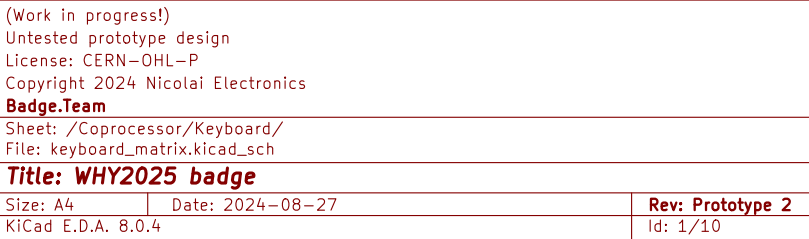
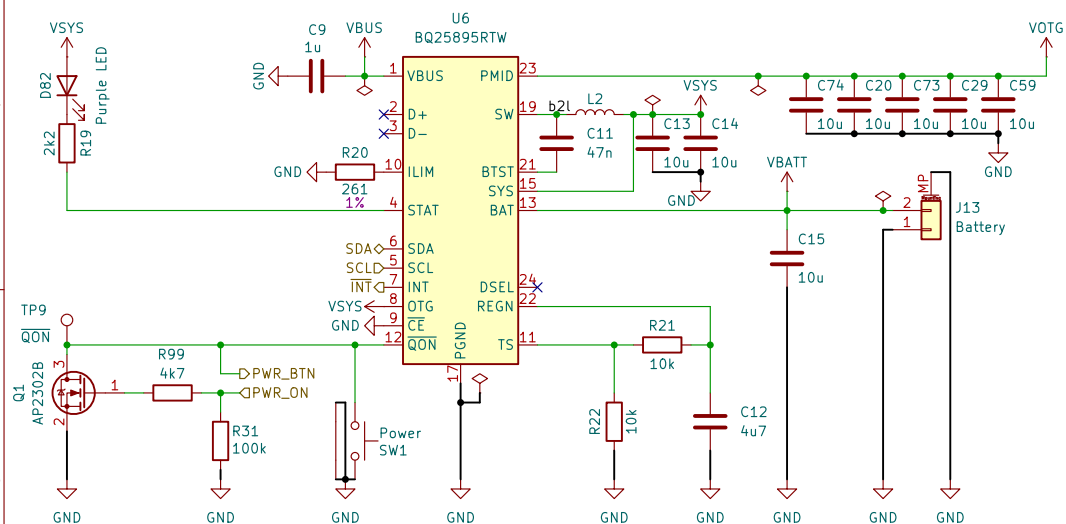


(Work in progress!)  
Untested prototype design  
License: CERN-OHL-P  
Copyright 2024 Nicolai Electronics  
**Badge.Team**  
Sheet: /Coprocessor/  
File: coprocessor.kicad\_sch

Title: WHY2025 badge	
Size: A4	Date: 2024-08-27
KiCad E.D.A. 8.0.4	Rev: Prototype 2
	Id: 1/10



## PMIC



Watch out with the I2C bus of this device, wrong configuration can be dangerous.

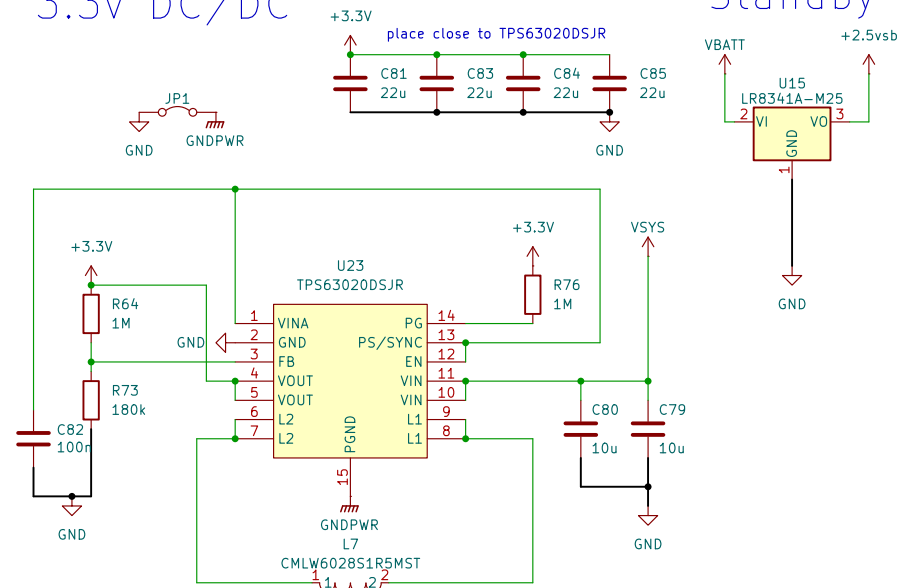
VBUS is the voltage coming from the input USB-C port. This voltage can be 5 up to 14 volts.

