

TO-DO:

- provjeriti jel sve električki točno spojeno (isprintati i proći kroz sve)
- Fixati 3D Modele koji nedostaju na footprintima
- Assembly svega + nova gornja površina tematski ukrašena
- TME BOM sastaviti
- pored ovoga, na izradu poslati još i CNLJS (ploča + kockica + TP)

Layout:

- bolje razmjestiti rupe da ne zijeve kučište

Sheet: /  
File: BoardGame.kicad\_sch

**Title: BoardGame**

Size: A4 Date: 2022-09-21

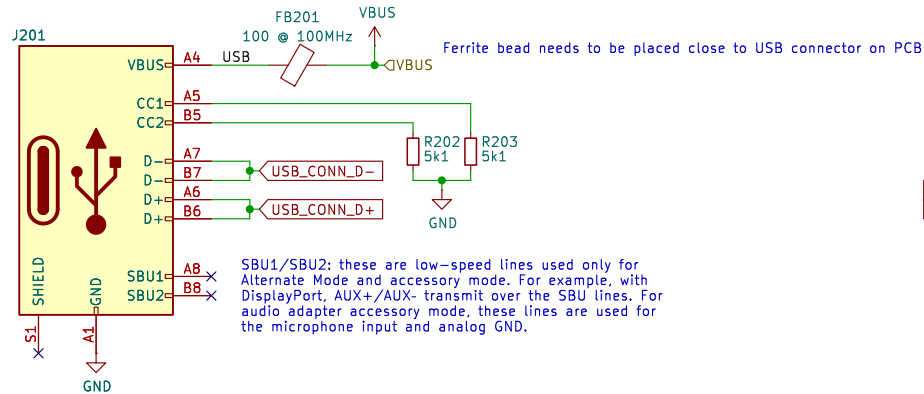
KiCad E.D.A. 8.0.6

**Rev: 1**

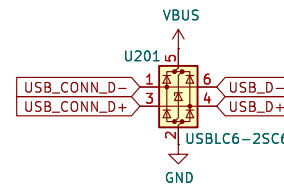
Id: 1/10

The device must have 5.1k pull-down on the its port CC pin (on both pins).

Once the C-C cable is connected between two link partners, the DFP (host) will sense the drag by 5.1k resistor (from device side). As result, it will turn the VBUS on. This is how a host recognizes that a connection has been made. The connect event is essentially controlled by sink side having 5.1k Rd.

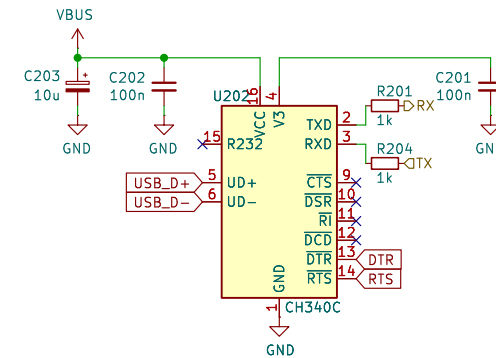


Shield is grounded at the host side (PC) so NC here.

