

Sheet: /UI_POT/ File: UI_POT.kicad_sch

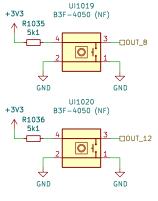
Title:

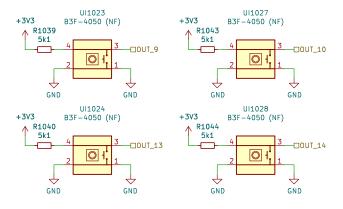
 Size: A4
 Date:
 Rev:

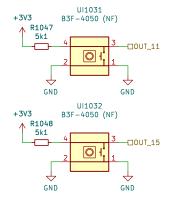
 KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1
 Id: 2/10

Simulation:

http://tinyurl.com/y229mty4





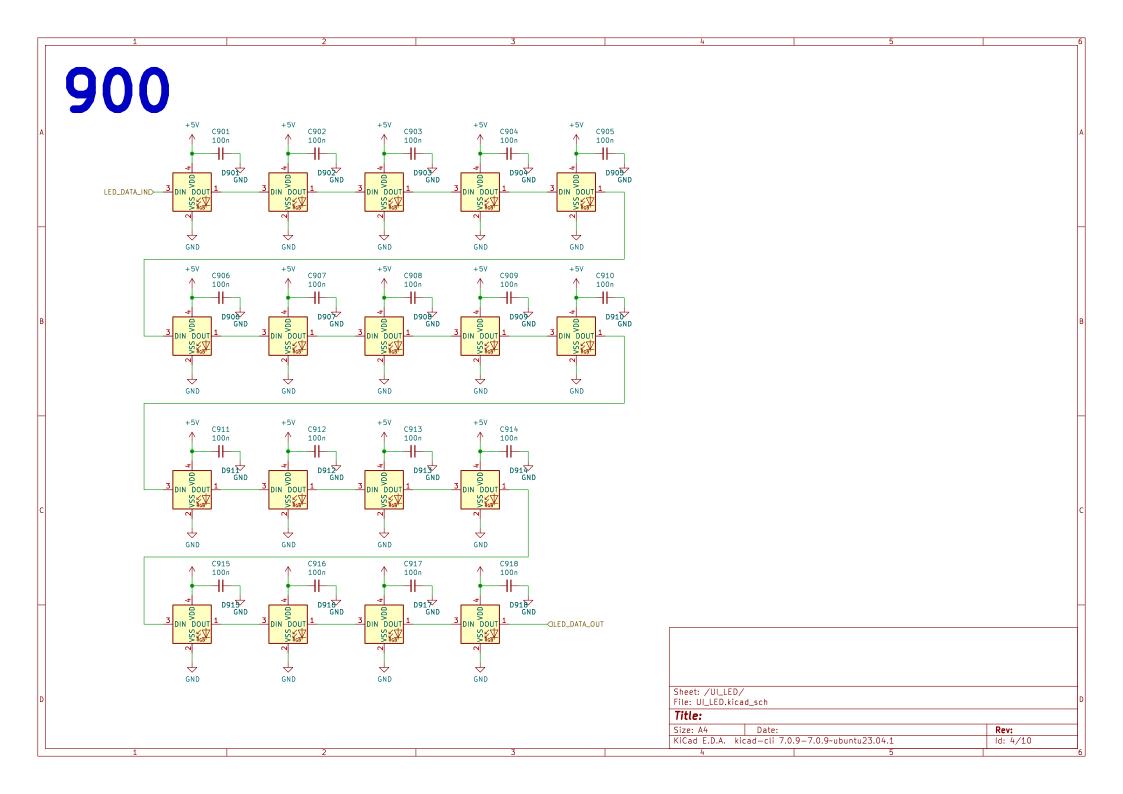


Sheet: /UI_BUTTON/
File: UI_BUTTON.kicad_sch

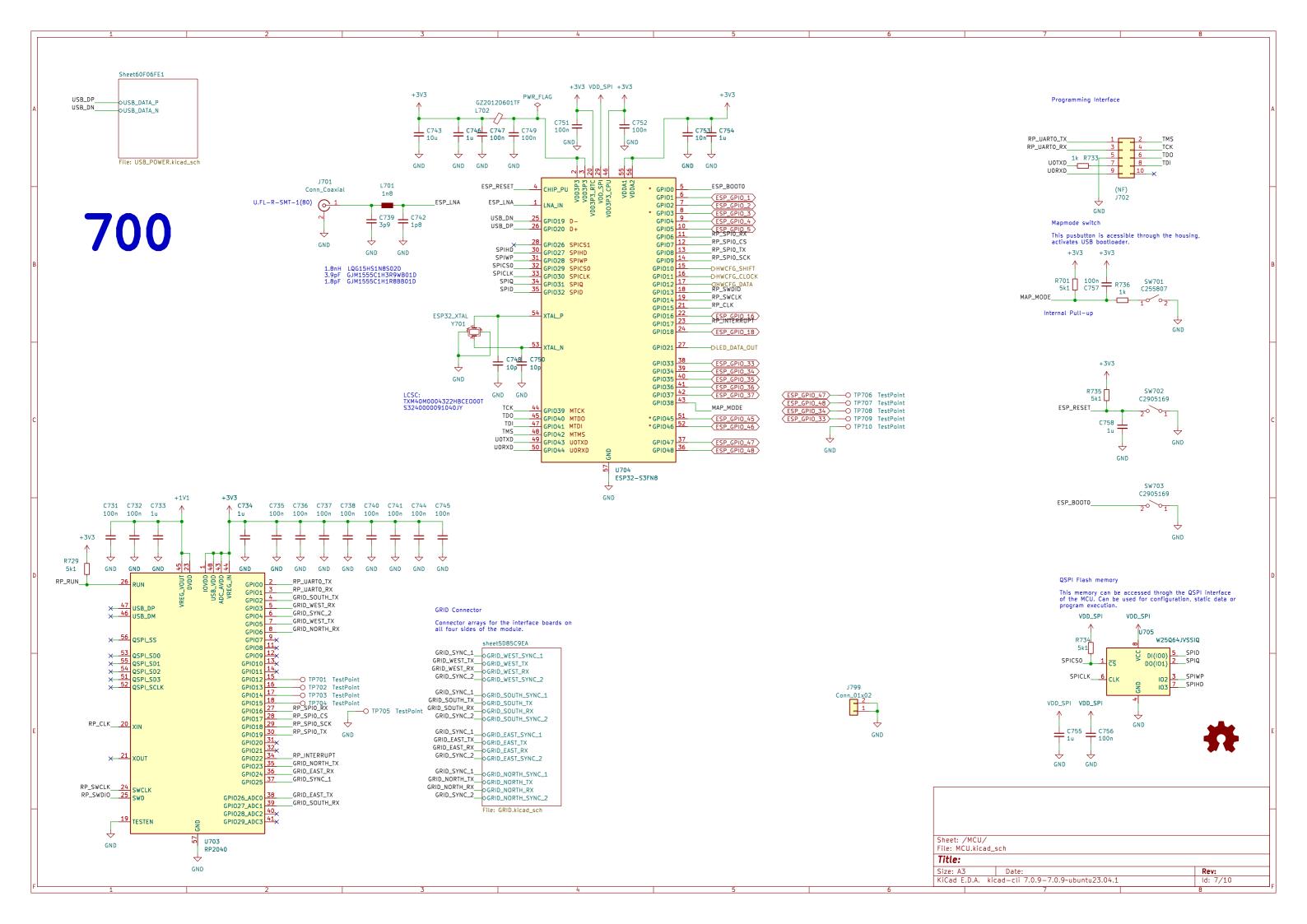
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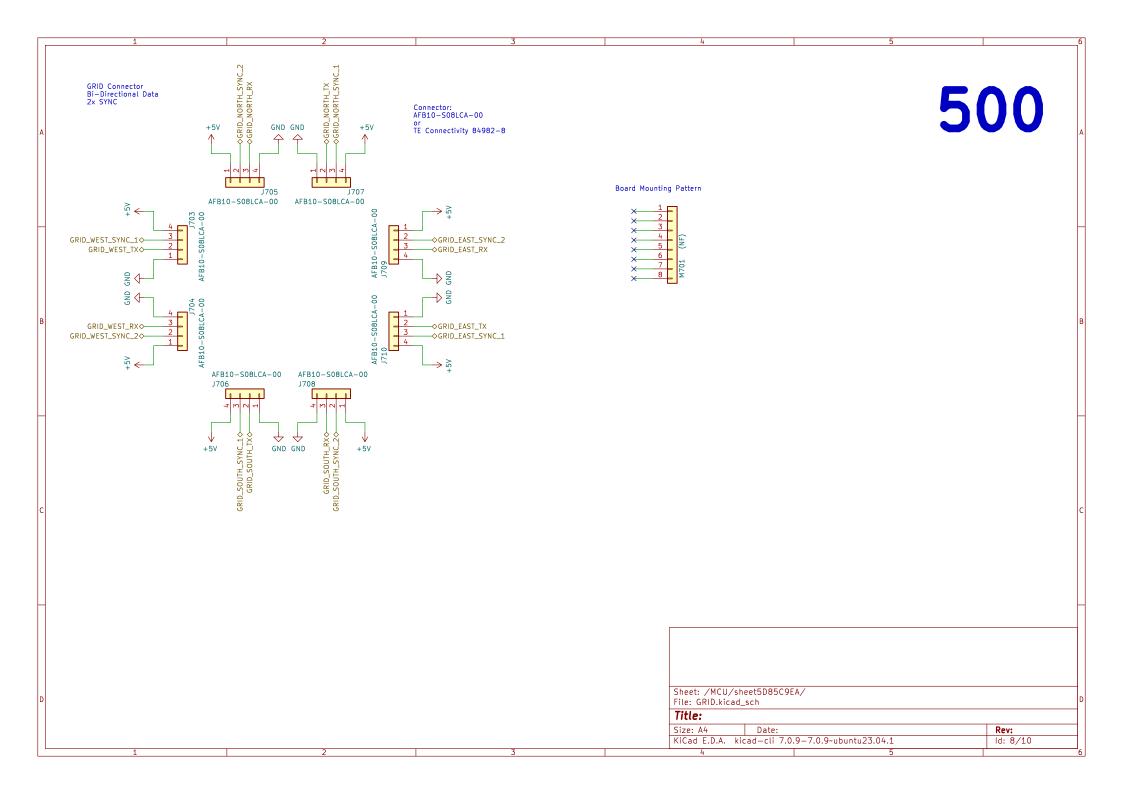
 Size: A4
 Date:
 Rev:

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1000 R1001 1k C1001 1k C1005 GND R1002 1k GND IN_2D-----R1006 C1002 1k C1006 GND R1003 GND IN_4D-----+3٧3 R1007 C1003 1 k + C1007 100n 13 X0 A X1 X1 X2 X2 X3 GND -DOUT R1004 GND 1k Х3 IN_6D------X5 R1008 C1004 U1001 74HC4051 1 k C1008 100n 11 10 9 GND ADDRESS_AD +3V3 ADDRESS_BD-VSS ADDRESS_CD-GND + C1009 GND GND Sheet: /Sheet5D7C8BFD/ File: UI_MUX.kicad_sch Title: Size: A4 Date: Rev: KiCad E.D.A. kicad-cli 7.0.9-7.0.9~ubuntu23.04.1 ld: 5/10 1000 R1009 1k C1010 1k C1014 GND R1010 1k GND IN_2D-----R1014 C1011 1k C1015 GND R1011 GND IN_4D-----+3٧3 R1015 C1012 1 k + C1016 100n \rightarrow 13 14 15 12 GND X0 8 -DOUT R1012 X2 GND 1 k Х3 IN_6D-----C1013 1k X5 U1002 74HC4051 C1017 100n 11 10 9 GND ADDRESS_AD +3V3 ADDRESS_BD-VSS ADDRESS_CD-GND + C1018 GND GND Sheet: /sheet5D8763D6/ File: UI_MUX.kicad_sch Title: Size: A4 Date: Rev: KiCad E.D.A. kicad-cli 7.0.9-7.0.9~ubuntu23.04.1 ld: 6/10





ESD Diodes

VBUS U706
SESRV05-4

WHY N 3
USB_DATA_N O GND

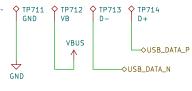
SESRV N N N N 1

GND

GND

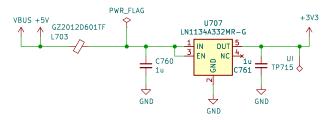
GND

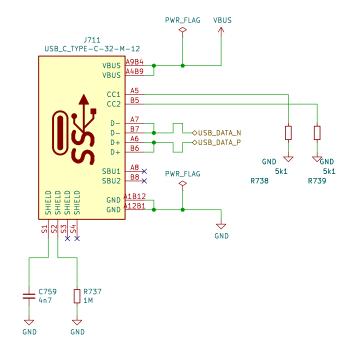
GND



+3V3 LDO Regulators

Regulators for generating independent power rails for the microcontroller and the user interface.



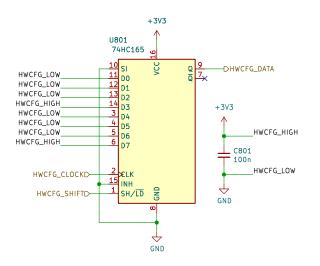


Sheet: /MCU/Sheet60F06FE1/ File: USB_POWER.kicad_sch

Title:

 Size: A4
 Date:
 Rev:

 KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1
 Id: 9/10



Board Identification

Grid firmware can identify the hardware and the board revision thorugh a 3 wire serial interface using one or more shift register as read only memory. The content of the memory is defined by pulling the inputs high or low through pcb traces or solderable configuration jumpers.

4b'Model + 4b'Revision + nb'Reserved (Multiple shift registers)

```
DO: MODEL (LSB)
D1: MODEL
D2: MODEL
D3: MODEL (MSB)
D4: REVISION (LSB)
D5: REVISION
D6: REVISION (MSB)
```

Model Codes (D3-D0):

Po16 0000 Bo16 0001 PBF4 0010 EN16 0011

Revision Codes (D7-D4):

RevA 0000 RevB 0001 RevC 0010 RevD 0011

> Sheet: /HWCFG/ File: HWCFG.kicad_sch

Title:

 Size: A4
 Date:
 Rev:

 KiCad E.D.A. kicad-cli 7.0.9-7.0.9~ubuntu23.04.1
 Id: 10/10

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