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Sheet: BB-xM Adapter (CAM)
BB-xM Adapter (CAM)
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Circuits that exist in the v2 prototype only
and that will not be part of the final design.

Note regarding I2C addresses:
Addresses in the schematics are provided for convenience.
The authoritative source is
https://neo900.org/git/misc/tree/i2c

Signals that exist on both LOWER and UPPER (and maybe also BOB)
have a _U suffix on UPPER. No suffix is needed to distinguish
between LOWER and BOB becauses all BOB components are on
the same sheet and wires connecting them use sheet-local labels.

Sheet: / File: neo900.sch		
Title: Neo900		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
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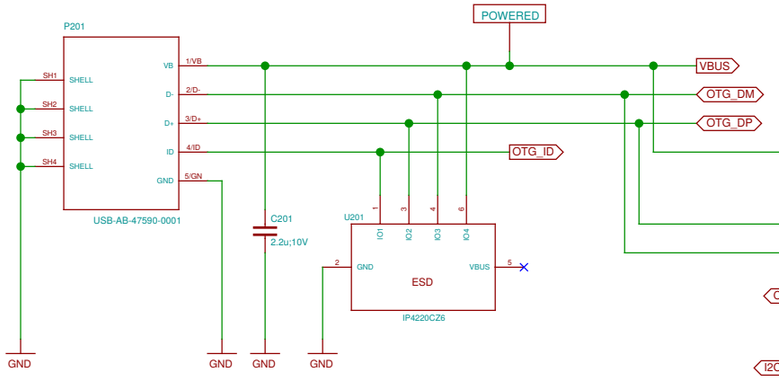
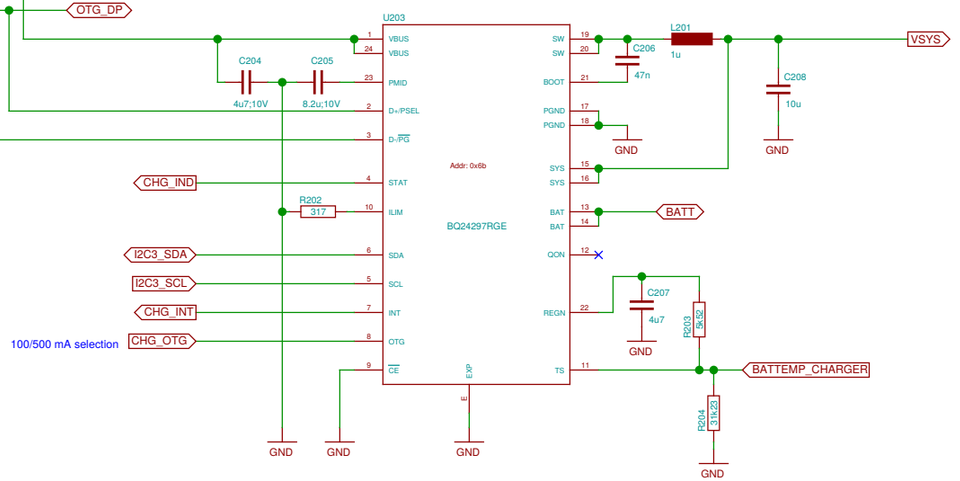
USB OTG connector

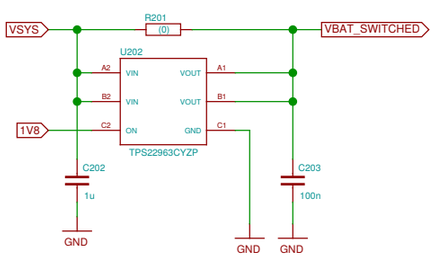


Battery charger with USB OTG

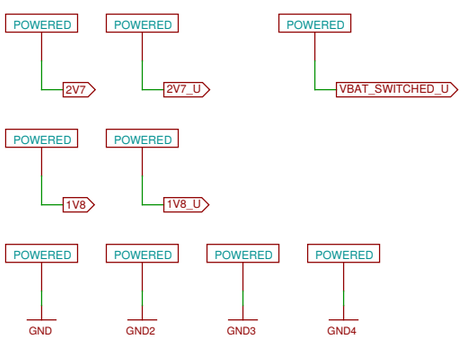


Power distribution and sequencing

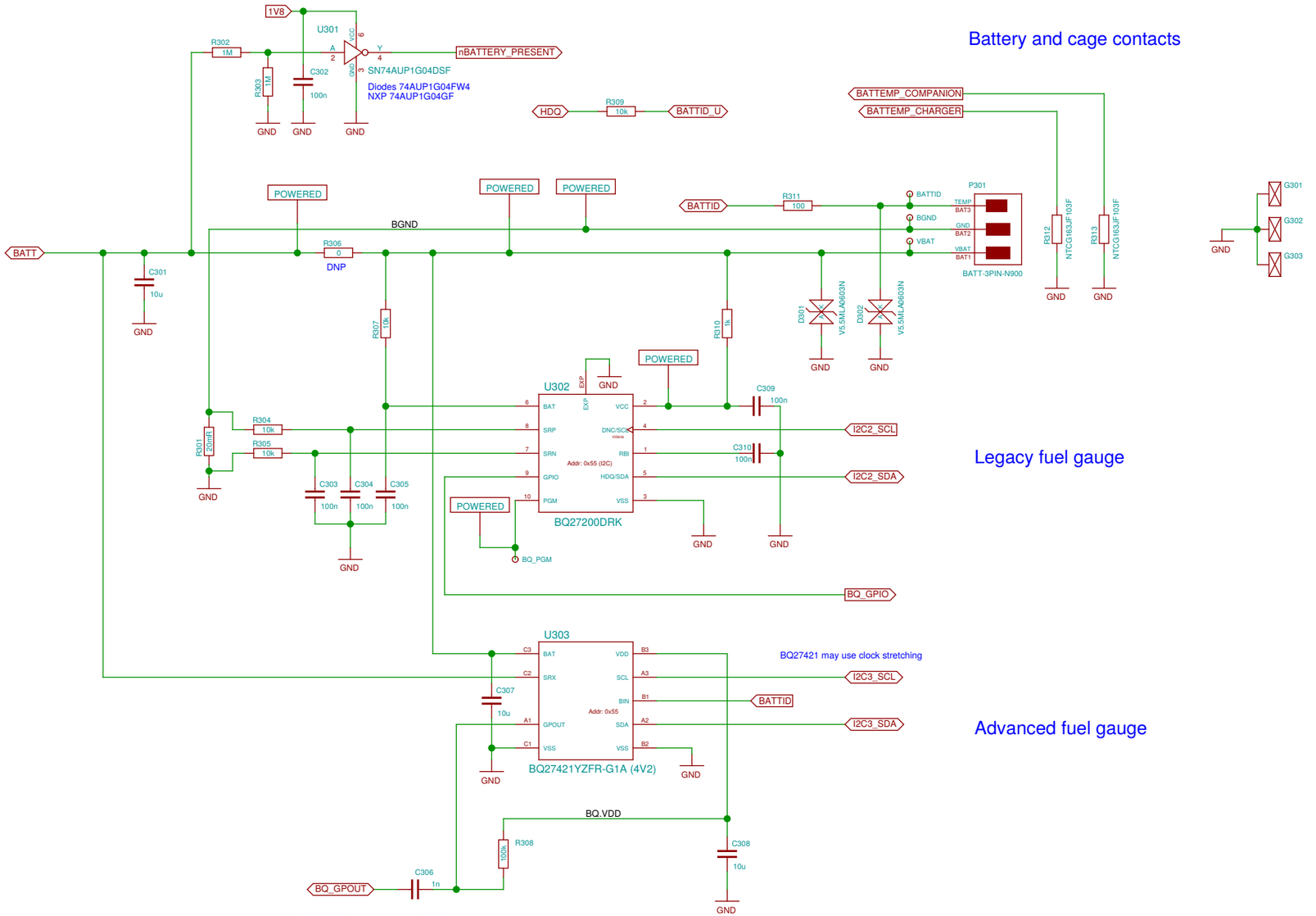
Most high-current consumers are on VBAT_SWITCHED.
1V8 signals that the regulators on UPPER are operational.



KiCad bureaucracy

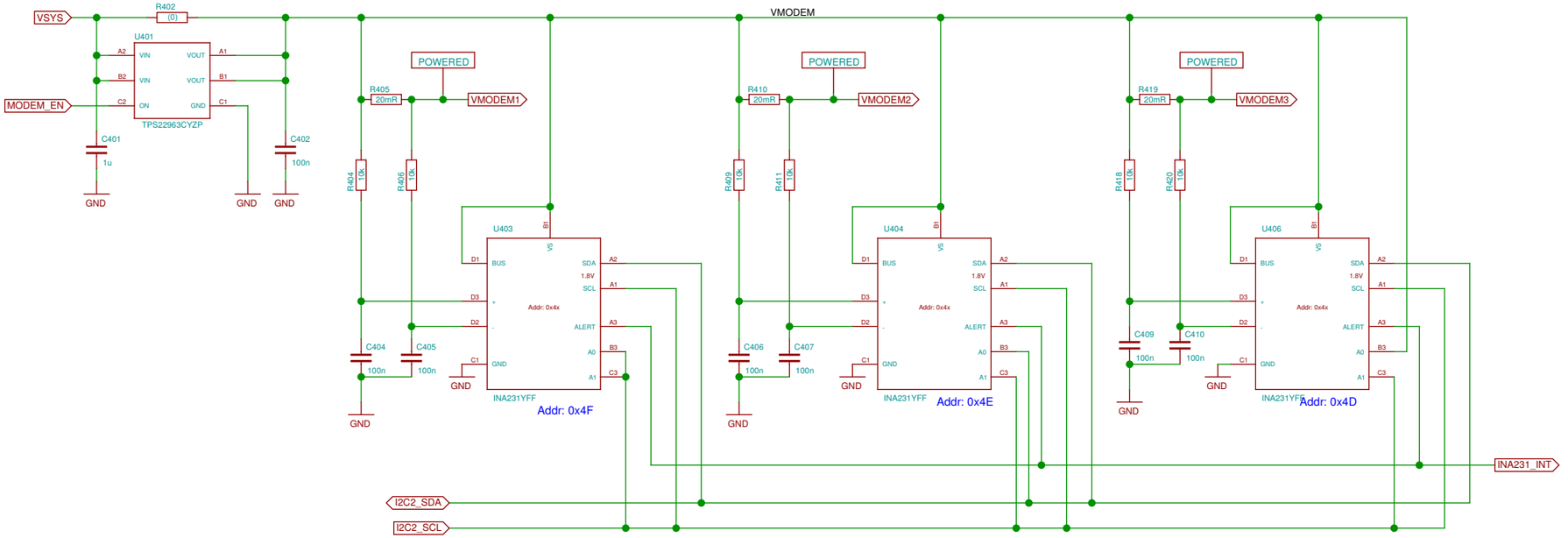


Sheet: /Charger/OTG/ File: charger.sch		
Title: Charger/OTG		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 2/25

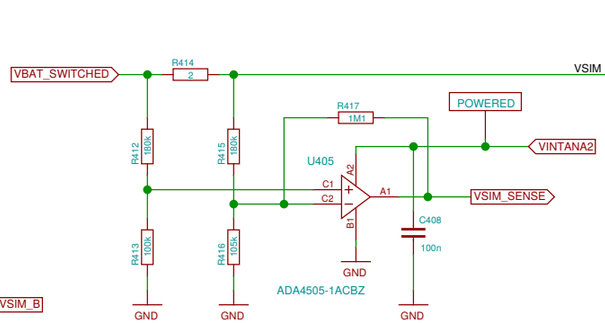


Sheet: /Battery/ File: battery.sch		
Title: Battery		
Size: A3	Date: 2016-11-18 04:02:08	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 3/25

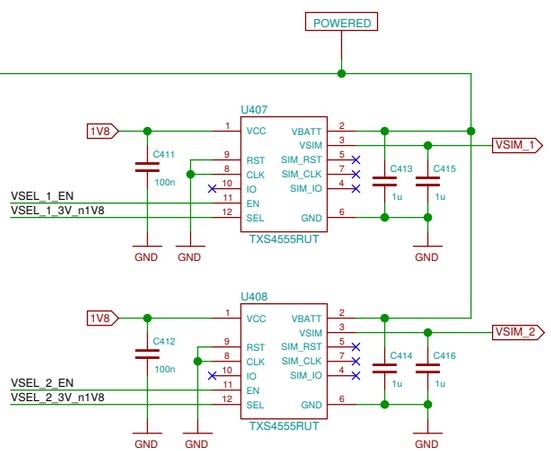
Modem current monitor



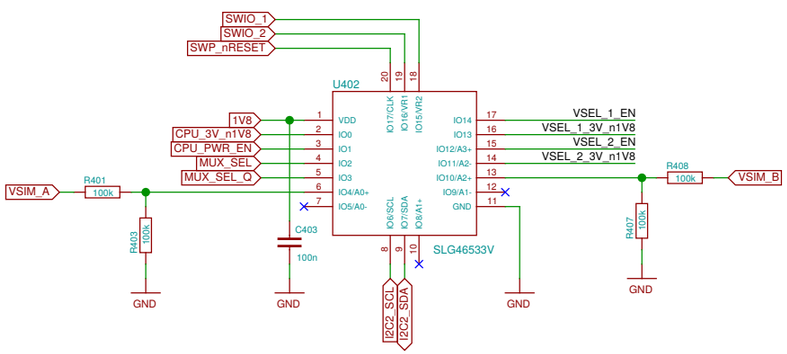
SIM current sensing



SIM power supply



SIM power selection



TODO: update SLG design for changed pins

Sheet: /Modem Power/ File: modempwr.sch		
Title: Modem Power		
Size: A3	Date: 2016-11-14 18:26:18	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 4/25

SIM B bus

VSIM_B — TP528 — VSIM_B
MODEM_RST_B — TP529 — MODEM_RST_B
MODEM_DATA_B — TP530 — MODEM_DATA_B
MODEM_CLK_B — TP531 — MODEM_CLK_B
MODEM_CD_B — TP532 — MODEM_CD_B

17+10+10 = 37 test points. PCB space permitting, to be in arranged a 6 x 6 + 1 grid with 1.0 mm pitch. This patchfield is to be placed adjacent to the SIM B bus test points.

