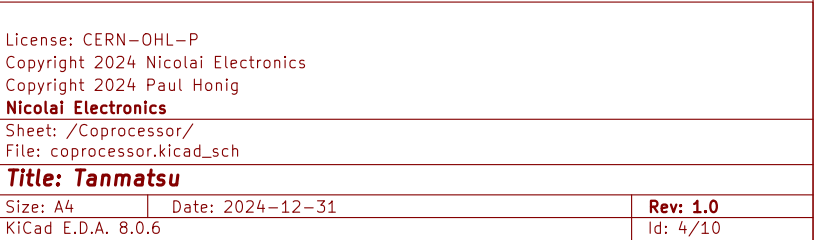


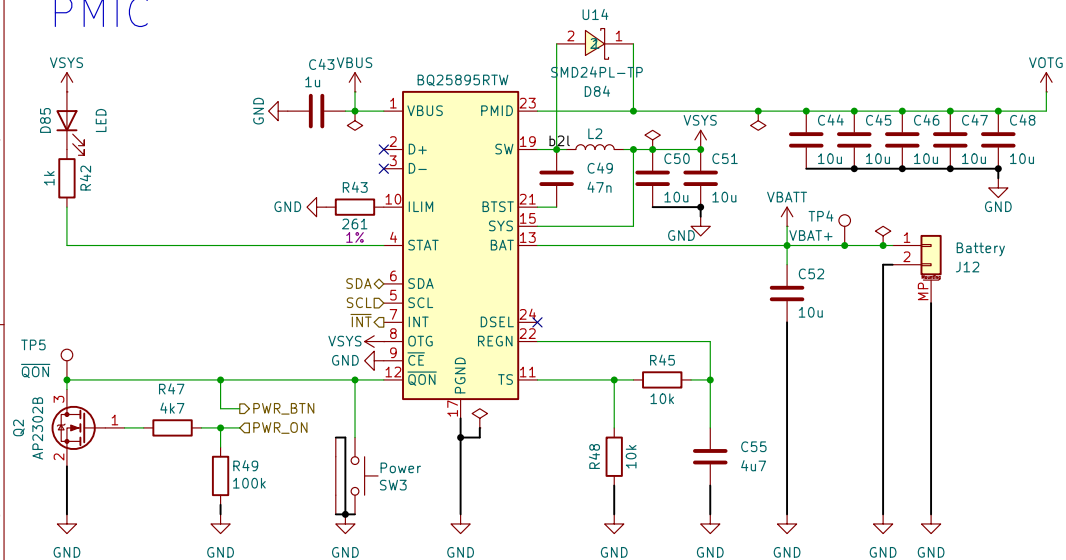
License: CERN-OHL-P
 Copyright 2024 Nicolai Electronics
 Copyright 2024 Paul Honig

Nicolai Electronics
 Sheet: /Application processor/
 File: esp32p4.kicad_sch

Title: Tanmatsu	
Size: A4	Date: 2024-12-31
KiCad E.D.A. 8.0.6	Rev: 1.0
	Id: 2/10



PMIC



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

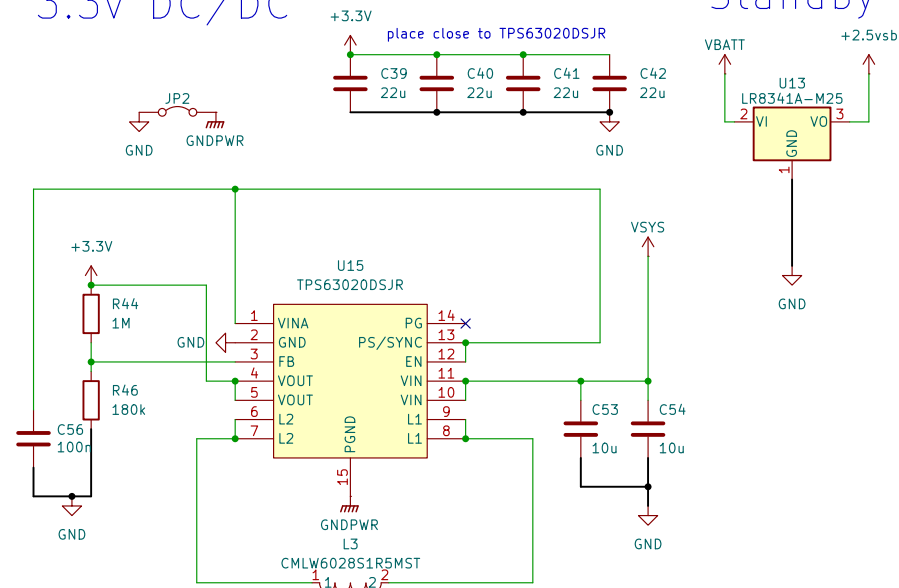
VBUS is the voltage coming from the input USB-C port. This voltage can be 5 up to 14 volts.

