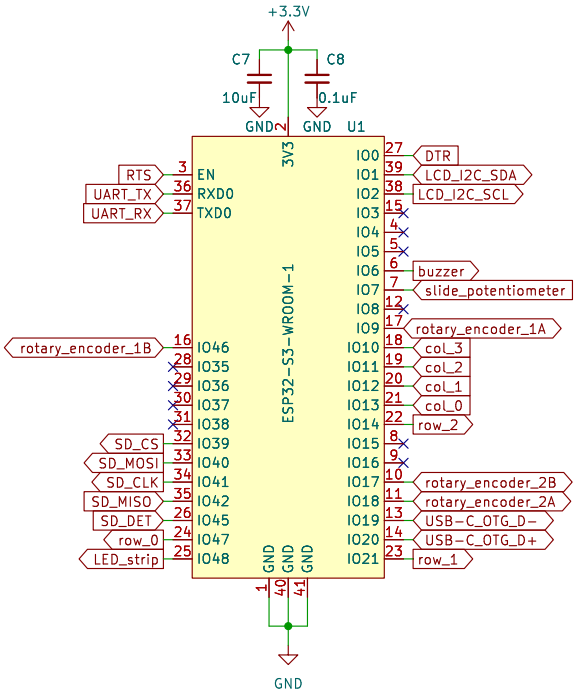
uC pinout



Power source

File: power-source.kicad_sch

IO

File: io.kicad_sch

USB-C interface

File: usb-c-interface.kicad_sch

Micro SD connector

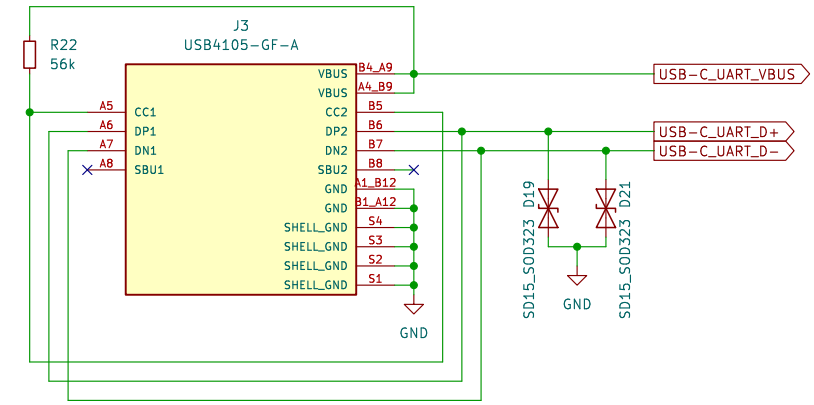
File: micro-sd-connector.kicad_sch

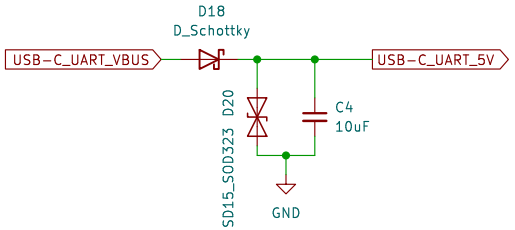
Sheet: /
File: keypad.kicad_sch

Title: Keypad board

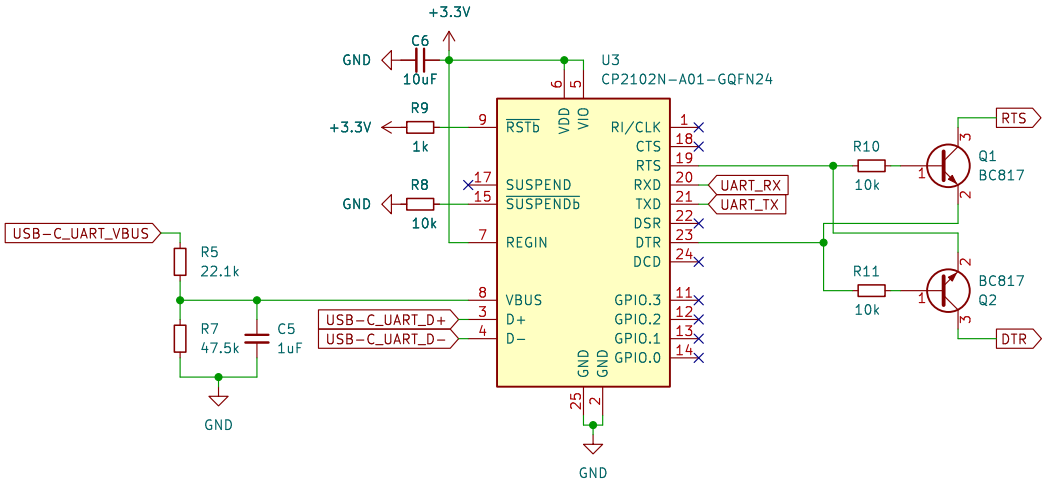
Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 1/7

USB-C (UART)

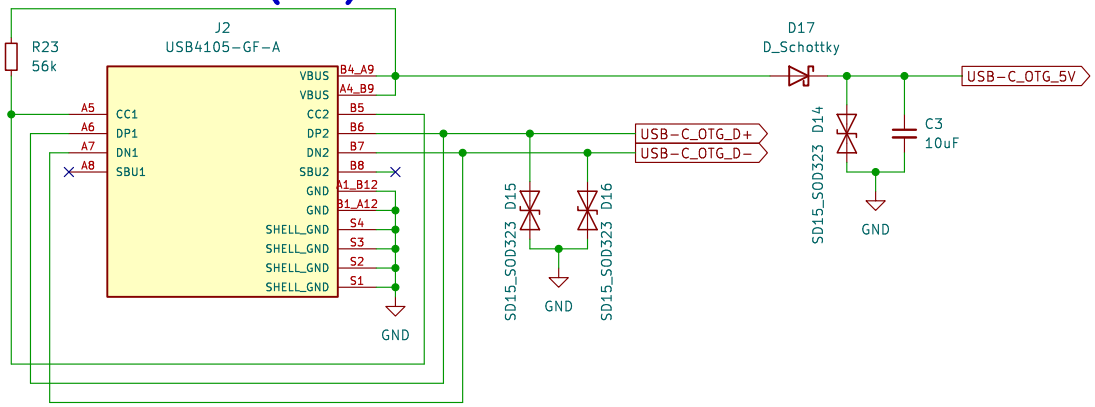




USB-UART converter



USB-C (OTG)

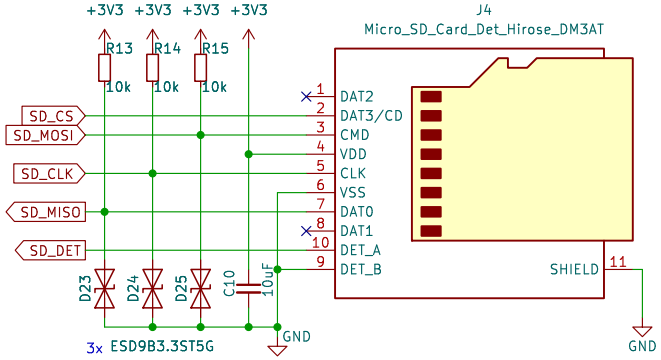


Sheet: /USB-C interface/
File: usb-c-interface.kicad_sch

Title: Keypad board

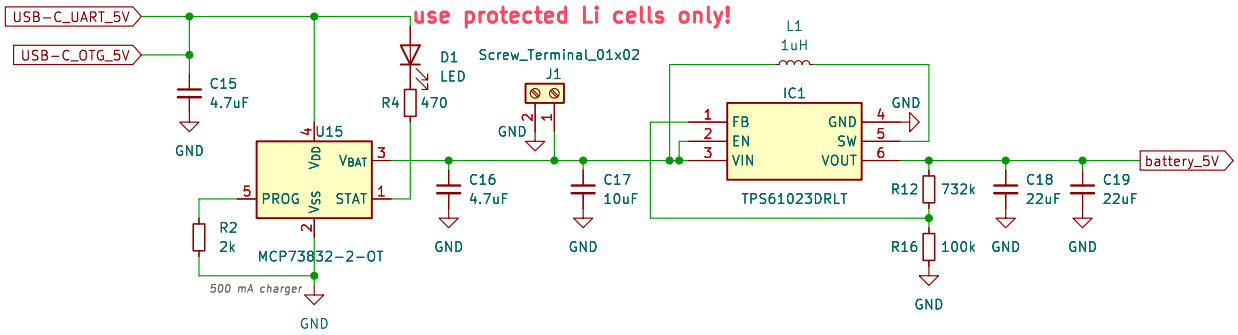
Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 4/7