M501N (PHS8): RFU-DNU pins A7, F14, F15, G4, H13, K12, K13, L5, L6, L7, L8, L9, L10, L11, L12, L13, N12 → TP501–TP517 → MODEM_A7, MODEM_F14, MODEM_F15, MODEM_G4, MODEM_H13, MODEM_K12, MODEM_K13, MODEM_L5, MODEM_L6, MODEM_L7, MODEM_L8, MODEM_L9, MODEM_L10, MODEM_L11, MODEM_L12, MODEM_L13, MODEM_N12

Pads that are DNU in PHS8 and PLS8.

M501P (PHS8): RFU-DNU/GPIO10, GPIO7, GPIO8, GPIO9, GPIO5, GPIO1, GPIO2, GPIO3, ADC2, ADC1 pins F16, G14, G15, G16, H15, J14, J15, J16, M12, M13 → TP518–TP527 → MODEM_F16, MODEM_G14, MODEM_G15, MODEM_G16, MODEM_H15, MODEM_J14, MODEM_J15, MODEM_J16, MODEM_M12, MODEM_M13

Pads that are DNU in PHS8 but have a GPIO or ADC function assigned to them in PLS8.

M501O (PHS8): RFU-GND/DNU pins C12, C13, D12, D13, D14, E12, E13, E14, F13, G13 → TP533–TP542 → MODEM_C12, MODEM_C13, MODEM_D12, MODEM_D13, MODEM_D14, MODEM_E12, MODEM_E13, MODEM_E14, MODEM_F13, MODEM_G13

R501–R510 0 Ω → GND

Pads RFU (GND) in PHS8 and RFU (DNU) in PLS8.
The resistors indicate cuttable traces.

Modem (module)

MCBSP4_DR — TP543 — PCM-OUT
MCBSP4_DX — TP544 — PCM-IN
MCBSP4_CLKX — TP545 — PCB-CLK
MCBSP4_FSX — TP546 — PCM-SYNC

M501H PCM: IN M7, OUT M10, CLK M8, FSC M9
M501G PHS8: W6OUT N7, DOUT P7, I2S_EXT MCLK_OUT P8, SCLKOUT N8

PHS8 USB: D+ P4, D- P5, VBUS N5
TP555 MODEM_DP → USB_MODEM_DP
TP556 MODEM_DM → USB_MODEM_DM
TP557 VUSB_MODEM → VBAT_SWITCHED

M501K: IGT L16, EMERG_OFF N14
ON_KEY
TP558 EMERG

PWR_IND M4, LC_IND H16, STATUS B14, WAKEUP H14
TP559 RESET → PWR_IND
TP560 LC → LC_IND
TP561 STATUS → STATUS
TP562 WAKEUP → MODEM_WAKEUP

VDDLP M15, VEXT M5, VGNSS K16, ANT-GNSS_DC D5
VGNSS → ANT_GNSS_DC
C509 47u → GND

M501J SIM: POWER K15, RST L14, IO K14, CLK L15, CD M14
VSIM_A, MODEM_RST_A, MODEM_DATA_A, MODEM_CLK_A, MODEM_CD_A

PHS8 M501A: CTS N8, RX P11, RTS N10, TX P12
UART1_RTS, UART1_TX, UART1_CTS, UART1_RX
TP547 CTS, TP548 RX, TP549 RTS, TP550 TX

PHS8: RING P10, DCD N9, DSR P9, DTR P8
RING
TP551 RING, TP552 DCD, TP553 DSR, TP554 DTR

BATT+ N13, P13
C501 10p, C503 39p, C505 47u → VMODEM3

BATT+GSM N3, N4
C507 10p, C508 39p, C510 47u → VMODEM1

BATT+WCDMA A4, B3
C502 10p, C504 39p, C506 47u → VMODEM2

M501C ANT_GNSS E1 → GNSS_IN

M501B ANT_DRX A12 → J501 → CELL_ANT_DRX
M501D ANT_WGSM K1 → J502 → CELL_ANT_TRX
50 Ohm
ANT_DRX, CELL_IN → GND
Place taps close to modem

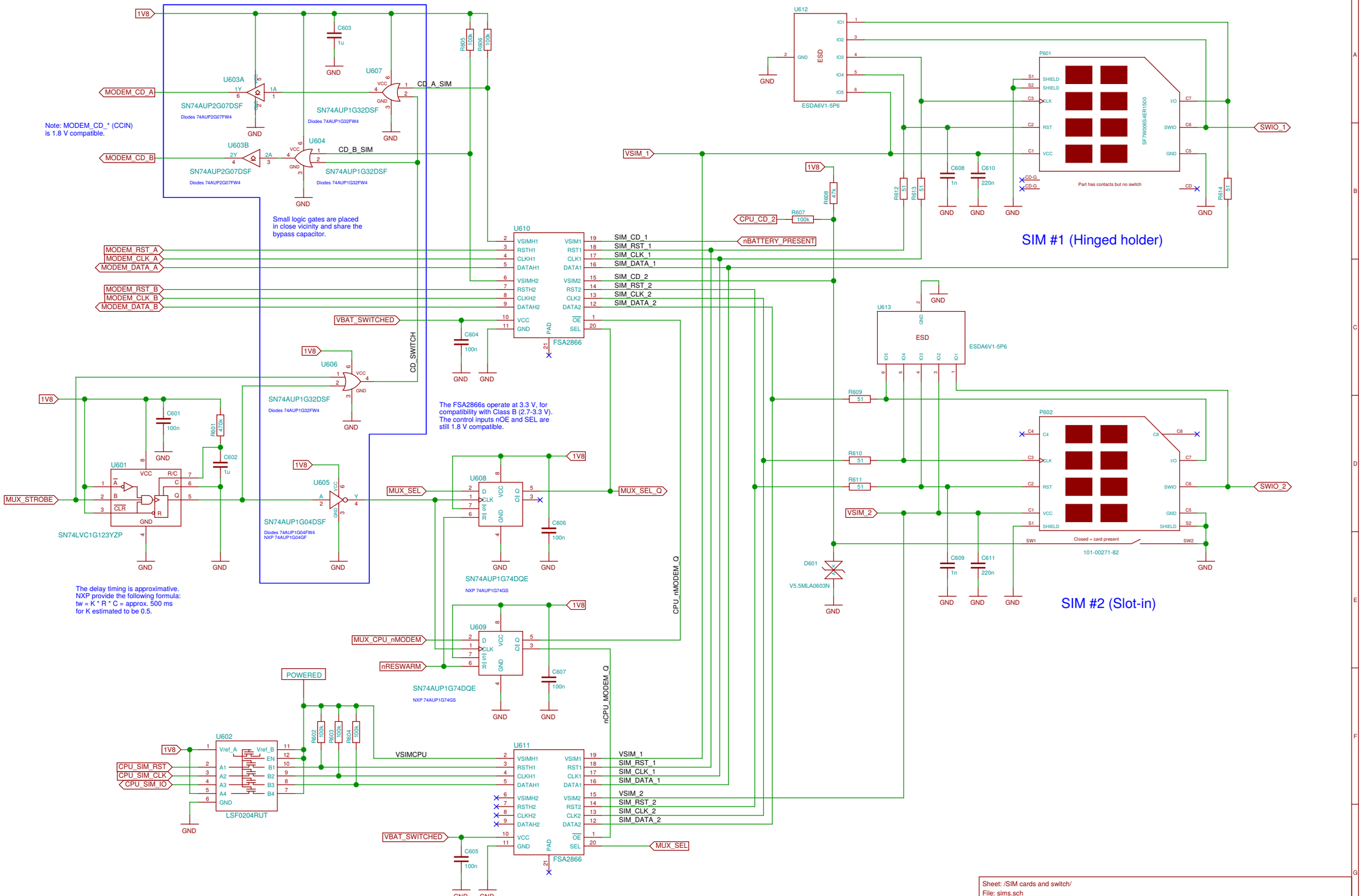
MODEM_EMERG
MODEM_IGT — MODEM_IGT
T501 UMG6N 10k/47k: B2, GND, B1, C2, C1, pins 3, 2, 1, 4, 5

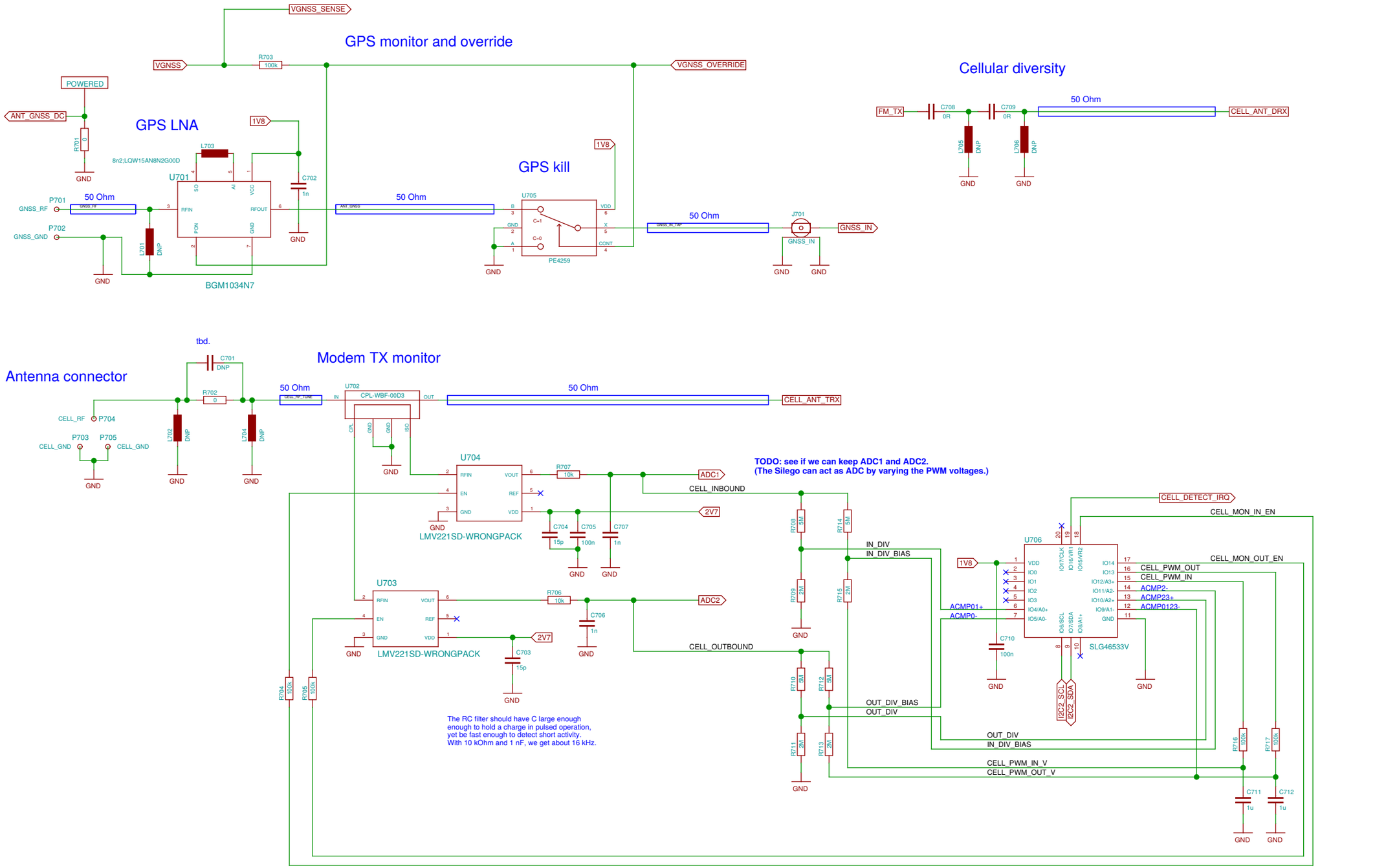
M501L / M501M: GND pins A5, A6, A8, A9, A10, A11, A13, B4, B5, B6, B7, B8, B9, B10, B11, B12, B13, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, D1, D2, D3, D4, D6, D7, D8, D9 and D10, D11, E2, E3, E4, E5, F1, F2, F3, F4, G1, G2, G3, H1, H2, H3, H4, J1, J2, J3, J4, J13, K2, K3, K4, K5, L1, L2, L3, L4, M2, M3, M6, N11

