

Sheet: Avionics



File: Avionics.sch

Sheet: Power



File: Power.sch

Sheet: Connectors



File: Connectors.sch

Sheet: RF and GPS



File: RF\_and\_GPS.sch

Sheet: Burn Wires



File: Burn\_Wires.sch

**Max Holliday**

Sheet: /  
File: mainboard.sch

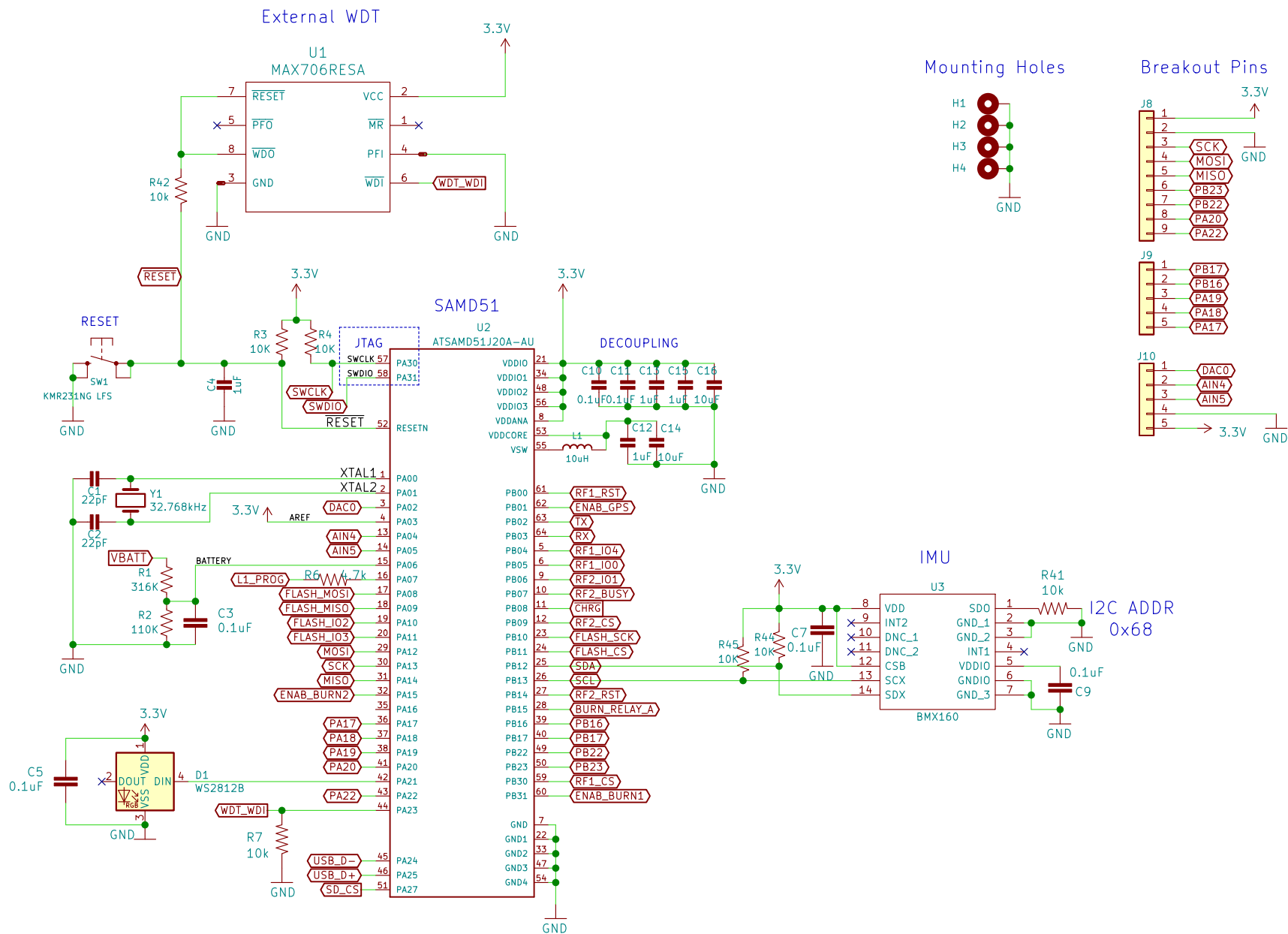
**Title: PyCubed Mainboard**

Size: A4 Date: 2020-02-10

KiCad E.D.A. kicad (5.1.5)-3

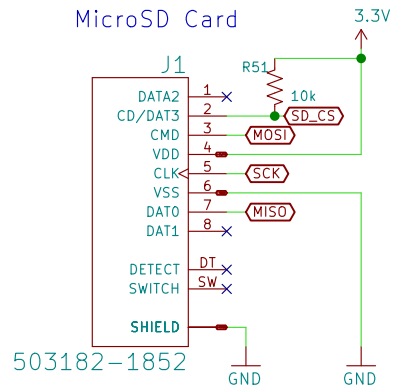
