Buttons
neo900_SS_1.sch

OTG
neo900_SS_2.sch

Charger/OTG-Booster
neo900_SS_3.sch

Modem Power
neo900_SS_4.sch

Fuel Gauge
neo900_SS_5.sch

3G/4G Modem + SIM
neo900_SS_6.sch

Dual SIM switch
neo900_SS_7.sch

Antenna connections
neo900_SS_8.sch

WLAN, Bluetooth, FM
neo900_SS_9.sch

Sensors
neo900_SS_10.sch

Audio Codec
neo900_SS_11.sch

Audio Headset + Mic
neo900_SS_12.sch

FCI
neo900_SS_13.sch

Audio Handsfree
neo900_SS_14.sch

Misc (lower)
neo900_SS_15.sch

RFID/NFC Reader
neo900_SS_16.sch

RFID/NFC Controller
neo900_SS_17.sch

Hackerbus
neo900_SS_18.sch

Infrared
neo900_SS_19.sch

B2B to UPPER
neo900_SS_20.sch

uSD Breakout Board
neo900_SS_21.sch

B2B to LOWER
neo900_SS_22.sch

Keypad
neo900_SS_23.sch

Display-Peripherals
neo900_SS_24.sch

Display-Panel&Power
neo900_SS_25.sch

CPU + PoP RAM/NAND
neo900_SS_26.sch

eMMC
neo900_SS_27.sch

PMU+Codec
neo900_SS_28.sch

BB-XM Dummy (TWL4030)
neo900_SS_29.sch

Camera
neo900_SS_30.sch

LEDs
neo900_SS_31.sch

Fancy LEDs
neo900_SS_32.sch

Connector to BB-XM
neo900_SS_33.sch

BB-XM Adapter (CPU)
neo900_SS_34.sch

BB-XM Adapter (DISP)
neo900_SS_35.sch

BB-XM Adapter (CAM)
neo900_SS_36.sch

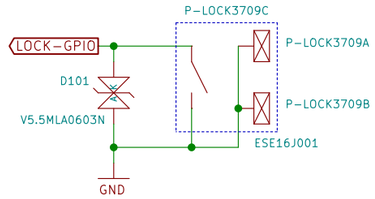
No-Solder Components
neo900_SS_37.sch

Sheet: /
File: neo900.sch

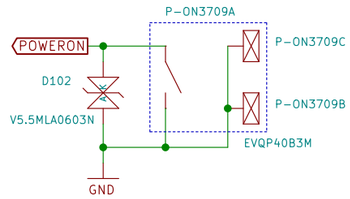
Title: Neo900

Size: A3	Date: 16 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 1/38

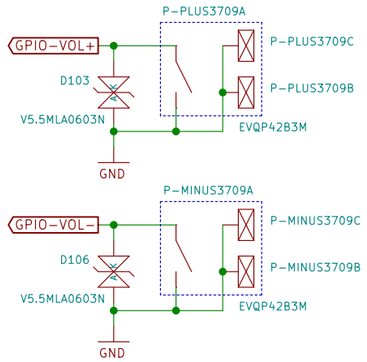
lock switch



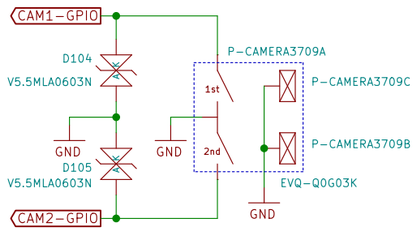
on-off



volume



camera trigger



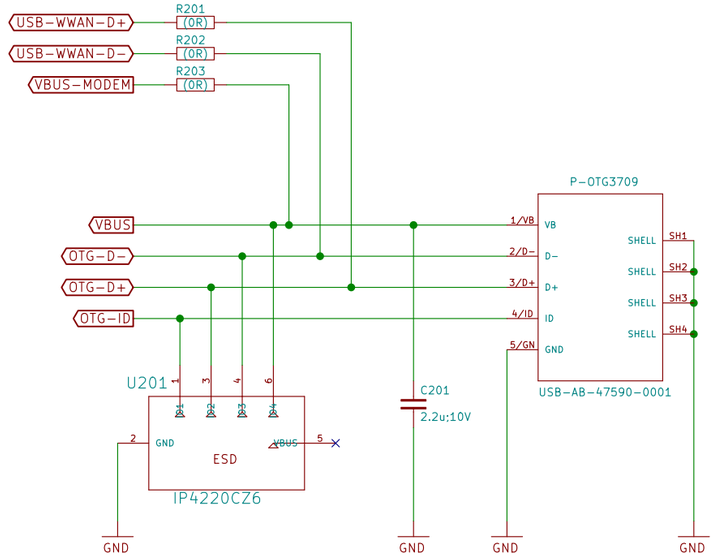
place in scan matrix? would need 3-4 wires to UPPER board instead of 2
No. VOL+ or VOL- can either be connected to GPIOs
or drive two FETs that sit in the keyboard matrix
in any case it is sufficient to connect GPIO-VOL+ and VOL- to two pins on the B2B connector

Sheet: /Buttons/
File: neo900_SS_1.sch

Title: Buttons

Size: A3	Date: 16 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 2/38

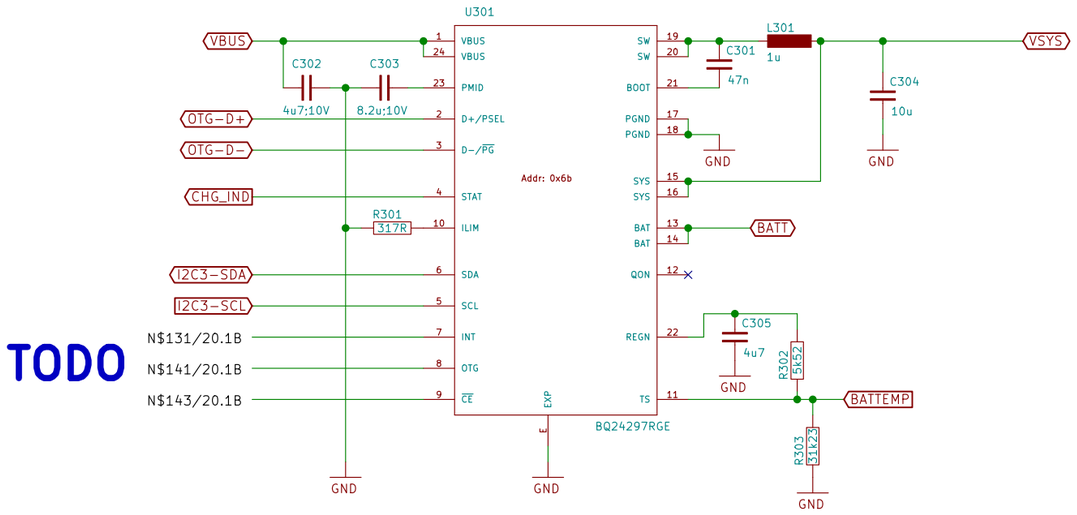
can be used to test/operate the modem through the OTG port (w/o UPPER PCB)



Sheet: /OTG/
File: neo900_SS_2.sch

Title: OTG

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product	Id: 3/38	

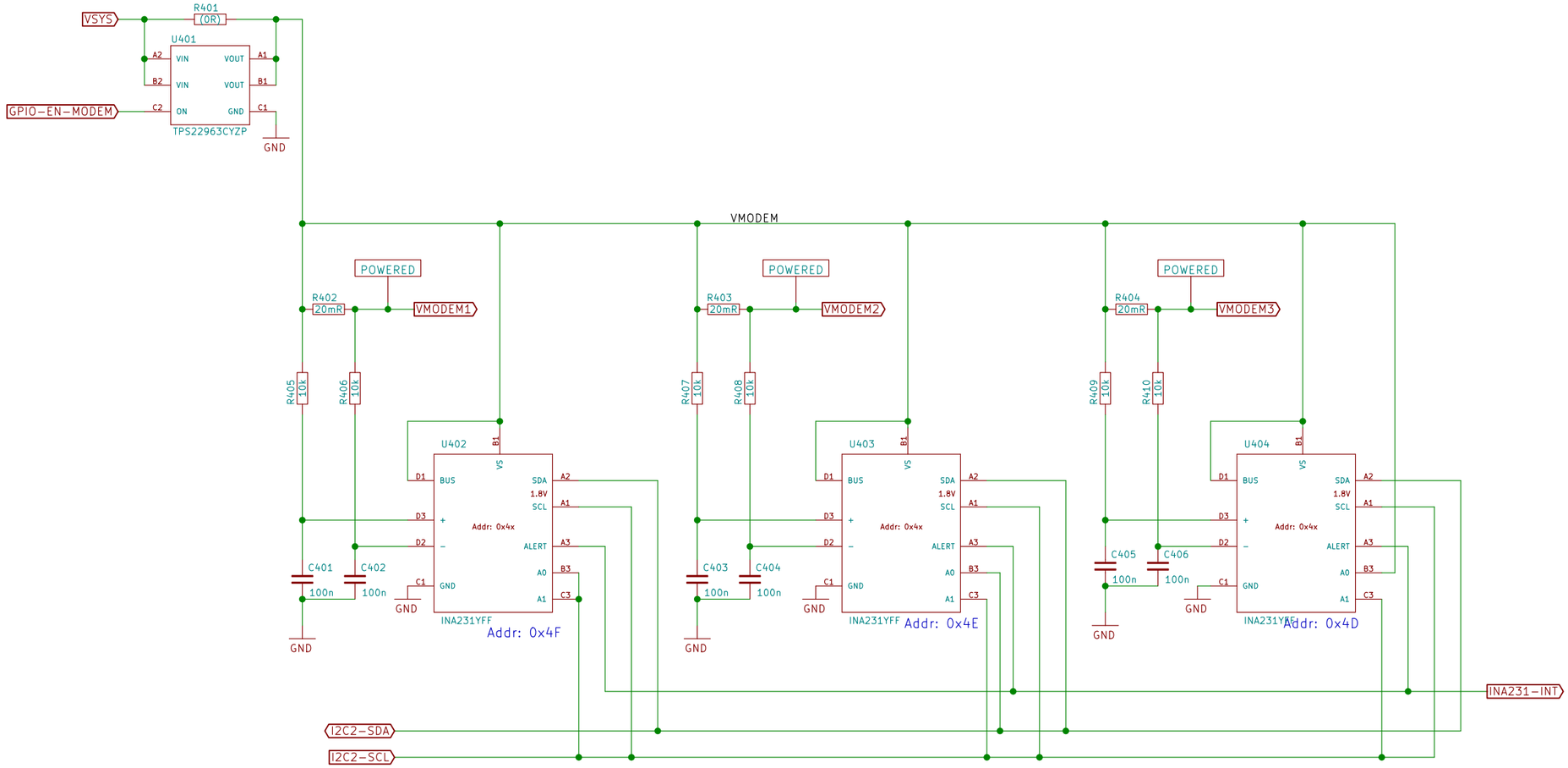


TODO

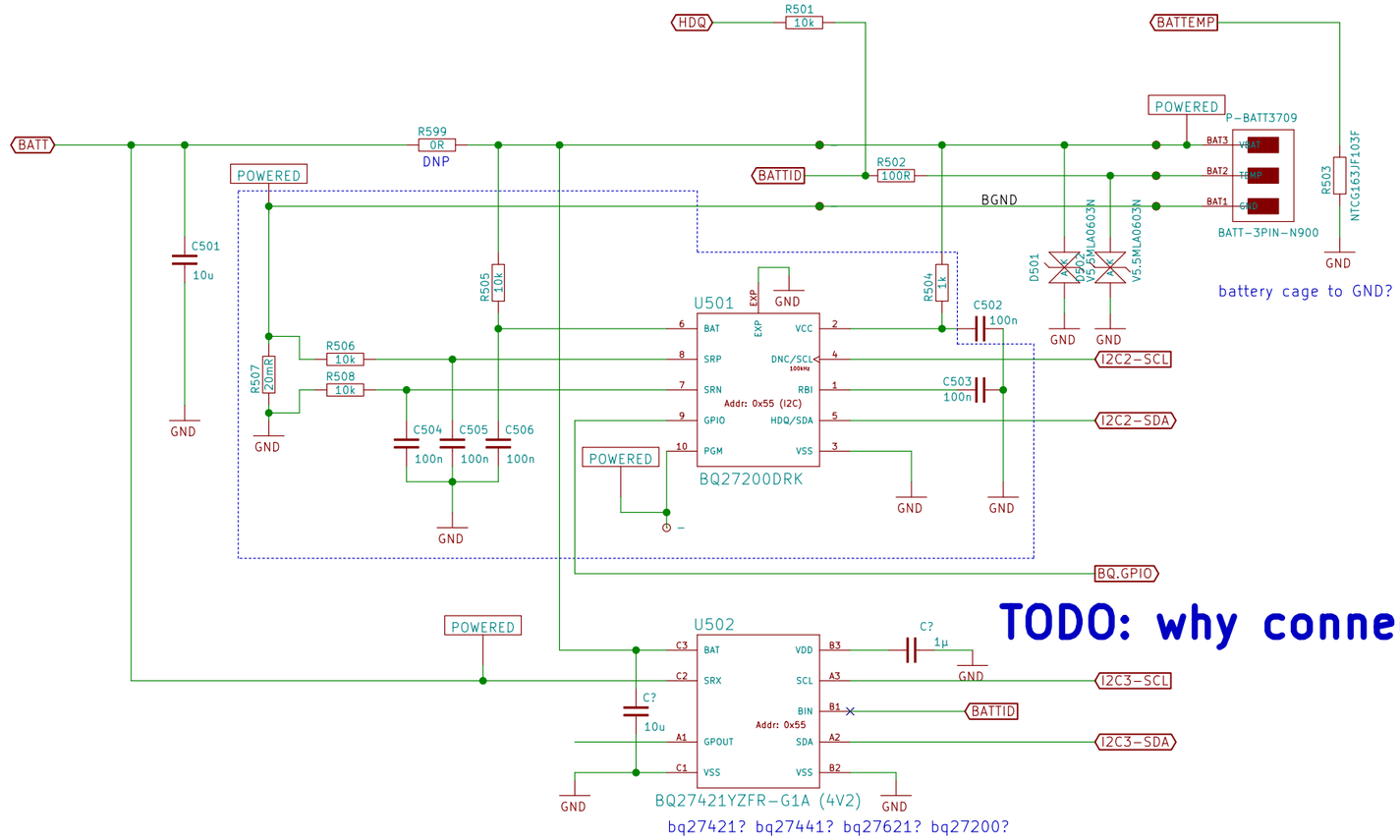
Sheet: /Charger/OTG-Booster/
File: neo900_SS_3.sch