Anti-eavesdropping

M501F PHS8: EARP E15, EARN E16, VMIC C14, MICP D15, MICN D16, AGND C15
VMIC 2.7 V
R511 100k
MODEM_VMIC_SENSE
R512 100k
GND

Sheet: /3G/4G Modem/ File: modem.sch		
Title: 3G/4G Modem		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 5/25


Note: MODEM_CD_* (CCIN) is 1.8 V compatible.
Small logic gates are placed in close vicinity and share the bypass capacitor.
The FSA2866s operate at 3.3 V, for compatibility with Class B (2.7-3.3 V). The control inputs nOE and SEL are still 1.8 V compatible.
The delay timing is approximative. NXP provide the following formula: tw = K * R * C = approx. 500 ms for K estimated to be 0.5.
SIM #1 (Hinged holder)
SIM #2 (Slot-in)
Part has contacts but no switch
Closed = card present
(c) CC-BY-SA 2014-2016 Neo900 & GDC
Sheet: /SIM cards and switch/
File: sims.sch
Title: SIM cards and switch
Size: A3
Date: 2016-11-18 15:48:54
Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z
Id: 6/25

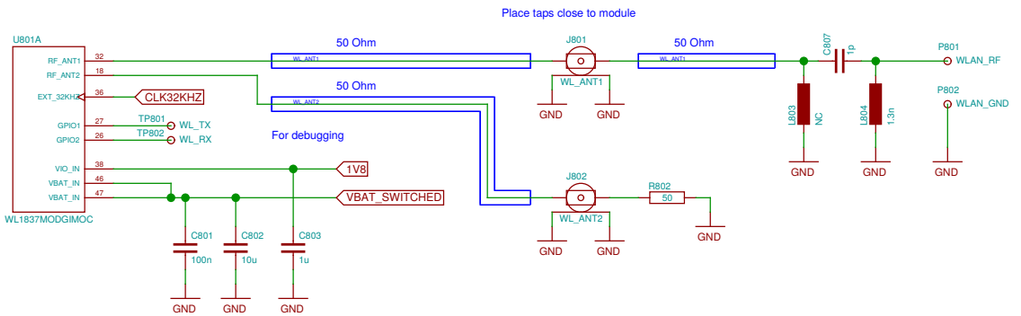


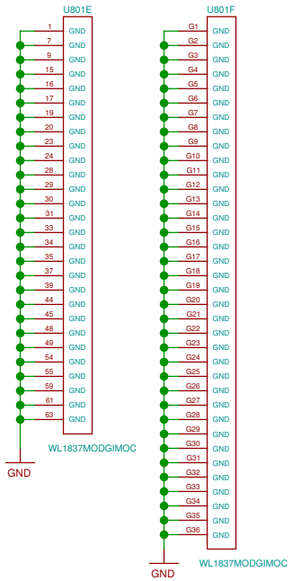
Sheet: /Modem Antennas/		
File: ants.sch		
Title: Modem Antennas		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 7/25

WiLink8

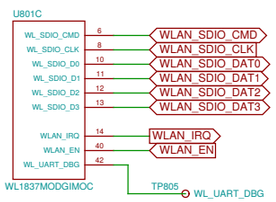
TODO: assign footprints for c-spring contacts

WLAN/BT antenna

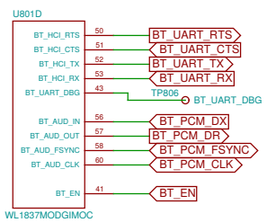




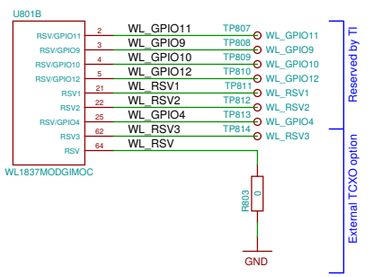
WLAN



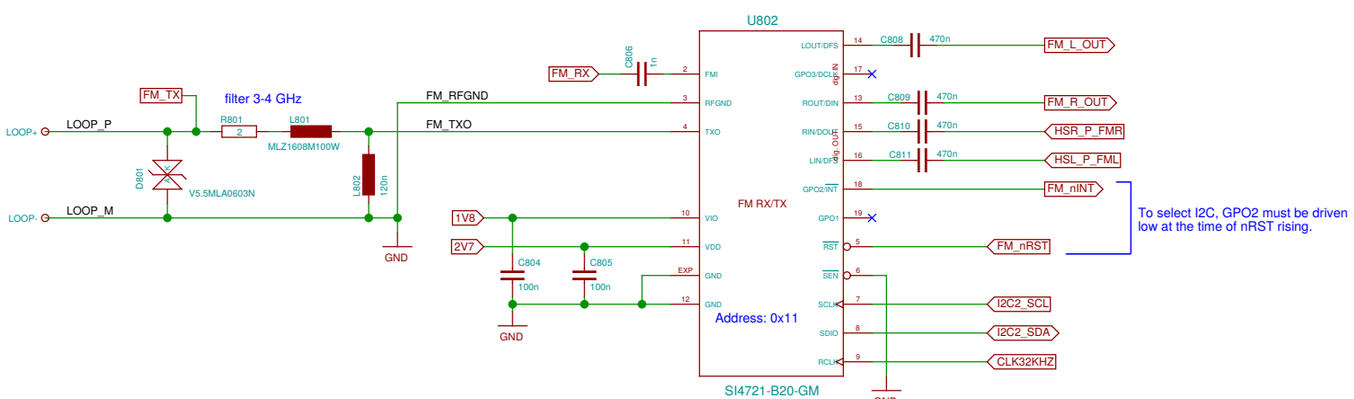
Bluetooth



Reserved / Debugging



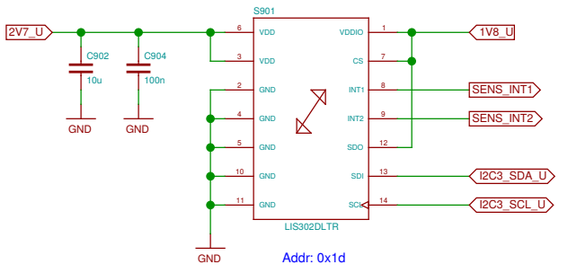
FM Radio (TX/RX)



Si4705 is pin compatible (mostly) but RX-only

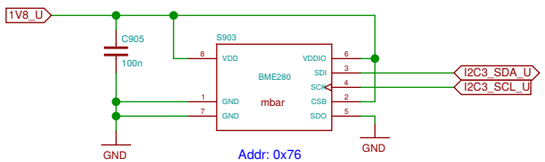
Sheet: /WLAN, Bluetooth, FM/		
File: wlan.sch		
Title: WLAN, Bluetooth, FM		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 8/25

Acceleration (legacy)



Addr: 0x1d

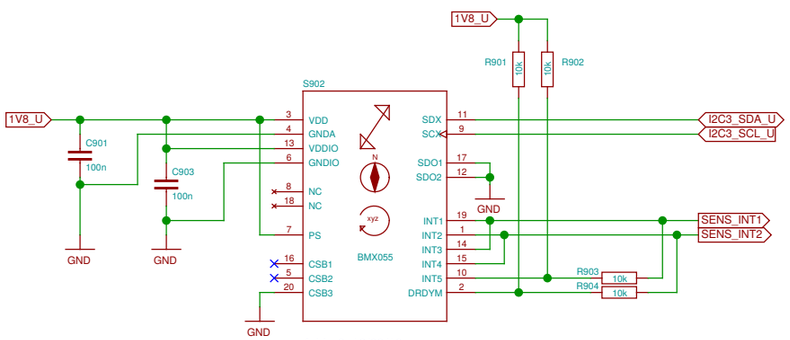
Pressure, humidity



Addr: 0x76

keep away from liquids and extreme temperatures

9-axis (acceleration, gyroscope, magnetometer)



