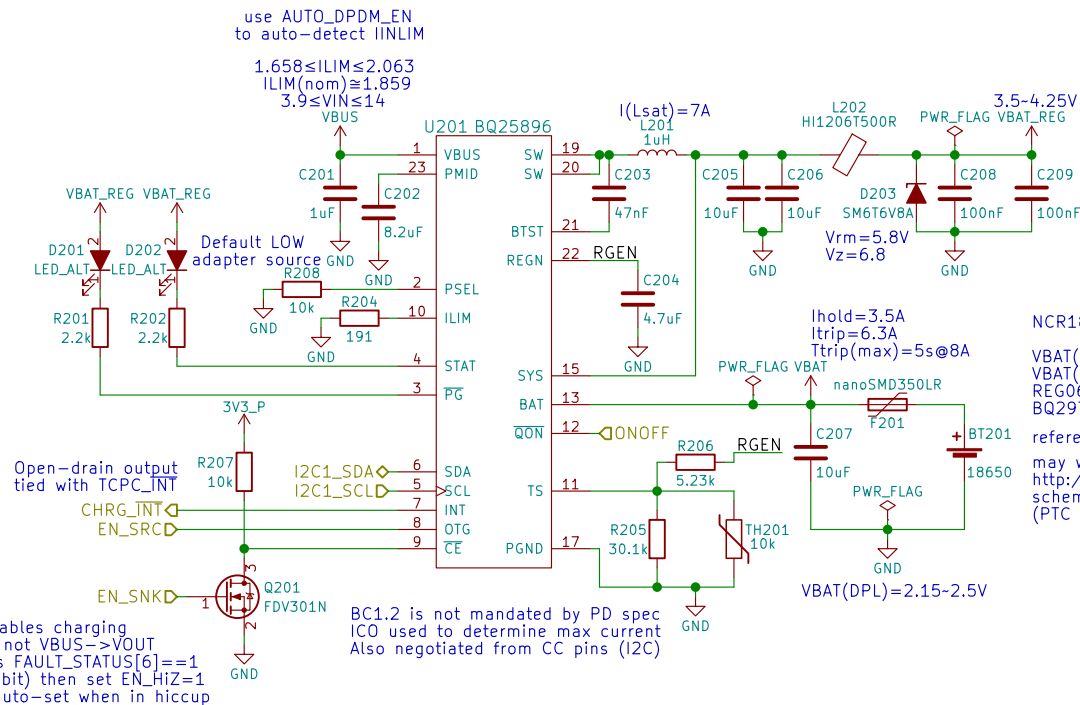


(interpret RSOC% based on this plot)



NCR18650BD is recommended

VBAT(nom)=REG06[7:2]
 VBAT(default_max_ovp)=(REG06[7:2]×1.005)×1.04=4.3982016V
 REG06[7:2]=010111⇒VBAT(max_ovp)=4.3814784
 BQ29705 provides 4.425V as OVP!!!

reference design: <http://www.ti.com/lit/ug/sluuba2b/sluuba2b.pdf>
 may want to include BQ29705 protection as in:
<http://www.ti.com/lit/ug/tiduc11/tiduc11.pdf>
 schematic: <http://www.ti.com/lit/df/tidrp70/tidrp70.pdf>
 (PTC may be good enough)

Reading PTN5110HQ's CC_STATUS and POWER_STATUS registers will tell TCPM (i.MX8M) when to set EN_HiZ

Also, reading PTN5110HQ's CC_STATUS and POWER_STATUS registers will tell TCPM (i.MX8M) when to set OTG_CONFIG=1 (this will also happen when PTN5110HQ sets EN_SRC HIGH)