**Rev: v04**

Id: 1/6

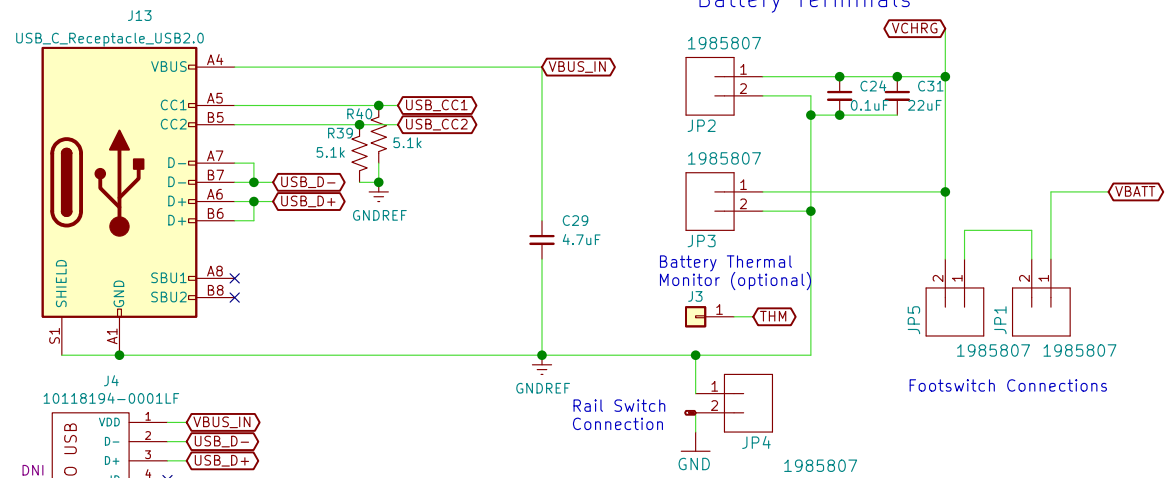


# Avionics

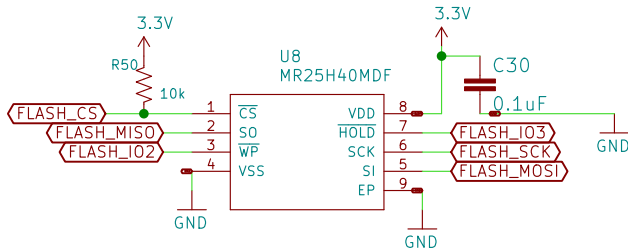
<b>Max Holliday</b>	
Sheet: /Avionics/	
File: Avionics.sch	
<b>Title: PyCubed Mainboard</b>	
Size: User	Date: 2020-02-10
KiCad E.D.A. kicad (5.1.5)-3	Rev: v04
	Id: 6/6



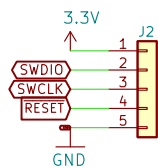
### Power Connectors: USB-C Power Delivery to 2S Li-ion Battery



