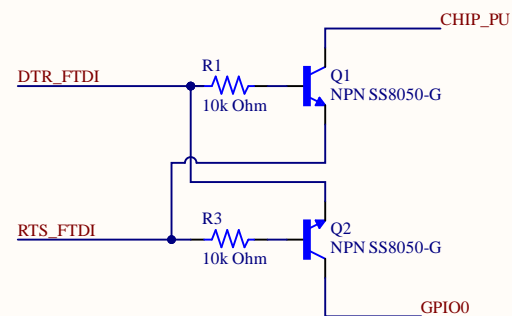
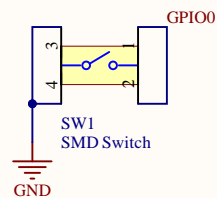


SIRIUS - FLIGHT COMPUTER

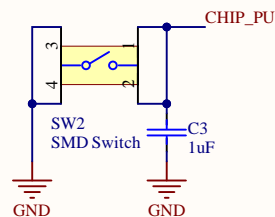
Serial Signal Handling (Auto Programmer)



Boot & Reset Button

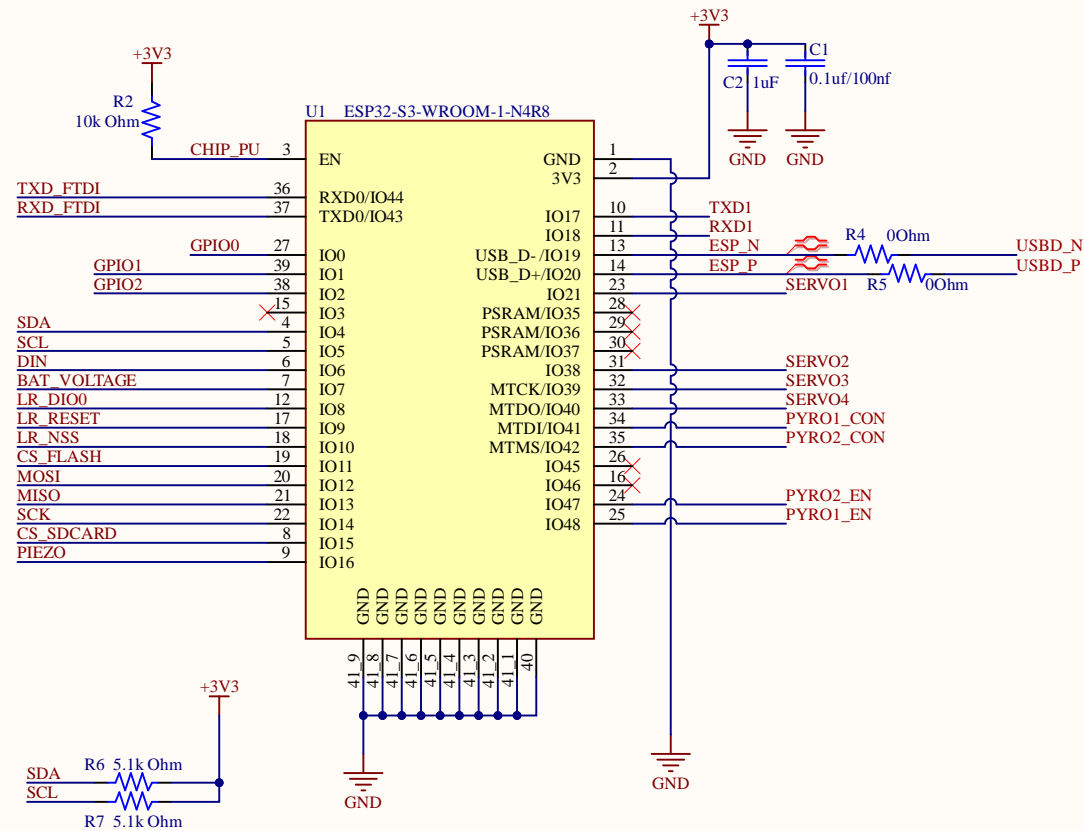


Boot Button