Micro SD connector

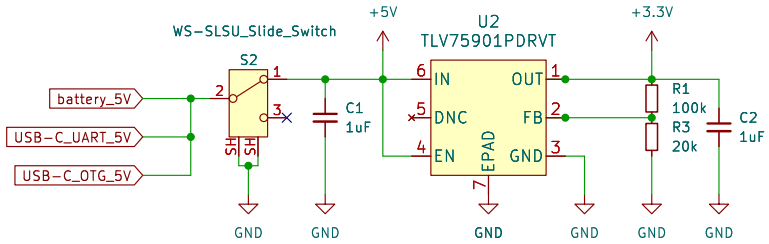


Sheet: /Micro SD connector/		
File: micro-sd-connector.kicad_sch		
Title: Keypad board		
Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 5/7

Battery power source with charging circuit

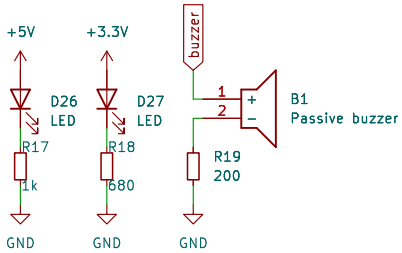


5V LDO

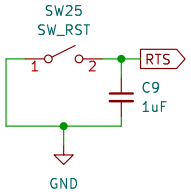


Sheet: /Power source/		
File: power-source.kicad_sch		
Title: Keypad board		
Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 6/7

