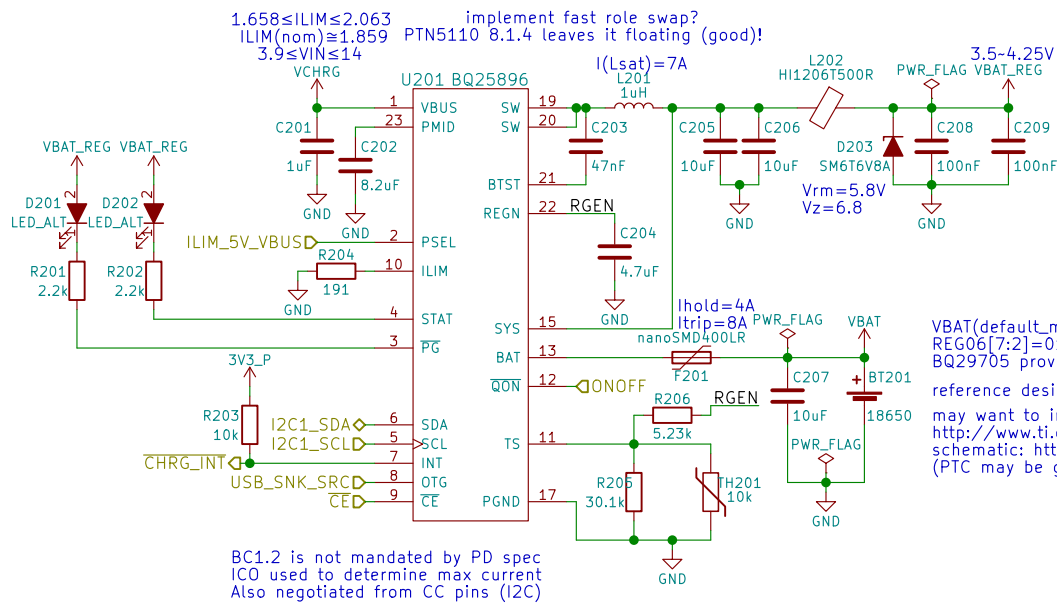


Estimated remaining capacity					
Voltage	AW 18650 2600mAh (black)	Sanyo 18650 2600mAh (Red)	Panasonic COR18650CH 2250mAh	Panasonic NCR18650A 3100mAh	Panasonic NCR18650B 3400mAh
4.2	100%	100%	100%	100%	100%
4.1	92%	92%	94%	94%	94%
4.0	78%	79%	85%	83%	84%
3.9	61%	61%	76%	73%	74%
3.8	43%	44%	66%	60%	62%
3.7	14%	15%	54%	52%	53%
3.6	3%	5%	26%	38%	39%
3.5	1%	2%	12%	20%	22%
3.4	0%	1%	5%	11%	13%
3.3	0%	0%	2%	1%	3%
3.2	0%	0%	0%	0%	0%

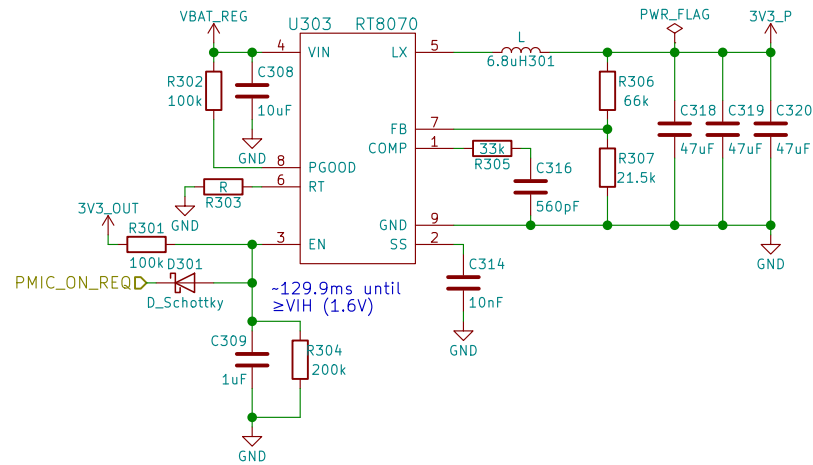
Measured 1 hour after discharge at 1A
 ⇒18650 batteries don't reach 3.3V until depleted