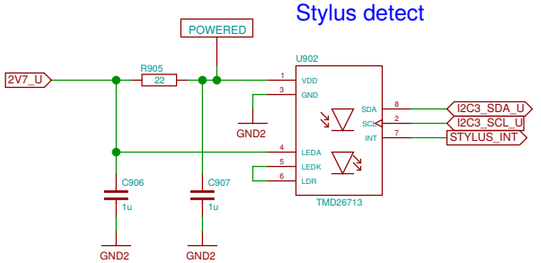
Addr: 0x18/68/10

keep away from magnets and metal

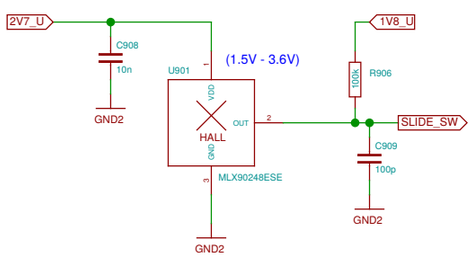
UPPER

LOWER

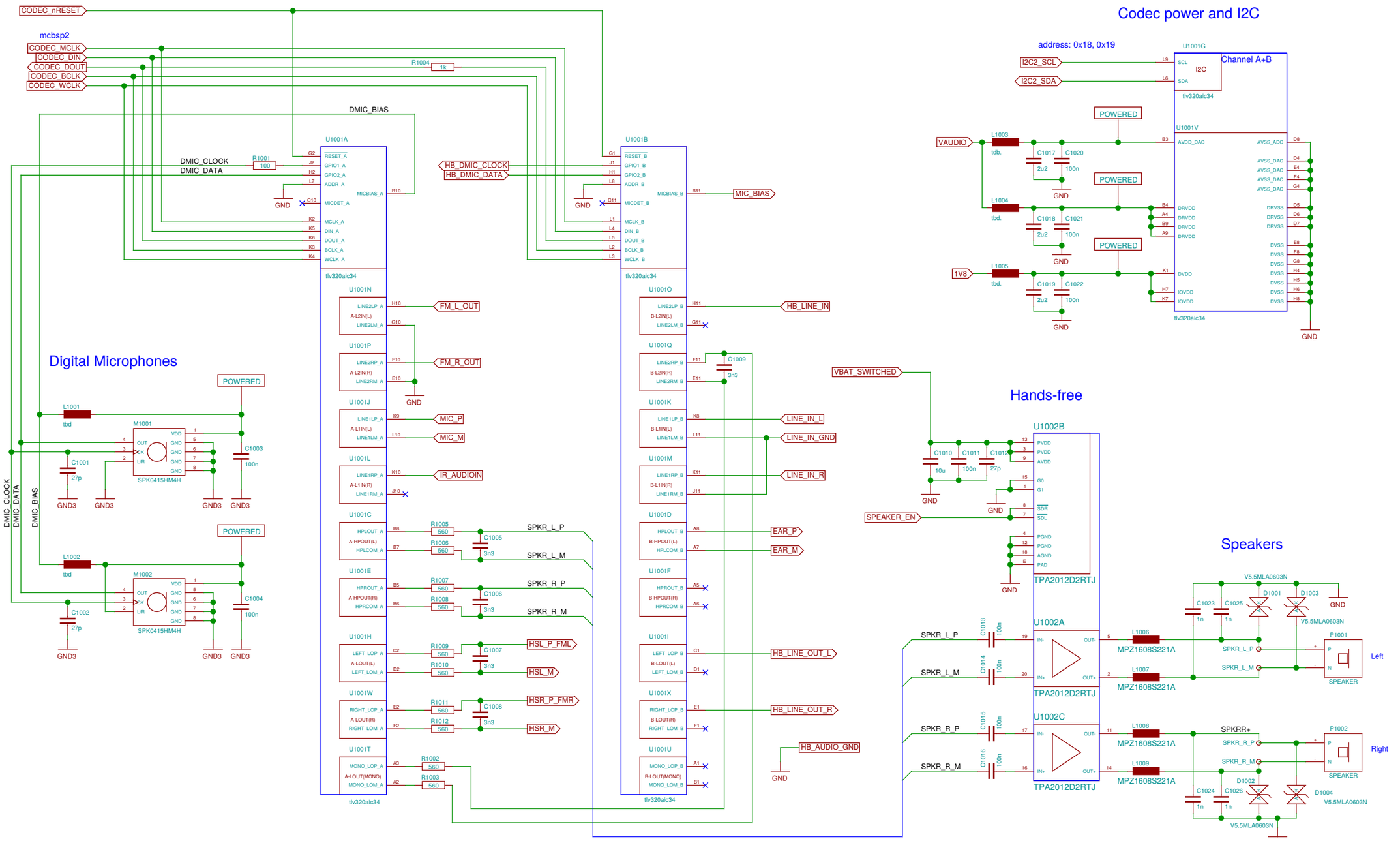
Stylus detect



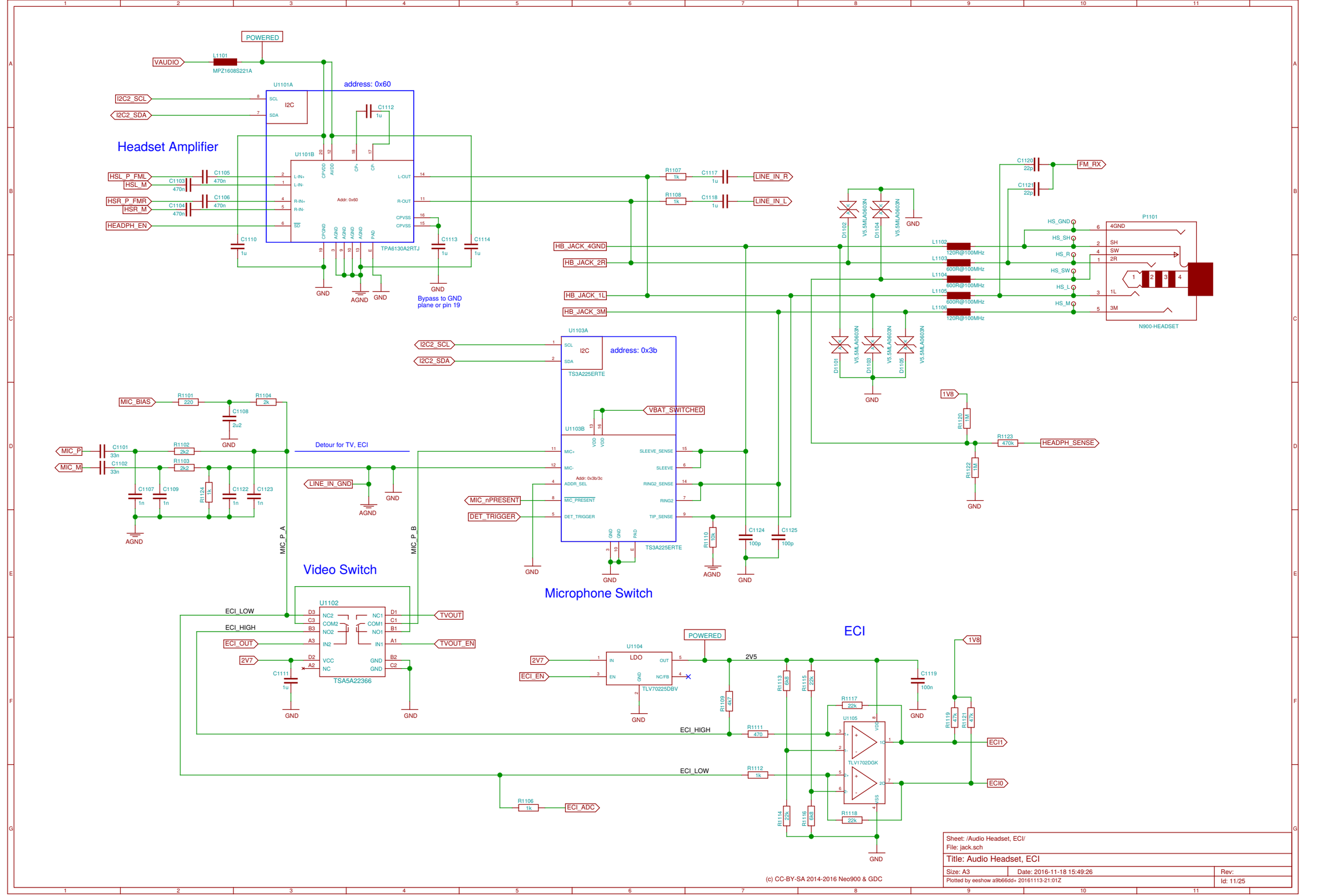
Slide sensor



Sheet: /Sensors/ File: sensors.sch		
Title: Sensors		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 9/25



Sheet: /Audio Codec/		
File: codec.sch		
Title: Audio Codec		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 10/25


POWERED
VAUDIO
L1101
MPZ1608S221A
U1101A
address: 0x60
I2C2_SCL
I2C2_SDA
I2C
SCL
SDA
C1112
1u
Headset Amplifier
U1101B
HSL_P_FML
HSL_M
HSR_P_FMR
HSR_M
HEADPH_EN
C1105
470n
C1103
470n
C1106
470n
C1104
470n
L-IN+
L-IN-
R-IN+
R-IN-
SD
Addr: 0x60
L-OUT
R-OUT
CPVSS
CPVDD
AVDD
CP+
CP-
CPGND
AGND
PAD
TPA6130A2RTJ
C1110
1u
C1113
1u
C1114
1u
GND
AGND
Bypass to GND plane or pin 19
R1107
1k
C1117
1u
LINE_IN_R
R1108
1k
C1118
1u
LINE_IN_L
HB_JACK_4GND
HB_JACK_2R
HB_JACK_1L
HB_JACK_3M
D1102
D1104
V5.5MLA0603N
L1102
120R@100MHz
L1103
600R@100MHz
L1104
600R@100MHz
L1105
600R@100MHz
L1106
120R@100MHz
C1120
22p
C1121
22p
FM_RX
P1101
HS_GND
HS_SH
HS_R
HS_SW
HS_L
HS_M
4GND
SH
SW
2R
1L
3M
N900-HEADSET
D1101
D1103
D1105
U1103A
I2C2_SCL
I2C2_SDA
address: 0x3b
TS3A225ERTE
U1103B
VBAT_SWITCHED
VDD
MIC+
MIC-
ADDR_SEL
MIC_PRESENT
DET_TRIGGER
SLEEVE_SENSE
SLEEVE
RING2_SENSE
RING2
TIP_SENSE
Addr: 0x3b/3c
1V8
R1120
1M
R1123
470k
HEADPH_SENSE
R1122
1M
MIC_BIAS
R1101
220
R1104
2k
C1108
2u2
MIC_P
MIC_M
C1101
33n
C1102
33n
R1102
2k2
R1103
2k2
C1107
1n
C1109
1n
R1124
1k
C1122
1n
C1123
1n
Detour for TV, ECI
LINE_IN_GND
MIC_P_A
MIC_P_B
MIC_nPRESENT
DET_TRIGGER
R1110
10k
C1124
100p
C1125
100p
Video Switch
Microphone Switch
U1102
TSA5A22366
ECI_LOW
ECI_HIGH
ECI_OUT
2V7
TVOUT
TVOUT_EN
C1111
1u
ECI
U1104
TLV70225DBV
LDO
ECI_EN
2V5
R1109
4k7
R1113
6k8
R1115
22k
C1119
100n
R1117
22k
R1118
22k
R1114
22k
R1116
6k8
U1105
TLV1702DGK
R1111
470
R1112
1k
R1119
47k
R1121
47k
ECI1
ECI0
R1106
1k
ECI_ADC
(c) CC-BY-SA 2014-2016 Neo900 & GDC
Sheet: /Audio Headset, ECI/
File: jack.sch
Title: Audio Headset, ECI
Size: A3
Date: 2016-11-18 15:49:26
Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z
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No-Solder Components

N1201
N900 case assembly

N1202
N97-CAMERA-HOLE

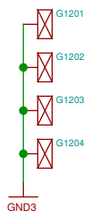
N1205
headset jack

N1203
STENCIL-TOP

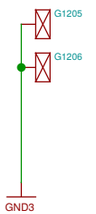
N1204
STENCIL-BOTTOM

Shield Contacts on UPPER

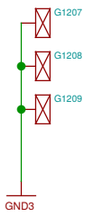
For the display



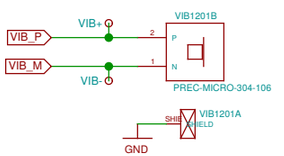
For the key mat



For the "key frame hook"

