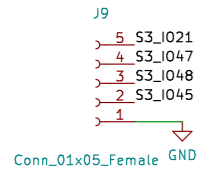
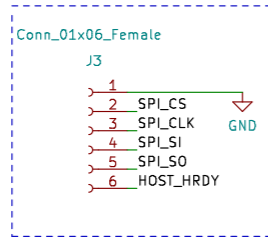




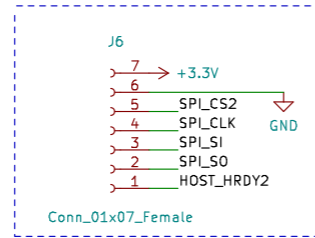
S3 available IOs



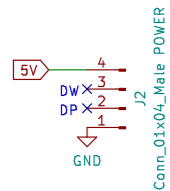
SPI Interface CINREAD



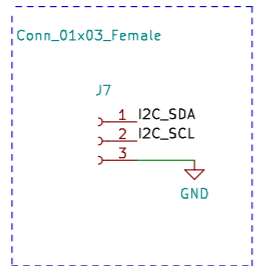
SPI Interface 2 (external)



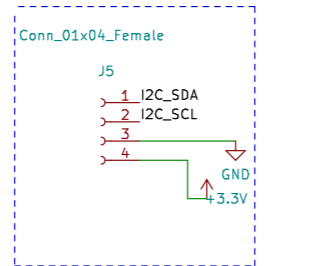
CINREAD IT8951 Power source



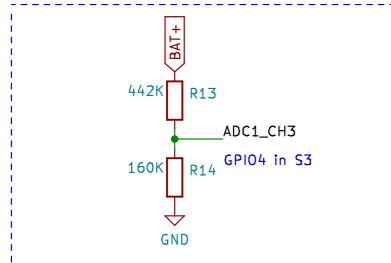
I2C interface CINREAD



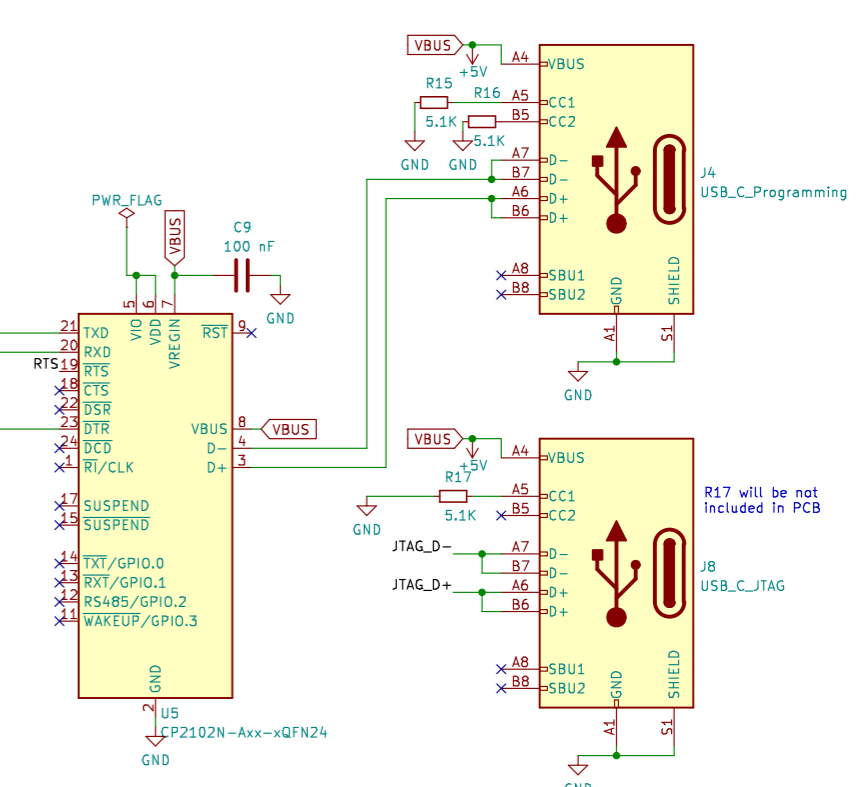
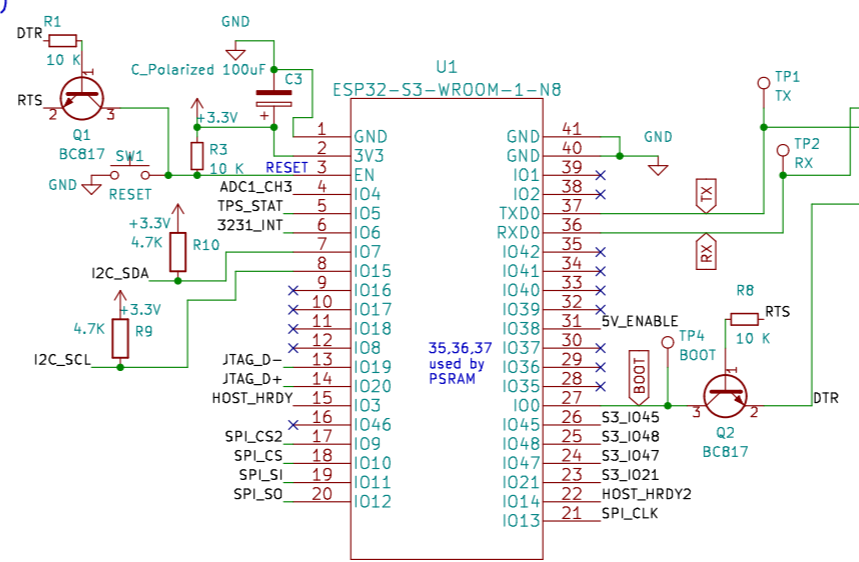
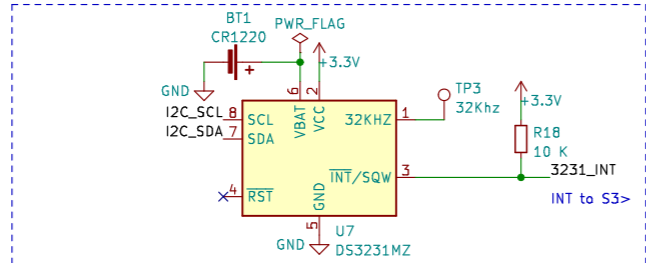
I2C interface 2 (BME 280 like)