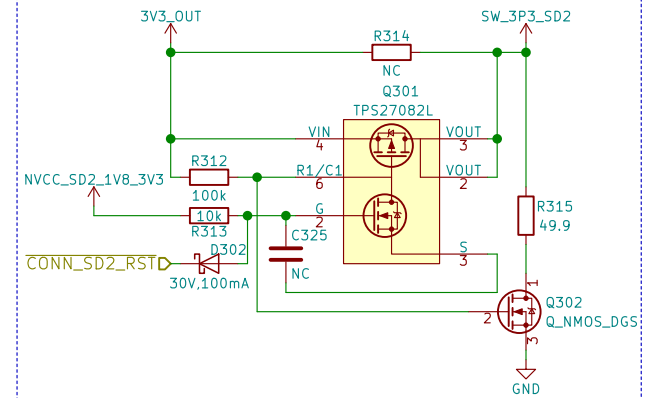
VBAT(default_max_ovp)=(REG06[7:2]×1.005)×1.04=4.3982016V
 REG06[7:2]=010111⇒VBAT(max_ovp)=4.3814784
 BQ29705 provides 4.425V as OVP!!!
 reference design: <http://www.ti.com/lit/ug/sluuba2b/sluuba2b.pdf>
 may want to include BQ29705 protection as in:
<http://www.ti.com/lit/ug/tiduc1/tiduc1.pdf>
 schematic: <http://www.ti.com/lit/df/tidrp70/tidrp70.pdf>
 (PTC may be good enough)

3.3V/3A

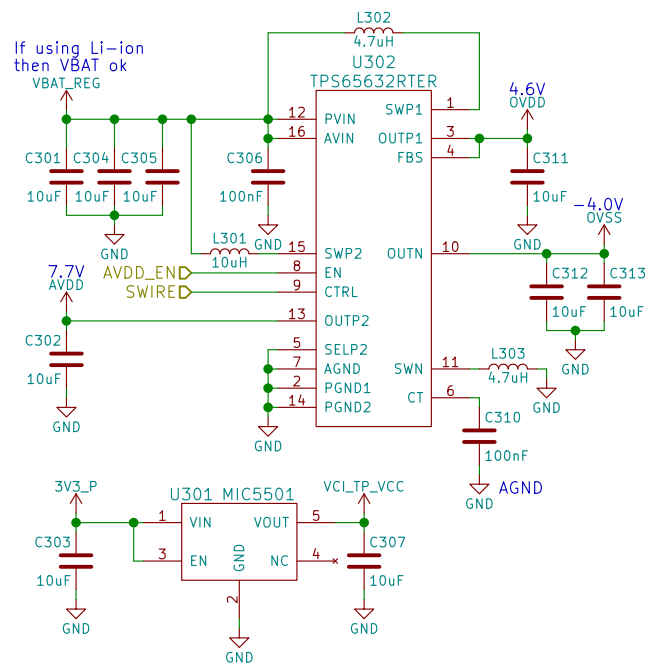
When VBAT can fall below 3.3V use TPS63020 instead!



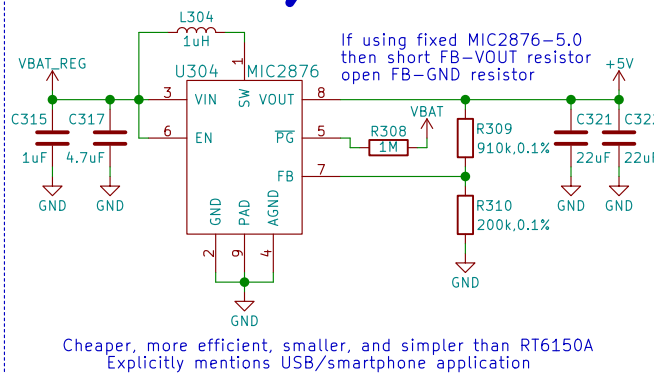
SD POWER



AMOLED POWER

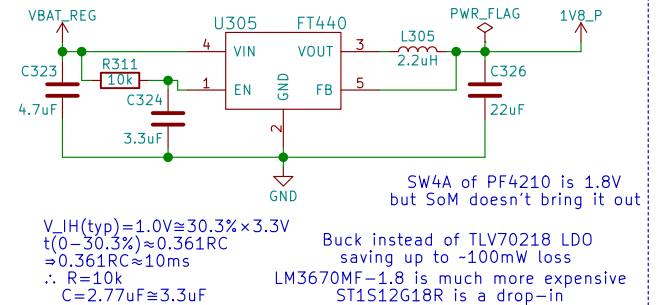


5.0V/3.8A



Cheaper, more efficient, smaller, and simpler than RT6150A
Explicitly mentions USB/smartphone application

