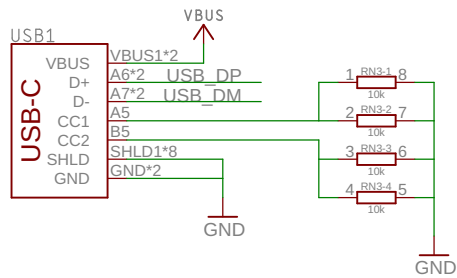
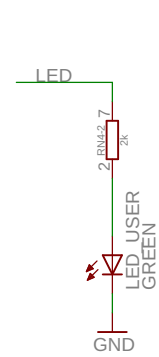


Pimoroni Pico Lipo (4MB: PIM578, 16MB: PIM560)

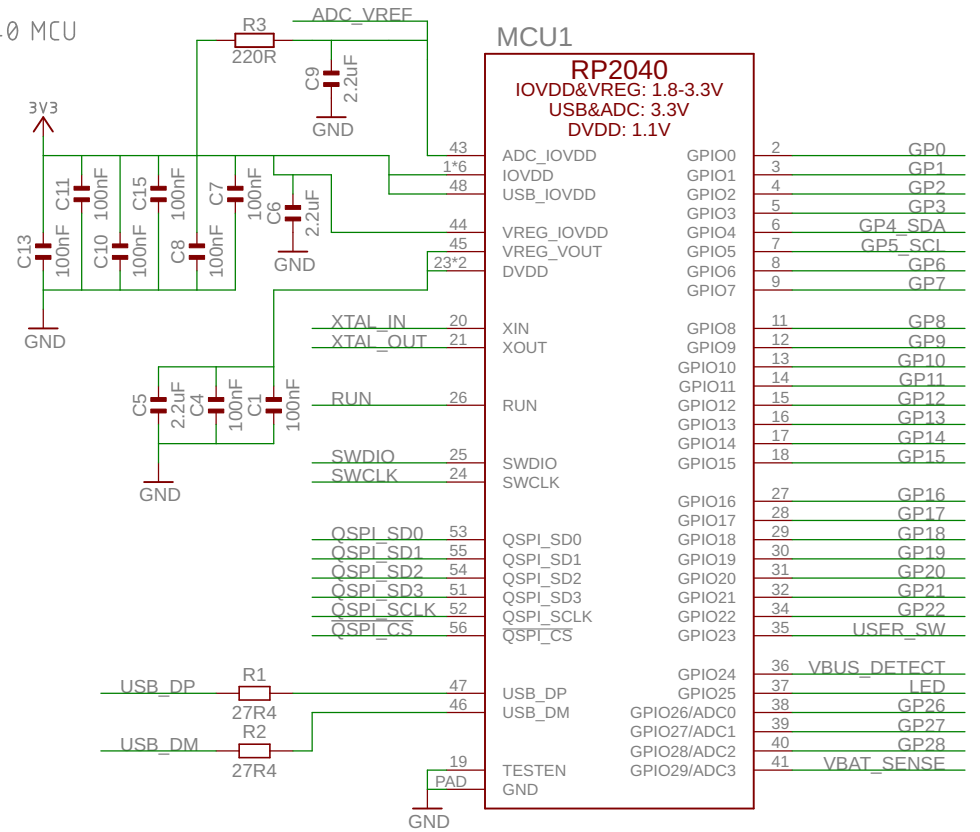
USB-C connector



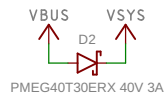
User LED



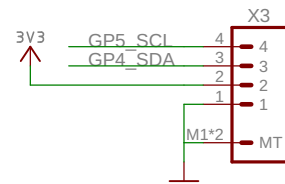
RP2040 MCU



Vbus to Vsys diode connection

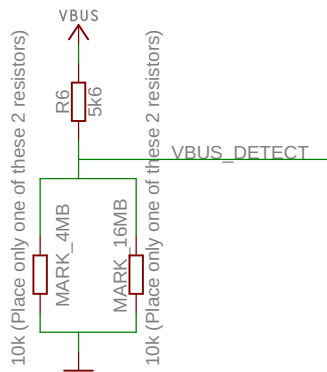


i2c (qwiiic / stemma qt) connector

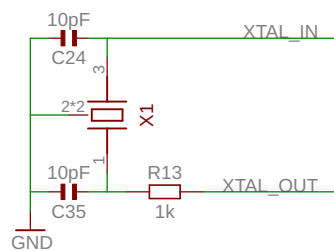