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Purism SPC

Sheet: /Battery/

File: battery.sch

Title: Battery

Size: A4 Date: 2018-04-19

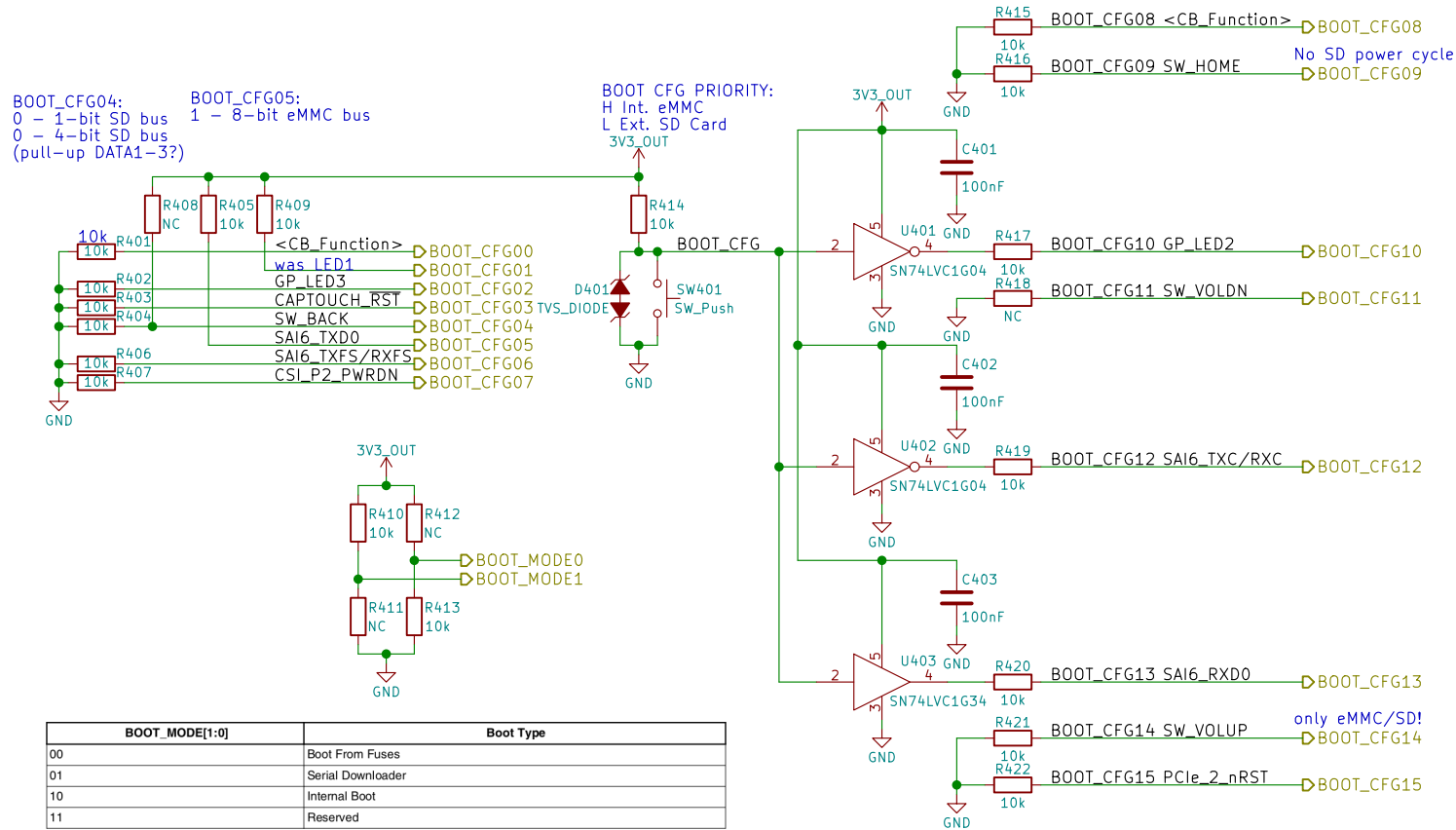
KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 2/15

BOOT_CFG04:
0 - 1-bit SD bus
0 - 4-bit SD bus
(pull-up DATA1-3?)

BOOT_CFG05:
1 - 8-bit eMMC bus



BOOT_MODE[1:0]	Boot Type
00	Boot From Fuses
01	Serial Downloader
10	Internal Boot
11	Reserved

BOOT_CFG[14:12]		Boot device			
001		SD/eSD			
010		MMC/eMMC			
011		NAND			
Fuse	Config	Definition	GPIO ¹	Shipped value	Settings
BOOT_CFG[11:10]	OEM	USDHC port selection	Yes	00	00 - USDHC-1 01 - USDHC-2 10 - USDHC-3 else - reserved

