

1000



Sheet: /UI_POT/
File: UI_POT.kicad_sch

Title:

Size: A4

Date:

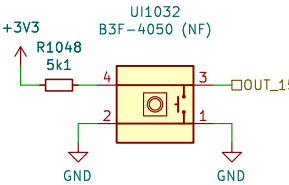
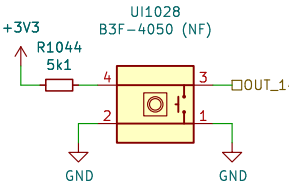
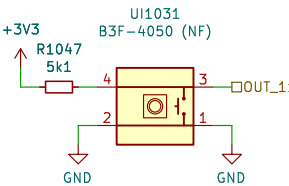
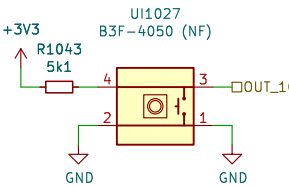
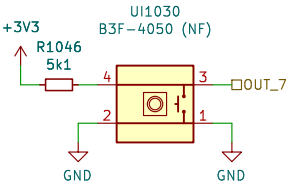
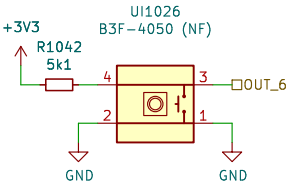
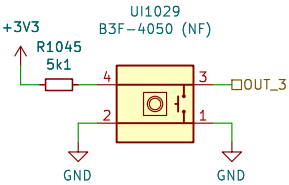
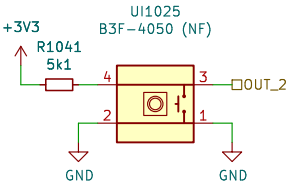
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Simulation:
<http://tinyurl.com/y229mty4>



Sheet: /UI_BUTTON/
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GRID Connector
Bi-Directional Data
2x SYNC

Board Mounting Pattern



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

VBUS TP601 GND TP602 VB TP603 D- TP604 D+ USB_DATA_N USB_DATA_P USB_DATA_N

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

VBUS +5V GZ2012D601TF L601 PWR_FLAG UI +3V3 U602 LN1134A332MR-G IN EN OUT NC GND 1 3 5 4 2 C601 1u C602 1u TP605

J601 TYPE-C-32-M-12 VBUS A9B4 CC1 A5 CC2 B5 D- A7 D- B7 D+ A6 D+ B6 SBU1 A8 SBU2 BB SHIELD A1B12 SHIELD A12B1 SHIELD S2 S3 S4 C603 4n7 R603 1M GND GND

PWR_FLAG VBUS A9B4 A4B9 CC1 A5 CC2 B5 D- A7 D- B7 D+ A6 D+ B6 SBU1 A8 SBU2 BB SHIELD A1B12 SHIELD A12B1 SHIELD S2 S3 S4 C603 4n7 R603 1M GND GND

GND 5k1 R601 GND 5k1 R602

Sheet: /MCU/Sheet60F06FE1/ File: USB_POWER.kicad_sch		
Title:		
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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

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Rev:

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