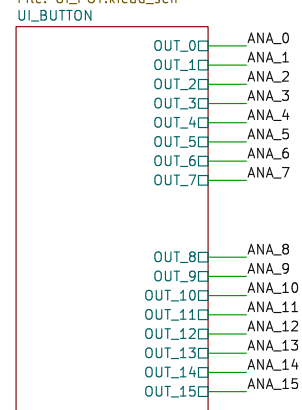
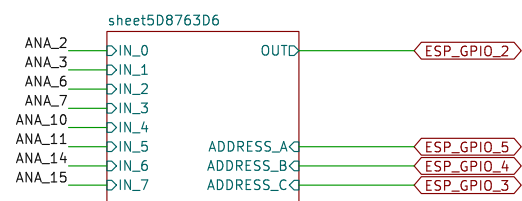
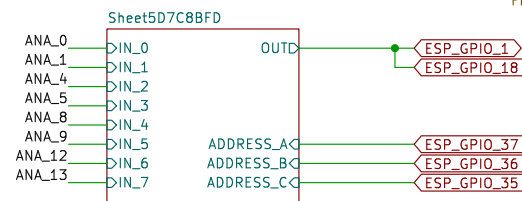
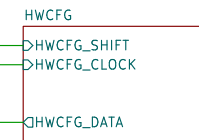
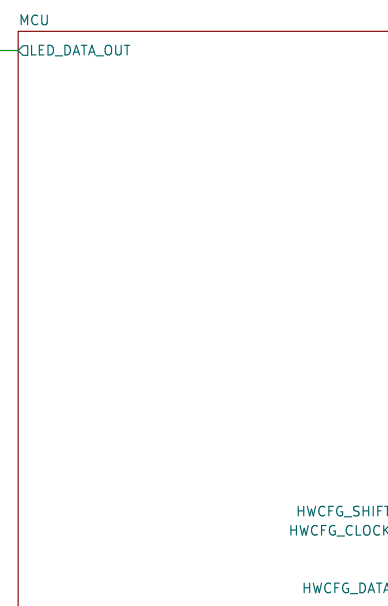
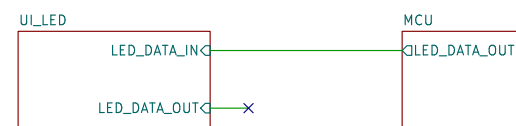