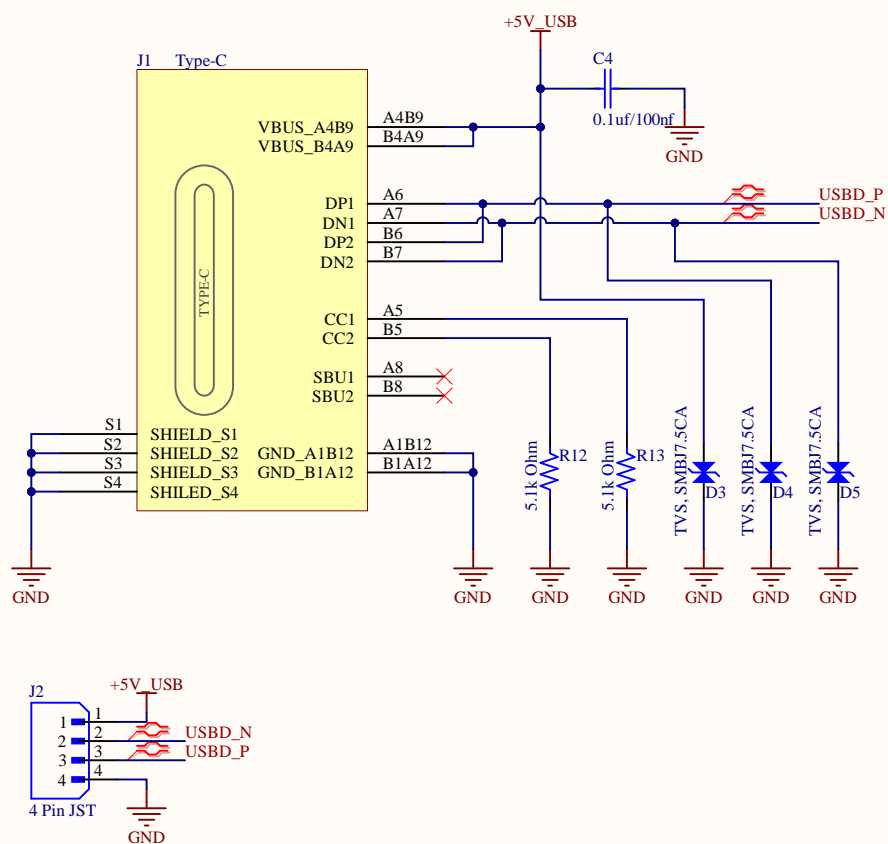
Reset Button

MCU (ESP32 S3 Wroom 1 N4R8)

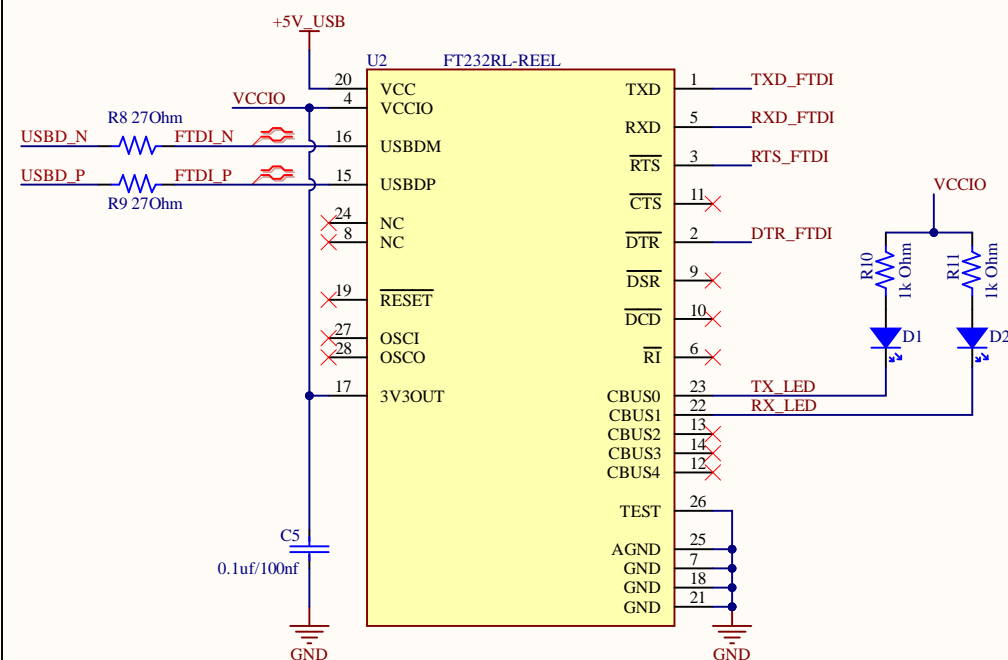


Title		
Microcontroller		
Size	Number	Revision
A4		
Date:	6-20-2025	Sheet of 1/6
File:	C:\Users\...\MCU.SchDoc	Drawn By: Shyam Rajendran