1.8V/600mA



Buck instead of TLV70218 LDO
saving up to ~100mW loss
LM3670MF-1.8 is much more expensive
ST1S12G18R is a drop-in

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Purism SPC

Sheet: /Power/
File: power.sch

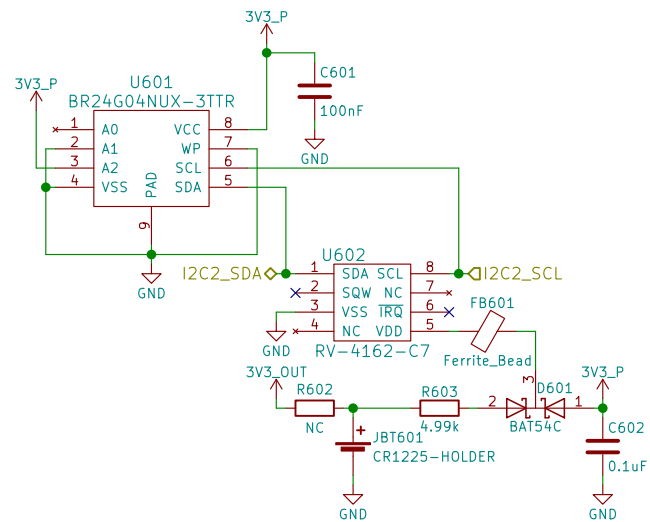
Title: Power

Size: A4
KiCad E.D.A. kicad 4.0.7

Date: 2018-04-19

Rev: v0.1.0