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

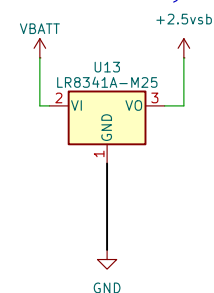
VBATT is connected to the rechargeable battery.

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

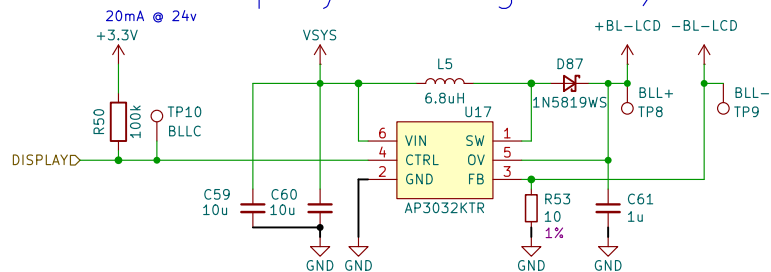
3.3v DC/DC



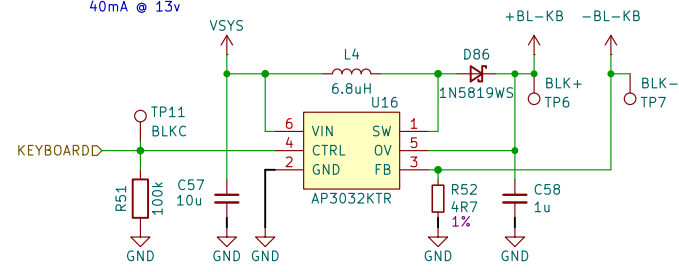
Standby



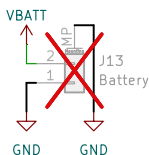
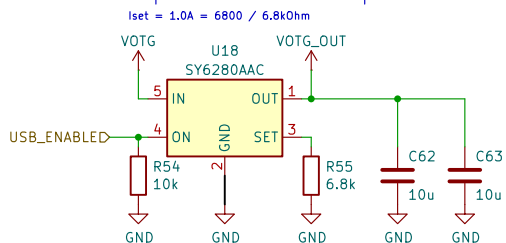
Display backlight DC/DC



