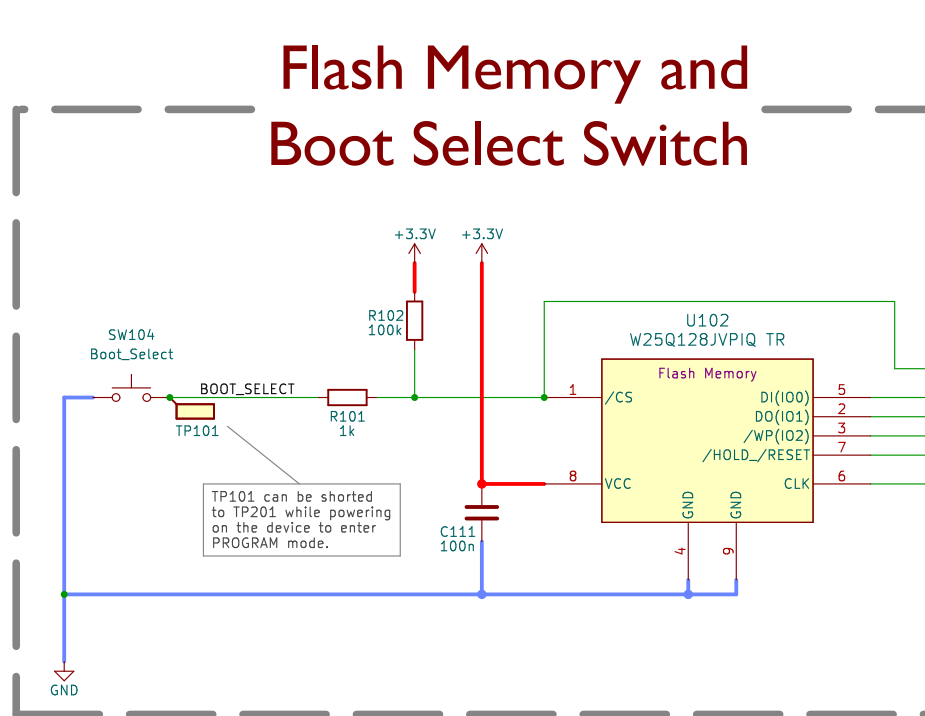
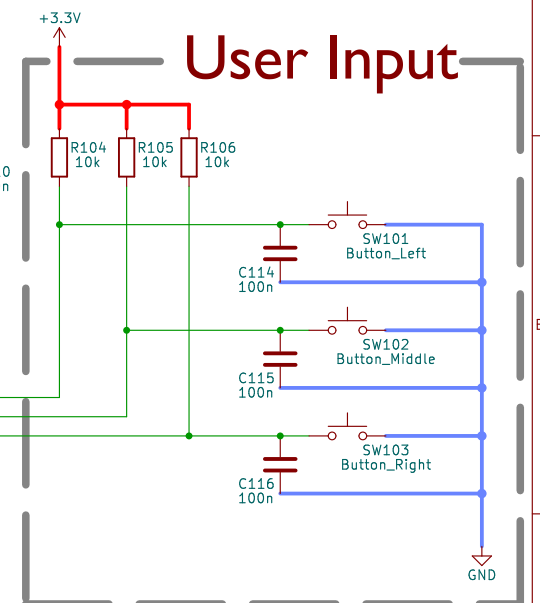


