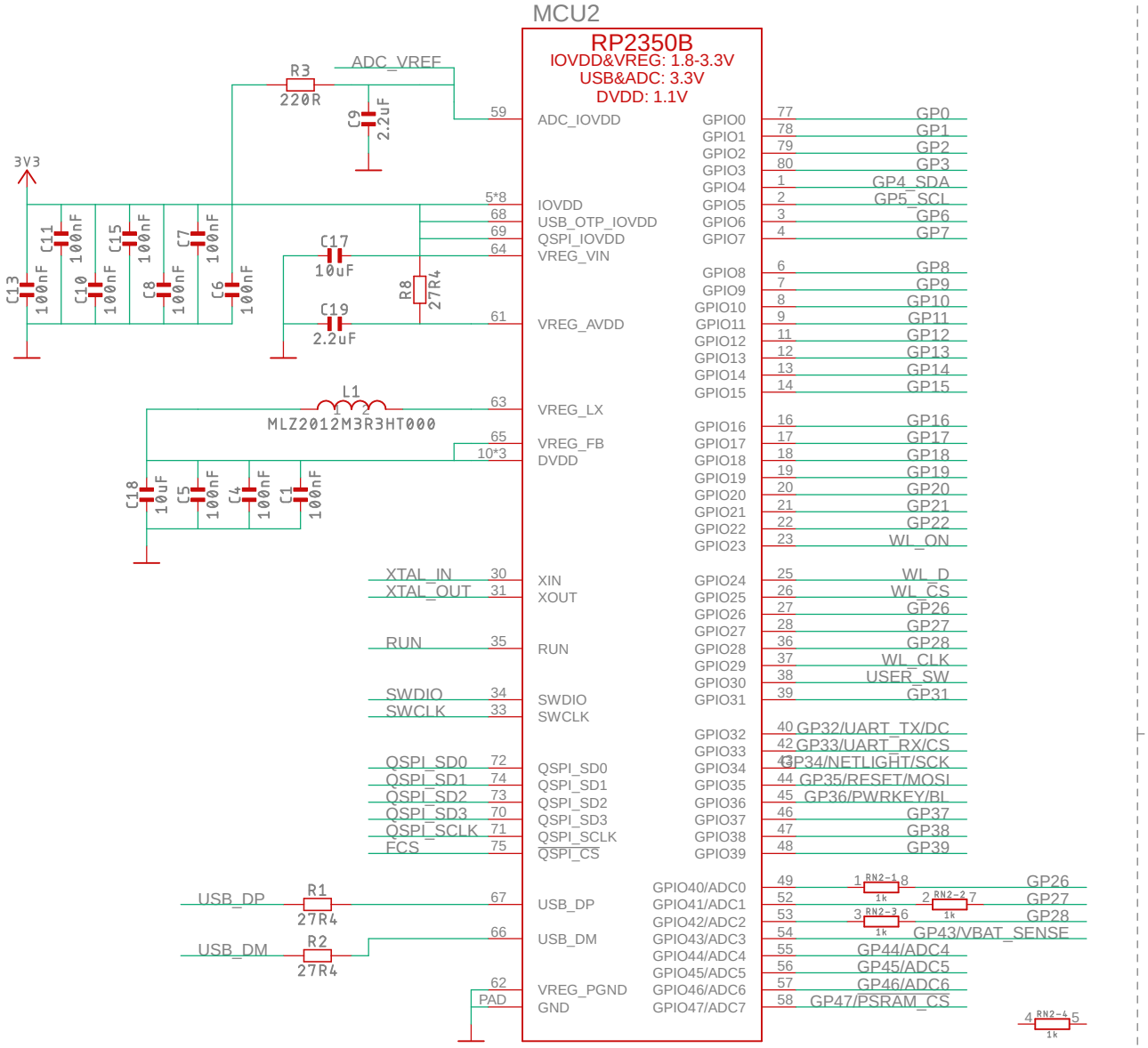
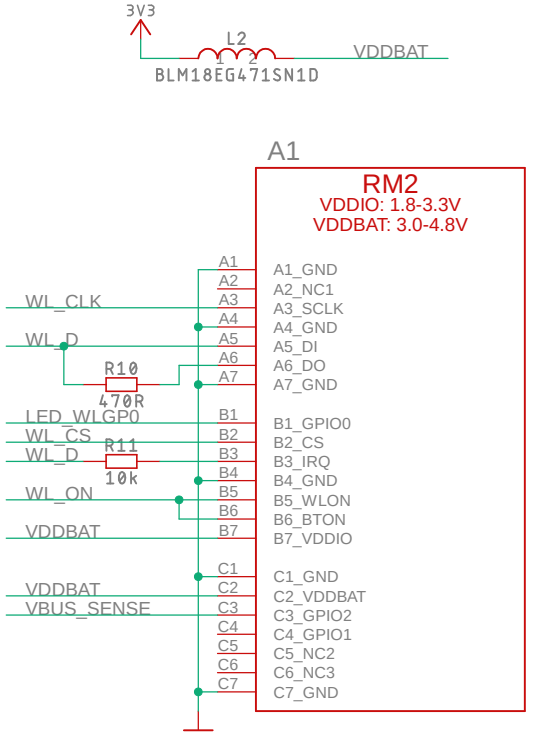
Pimoroni Pico LiPo 2 XL W (PIM776)