Title: Charger/OTG-Booster

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 4/38



Sheet: /Modem Power/ File: neo900_SS_4.sch		
Title: Modem Power		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 5/38



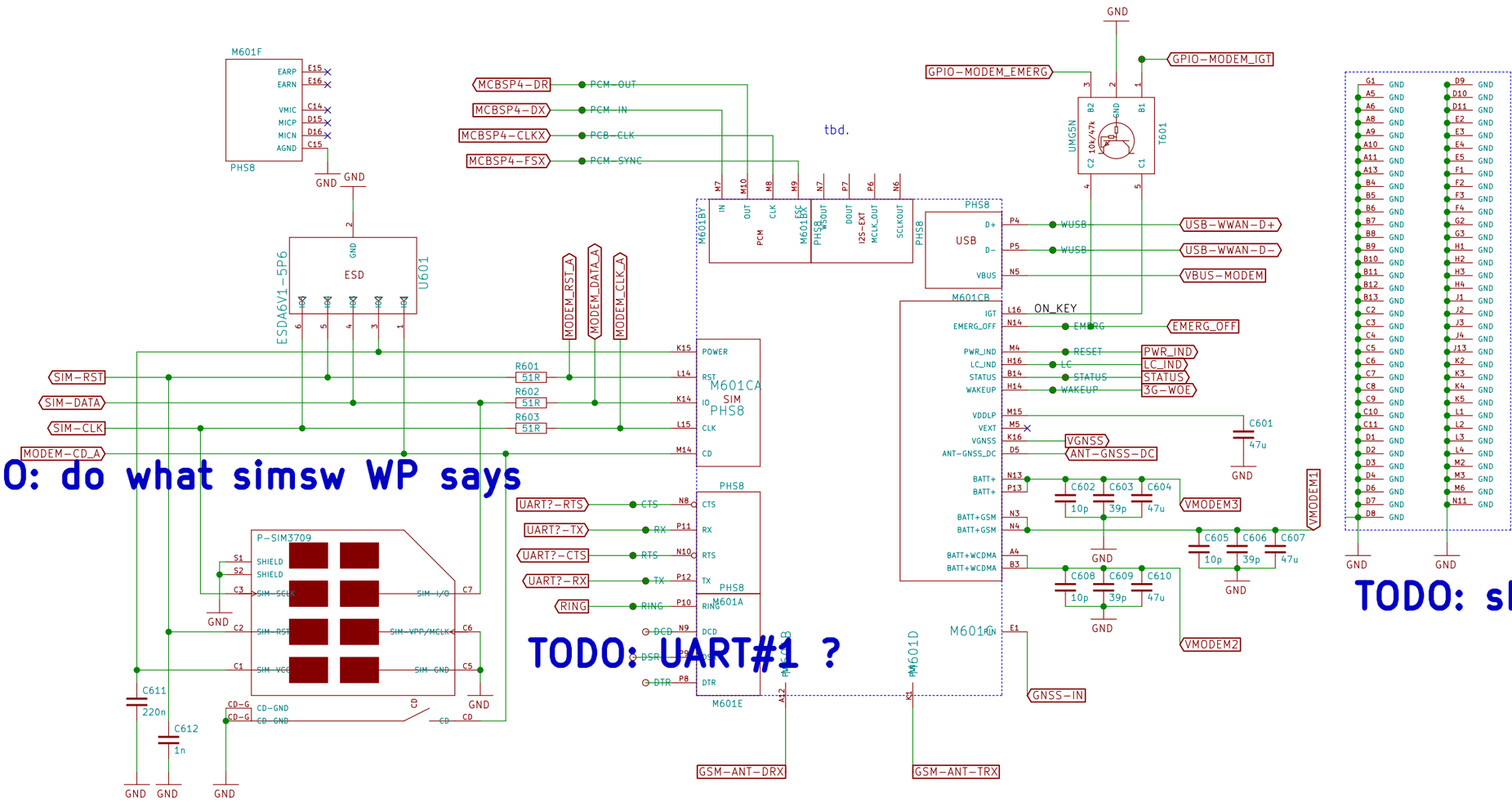
TODO: why connect to VCC ?

TODO: can U501 and U502 coexist ?
TODO: BQ27421YZFR-G1A

Sheet: /Fuel Gauge/
File: neo900_SS_5.sch

Title: Fuel Gauge

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 6/38



TODO: do what simsw WP says

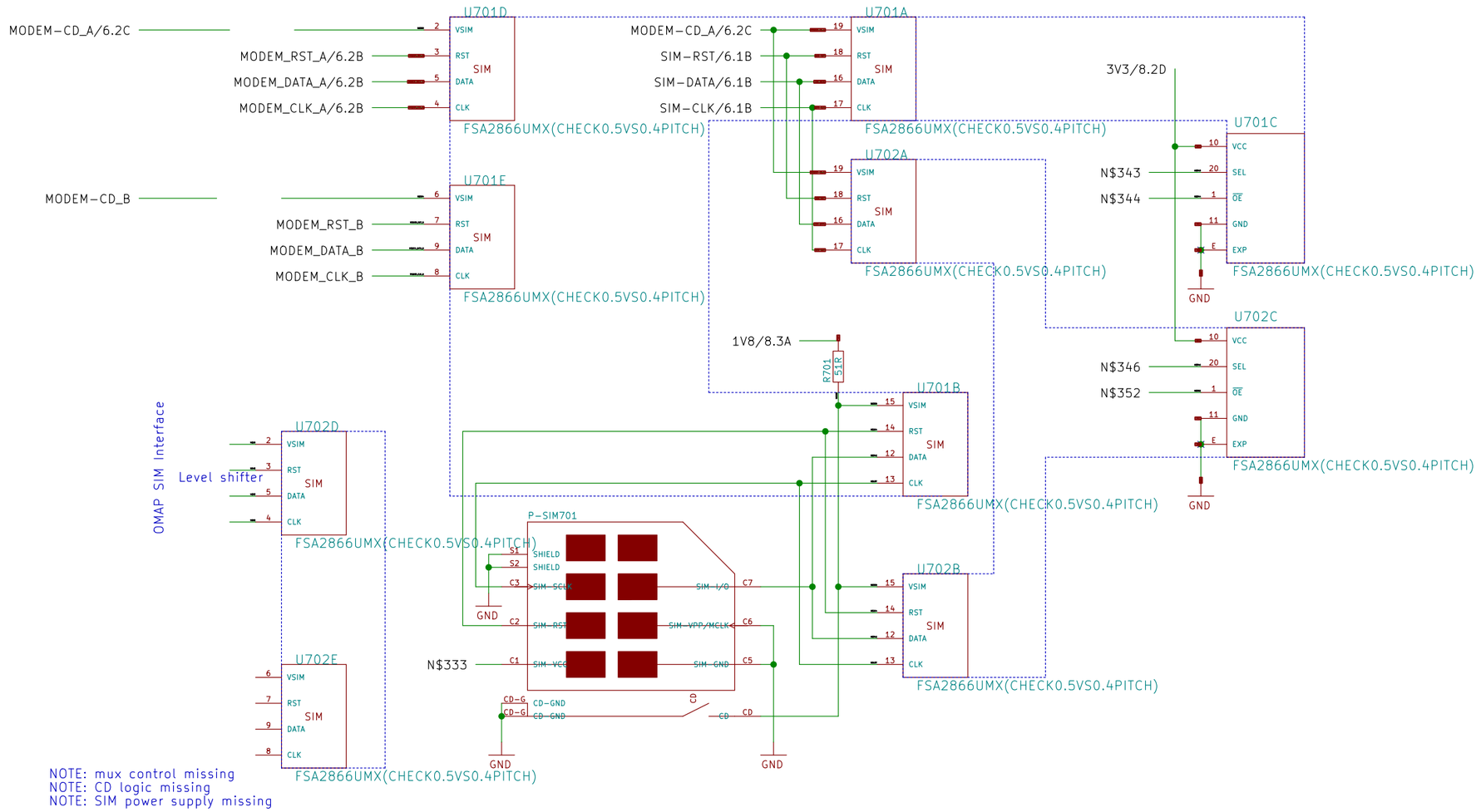
TODO: UART#1 ?

TODO: shield connection near

Can we connect UART in parallel to Bluetooth UART (i.e. if BT is disabled we can unbrick the Modem?)

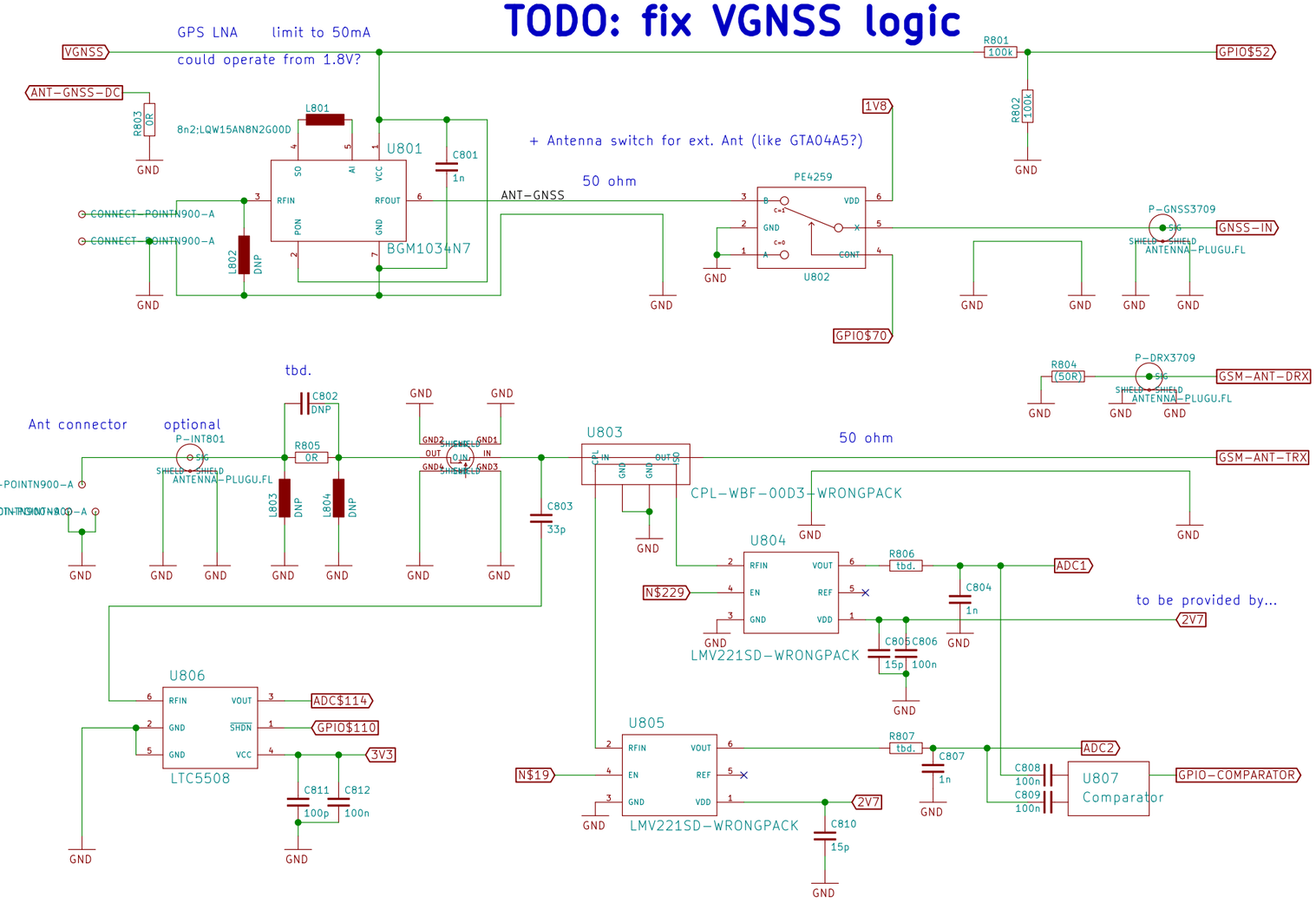
Sheet: /3G/4G Modem + SIM/ File: neo900_SS_6.sch		
Title: 3G/4G Modem + SIM		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 7/38

TODO: not cleaned up – needs total rewrite



Sheet: /Dual SIM switch/ File: neo900_SS_7.sch		
Title: Dual SIM switch		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 8/38

TODO: fix VGNSS logic



TODO: name all the *$*

Sheet: /Antenna connections/		
File: neo900_SS_8.sch		
Title: Antenna connections		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 9/38

WiLink8

M901BW

VBATT
1V8
WLAN-IRQ
32KHZ
WLAN-EN
BT-EN

VBATT 46 47
VIO 38
WLAN-IRQ 14
32KHZ 36
WLAN-EN 40
BT-EN 41
WL-UART-DBG 42
BT-UART-DBG 43
ANT1 32 — main antenna (at top of GTA04)
ANT2 18 — install C1101/2, L1102/4 according to antenna type

WL1837MODGIMOC

secondary (on the side of GTA04)
could be 5.8GHz as well

TODO: ANT2

GND

M901AA M901AB M901AC M901AD M901AE M901AF M901AG M901AH M901AI M901AJ M901AK M901AL M901AM M901AN M901AO M901AP M901AQ M901AR M901AS M901AT M901AU M901AV M901AW M901AX M901AY M901AZ M901BA M901BB

M901O M901P M901Q M901R M901S M901T M901U M901V M901W M901X M901Y M901Z

M901CA M901BC M901BD M901BE M901BF M901BG M901BH M901BI M901BJ M901BK M901BL M901BM M901BN

M901C M901D M901E M901F M901G M901H M901I M901J M901K M901L M901M M901N

TODO: merge GND into one component ?

