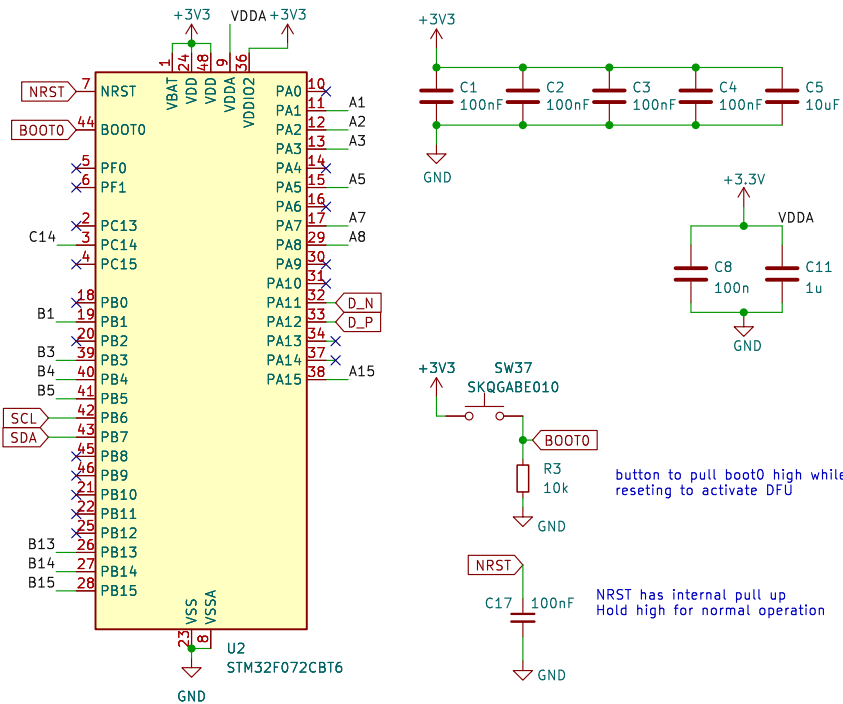
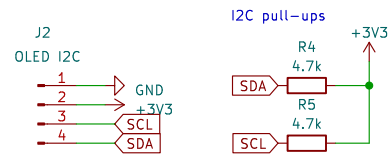


## MCU



## OLED display

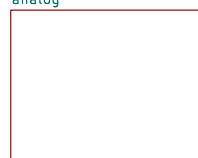


## key matrix



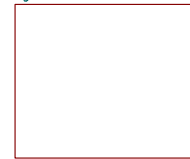
File: key\_matrix.kicad\_sch

## analog



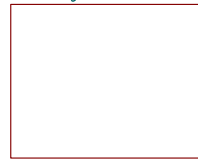
File: analog.kicad\_sch

## rgb



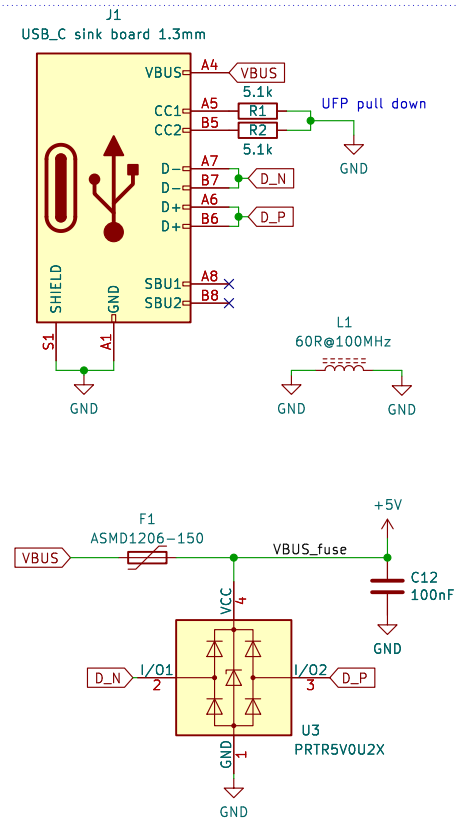
File: rgb.kicad\_sch

## mounting\_holes



File: mounting\_holes.kicad\_sch

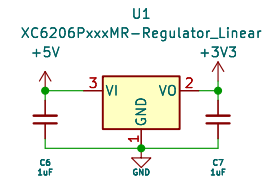
## USB-C and ESD



usb signal impedance ref:  
4 layer PCB, stack up: JLC04161H-7628  
coplanar differential pair  
signal spacing: 0.2mm/0.15mm  
signal to ground spacing: 0.2mm/0.15mm  
signal trace width: 0.2644mm/0.2096mm