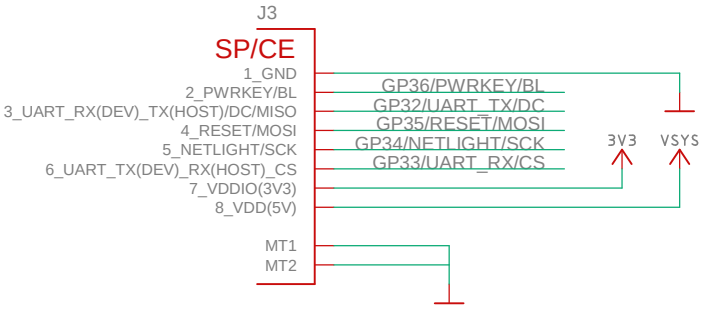
RP2350B MCU



RM2 module

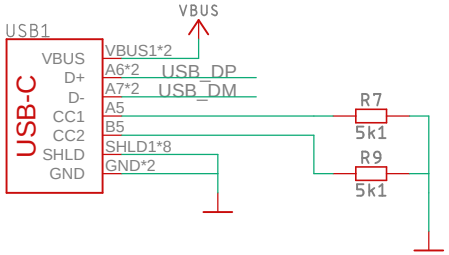


SP/CE Connector

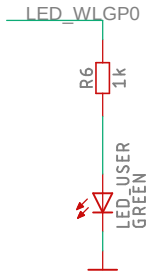


Pimoroni Pico LiPo 2 XL W (PIM776)