File: UI\_POT.kicad\_sch



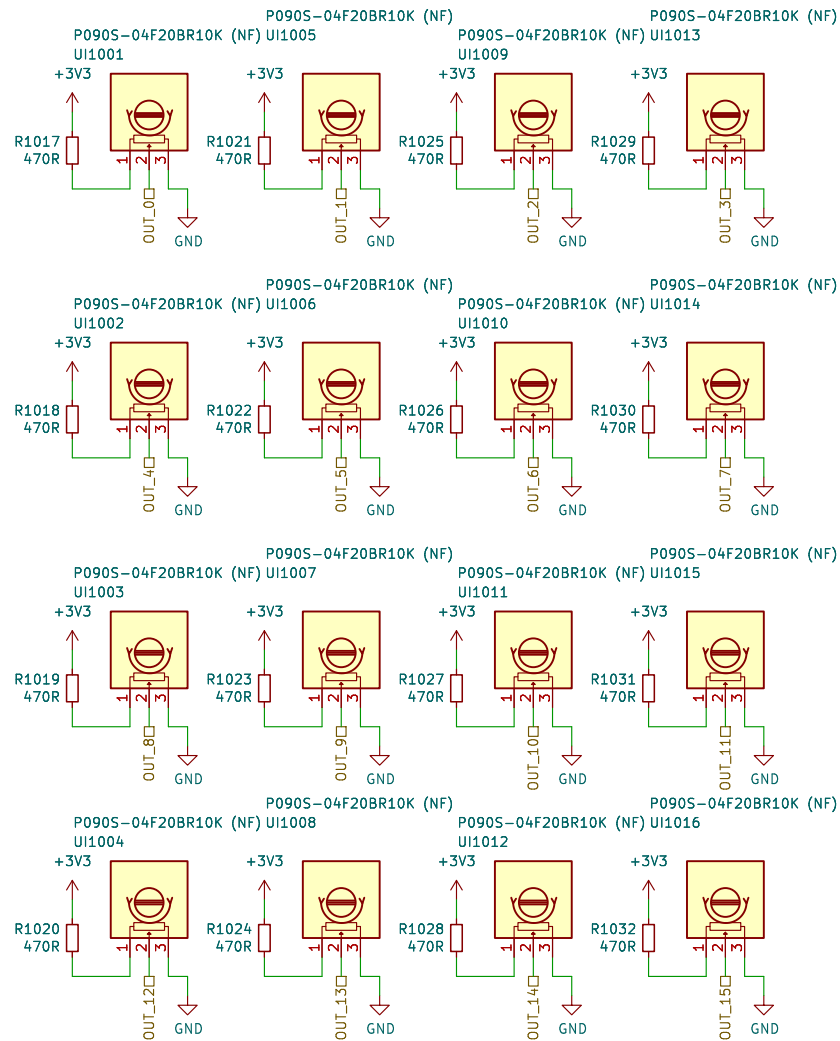
File: UI\_BUTTON.kicad\_sch



**Common Sheets:**  
500 GRID  
600 USB\_POWER  
700 MCU

**Module Specific:**  
800 HWCFG  
900 LED  
1000 UI

# 1000



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

**Title:**

Size: A4

Date:

KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1

**Rev:**

Id: 2/10

1000

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



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

Title:

Size: A4

Date:

KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1

Rev:

Id: 3/10

# 900



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

### Title:

Size: A4  
KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1

Date:

Rev:  
Id: 4/10

1000

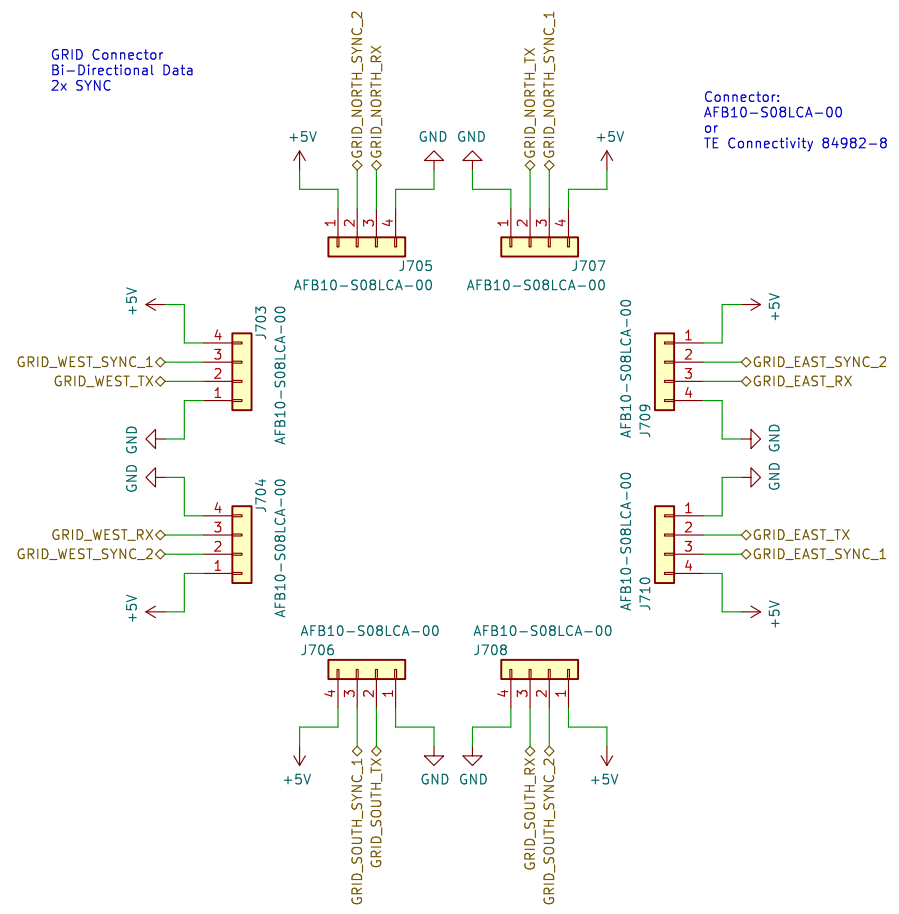


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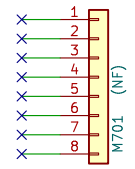