Id: 3/15

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

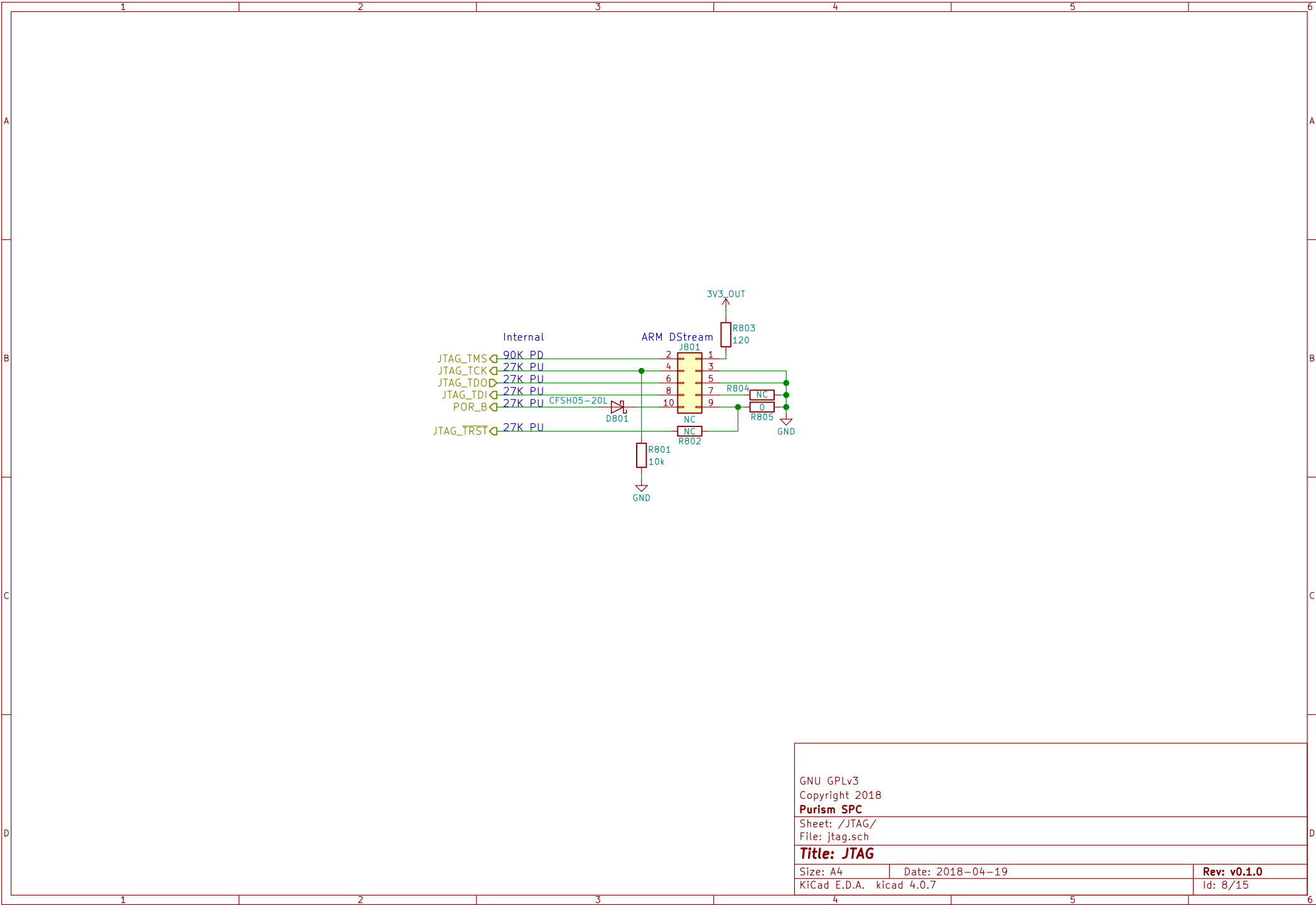
Title: UART Debug

Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 7/15



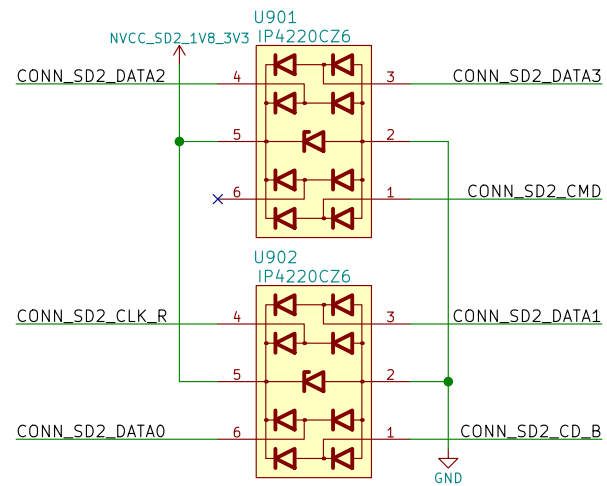
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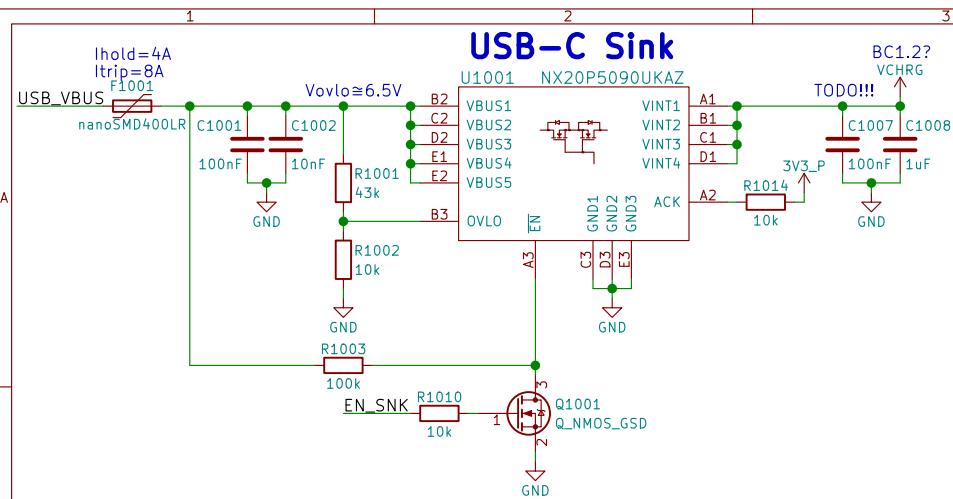
Sheet: /JTAG/
File: jtag.sch