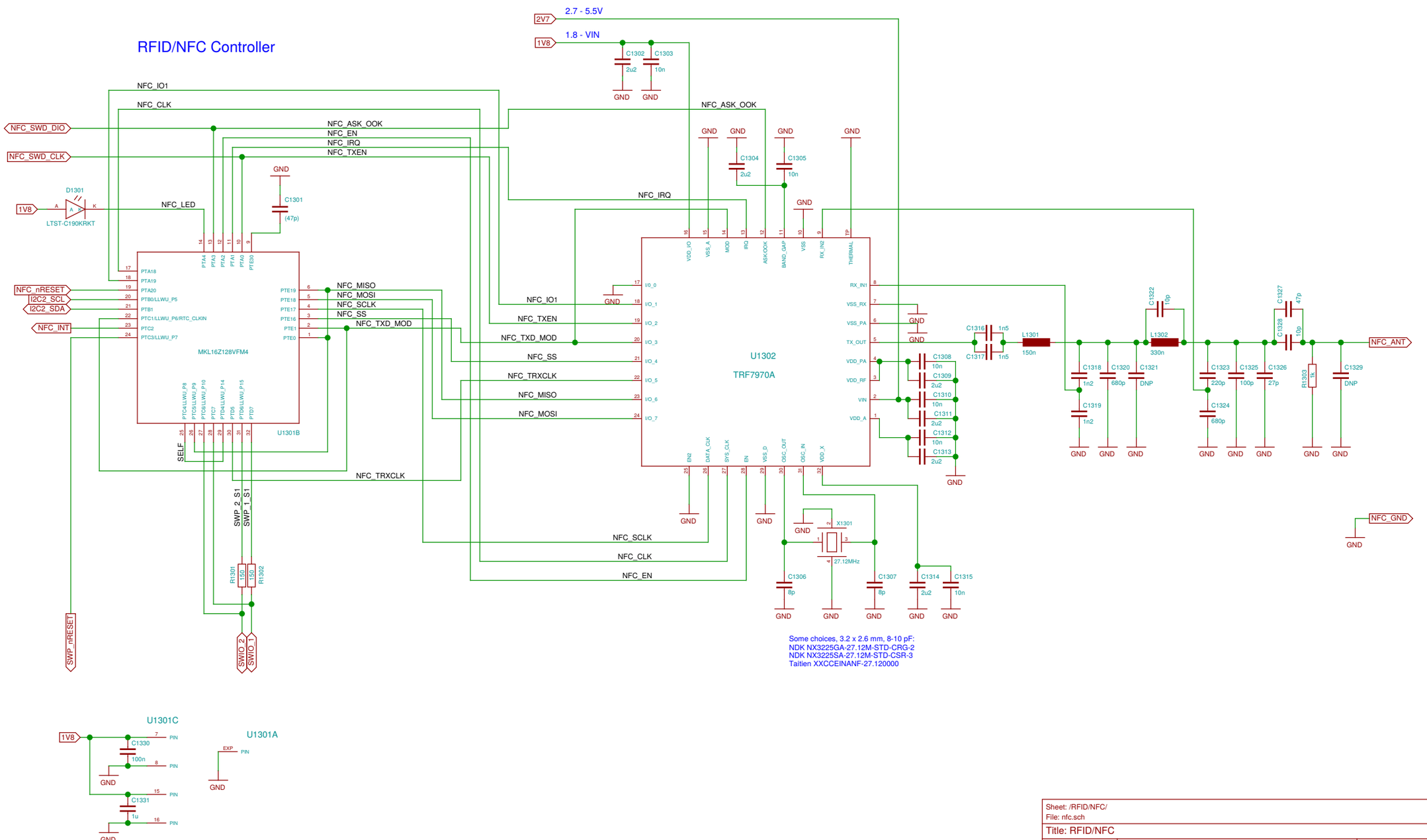


Vibramotor

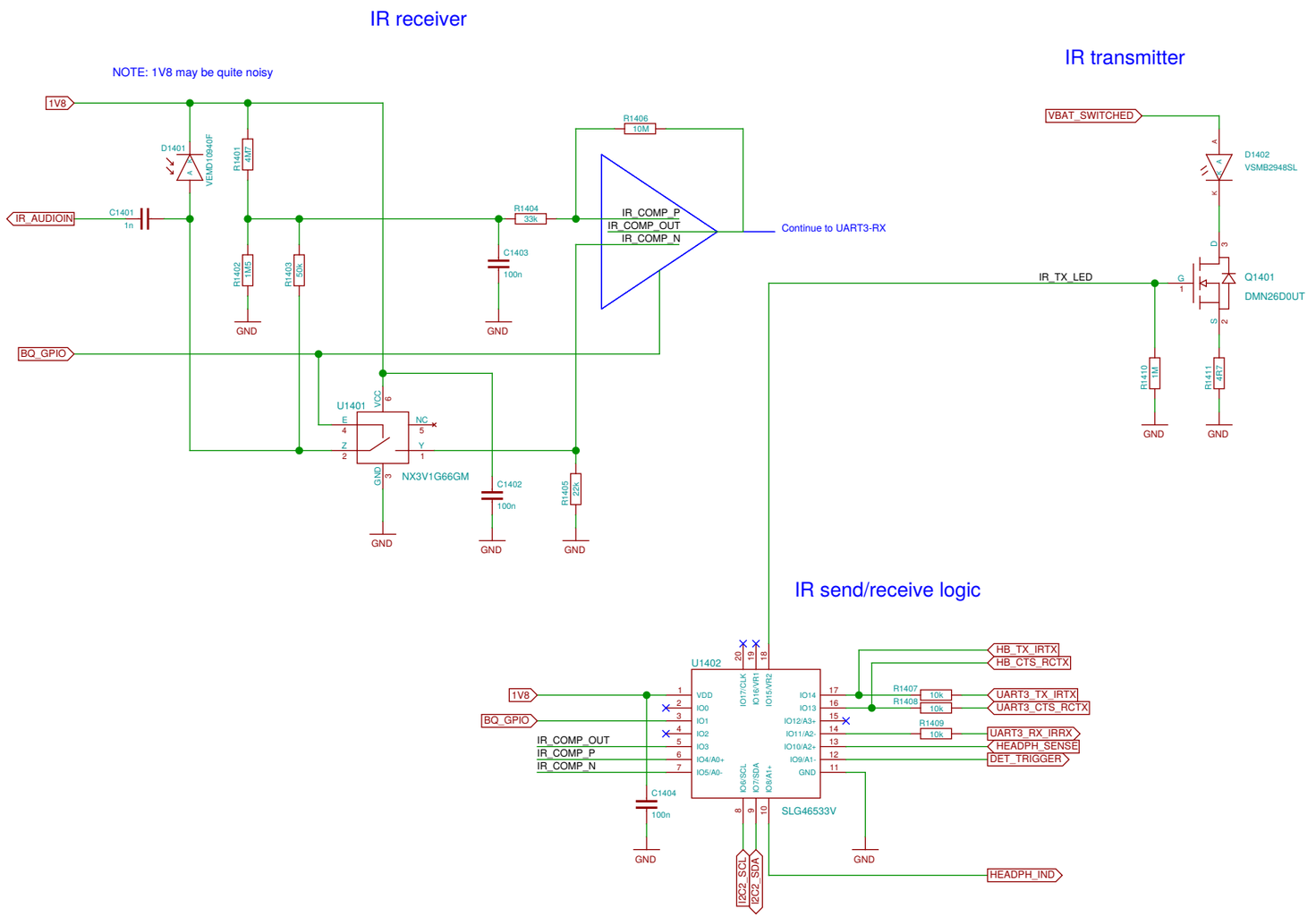


Sheet: /Misc/ File: misc.sch		
Title: Misc		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 12/25

RFID/NFC Transceiver



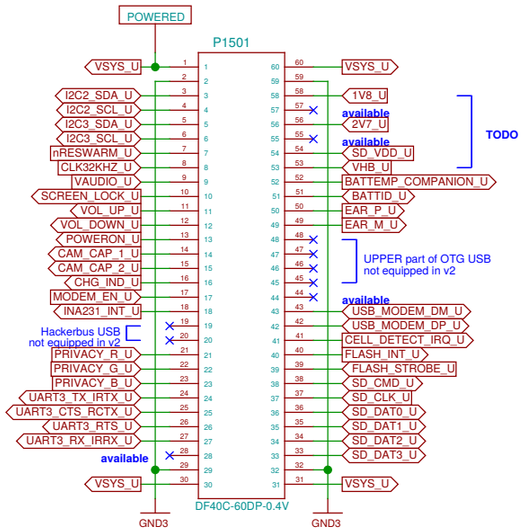
Sheet: /RFID/NFC/		
File: nfc.sch		
Title: RFID/NFC		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 13/25

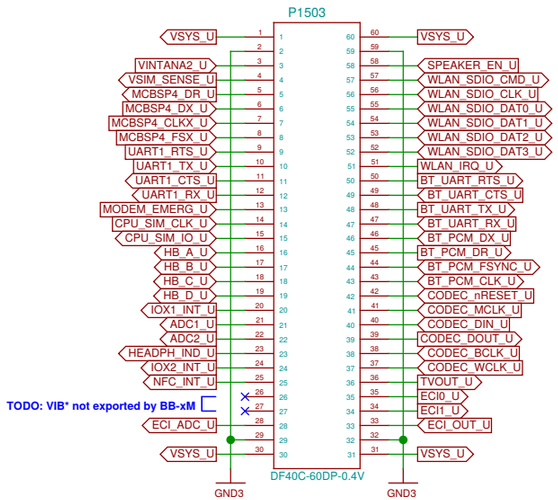


TODO: update D1401 footprint

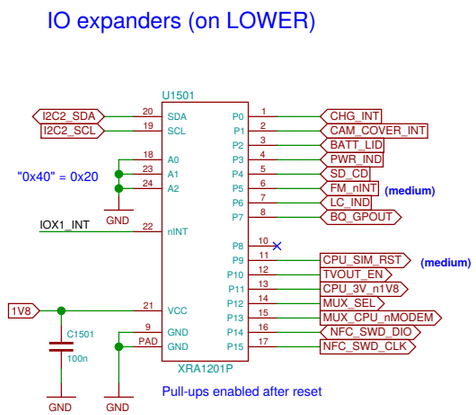
Sheet: /Infrared/ File: ir.sch		
Title: Infrared		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 14/25

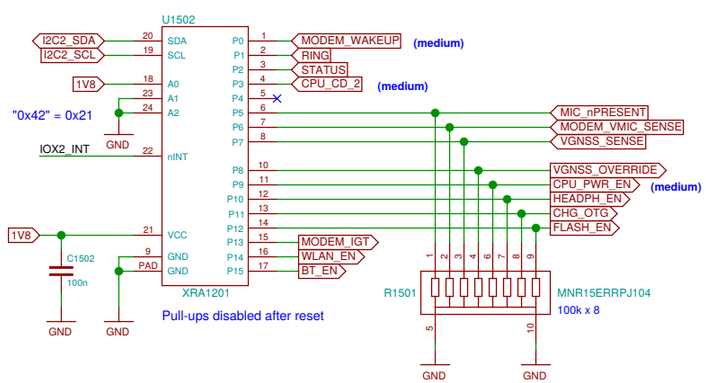
This is just the collection of signals we have.
Proper assignment still pending.

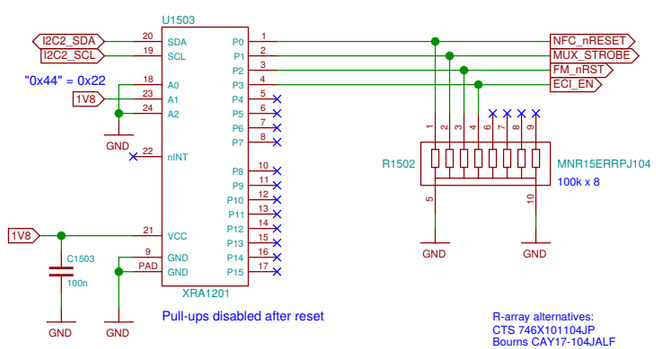




IO expanders (on LOWER)

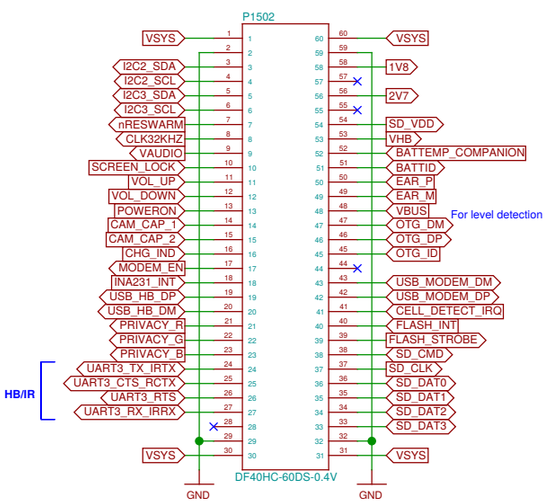


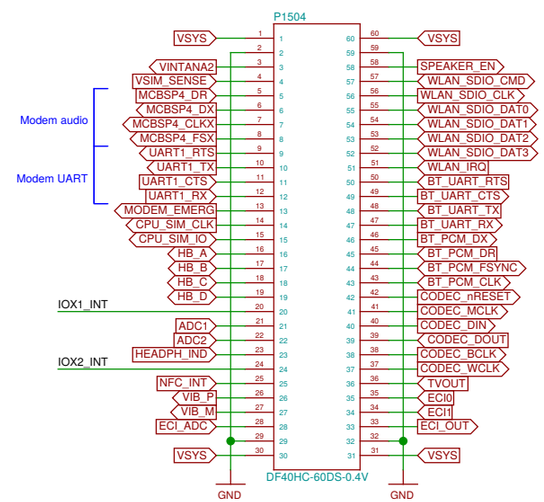




UPPER

LOWER



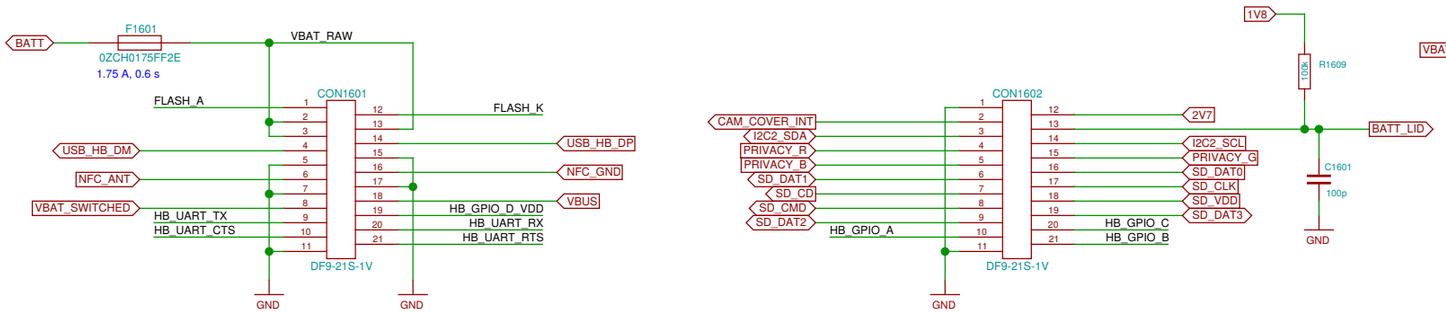


Current rating per contact: 0.3 A

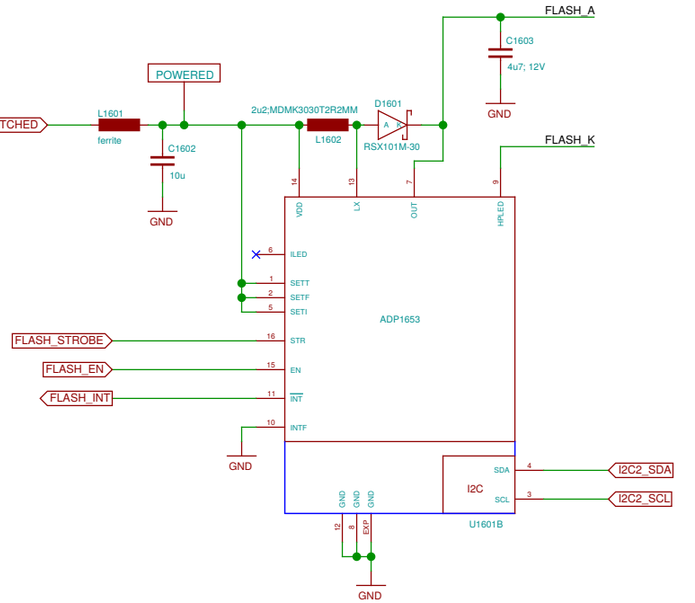
Sheet: /B2B LOWER-UPPER/		
File: b2b.sch		
Title: B2B LOWER-UPPER		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 15/25

LOWER-BOB Interconnect (LOWER side)

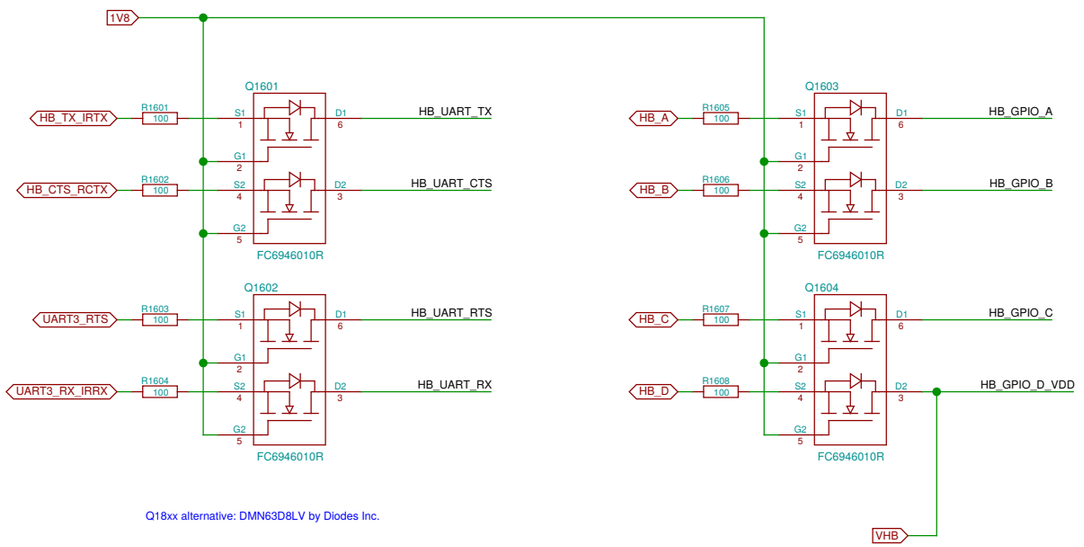
Defined in the Hackerbus specification, http://neo900.org/stuff/papers/hb.pdf



Flash/Torch



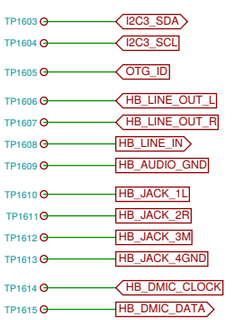
Level shifters for Hackerbus GPIO and UART



Q18xx alternative: DMN63D8LV by Diodes Inc.

