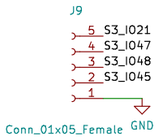
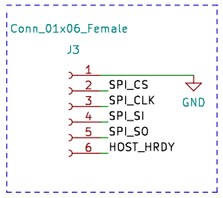
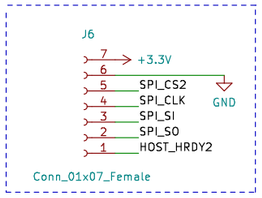
S3 available IOs



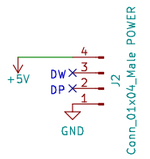
SPI Interface CINREAD



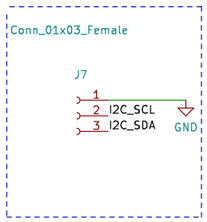
SPI Interface 2 (external)



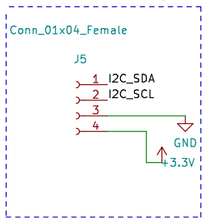
CINREAD IT8951 Power source



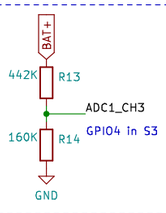
I2C interface CINREAD



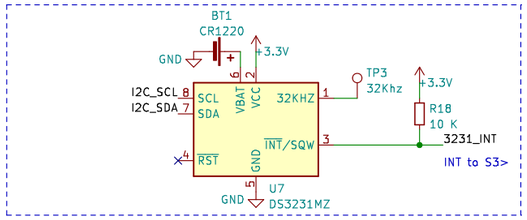
I2C interface 2 (BME 280 like)

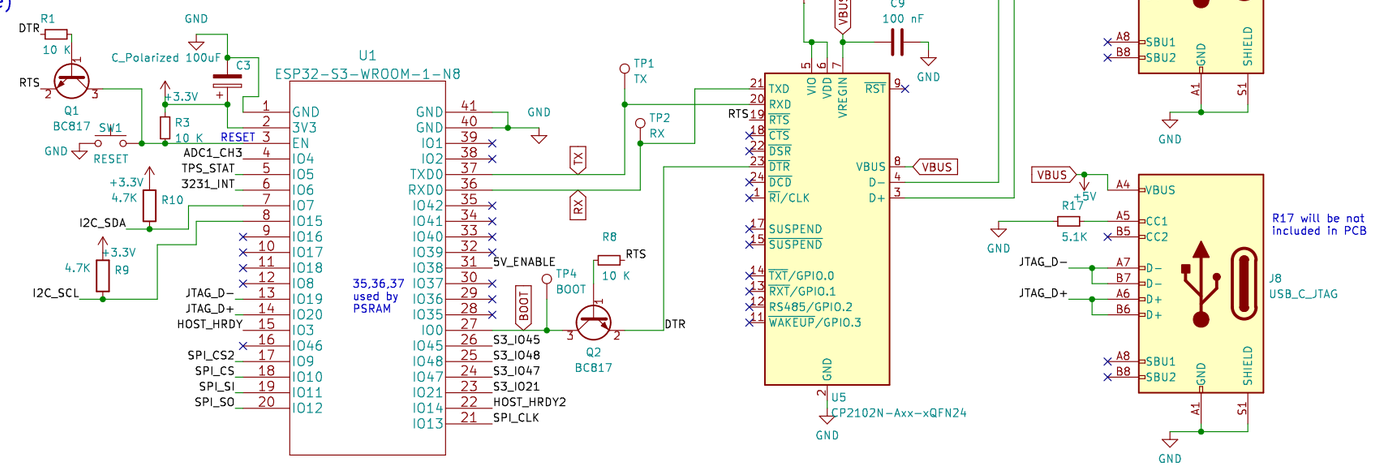


Voltage divider (via ADC1_CH3)



DS3231 Real time clock via I2C

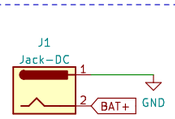


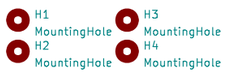


ATTENTION: There are 2 models
QFN20 and QFN24 -> used here

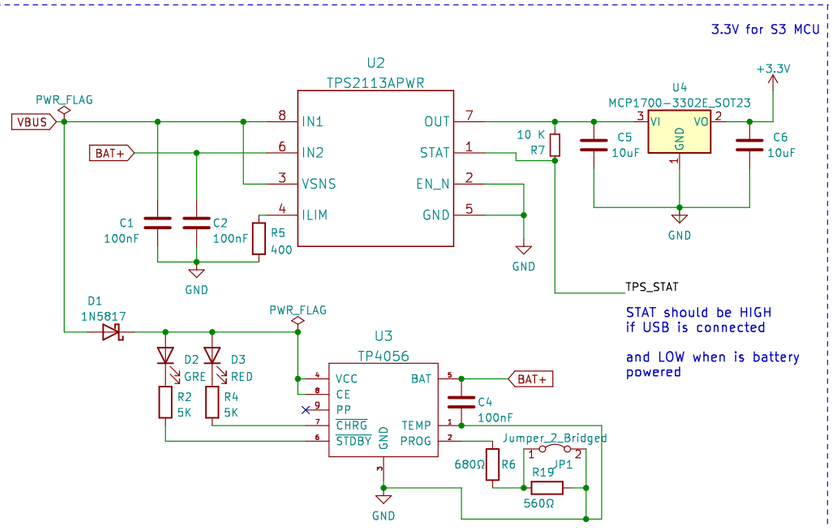
GPIO3 Controls where JTAG signal goes
0: JTAG signal from on-chip JTAG pins
1: JTAG signal from USB Serial/JTAG controller

Battery jack

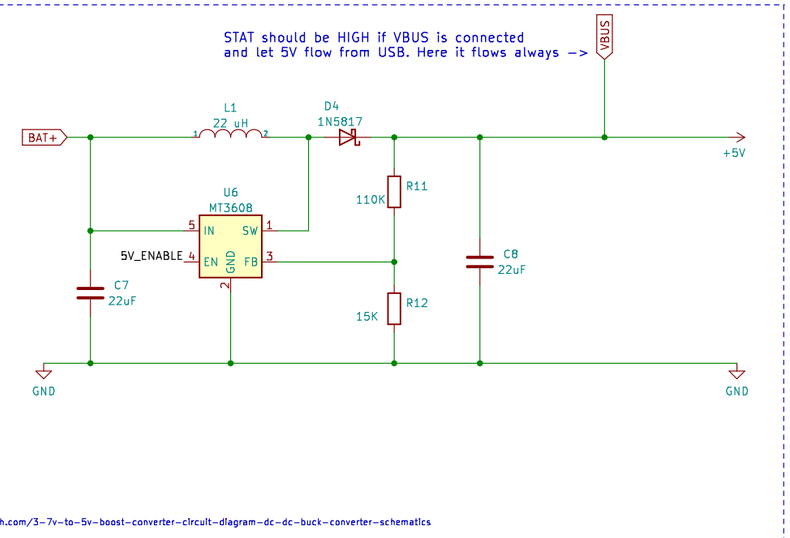




LiPo 3.7V charging circuit + 3.3 V step down



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



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