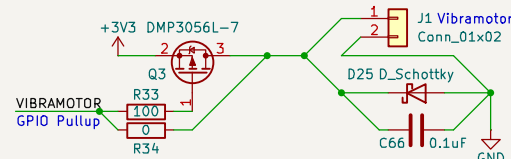
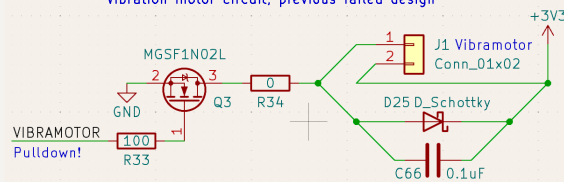


Vibration motor circuit, previous failed design



<https://docs.espressif.com/projects/esp-idf/en/latest/esp32c3/api-reference/peripherals/gpio.html>  
<https://projects.esp-idf/en/latest/esp32c3/api-guides/jtag-debugging/configure-other-jtag.html>  
<https://docs.espressif.com/projects/esp-idf/en/latest/esp32c3/api-reference/system/efuse.html>  
Remember to write a device id or encryption key to the 4 Kbit eFuse!

Warning, untested prototype!  
Pending quality assurance testing  
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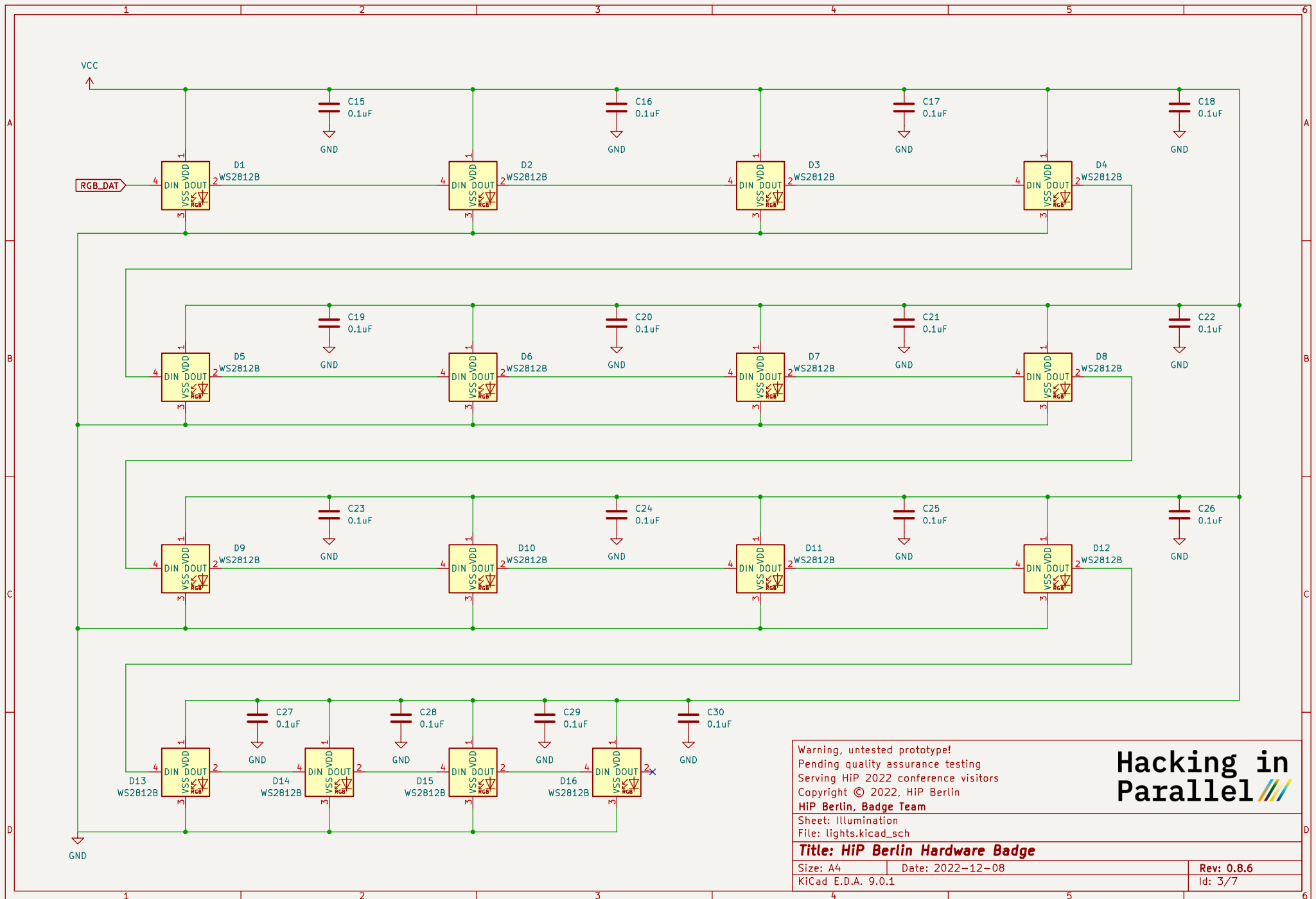
Sheet: Microcontrol  
File: control.kicad\_sch

