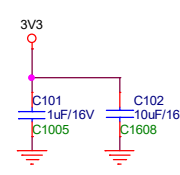
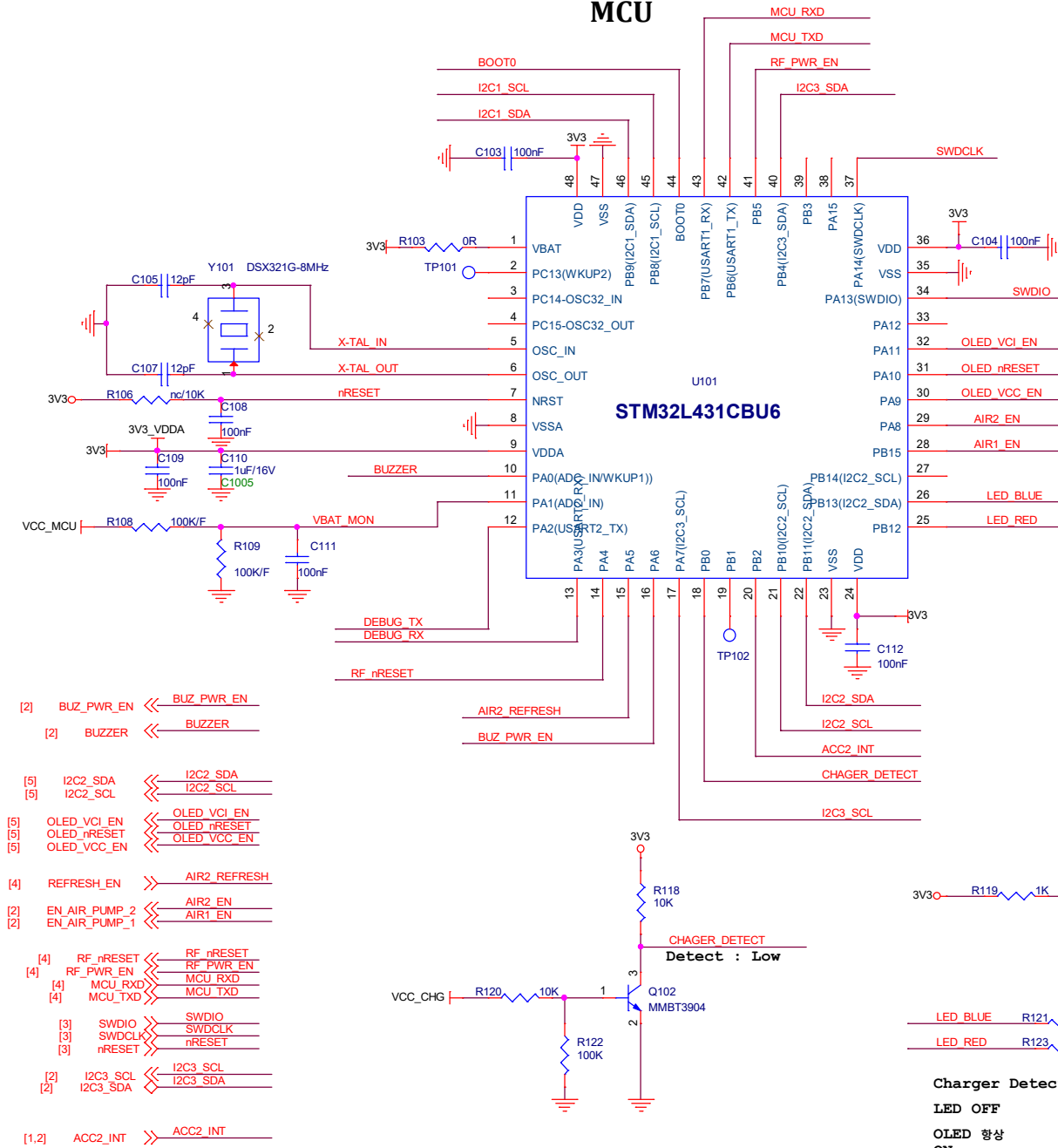
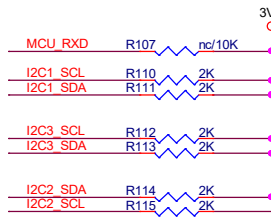


MCU

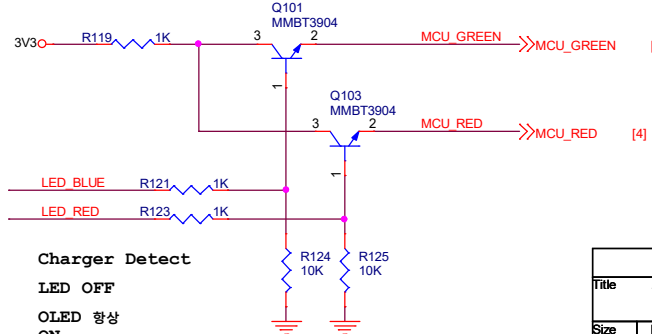
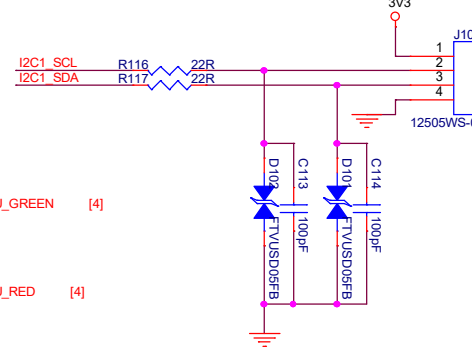


