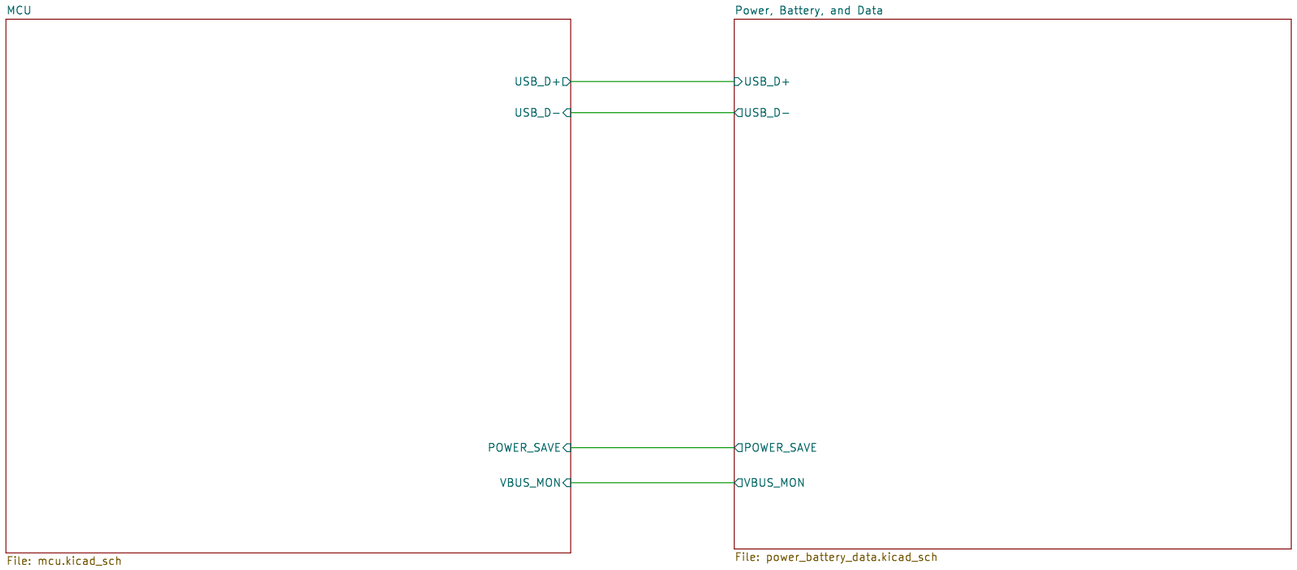


Goblin Hardwerks

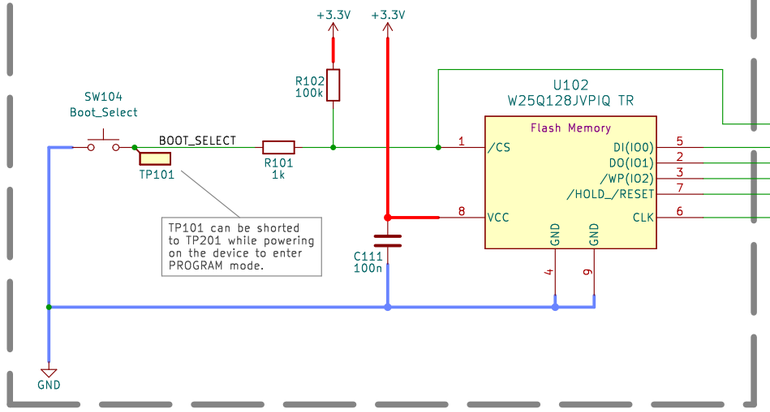
Sheet: /
File: RamaPotchi.kicad_sch

Title: *RamaPotchi*

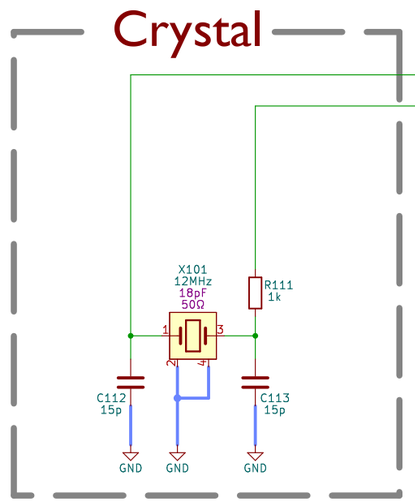
Size: A3	Date: 2023-12-21	**Rev: 0.3**
KiCad E.D.A. kicad 7.0.9		Id: 0/3