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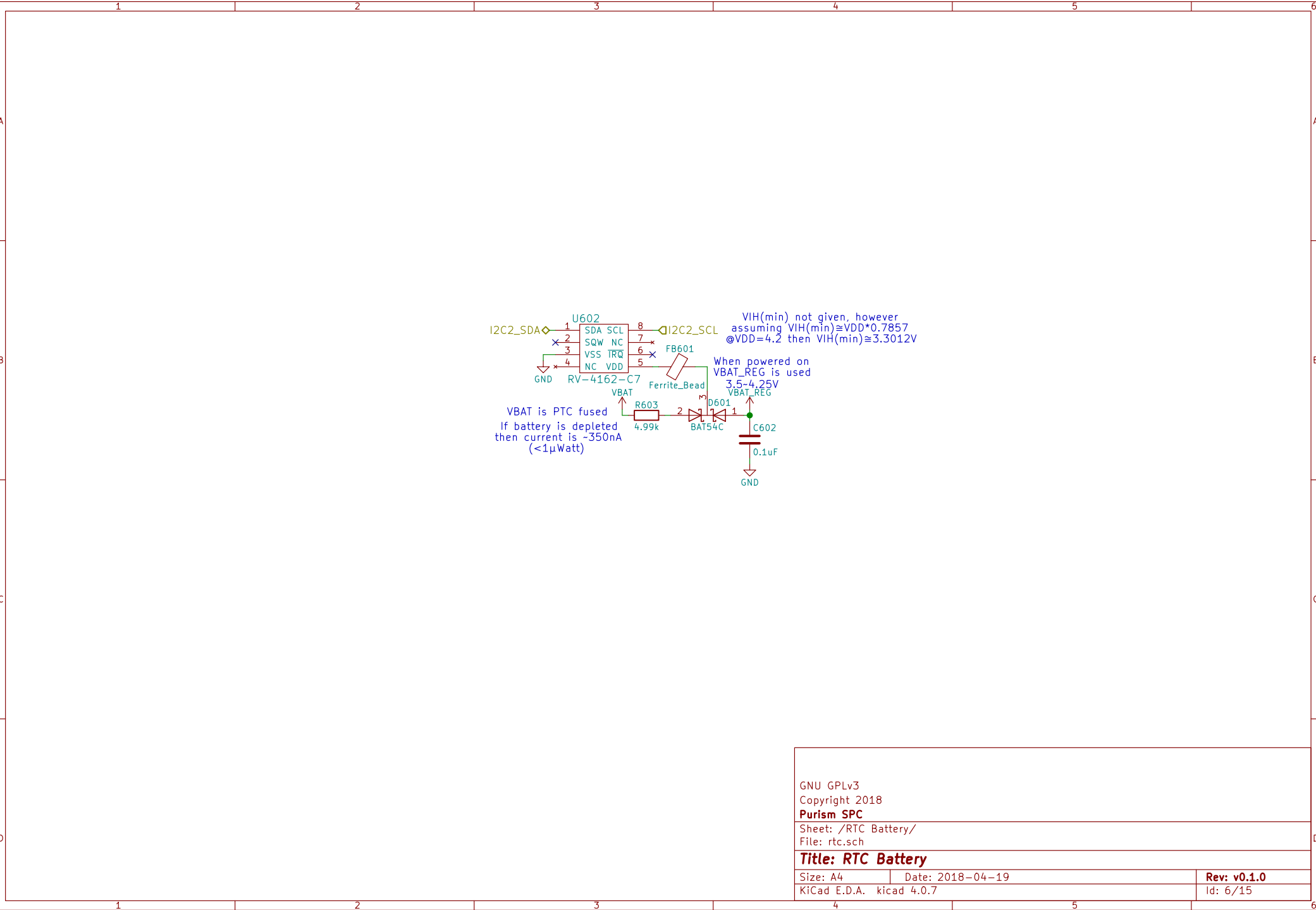
Purism SPC