BOOT

BOOT0	
0	FLASH MEMORY
1	SYSTEM MEMORY



3-Axis Sensor Board Interface



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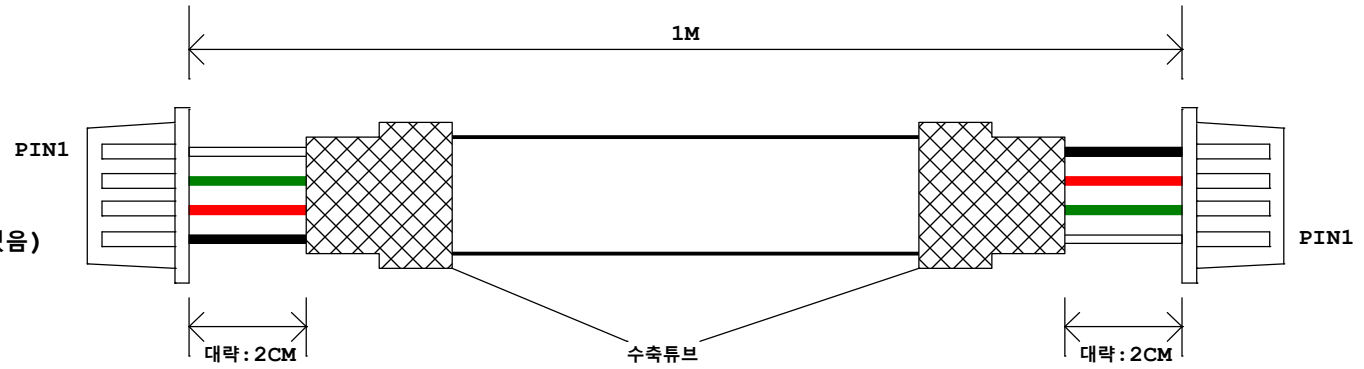
하네스 케이블 제작 사양서

4-Core 1:1 하네스케이블 (외피 있음)

housing : 12505HS-04

제조사 : 연호전자

Cable: UL2464 28AWG 4Core Cable

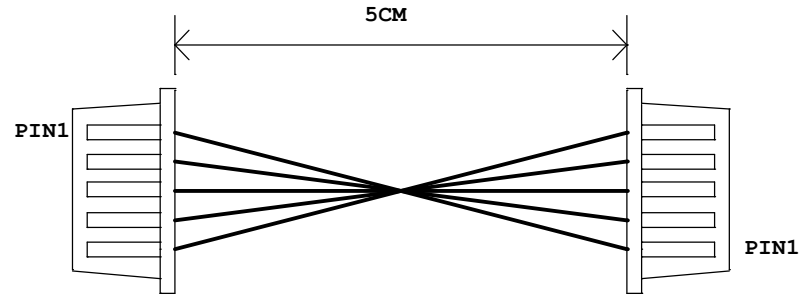


5핀 1:1 하네스 케이블 (외피 없음)

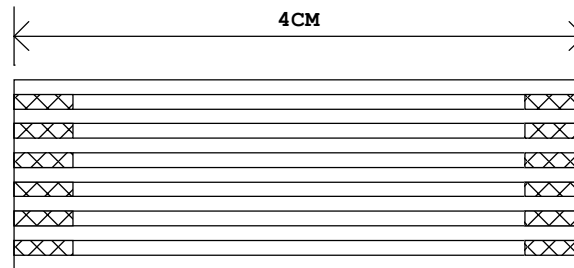
housing : 12505HS-04

케이블 색깔 : 동일

케이블 사양 : AWG26 또는 (최대한 두꺼운 케이블)