Vbus detection voltage divider

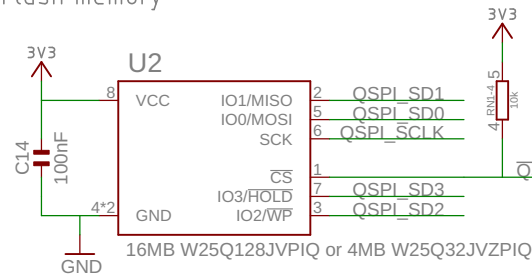
Only one of MARK_4MB and MARK_16MB is placed to mark whether this is the 4MB/16MB flash version



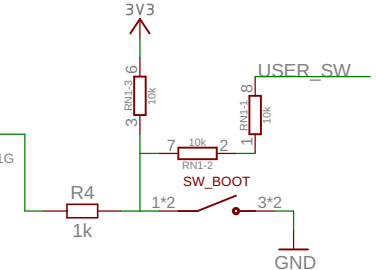
Crystal oscillator



Flash memory

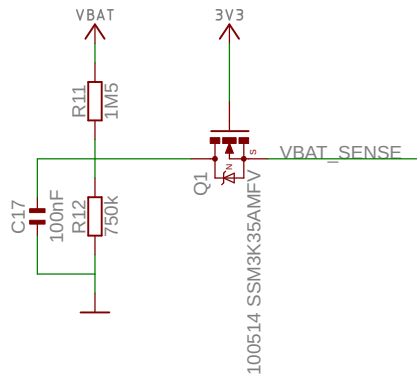


Combined USB boot & user switch



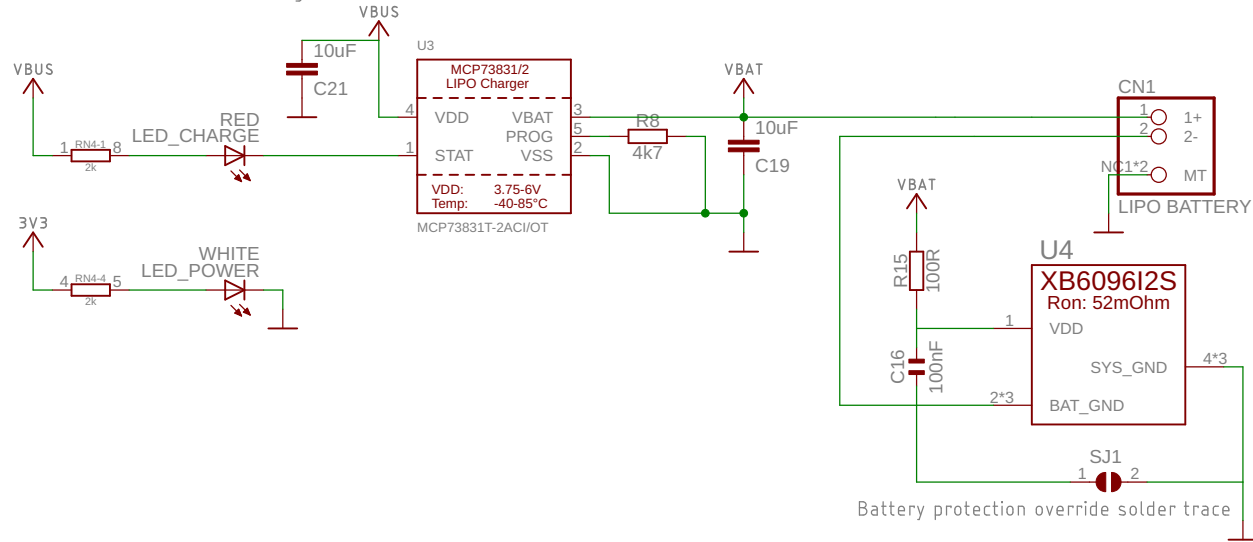
Pimoroni Pico Lipo (4MB: PIM578, 16MB: PIM560)