Sheet: /Boot Config/
File: boot.sch

Title: Boot Configuration

Size: A4	Date: 2018-04-19	Rev: v0.1.0
KiCad E.D.A. kicad 4.0.7		Id: 4/15

Id: 5/15



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Purism SPC

Sheet: /RTC Battery/
File: rtc.sch

Title: RTC Battery

Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 6/15



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Purism SPC

Sheet: /UART Debug/
File: uart.sch

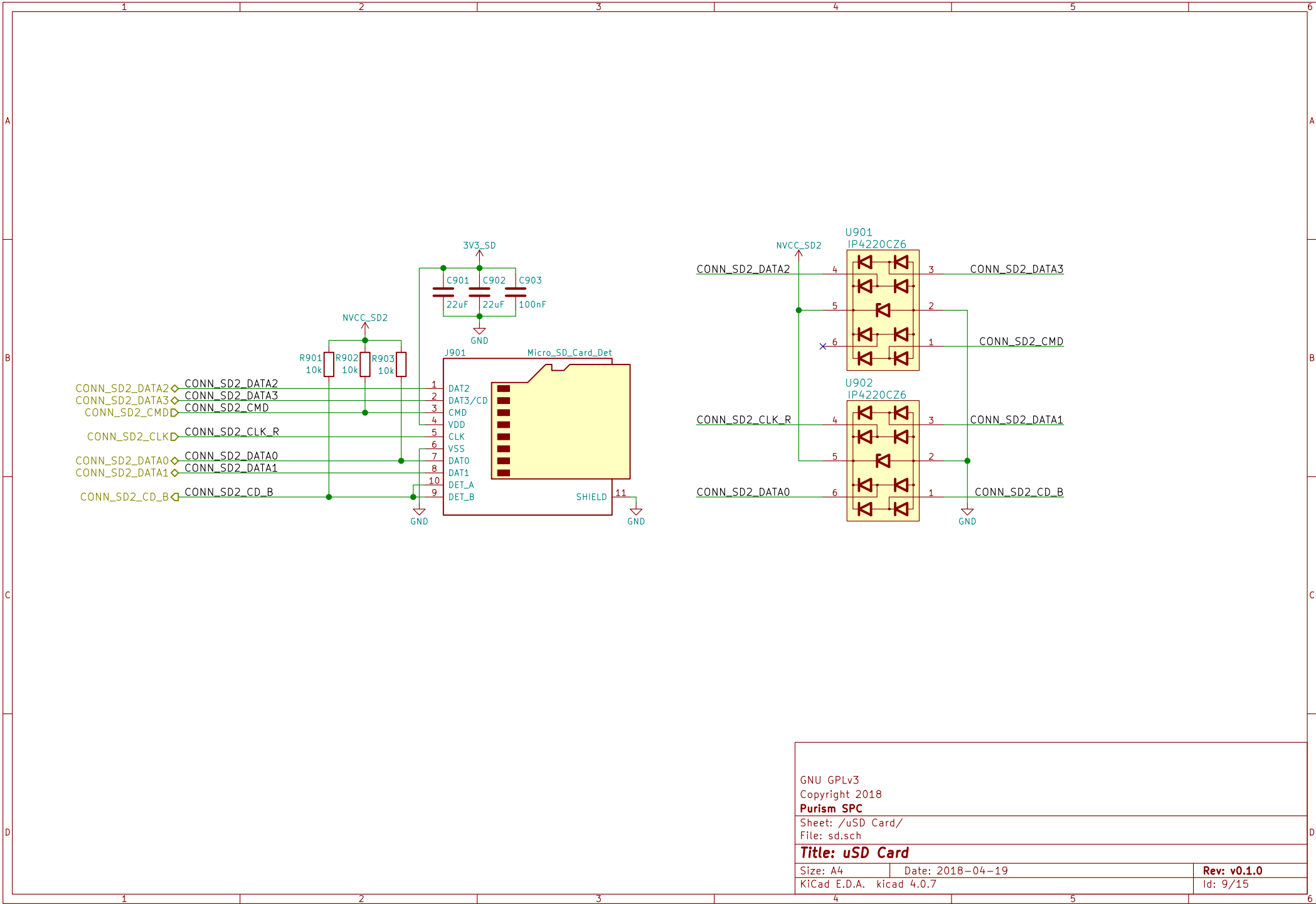
Title: UART Debug

Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 7/15



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Purism SPC

Sheet: /uSD Card/

File: sd.sch

Title: uSD Card

Size: A4

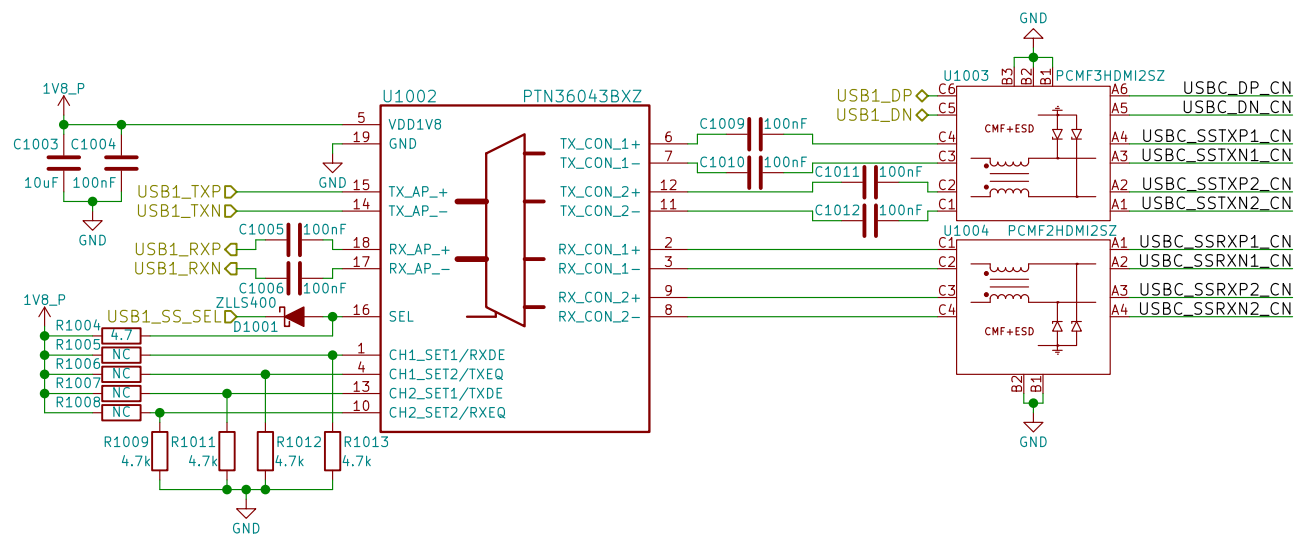
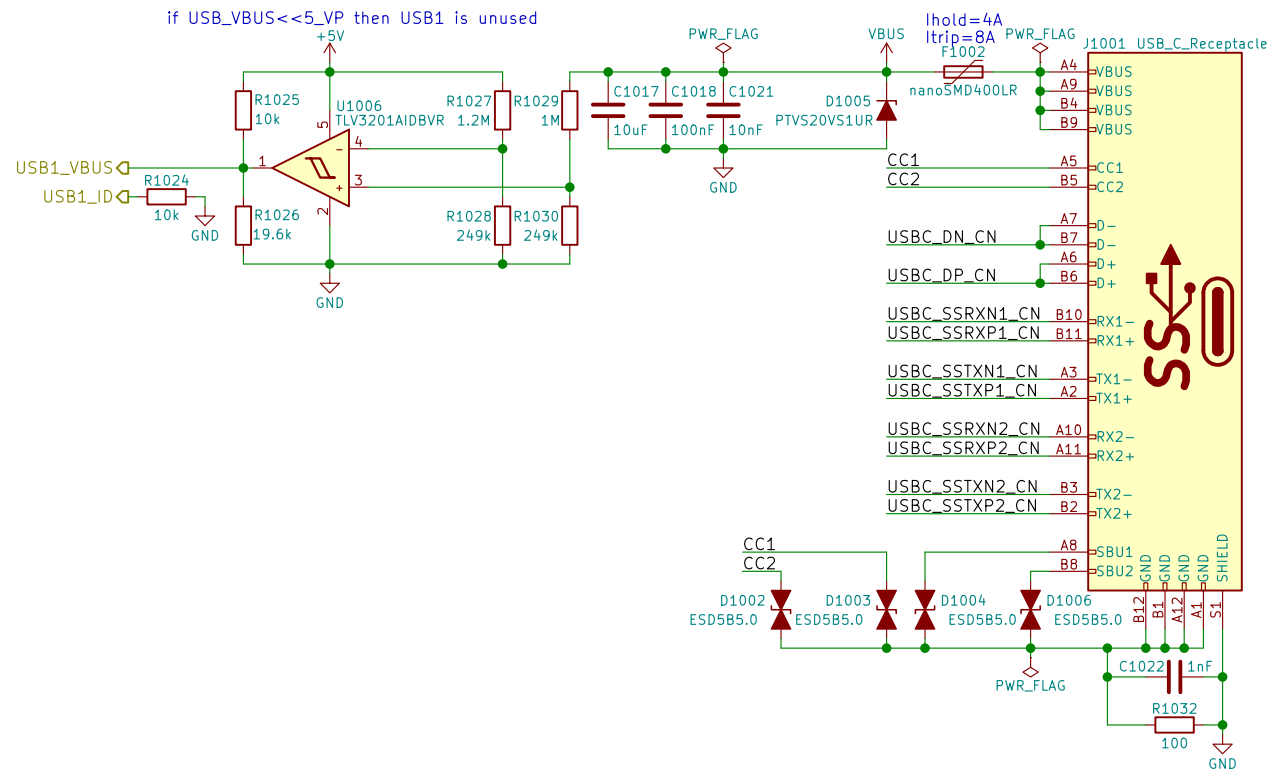
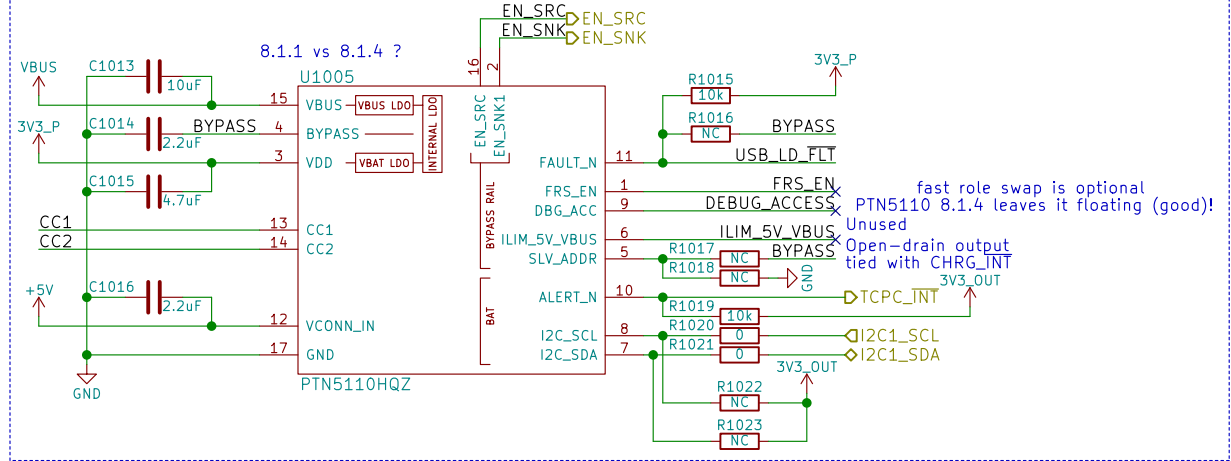
Date: 2018-04-19

