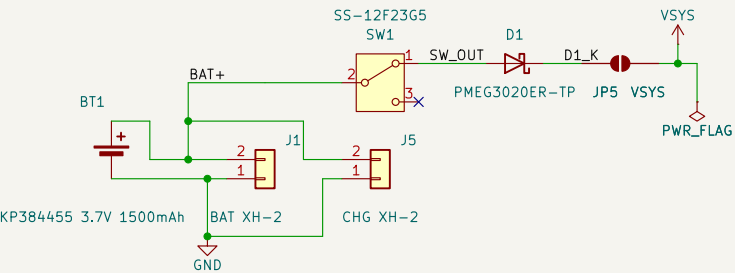
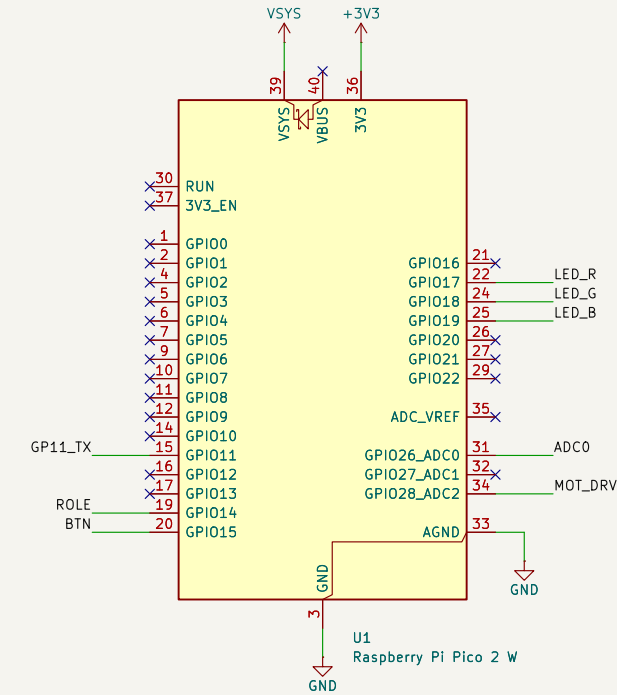


POWER – cell, switch, OR-ing diode (design §6.1, README)

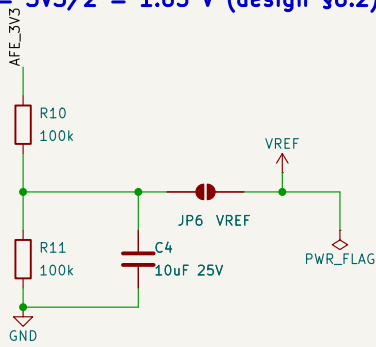


VBUS (USB) and VSYS are OR'd inside the Pico; D1 stops VSYS back-feeding the cell and makes a reversed J1 harmless. -0.35 V drop: VSYS 2.6–3.8 V, Pico needs 1.8–5.5 V, J5 is the charger's plug, wired to the cell, NOT a power input. JP5 ships OPEN: bridge it to run from the cell (USB works regardless); open, TP7 -> TP6 is the ammeter position.

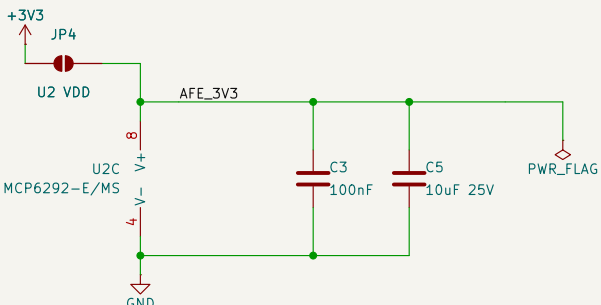
U1 – Pico 2 W, socketed on two 1x20 female strips



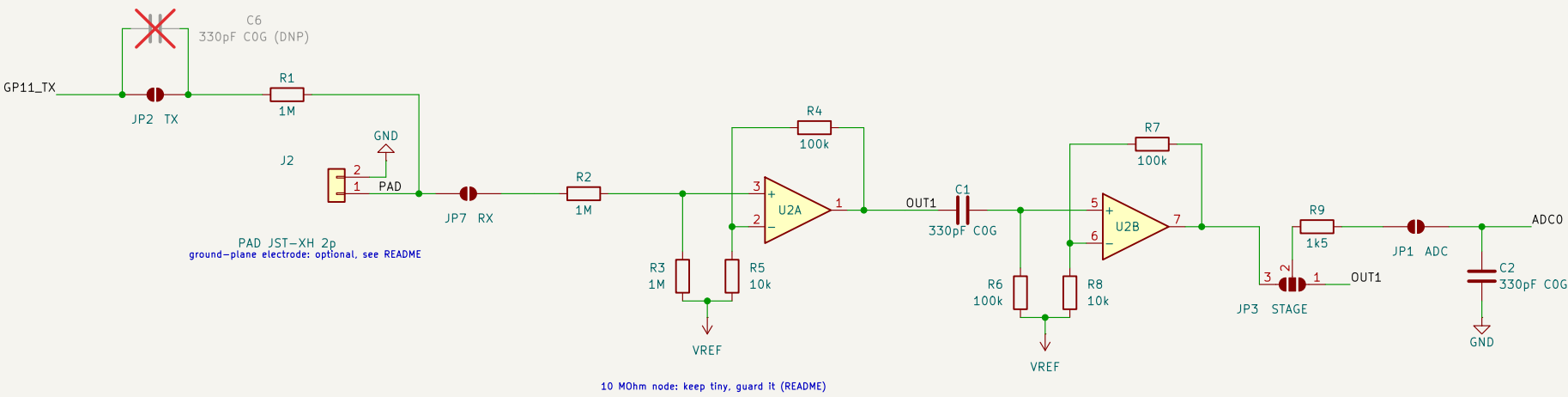
VREF = 3V3/2 = 1.65 V (design §6.2)