Title: JTAG

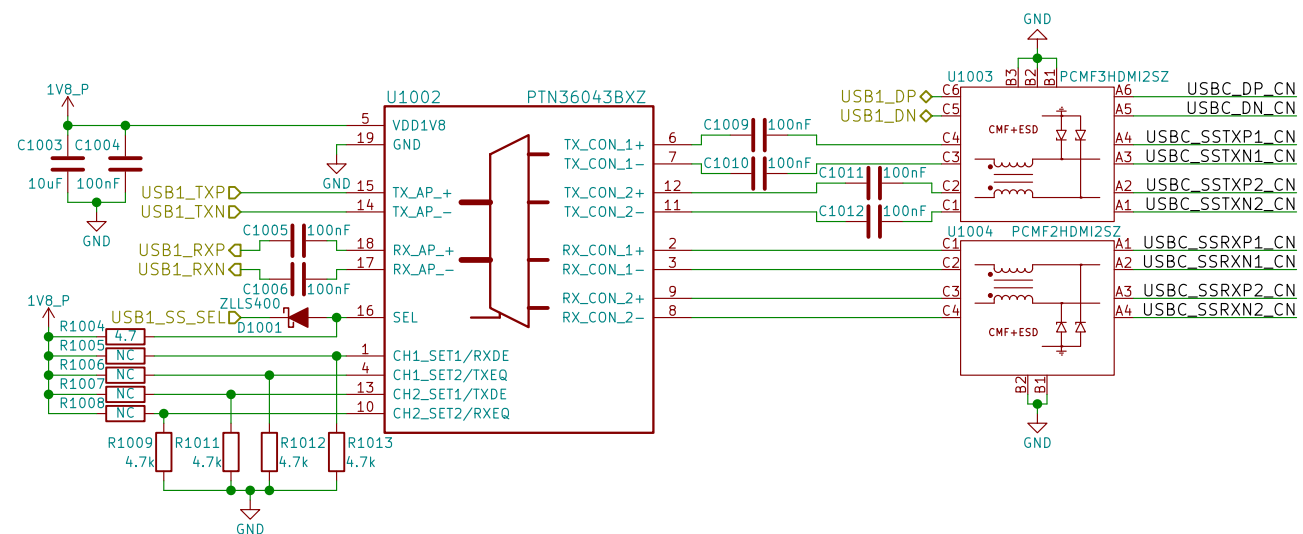
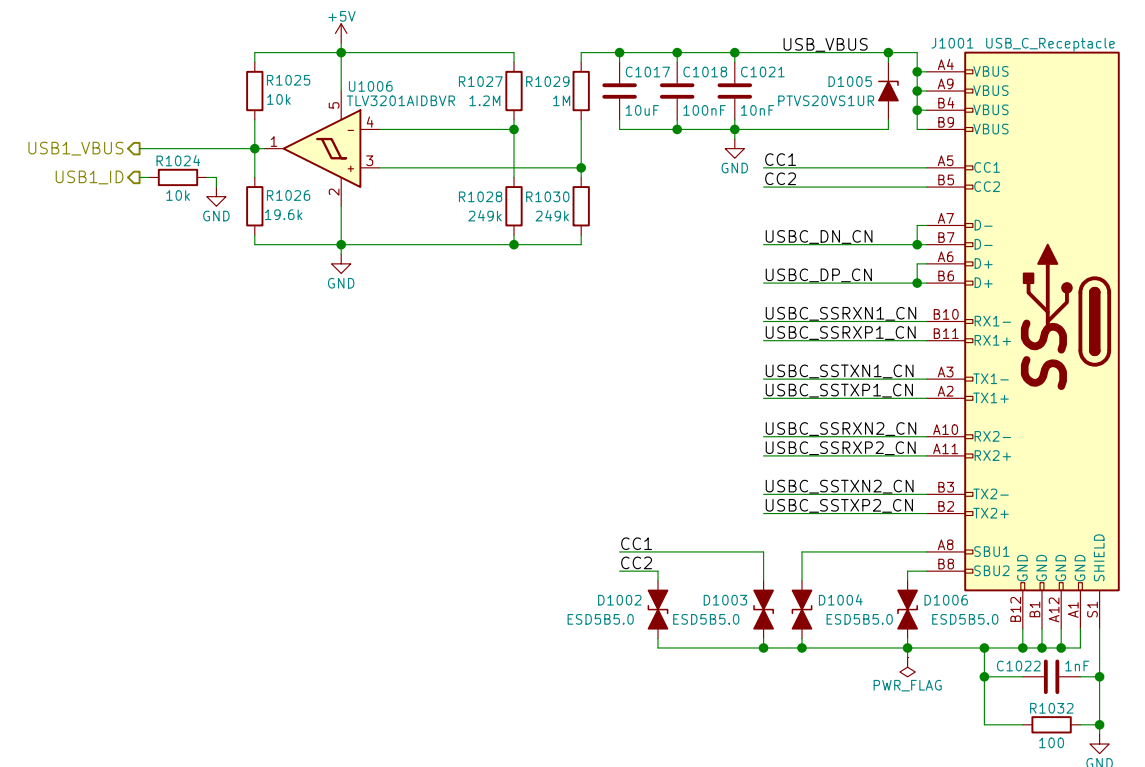
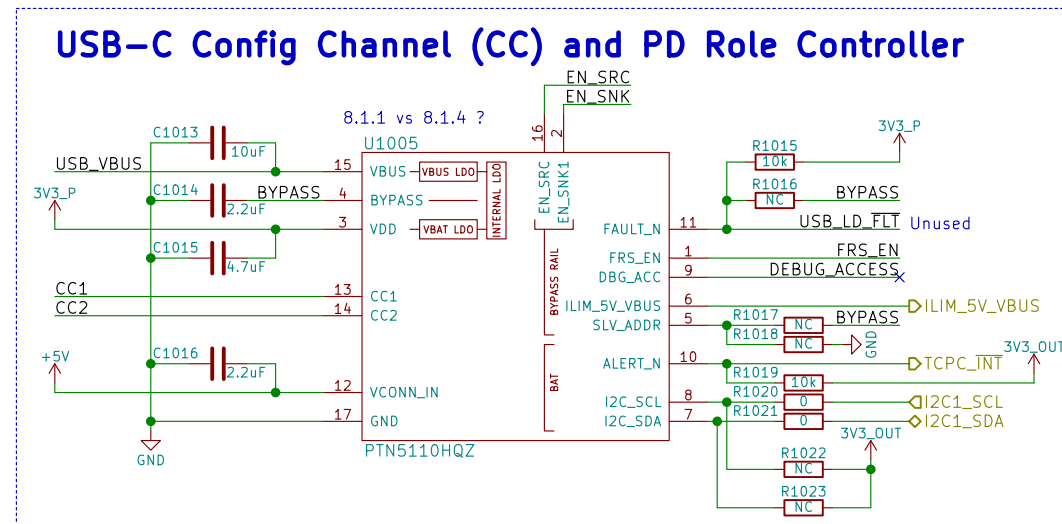
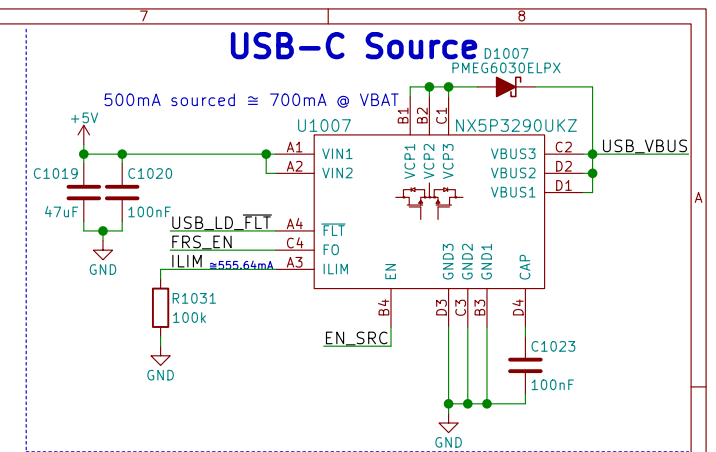
Size: A4	Date: 2018-04-19	Rev: v0.1.0
KiCad E.D.A. kicad 4.0.7		Id: 8/15