Rev: v0.1.0

KiCad E.D.A. kicad 4.0.7

Id: 9/15

USB-C Config Channel (CC) and PD Role Controller

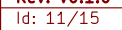


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Purism SPC
Sheet: /USB-C/
File: usb-c.sch

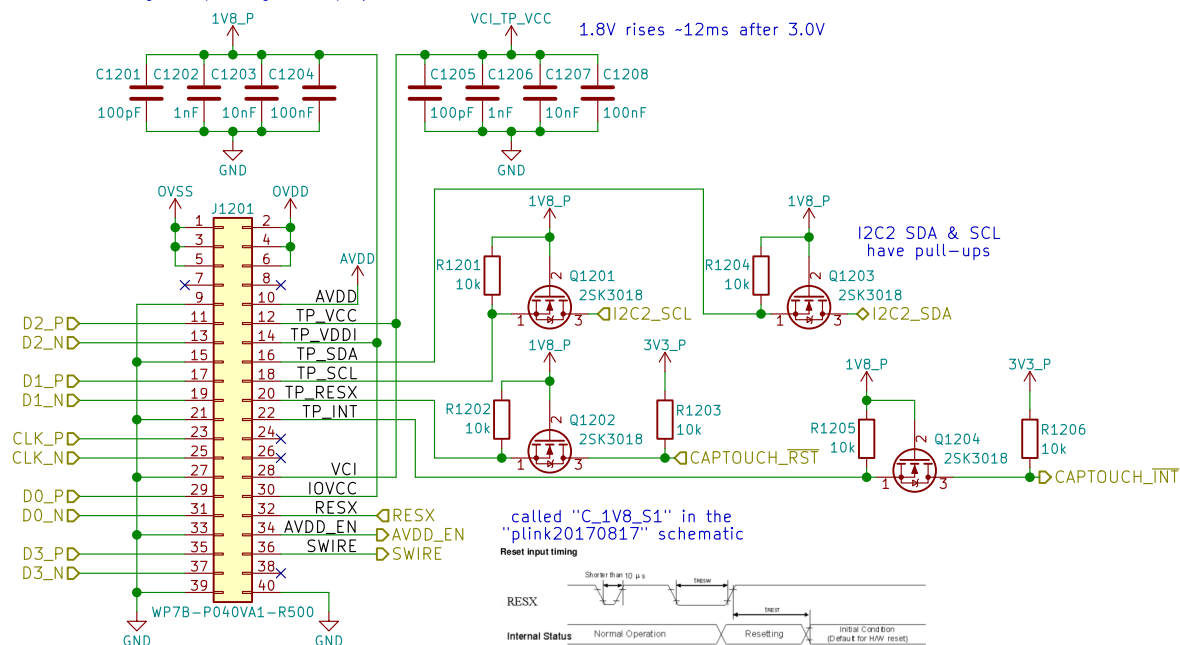
Title: USB Type C

Size: A3 Date: 2018-04-19
KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0
Id: 10/15



Using H546DLB01.1 pin assignment may need to be changed depending on display used