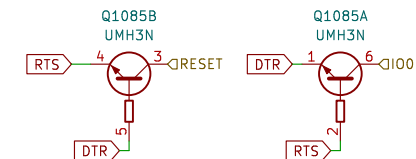


ESD protection IC

## CH340C USB-UART IC



## ESP32 AUTORESET CIRCUIT



Sheet: /USB-UART/  
File: USB.kicad\_sch

**Title: BoardGame**

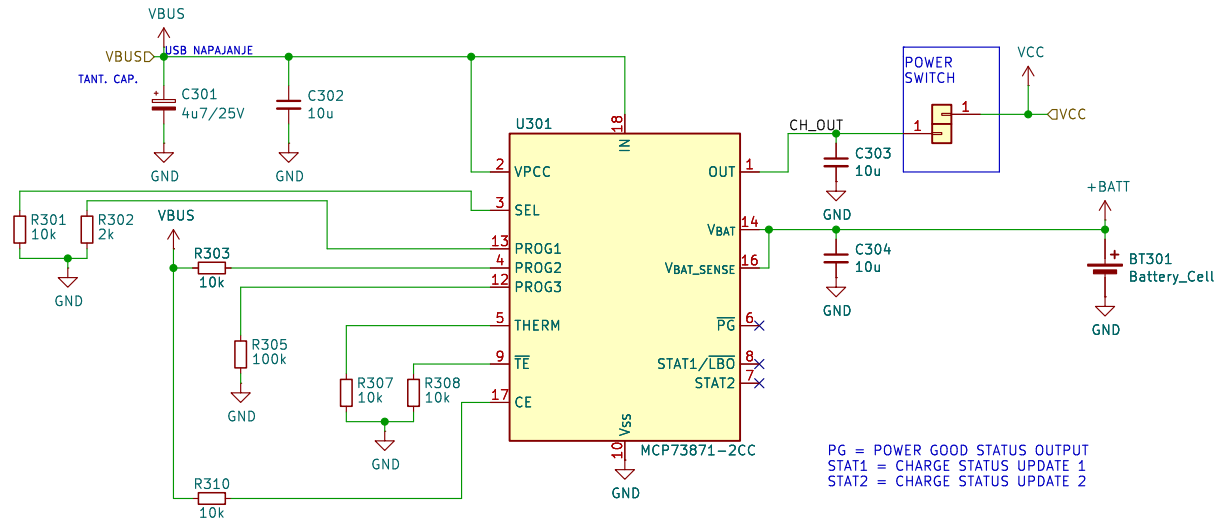
Size: A4 Date: 2022-09-21

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**Rev: 1**

Id: 2/10

# MCP73871



For optimum voltage regulation, it is recommended to place the battery pack closest to the device's VBAT and VSS pins to minimize voltage drops along the high current-carrying PCB traces. If the PCB layout is used as a heat sink, adding many vias in the heat sink pad can help conduct more heat to the PCB backplane, thus reducing the maximum junction temperature.

If temperature monitoring is not required, place a standard 10k resistor from THERM to VSS.