USB-C + ESD Protection

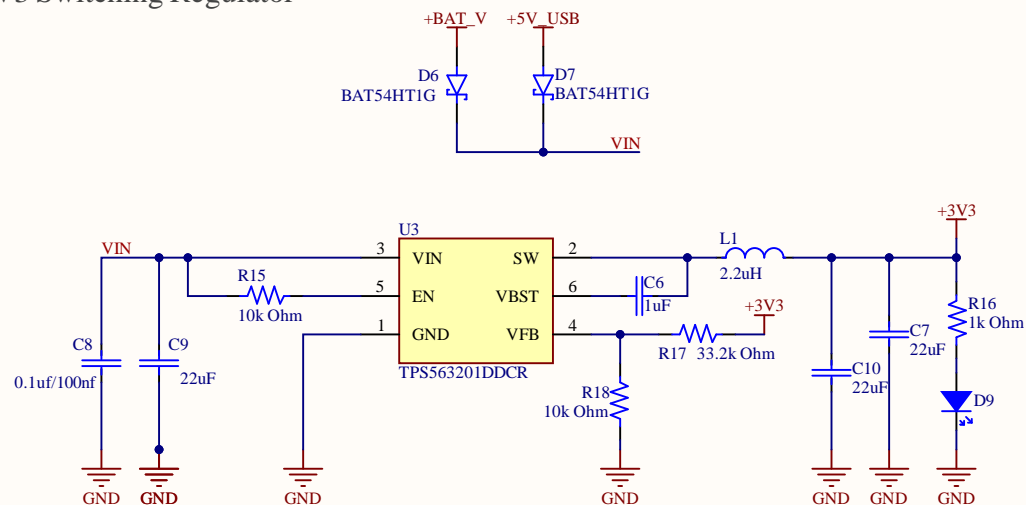


USB to UART

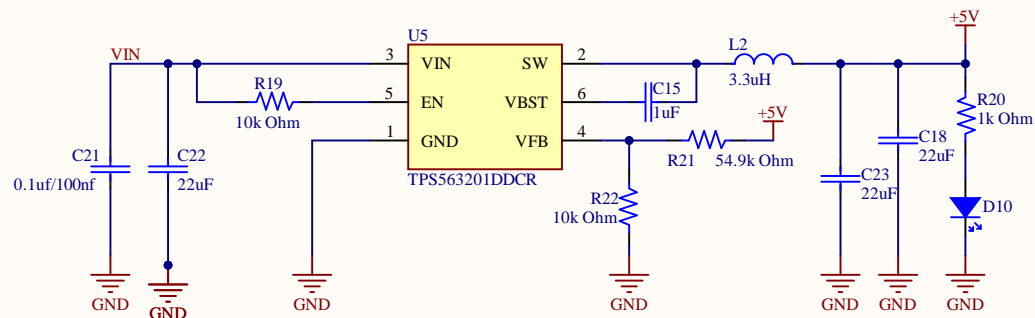


Title		
USB Interface		
Size	Number	Revision
A4		
Date:	6-20-2025	Sheet of 2/6
File:	C:\Users\...\USB.SchDoc	Drawn By: Shyam Rajendran

