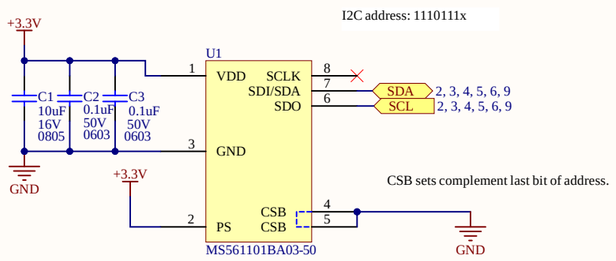
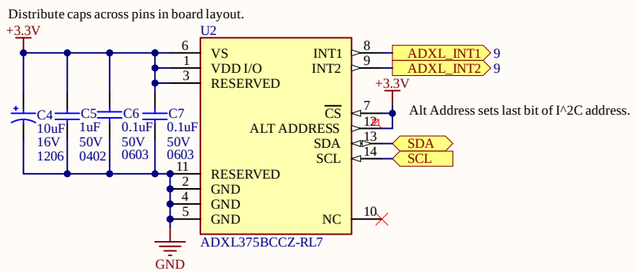


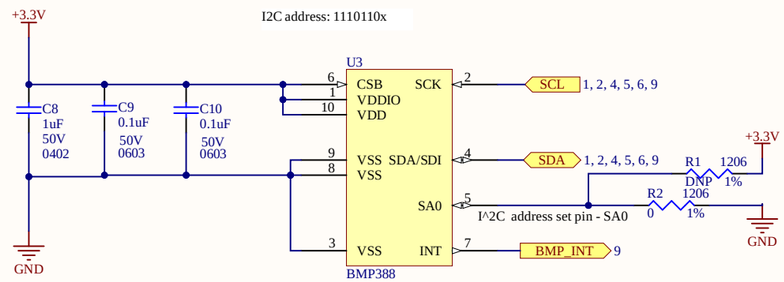
SHEET NAME: MS5611_Primary_Alt.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

RIT LAUNCH INITIATIVE



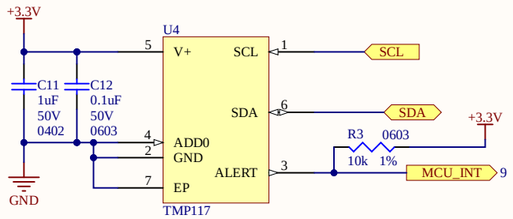
SHEET NAME: ADXL375_HighG_Accel.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

RIT LAUNCH INITIATIVE



SHEET NAME: BMP388_Secondart_Alt.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

RIT LAUNCH INITIATIVE



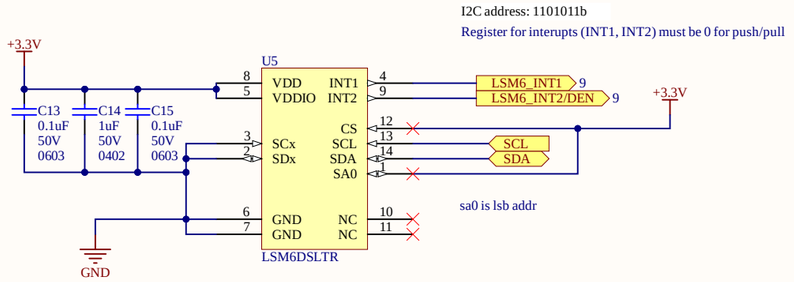
- Place PCB vertically along air flow.

4. If the device is used to measure still air temperature:
   - Miniaturize the board to reduce thermal mass. Smaller thermal mass results in faster thermal response.
   - Place two copper planes of equal size to the top and bottom of the exposed pad.
   - Remove the top solder mask.
   - To prevent oxidation, cover any exposed copper with solder paste.
   - Thermal isolation is required to avoid thermal coupling from heat source components through the PCB.
   - Avoid running the copper plane underneath the temperature sensor.

