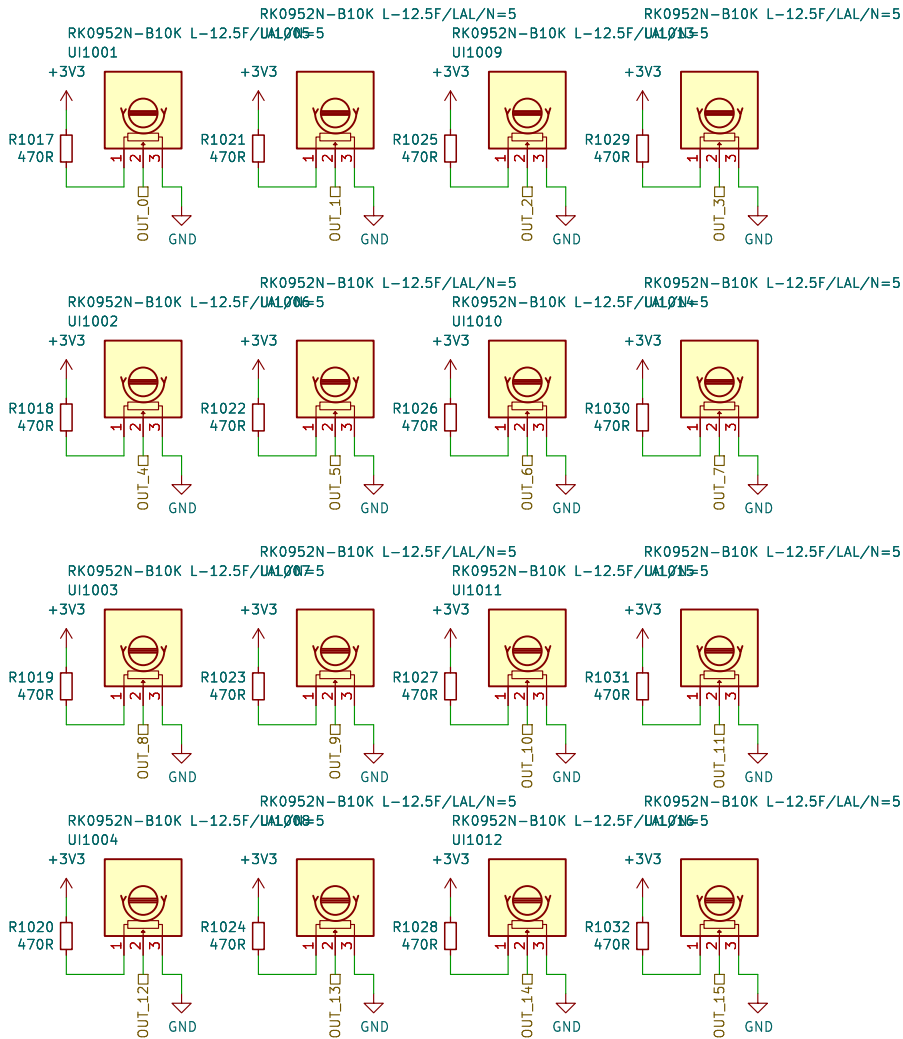


Common Sheets:
500 GRID
600 USB_POWER
700 MCU

Module Specific:
800 HWCFG
900 LED
1000 UI

1000



Sheet: /UI_POT/
File: UI_POT.kicad_sch

Title:

Size: A4

Date:

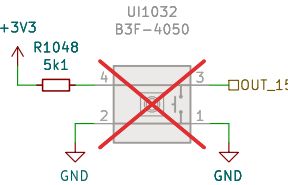
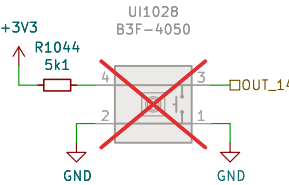
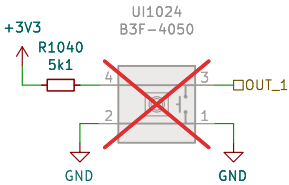
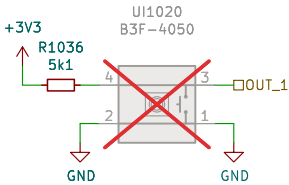
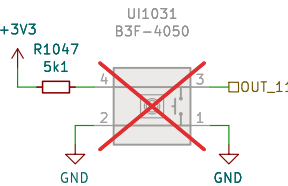
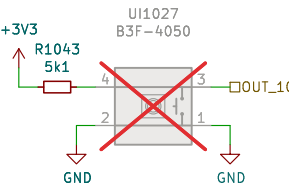
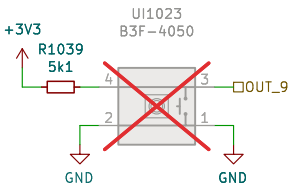
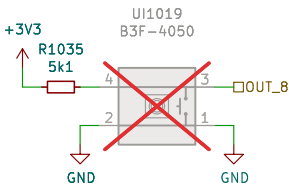
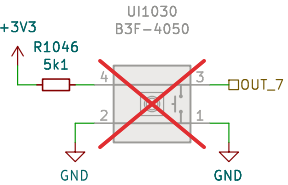
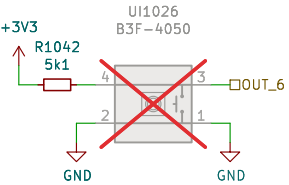
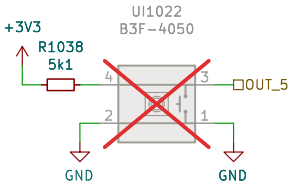
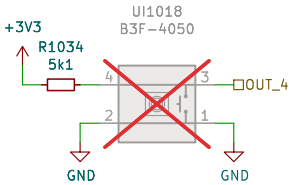
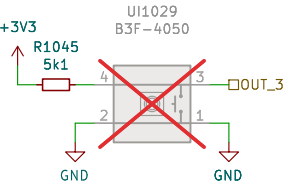
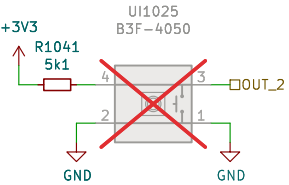
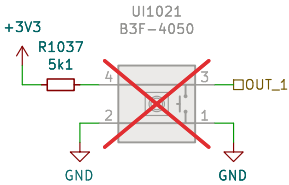
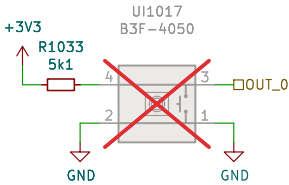
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Simulation:
<http://tinyurl.com/y229mty4>



Sheet: /UI_BUTTON/
File: UI_BUTTON.kicad_sch

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Sheet: /UI_LED/
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Title:

Size: A4
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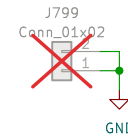
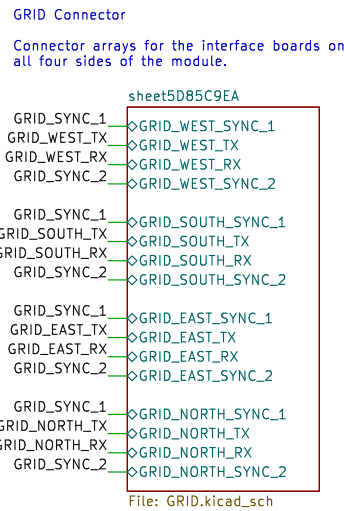
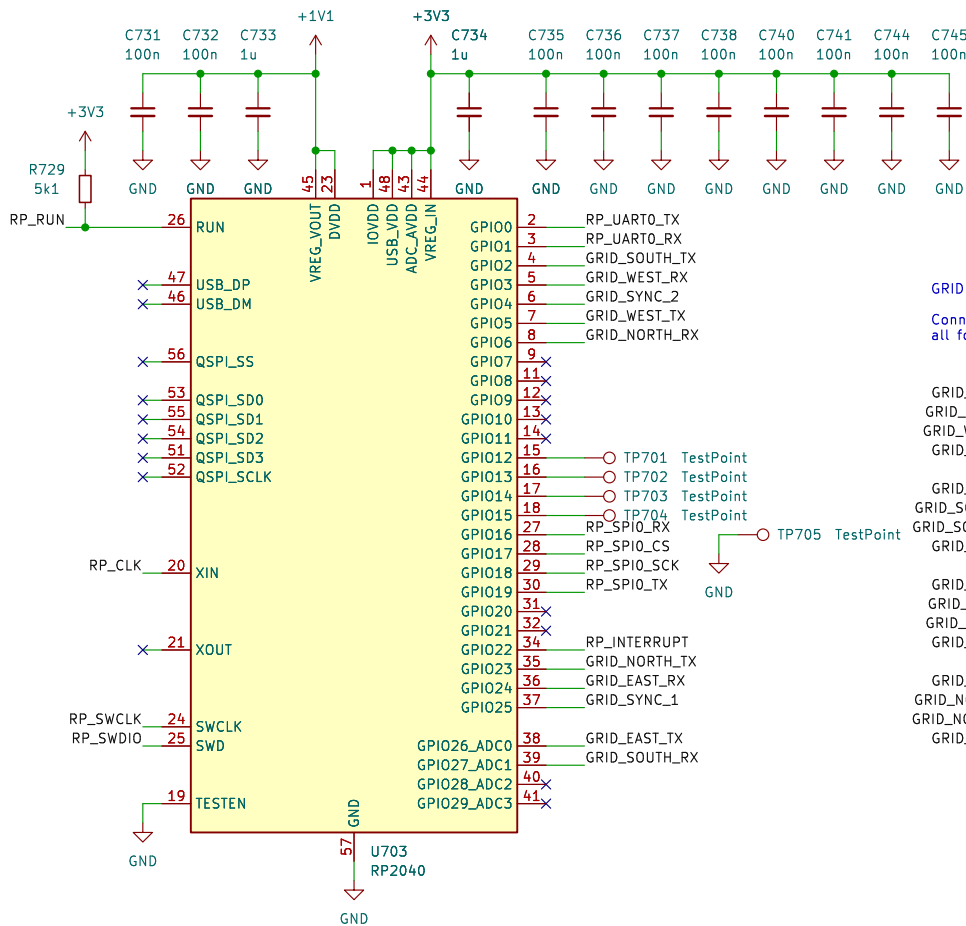
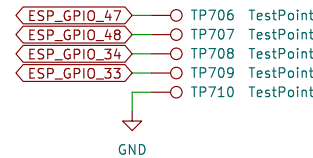
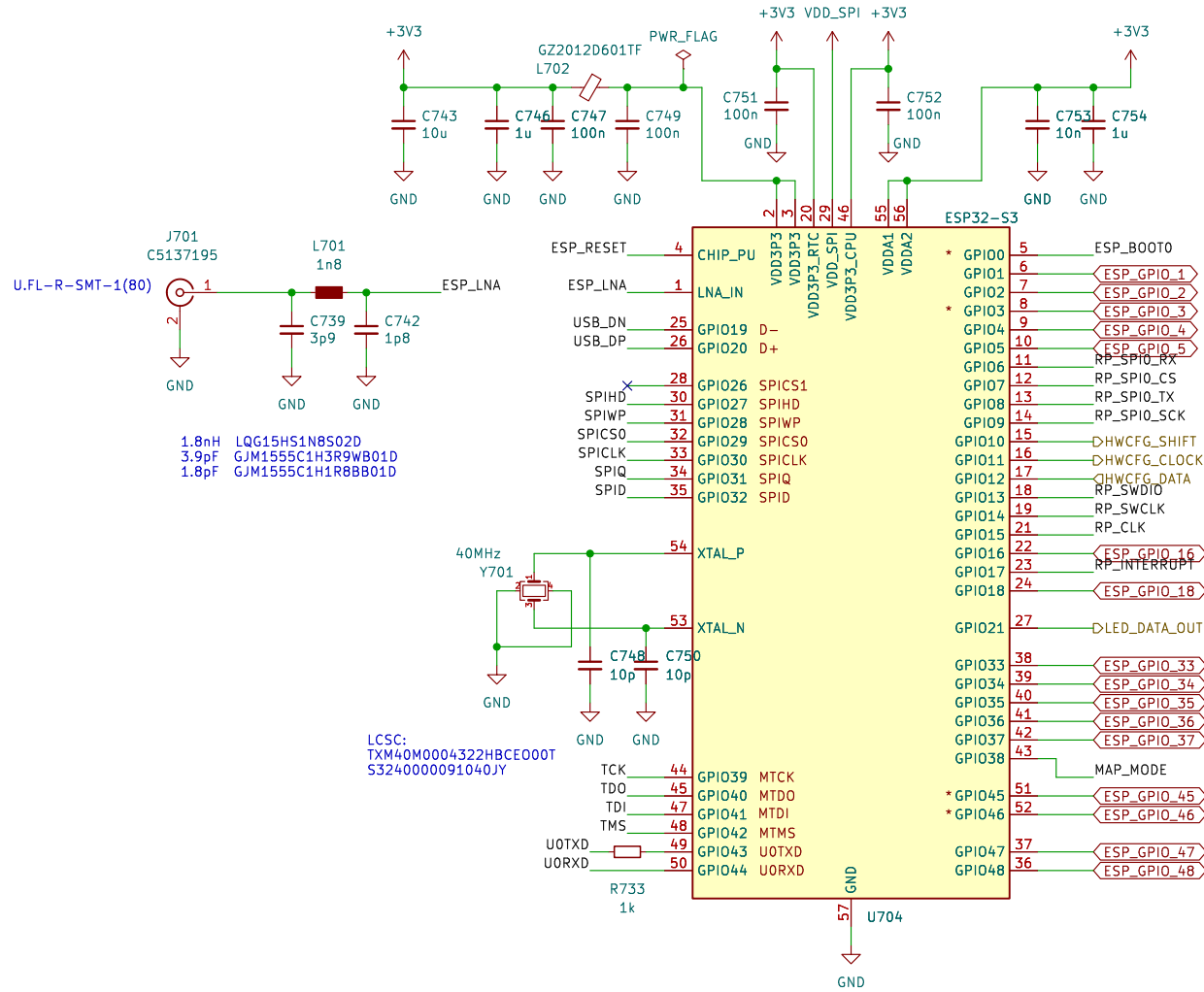
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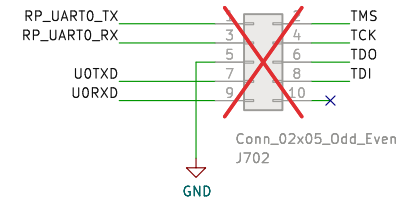
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700