U2 supply – AFE_3V3 behind JP4 (design §6.4 decoupling + C5 bulk)

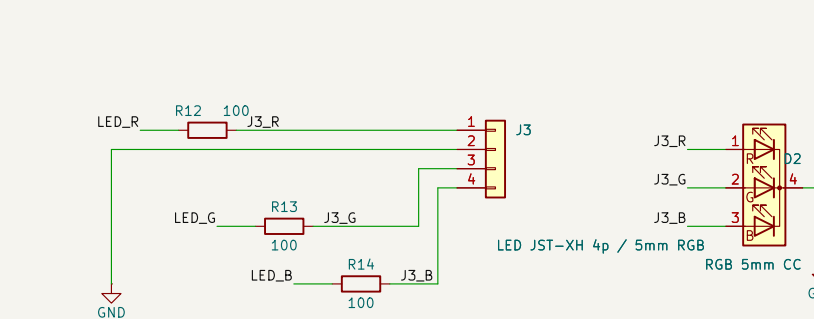


ANALOGUE – TX drive, shared PAD, x121 receive chain (design §6.3, §6.4)



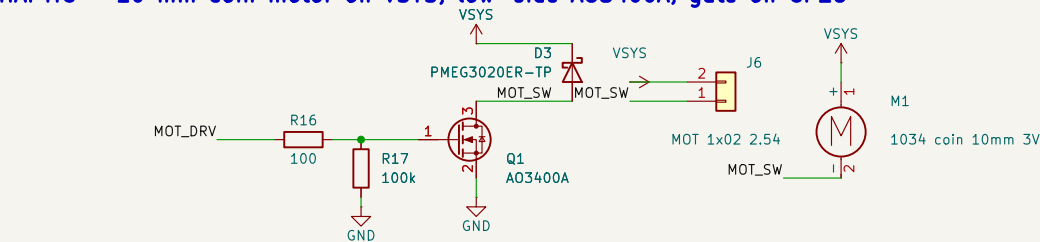
Gain 11 x 11 = 121. Firmware holds GP11 high-Z with its input buffer OFF while receiving (RP2350–E9), so R1 does not load or bias the pad. Every JP ships OPEN: bridge with solder to bring the board up one stage at a time (README order); wick off to isolate. No test pad on the 10 MOhm node on purpose. JP3: centre -> R9. Blob to pin 3 = stage 2 (x121); move it to pin 1 = stage 1 only (x11) if stage 2 clips. C6 is DNP: fit it instead of bridging JP2 to AC-couple TX.

STATUS LED – RGB common cathode on GP17/18/19, direct-solder or JST–XH 4p

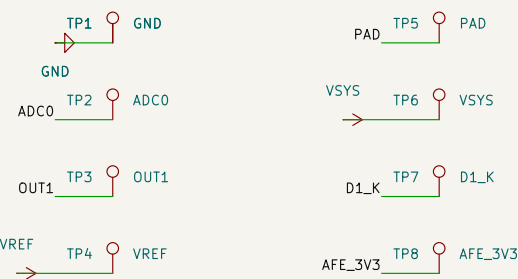


(D2 drawn for reference: it is the LED that plugs into J3, not a board component)

HAPTIC – 10 mm coin motor on VSYS, low-side A03400A, gate on GP28



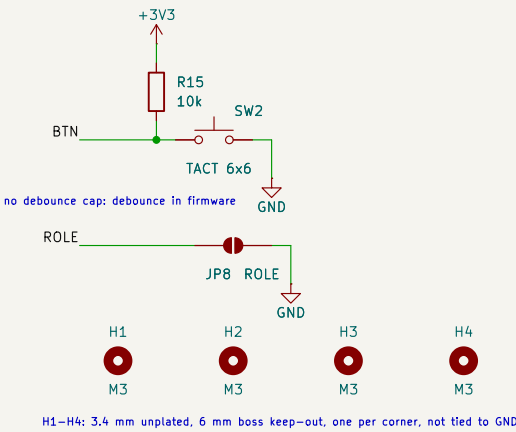
TP1–TP8 TEST PADS – bring-up order (README)



Through-hole, 1.5 mm pad / 0.7 mm drill: a wire solders in.
TP5 loads a 10 MOhm node through R1: a 10x probe or better, never a meter. TP6/TP7 straddle JP5: the ammeter position.
TP8 is new: C4 and C5 are 0603 MLCC now, so the through-hole + lead that used to be the AFE_3V3 probe point is gone.

(M1 drawn for reference: the motor whose leads go into J6, not a board component.)
D3 is the flyback path: without it the motor's collapse drives Q1's drain well above VSYS at every turn-off. Firmware: GP28 high runs the motor – never during an RX window.

BUTTON (GP15), ROLE strap (GP14), MOUNTING



Handoff		
Sheet: /		
File: handoff.kicad_sch		
Title: Handoff – body-coupled handshake wristband		
Size: A3	Date: 2026–09–11	Rev: A
KiCad E.D.A. 10.0.6		Id: 1/1