### MRAM – Nonvolatile Memory (4MB storage)



### JTAG



# Connectors

Max Holliday

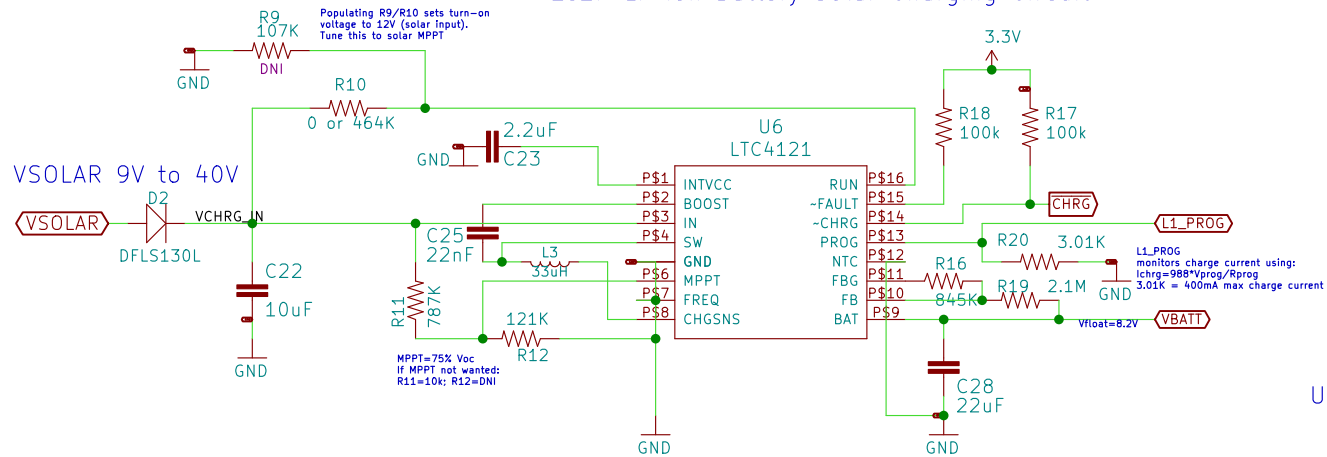
Sheet: /Connectors/  
File: Connectors.sch

**Title: PyCubed Mainboard**

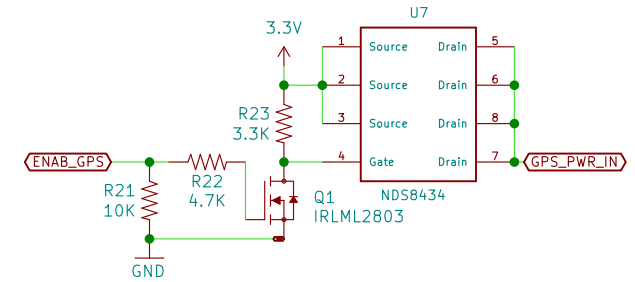
Size: User Date: 2020-02-10  
KiCad E.D.A. kicad (5.1.5)-3

Rev: v04  
Id: 4/6

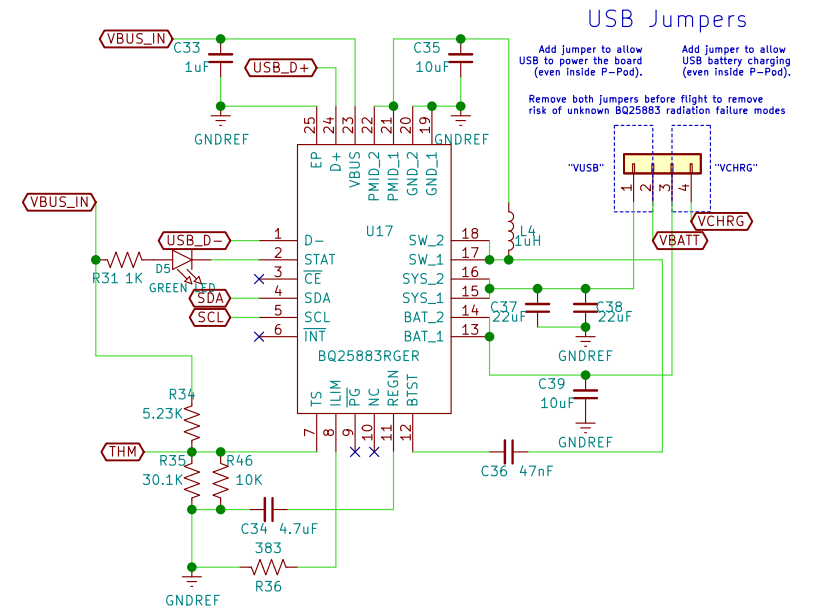
### 2s2P Li-Ion Battery Solar Charging Circuit