I2C address: 1001000x

SHEET NAME: Temp_TMP117.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

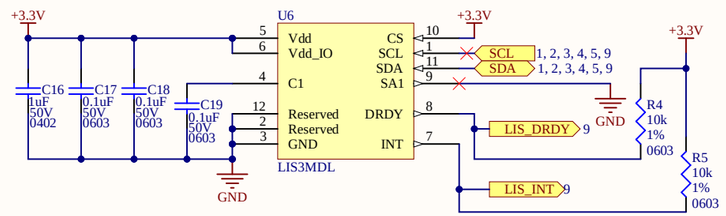
RIT LAUNCH INITIATIVE



SHEET NAME: LSM6DSL.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

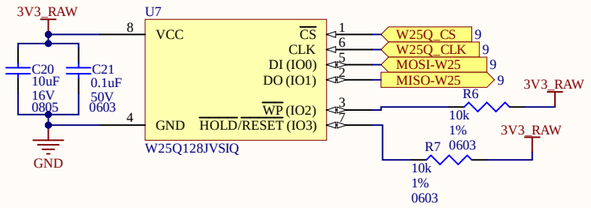
RIT LAUNCH INITIATIVE

I2C address: 0011100



SHEET NAME: LIS3MDL_Magnetometer.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

RIT LAUNCH INITIATIVE

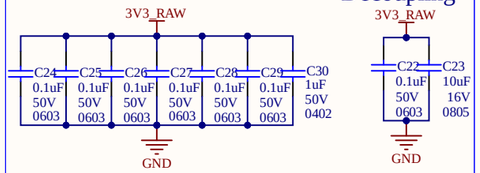


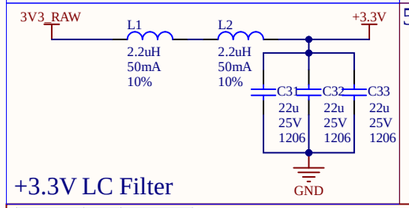
SHEET NAME: W25Q128JVSIQ_Flash_Mem.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

RIT LAUNCH INITIATIVE

Digital-to-Analog Voltage

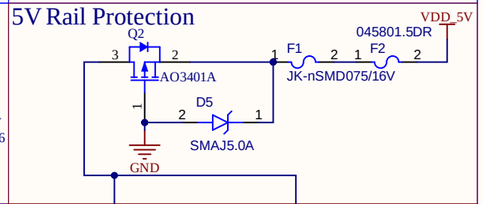
VRAW Decoupling



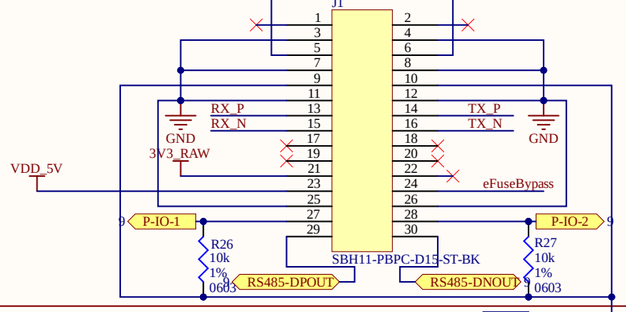


+3.3V LC Filter

5V Rail Protection



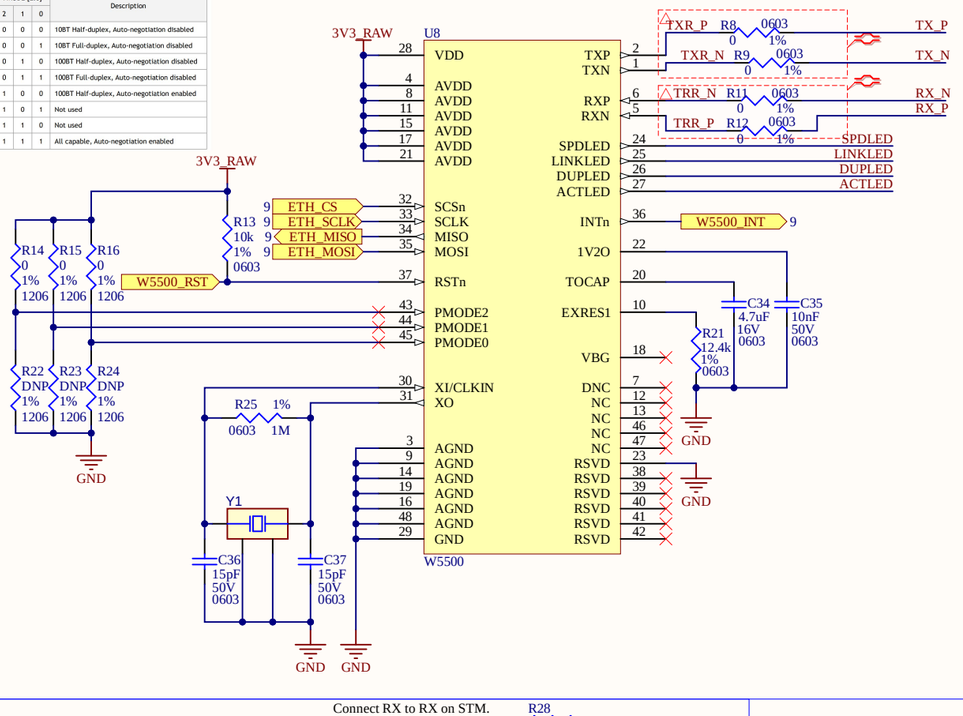
Description	PIN		Description
Battery Voltage	1	2	Battery Voltage
GND	3	4	GND
5v	5	6	5v
GND	7	8	GND
3v3	9	10	3v3
GND	11	12	GND
TX+	13	14	RX+
TX-	15	16	RX-
ADDR 0 (LSB)	17	18	ADDR 1
ADDR 2	19	20	ADDR 3 (MSB)
LED 0	21	22	LED 1
GPIO 0	23	24	GPIO 1
GPIO 2	25	26	GPIO 3
GPIO 4	27	28	GPIO 5
GPIO 6	29	30	GPIO 7