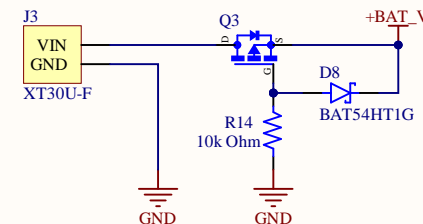
3V3 Switching Regulator



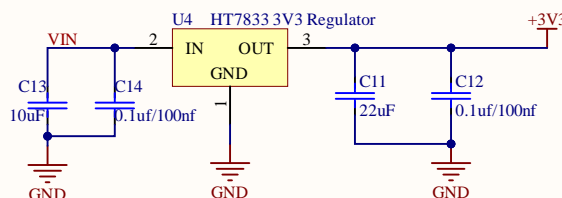
5V Switching Regulator



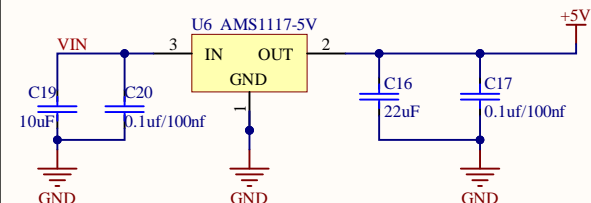
Battery Connector



LDO 3V3

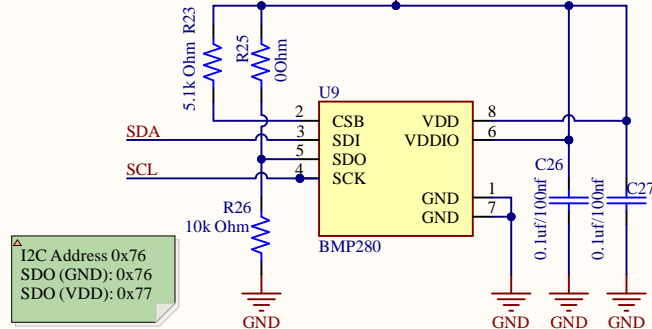


LDO 5V

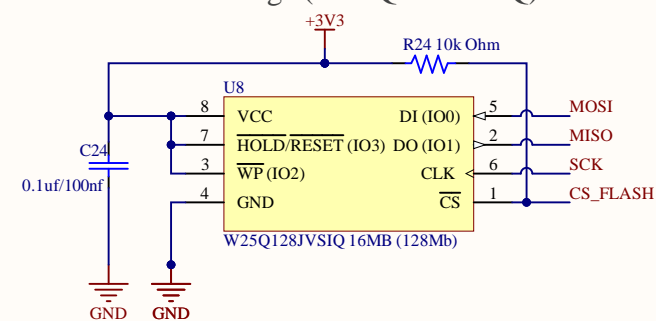


Title		
Power Distribution		
Size	Number	Revision
A4		
Date:	6-20-2025	Sheet of 3/6
File:	C:\Users\...\Power Distribution.SchDoc	Drawn By: Shyam Rajendran

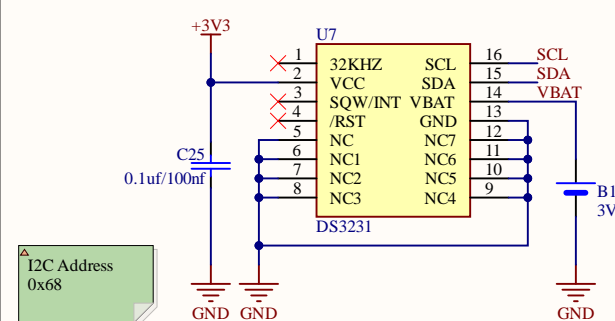
BMP280



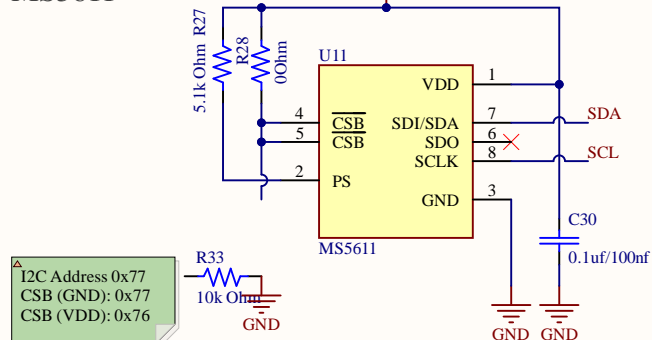
External Flash Storage (W25Q128JVSQ)