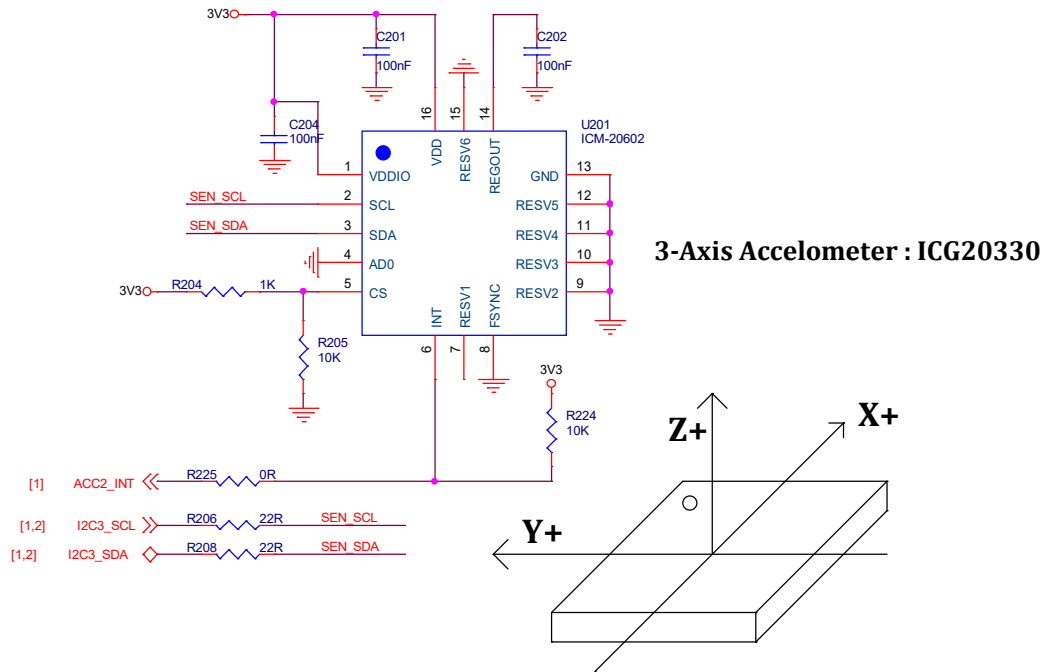


0.5mm Pitch 6-Pin FFC Cable 제작 사양서

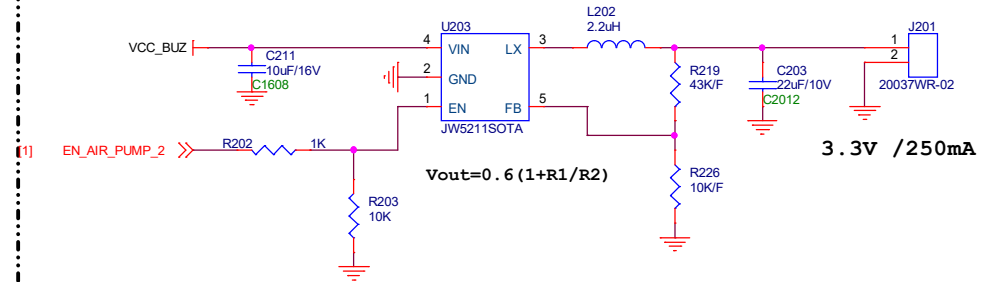


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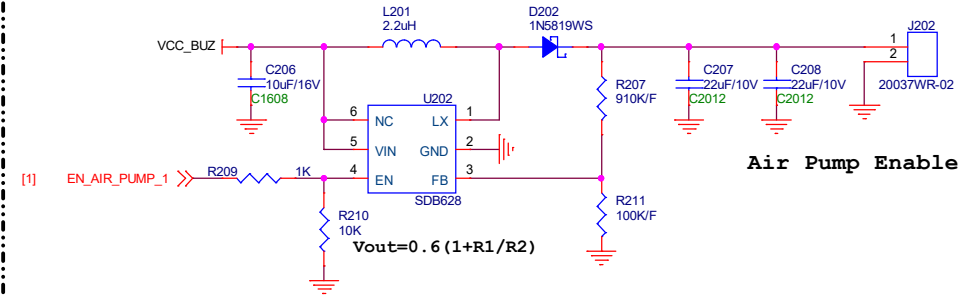
6-Axis sensor(acc+gyro)