Sheet: /Battery charger/  
 File: Battery charger.kicad\_sch

**Title: BoardGame**

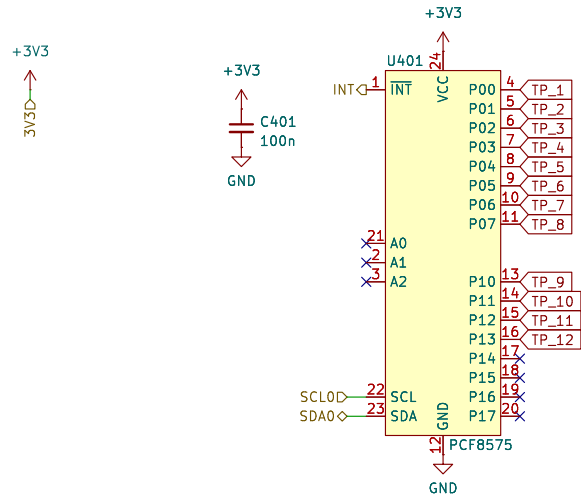
Size: A4 Date: 2022-09-21

KiCad E.D.A. 8.0.6

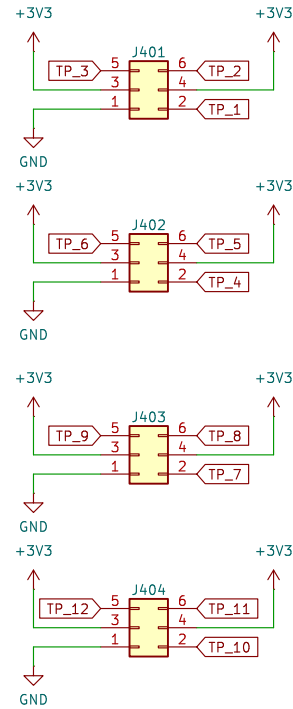
**Rev: 1**

Id: 3/10

## PCF8575 I/O Expander



## Touchpad connectors



Sheet: /IO Expander/  
