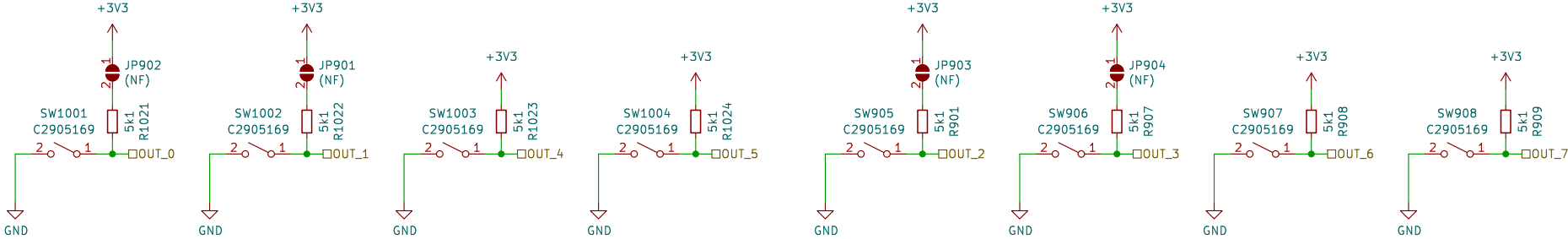
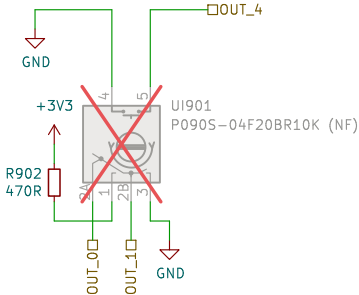


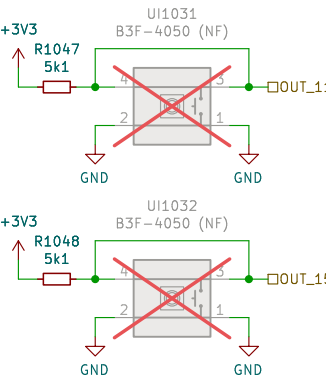
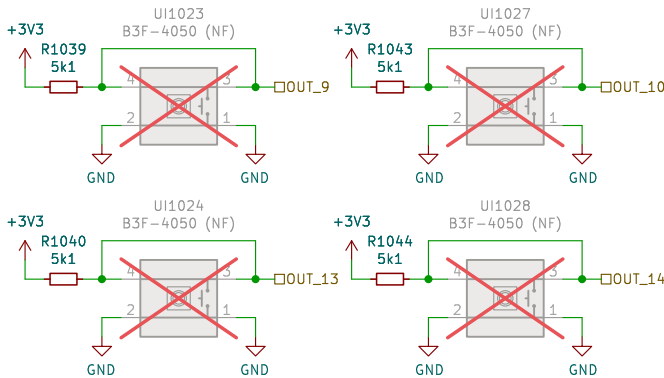
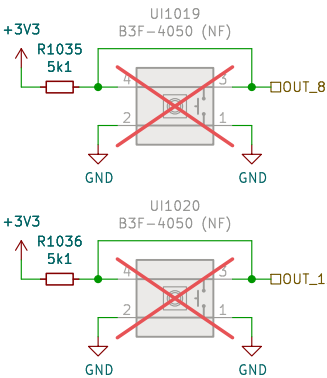
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KiCad E.D.A. 8.0.3		Id: 2/11

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



Sheet: /UI_BUTTON/ File: UI_BUTTON.kicad_sch		
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Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.3	Id: 3/11	

900



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Size: A4

Date:

KiCad E.D.A. 8.0.3

Rev:

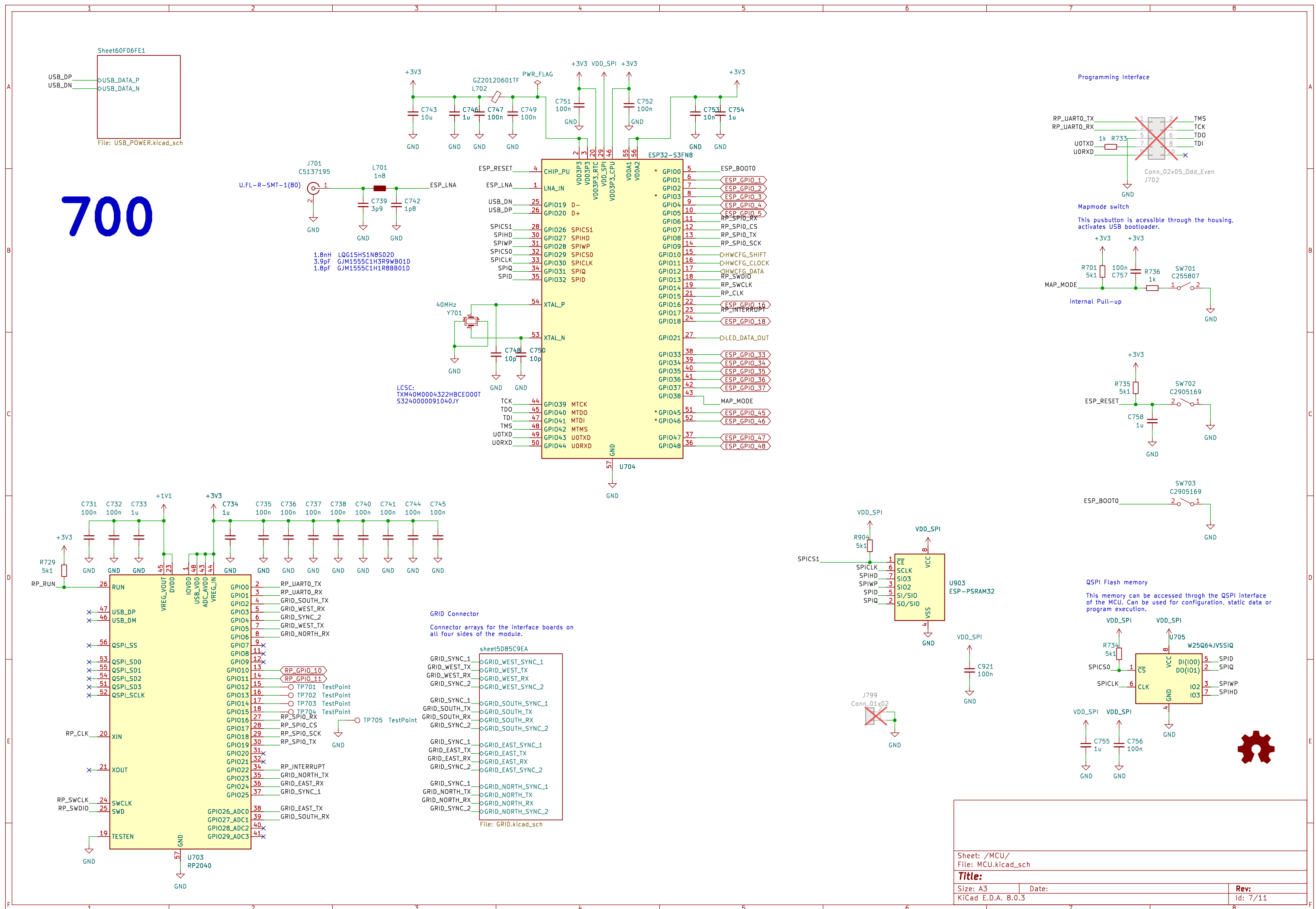
Id: 4/11

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500

GRID Connector
Bi-Directional Data
2x SYNC

Board Mounting Pattern



Sheet: /MCU/sheet5D85C9EA/ File: GRID.kicad_sch		
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Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.3		Id: 8/11

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.

The schematic illustrates the following components and their functions:

- J601 TYPE-C-32-M-12**: The primary connector for the USB interface.
- U601 C5451661**: ESD protection diodes connected to the USB_DATA_P, USB_DATA_N, and VBUS lines.
- U602 LN1134A332MR-G**: A low-dropout (LDO) voltage regulator converting VBUS +5V to a regulated +3V3 output.
- C601 1u**, **C602 1u**, **C603 4n7**: Various capacitors used for decoupling and filtering at different stages of the power supply.
- R601 5k1**, **R602 5k1**, **R603 1M**: Resistors used for signal conditioning and pull-up/pull-down purposes.
- PWR_FLAG** and **VBUS**: Designated power and status signals throughout the circuit.

Sheet: /MCU/Sheet60F06FE1/ File: USB_POWER.kicad_sch		
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KiCad E.D.A. 8.0.3	Id: 9/11	

Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.3		Id: 9/11
4	5	6

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.