MCU - RP2040

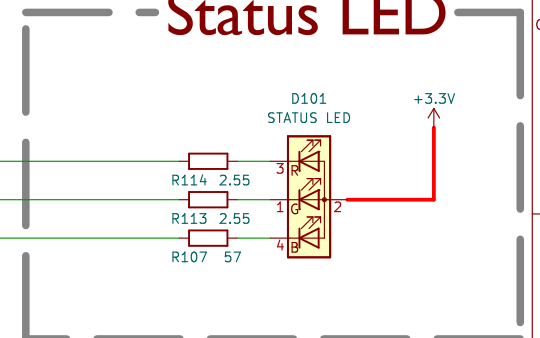
Flash Memory and Boot Select Switch



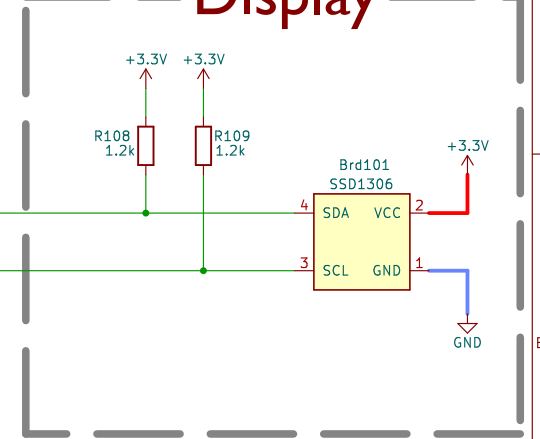
User Input



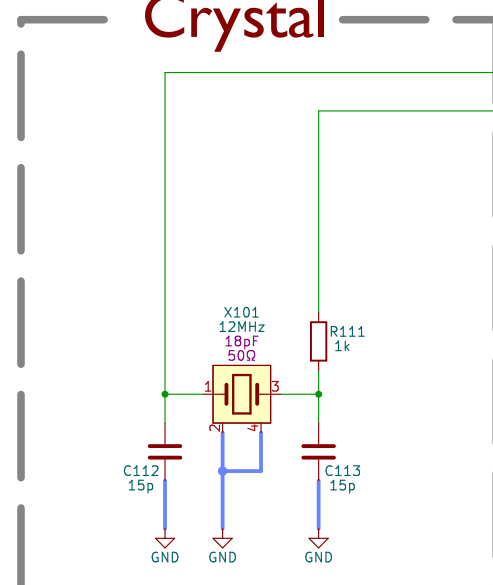
Status LED



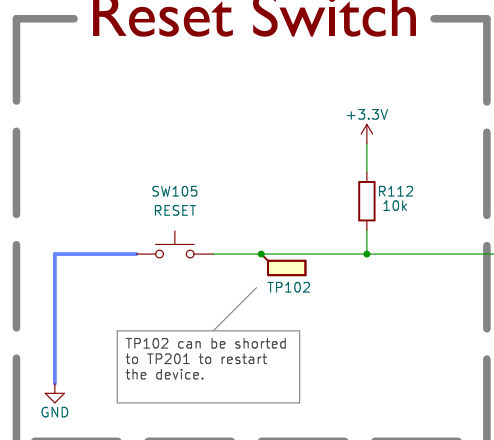
Display



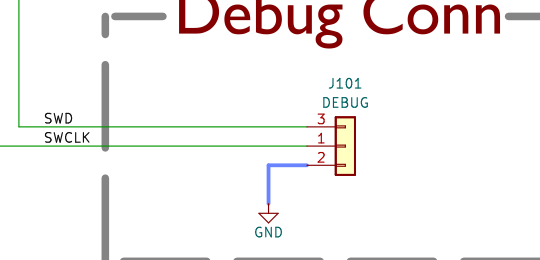
Crystal



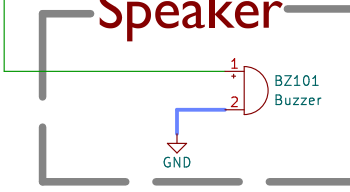
Reset Switch



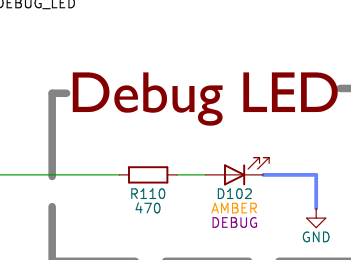
Debug Conn



Speaker



Debug LED



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

Sheet: /MCU/
File: mcu.kicad_sch

Title: RamaPotchi

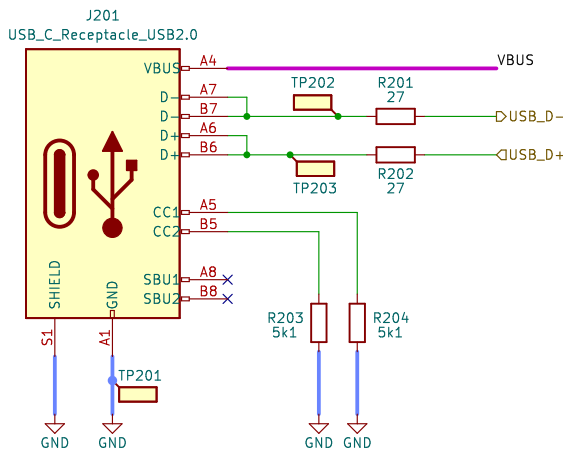
Size: A3 Date: 2023-12-21
KiCad E.D.A. kicad 7.0.9