File: IO Expander.kicad\_sch

**Title: BoardGame**

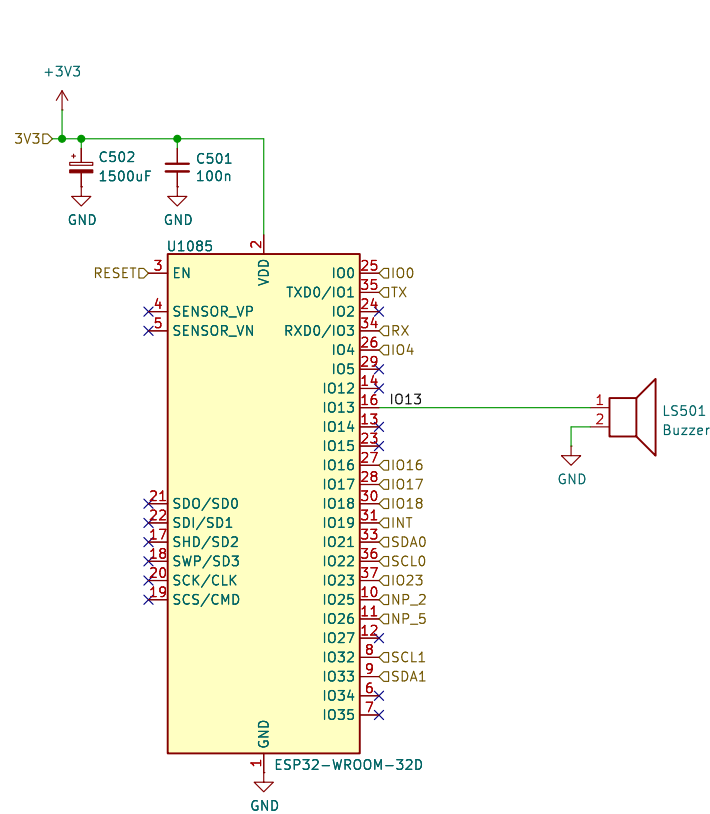
Size: A4 Date: 2022-09-21

KiCad E.D.A. 8.0.6

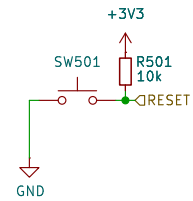
**Rev: 1**

Id: 4/10

## MICROCONTROLLER



## RESET SWITCH



Sheet: /Microcontroller/  