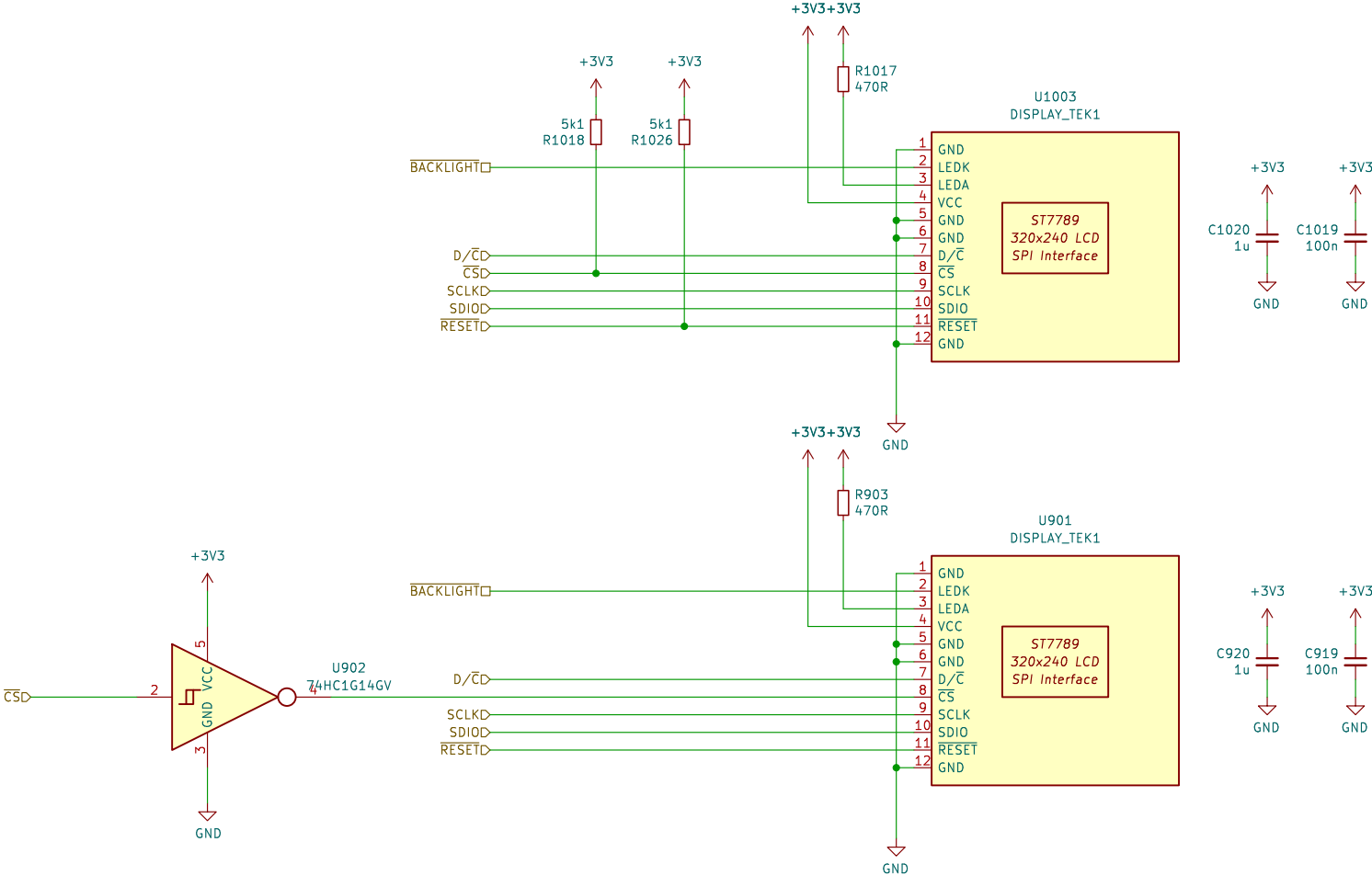
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D1: MODEL
D2: MODEL
D3: MODEL (MSB)
D4: REVISION (LSB)
D5: REVISION
D6: REVISION
D7: REVISION (MSB)

Po16	0000
Bo16	0001
PBF4	0010
EN16	0011
...	

```
RevA 0000
RevB 0001
RevC 0010
RevD 0011
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Sheet: /HWCFG/ File: HWCFG.kicad_sch	
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Size: A4	Date: Rev:
KiCad E.D.A. 8.0.3	Id: 10/11

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Sheet: /UI_DISPLAY/		
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