MCU - RP2040

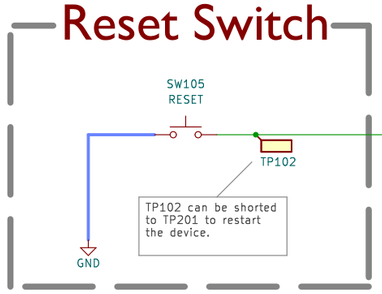
Flash Memory and Boot Select Switch

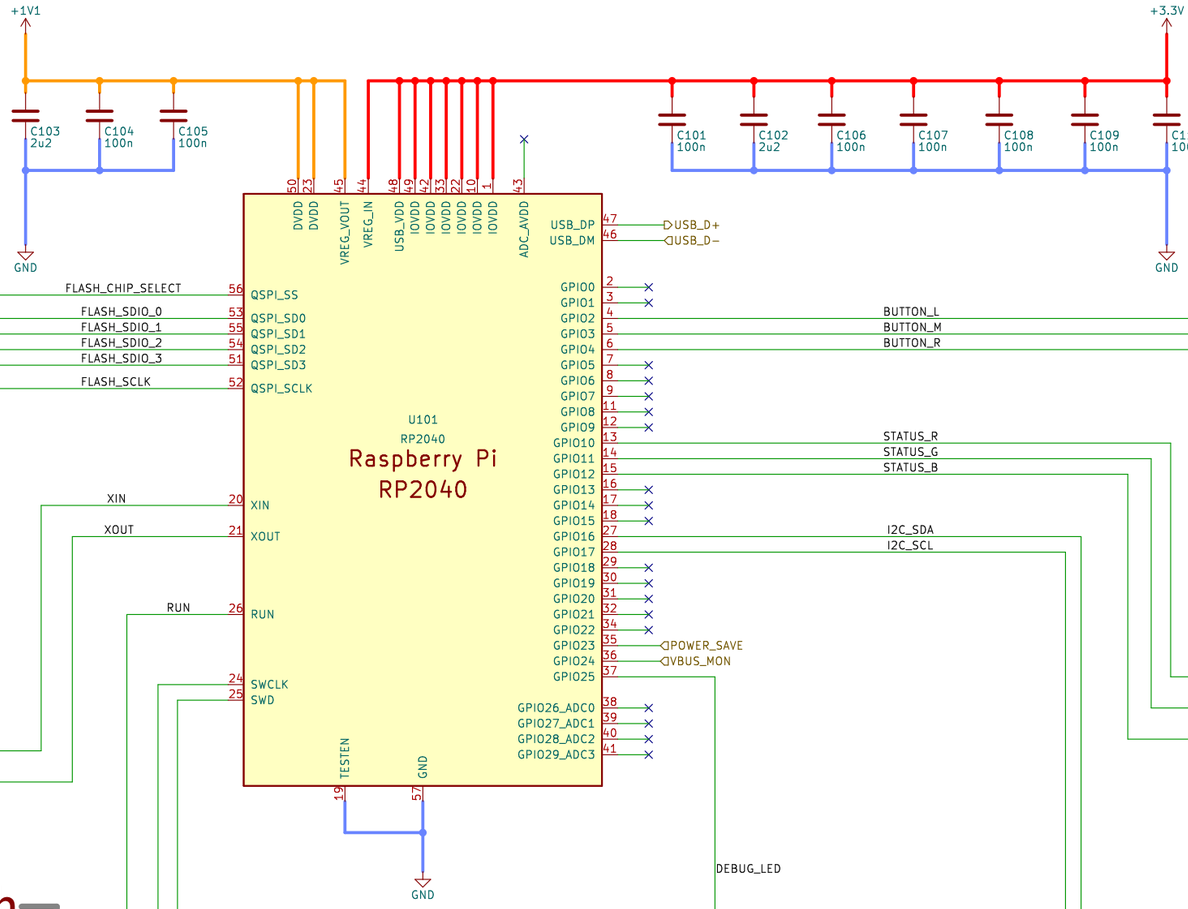


Crystal

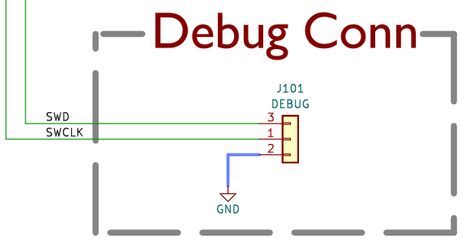


Reset Switch

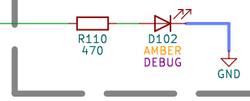




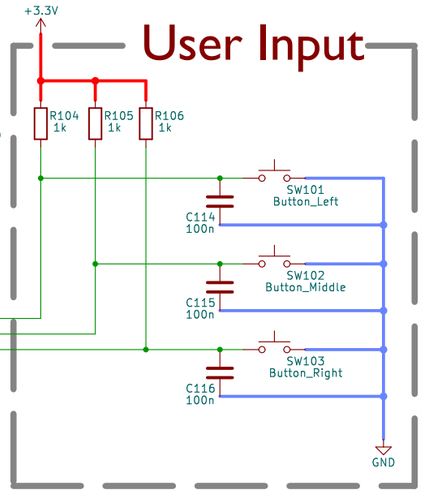
Debug Conn



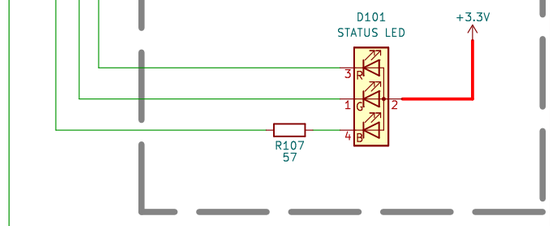
Debug LED



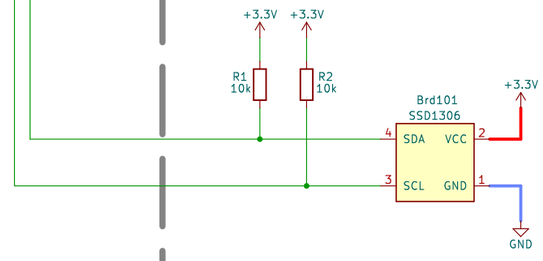
User Input



Status LED



Display



NOTE:
- 100nF Capacitors are 16V, X7R, +/-10%, M1005
- 2.2uF Capacitors are 16V, X5R, +/-10%, M1608
- 15pF Capacitors are 50V, C0G, +/-5%, M1005
- Resistors are 63mW, +/-1%, M1005

Color Legend
- +1.1V
- +3.3V
- GND

Goblin Hardwerks

RP2040 Microcontroller, Flash Memory, Boot Select Switch, Hardware RESET switch, Debug Connector, Debug LED, RGB Status LED, User Input Switches, and Display Screen.