Keyboard backlight DC/DC



Switched power for USB-A port



License: CERN-OHL-P

Copyright 2024 Nicolai Electronics

Copyright 2024 Paul Honig

Nicolai Electronics

Sheet: /Power/

File: power.kicad_sch

Title: Tanmatsu

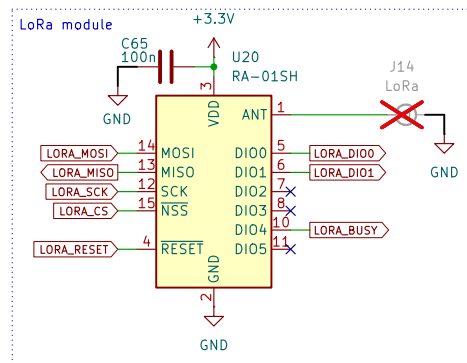
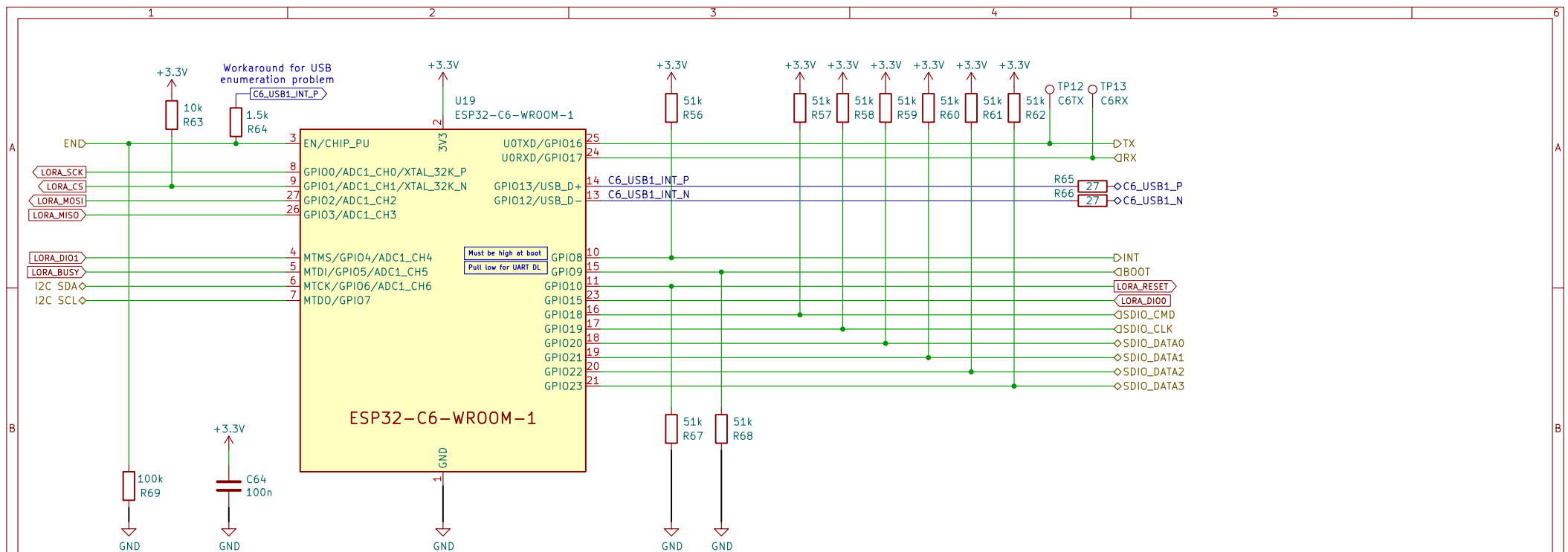
Size: A4

Date: 2024-12-31

KiCad E.D.A. 8.0.6

Rev: 1.0

Id: 6/10



- Boostrapping pins:
 - GPIO8: Has to be high at power on
 - GPIO9: Connect to pull-up resistor, pull to GND to start download mode
- Low power peripherals:
 - UART: RX on GPIO4, TX on GPIO5
 - I2C: SDA on GPIO6, SCL on GPIO7