BT-PCM-DX
BT-PCM-DR

WL1837MODGIMOC

M901A
FSC 58
CLK 60
OUT 57
IN 56
PCM

M901B
CTS 51
RX 53
RTS 50
TX 52

M901BO M901BP M901BQ M901BR M901BS M901BT M901BU

M901BV
CLK 8
CMD 6
DAT0 10
DAT1 11
DAT2 12
DAT3 13

WLAN-IRQ
WLAN-EN
BT-EN
GPIO175
KEYIRQ

TODO: unfinished

FM-RX
C901 1n
filter 3-4 GHz
R904 2R
MLZ1608M100W
L901
LOOP+
LOOP
LOOP-
connect >10cm
loop or stub antenna
D901 V5.5MLA0603N
L902 120n
1V8
3V3
C902 100n
C903 100n
GND

U902
FMI 2
RFGND 3
TXO 4
VIO 10
VDD 11
GND EXP
GND 12
LOUT/DFS 14
GPO3/DCLK 17
ROUT/DIN 13
RIN/DOUT 15
LIN/DFS 16
GPO2/INT 18
GPO1 19
RST 5
SEN 6
SCLK 7
SDIO 8
RCLK 9
dig. IN
dig. OUT
FM RX/TX
Address: 0x11
SI4721BG

50 Ohm???
R901 2k2
R902 2k2
R903 2k2
R905 680R
R906 2k2

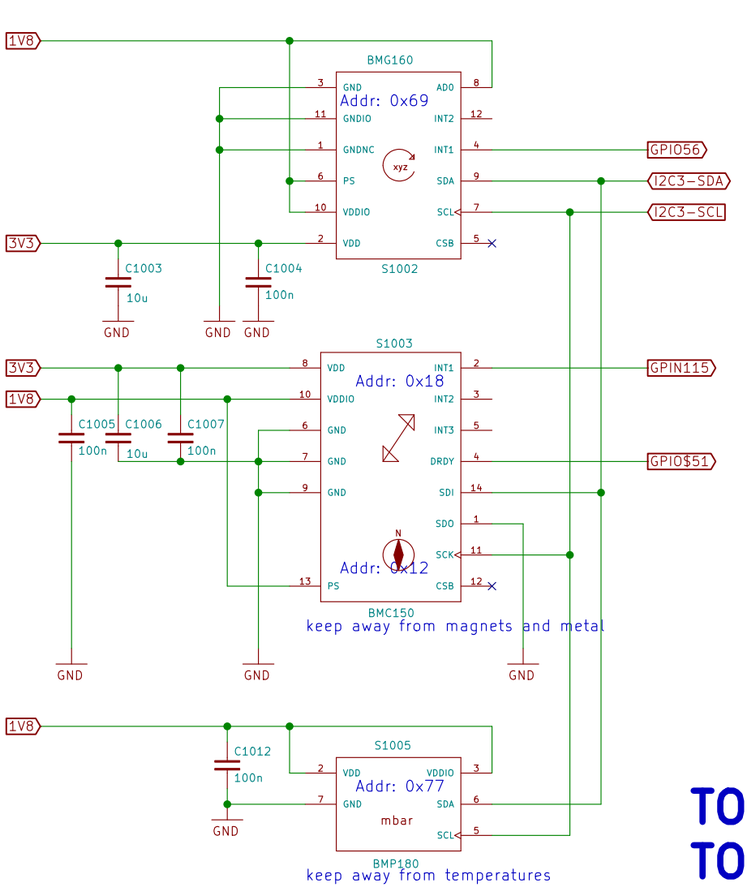
NRESWARM
I2C2-SCL
I2C2-SDA
32KHZ

Si4705 is pin compatible (mostly) but RX-only

TODO: unfinished

FSX
CLKX
DX
DR
FSR
CLKR

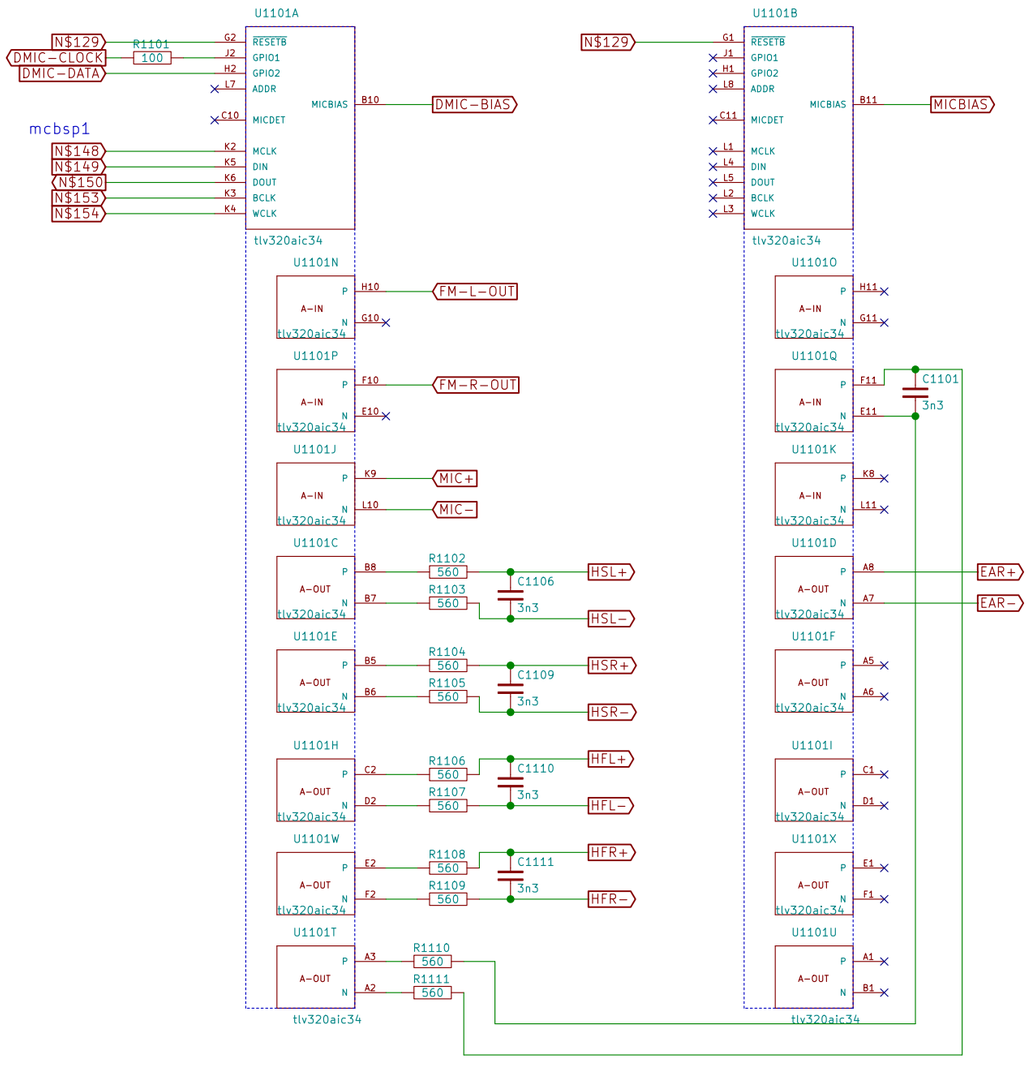
Sheet: /WLAN, Bluetooth, FM/		
File: neo900_SS_9.sch		
Title: WLAN, Bluetooth, FM		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 10/38



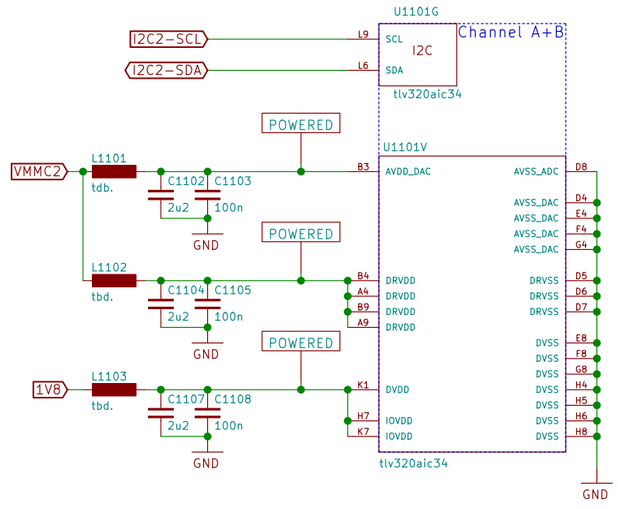
TODO: no BMG160, BMC150
TODO: BMP180 -> BME280
TODO: BNO055 -> BMX055
TODO: INT1/2 sharing

Sheet: /Sensors/		
File: neo900_SS_10.sch		
Title: Sensors		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 11/38

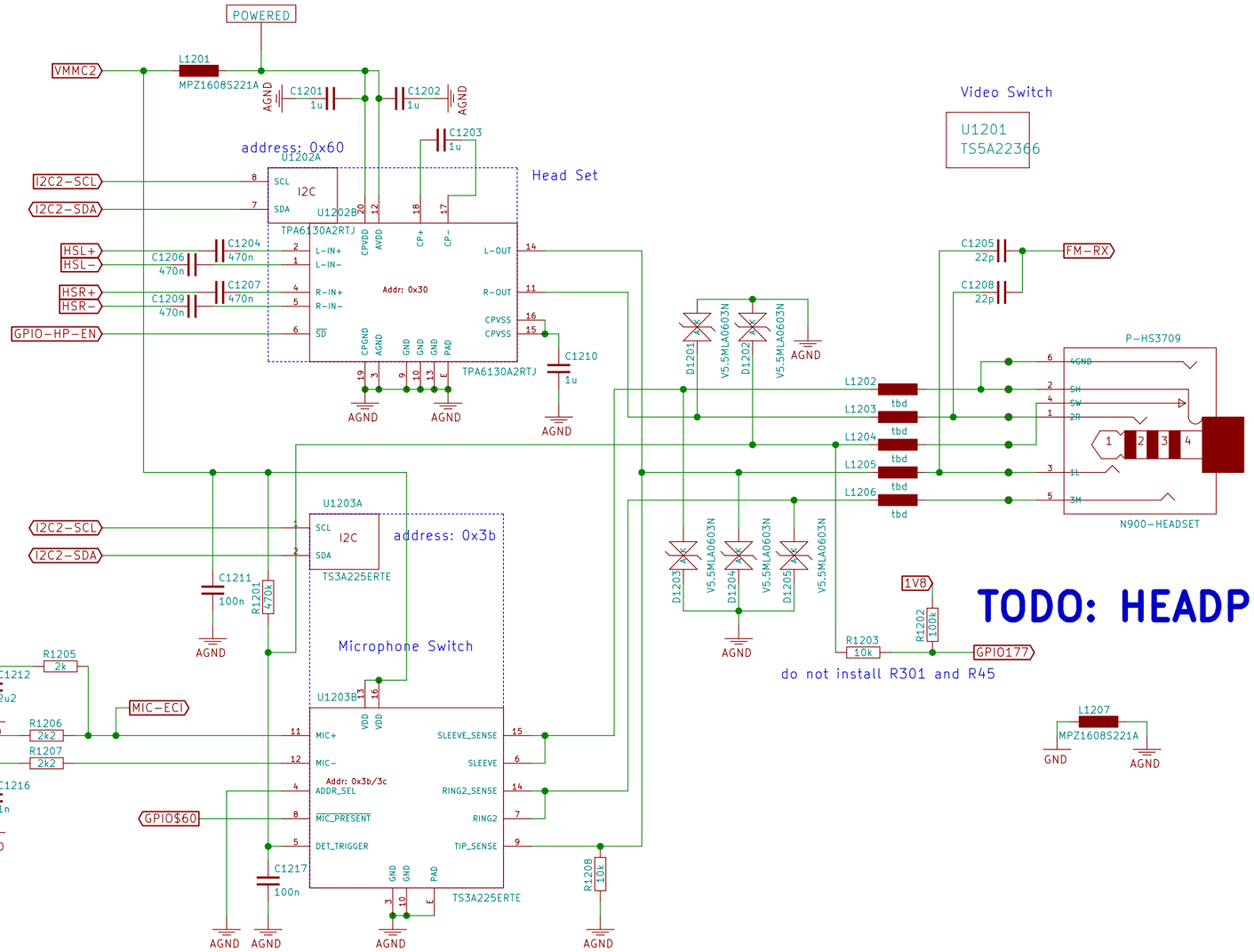
problem: this is a 0.5mm BGA making lower board expensive
but it appears to be not extremely critical (only 3 rows and inner ring is GND)
problem: analog mic is on upper board
alternative: place on upper board (to be evaluated)