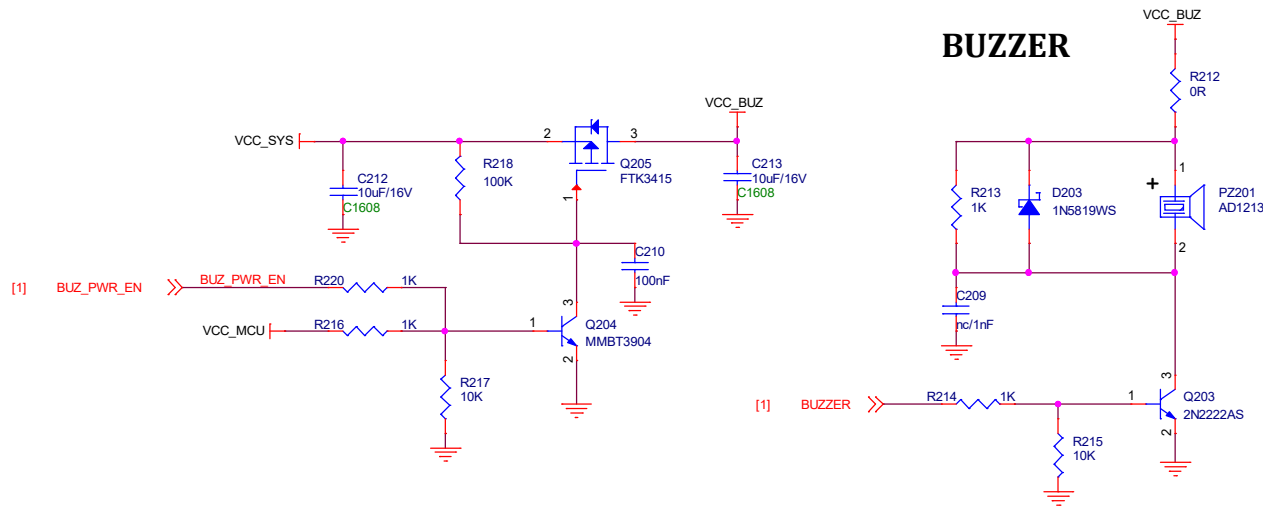
Refresh Air Pump Enable



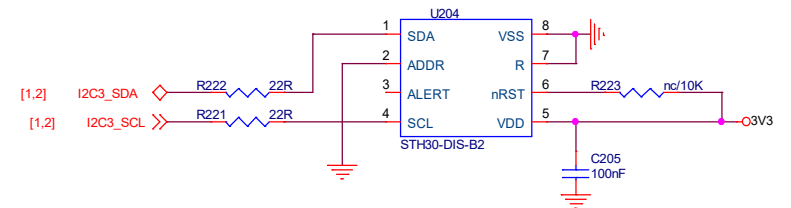
6V Air Pump 6V/250mA



BUZZER

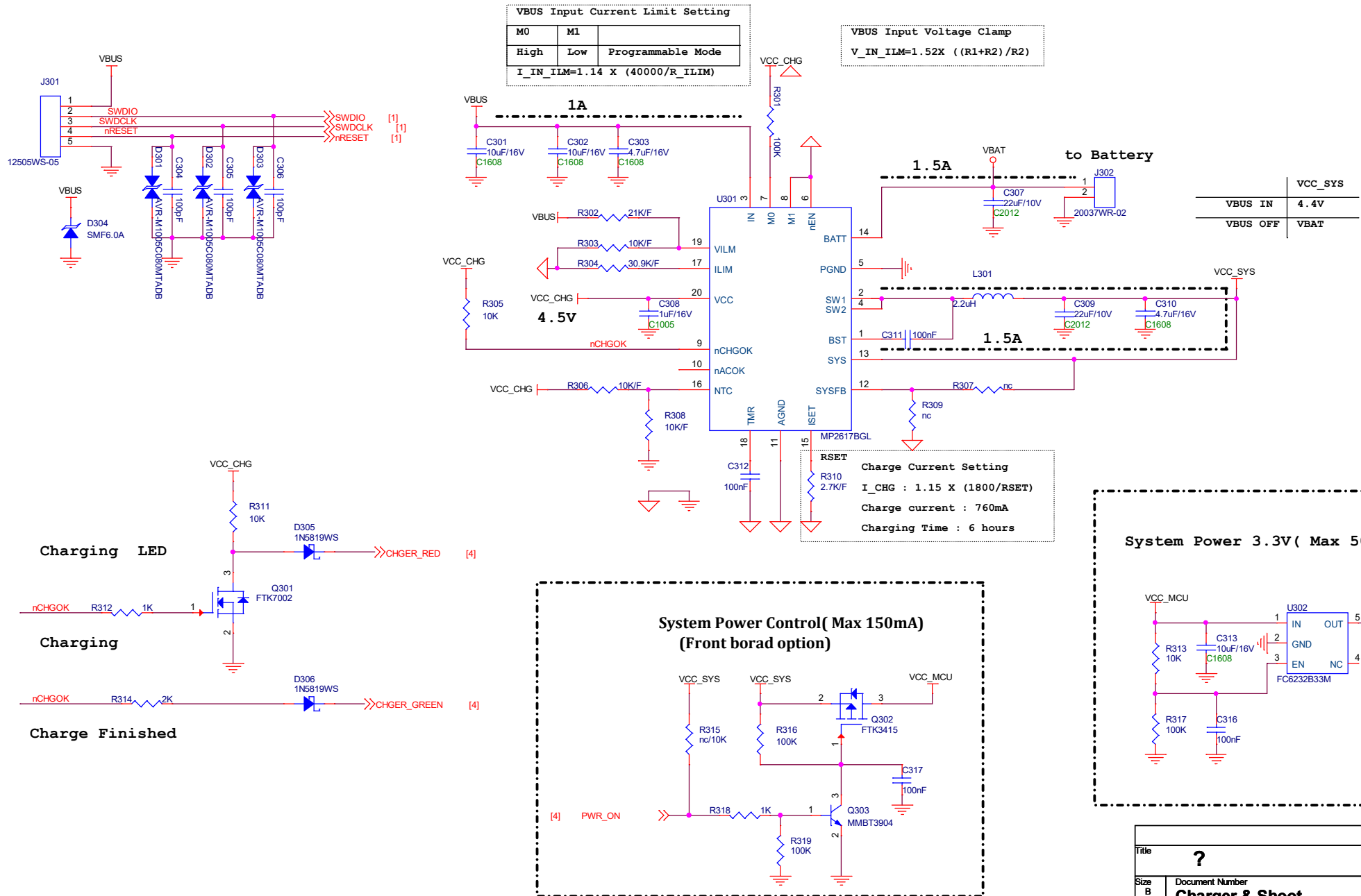


Humidity & Temperature Sensor