Voltage divider (via ADC1\_CH3)

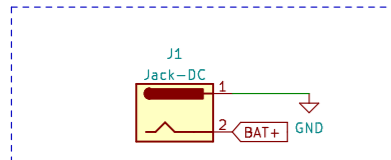


DS3231 Real time clock via I2C

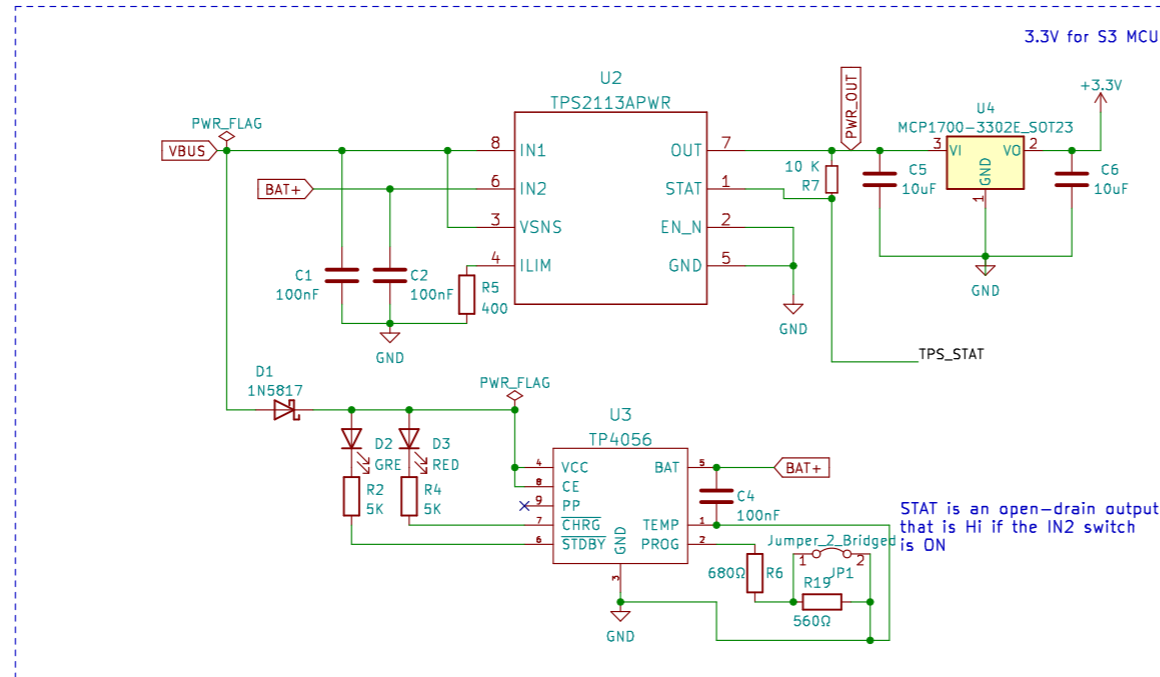


ATTENTION: There are 2 models QFN20 and QFN24 -> is used in this design  
 GPIO3 Controls where JTAG signal goes  
 0: JTAG signal from on-chip JTAG pins  
 1: JTAG signal from USB Serial/JTAG controller

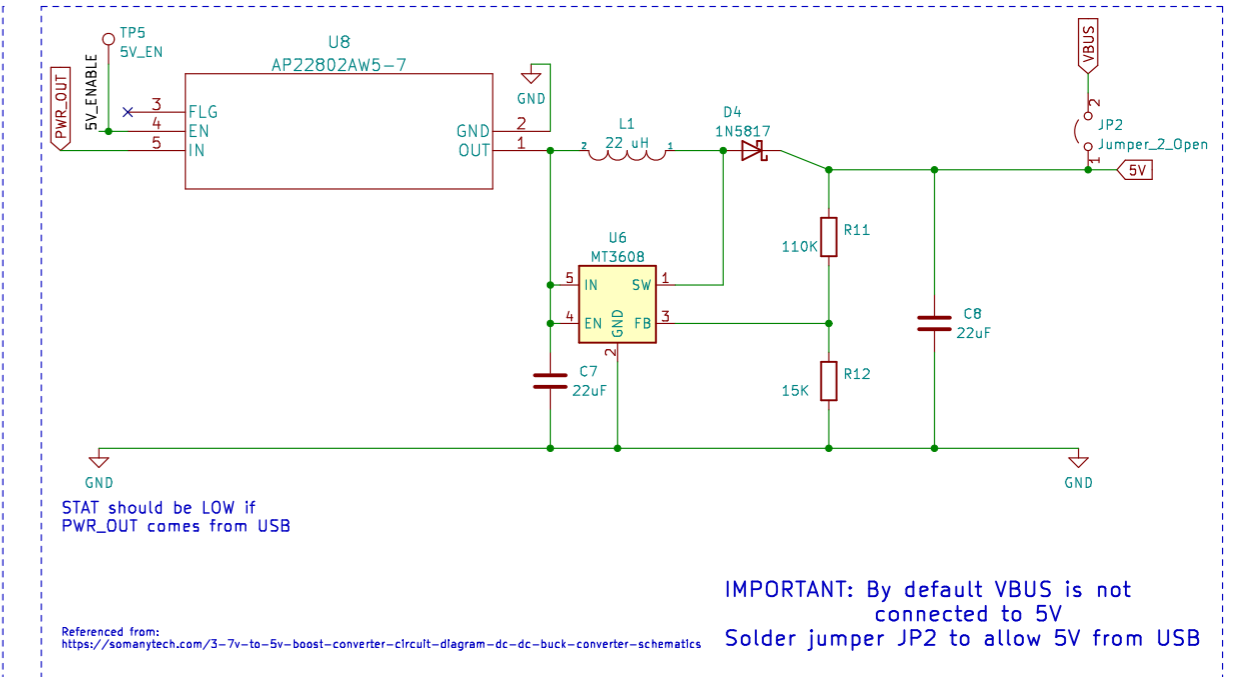
Battery jack



LiPo 3.7V charging circuit + 3.3 V step down



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



STAT should be LOW if PWR\_OUT comes from USB  
 IMPORTANT: By default VBUS is not connected to 5V Solder jumper JP2 to allow 5V from USB  
 Referenced from: <https://somanymtech.com/3-7v-to-5v-boost-converter-circuit-diagram-dc-dc-buck-converter-schematics>