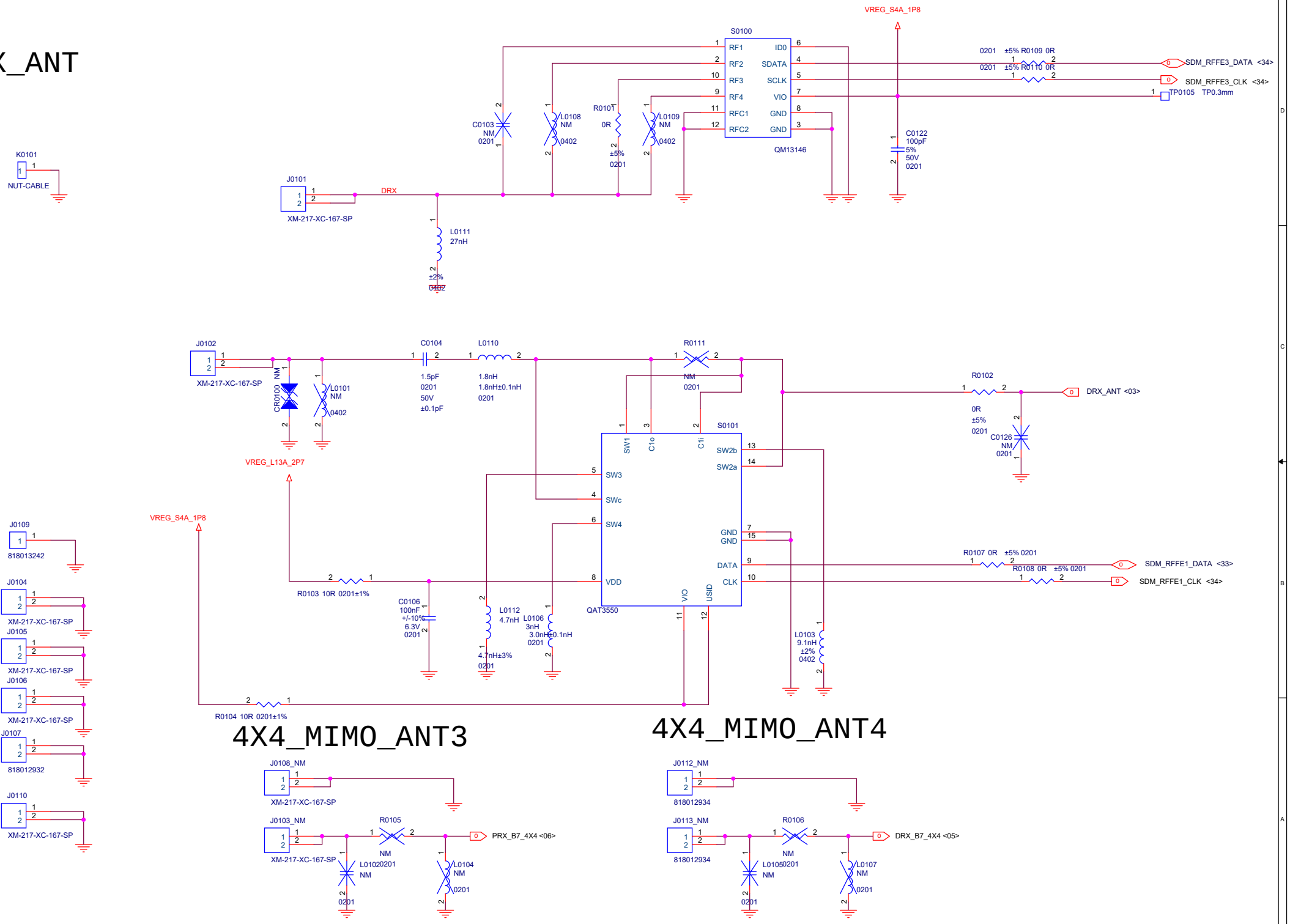
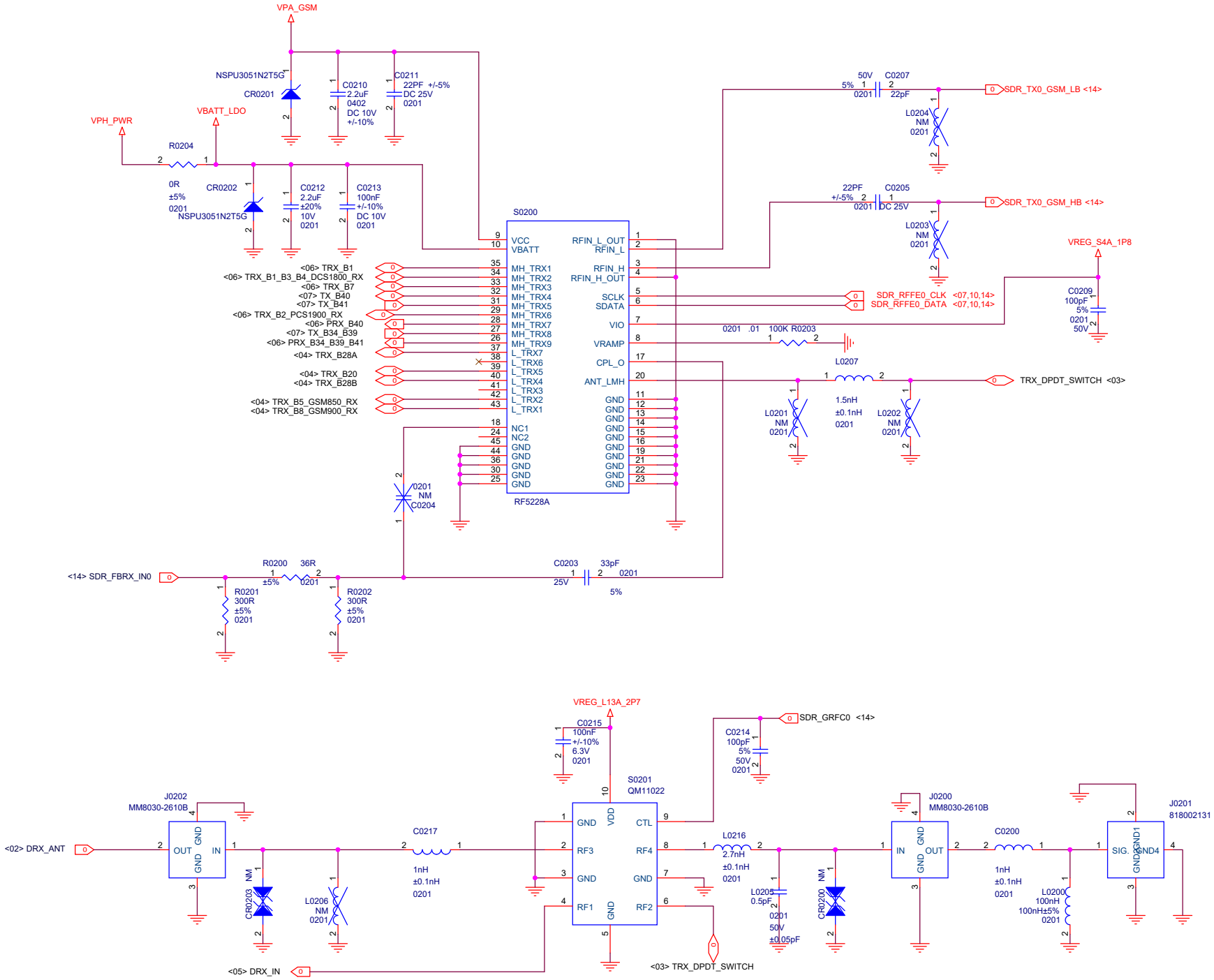
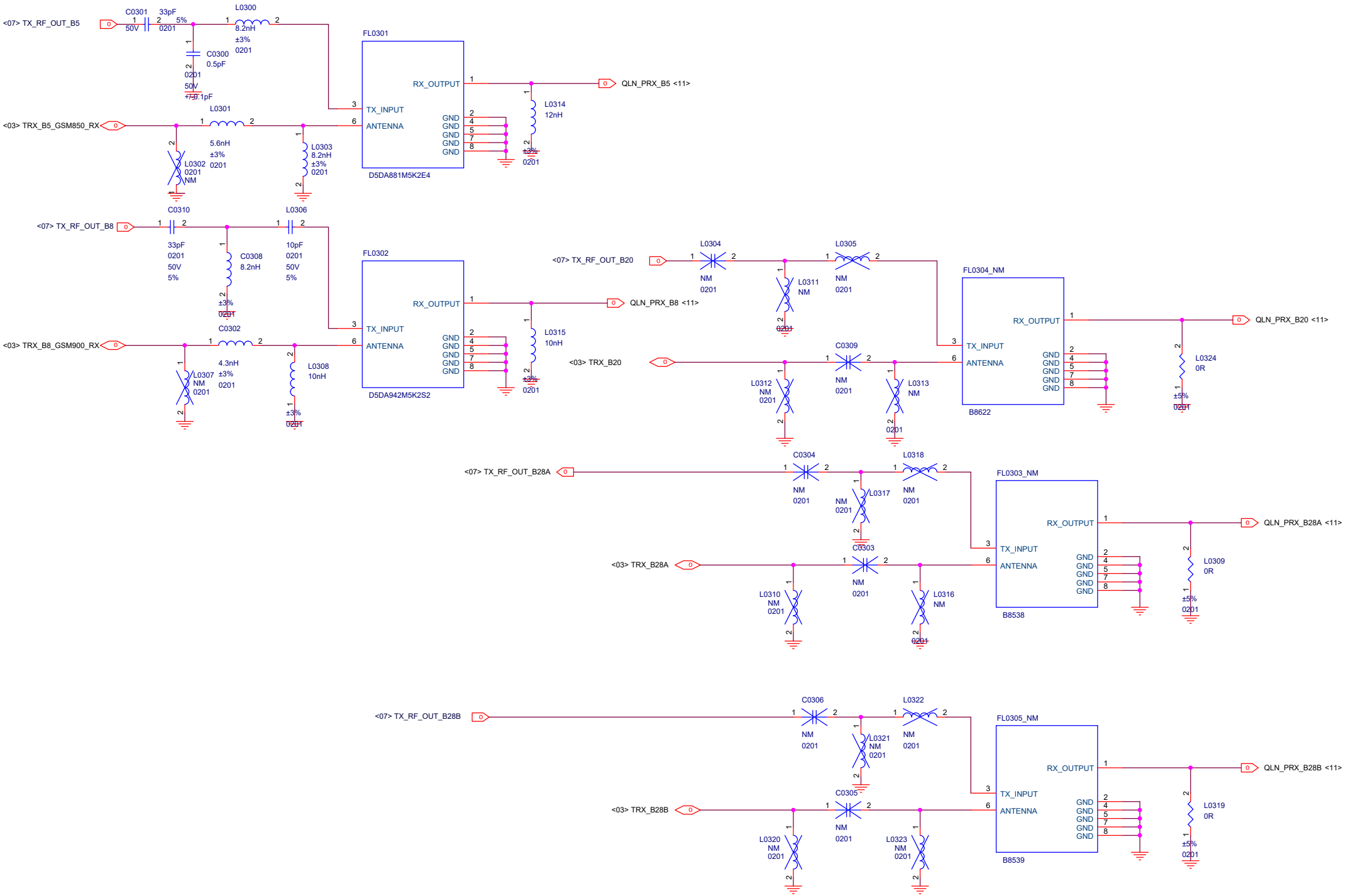
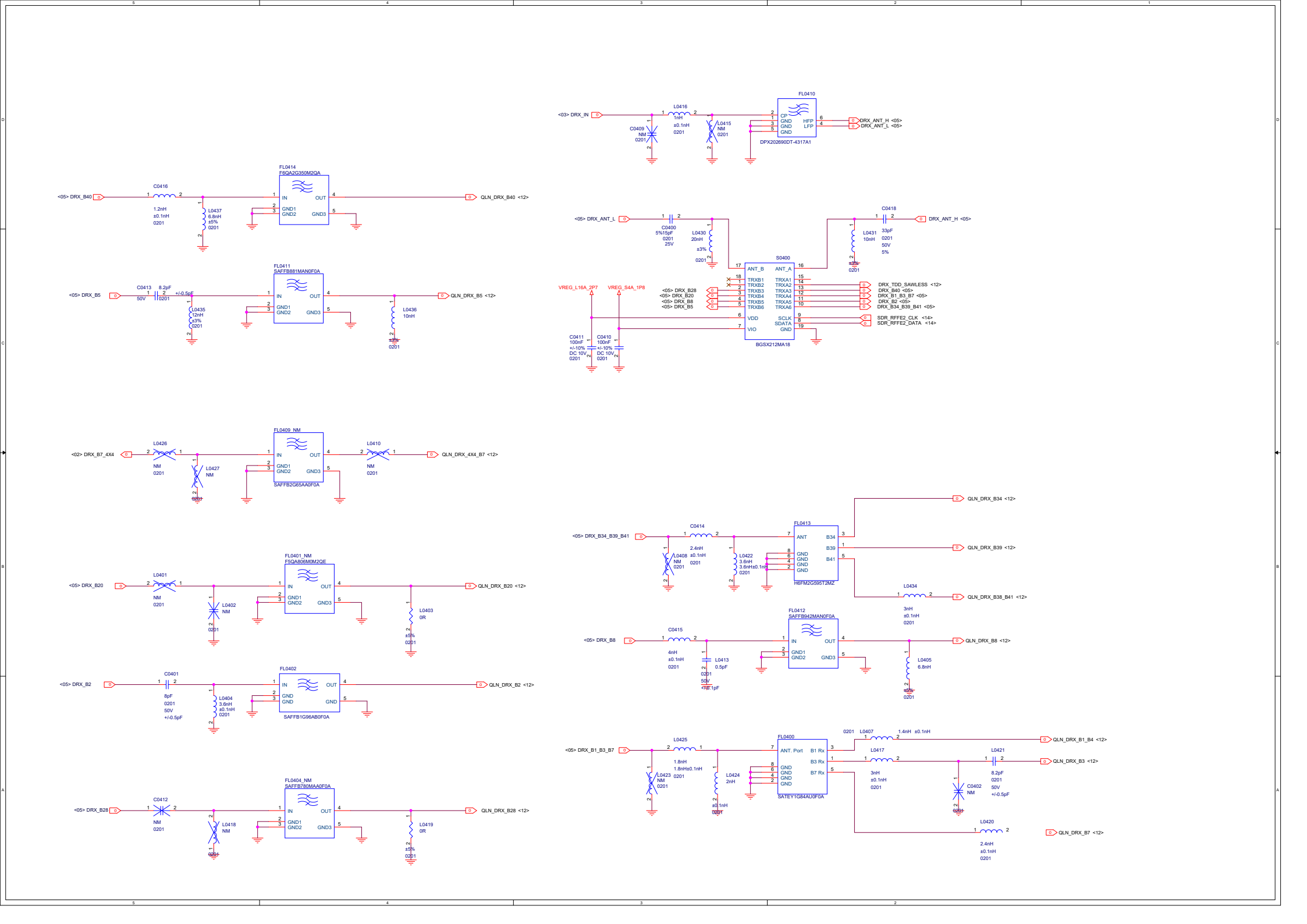
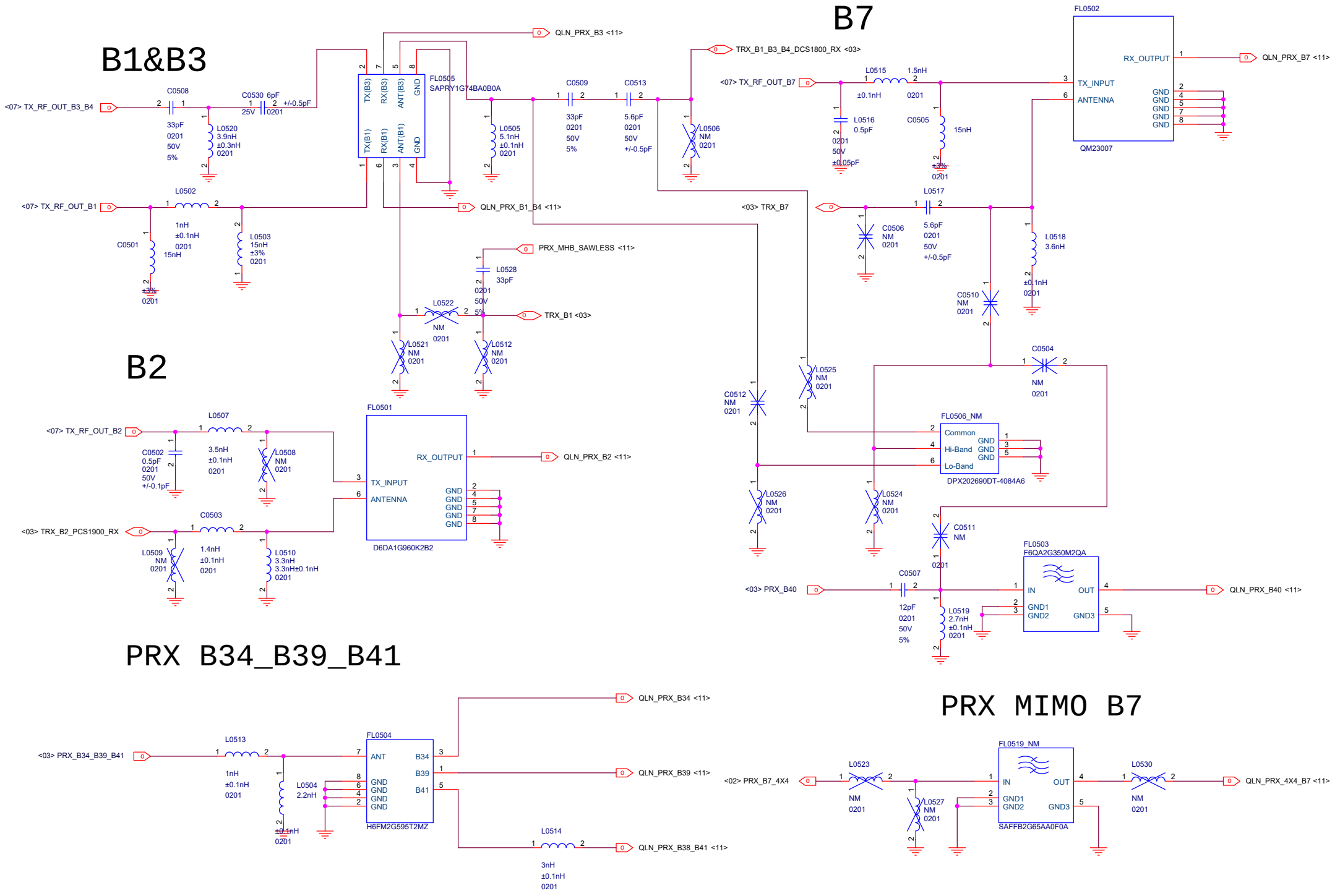
DRX_ANT


VREG_S4A_1P8
S0100
RF1
RF2
RF3
RF4
RFC1
RFC2
ID0
SDATA
SCLK
VIO
GND
GND
QM13146
0201 ±5% R0109 0R
0201 ±5% R0110 0R
SDM_RFFE3_DATA <34>