<https://jlcpcb.com/pcb-impedance-calculator/>

## 3.3V LDO



COL0	MUX_CH0
COL1	MUX_CH1
COL2	MUX_CH2
COL3	MUX_CH3
COL4	MUX_CH4
COL5	MUX_CH10
COL6	MUX_CH12
COL7	MUX_CH14
COL8	MUX_CH15
COL9	MUX_CH13

ROW0	A3
ROW1	A5
ROW2	A7
ROW3	B1

AMUX_SEL_0	B15
AMUX_SEL_1	B14
AMUX_SEL_2	B13

APLEX_EN0	A8
APLEX_EN1	C14

ADC	A2
APLEX_OUT	A1

RGB	A15
-----	-----

KNOB_SW	B3
EncA	B4
EncB	B5

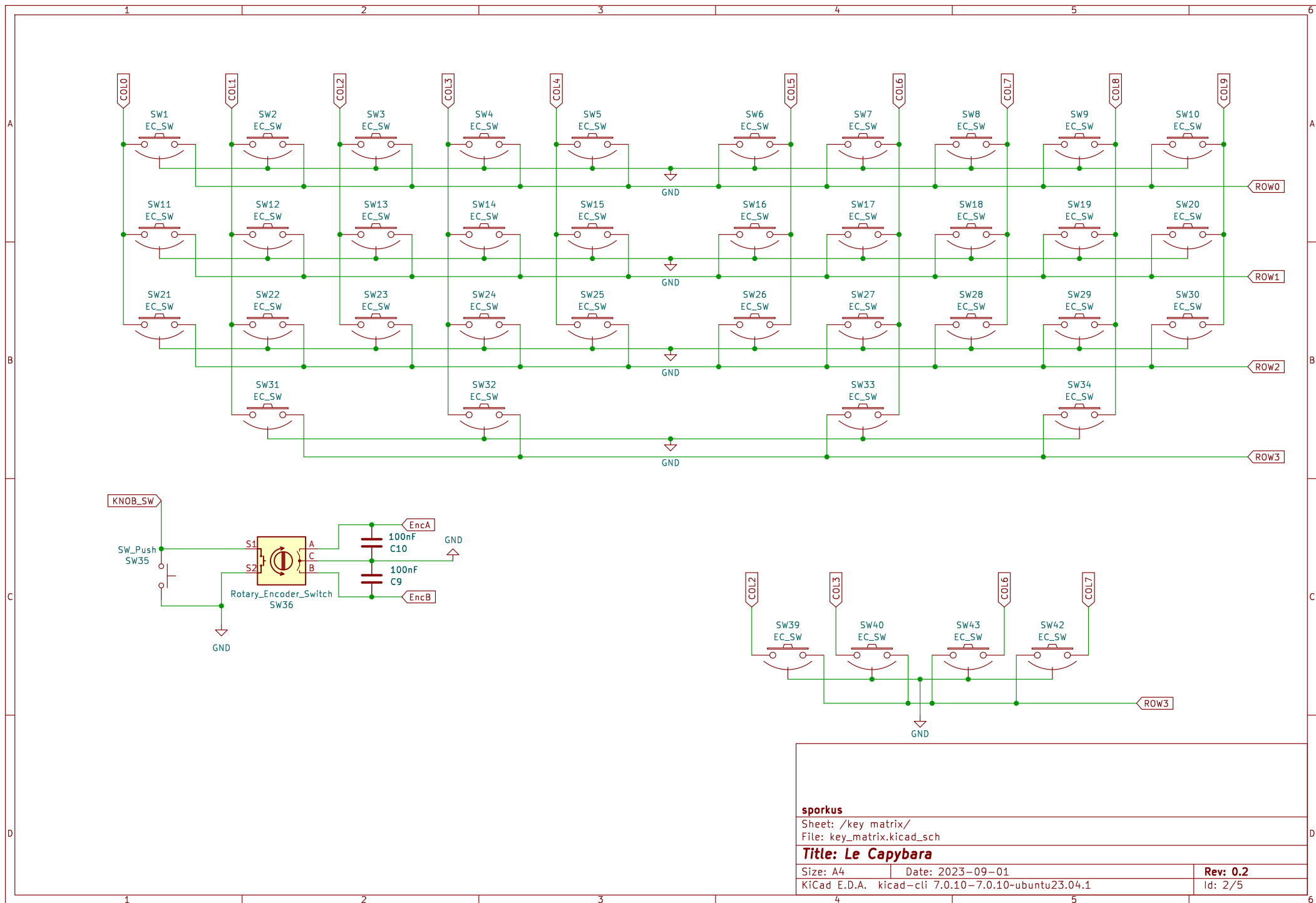
Fixes analog, RGB schematic  
**sporkus**