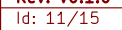


Id: 9/15

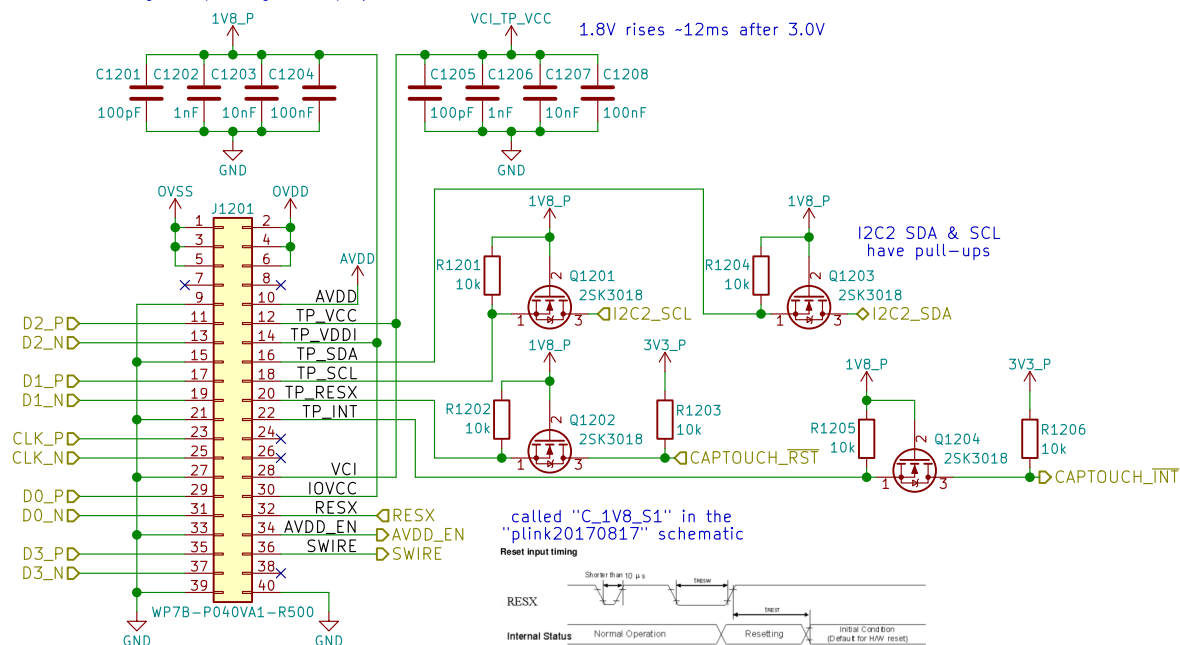


May have BQ25896 handle switching!!!





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

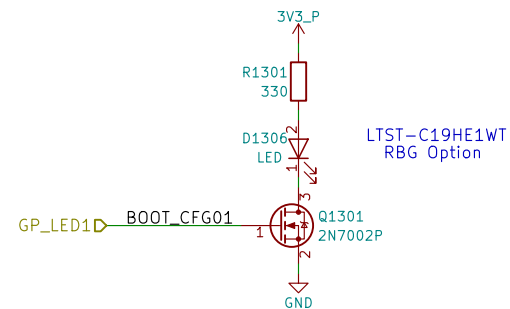
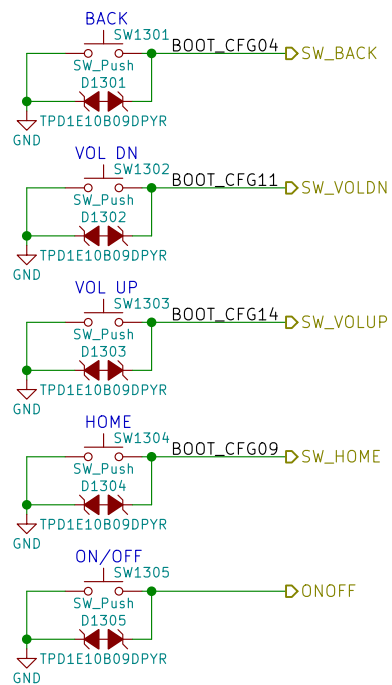
Title: MIPI DSI

