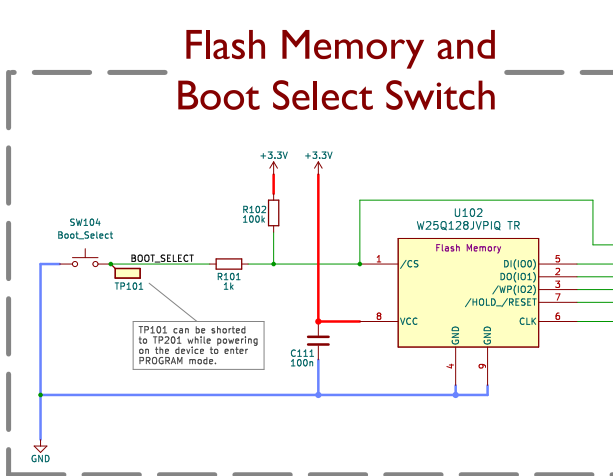
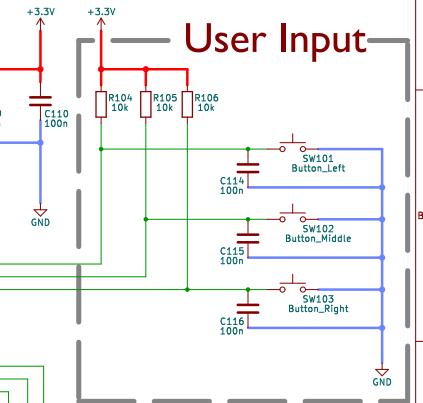


# MCU - RP2040

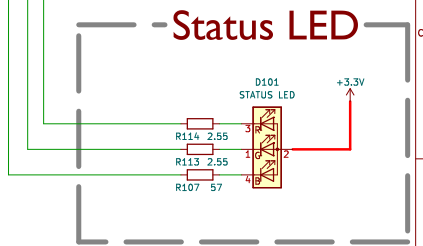
## Flash Memory and Boot Select Switch



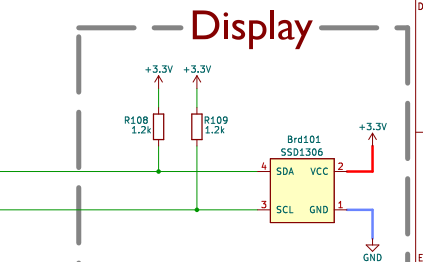
## User Input



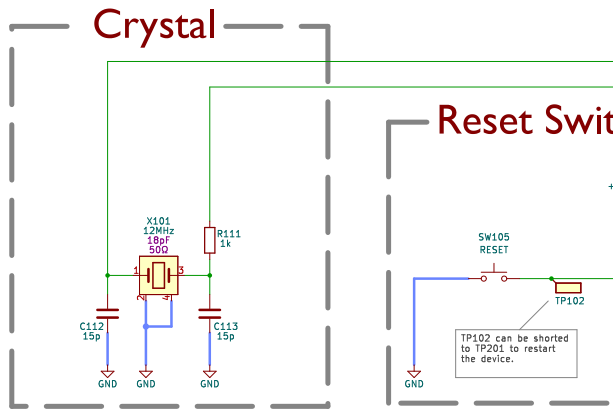
## Status LED



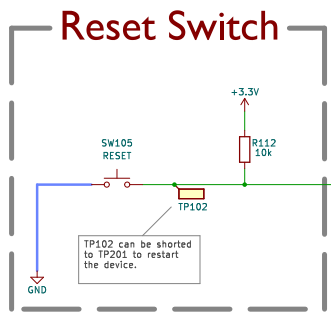
## Display



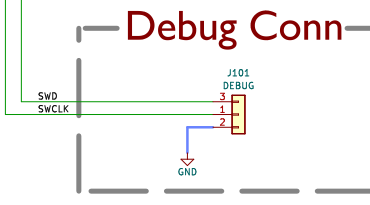
## Crystal



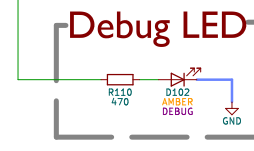
## Reset Switch



## Debug Conn



## 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

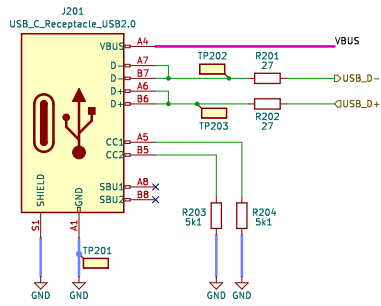
Size: A3 Date: 2023-12-21  
KiCad E.D.A. KiCad 7.0.9

Rev: 0.3  
Id: 1/3

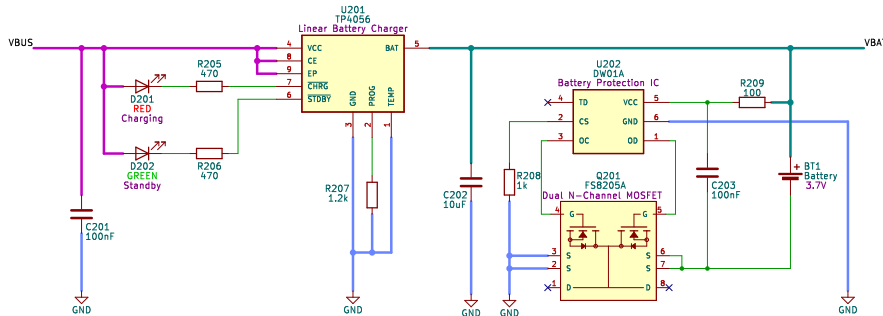
RP2040 Microcontroller, Flash Memory, Boot Select Switch, Hardware RESET switch, Debug Connector, Debug LED, RGB Status LED, User Input Switches, and Display Screen.

# Power, Battery, and Data

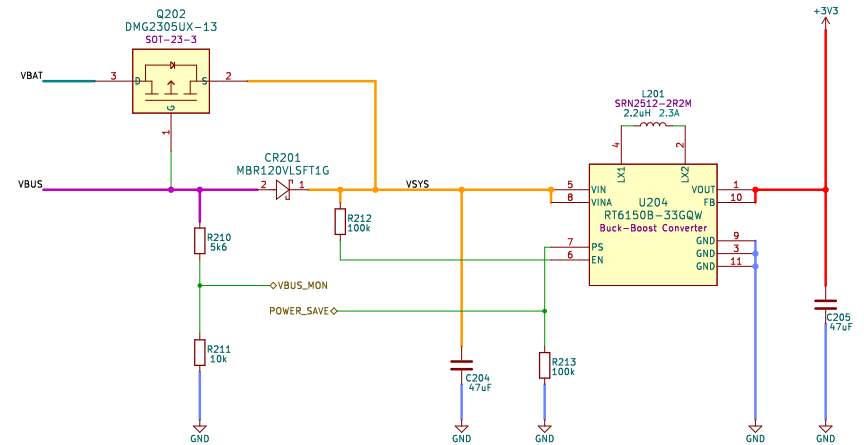
## USB-C Port



## 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