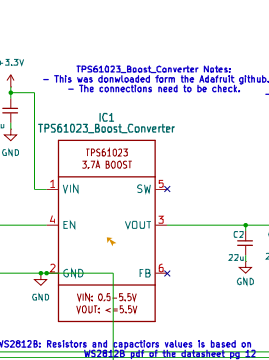
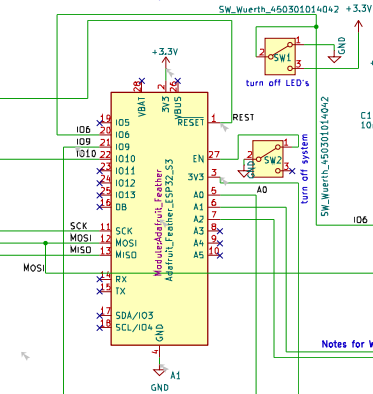
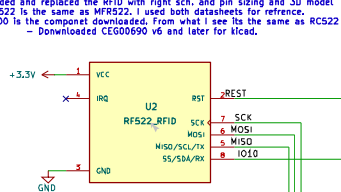


- ESP32-S3 Feather from adafruit and the usb is in the board.
- Organically Adafruit HUZZAH32 ESP32 Feather.
- This is edited to be ESP32-S3 Feather by the phouts, couldn't find online in time
- also change the size form the HUZZAH32 ESP32 Feather to match with ESP32-S3 Feather as this is different.
- Also never change the pin demisions and the elietrical type.

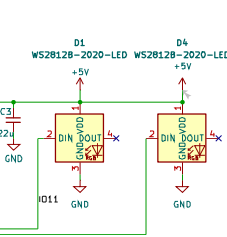
Battery Notes:
- Battery is external.

- Downloaded and replaced the RFID with right sch. and pin sizing and 3D model
- RC522 is the same as MFR522. I used both datasheets for reference.
- CEG006900 is the componet downloaded. From what I see its the same as RC522
- Downloaded CEG006900 v6 and later for Kicad.

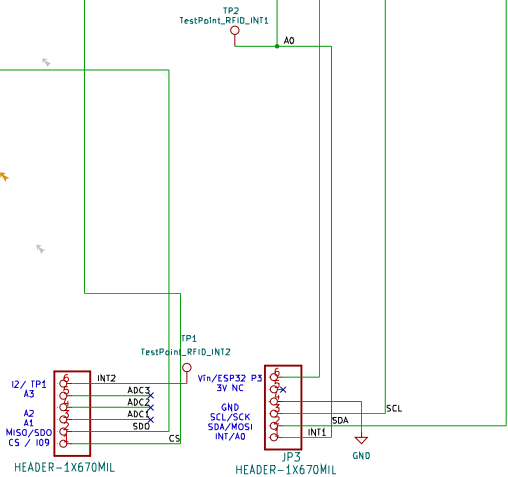
RFID Notes:



- Notes for WS2812B:
- Is a type of LED that is simialer to the NeoPixel
- To solder it is surface mount.
- WS2812B is the same as SK6812 according to Adafruit
- Connected VDD to Vin of boost converter as ESP32 can not regualite the voltage needed.
- 330ohm helps with signal ring/spikes
- 100uF helps with voltage spikes with multiple LED



Notes for WS2812B: Resistors and capacitors values is based on WS2812B.pdf of the datasheet pg 12



CS High = I2C, Low = SPI
Defaults to I2C as-is (R8)

I2C

SCL (Pin 4) = Serial Clock
SDA (Pin 6) = Serial Data
SDO (Pin 7) = SA0/Address LSB

SDO pulled low by default (R1) to set I2C address LSB to 0

SPI

SCL (Pin 4) = Serial Clock
SDA (Pin 6) = Data In (MOSI)
SDO (Pin 7) = Data Out (MISO)