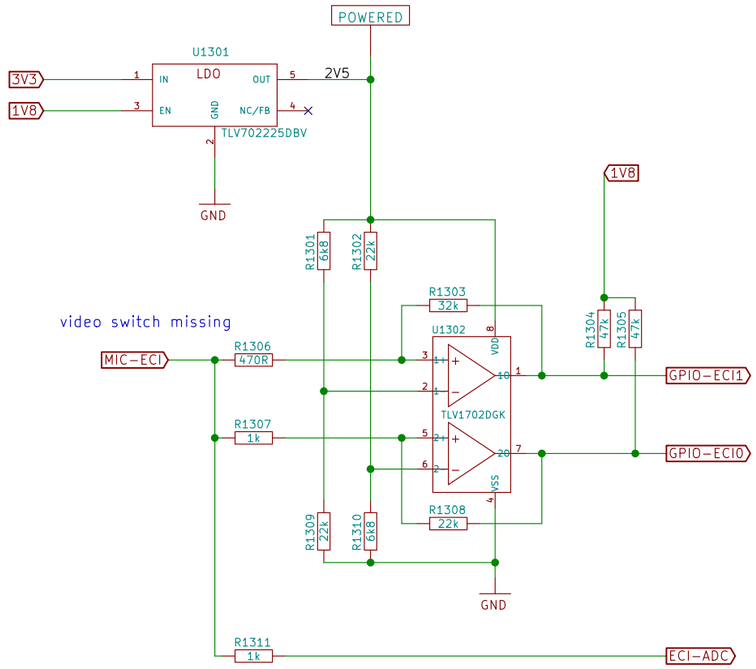
conflict with bmc150?
address: 0x18-0x1b



Sheet: /Audio Codec/	
File: neo900_SS_11.sch	
Title: Audio Codec	
Size: A3	Date: 17 JUL 2016
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product	Id: 12/38



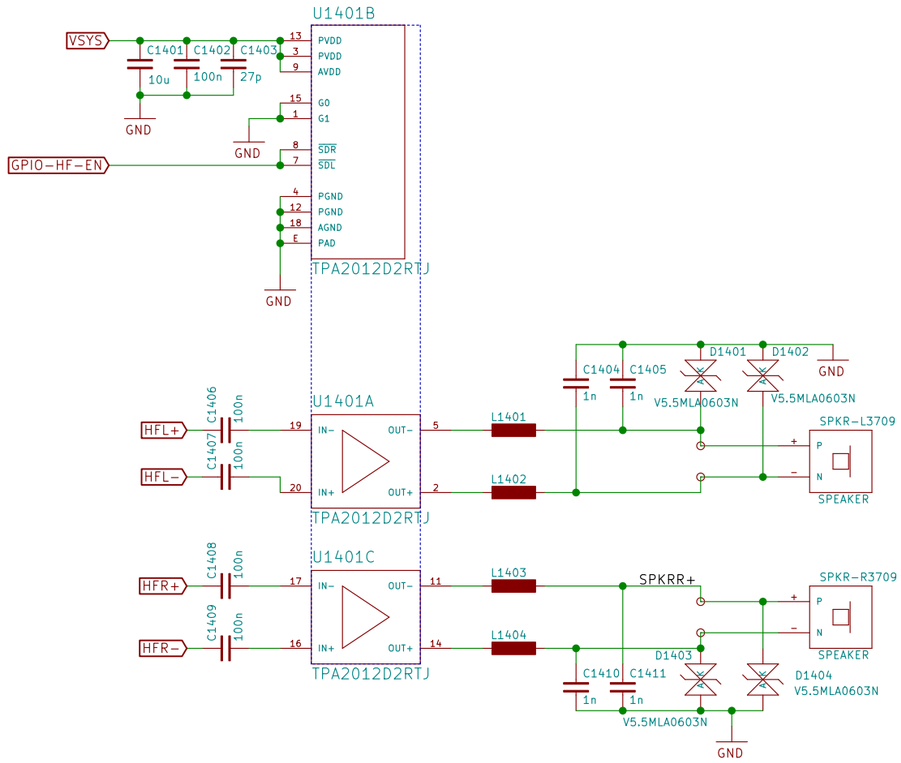
Sheet: /Audio Headset + Mic/ File: neo900_SS_12.sch		
Title: Audio Headset & Mic		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 13/38



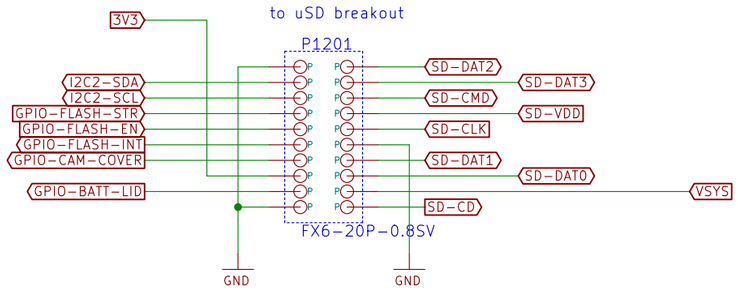
TODO: draw comparator right

Sheet: /ECI/		
File: neo900_SS_13.sch		
Title: ECI		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 14/38

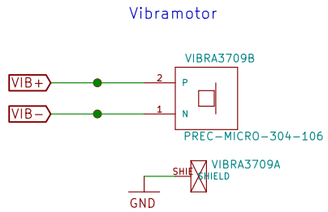
Hands Free

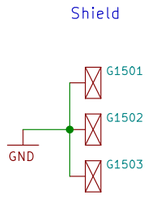


Sheet: /Audio Handsfree/		
File: neo900_SS_14.sch		
Title: Audio Handsfree		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 15/38

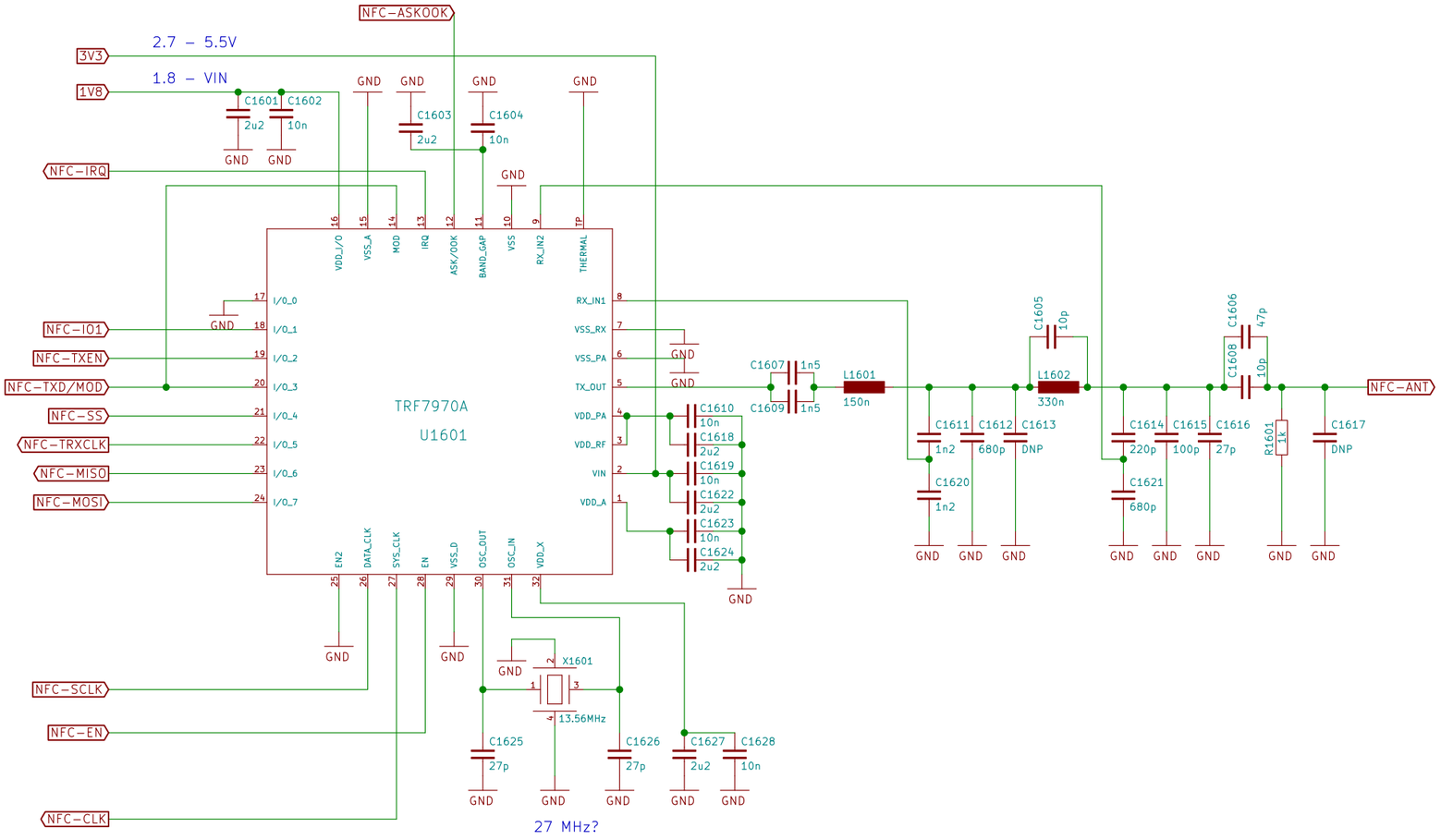


TODO: bogus connector (see HB WP)

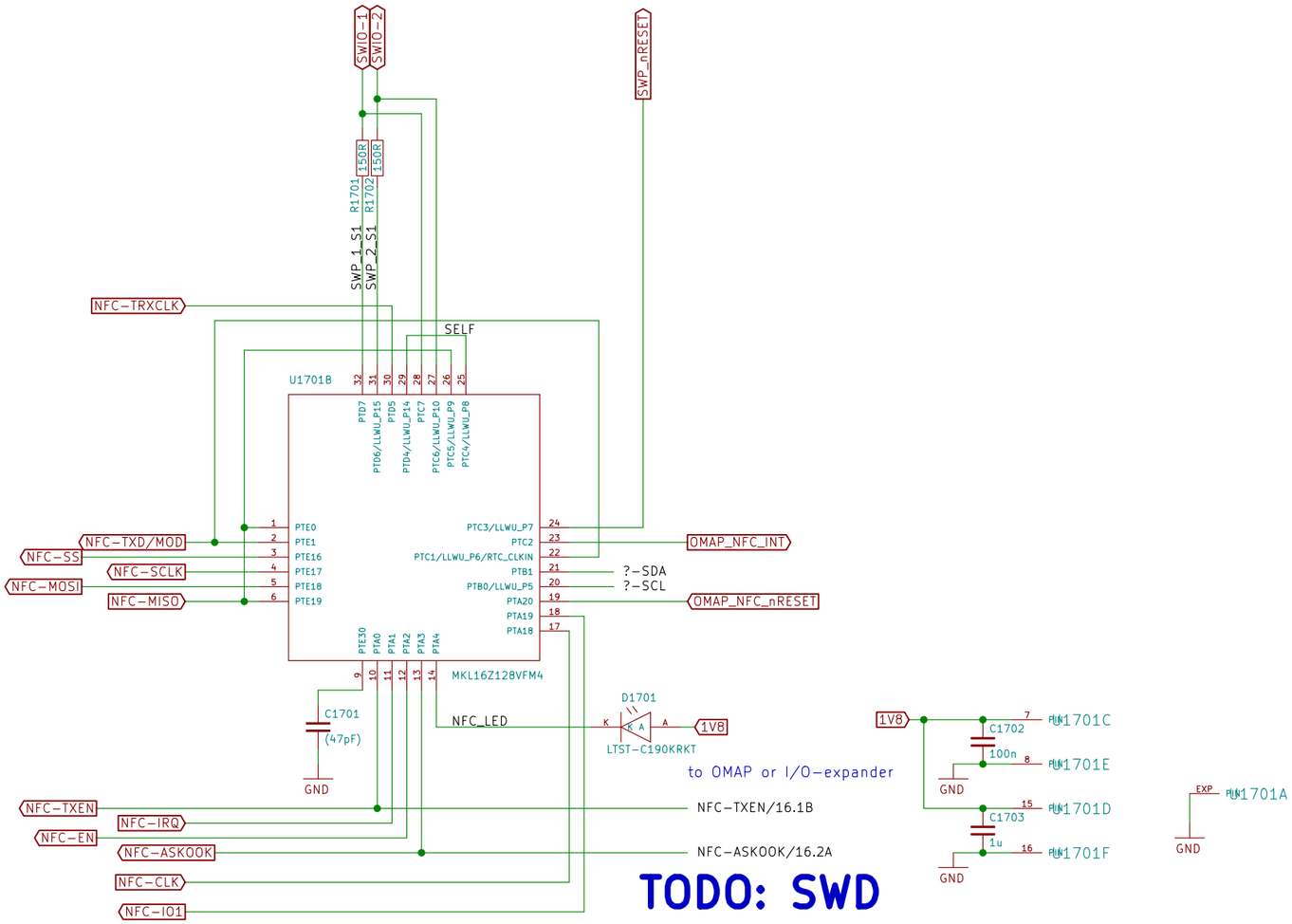




Sheet: /Misc (lower)/ File: neo900_SS_15.sch		
Title: Misc (lower)		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~~46~~ubuntu16.04.1-product		Id: 16/38



Sheet: /RFID/NFC Reader/ File: neo900_SS_16.sch		
Title: RFID/NFC Reader		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 17/38