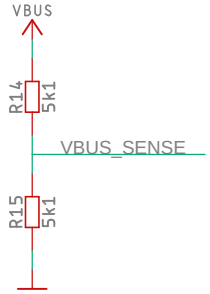
USB-C connector



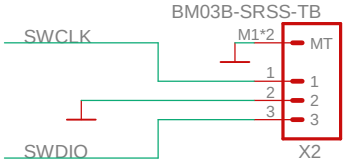
User LED



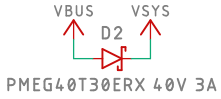
Vbus sense voltage divisor



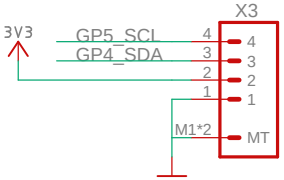
Debug connector



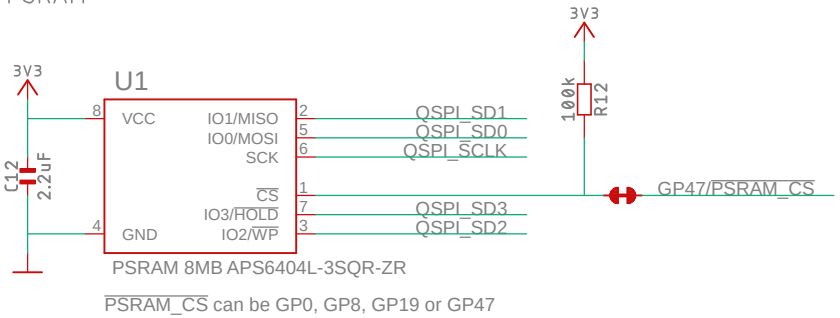
Vbus to Vsys diode connection



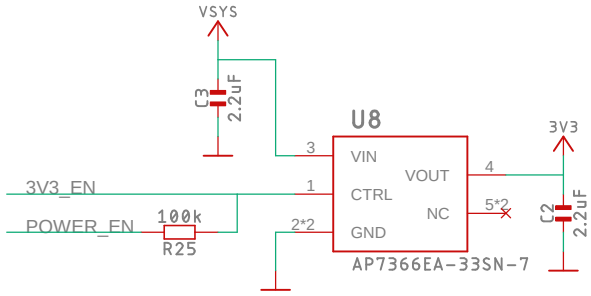
QW/ST connector



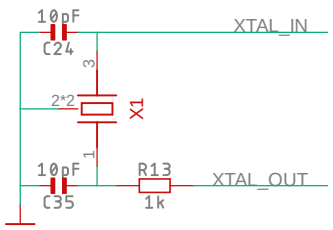
PSRAM