VOTG is 5V generated from VBATT or VBUS depending on the power source of the system.

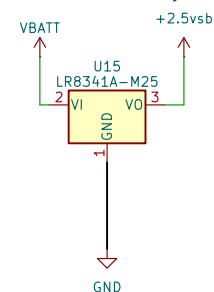
VBATT is connected to the rechargeable battery.

VSYS is an unregulated 3.5 to 4.5V output used to power the DC-DC converters for the rest of the components.

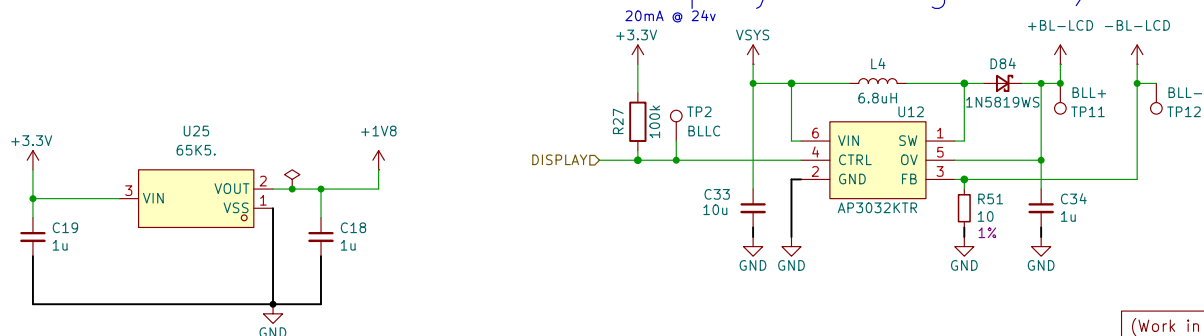
## 3.3v DC/DC



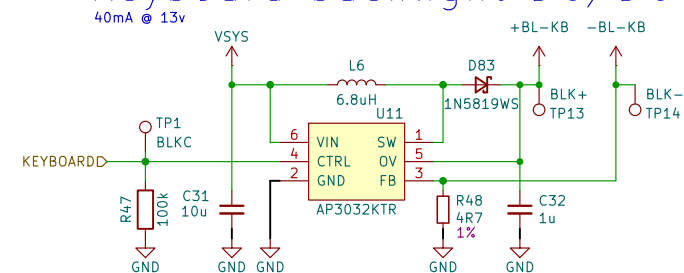
## Standby



## Display backlight DC/DC



## Keyboard backlight DC/DC



(Work in progress!)

