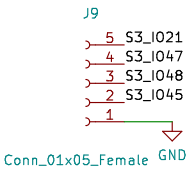
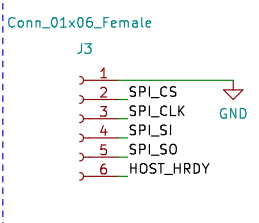


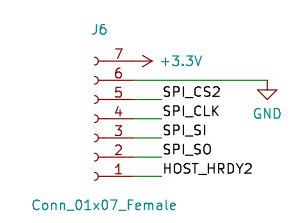
S3 available IOs



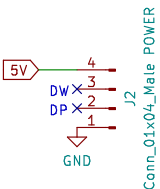
SPI Interface CINREAD



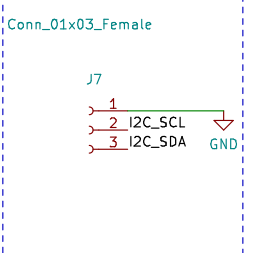
SPI Interface 2 (external)



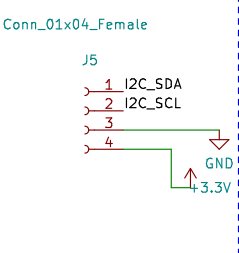
CINREAD IT8951 Power source



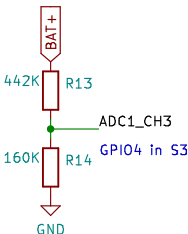
I2C interface CINREAD



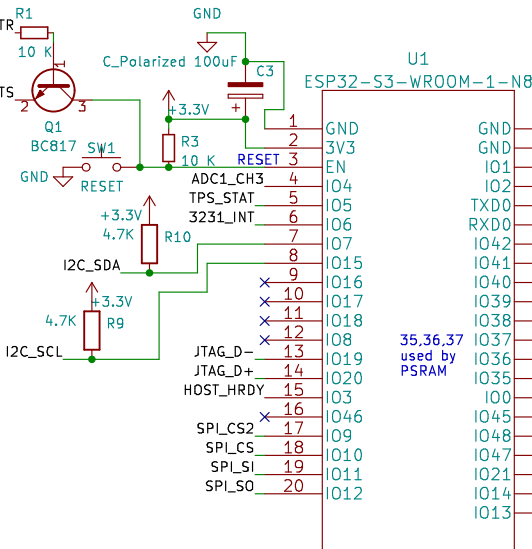
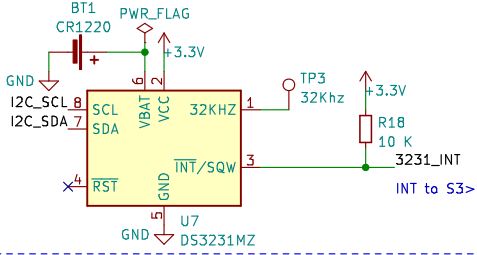
I2C interface 2 (BME 280 like)



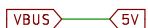
Voltage divider (via ADC1\_CH3)



DS3231 Real time clock via I2C



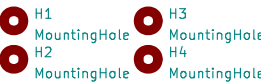
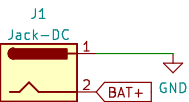
By default VBUS is not connected to 5V  
Solder jumper JP2 to allow 5V from USB→