Battery sense voltage divisor

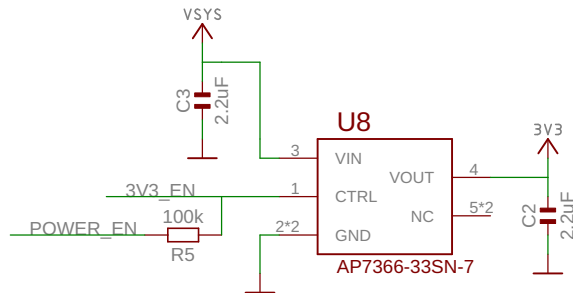


Lipo charger, protection and connector

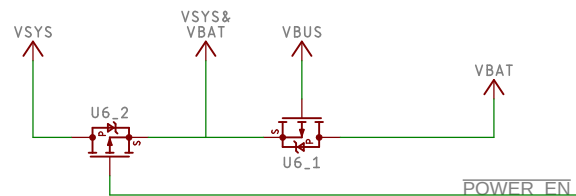
4.7k on PROG sets charge current limit to ~220mA.



LDO for 3v3 output, low Iq



Vbat charge protection and power switch FET switches



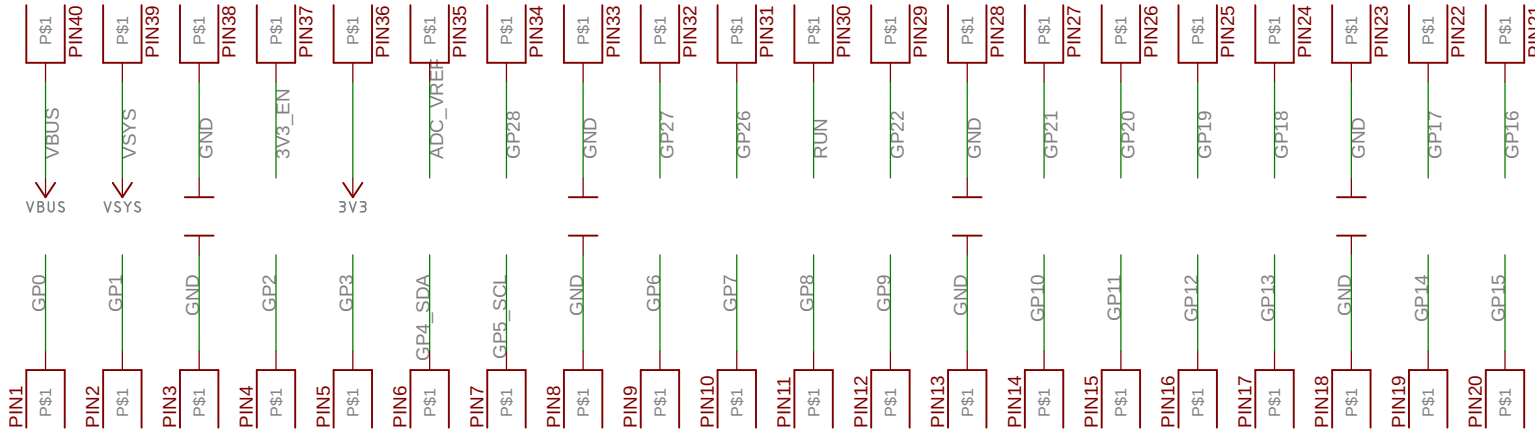
Typical discharge power path resistance:
 XB609612S: 52mOhm
 DMP2075UFDB: 64mOhm

->

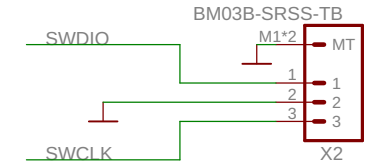
$52 + 2 \cdot 64 = 180\text{mOhm}$
 Voltage drop at 1A = 180mV

Pimoroni Pico Lipo (4MB: PIM578, 16MB: PIM560)

Output headers



Debug header



Power switch toggle circuit

R14 and the PCB capacitor slow down the SET rising slope enough compared to RESET that the chip reliably defaults to on at powerup