Untested prototype design

License: CERN-OHL-P

Copyright 2024 Nicolai Electronics

**Badge.Team**

Sheet: /Power/

File: power.kicad\_sch

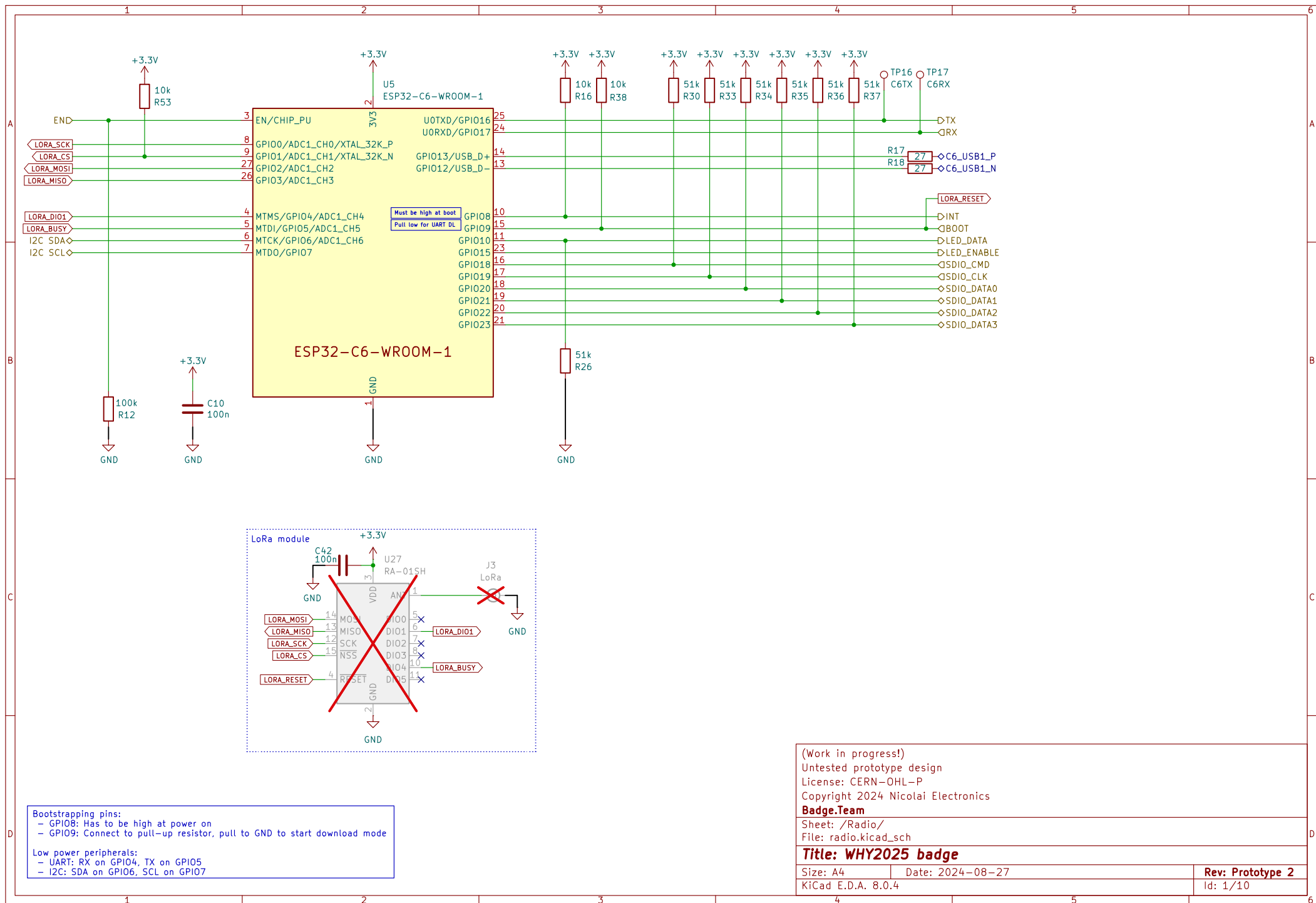
**Title: WHY2025 badge**

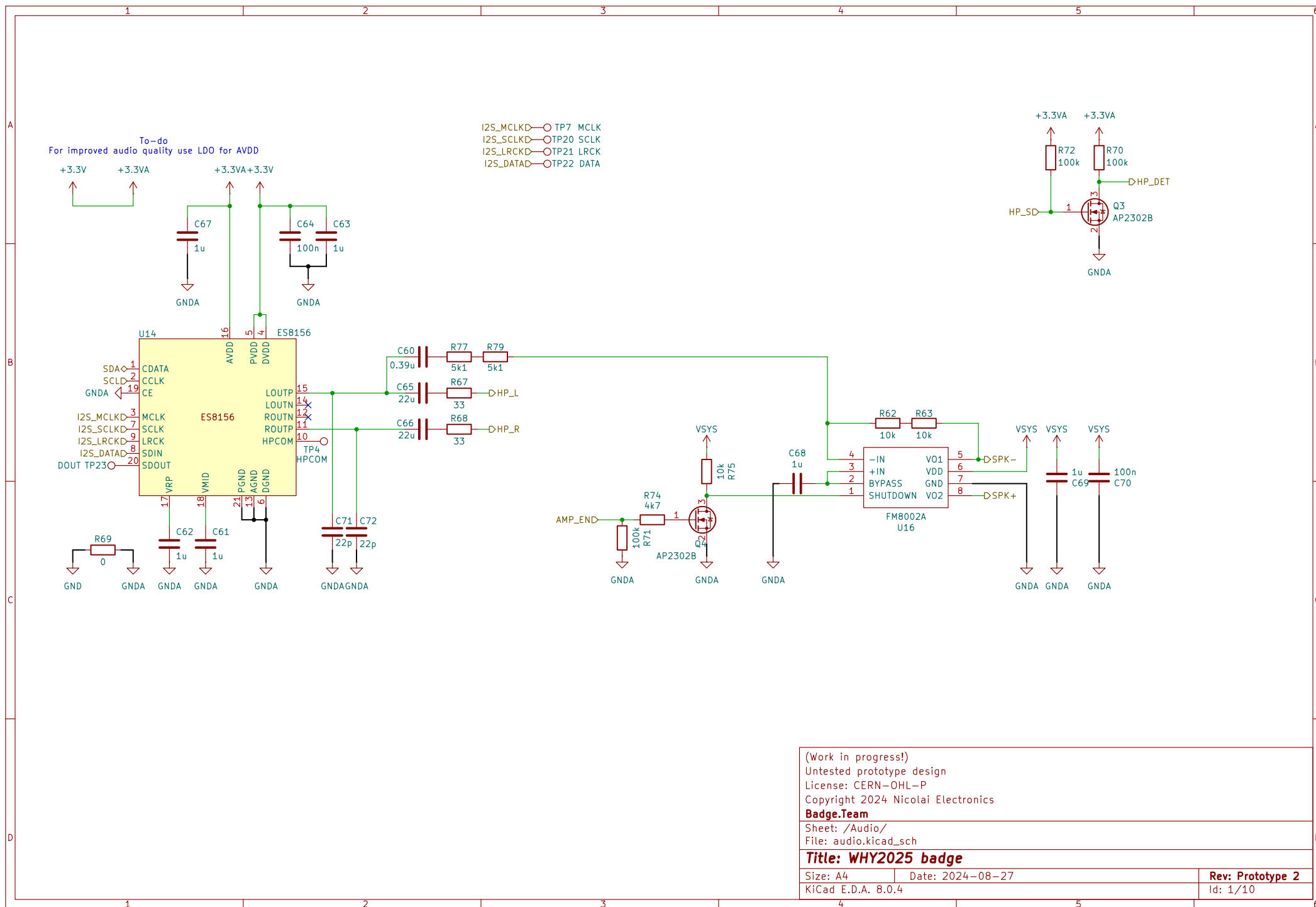
Size: A4 Date: 2024-08-27