File: Microcontroller.kicad\_sch

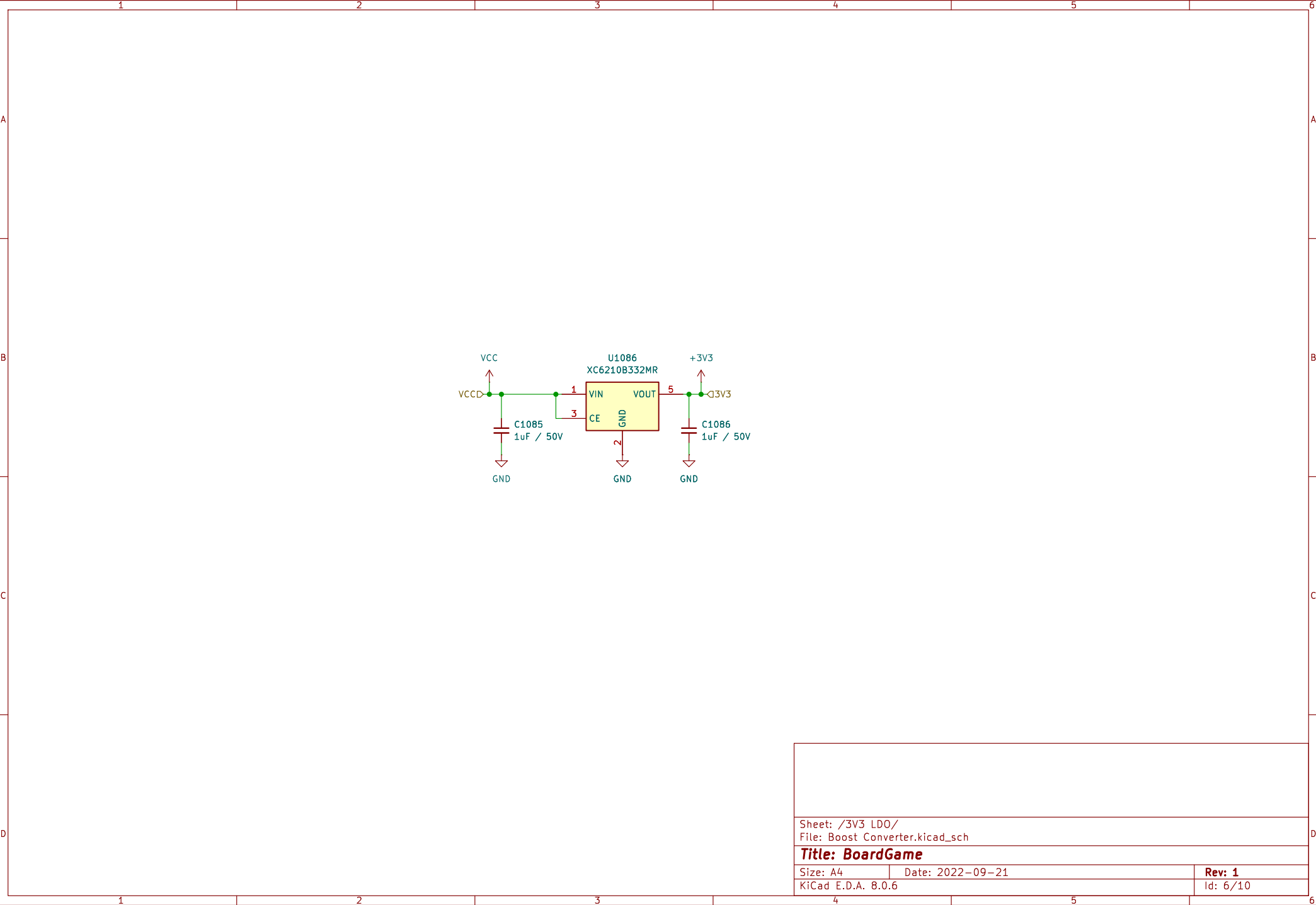
**Title: BoardGame**

Size: A4 Date: 2022-09-21

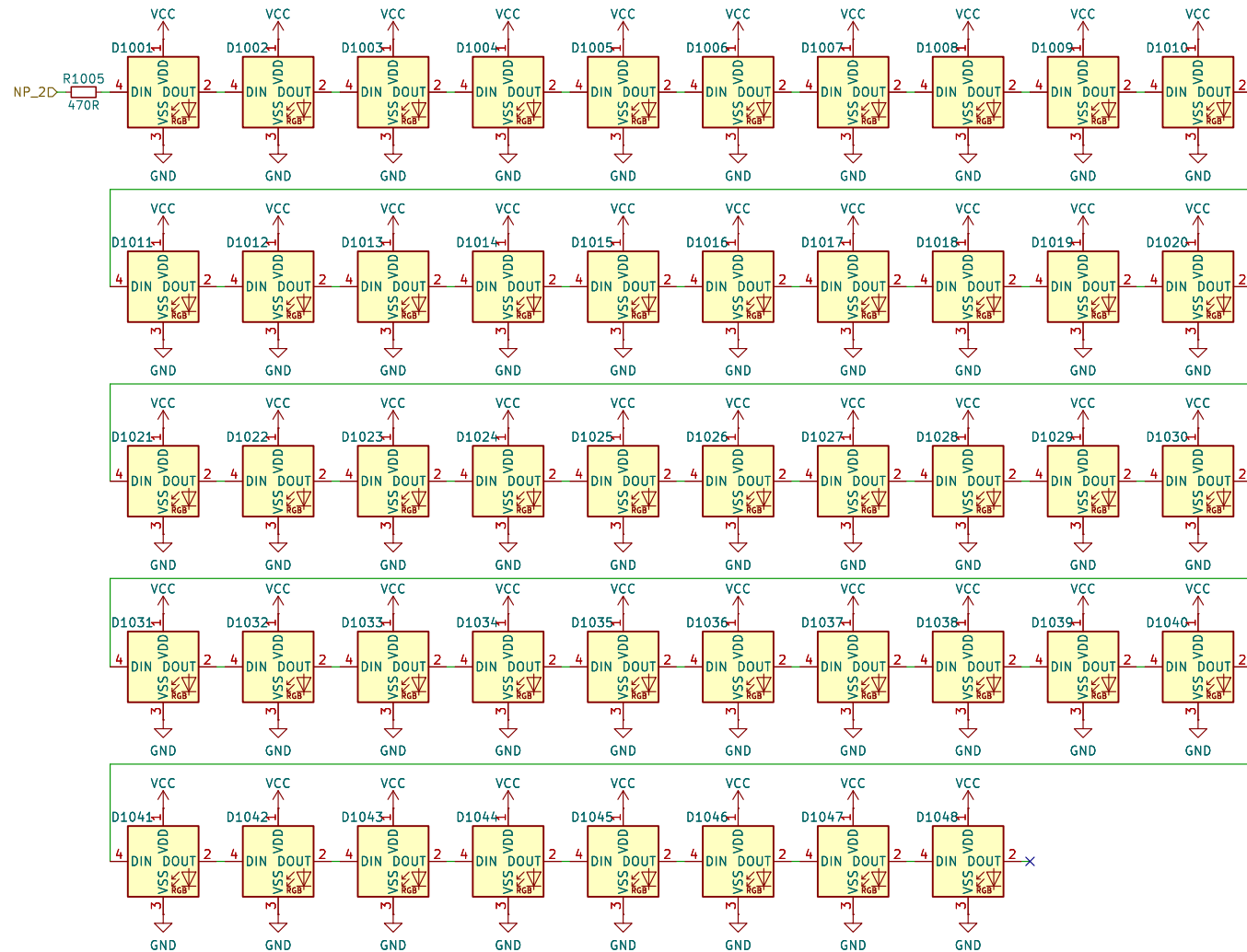
KiCad E.D.A. 8.0.6

**Rev: 1**

Id: 5/10



## Path LEDs



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