SDM_RFFE3_CLK <34>
TP0105 TP0.3mm
C0103 NM 0201
L0108 NM 0402
R0101 0R ±5% 0201
L0109 NM 0402
C0122 100pF 5% 50V 0201
K0101
NUT-CABLE
J0101
XM-217-XC-167-SP
DRX
L0111 27nH ±2% 0402
J0102
XM-217-XC-167-SP
CR0100 NM
L0101 NM 0402
C0104 1.5pF 0201 50V ±0.1pF
L0110 1.8nH 1.8nH±0.1nH 0201
R0111 NM 0201
R0102 0R ±5% 0201
DRX_ANT <03>
C0126 NM 0201
VREG_L13A_2P7
VREG_S4A_1P8
S0101
SW1
C1o
C1i
SW2b
SW2a
SW3
SWc
SW4
VDD
GND
GND
DATA
CLK
VIO
USID
QAT3550
R0103 10R 0201±1%
R0104 10R 0201±1%
C0106 100nF +/-10% 6.3V 0201
L0112 4.7nH 4.7nH±3% 0201
L0106 3nH 3.0nH±0.1nH 0201
L0103 9.1nH ±2% 0402
R0107 0R ±5% 0201
R0108 0R ±5% 0201
SDM_RFFE1_DATA <33>
SDM_RFFE1_CLK <34>
J0109
818013242
J0104
XM-217-XC-167-SP
J0105