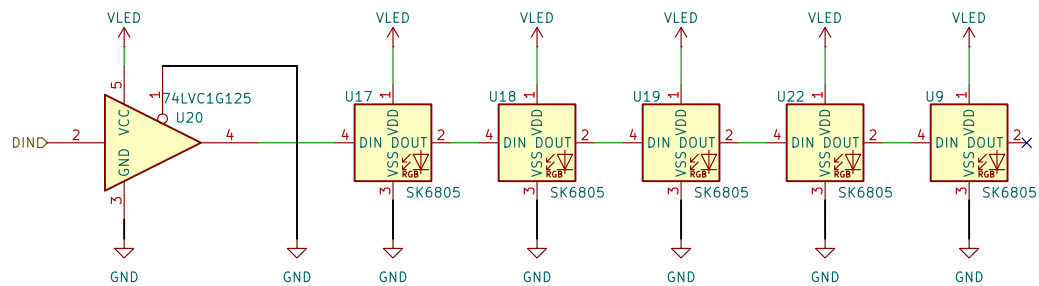
KiCad E.D.A. 8.0.4

**Rev: Prototype 2**

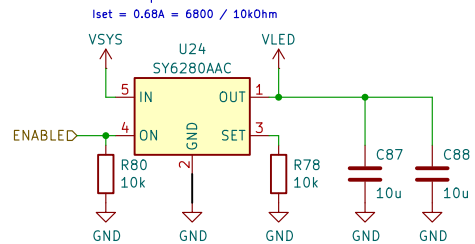
Id: 1/10







### Switched power: Vin for LEDs



(Work in progress!)  
 Untested prototype design  
 License: CERN-OHL-P  
 Copyright 2024 Nicolai Electronics