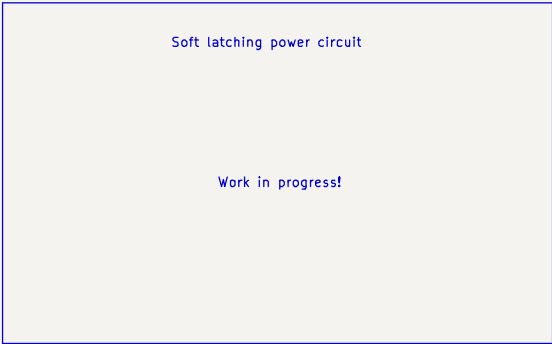
**Title: HiP Berlin Hardware Badge**

Size: A4 Date: 2022-12-08  
KiCad E.D.A. 9.0.1

**Hacking in  
Parallel**

Rev: 0.8.6  
Id: 2/7





Id: 4/7

SCL/SDA pullup may be 10K,  
and GPIO pullup may be 4K7.

I2C addresses include 0x2D,  
0x53 (returns user memory),  
and 0x57 (system memory.)

Mitch design

Helps nerds  
hack their  
electronics.

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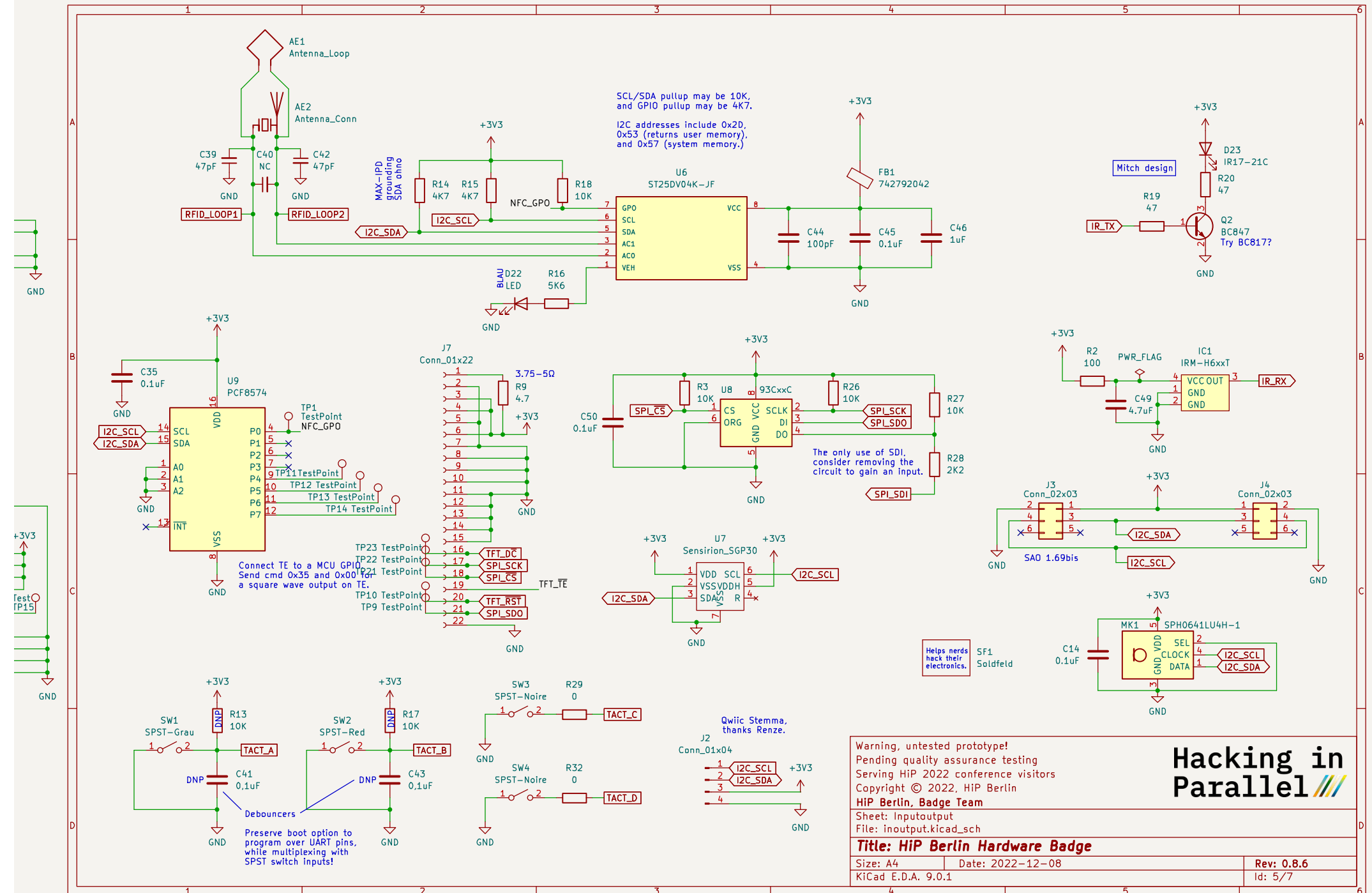
Sheet: Inputoutput  
File: inoutput.kicad\_sch

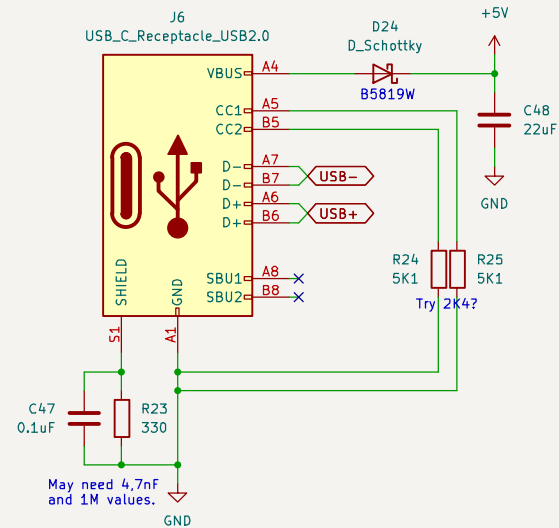
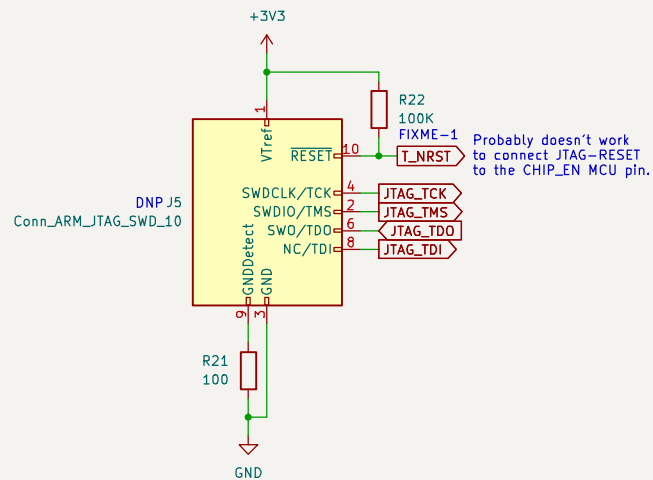
**Title: HiP Berlin Hardware Badge**