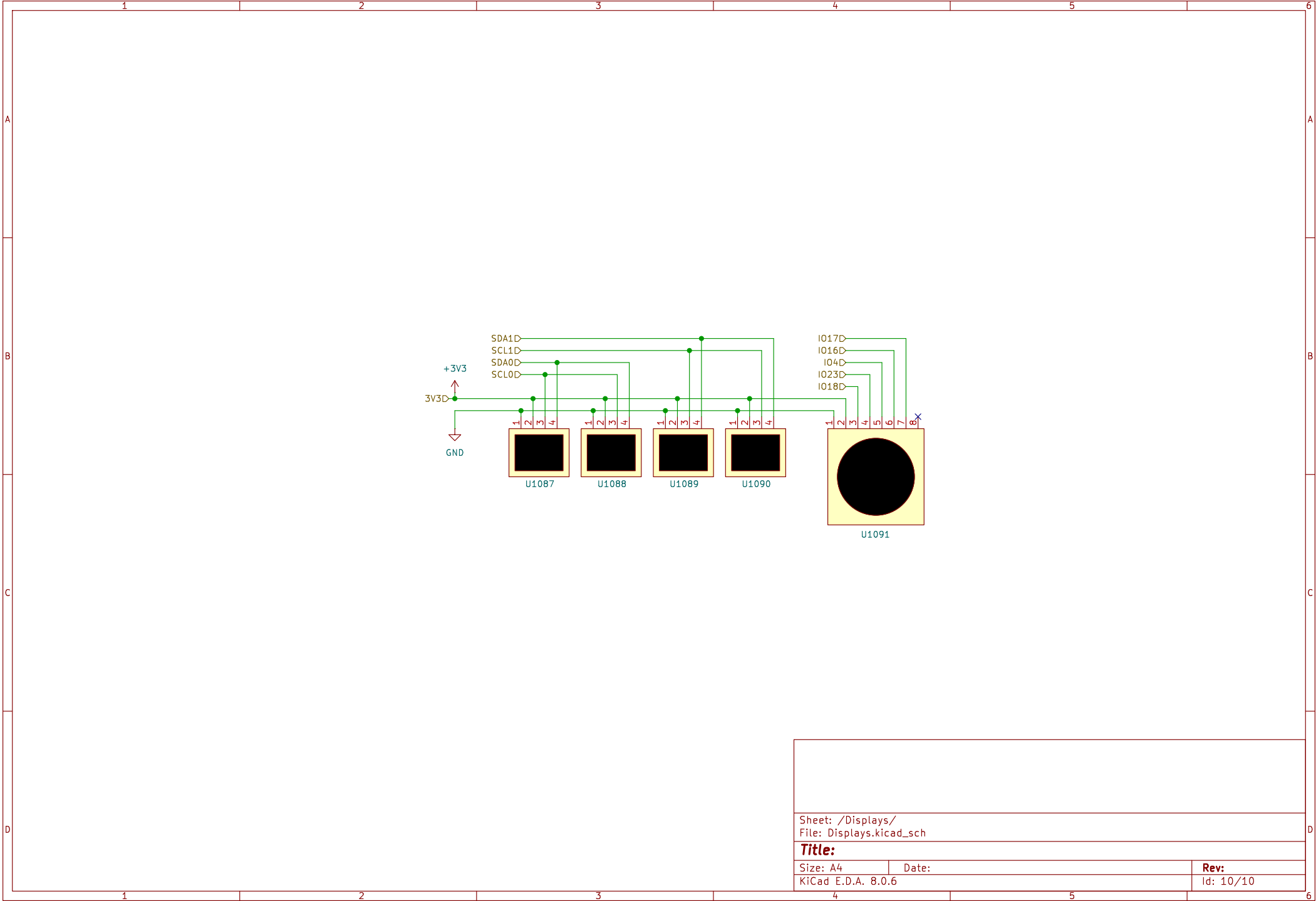
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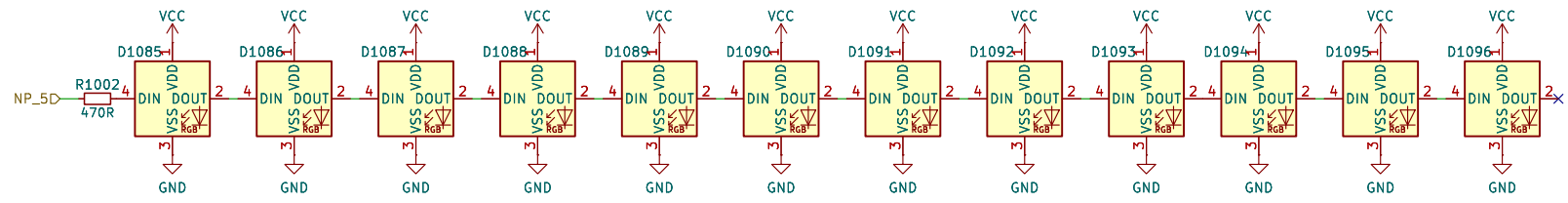
Rev:

Id: 8/10





Touchpads LEDs



Sheet: /Touchpad LEDs/ File: Touchpad LEDs.kicad_sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.6	Id: 11/10	