**Badge.Team**

Sheet: /LEDs/  
 File: leds.kicad\_sch

**Title: WHY2025 badge**

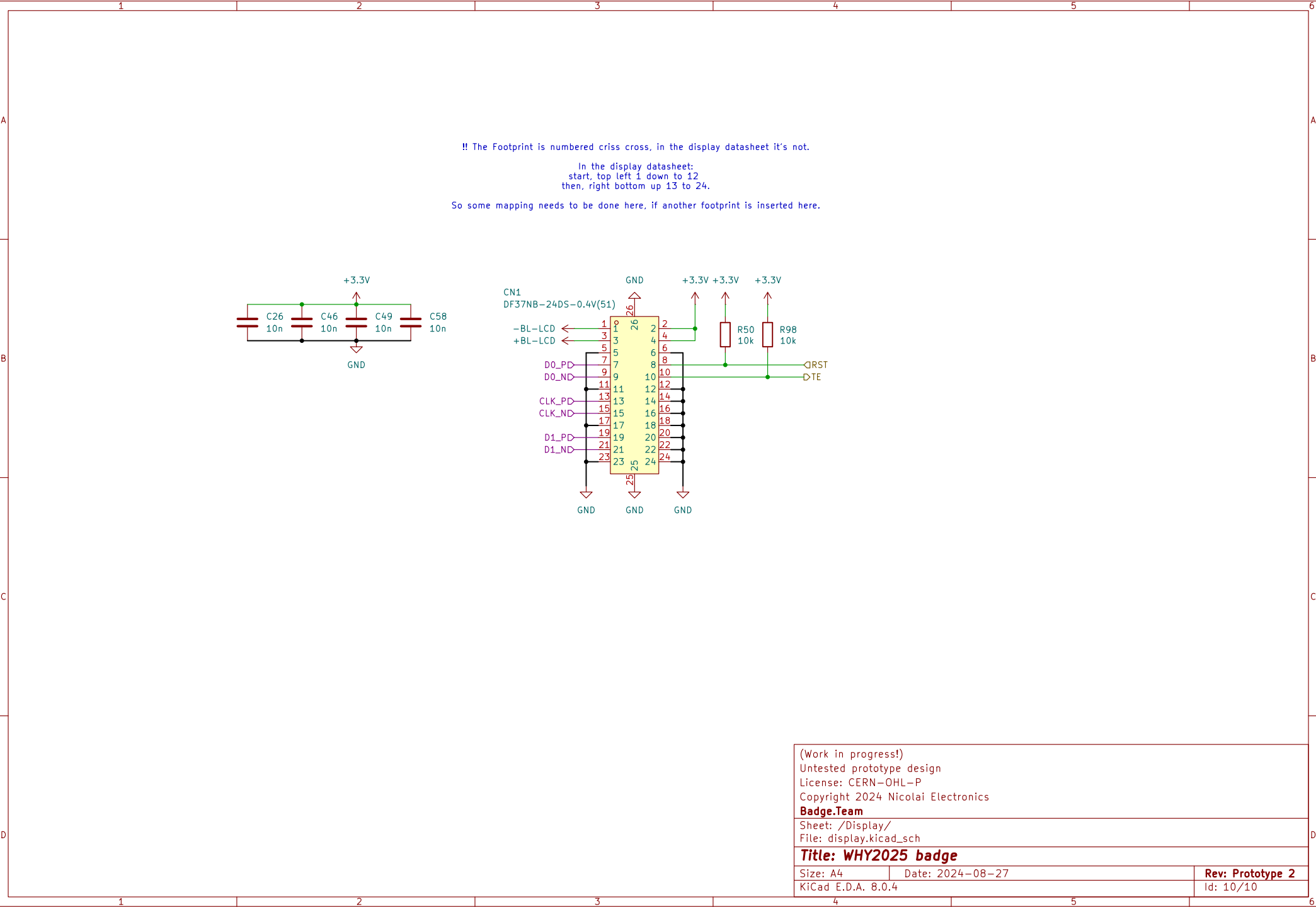
Size: A4 Date: 2024-08-27

KiCad E.D.A. 8.0.4

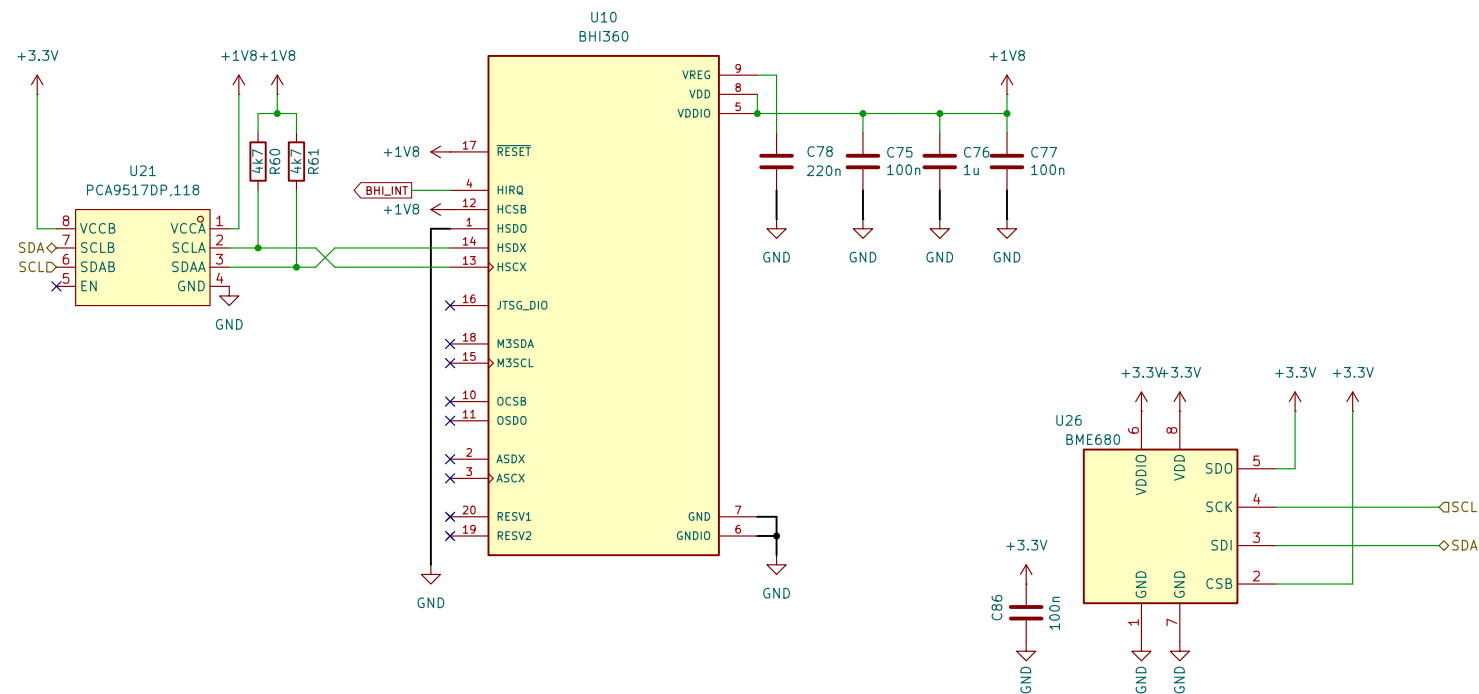
**Rev: Prototype 2**

Id: 1/10





(Work in progress!) Untested prototype design License: CERN-OHL-P Copyright 2024 Nicolai Electronics <b>Badge.Team</b>		
Sheet: /Display/ File: display.kicad_sch		
<b>Title: WHY2025 badge</b>		
Size: A4	Date: 2024-08-27	Rev: Prototype 2
KiCad E.D.A. 8.0.4	Id: 10/10	



Untested prototype design  
License: CERN-OHL-P  
Copyright 2024 Nicolai Electronics

**Badge.Team**

Sheet: /Sensors/  
File: sensors.kicad\_sch

**Title: WHY2025 badge**

Size: A4 Date: 2024-08-27

KiCad E.D.A. 8.0.4

**Rev: Prototype 2**

Id: 1/10