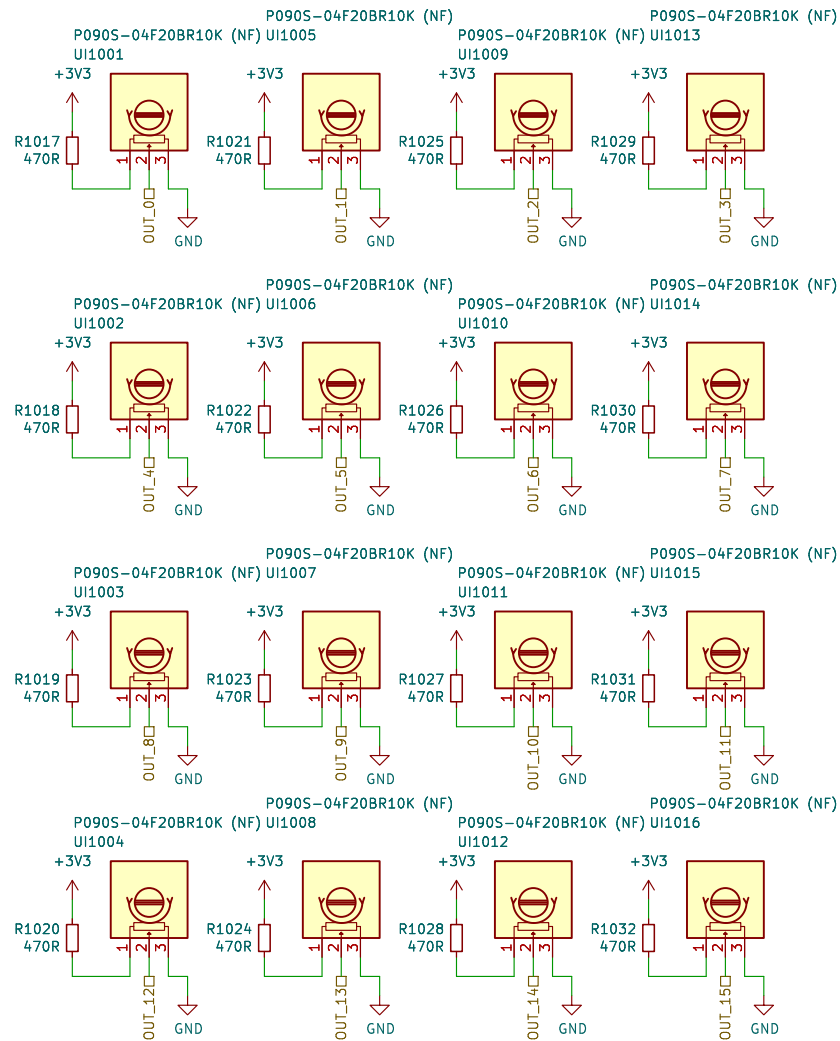


# 1000



Sheet: /UI\_POT/  
File: UI\_POT.kicad\_sch

**Title:**

Size: A4  
KiCad E.D.A. kicad-cli 7.0.11+1

Date:

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Id: 2/10

1000

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



Sheet: /UI\_BUTTON/  
File: UI\_BUTTON.kicad\_sch

Title:

Size: A4  
KiCad E.D.A. kicad-cli 7.0.11+1

Date:

Rev:

Id: 3/10

# 900



Sheet: /UI\_LED/  
File: UI\_LED.kicad\_sch

### Title:

Size: A4  
KiCad E.D.A. kicad-cli 7.0.11+1

Date:

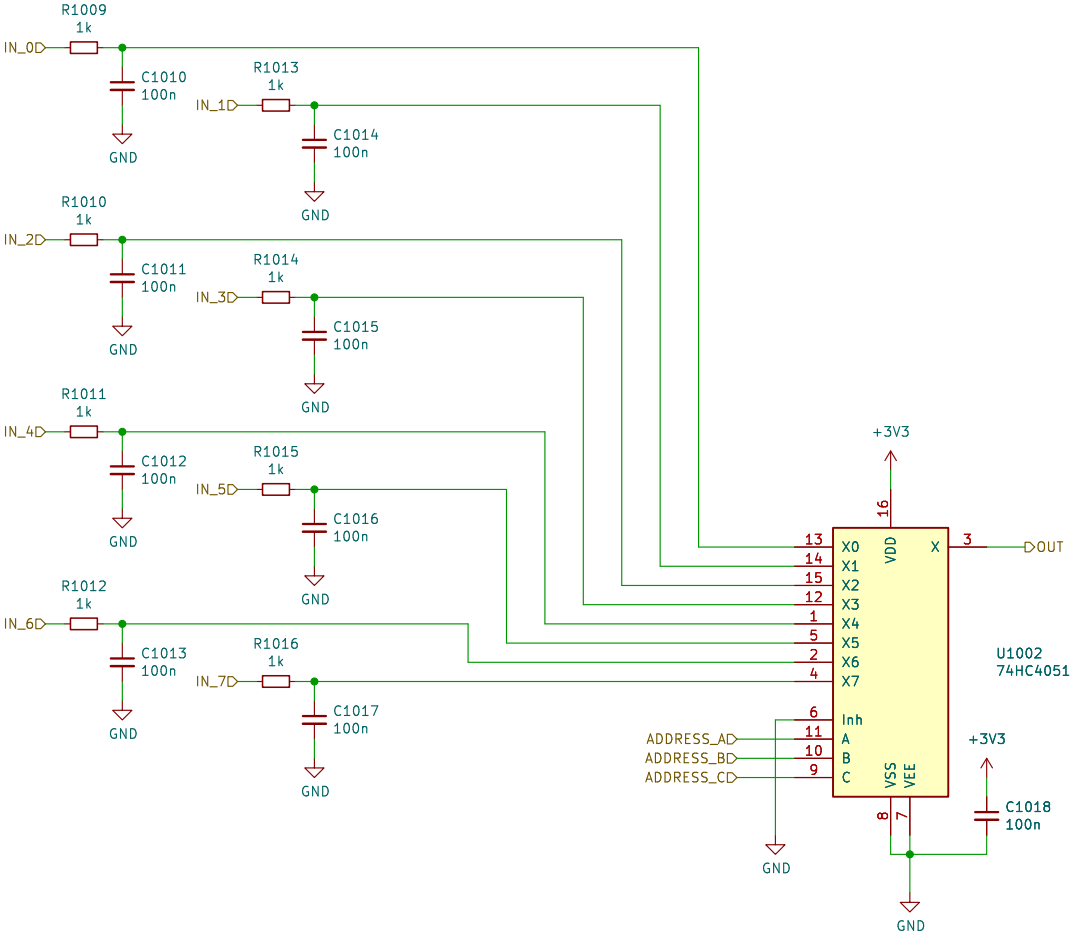
Rev:

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500

GRID Connector  
Bi-Directional Data  
2x SYNC

Board Mounting Pattern



Sheet: /MCU/sheet5D85C9EA/ File: GRID.kicad_sch		
<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad-cli 7.0.11+1		Id: 8/10



**600**

**ESD Diodes**  
ESD protection for all of the externally accessible nets.

**+3V3 LDO Regulators**  
Regulators for generating independent power rails for the microcontroller and the user interface.

**Components and Connections:**

- J601 (TYPE-C-32-M-12):** USB Type-C connector. Pins A9B4, A4B9, A5, B5, A7, B7, A6, B6, A8, B8, A1B12, A12B1, S1, S2, S3, S4 are shown.
- U601 (C5451661):** ESD protection diodes. Pins 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100 are shown.
- U602 (LN1134A332MR-G):** 3V3 LDO regulator. Pins 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100 are shown.
- Resistors:** R601 (5k1), R602 (5k1), R603 (1M).
- Capacitors:** C601 (1u), C602 (1u), C603 (4n7).
- Power Rails:** VBUS, GND, +3V3, PWR\_FLAG, USB\_DATA\_P, USB\_DATA\_N.

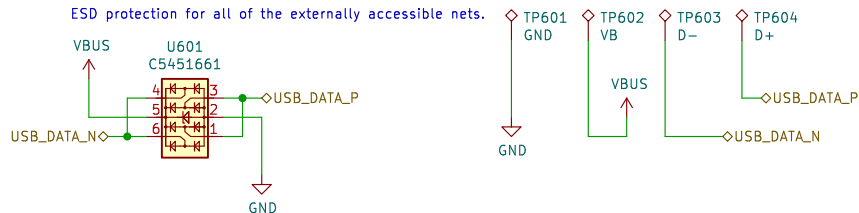
**Sheet: /MCU/Sheet60F06FE1/  
File: USB\_POWER.kicad\_sch**

**Title:**

**Size: A4** **Date:** **Rev:**

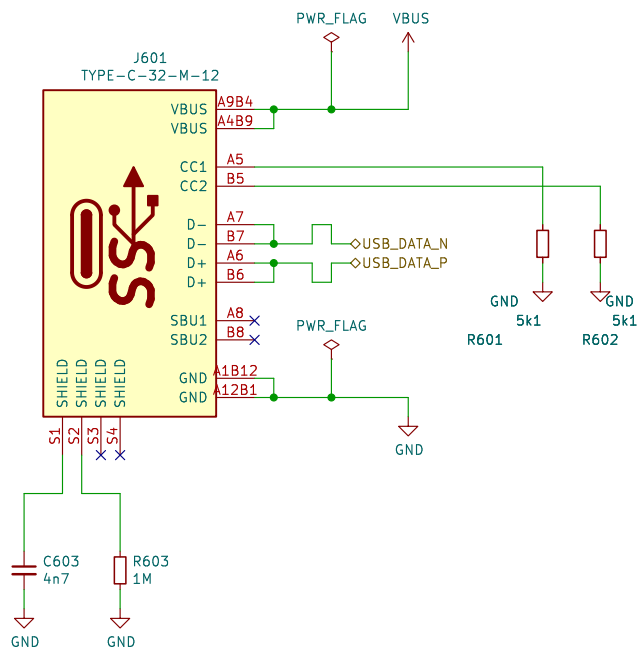
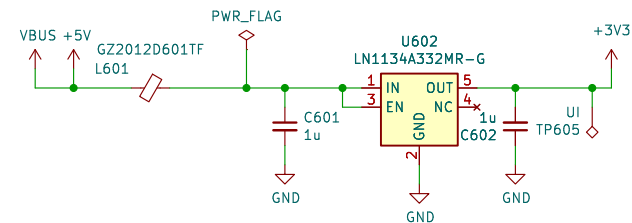
**KiCad E.D.A. kicad-cli 7.0.11+1** **Id: 9/10**

ESD protection for all of the externally accessible nets.



### +3V3 LDO Regulators

Regulators for generating independent power rails for the microcontroller and the user interface.



Sheet: /MCU/Sheet60F06FE1/  
File: USB\_POWER.kicad\_sch

**Title:**

Size: A4

Date:

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Rev:

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[illegible]

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	
<b>Title:</b>	
Size: A4	Date:
KiCad E.D.A. kicad-cli 7.0.11+1	Id: 10/10