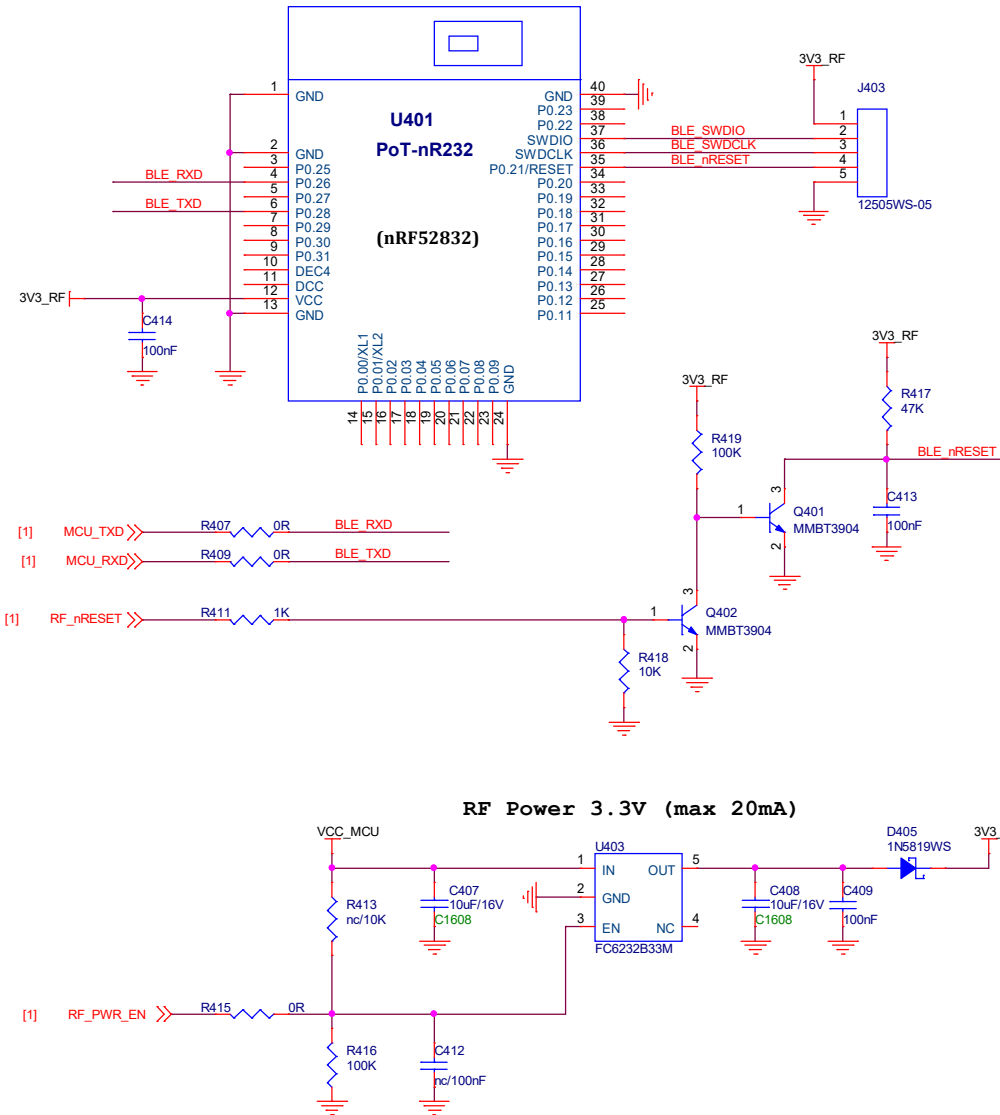


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B	BLE & 6-Axis Sensor	0.1	
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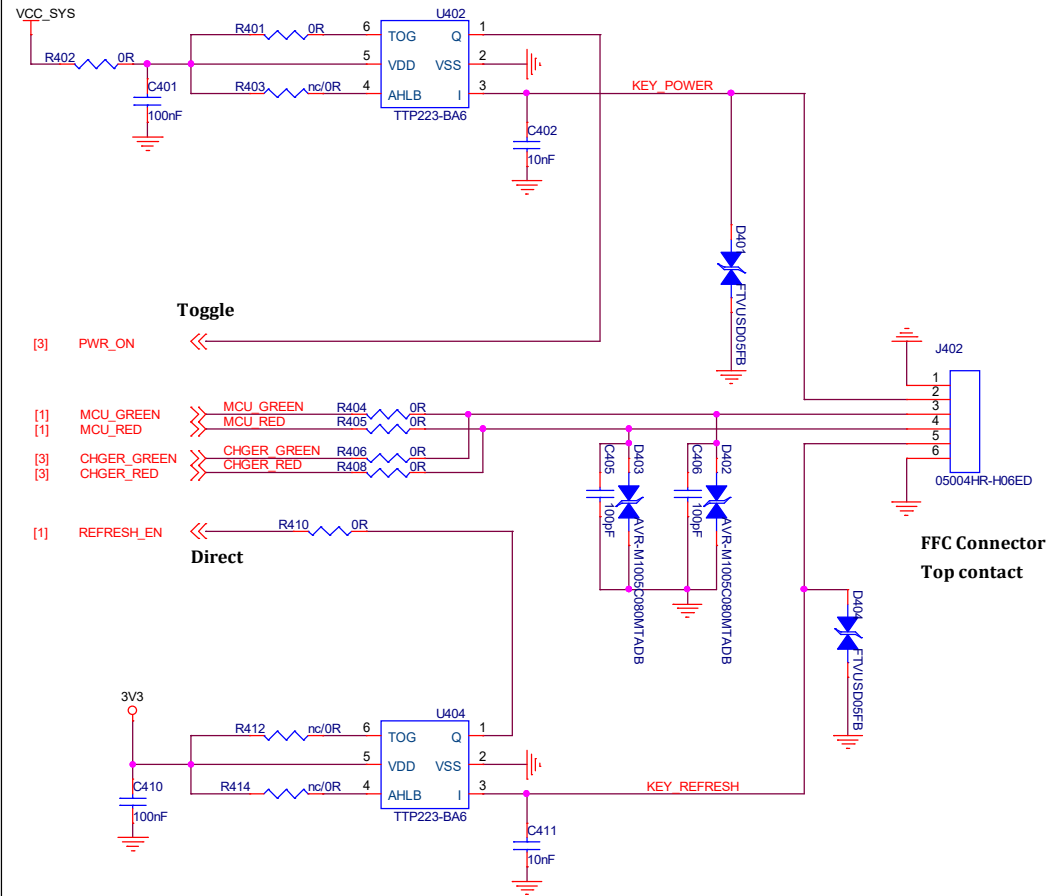
Battery Charger