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Purism SPC

Sheet: /MIPI DSI/
File: mipi_dsi.sch

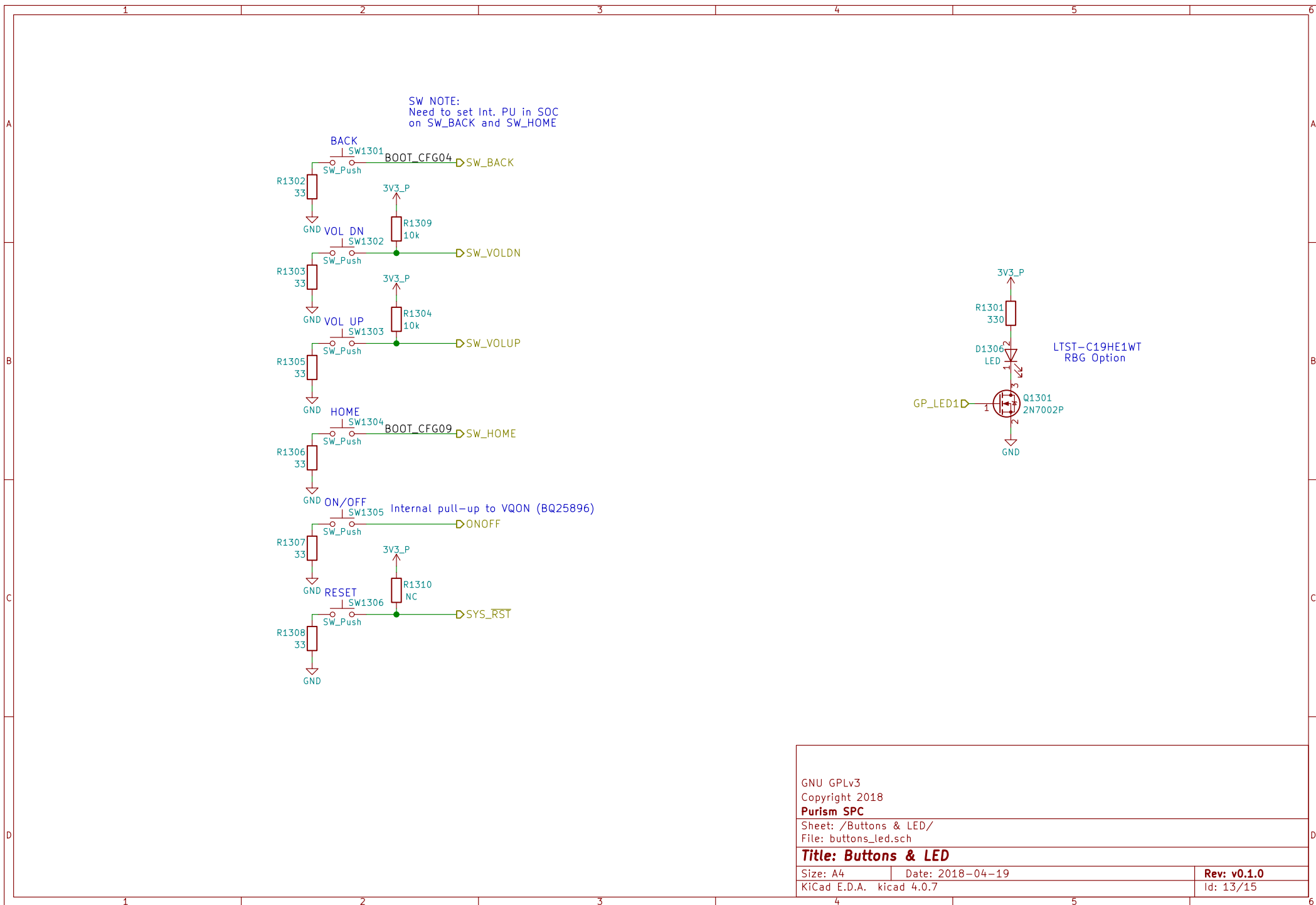
Title: MIPI DSI

Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 12/15



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Purism SPC

Sheet: /Buttons & LED/
File: buttons_led.sch