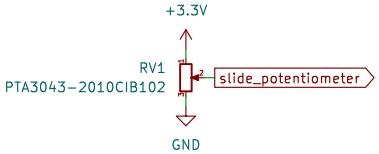
Indicators



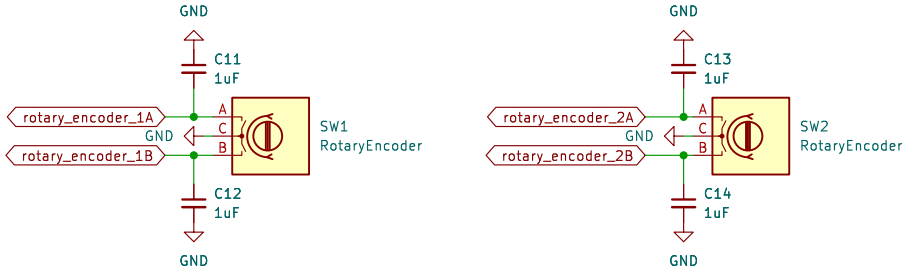
Manual reset



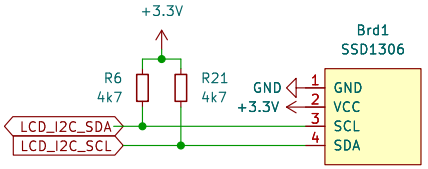
Slide potentiometer



Rotary encoders



LCD Display



Button matrix1

File: button-matrix.kicad_sch

Button led strip1

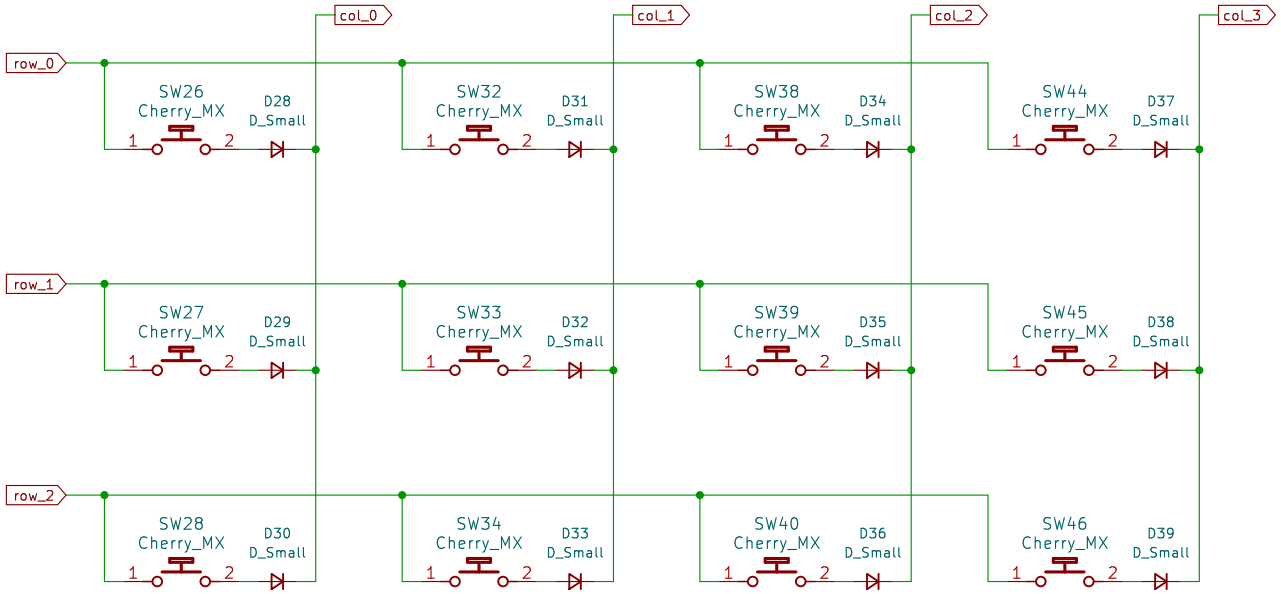
File: button-led-strip.kicad_sch

Sheet: /IO/
File: io.kicad_sch

Title: Keypad board

Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 7/7

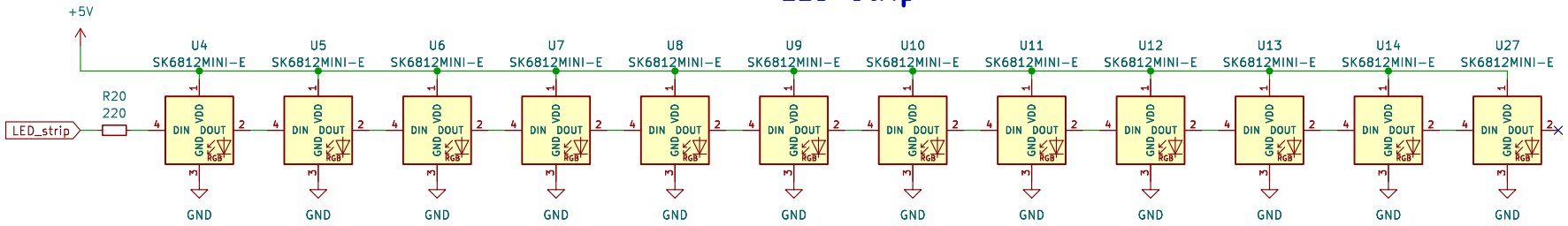
Button matrix (4x3)



Switches – best if transparent for LED light pass through (e.g. LED Cherry MX)
Diodes – 12x 1N4148W-13-F

Sheet: /IO/Button matrix1/		
File: button-matrix.kicad_sch		
Title: Keypad board		
Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 8/7

LED strip



Sheet: /IO/Button led strip1/		
File: button-led-strip.kicad_sch		
Title: Keypad board		
Size: A4	Date: 2023-11-15	**Rev: 1.1**
KiCad E.D.A. kicad 7.0.8		Id: 9/7