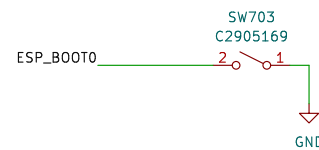
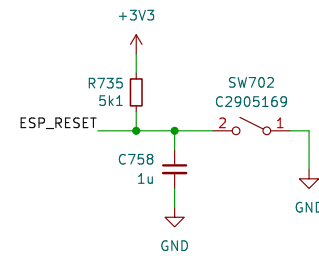
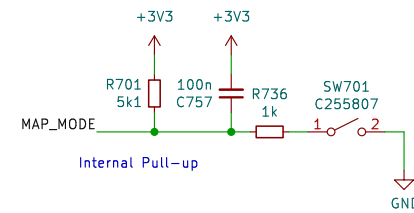


Programming Interface



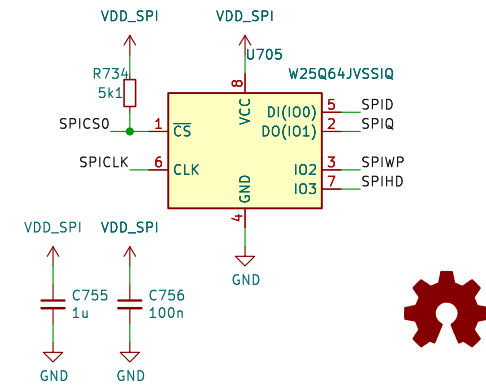
Mapmode switch

This pusbutton is accessible through the housing, activates USB bootloader.



QSPI Flash memory

This memory can be accessed through the QSPI interface of the MCU. Can be used for configuration, static data or program execution.