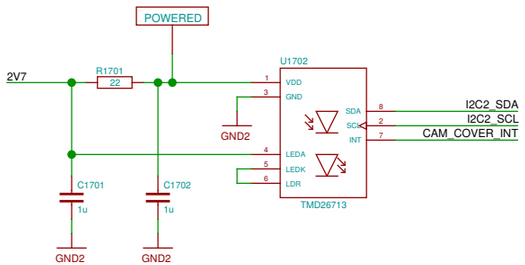
Patchfield

The following signals (or some of them) - **IF FEASIBLE** - should be made available on testpoints next to the 100 Ohm array of R1601 to R1608 for easy yellow wire solder-patching of secondary HB pin functions.

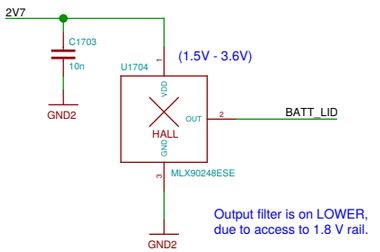


Sheet: /Hackerbus/ File: hb.sch		
Title: Hackerbus		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 16/25

Camera Cover detect

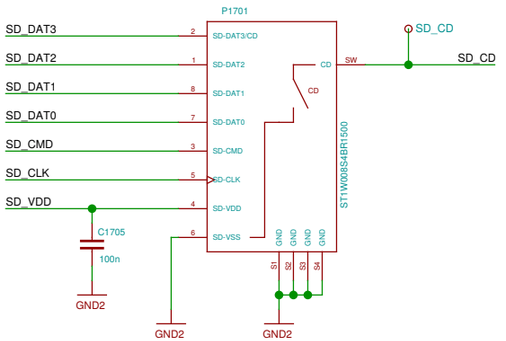


Battery Cover detect

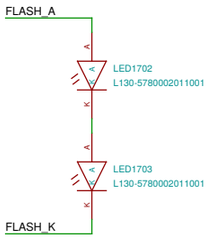


Output filter is on LOWER, due to access to 1.8 V rail.

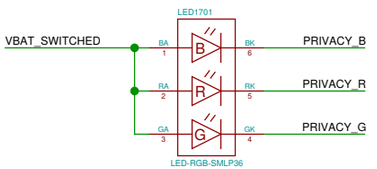
Memory card holder



Camera flash

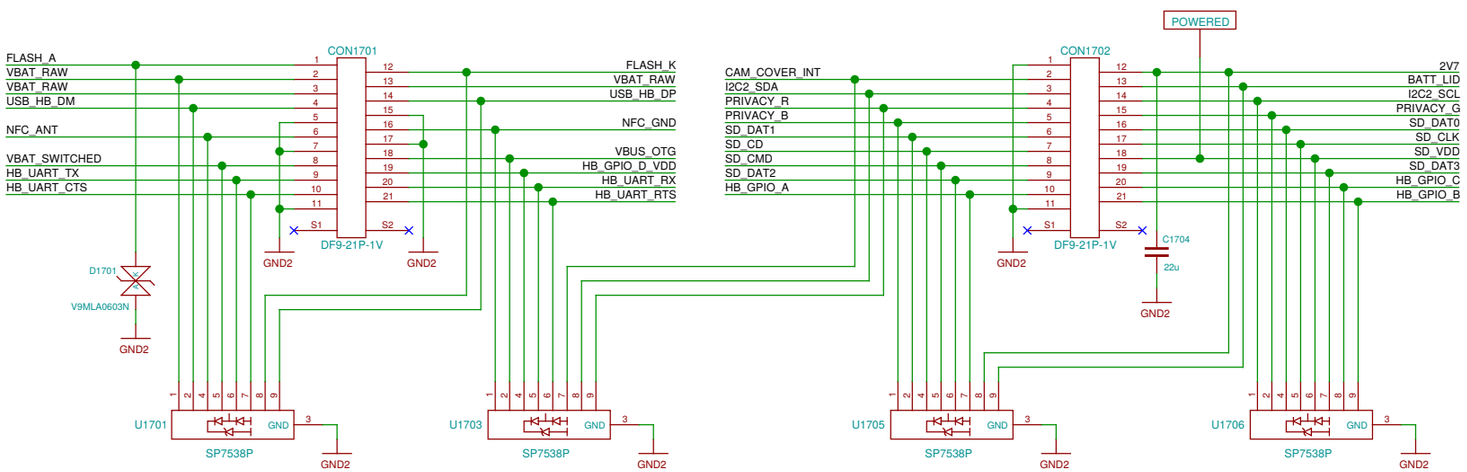


Privacy LED

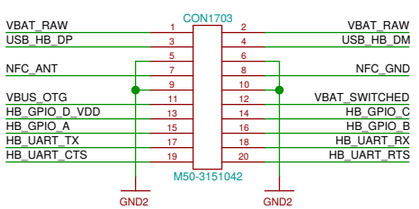


LOWER-BOB Interconnect (BOB side)

Defined in the Hackerbus specification, http://neo900.org/stuff/papers/hb.pdf



Hackerbus

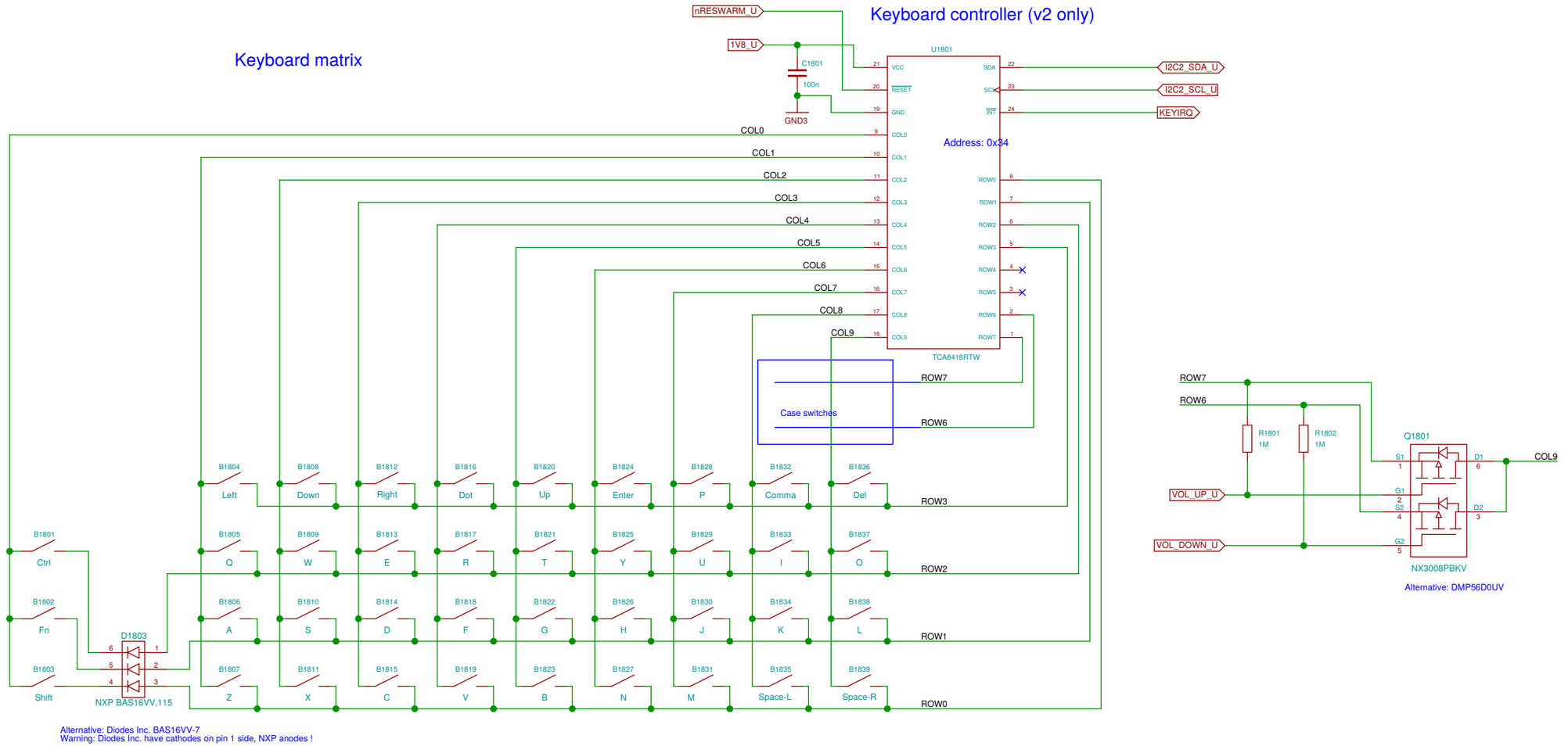


ESD pin assignment is only indicative.
Actual assignment to be defined by layout.

Sheet: /uSD Breakout Board/ File: bob.sch		
Title: uSD Breakout Board		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 17/25

Keyboard matrix

Keyboard controller (v2 only)



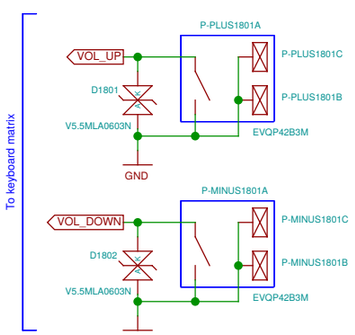
Alternative: Diodes Inc. BAS16VV-7
Warning: Diodes Inc. have cathodes on pin 1 side, NXP anodes !