Sheet: /MCU/
File: mcu.kicad_sch

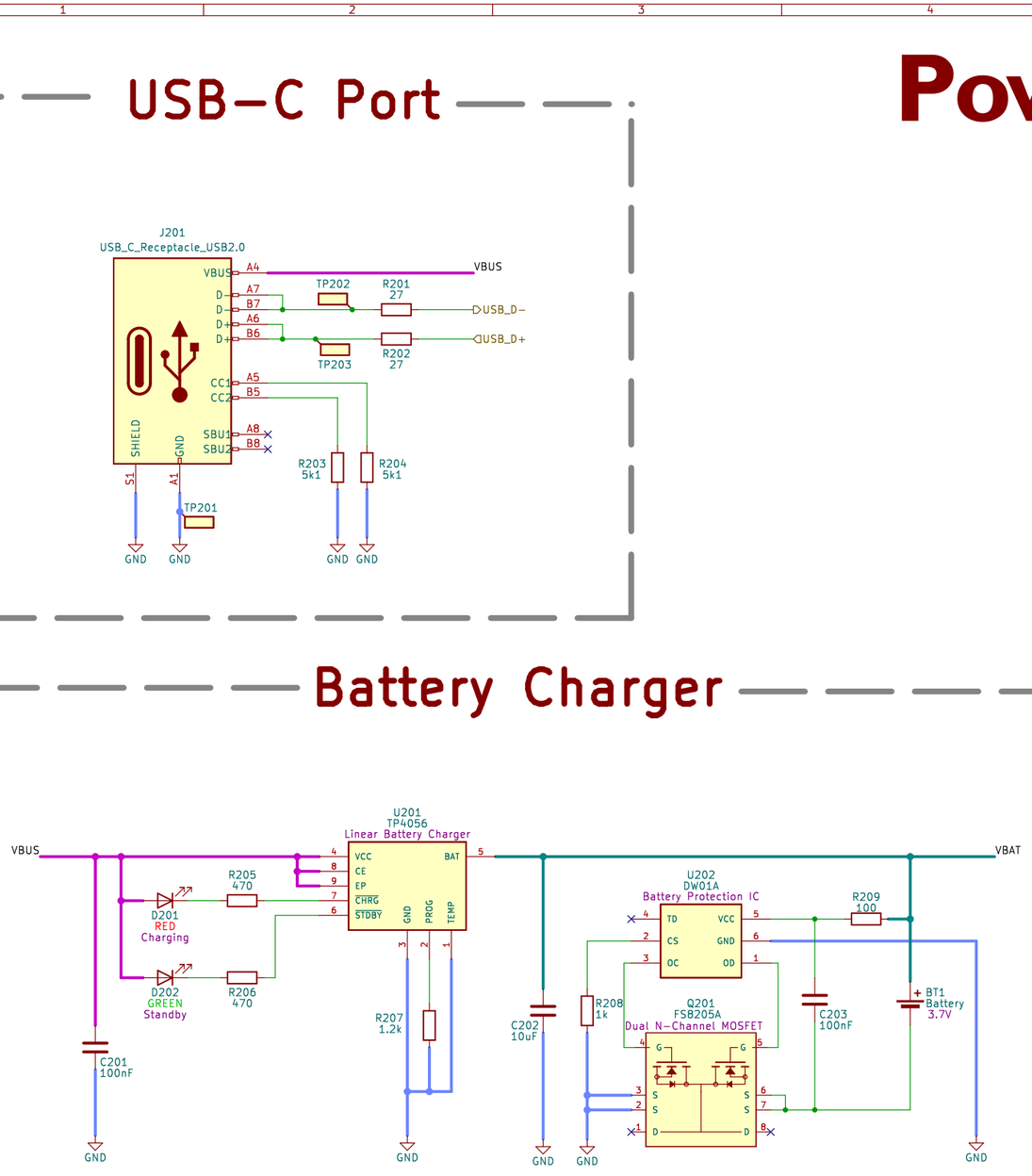
Title: RamaPotchi

Size: A3	Date: 2023-12-21	**Rev: 0.3**
KiCad E.D.A. kicad 7.0.9		Id: 1/3

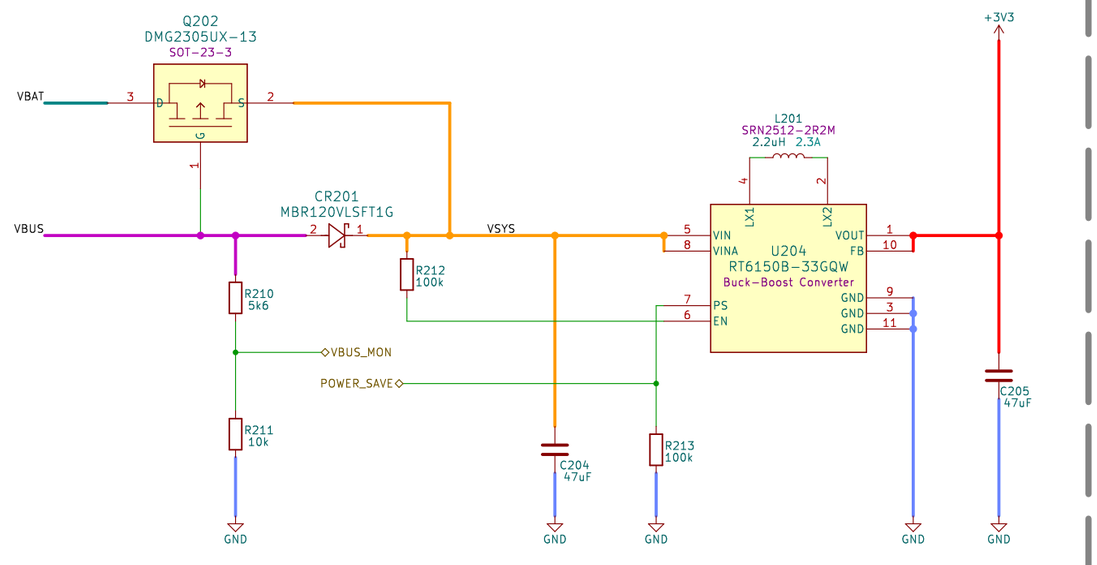
Power, Battery, and Data

USB-C Port

Battery Charger



Power Supply



NOTE:
- 47uF Capacitors are 10V, X5R, +/-20%, M3216
- 10uF Capacitors are 25V, X5R, +/-20%, M1608
- 100nF Capacitors are 16V, X7R, +/-10%, M1005
- Resistors are 63mW, +/-1%, M1005

Color Legend

- VSYS (~5V)
- VBUS (~5V)
- VBAT (~3.7V)
- +3.3V
- GND

Goblin Hardwerks

USB 2.0 Data and Power over USB-C.
Lithium-Ion Battery Charging System.

Sheet: /Power, Battery, and Data/
File: power_battery_data.kicad_sch

Title: *RamaPotchi*

Size: A3	Date: 2023-12-21	**Rev: 0.3**
KiCad E.D.A. kicad 7.0.9		Id: 2/3