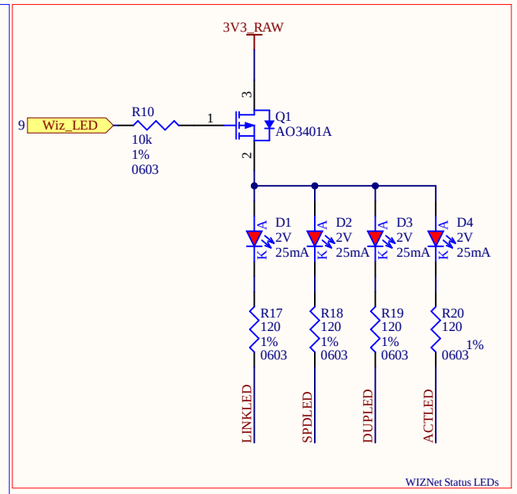


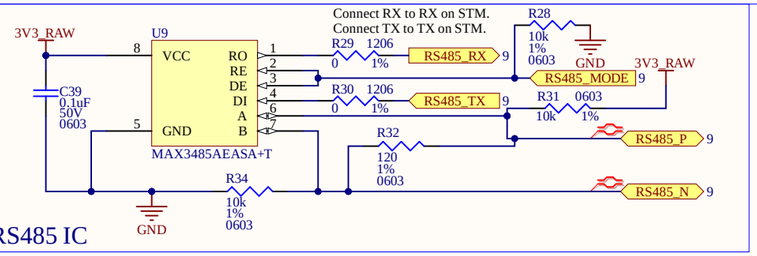
Backplane Connector

WIZNet W5500

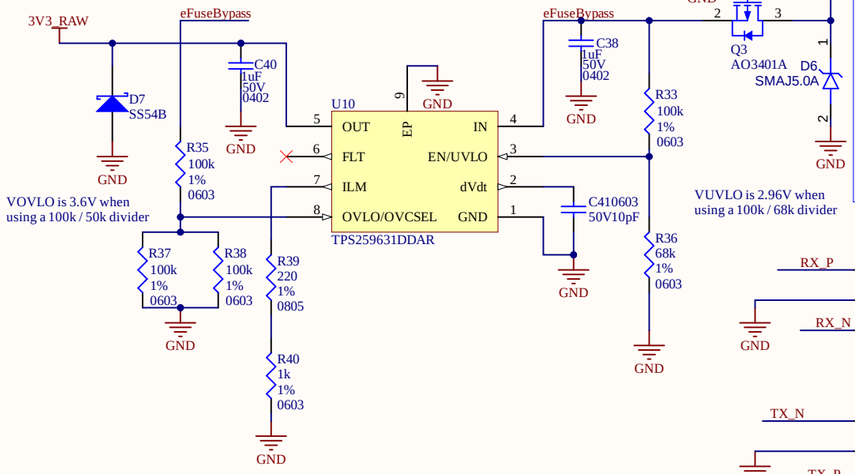
PMODE [2:0]			Description
2	1	0	
0	0	0	10BT Half-duplex, Auto-negotiation disabled
0	0	1	10BT Full-duplex, Auto-negotiation disabled
0	1	0	100BT Half-duplex, Auto-negotiation disabled
0	1	1	100BT Full-duplex, Auto-negotiation disabled
1	0	0	100BT Half-duplex, Auto-negotiation enabled
1	0	1	Not used
1	1	0	Not used
1	1	1	All capable, Auto-negotiation enabled