# 500



Board Mounting Pattern



Sheet: /MCU/sheet5D85C9EA/ File: GRID.kicad_sch		
<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1		Id: 8/10



**600**

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

U706  
SESRV05-4

VBUS  
USB\_DATA\_N  
USB\_DATA\_P  
GND

TP711  
GND

TP712  
VB

TP713  
D-

TP714  
D+

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

U707  
LN1134A332MR-G

VBUS +5V  
GZ2012D601TF  
L703

PWR\_FLAG

C760  
1u

C761  
1u

TP715  
UI

+3V3

J711  
USB\_C\_TYPE-C-32-M-12

VBUS  
VBUS  
CC1  
CC2  
D-  
D-  
D+  
D+  
SBU1  
SBU2  
SHIELD  
SHIELD  
SHIELD  
GND  
GND

A9B4  
A4B9  
A5  
B5  
A7  
B7  
A6  
B6  
A8  
B8  
A1B12  
A12B1

PWR\_FLAG

GND  
GND

R738  
5k1

R739  
5k1

C759  
4n7

R737  
1M

GND  
GND

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

**Title:**

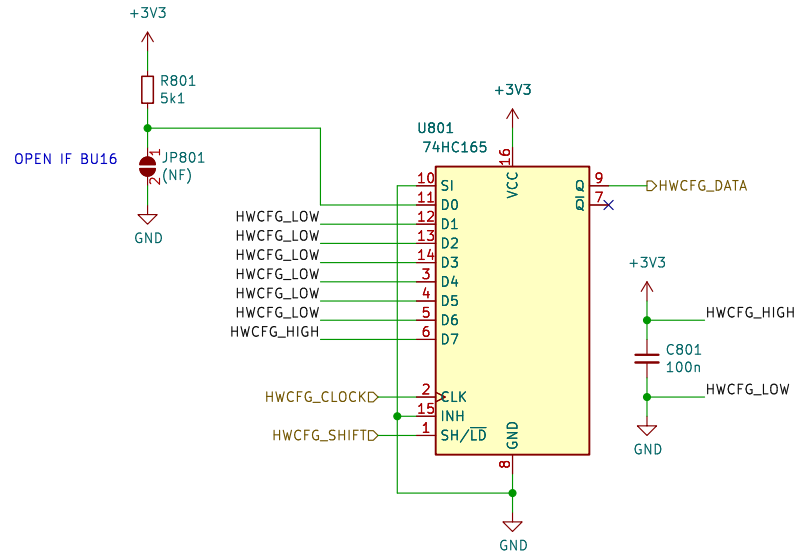
Size: A4 Date: Rev:

KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1 Id: 9/10

<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1		Id: 9/10

<b>Title:</b>		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1		Id: 9/10

800



#### Board Identification

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.

4b'Model + 4b'Revision + nb'Reserved (Multiple shift registers)

D0: MODEL (LSB)  
D1: MODEL  
D2: MODEL  
D3: MODEL (MSB)  
D4: REVISION (LSB)  
D5: REVISION  
D6: REVISION  
D7: REVISION (MSB)

#### Model Codes (D3-D0):

Po16 0000  
Bo16 0001  
PBF4 0010  
EN16 0011  
...

#### Revision Codes (D7-D4):

RevA 0000  
RevB 0001  
RevC 0010  
RevD 0011  
...

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

#### Title:

Size: A4	Date:	Rev:
KiCad E.D.A. kicad-cli 7.0.9-7.0.9-ubuntu23.04.1		Id: 10/10