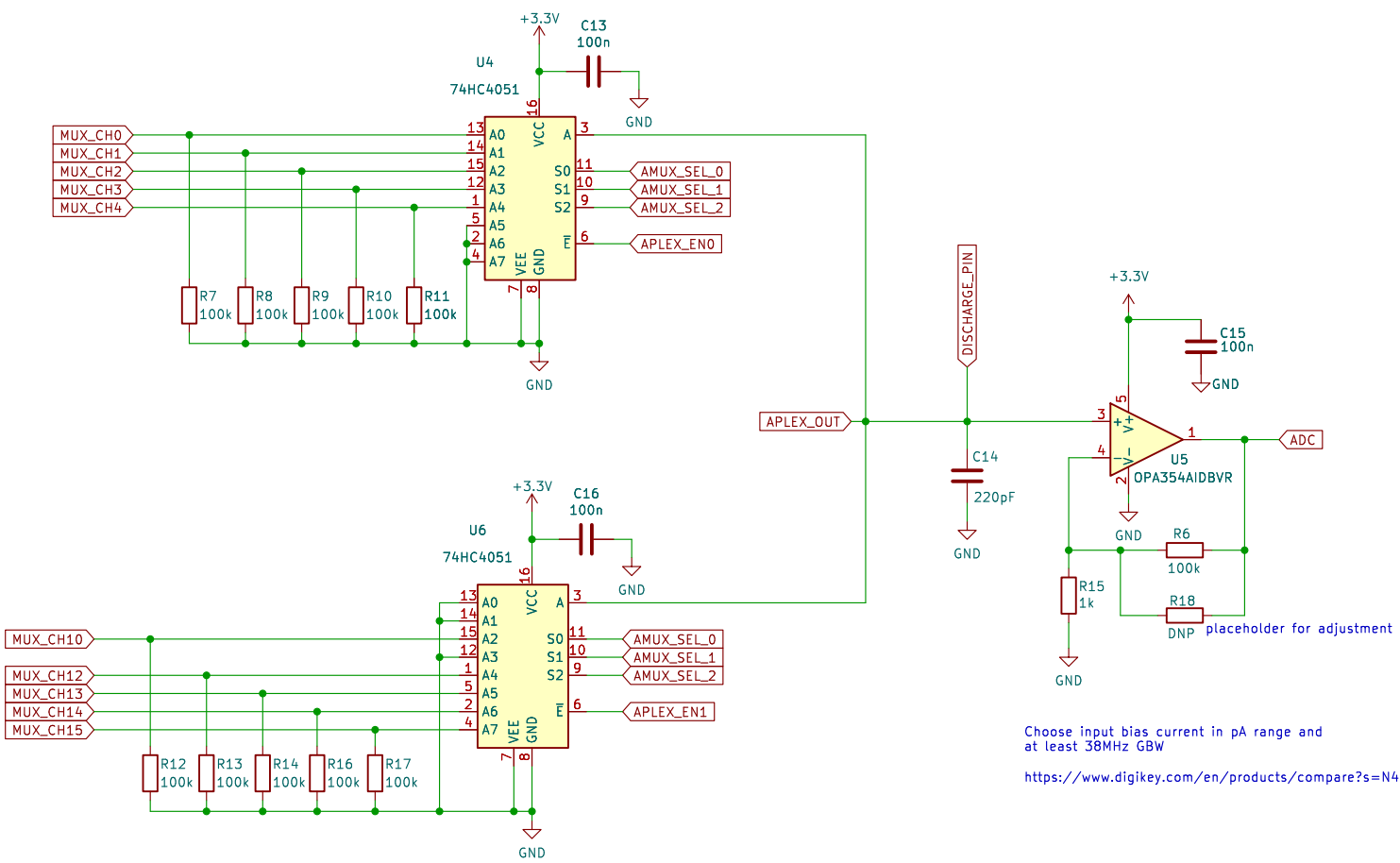
Sheet: /  
File: le\_capybara.kicad\_sch