LoRA & BLE Module Interface



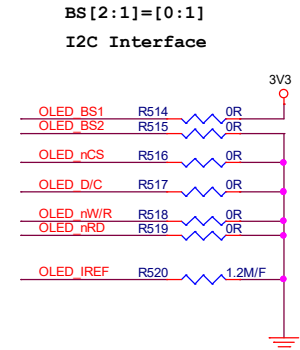
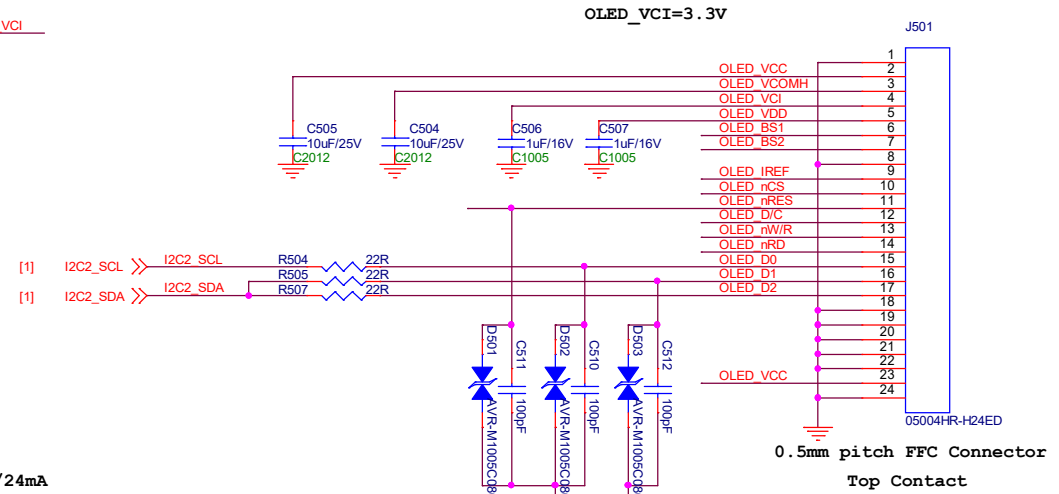
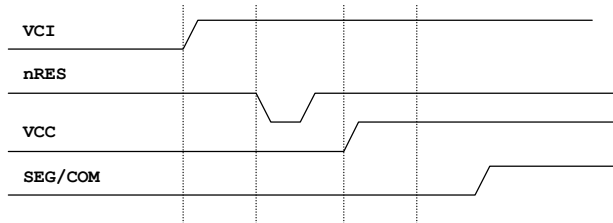
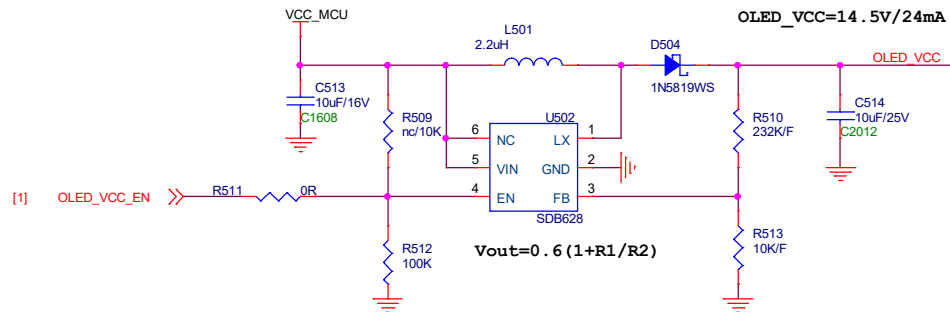
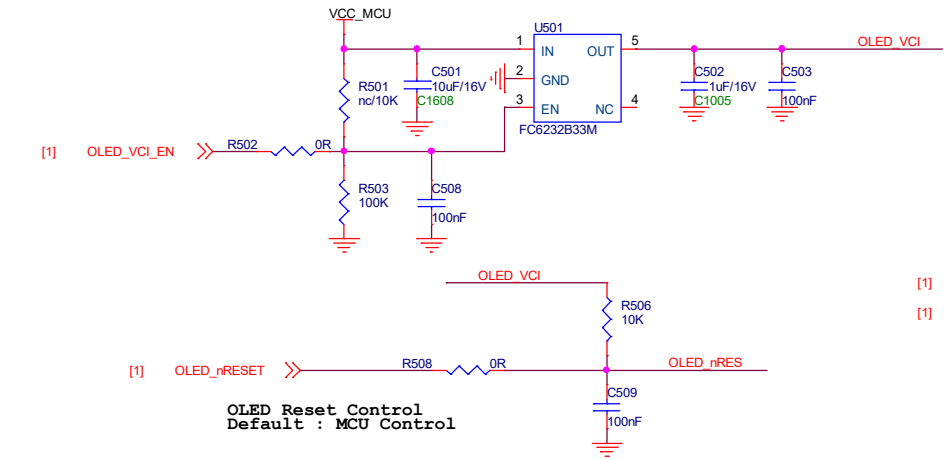
Power ON/OFF Switch



Airbag ReFlow Switch

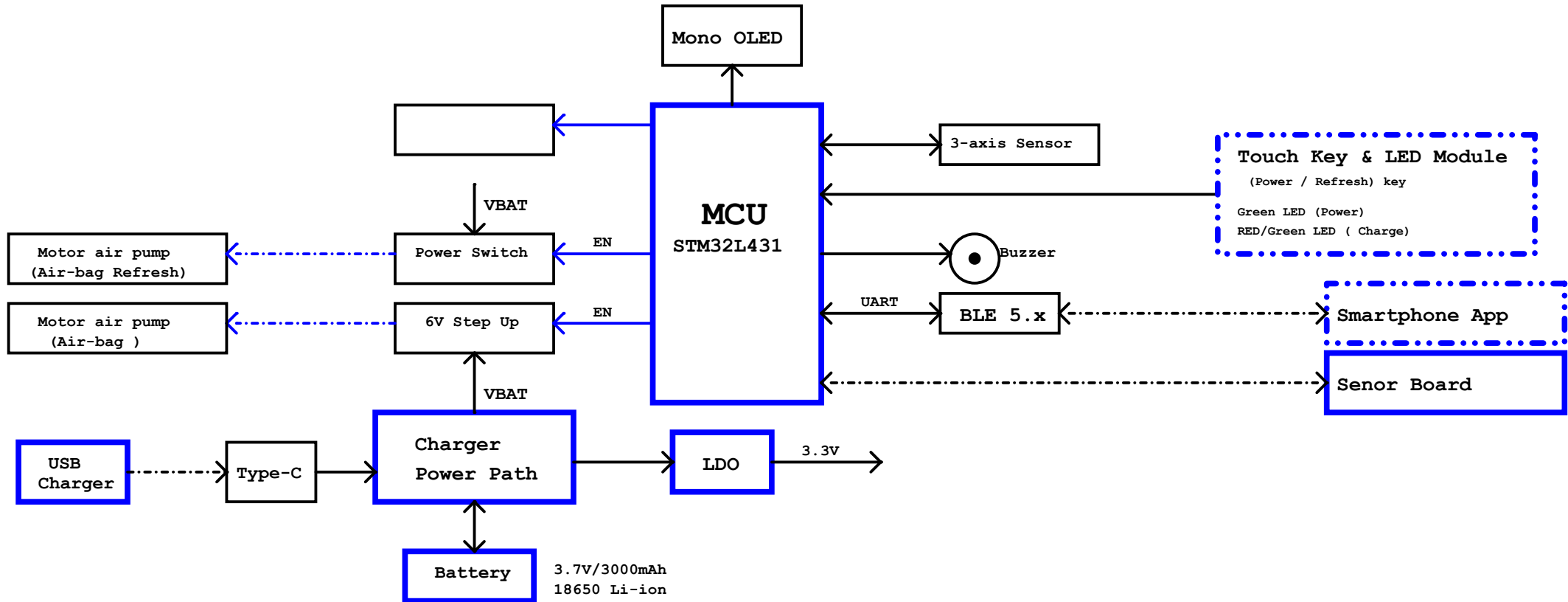
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OLED Interface (I2C)



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0-U-A System Block



0-U-A Sensor Board Specifications

MCU : STM32L431CBU6 - 128KB Flash / 64KB RAM

Battery : 3.7V/3000mAh (18650 Li-ion Battery)