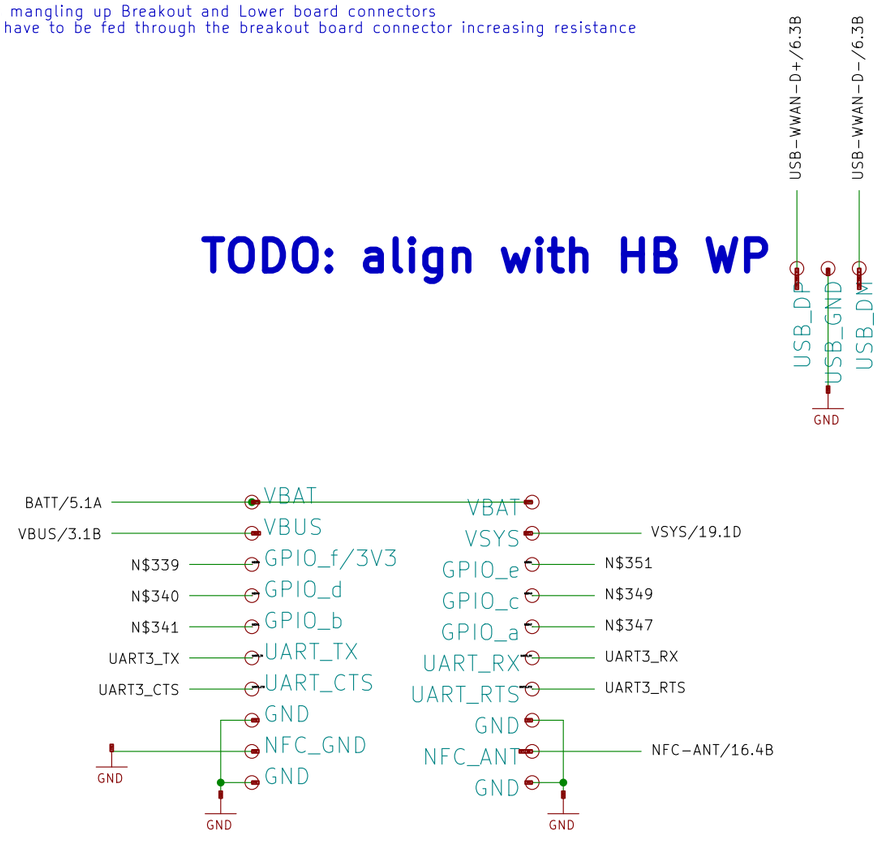
Sheet: /RFID/NFC Controller/
File: neo900_SS_17.sch

Title: RFID/NFC Controller

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 18/38

NOTE: this is mangling up Breakout and Lower board connectors
Signals may have to be fed through the breakout board connector increasing resistance

TODO: align with HB WP



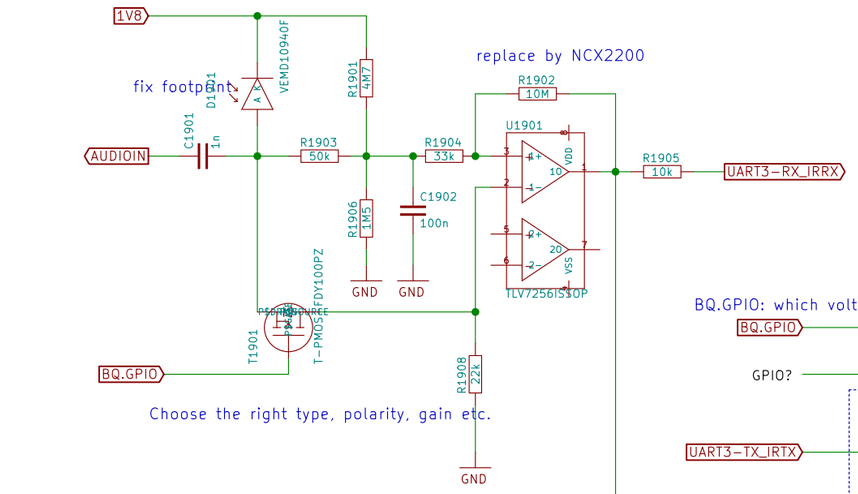
Missing 10 level shifter chip (or do we really have the space for 10x discrete T+R+D ca. 3x3mm each?)

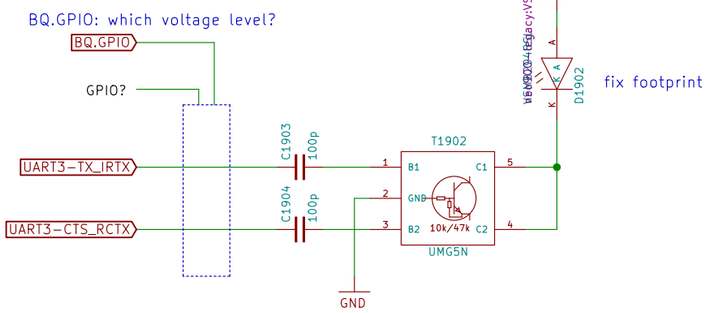
Missing 6x 2R for alternate function select (do we have the space for ca. 2.5 x 5mm?)

TODO: align with HB WP

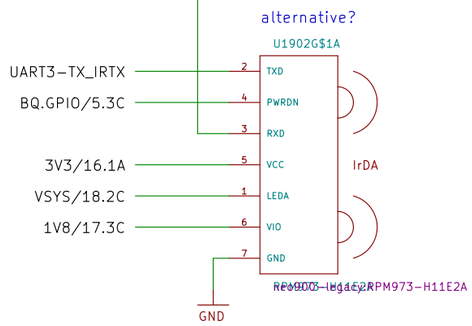
Sheet: /Hackerbus/ File: neo900_SS_18.sch		
Title: Hackerbus		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 19/38

NOTE: 1V8 may be quite noisy





TODO: delete U1902



TODO: update to design in IR WP

Sheet: /Infrared/
File: neo900_SS_19.sch

Title: Infrared

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+20160720318+6975~ubuntu16.04.1-product		Id: 20/38

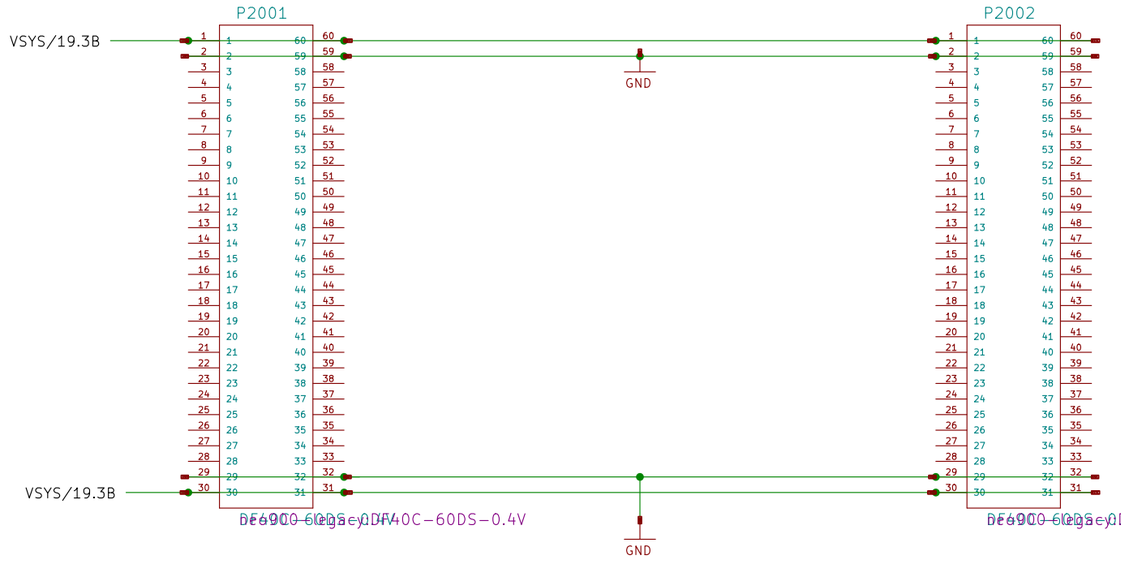
TODO: update when details settle

ca. 130 signals (to be counted exactly after definition of upper/lower split)

LOCK-GPIO/1.2A
POWERON/1.3A
GPIO-VOL+/1.2B
GPIO-VOL-/1.2B
CAM1-GPIO/1.3B
CAM2-GPIO/1.3C
I2C3-SDA/10.4C
I2C3-SCL/10.4C
CHG_IND/3.1B
N$131/3.1C
N$141/3.1C
N$143/3.1C
BATTEMP/5.4A
GPIO-EN-MODEM/4.1A
I2C2-SDA/15.1A
I2C2-SCL/15.1A
INA231-INT/4.4C
HDQ/5.2A
GPIO$70/8.3B
GPIO$110/8.1D
N$19/8.2D
N$229/8.3C
ADC$114/8.1C
ADC1/8.4C
ADC2/8.4C
GPIO-COMPARATOR/8.4D
MCBSP4-DR/6.2A
MCBSP4-DX/6.2A
MCBSP4-CLKX/6.2A
MCBSP4-FSX/6.2A
UART?-RTS/6.2C
UART?-CTS/6.2C
UART?-RX/6.2C
UART?-TX/6.2C
RING/6.2C
GPIO-MODEM_IGT/6.3A
GPIO-MODEM_EMERG/6.3A
EMERG_OFF/6.3B
PWR_IND/6.3B
LC_IND/6.3B
STATUS/6.3B
3G-WOE/6.3B
GPIO$52/8.4A
GPIO-WLAN-EN/9.1A
MMC3-CLK/9.1A
MMC3-CMD/9.1A
MMC3-DATA0/9.1A

MMC3-DATA1/9.1A
MMC3-DATA2/9.1A
MMC3-DATA3/9.1A
GPIO-WLAN-IRQ/9.1A
GPIO-BT-EN/9.1C
UART1-RX/9.1C
UART1-RTS/9.1C
UART1-CTS/9.1D
UART1-TX/9.1D
MCBSP3-FCK/9.1D
MCBSP3-CLK/9.1D
MCBSP3-DR/9.1D
MCBSP3-DX/9.1D
SYSCLK/9.3C
32KHZ/9.4A
GPIO-FM-EN/9.3A
GPIO-FMIRQ/9.3A
MCBSP2-FCK/9.3A
MCBSP2-CLK/9.3A
MCBSP2-DR/9.3A
MCBSP2-DX/9.3A
GPIN115/10.3B
GPIO56/10.3A
GPIO$51/10.3B
GPIO$55/10.4A
GPIO$56/10.4A
ACCEL-INT/10.4C
N$129/11.2A
N$148/11.1A
N$149/11.1A
N$150/11.1A
N$153/11.1A
N$154/11.1A
GPIO-ECI1/13.3B
GPIO-ECI0/13.3C
ECI-ADC/13.3C
VMMC2/12.1A
GPIO-HP-EN/12.1B
GPIO$60/12.2D
GPIO177/12.4C
GPIO-HF-EN/14.1B
GPIO-FLASH-STR/15.1A
GPIO-FLASH-EN/15.1A
GPIO-FLASH-INT/15.1A
GPIO-BATT-LID/15.1B
SD-CMD/15.2A
SD-CLK/15.2A
SD-CD/15.2B
SD-VDD/15.2A
SD-DAT0/15.2B
SD-DAT1/15.2B
SD-DAT2/15.2A
SD-DAT3/15.2A
VIB+/15.1D
VIB-/15.1D
3V3/19.1D
2V5/13.3B
1V8/19.1D
VBUS/18.1C
OTG-D-/3.1B
OTG-D+/3.1B
OTG-ID/2.2B
VBUS-MODEM/6.3B
USB-WWAN-D+/18.3A
USB-WWAN-D-/18.3A
2V7/8.4C
GPIO-CAM-COVER/15.1B
N$38

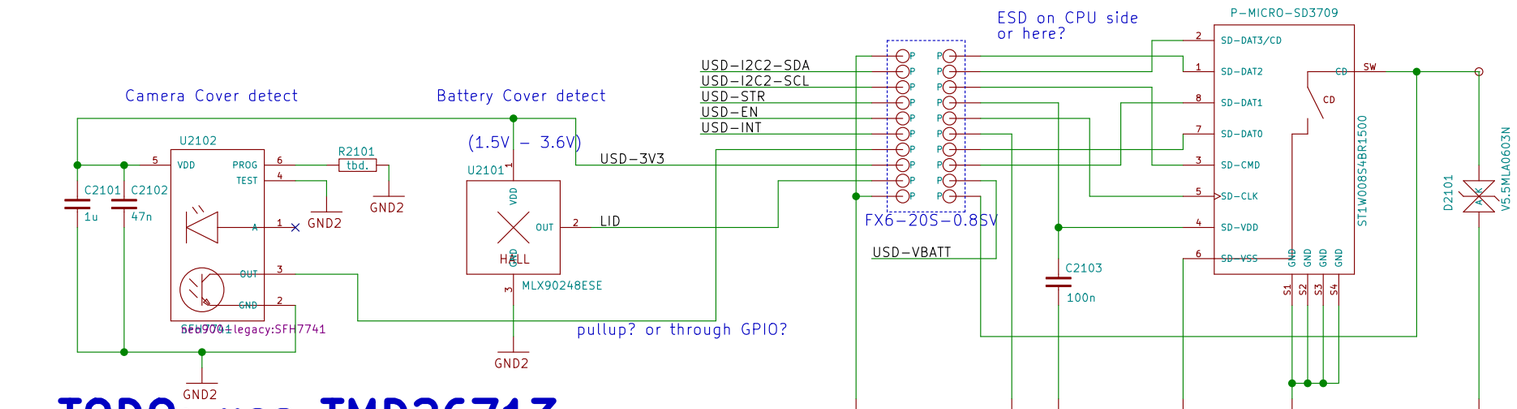
Pin assignment musr be optimized for final component placement
we might have to switch to 80 or 100 pin connectors



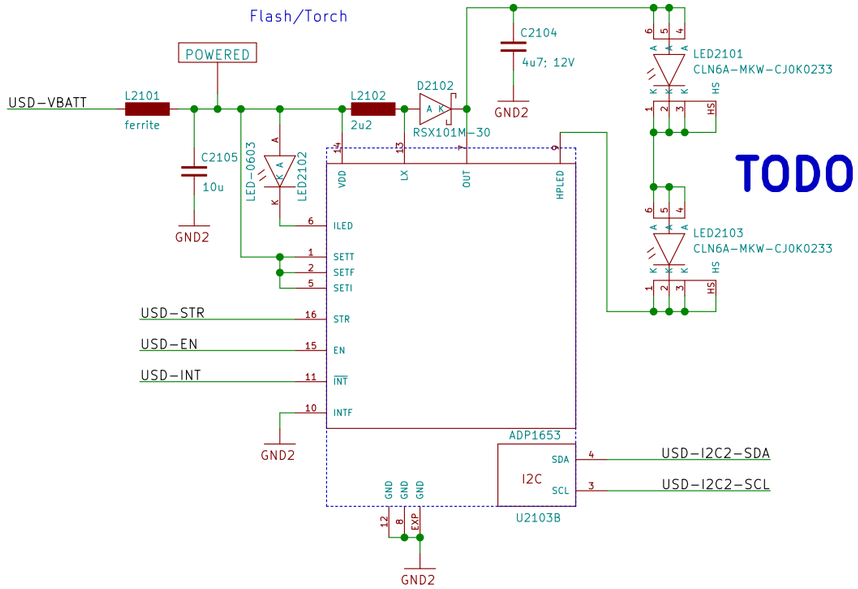
Sheet: /B2B to UPPER/
File: neo900_SS_20.sch