Grid firmware can identify the hardware and the board revision through 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.

D0: MODEL (LSB)
D1: MODEL
D2: MODEL
D3: MODEL (MSB)
D4: REVISION (LSB)
D5: REVISION
D6: REVISION
D7: REVISION (MSB)

Po16	0000
Bo16	0001
PBF4	0010
EN16	0011
...	

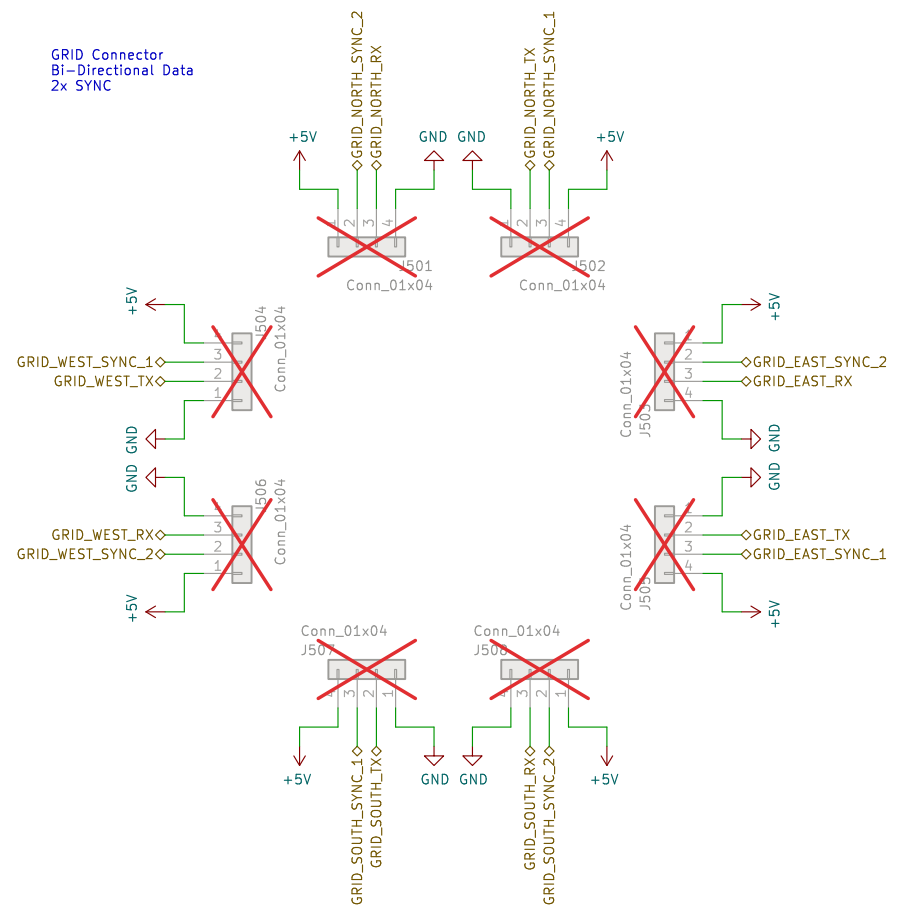
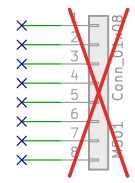
```
RevA 0000
RevB 0001
RevC 0010
RevD 0011
...
```

Sheet: /HWCFG/ File: HWCFG.kicad_sch	
Title:	
Size: A4	Date:
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500

GRID Connector
Bi-Directional Data
2x SYNC

Board Mounting Pattern

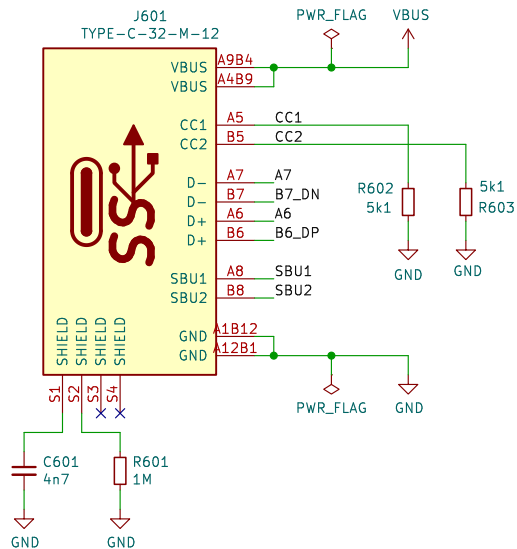


Sheet: /MCU/sheet5D85C9EA/ File: GRID.kicad_sch		
Title:		
Size: A4	Date:	Rev:
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600