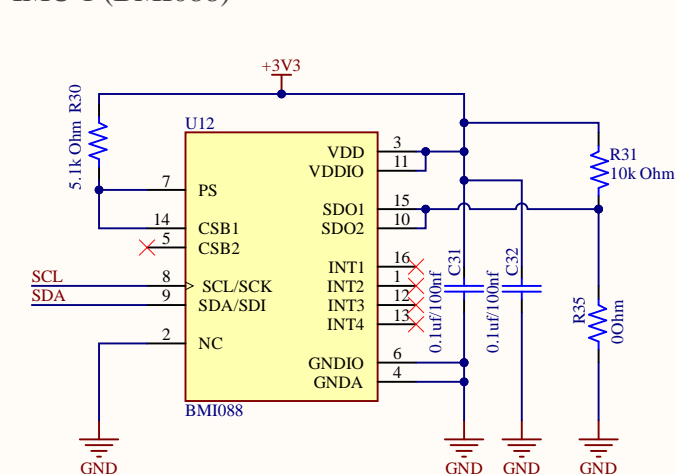
DS3231 RTC



MS5611

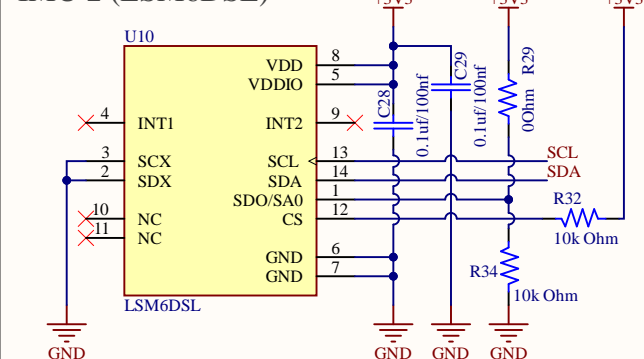


IMU 1 (BMI088)



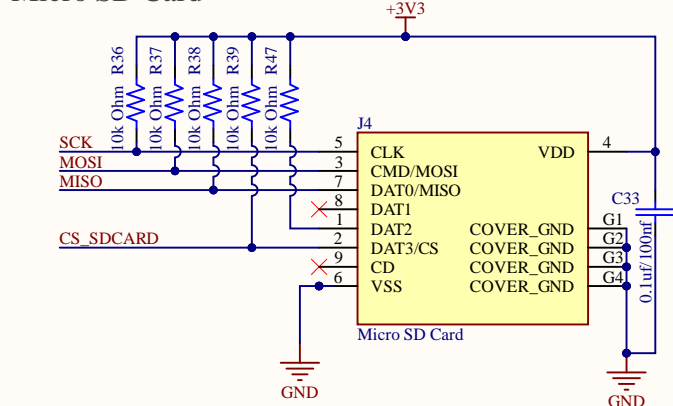
I2C Address Accel, Gyro: 0x19, 0x69
SDO1(GND): 0x18
SDO1(VDDIO): 0x19
SDO2(GND): 0x68
SDO2(VDDIO): 0x69

IMU 2 (LSM6DSL)



I2C Address 0x6A
SDO/SA0 (GND): 0x6A
SDO/SA0 (VCC): 0x6B

Micro SD Card



Programmable LED



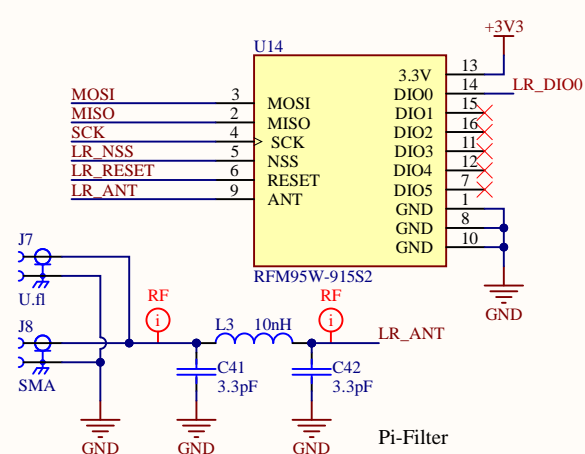
GPIOs



Title Sensor Suite 1

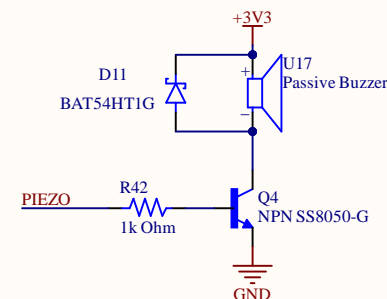
Size	Number	Revision
A4		
Date:	6-20-2025	Sheet of 4/6
File:	C:\Users\...\Sensor Suite 1.SchDoc	Drawn By: Shyam Rajendran