Alternative: DMP56D0UV

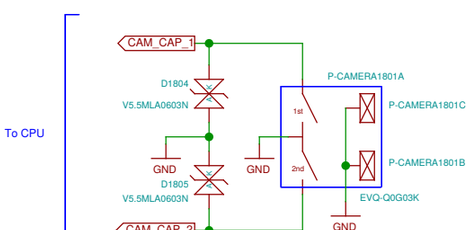
UPPER

LOWER

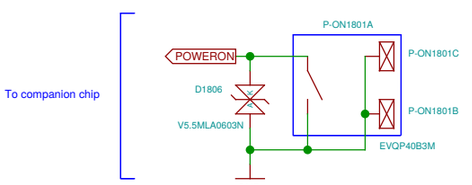
Volume



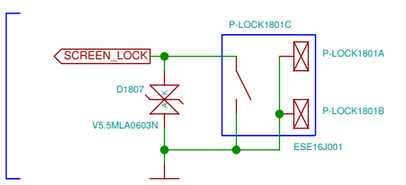
Camera trigger



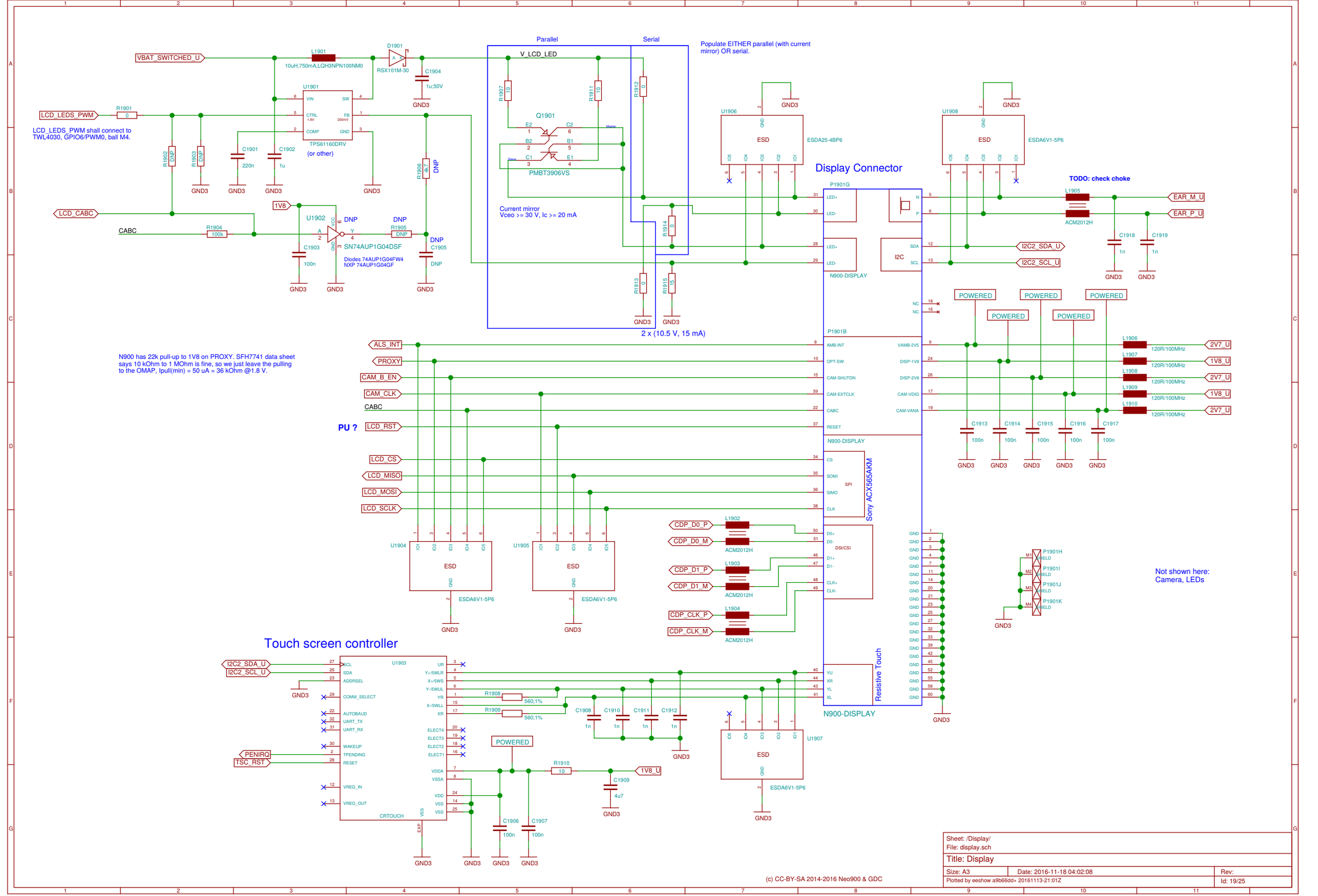
On-off

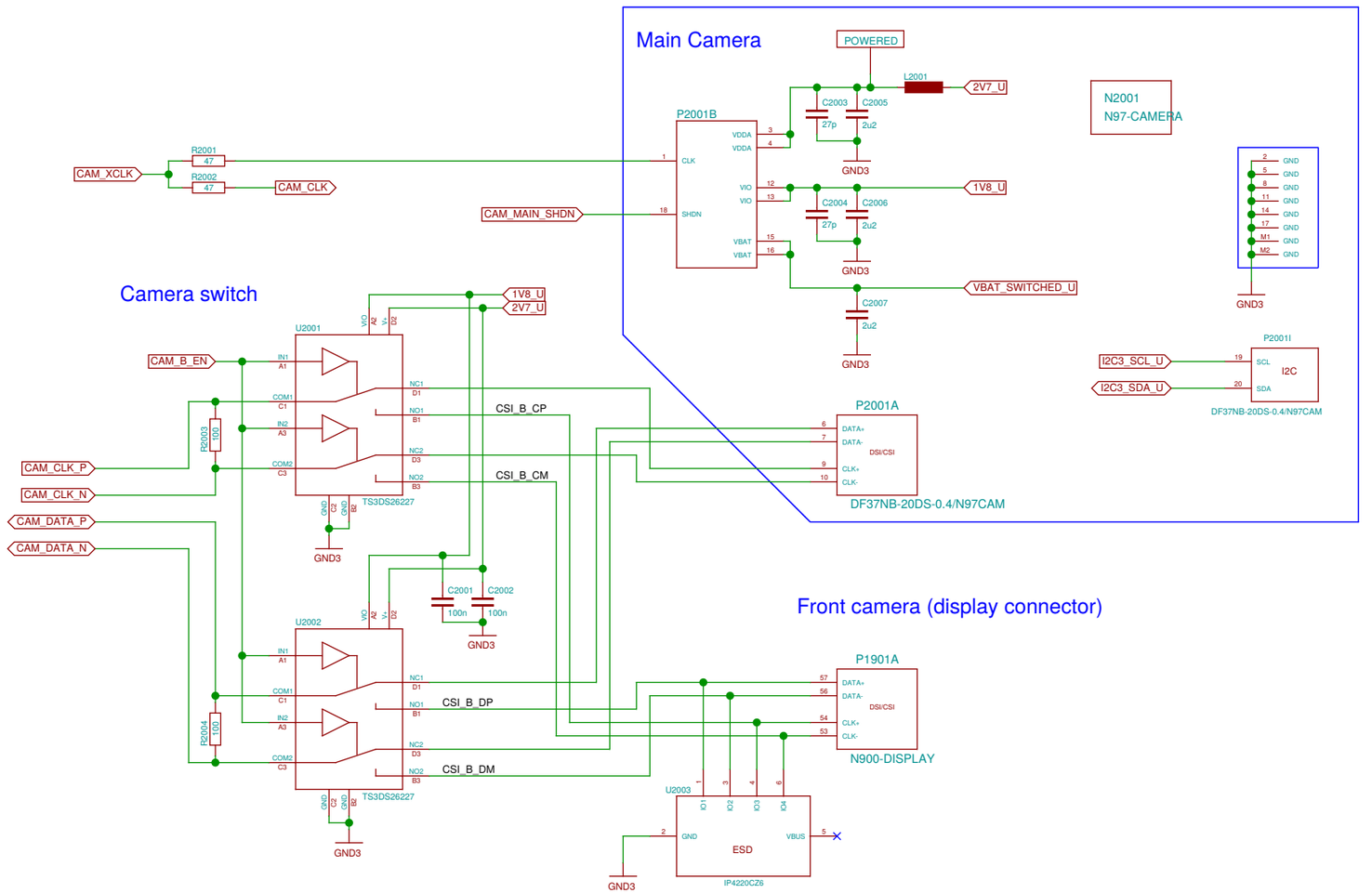


Lock switch



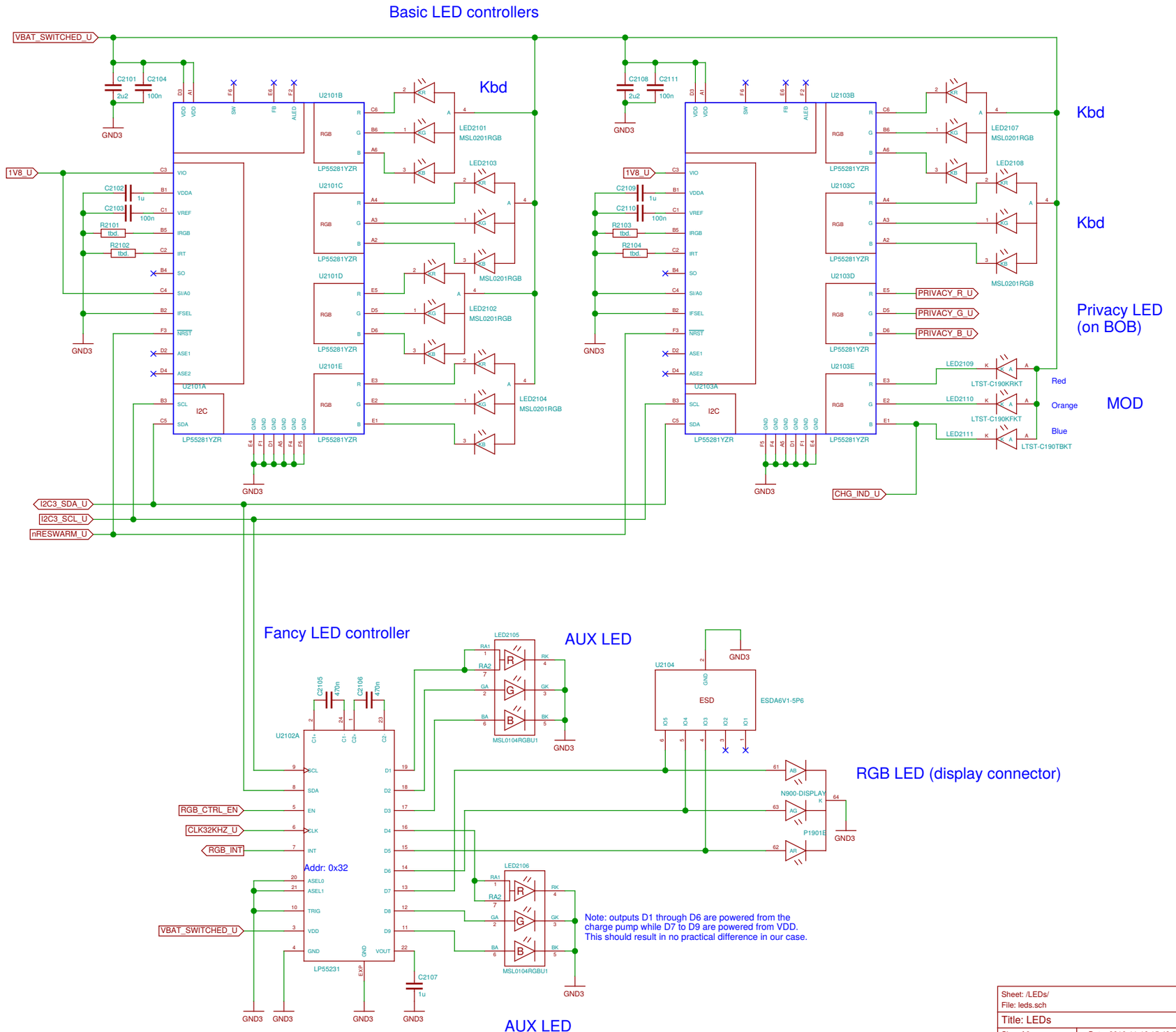
Sheet: /Keypad and buttons/ File: keys.sch		
Title: Keypad and buttons		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 18/25


VBAT_SWITCHED_U
L1901
10uH,750mA,LQH3NPN100NM0
D1901
RSX101M-30
C1904
1u;50V
U1901
TPS61160DRV
(or other)
C1901
220n
C1902
1u
R1901
0
LCD_LEDS_PWM
LCD_LEDS_PWM shall connect to TWL4030, GPIO6/PWM0, ball M4.
R1902
DNP
R1903
DNP
R1906
4k7
DNP
Parallel
Serial
V_LCD_LED
R1907
10
R1911
10
R1912
0
Q1901
PMBT3906VS
Current mirror
Vceo >= 30 V, Ic >= 20 mA
R1913
0
R1914
0
R1915
15
2 x (10.5 V, 15 mA)
Populate EITHER parallel (with current mirror) OR serial.
U1906
ESDA25-4BP6
U1908
ESDA6V1-5P6
Display Connector
P1901G
N900-DISPLAY
I2C
I2C2_SDA_U
I2C2_SCL_U
TODO: check choke
L1905
ACM2012H
EAR_M_U
EAR_P_U
C1918
1n
C1919
1n
LCD_CABC
CABC
R1904
100k
1V8
U1902
SN74AUP1G04DSF
Diodes 74AUP1G04FW4
NXP 74AUP1G04GF
C1903
100n
R1905
DNP
C1905
DNP
N900 has 22k pull-up to 1V8 on PROXY. SFH7741 data sheet says 10 kOhm to 1 MOhm is fine, so we just leave the pulling to the OMAP, Ipull(min) = 50 uA = 36 kOhm @1.8 V.
ALS_INT
PROXY
CAM_B_EN
CAM_CLK
CABC
PU ?
LCD_RST
LCD_CS
LCD_MISO
LCD_MOSI
LCD_SCLK
P1901B
N900-DISPLAY
Sony ACX565AKM
SPI
DSI/CSI
Resistive Touch
POWERED
L1906
L1907
L1908
L1909
L1910
120R/100MHz
2V7_U
1V8_U
C1913
C1914
C1915
C1916
C1917
100n
U1904
U1905
ESDA6V1-5P6
CDP_D0_P
CDP_D0_M
CDP_D1_P
CDP_D1_M
CDP_CLK_P
CDP_CLK_M
L1902
L1903
L1904
ACM2012H
P1901H
P1901I
P1901J
P1901K
FIELD
Not shown here:
Camera, LEDs
Touch screen controller
U1903
CRTOUCH
I2C2_SDA_U
I2C2_SCL_U
PENIRQ
TSC_RST
R1908
560;1%
R1909
560;1%
C1908
C1910
C1911
C1912
1n
U1907
R1910
10
C1909
4u7
C1906
C1907
100n
(c) CC-BY-SA 2014-2016 Neo900 & GDC
Sheet: /Display/
File: display.sch
Title: Display
Size: A3
Date: 2016-11-18 04:02:08
Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z
Id: 19/25



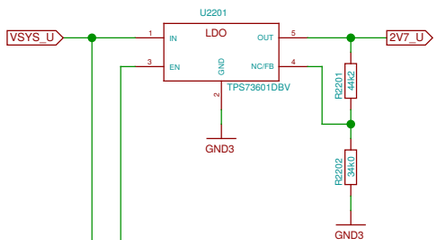
(c) CC-BY-SA 2014-2016 Neo900 & GDC

Sheet: /Cameras/ File: cams.sch		
Title: Cameras		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 20/25

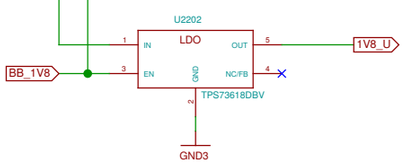


Sheet: /LEDs/ File: leds.sch		
Title: LEDs		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 21/25

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

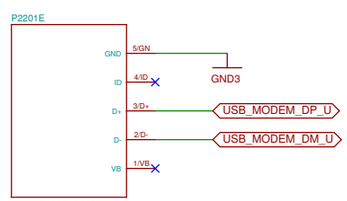


TODO: use REGEN ?