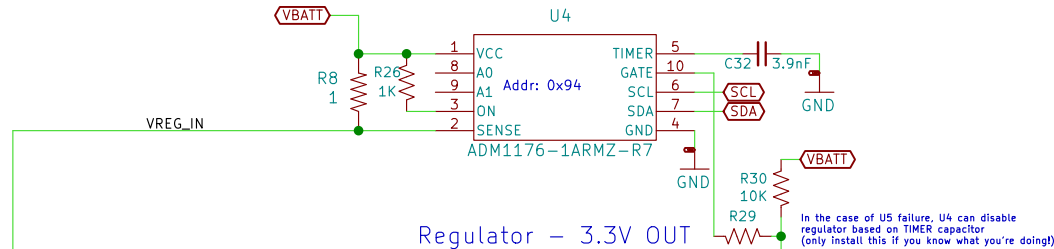
### GPS Power



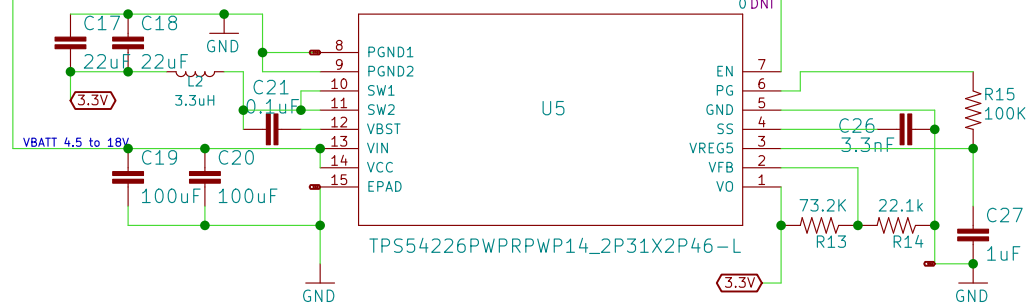
### USB (Boost) Charging for 2-cell Li-Ion