Rev: 0.3
Id: 1/3

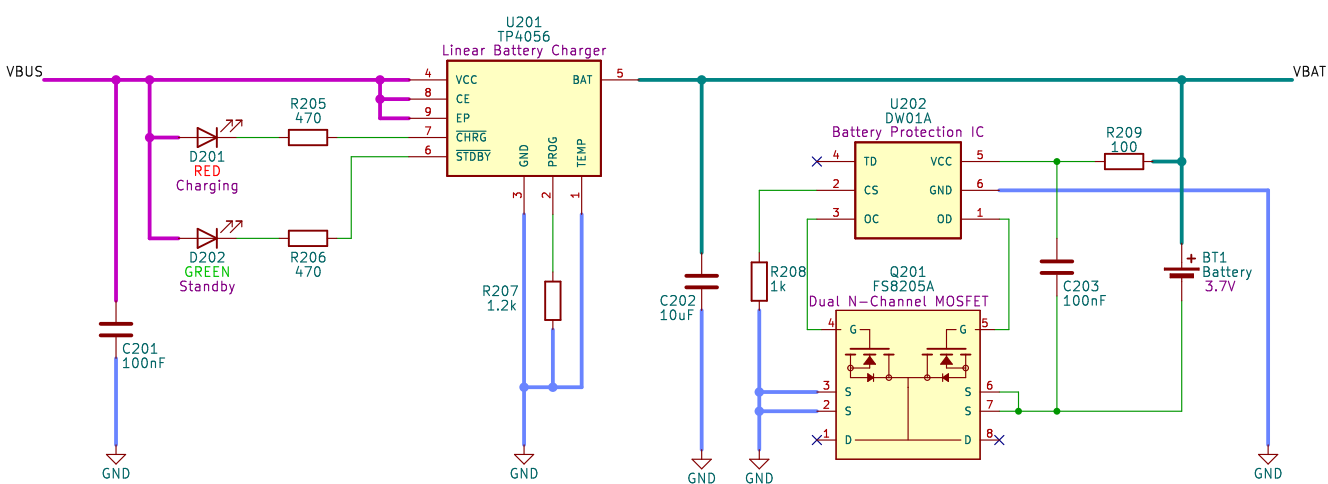
RP2040 Microcontroller, Flash Memory, Boot Select Switch, Hardware RESET switch, Debug Connector, Debug LED, RGB Status LED, User Input Switches, Speaker, and Display Screen.

Power, Battery, and Data

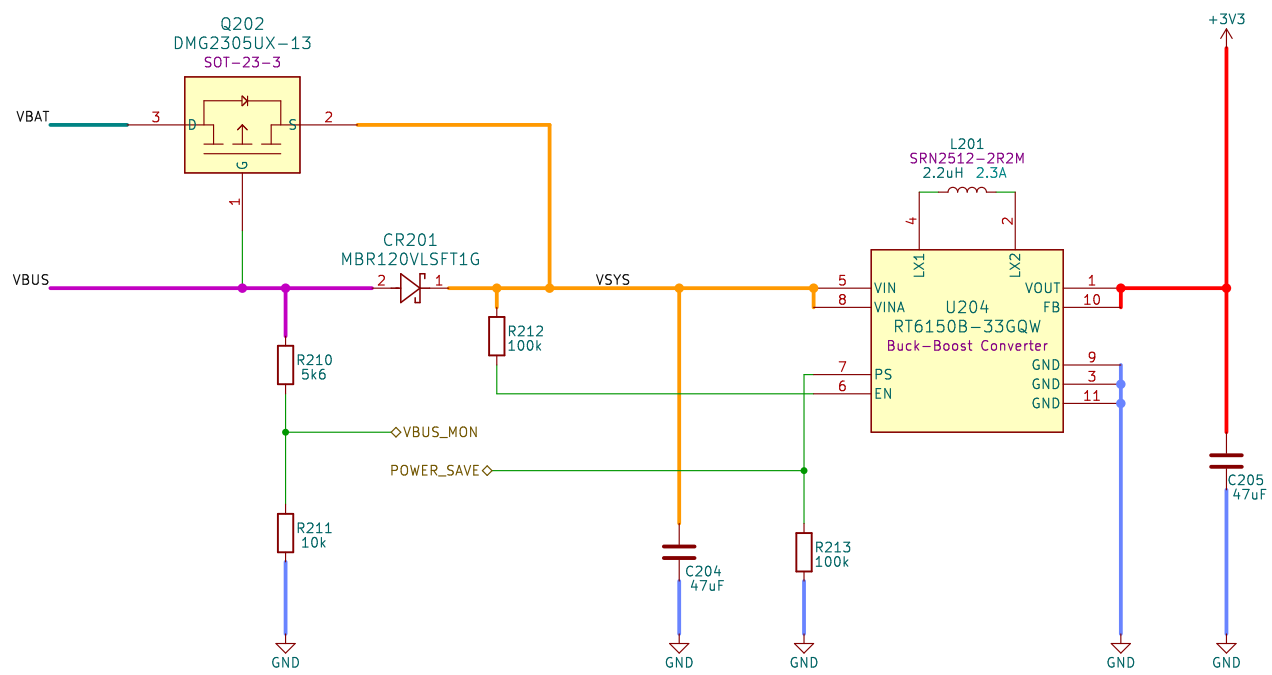
USB-C Port



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



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

Goblin Hardwerks

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

Title: RamaPotchi

Size: A3 Date: 2023-12-21
KiCad E.D.A. kicad 7.0.9

Rev: 0.3
Id: 2/3