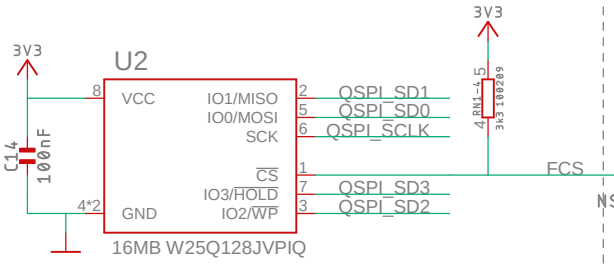
LDO for 3v3 output, low Iq



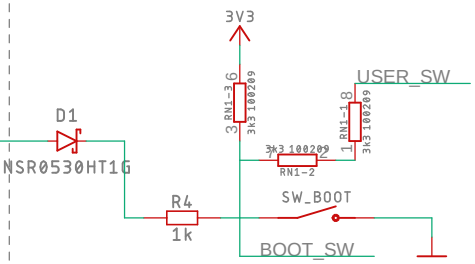
Crystal oscillator



Flash memory



Combined USB boot & user switch



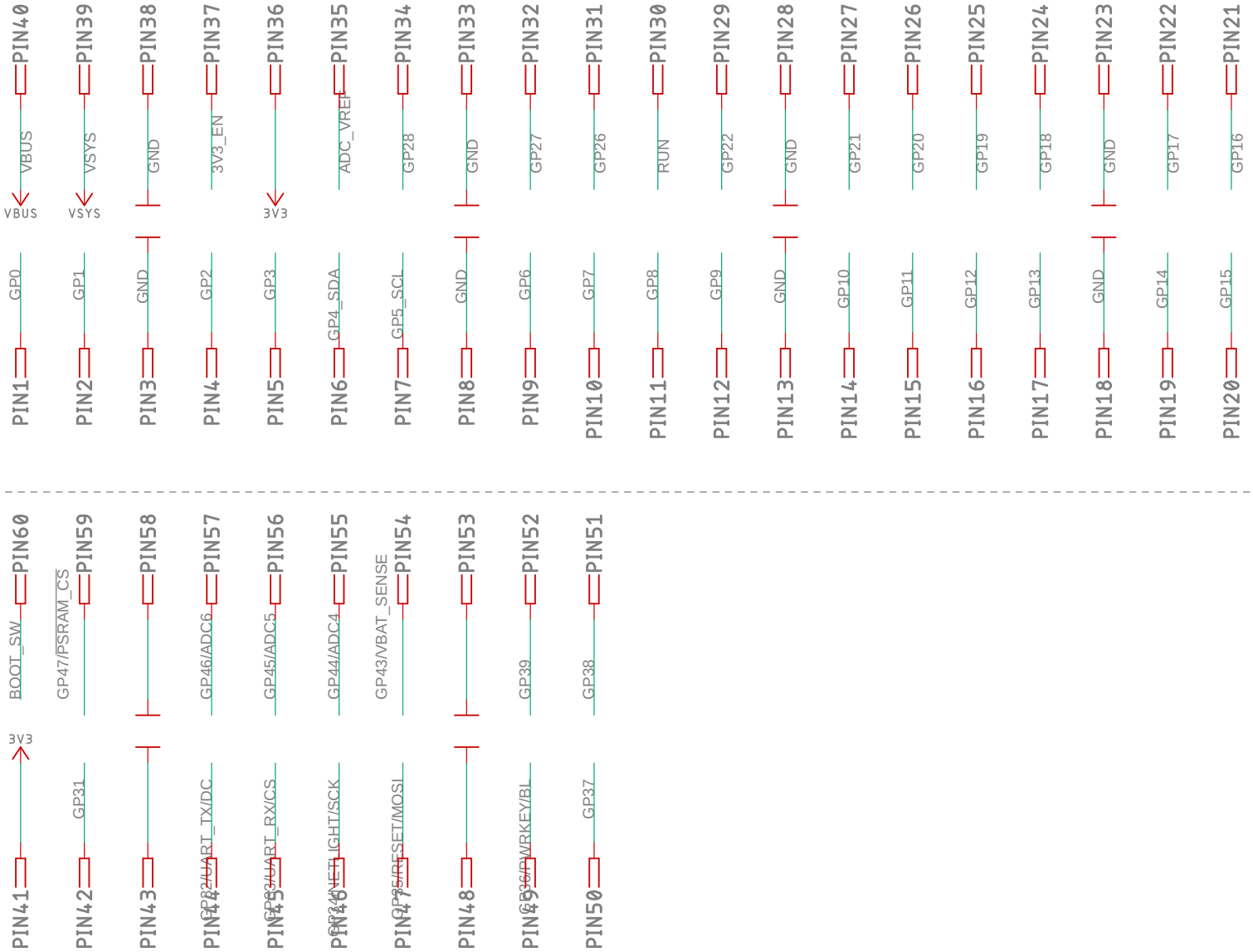
PIMORONI

DATE GENERATED 11/07/2025 17:20

SHEET 2/4

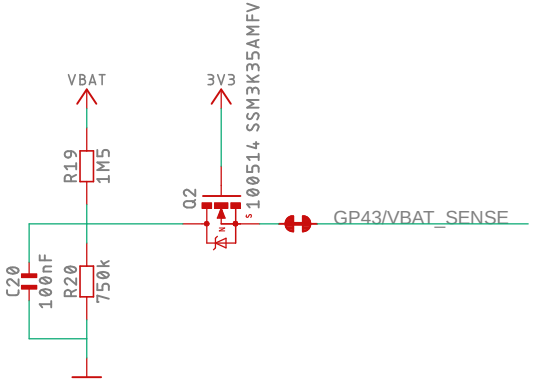
Pimoroni Pico LiPo 2 XL W (PIM776)

Output headers



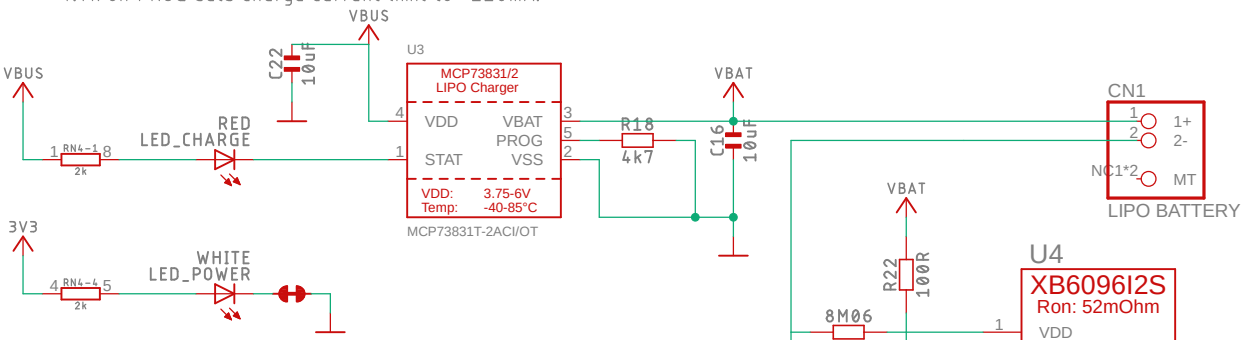
Pimoroni Pico LiPo 2 XL W (PIM776)