Title: B2B to UPPER

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 21/38



TODO: use TMD26713



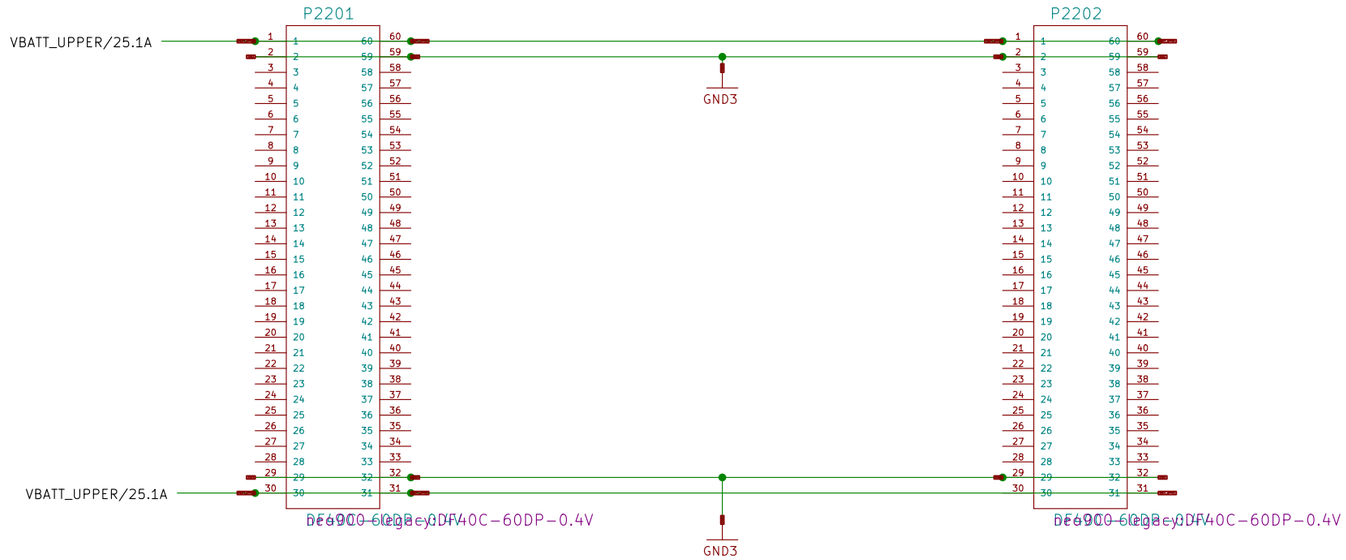
TODO: wrong LEDs

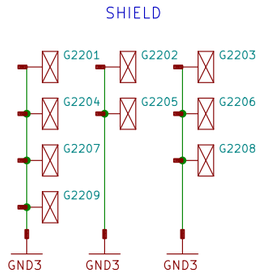
TODO: flash controller is now on LOWER, not BOB

Sheet: /uSD Breakout Board/ File: neo900_SS_21.sch		
Title: uSD Breakout Board		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 22/38

TODO: track B2B to UPPER

to be adjusted to lower board connector



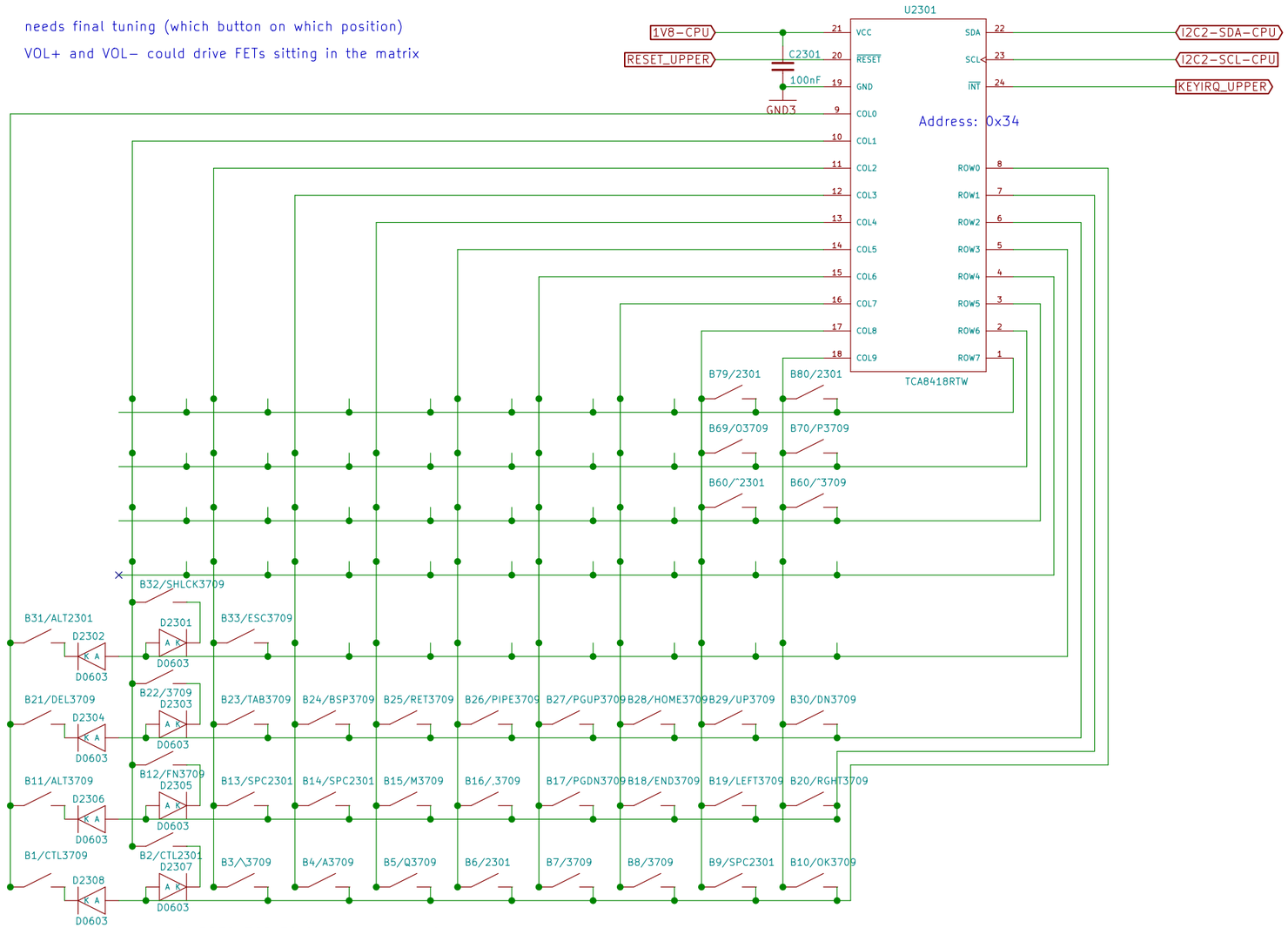


Sheet: /B2B to LOWER/ File: neo900_SS_22.sch		
Title: B2B to LOWER		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 23/38

TODO: *_UPPER names ?

needs final tuning (which button on which position)

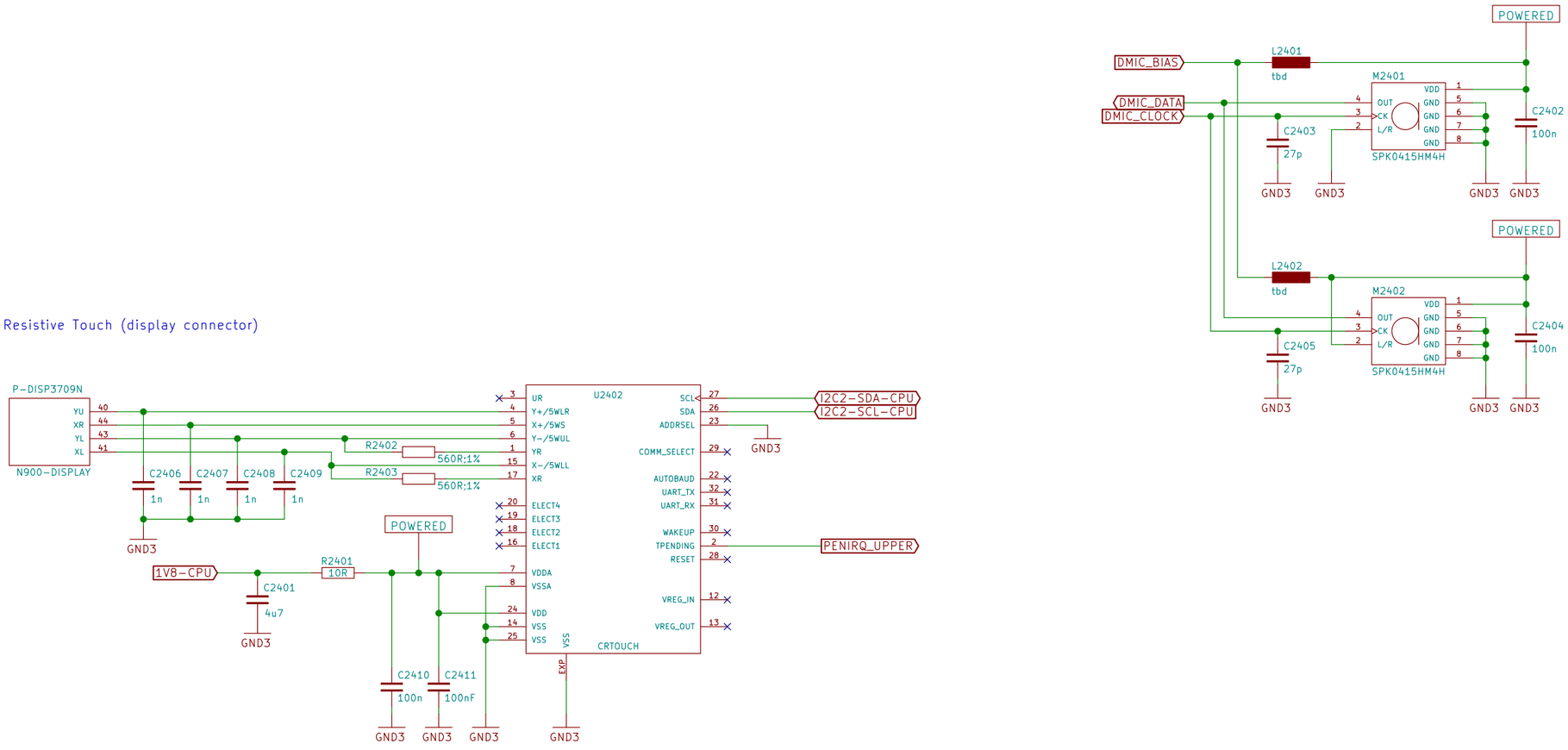
VOL+ and VOL− could drive FETs sitting in the matrix



replace by 2x RB521ZS8A30 for space constraints

TODO: remove 3709 in comp ref
TODO: remove keycap from comp ref
TODO: sort out 6 "ext" buttons
TODO: rearrange matrix to avoid diodes ?