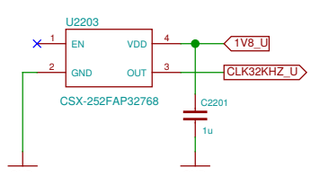


Modem USB

connect to BB
by some Micro-USB cable

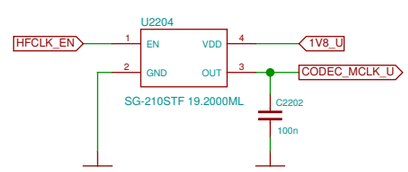


32 kHz clock



Alternative: OYKTGLJANF-0.032768

19.2 MHz clock



Alternative: KC2520B19.2000C1GE00

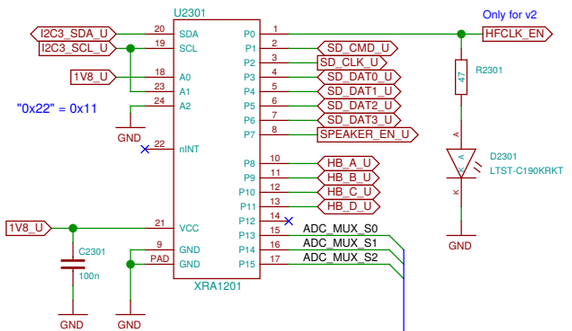
Sheet: /Adaptation (v2 only)/		
File: v2.sch		
Title: Adaptation (v2 only)		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 22/25

TODO: update pin names in footprint

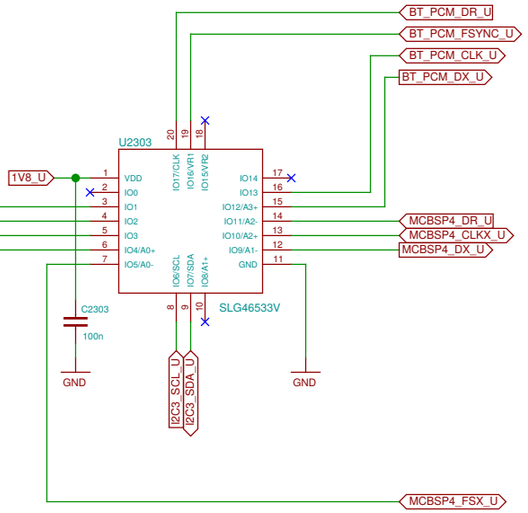
BB-xM Main Expansion Header (P9, 7.24)

Same part, as "breakaway" strip (72 positions):
435-40-272-00-160000

IO expander



PCM switch



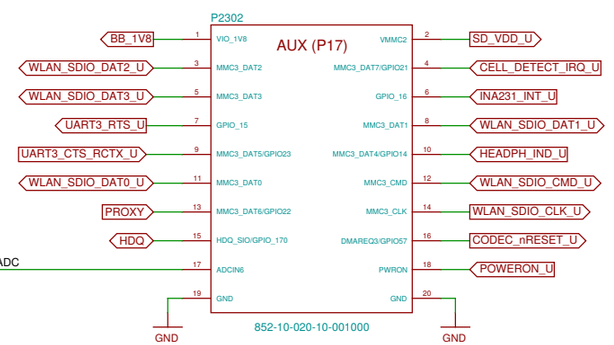
PCM_MUX_FSYNC
PCM_MUX_DR
PCM_MUX_CLK
PCM_MUX_DX

UART2

nRESWARM_U
I2C2_SCL_U
ECI1_U
IOX2_INT_U
BT_UART_RTS_U
BT_UART_RX_U
BT_UART_TX_U
BT_UART_CTS_U

I2C2_SDA_U
SENS_INT1
SENS_INT2
STYLUS_INT
IOX1_INT_U
KEYIRQ
RGB_INT
ECI0_U
SLIDE_SW
WLAN_IRQ_U
SCREEN_LOCK_U
(weak) BB_1V8

Auxiliary Expansion Header (P17, 7.26)



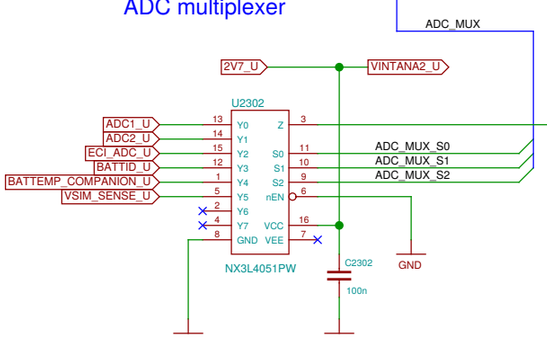
No UART3_RTS on BB-xM, using GPIO

No UART3_CTS on BB-xM, using GPIO

FM_nINT (on IO expander)

Same part, as "breakaway" strip (100 positions):
852-10-1000-10-001000

ADC multiplexer



Sheet: /BB-xM Adapter (CPU)/ File: bbcpu.sch		
Title: BB-xM Adapter (CPU)		
Size: A3	Date: 2016-11-18 15:48:54	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 23/25

TODO: update pin names in footprint

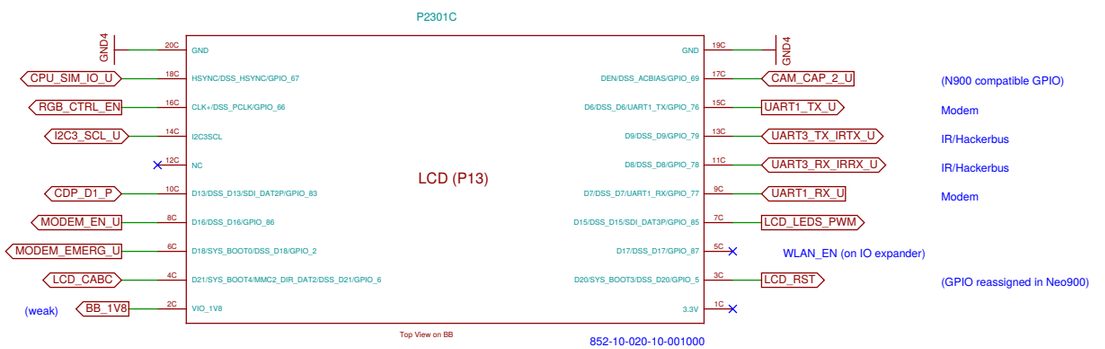
P11 (7.25)

(N900 compatible GPIO)

852-10-020-10-001000

Same part, as "breakaway" strip (100 positions):
852-10-1000-10-001000

P13 (7.25)



(N900 compatible GPIO)

Modem

IR/Hackerbus

IR/Hackerbus

Modem

WLAN_EN (on IO expander)

(GPIO reassigned in Neo900)

852-10-020-10-001000

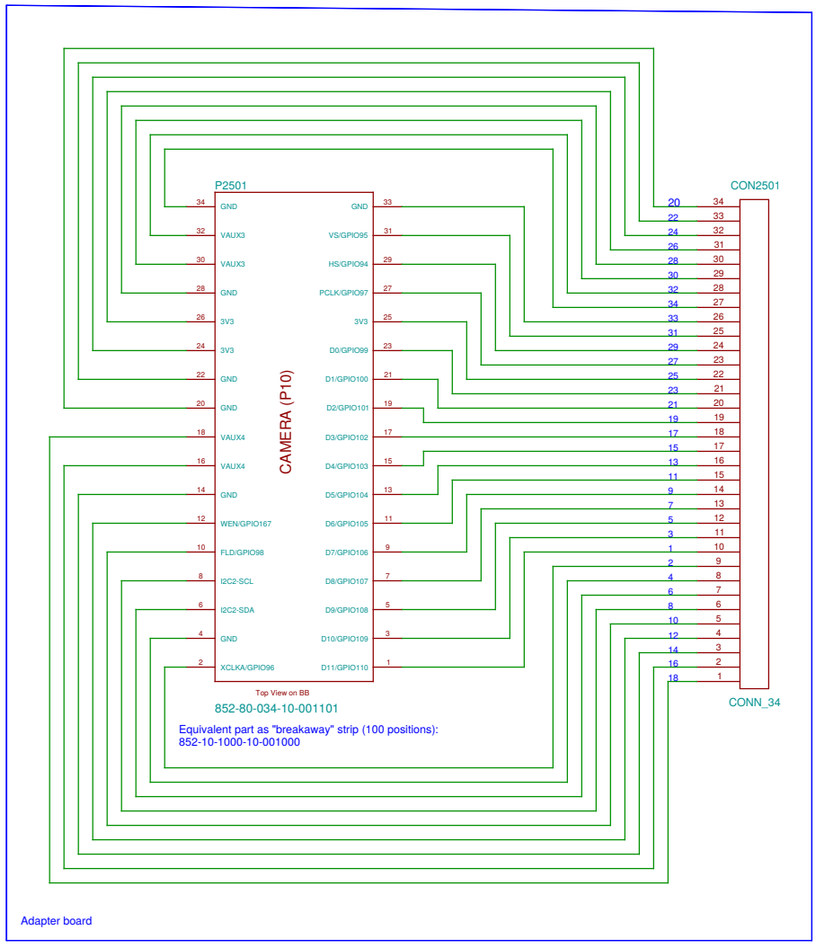
Same part, as "breakaway" strip (100 positions):
852-10-1000-10-001000

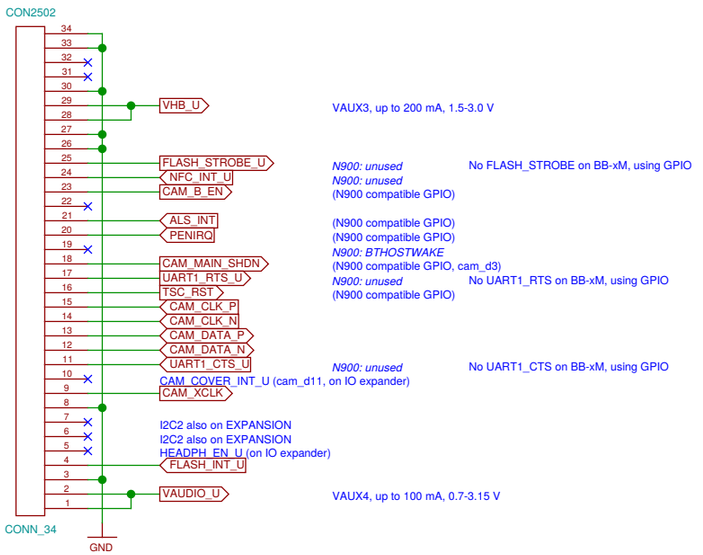
P4 (7.19)

Connect to BB-xM P4.3 (S-Video connector)

Sheet: /BB-xM Adapter (DISP)/		
File: bbdisp.sch		
Title: BB-xM Adapter (DISP)		
Size: A3	Date: 2016-11-18 03:38:20	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 24/25

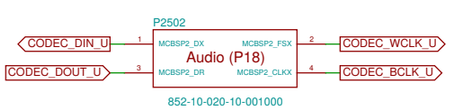
Processor Camera Port Interface (P10, 7.20.3)





34 x 1, 1.27 mm TH row (for ribbon cable)

TODO: update pin names in footprint



This part is a "breakaway" strip (20 positions) and needs to be customized (cut) before assembly.
Alternatively, 852-10-100-10-001000 (100 positions) could be used.

Sheet: /BB-xM Adapter (CAM)/		
File: bbcam.sch		
Title: BB-xM Adapter (CAM)		
Size: A3	Date: 2016-11-18 15:49:26	Rev:
Plotted by eeshow a9b66dd+ 20161113-21:01Z		Id: 25/25