**Title: Le Capybara**

Size: A4 Date: 2023-09-01  
KiCad E.D.A. kicad-cli 7.0.10-7.0.10-ubuntu23.04.1

Rev: 0.2  
Id: 1/5





Choose input bias current in pA range and  
at least 38MHz GBW

<https://www.digikey.com/en/products/compare?s=N4lgzCBcDa4AwEYBMbWA7CANCfu2KxAXVQBvYnti1UUAQqgNlzFrXuyYYTtUOTck>

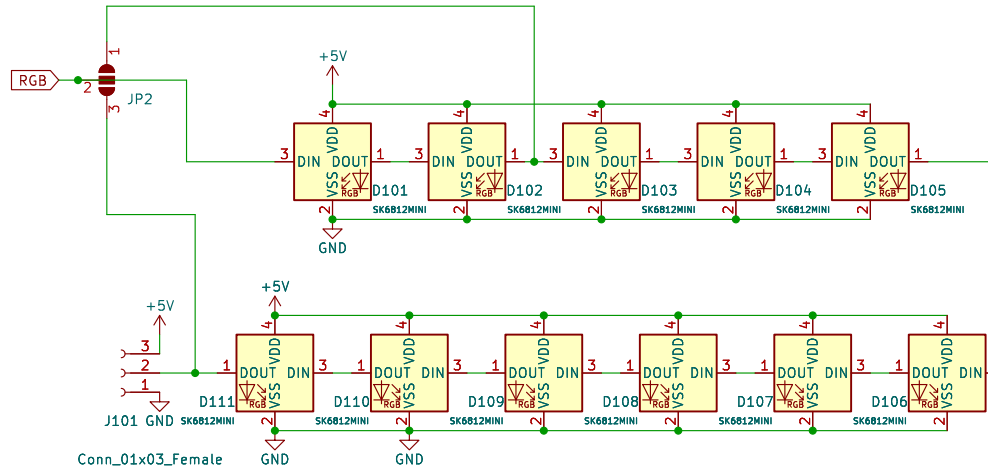
sporkus

Sheet: /analog/  
File: analog.kicad\_sch

Title: Le Capybara

Size: A4 Date: 2023-09-01  