Sheet: /Keypad/		
File: neo900_SS_23.sch		
Title: Keypad		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 24/38

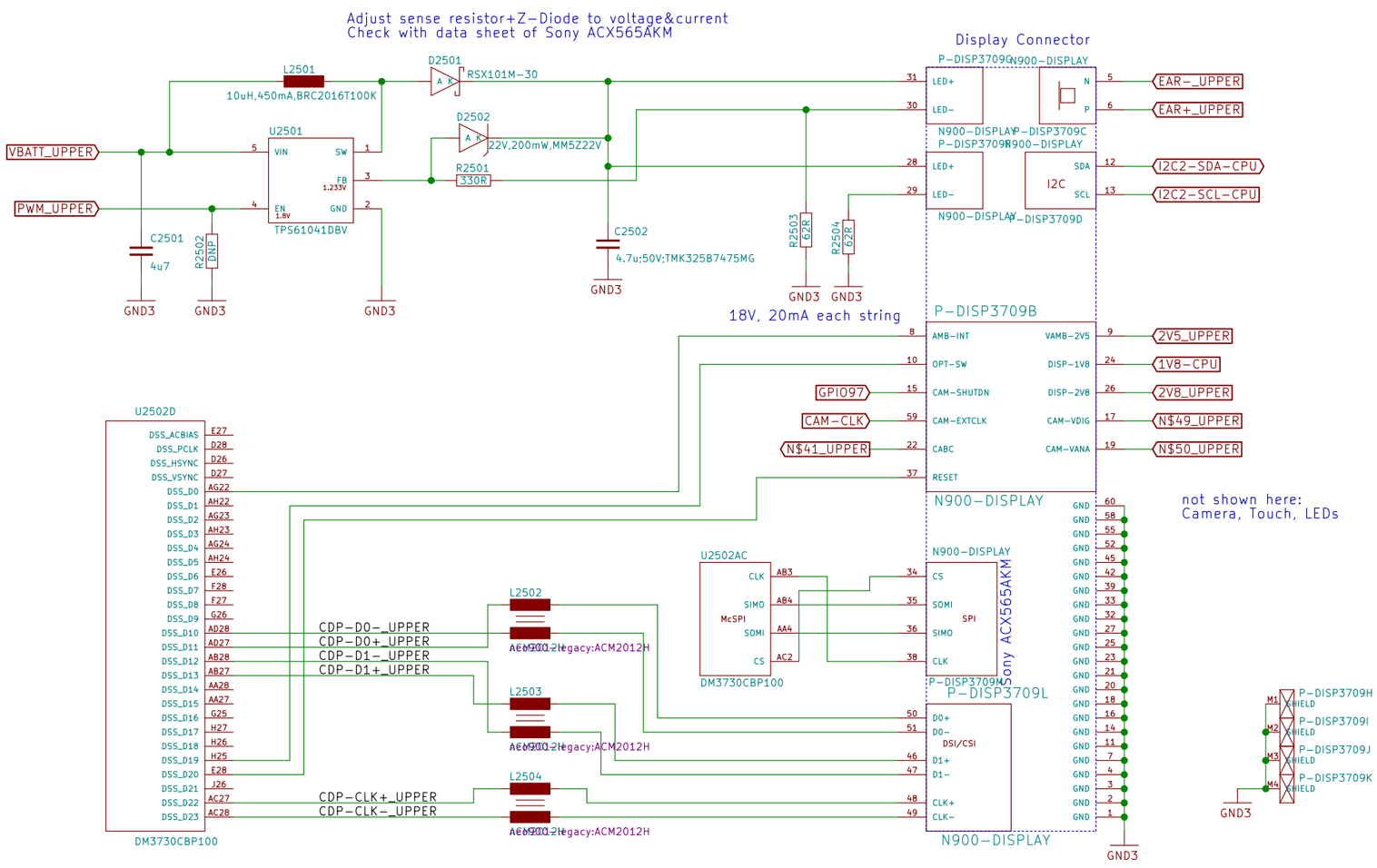


Sheet: /Display-Peripherals/
File: neo900_SS_24.sch

Title: Display-Peripherals

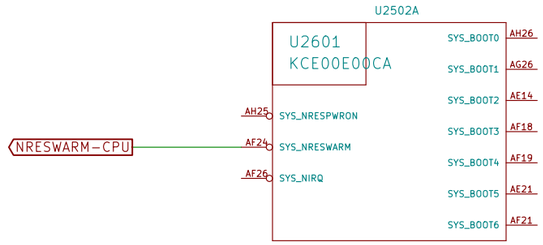
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 25/38

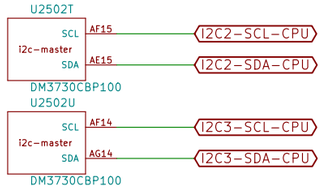
TODO: connector pin assigment needs intensive review

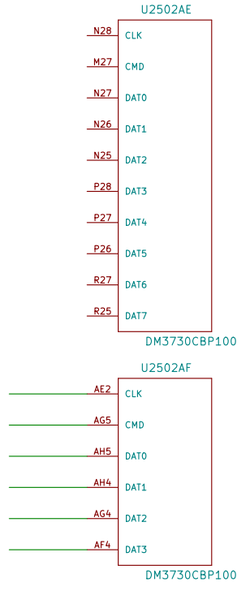


Sheet: /Display-Panel&Power/	
File: neo900_SS_25.sch	
Title: Display-Panel&Power	
Size: A3	Date: 17 JUL 2016
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product	Id: 26/38

INCOMPLETE in V2





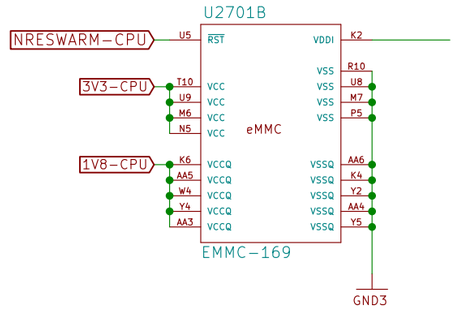


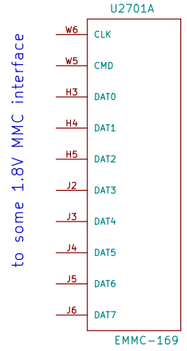
Sheet: /CPU + PoP RAM/NAND/
File: neo900_SS_26.sch

Title: CPU + PoP RAM/NAND

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~~4~~6ubuntu16.04.1-product		Id: 27/38

INCOMPLETE in V2





Sheet: /eMMC/		
File: neo900_SS_27.sch		
Title: eMMC		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 28/38

TODO: check role

INCOMPLETE in V2

R2801
(0R)

VSYS_UPPER

U2801
LTC3355

should drive TPS65950

VBAT(->TPS65950)_UPPER

C2801
tbd

GND3

U2803H

C8	IO.1P8		
H4	ADCIN0	GPIO13/LEDSYNC	G11
J3	ADCIN1	LEDA/VIBRA.P	F15
G3	ADCIN2	LEDB/VIBRA.M	G15
J9	STARTADC	LEDGND	F16
N16	VREF	NC	B14
N15	AGND		
A2	RFID.EN	MSECURE	H8

TPS65950

U2802

A2	REFCLK	VBAT	C1
A3	STP		
A4	DIR	VBUS	C2
B5	NXT	DM	D1
B4	DATA0	DP	E1
C5	DATA1	ID	B1
C4	DATA2		
D5	DATA3	SPK_L	E3
D4	DATA4	SPK_R	E2
E5	DATA5		
E4	DATA6	VDD3.3	D2
D3	DATA7	VDD1.8	B3
B2	RESETB	RBIAS	A1
A5	CLKOUT	GND	C3

USB3322

this goes through B2B to modem

VBUS-MODEM-CPU

MODEM-CPU-D-

MODEM-CPU-D+

needs a small charge pump to generate 5V 50mA.

TODO: VBUS-MODEM ?

U2803J

L15	UCLK		
L14	STP		
L13	DIR		
M13	NXT		
K14	DATA0/TX	VBUS	R8
K13	DATA1/RX	DN/UART3.TXD	T11
J14	DATA2/RTSI	DP/UART3.RXD	T10
J13	DATA3/CTSO	ID	R11
G14	DATA4		
G13	DATA5		
F14	DATA6		
F13	DATA7		

TPS65950

this goes through B2B to OTG socket

VBUS-CPU

OTG-CPU-D-

OTG-CPU-D+

OTG-CPU-ID

U2803B

		VAC	N5
		PCHGAC	N4
		PCHGUSB	N6
		ICTLAC1	N7
		ICTLAC2	P2
		ICTLUSB1	P6
		ICTLUSB2	P1
		VPRECH	N2
		VCCS	P5
		VBATS	P4
N1	BCIAUTO	VBAT	R5

TPS65950

U2803C

P16	32KXIN	32KCLKOUT	N10
P15	32KXOUT	HFCLKOUT	R12
A14	HFCLKIN	CLKREQ	G10
C6	CLKEN	CLK256FS	D13
D7	CLKEN2	BKBAT	M14

TPS65950

C2802
PAS3225P3R3113

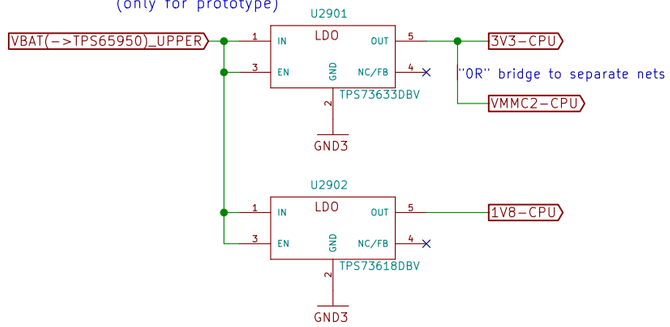
GND3

Sheet: /PMU+Codec/
File: neo900_SS_28.sch

Title: PMU+Codec

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 29/38

simple capless 400mA LDO for TPS65950 substitute
(only for prototype)



Sheet: /BB-XM Dummy (TWL4030)/ File: neo900_SS_29.sch		
Title: BB-XM Dummy (TWL4030)		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 30/38

INCOMPLETE in V2

Main Camera

POWERED

L3001

VAUX??

C3001 27p

C3002 2u2

GND3

1V8-CPU

C3003 27p

C3004 2u2

GND3

VBATT_UPPER

C3005 2u2

GND3

VCSI=VAUX2???

VDDA

N3001

Neo900 Legacy:N97-CAMERA

GND3

P3001I

I2C3-SCL-CPU

I2C3-SDA-CPU

I2C

DF37NB-20DS-0.4/N97CAM

P3001A

DSI/CSI

DF37NB-20DS-0.4/N97CAM

U2502B

DM3730CBP100

R3001 47R

R3002 47R

CAM-CLK

GPIO97

GPIO102

GPIO167

CAM-STR

U3001

U3002

TS3DS26227

R3003 100R

R3004 100R

C3006 100n

C3007 100n

CSI-B-C+_UPPER

CSI-B-C-_UPPER

CSI-B-D+_UPPER

CSI-B-D-_UPPER

Front camera (display connector)

P-DISP3709A

N900-DISPLAY

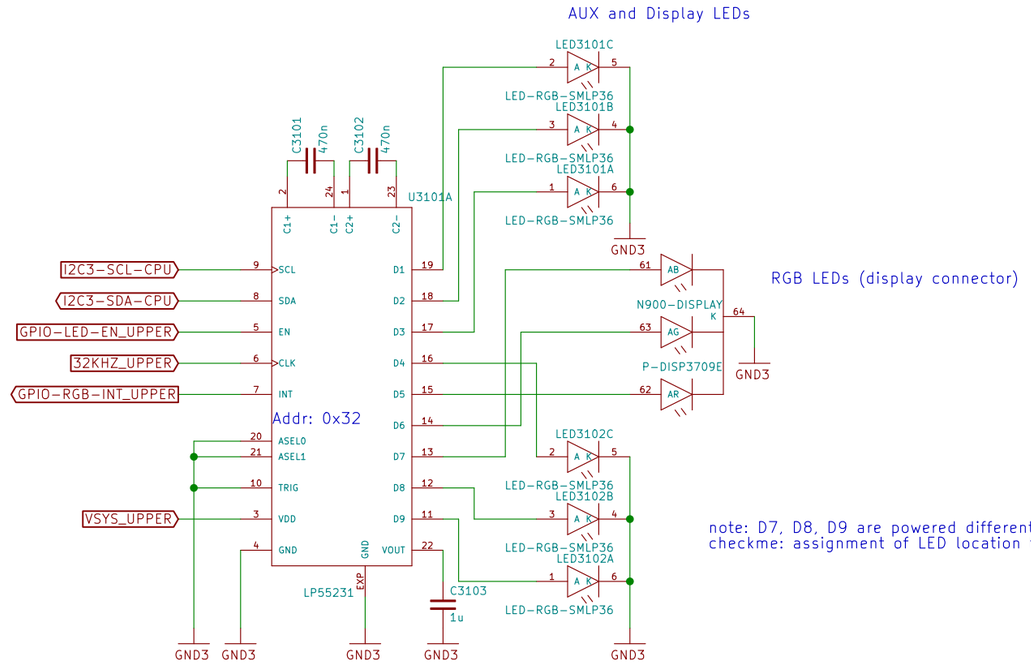
U3003
slide magnetic sensor

Sheet: /Camera/
File: neo900_SS_30.sch

Title: Camera

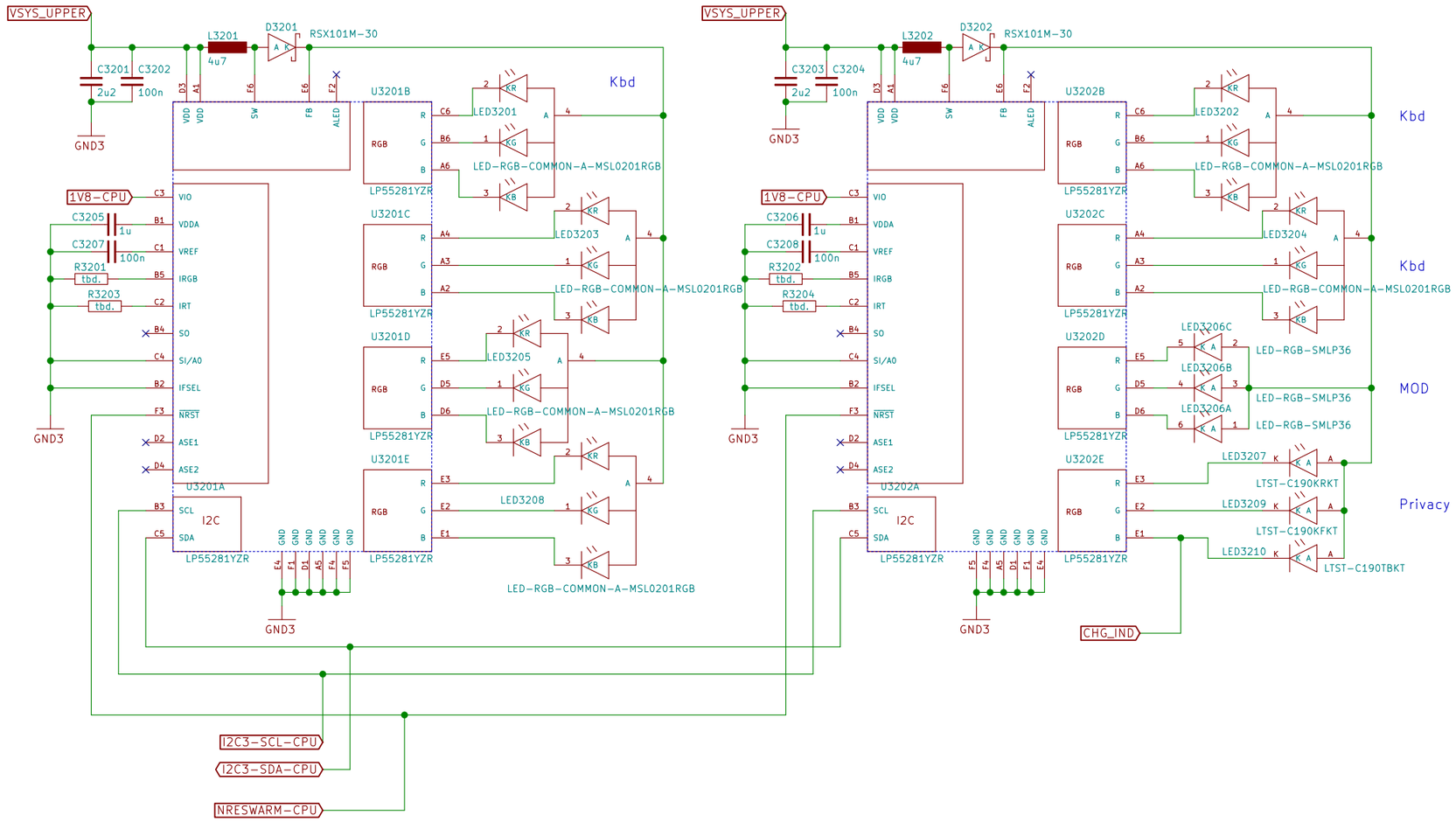
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 31/38

