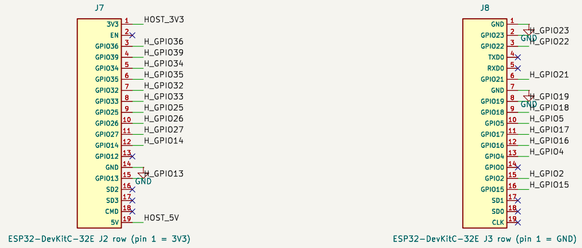
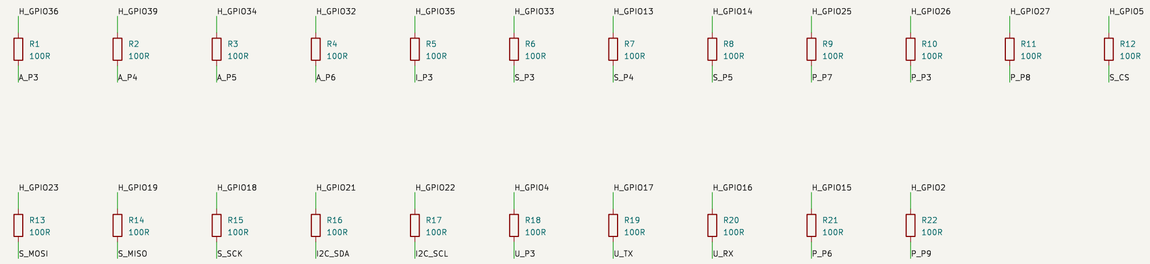
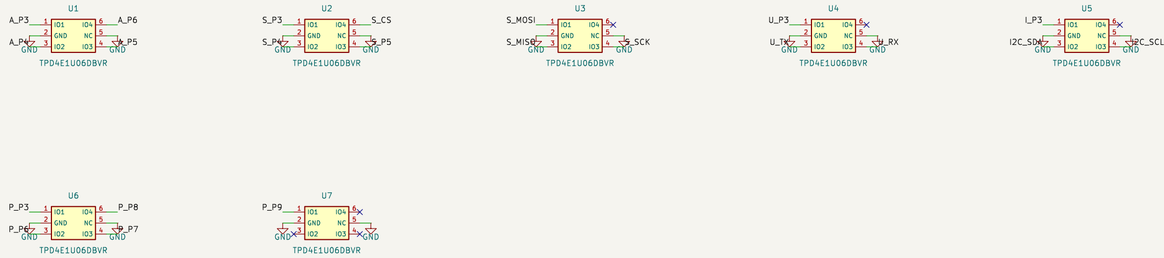
1 ESP32-DEVKITC-32E HOST HEADERS (J7 = DEVKIT J2 ROW, J8 = DEVKIT J3 ROW). PIN 1 AT THE ANTENNA END. UNUSED PINS ARE NO-CONNECT



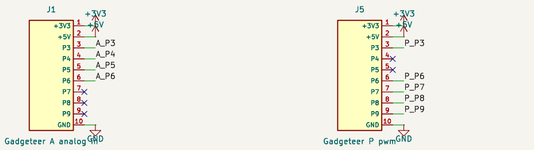
2 SERIES RESISTORS: ONE 100R PER SIGNAL BETWEEN THE HOST PIN (TOP NET) AND THE SOCKET NET (BOTTOM NET)



3 TVS ARRAYS (TPD4E1U06DBVR), SHUNT ON THE SOCKET-SIDE NET AFTER THE SERIES RESISTOR; UNUSED CHANNELS = NO-CONNECT



4 GADGETEER SOCKETS J1 A, J2 S, J3 U, J4 I, J5 P AND J6 QWIIC / 2.54 mm I2C (3.3 V ONLY). PINS 1 +3V3, 2 +5V, 10 GND

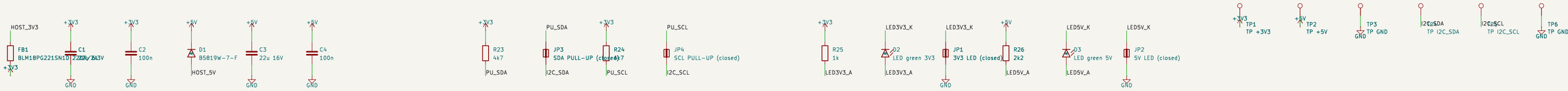


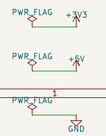
5 POWER: 3V3 THROUGH FERRITE FB1 (HOST_3V3 TO +3V3), 5V THROUGH SCHOTTKY D1 (HOST_5V TO +5V, BLOCKS BACK-FEED)

6 I2C PULL-UPS 4.7k TO +3V3, EACH WITH A REMOVABLE SOLDER JUMPER

7 STATUS LEDS, EACH WITH ITS OWN SOLDER JUMPER (CLOSED = LED ON)

8 TEST PADS





PWR_FLAGs: +3V3, +5V and GND are sourced from the DevKit through J7/J8 (HOST_3V3, HOST_5V, GND); this board has no regulator.

STUDY: unqualified, not for fabrication
ESP32-DevKitC-32E host adapter for Gadgeteer extension boards
Smoothieware / CERN-OHL-S-2.0

Sheet: /
File: esp32-to-gadgeteer-host.kicad_sch

Title: ESP32 DevKit to Gadgeteer host

Size: A2	Date: 2026-10-22	**Rev: v03**
KiCad E.D.A. 9.0.8		Id: 1/1