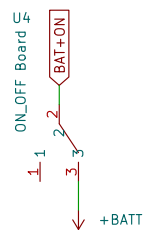
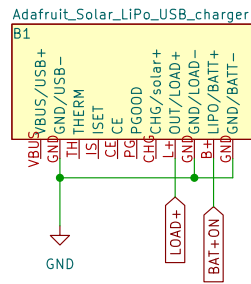


## Power System

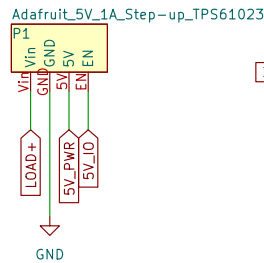
### PWR Switch Board



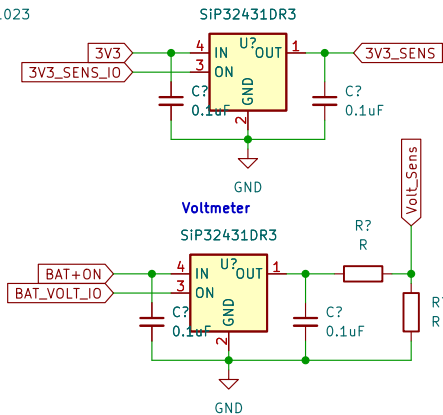
### Solar LiPo Charger



### 5V Step up / Switch

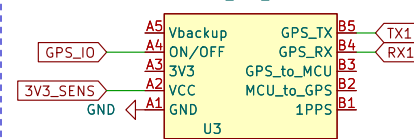


### 3V3\_SENS Switch

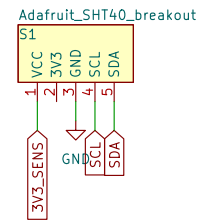


## Sensors

### GPS

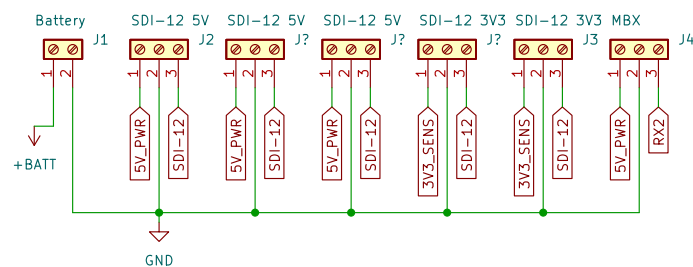


### Internal T/RH

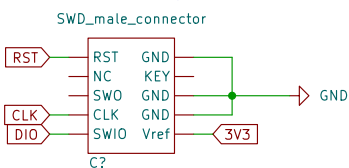


## Physical Connectors

### Screw Terminals

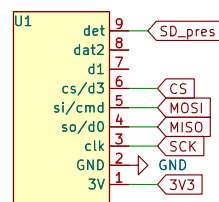


### SWD 10 pins Plug

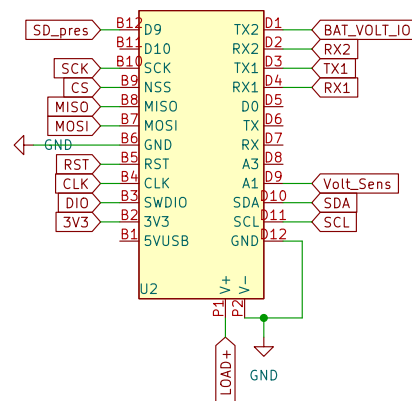


## Logic

### Adafruit\_MicroSD\_breakout



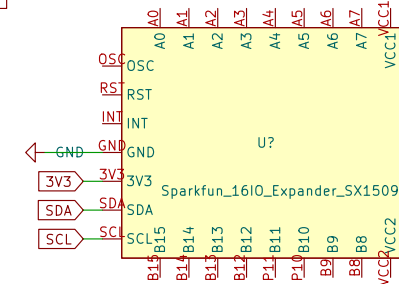
### Lora\_E5\_Mini



### Pin To Be Placed



### Not currently used



### TODO:

- Add multiplexer for more Digital pin (is it needed?)
- Solar charge regulator
  - add battery voltage system, either find a digital chip, or build a voltage divider connected to analog pin.
  - Check if using CE to prevent over-charging could save battery?
- 5V Stepup:
  - Can 5V\_IO (on-off) state be maintained via a digital pin used when microprocessor asleep?
- Voltage divider: calculate resistance voltage
- Decide if external need RTC
- Swap SHT40 for SHT31 (supported in RIOT)

S. Filhol  
simon.filhol@geo.uio.no  
University of Oslo

Sheet: /  
File: E5\_logger.kicad\_sch

**Title: RIOT LoRa-E5 Mini UIO logger V1**

Size: A4 Date: 2022-07-26

KiCad E.D.A. kicad 6.0.7

Rev: 1

Id: 1/1