Battery sense voltage divisor



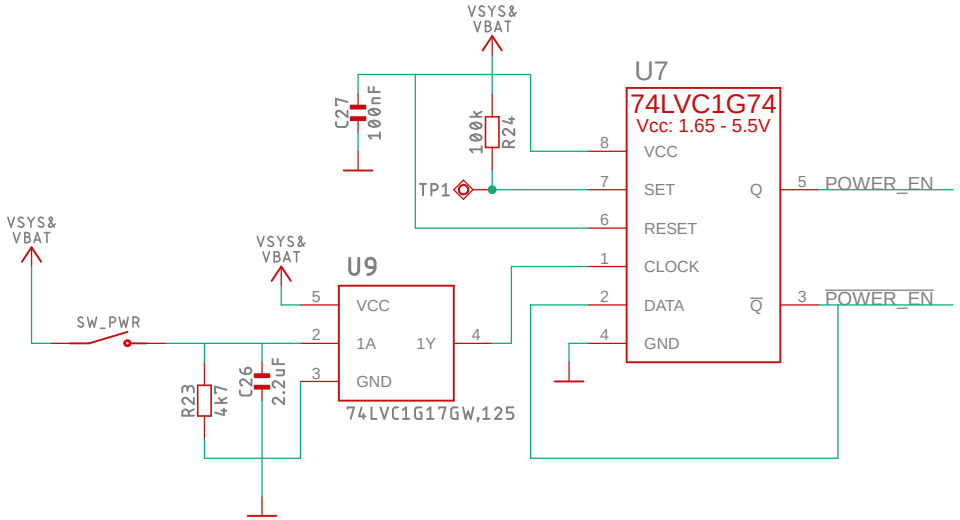
Lipo charger, protection and connector

4.7k on PROG sets charge current limit to ~220mA.

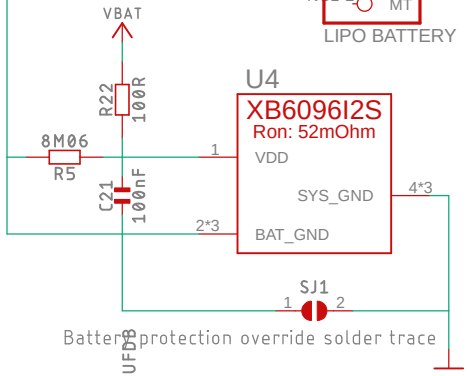


Power switch toggle circuit

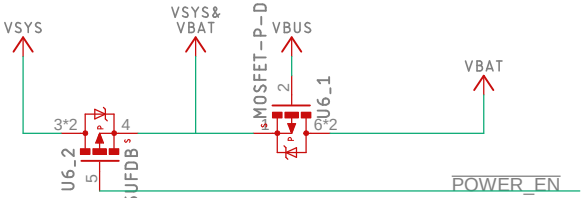
R24 and the PCB capacitor slow down the SET rising slope enough compared to RESET that the chip reliably defaults to on at powerup



Battery protection override solder trace



Vbat charge protection and power switch FET switches



MOSFET-P-DUAL_DMP2075UFDB

Typical discharge power path resistance:
XB6096I2S: 52mOhm
DMP2075UFDB: 64mOhm

->

52 + 2*64 = 180mOhm
Voltage drop at 1A = 180mV