Size: A4 Date: 2022-12-08  
KiCad E.D.A. 9.0.1

Rev: 0.8.6  
Id: 5/7

**Hacking in  
Parallel**





<https://docs.espressif.com/projects/esp-idf/en/latest/esp32c3/api-guides/jtag-debugging/index.html>

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**Hacking in  
Parallel**

Sheet: Serialconnect  
File: serial.kicad\_sch

**Title: HiP Berlin Hardware Badge**

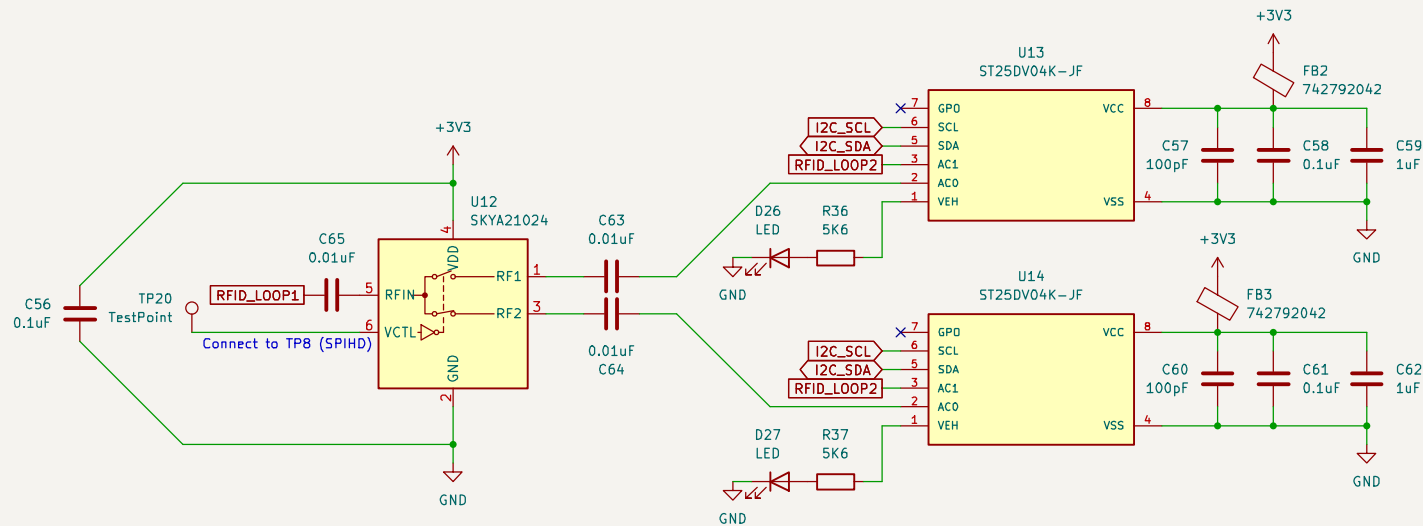
Size: A4

Date: 2022-12-08

Rev: 0.8.6

KiCad E.D.A. 9.0.1

Id: 6/7



Consider avoiding to place power matching circuits until functional tests conclude.

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 Sheet: Inputoutput1  
 File: nfceeprom.kicad\_sch

**Hacking in  
 Parallel**

**Title: HiP Berlin Hardware Badge**

Size: A4

Date: 2022-12-08

Rev: 0.8.6

KiCad E.D.A. 9.0.1

Id: 7/7