License: CERN-OHL-P
Copyright 2024 Nicolai Electronics
Copyright 2024 Paul Honig

Nicolai Electronics

Sheet: /Radio/
File: radio.kicad_sch

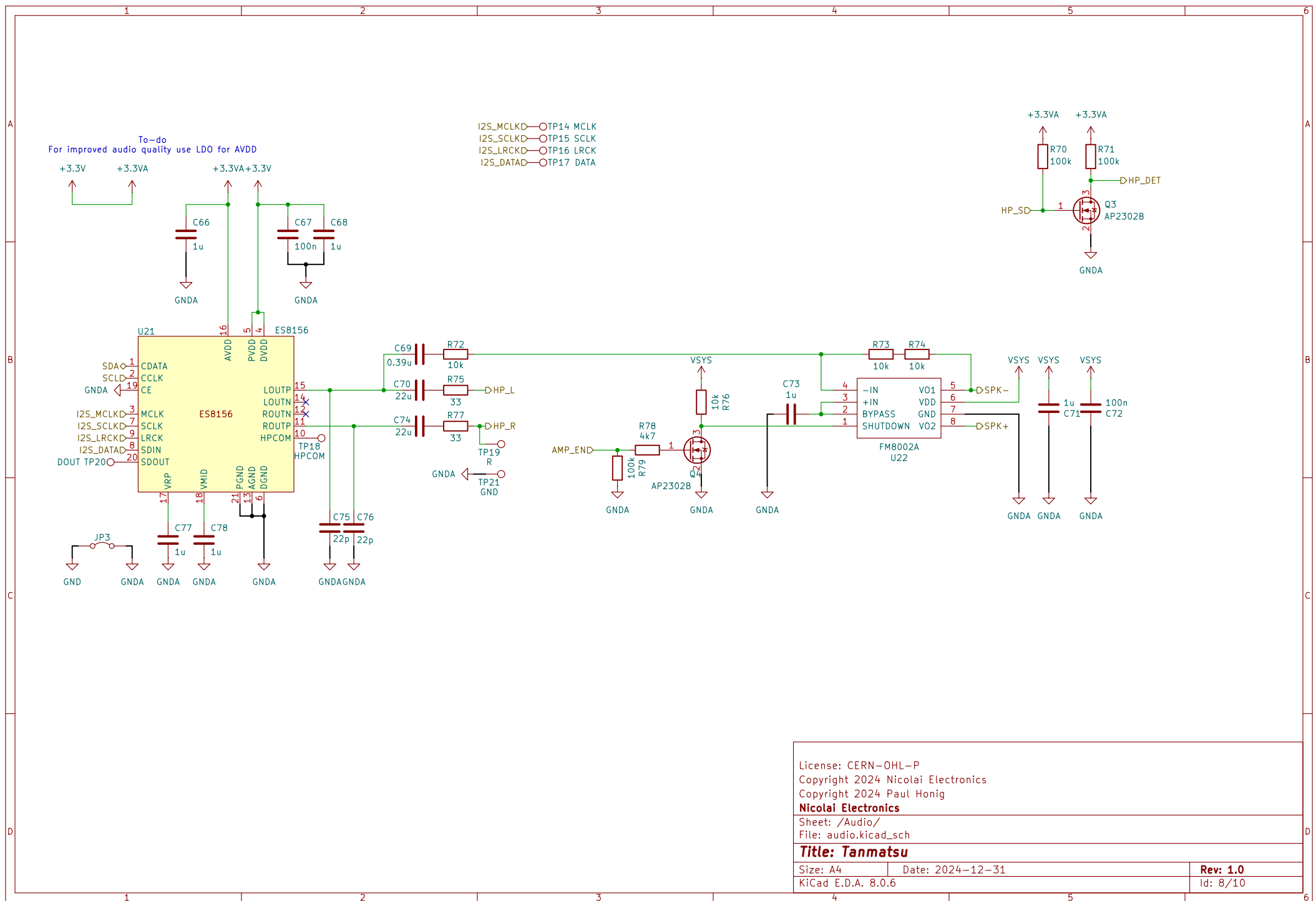
Title: Tanmatsu

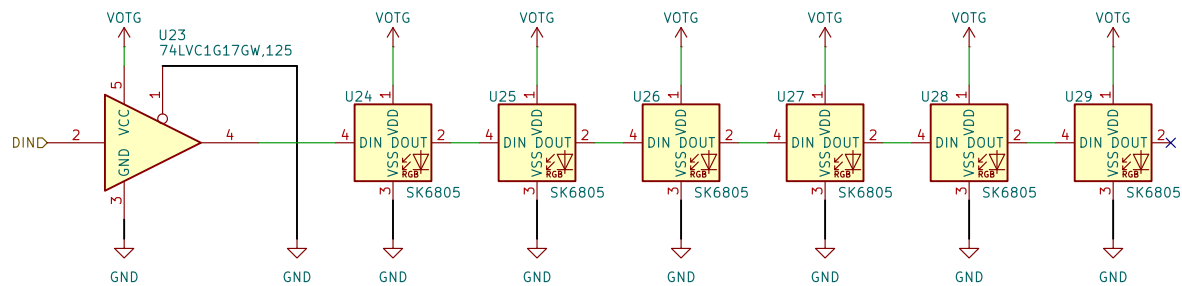
Size: A4	Date: 2024-12-31
----------	------------------