### System Power Monitor



### Regulator - 3.3V OUT



# Power

Max Holliday

Sheet: /Power/  
File: Power.sch

Title: PyCubed Mainboard

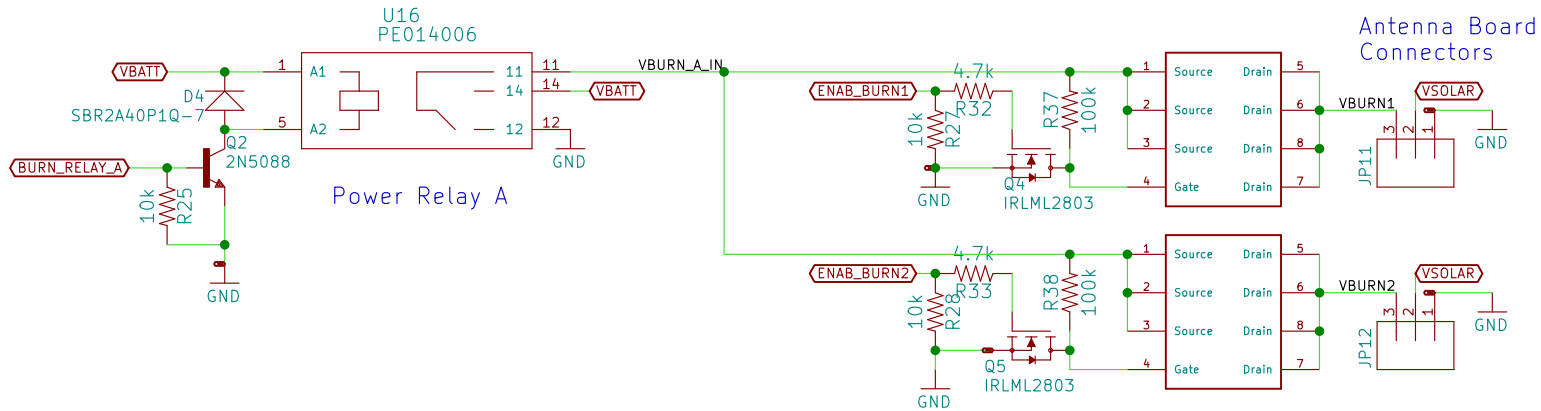
Size: A4 Date: 2020-02-10

KiCad E.D.A. kicad (5.1.5)-3

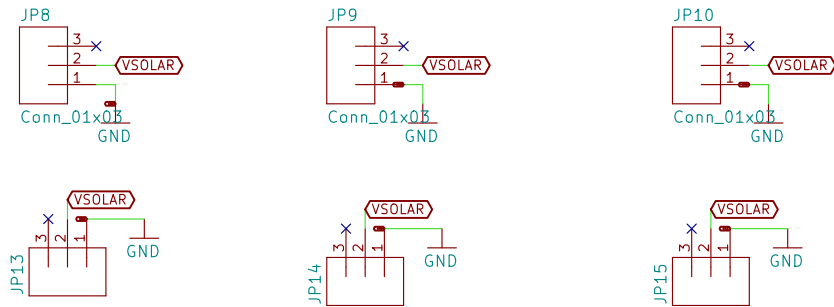
Rev: v04

Id: 5/6

## Burn Wire Control (Antenna Depolyment)



## Solar Panel Connectors



# Burn Wires

**Max Holliday**

Sheet: /Burn Wires/

File: Burn\_Wires.sch

**Title: PyCubed Mainboard**

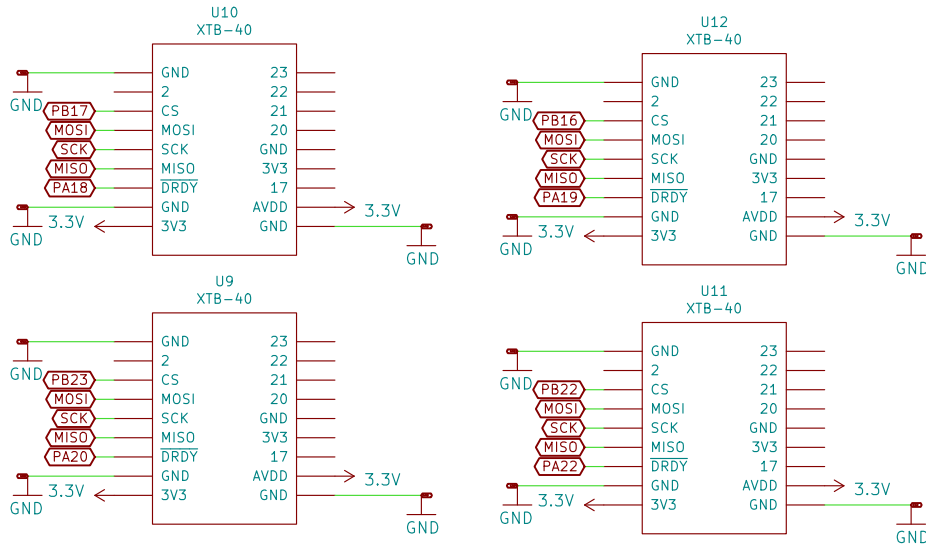