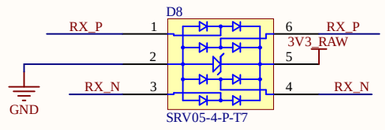


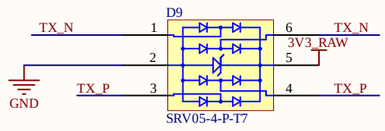


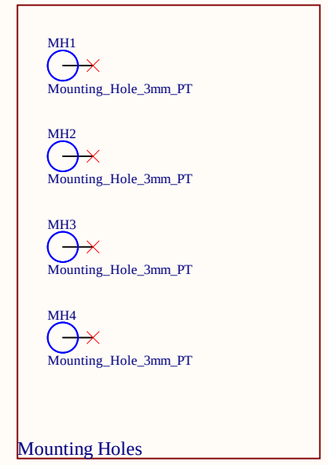
RS485 IC



3.3V Rail Protection



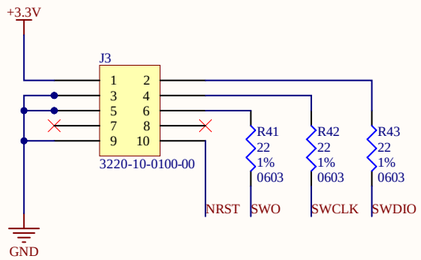




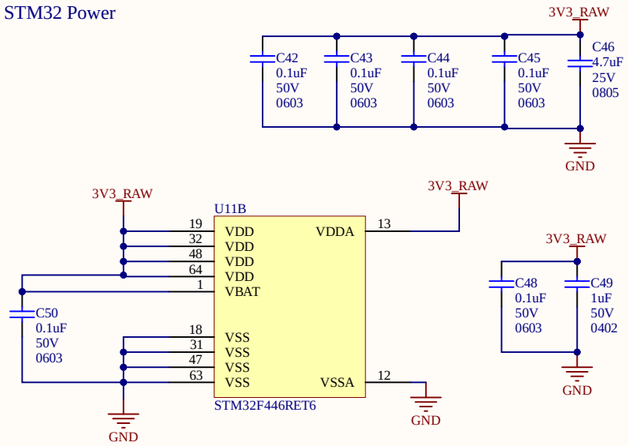
SHEET NAME: Backplane_Interface.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

