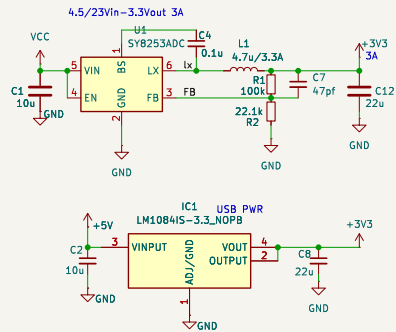
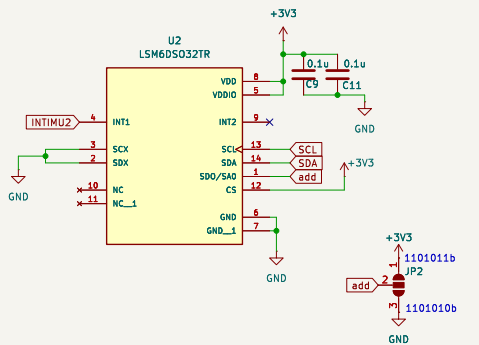
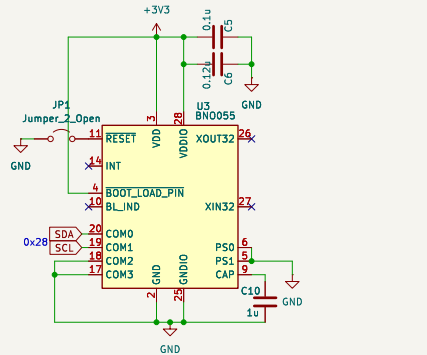
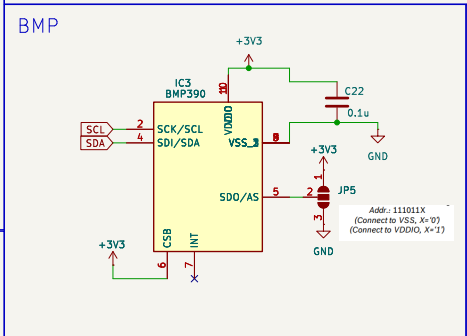


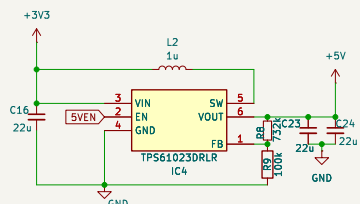
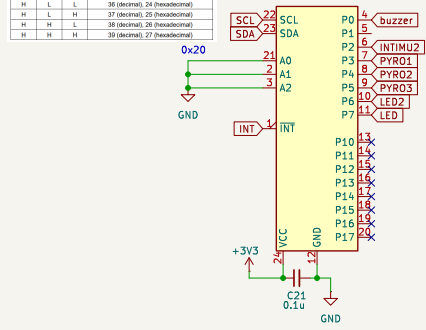
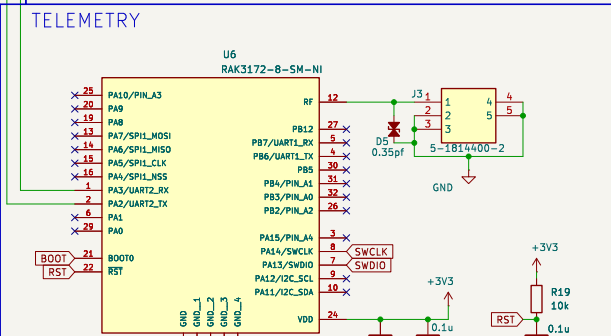
# MAIN POWER MANAGEMENT

The diagram illustrates the main power management circuit, which is divided into three main sections:

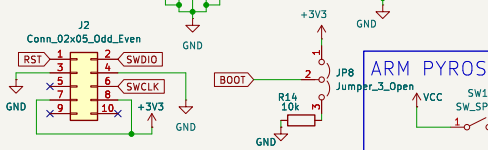
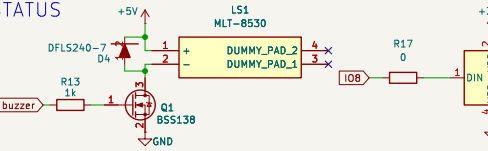
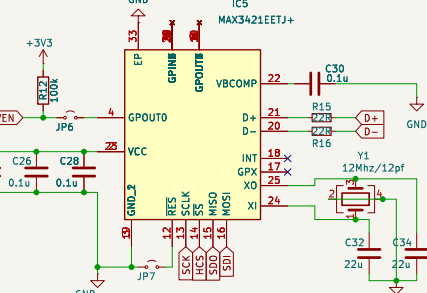
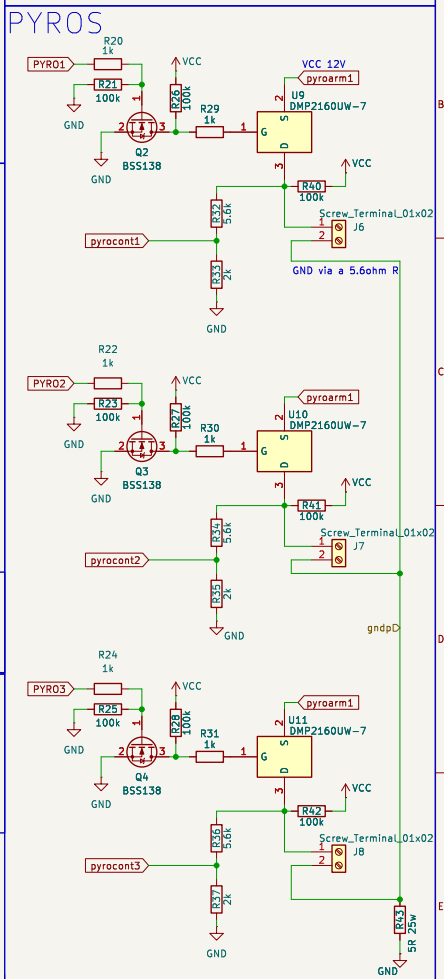
- Battery Management:** This section uses the **INA260A1PWR** (IC2) to monitor the battery. It includes a **J1 XT60PW-F** connector for the battery, a **SHIELD** ground connection, and a **LED** (D1) connected to the **VCC** line. The circuit also includes a **3V3** output and a **0.1u** capacitor (C13).
- DC-DC Conversion:** This section uses the **SY8253ADC** (U4) to convert the input voltage (**4.5/23Vin-3.3Vout 3A**) to **3V3**. It includes a **VIN** input, a **VOUT** output, and a **3V3** output. The circuit also includes a **0.1u** capacitor (C4), a **4.7u/3.3A** inductor (L1), a **100k** resistor (R1), a **22.1k** resistor (R2), a **47pf** capacitor (C7), and a **22u** capacitor (C12).
- USB Power:** This section uses the **LM1084IS-3.3\_NOPB** (IC1) to convert the USB input (**5V**) to **3V3**. It includes a **VIN** input, a **VOUT** output, and a **3V3** output. The circuit also includes a **10u** capacitor (C2) and a **22u** capacitor (C8).


[illegible][illegible][illegible]

INPUTS			I <sup>2</sup> C BUS SLAVE ADDRESS
A2	A1	A0	
L	L	L	32 (decimal), 20 (hex)
L	L	H	33 (decimal), 21 (hex)
L	H	L	34 (decimal), 22 (hex)
L	H	H	35 (decimal), 23 (hex)
H	L	L	36 (decimal), 24 (hex)
H	L	H	37 (decimal), 25 (hex)
H	H	L	38 (decimal), 26 (hex)
H	H	H	39 (decimal), 27 (hex)

[illegible]

The diagram illustrates the ARM PYROS module's internal circuitry. It features a J2 connector with pins 1 through 10. Pin 1 is labeled RST, pin 2 is SWDIO, pin 3 is SWCLK, pin 4 is SWIO, pin 5 is SWIO, pin 6 is SWCLK, pin 7 is SWIO, pin 8 is SWCLK, pin 9 is SWIO, and pin 10 is SWCLK. The module is powered by a +3V3 supply and GND. A BOOT pin is shown, connected to a JP8 jumper and a SW1 switch. The SW1 switch is connected to VCC and SW\_SPT, and its other terminal is connected to pyroarm1. The module also includes a SW1 switch and a SW\_SPT pin.

[illegible][illegible][illegible]

	
Sheet: / File: V5.kicad_sch	
<b>Title: Avionics</b>	
Size: A3	Date: 2025-06-23
KiCad E.D.A. 9.0.0	Rev: 142 Id: 1/1