XM-217-XC-167-SP
J0106
XM-217-XC-167-SP
J0107
818012932
J0110
XM-217-XC-167-SP
4X4_MIMO_ANT3
J0108_NM
XM-217-XC-167-SP
J0103_NM
XM-217-XC-167-SP
R0105 NM 0201
L0102 NM 0201
L0104 NM 0201
PRX_B7_4X4 <06>
4X4_MIMO_ANT4
J0112_NM
818012934
J0113_NM
818012934
R0106 NM 0201
L0105 NM 0201
L0107 NM 0201
DRX_B7_4X4 <05>

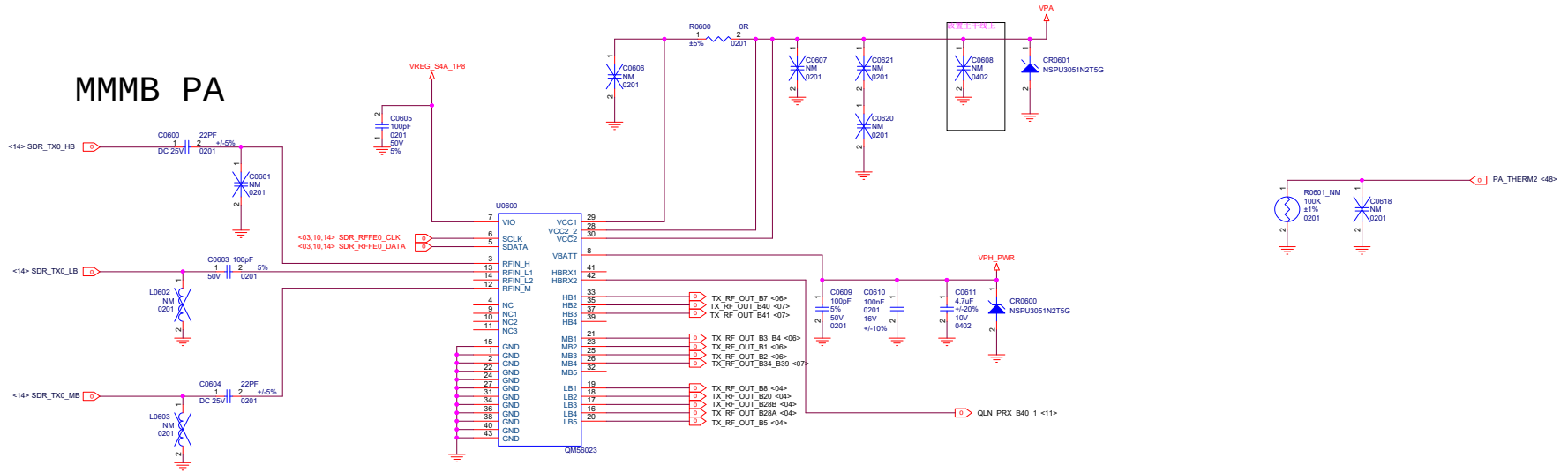

VPA_GSM