KiCad E.D.A. kicad-cli 7.0.10-ubuntu23.04.1

Rev: 0.2  
Id: 3/5



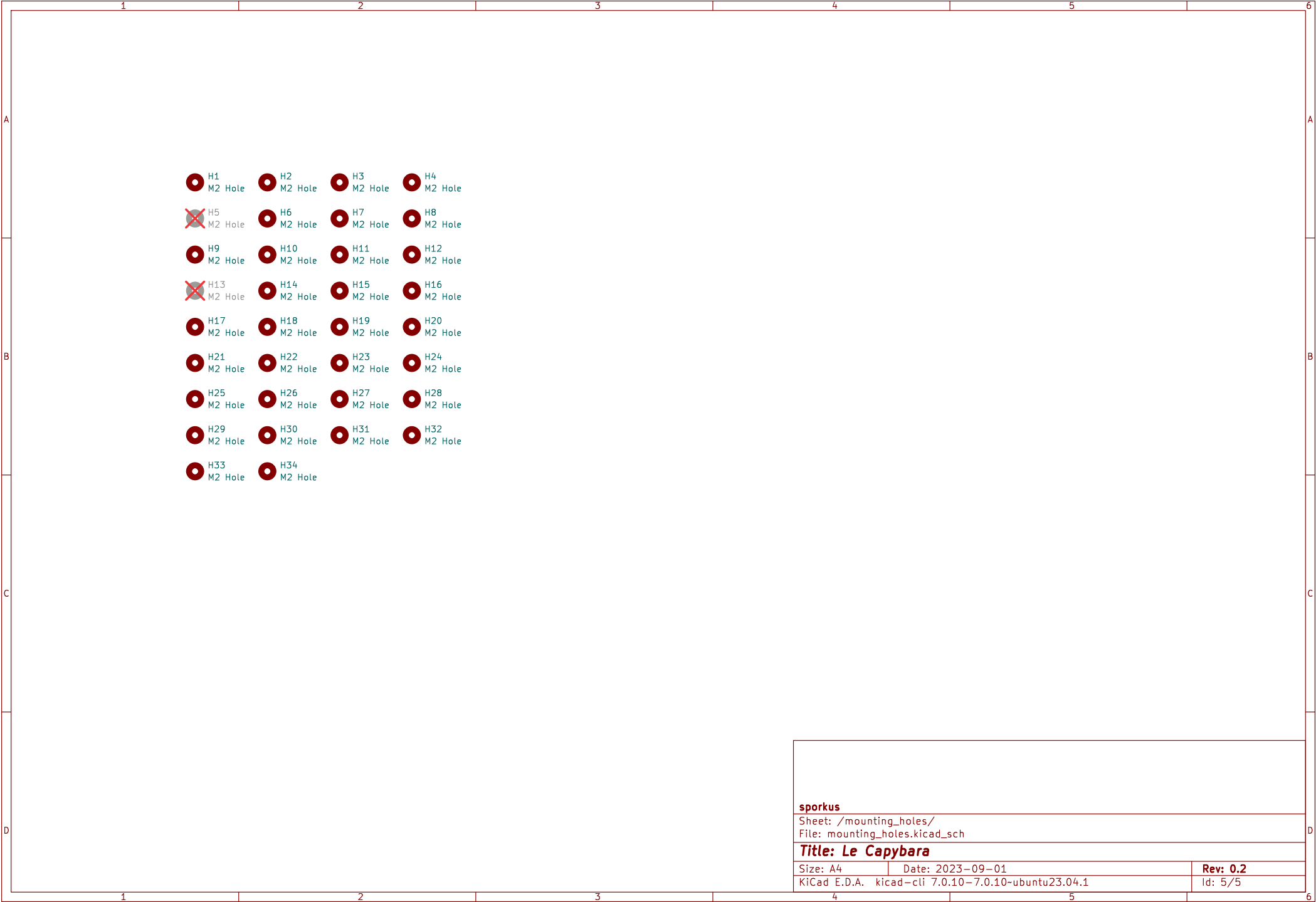
sporkus

Sheet: /rgb/  
File: rgb.kicad\_sch

**Title: Le Capybara**

Size: A4 Date: 2023-09-01  
KiCad E.D.A. kicad-cli 7.0.10-7.0.10-ubuntu23.04.1

**Rev: 0.2**  
Id: 4/5



sporkus

Sheet: /mounting\_holes/  
File: mounting\_holes.kicad\_sch

**Title: Le Capybara**

Size: A4	Date: 2023-09-01	Rev: 0.2
KiCad E.D.A. kicad-cli 7.0.10-7.0.10-ubuntu23.04.1		Id: 5/5