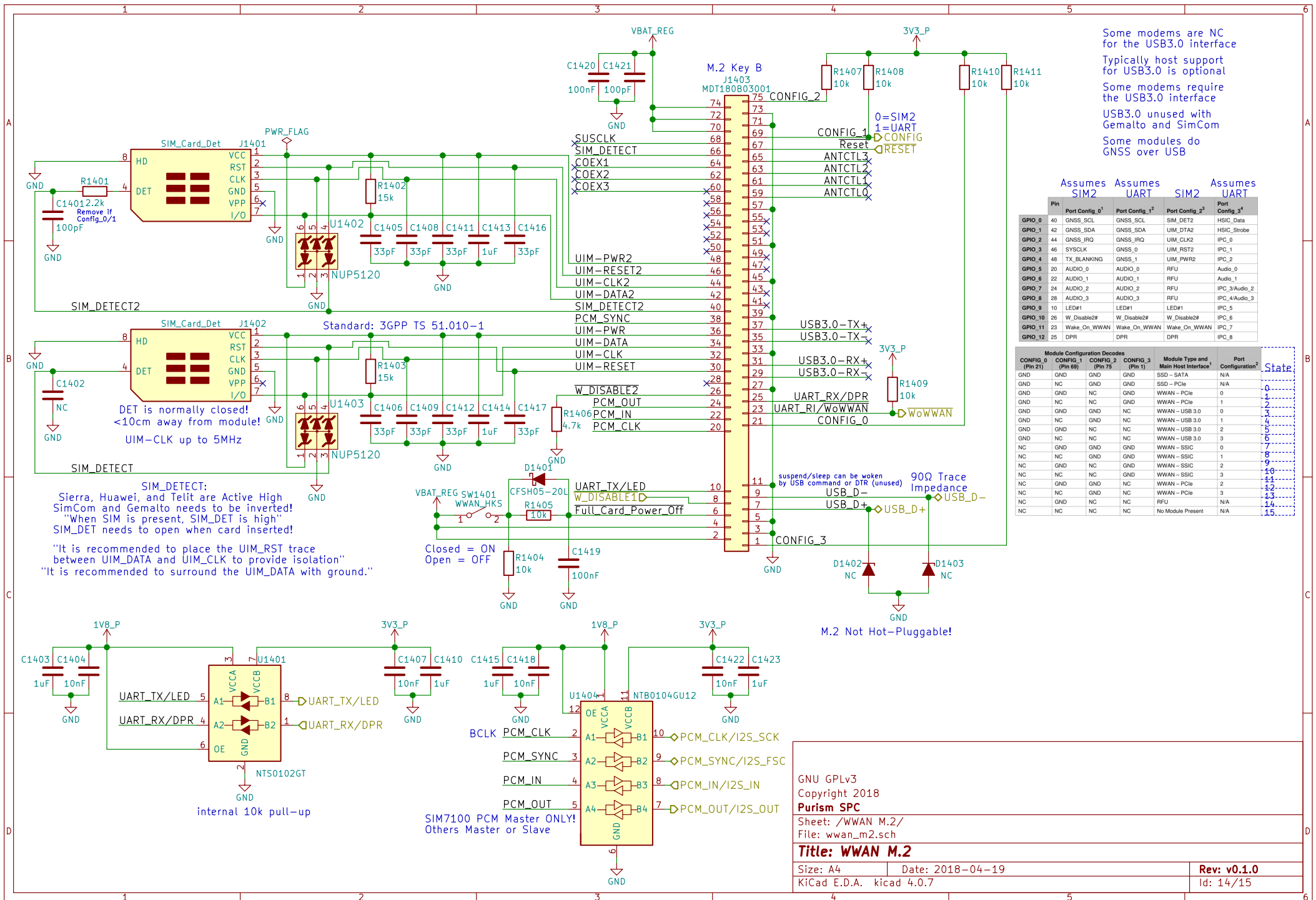
Title: Buttons & LED

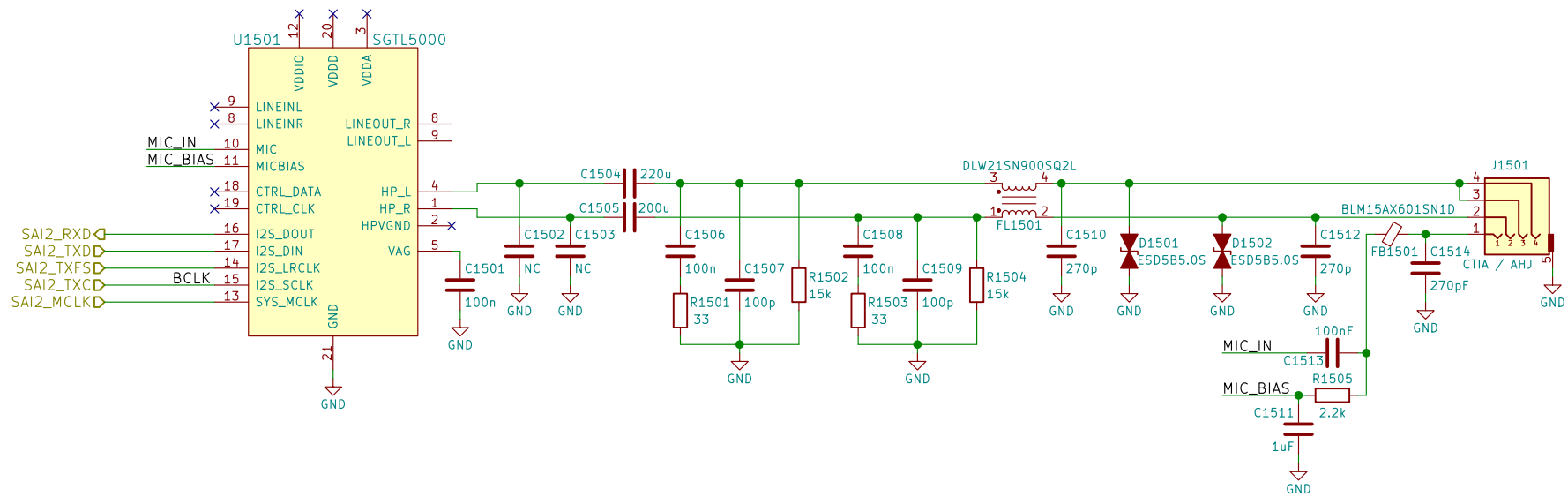
Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 13/15





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Purism SPC

Sheet: /Audio/
File: audio.sch

Title: Audio

Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 15/15