Tasks:
- Double-check wiring for all components. Just for a sanity check.
- Check the dimensions of the PCB. As there are issues with the size of the RFID in 3D view.
- Need to make sure Footprints are added to the componets and matching dimensions. Belive this is good NOW!
- Change labels to wires. It was fine as labels but would be better as wires.
- Test placements?? for compoents?? Like anymroe??

ESP32-S3 Notes
- ESP32-S3 Feather from adafruit and the usb is in the board.
- Orgianlly Adafruit HUZZAH32 ESP32 Feather.
- This is edited to be ESP32-S3 Feather by the pinouts. couldn't find online in time

Battery Notes:
- Battery is external.

RFID Notes:
- 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 refrence.
- CEG006900 is the componet downloaded. From what I see its the same as RC522
- Donwloaded CEG00690 v6 and later for kicad.

TPS61023_Boost_Converter Notes:
- This was donwloaded form the Adafruit github.
- The connections need to be check.

Notes for WS2812B:
- Is a type of LED that is similer to the NeoPixel
- To solder it is surface mount.
- WS2812B is the same as SK6812 according to Adafruit

U2 — RF522_RFID
VCC, IRQ, RST, SCK, MOSI, MISO/SCL/TX, SS/SDA/RX, GND

U1 — LIS3DH_Accelerator
VDD, VDD_IO, ADC1, ADC2, ADC3, INT1, INT2, SAO, SDA, SCK, CS, GND

A1 — Adafruit_Feather_ESP32_S3
VBAT, 3V3, VBUS, IO5, IO6, IO9, IO10, IO11, IO12, IO13, DB, SCK, MOSI, MISO, RX, TX, SDA/IO3, SCL/IO4, EN, 3V3, A0, A1, A2, A3, A4, A5, RESET

SW_Wuerth_450301014042
SW2 / SW1

IC1 — TPS61023_Boost_Converter
TPS61023 3.7A BOOST
VIN, EN, GND, 5V
VIN: 0.5-5.5V
VOUT: <=5.5V

C1 10u
C2 22u
C3 22u

D1 WS2812B-2020-LED
D2 WS2812B-2020-LED
DIN, GND, +5V

TP1 TestPoint_RFID_INT2
TP2 TestPoint_RFID_INT1

+3.3V   +5V   GND   REST   A0   A1   A2

ECE411_Team 1_ A-Team
Portland State University
Sheet: /
File: A_Team_ECE411.kicad_sch
Title: Illumi-not-i Bike Safety System
Size: B   Date: 2025-10-27   Rev: 8
KiCad E.D.A. 9.0.5   Id: 1/1