Charger IC : MP2617B

Sensor : Main board(3-axis) => OLED ON/OFF 감지용

RF : Bluetooth BLE5.x

충전기 : 5V/1.2A , USB Type-C Connector & Cable 일체형

Sensor : 2`nd Board(3-axis) => 영유아 뒤집어짐 감지용

PCB 사양 :

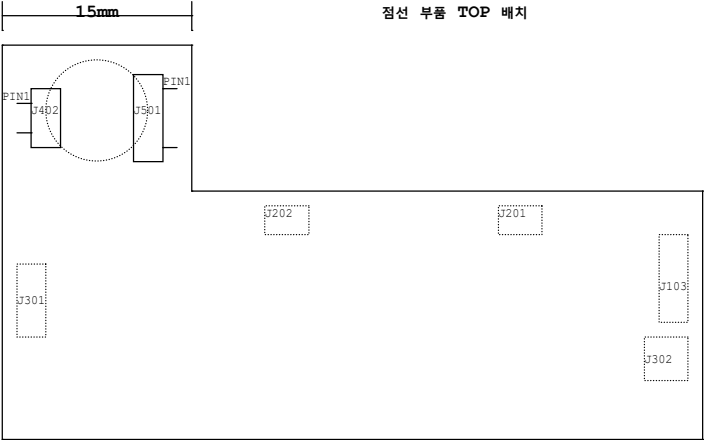
- Layer :
- Thickness : 1.2T
- 표면처리 : OSP

특이사항

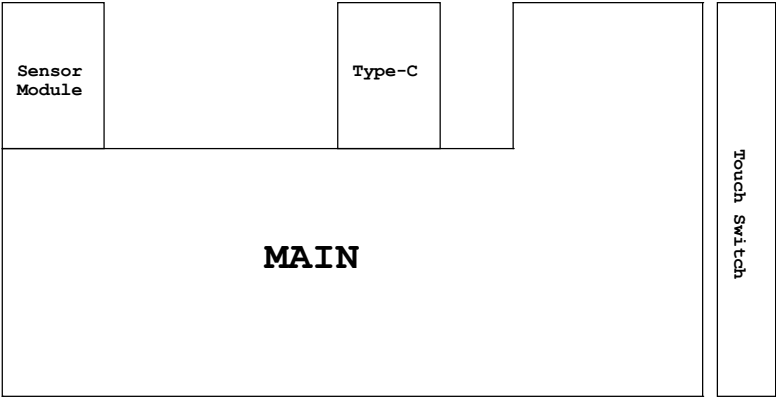
- 경고음 부저
- 전원 스위치 (터치 스위치)
- Motor Air pump 사용 => Airbag Flow
- Mono OLED Display
- Main Board 에 OLED On/Off 감지를 위한 3축 센서 사용
- 충전기 연결되면 OLED 는 항상 켜짐
- 유아용 이므로 전자파 차폐설계
- 블루투스 통신 (스마트폰 App 개발)
- Air-bag Refresh 스위치 사용 (터치 스위치)
- 녹색 LED 사용 (OLED OFF => 동작표시)
- 센서보드 서브보드로 사용

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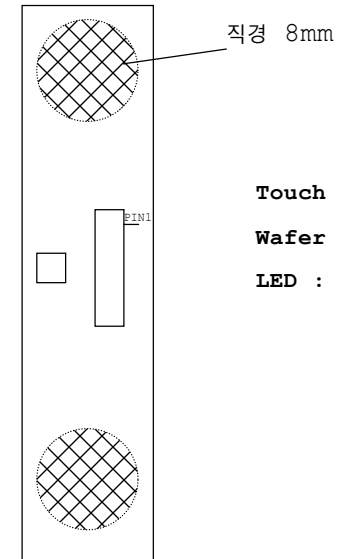
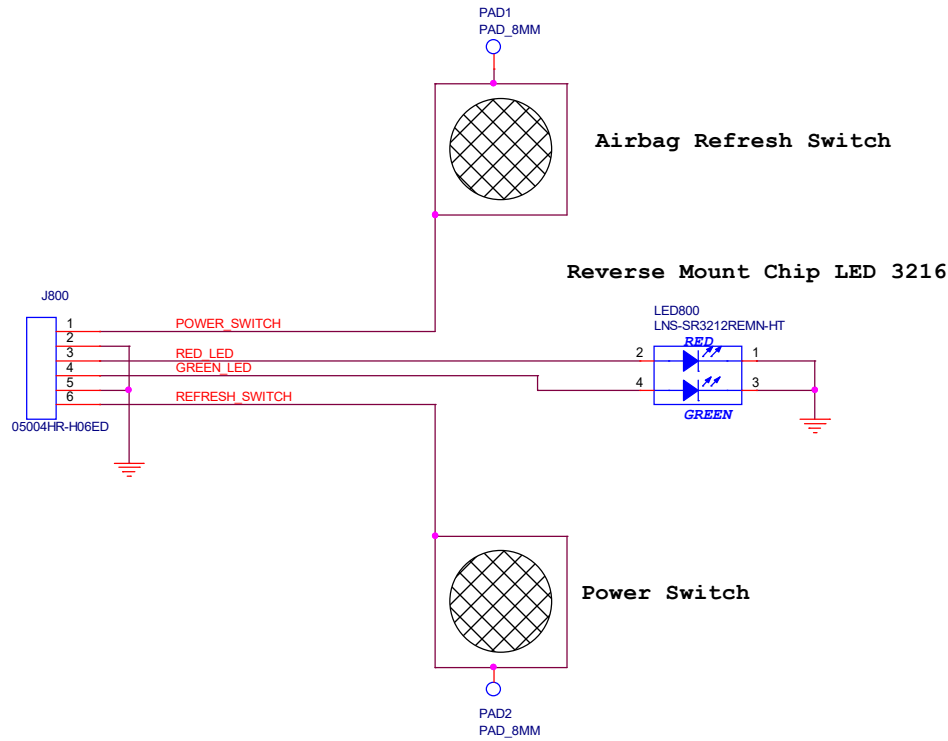
MAIN PCB LAYOUR (Bottom View)