Size: User Date: 2020-02-10

KiCad E.D.A. kicad (5.1.5)-3

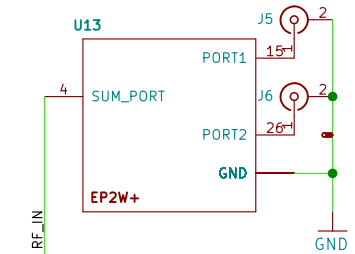
**Rev: v04**

Id: 2/6

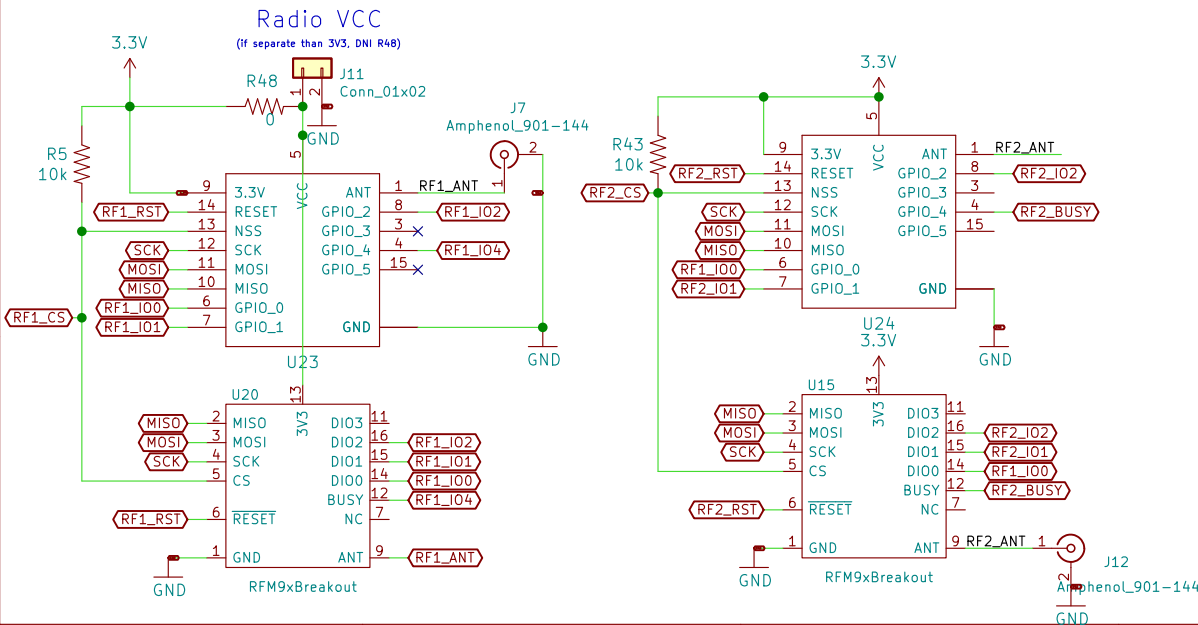
# Modular Payloads



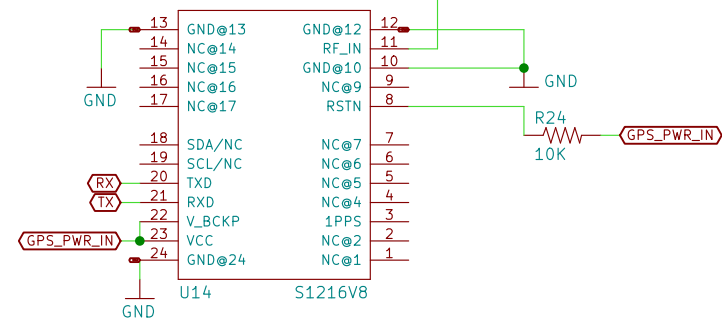
# RF Splitter (2 Way, 0deg DC-Pass)



# Modular Radios (HopeRF format)



# GPS Module



# Radio, GPS, Payloads

Max Holliday

Sheet: /RF and GPS/  
File: RF\_and\_GPS.sch

**Title: PyCubed Mainboard**

Size: A4 Date: 2020-02-10

KiCad E.D.A. kicad (5.1.5)-3

Rev: v04

Id: 3/6