RIT LAUNCH INITIATIVE

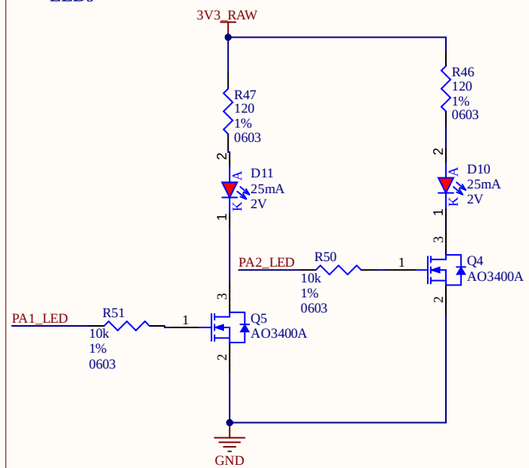
SWD Connector



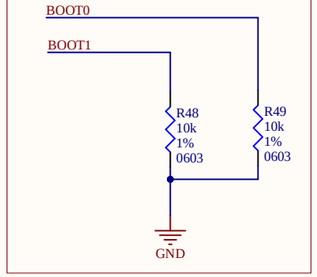
STM32 Power



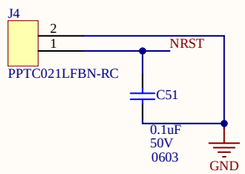
LEDs



Boot Mode

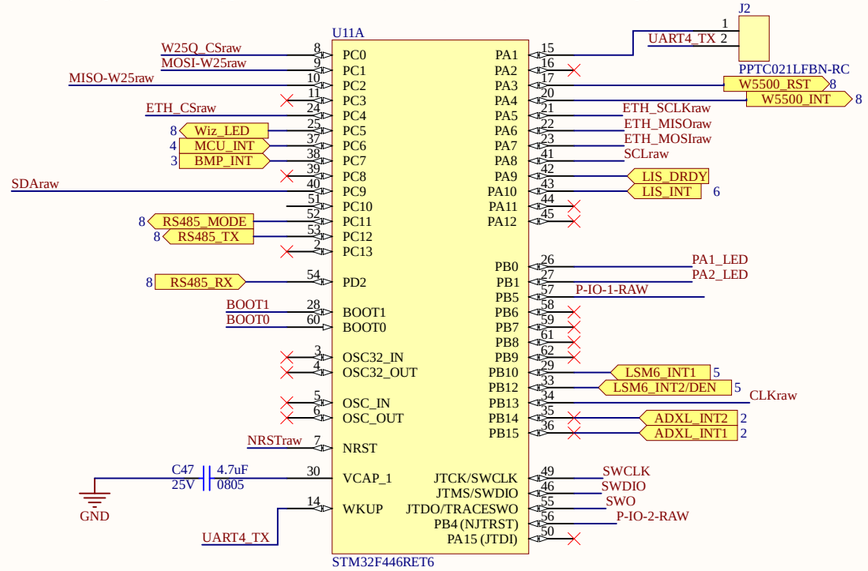


Reset

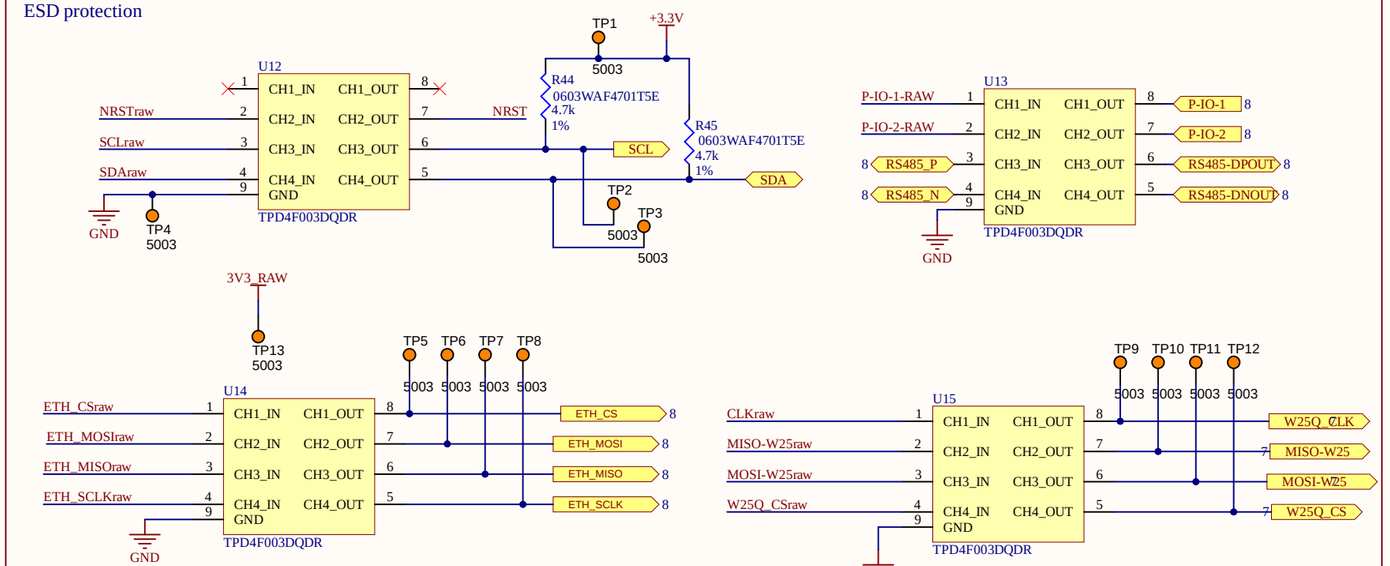


Sensor nets (interupts can connect to any port but if PA0 is used for an INT, PB0, PC0 cannot be used for an interrupt)

Rs485 RX and TX go to USART



ESD protection



Notes:
- 4.7 uF on v cap - unkown ESR - UNsure about 4.7 ohm res
- Chip select/nss pins
- Not sure what to do with extra esd protection pins

SHEET NAME: STM32.SchDoc	PROJECT: Sensor_Module_1.2.PrjPcb
ENGINEER: Louis Fleisher & Mary Dertinger	DATE: 5/19/2024

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