



Sheet: /  
File: PCBA-TEK2.kicad\_sch

Title:

Size: A3  
KiCad E.D.A. 8.0.3

Date:

Rev:

Id: 1/10

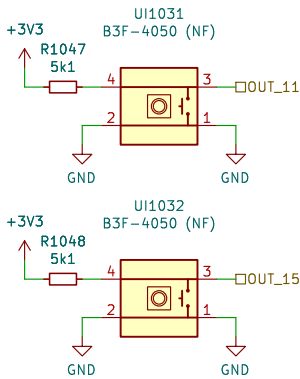
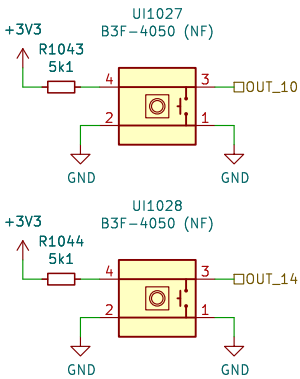
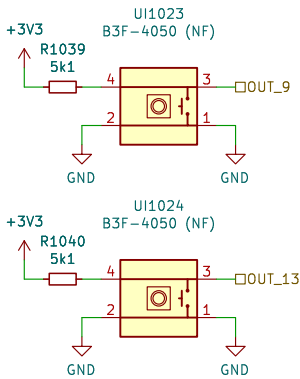
1000



Sheet: /UI_POT/ File: UI_POT.kicad_sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.3	Id: 2/10	

1000

Simulation:  
<http://tinyurl.com/y229mt4>



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

**Title:**

Size: A4

Date:

KiCad E.D.A. 8.0.3

**Rev:**

Id: 3/10

# 900



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

**Title:**

Size: A4  
KiCad E.D.A. 8.0.3

Date:

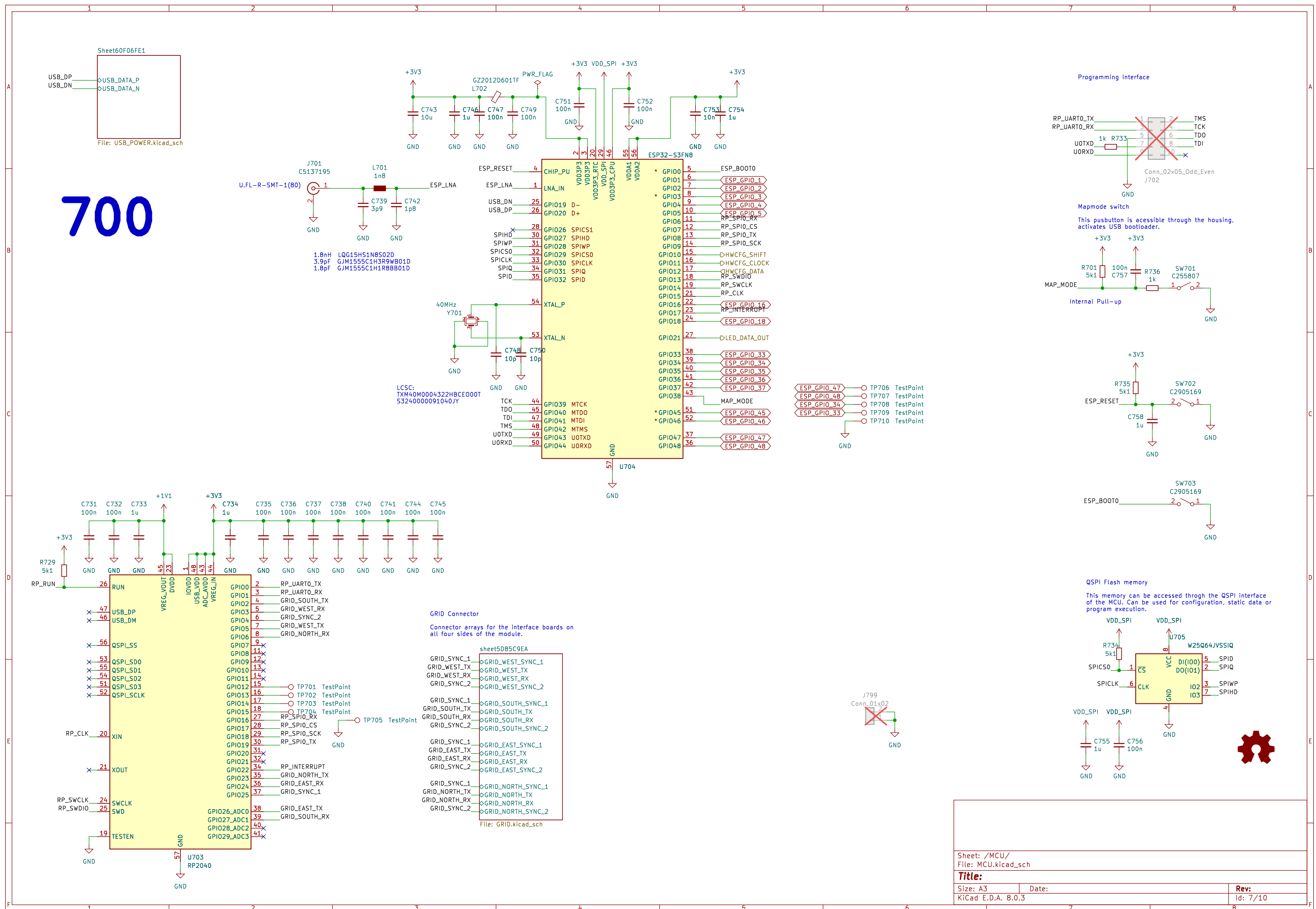
**Rev:**  
Id: 4/10

1000



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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. 8.0.3		Id: 8/10



600

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

TP601 GND  
TP602 VB  
TP603 D-  
TP604 D+

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

U601  
C5451661

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

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

VBUS +5V  
GZ2012D601TF  
L601  
PWR\_FLAG  
C601 1u  
GND  
U602  
LN1134A332MR-G  
IN EN  
OUT NC  
GND  
C602 1u  
TP605 UI  
+3V3  
GND

J601  
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  
BB  
A1B12  
A12B1  
PWR\_FLAG  
GND  
GND  
R601 5k1  
R602 5k1  
C603 4n7  
R603 1M  
GND  
GND

<b>Title:</b>		
Size: A4	Date:	<b>Rev:</b>
KiCad E.D.A. 8.0.3		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  
KiCad E.D.A. 8.0.3

Date:

Rev:

Id: 10/10