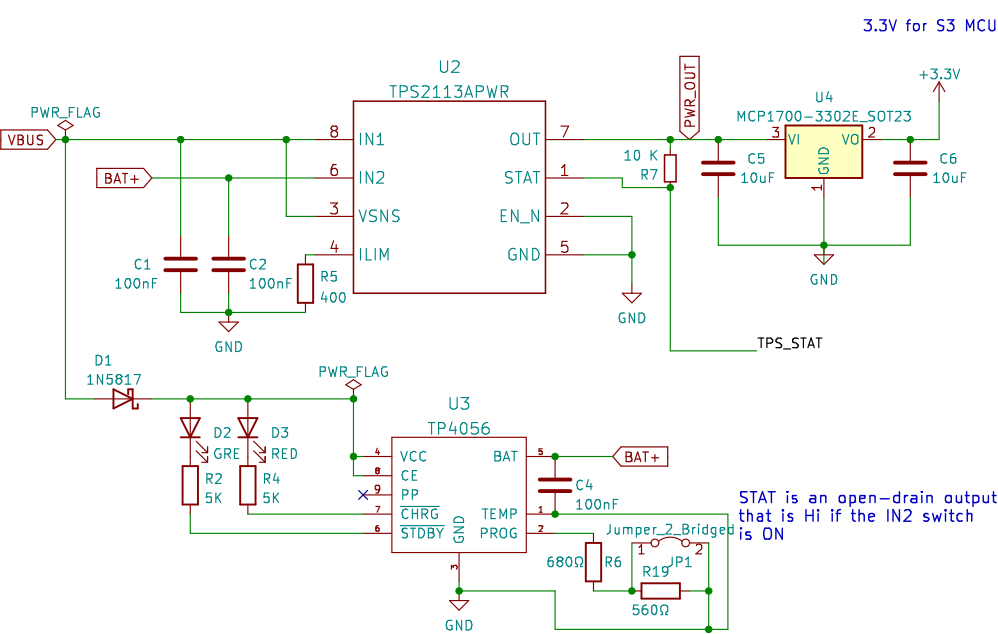
ATTENTION: There are 2 models  
QFN20 and QFN24 → is used in this design

GPIO3 Controls where JTAG signal goes  
0: JTAG signal from on-chip JTAG pins  
1: JTAG signal from USB Serial/JTAG controller

Battery jack

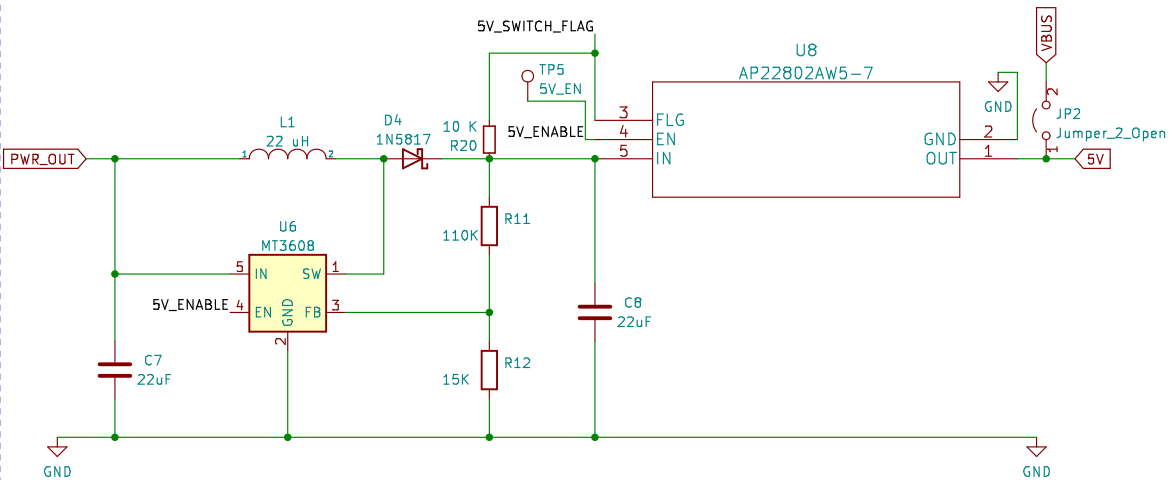


LiPo 3.7V charging circuit + 3.3 V step down



STAT is an open-drain output  
that is HI if the IN2 switch  
is ON

3V to 5V BOOST converter MT3608. Enable with IO38 HIGH (When on battery)



STAT should be LOW if  
PWR\_OUT comes from USB

Referenced from:  
<https://somanlytech.com/3-7v-to-5v-boost-converter-circuit-diagram-dc-dc-buck-converter-schematics>