LoRa (RFM95W, 915Hz)



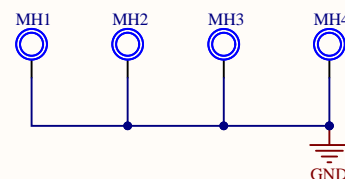
I2C Address: 0x1E (HMC)
0x0D (OMC)

Passive Buzzer

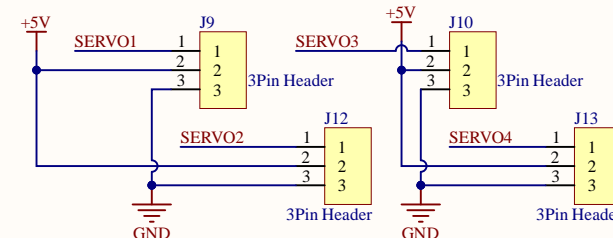


Mounting Holes

Mounting Holes



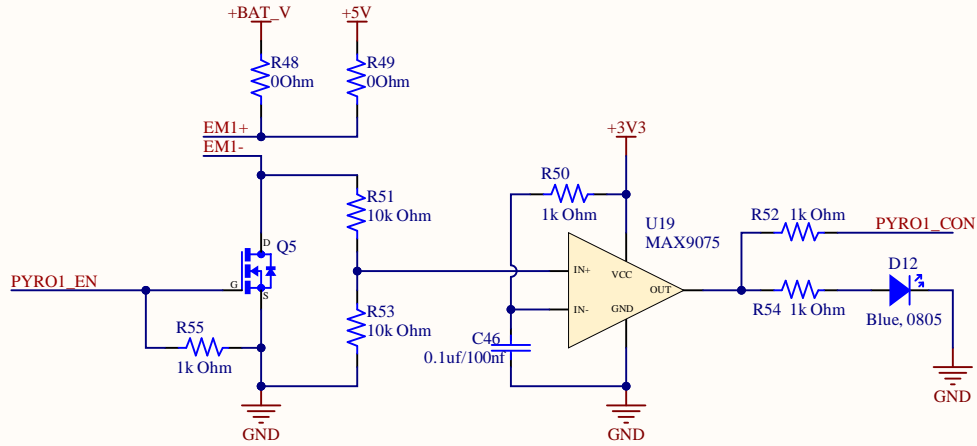
Servo Channels



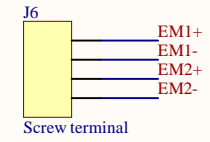
▲ I2C Address 0x42
(Can be configured through u-Center)

Title	Sensor Suite 2
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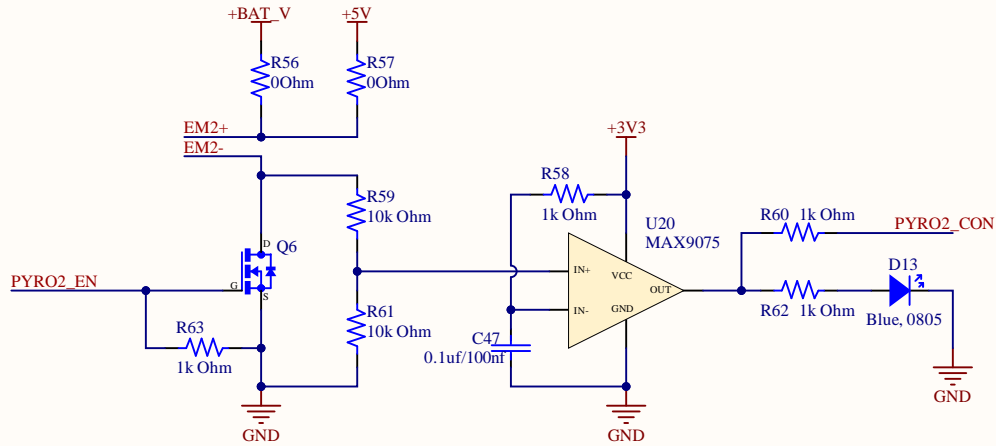
Pyro Channel 1



Screw Terminal



Pyro Channel 2



Title Pyro Channel		
Size A4	Number	Revision
Date: 6-20-2025	Sheet of 6/6	
File: C:\Users\...\Pyro Channel.SchDoc	Drawn By: Shyam Rajendran	

