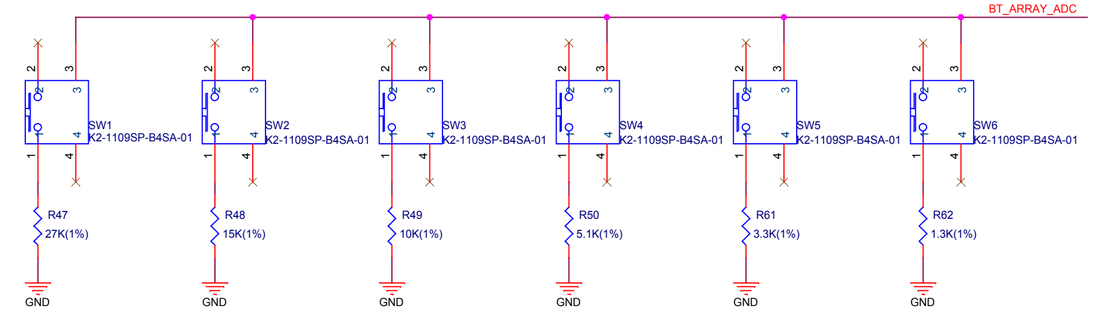








KEY Array:



Location Holes:

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