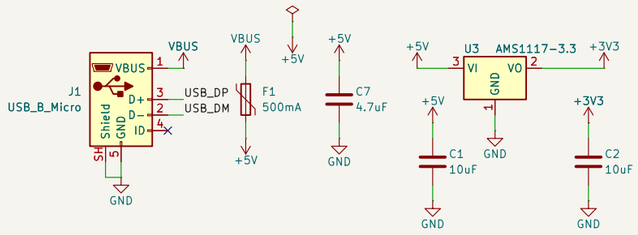
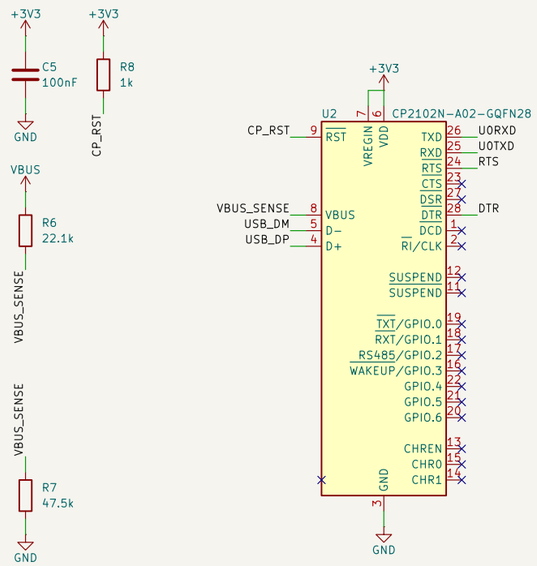
USB in, fuse and 3.3 V



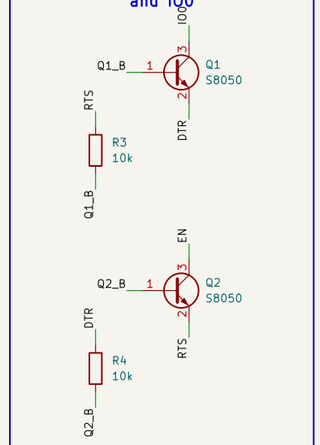
F1 opens on a short and protects the computer's port

USB to UART: CP2102N



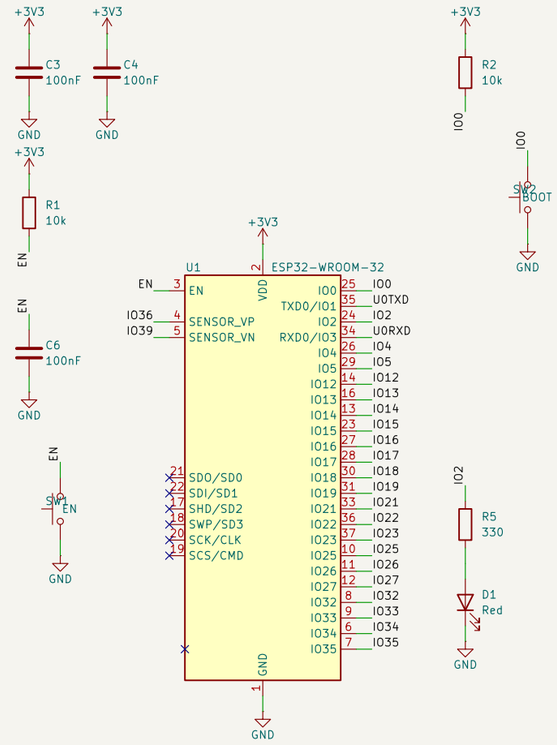
VBUS sensed: 5 x 47.5 / 69.6 = 3.4 V
VDD and VREGIN on 3.3 V (self-powered)
U0TXD: the ESP32 sends, RXD (25) receives

Auto-reset: DTR and RTS to EN and IO0



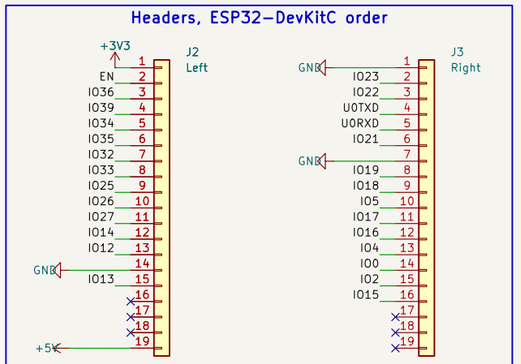
A transistor conducts only when
DTR and RTS differ. No emitter to GND.

ESP32-WROOM-32



EN: 10 k up, 100 nF down: about 1 ms
Flash pins SD0 to SD3, CLK, CMD left open
IO2: the LED to GND keeps it low at reset

Headers, ESP32-DevKitC order



Pins left open: SD2, SD3, CMD, CLK, SD0, SD1

Two layers, antenna past the board edge, no copper under it
ESP32-WROOM-32, CP2102N USB-UART, auto-reset, AMS1117-3.3
Created by siwit.co/PCB5 Approved by Dr. Sam Macharia
siliconwit.com

Sheet: /
File: esp32-devkit.kicad_sch

Title: ESP32 WiFi/Bluetooth Development Kit

Size: A3	Date: 2026-11-18	**Rev: A**
KiCad E.D.A. 10.0.8		Id: 1/1