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

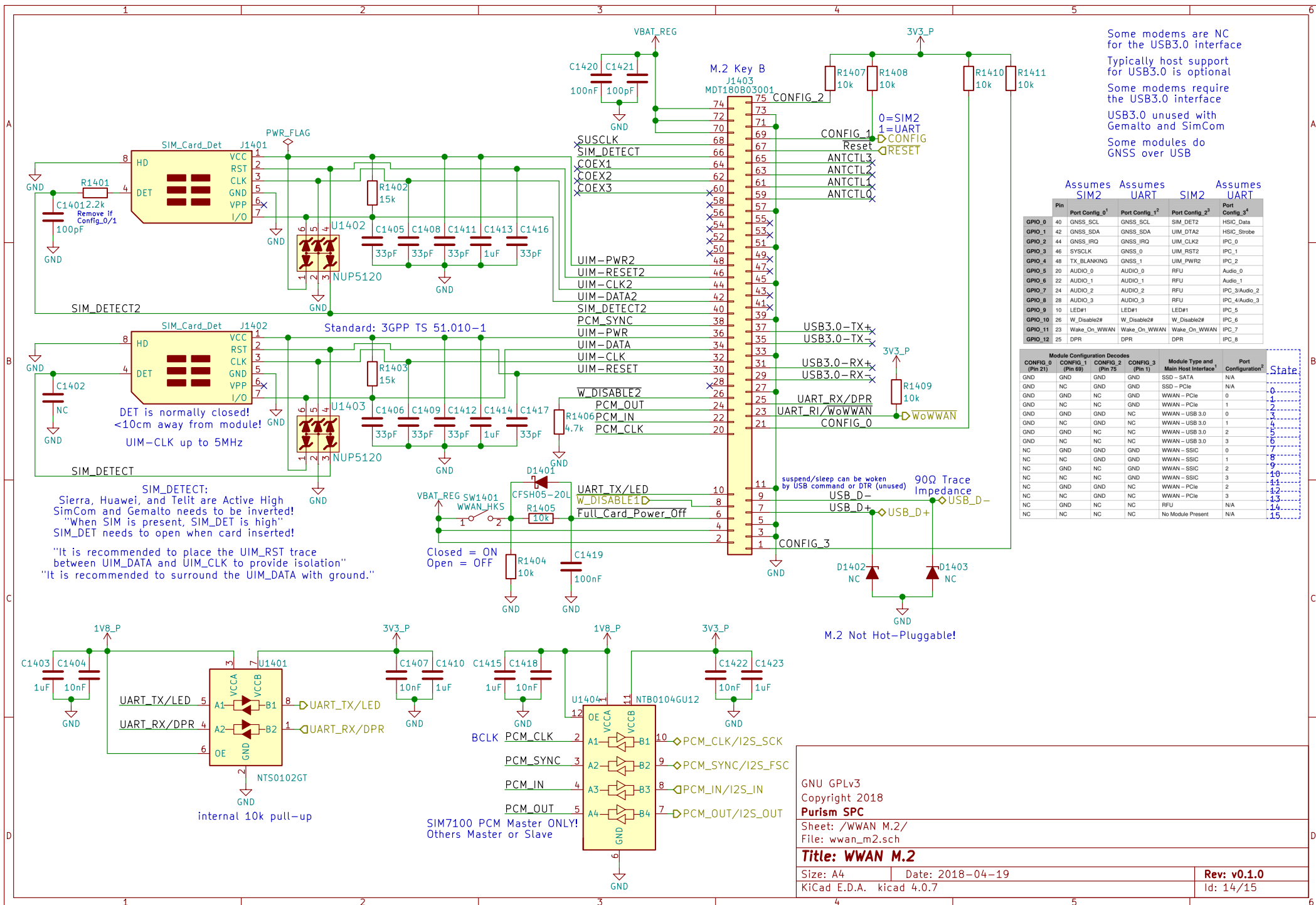
Title: Buttons & LED

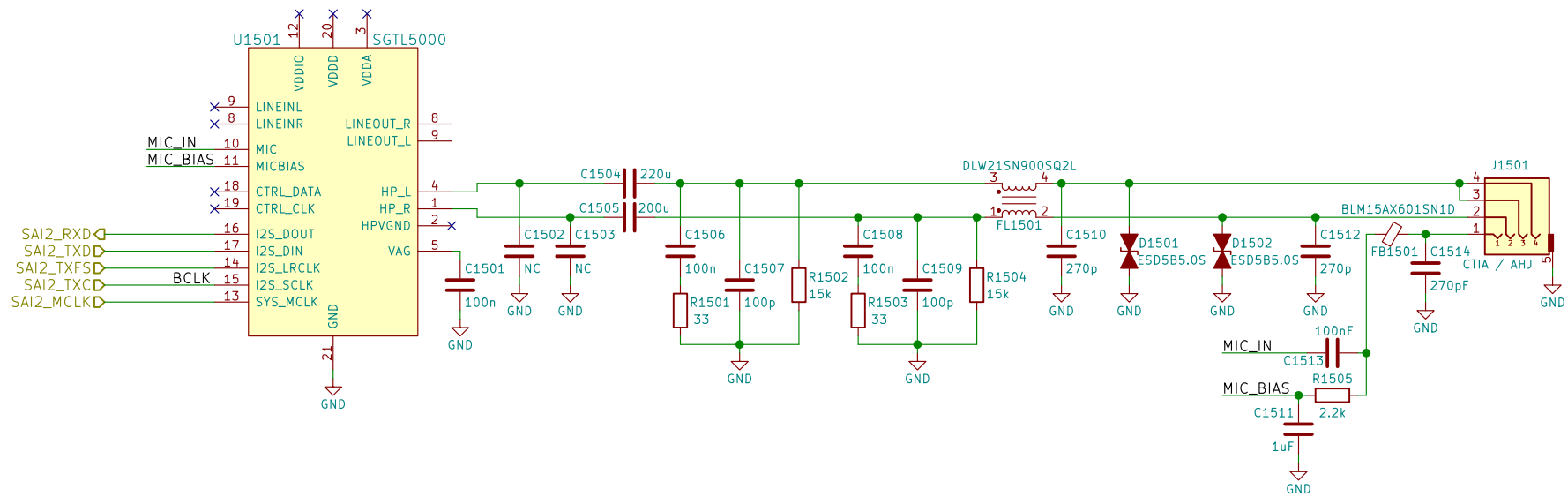
Size: A4 Date: 2018-04-19

KiCad E.D.A. kicad 4.0.7

Rev: v0.1.0

Id: 13/15





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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