KiCad E.D.A. 8.0.6

Rev: 1.0

Id: 7/10





License: CERN-OHL-P
Copyright 2024 Nicolai Electronics
Copyright 2024 Paul Honig

Nicolai Electronics

Sheet: /LEDs/
File: leds.kicad_sch

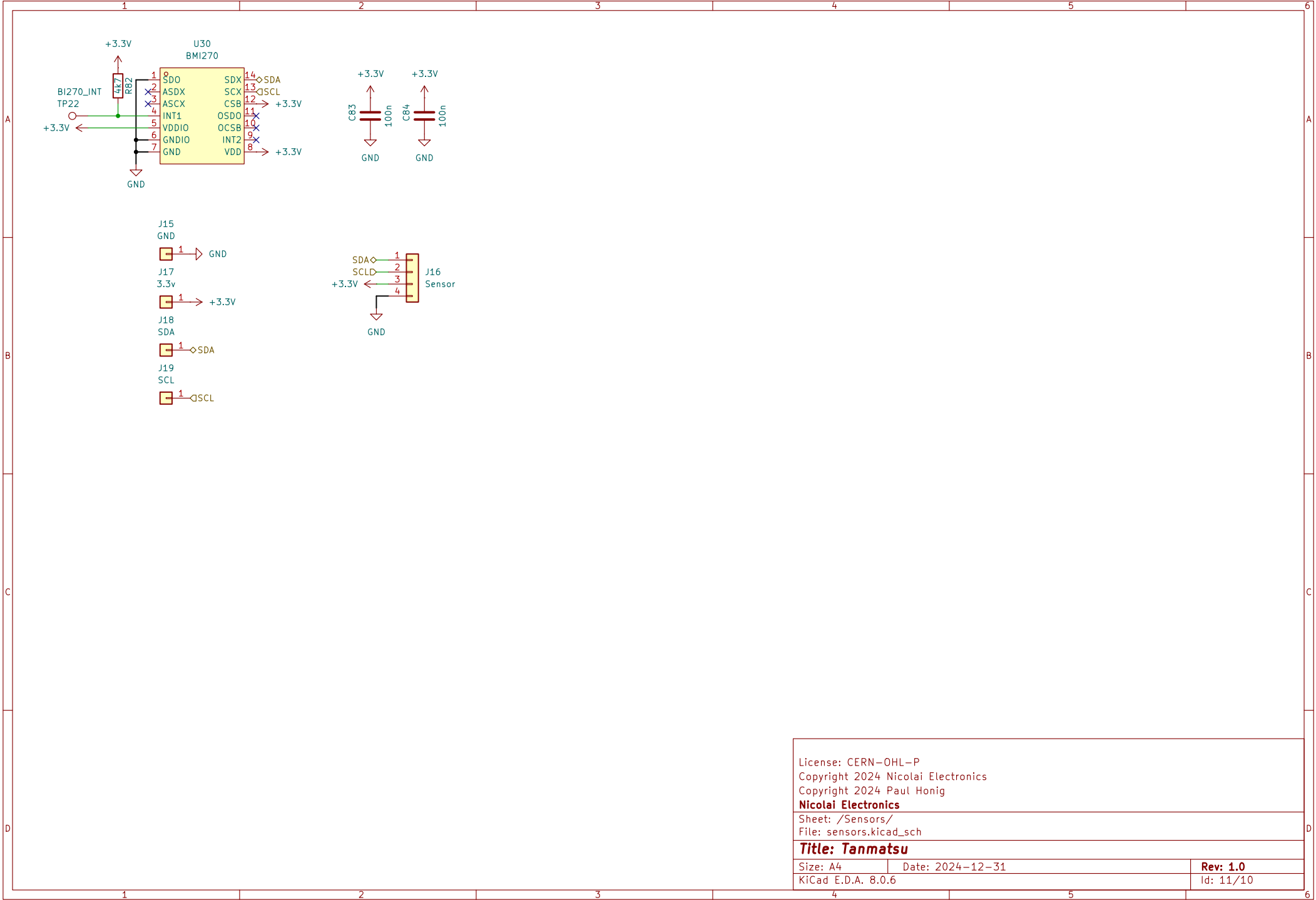
Title: Tanmatsu

Size: A4 Date: 2024-12-31

KiCad E.D.A. 8.0.6

Rev: 1.0

Id: 9/10



License: CERN-OHL-P
Copyright 2024 Nicolai Electronics
Copyright 2024 Paul Honig

Nicolai Electronics

Sheet: /Sensors/
File: sensors.kicad_sch

Title: Tanmatsu

Size: A4 Date: 2024-12-31

KiCad E.D.A. 8.0.6

Rev: 1.0

Id: 11/10