PCB 배열



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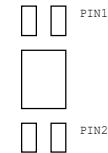


직경 8mm

Touch Pad : Bottom

Wafer & LED : Top

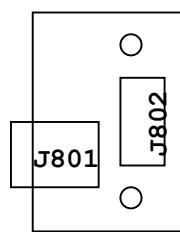
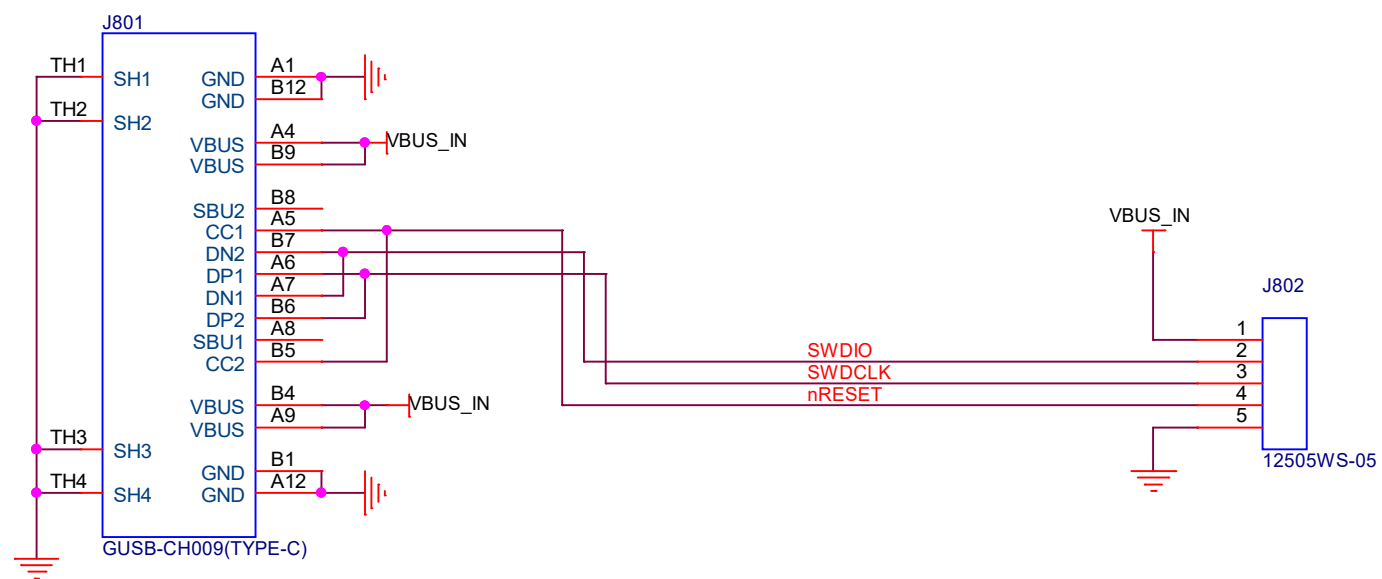
LED : Reverse Mount type



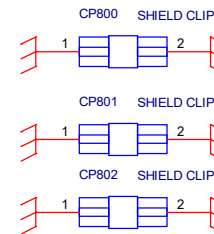
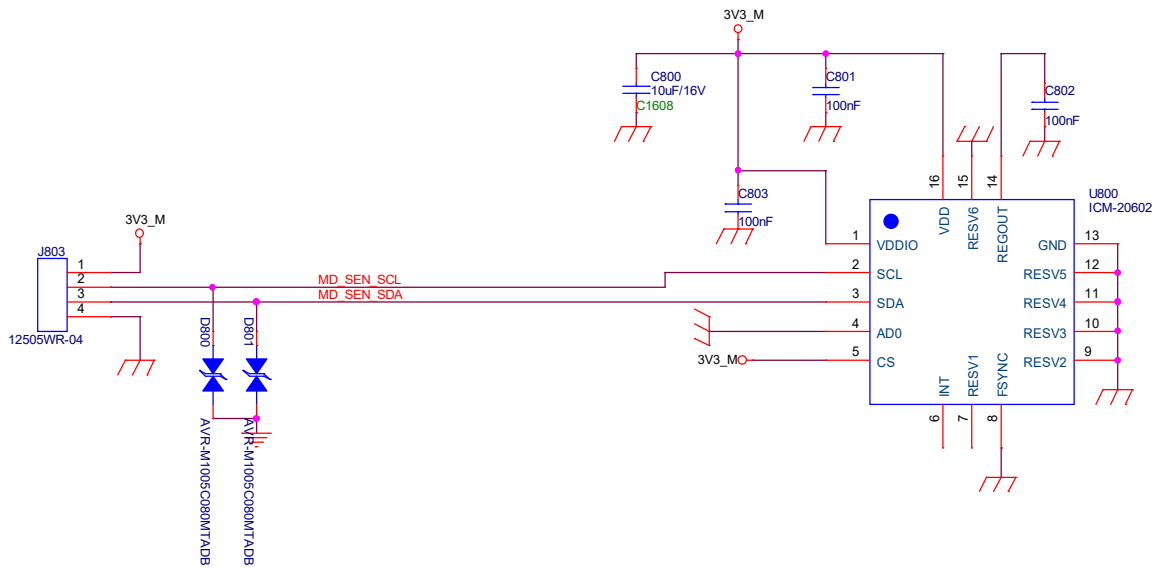
LED PCB LIB (TOP View)

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USB Type-C 5V Charge Adaptor

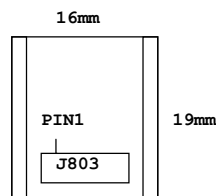


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3-Axis Accelometer : ICG20330

PCB Size



PCB 좌우 1MM 여분

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