AUX and Display LEDs



note: D7, D8, D9 are powered differently
checkme: assignment of LED location to output number

Sheet: /LEDs/ File: neo900_SS_31.sch		
Title: LEDs		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 32/38



(c) CC-BY-SA 2014-2016 Neo900 & GDC

Sheet: /Fancy LEDs/	
File: neo900_SS_32.sch	
Title: Fancy LEDs	
Size: A3	Date: 17 JUL 2016
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product	Id: 33/38

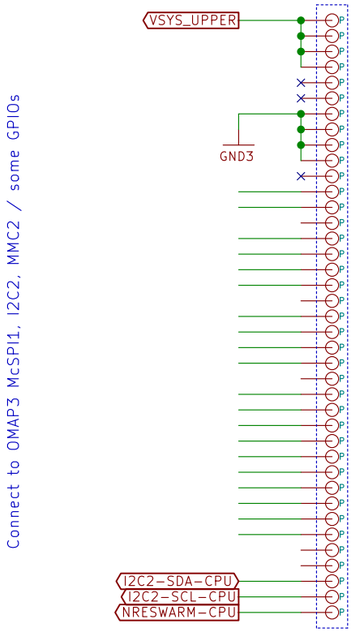
Rev:

These connectors allow to "emulate" the DM3730 by connecting a BB-XM

INCOMPLETE
prototype only

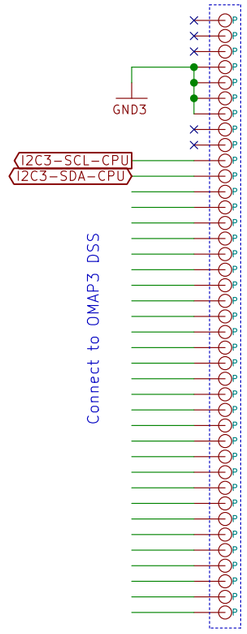
connect to respective CPU-pads

P2301



Connect to OMAP3 McSPI1, I2C2, MMC2 / some GPIOs

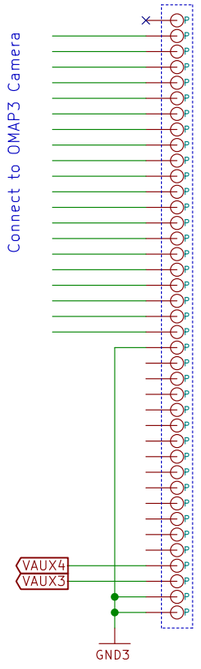
P2302



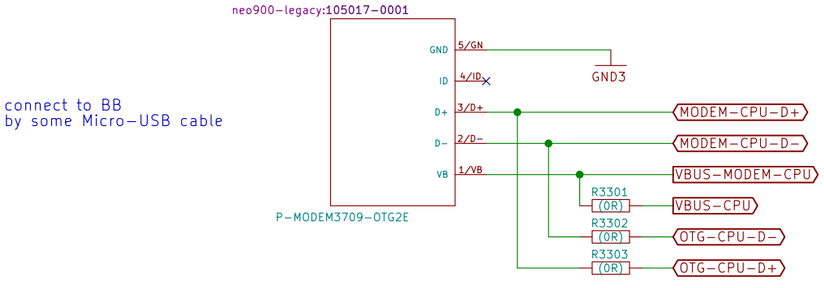
Connect to OMAP3 DSS

DSS / GPIOs, I2C3

P2303



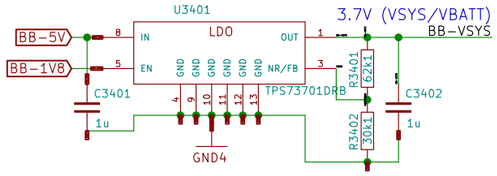
Connect to OMAP3 Camera



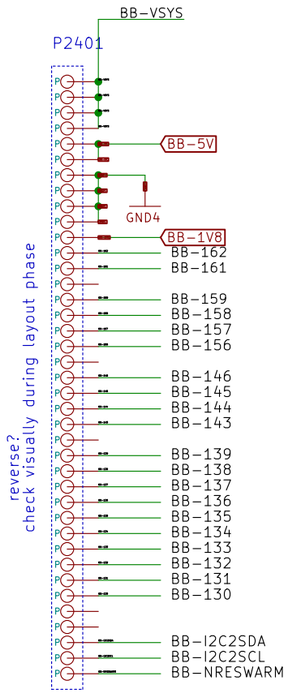
connect to BB
by some Micro-USB cable

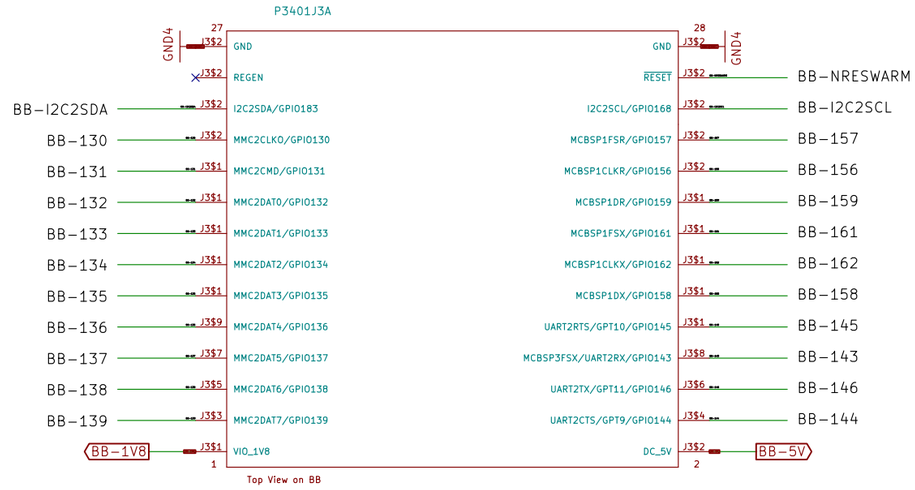
TODO: VBUS-MODEM ?

Sheet: /Connector to BB-XM/ File: neo900_SS_33.sch		
Title: Connector to BB-XM		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 34/38



Ersetzen durch 2A buck converter

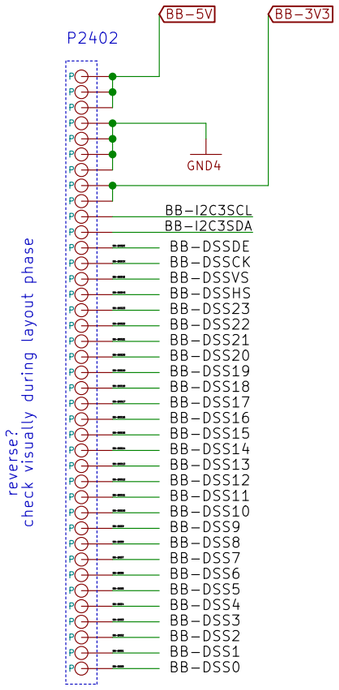


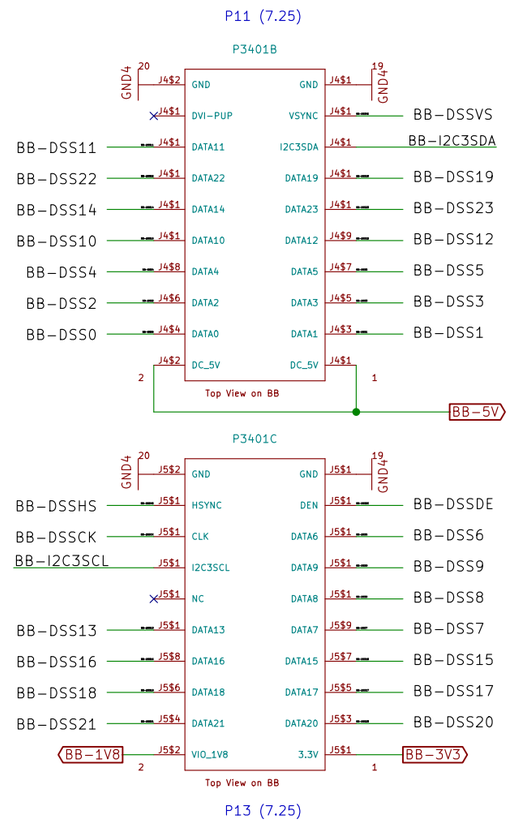


BB-xM Main Expansion Header (7.24)

TODO: needs decision on where to take this

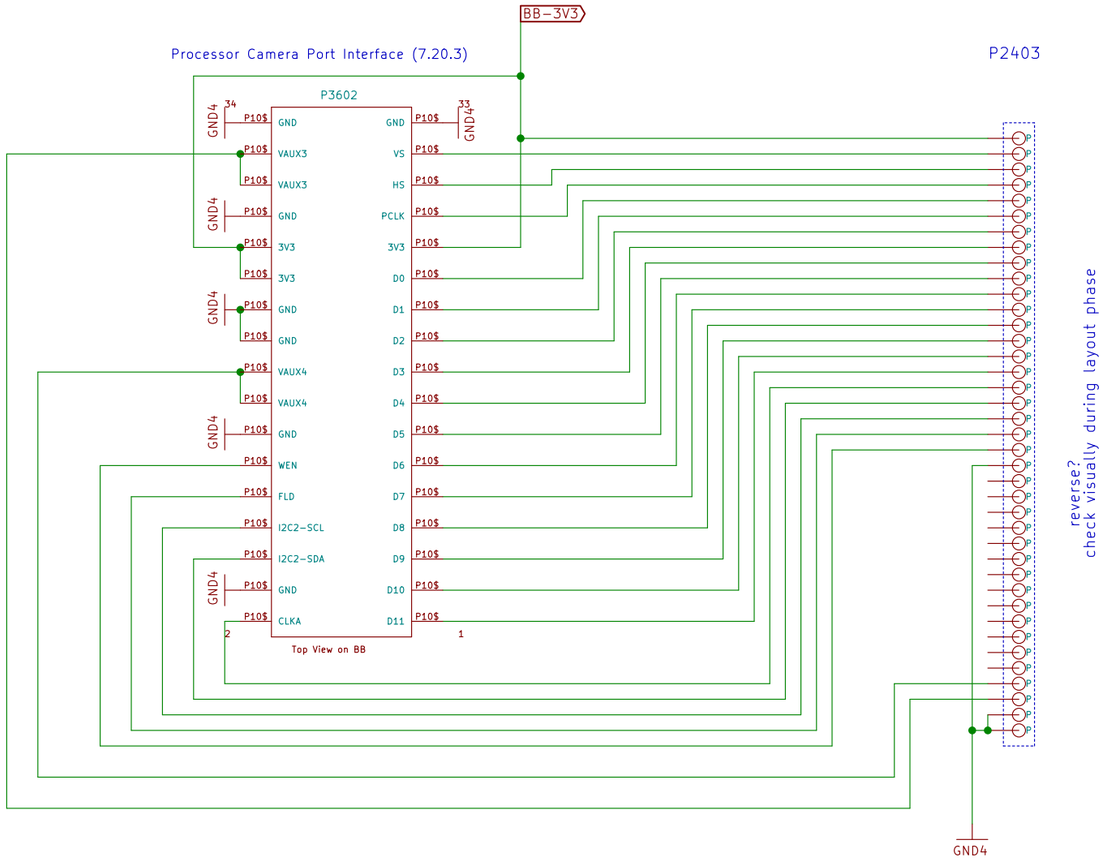
Sheet: /BB-XM Adapter (CPU)/ File: neo900_SS_34.sch		
Title: BB-XM Adapter (CPU)		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 35/38





TODO: needs decision on where to take this

Sheet: /BB-XM Adapter (DISP)/		
File: neo900_SS_35.sch		
Title: BB-XM Adapter (DISP)		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 36/38



Sheet: /BB-XM Adapter (CAM)/ File: neo900_SS_36.sch		
Title: BB-XM Adapter (CAM)		
Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~46ubuntu16.04.1-product		Id: 37/38

Molex Jumper cables to connect BB-XM-Adapter to Uppwer board

N3701
15015-0439
CPU

N3702
15015-0439
DISP

N3703
15015-0439
CAM

N3704
N900 case assembly

N3705
N97-CAMERA-HOLE

N3706
headset jack

N3707
STENCIL-TOP

N3708
STENCIL-BOTTOM

Sheet: /No-Solder Components/
File: neo900_SS_37.sch

Title: No-Solder Components

Size: A3	Date: 17 JUL 2016	**Rev:**
KiCad E.D.A. eeschema 4.1.0-alpha+201607120318+6975~ubuntu16.04.1-product		Id: 38/38