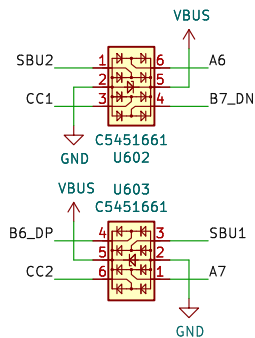
USB Port

USB C upstream facing port configured for 5V 3A power consumption.



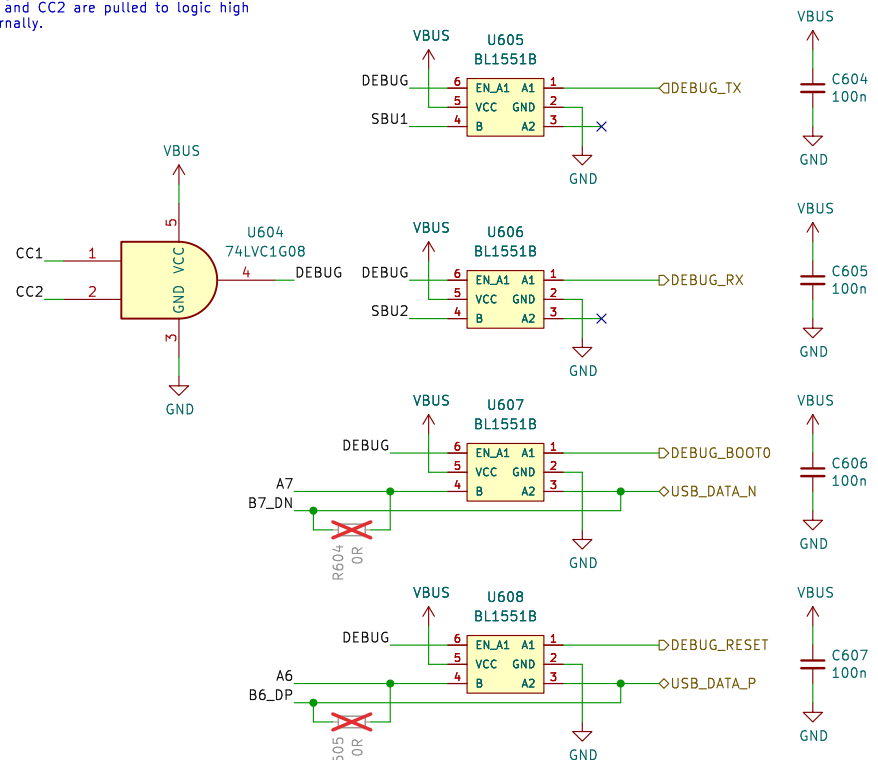
ESD Prot.

ESP protection for all 8 signals externally accessible via the USB C connector.



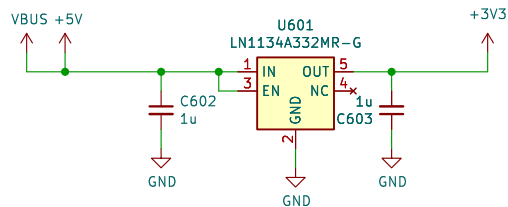
Debug-Mode Multiplexing

Debug.mode is activated when both CC1 and CC2 are pulled to logic high externally.

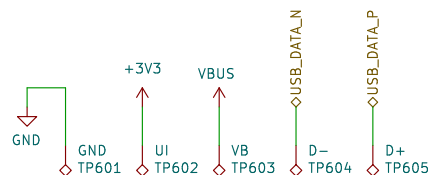


3V3 LDO

LDO regulator for generating the +3V3 power rail for the microcontroller and UI.



Testpoints



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

Title:

Size: A4 Date:

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