NSPU3051N2T5G
CR0201
C0210
2.2uF
0402
DC 10V
+/-10%
C0211
22PF +/-5%
DC 25V
0201
VPH_PWR
VBATT_LDO
R0204
0R
±5%
0201
CR0202
NSPU3051N2T5G
C0212
2.2uF
±20%
10V
0201
C0213
100nF
+/-10%
DC 10V
0201
S0200
VCC
VBATT
MH_TRX1
MH_TRX2
MH_TRX3
MH_TRX4
MH_TRX5
MH_TRX6
MH_TRX7
MH_TRX8
MH_TRX9
L_TRX7
L_TRX6
L_TRX5
L_TRX4
L_TRX3
L_TRX2
L_TRX1
NC1
NC2
GND
RFIN_L_OUT
RFIN_L
RFIN_H
RFIN_H_OUT
SCLK
SDATA
VIO
VRAMP
CPL_O
ANT_LMH
RF5228A
<06> TRX_B1
<06> TRX_B1_B3_B4_DCS1800_RX
<06> TRX_B7
<07> TX_B40
<07> TX_B41
<06> TRX_B2_PCS1900_RX
<06> PRX_B40
<07> TX_B34_B39
<06> PRX_B34_B39_B41
<04> TRX_B28A
<04> TRX_B20
<04> TRX_B28B
<04> TRX_B5_GSM850_RX
<04> TRX_B8_GSM900_RX
0201
NM
C0204
50V
5%
0201
C0207
22pF
L0204
NM
0201
SDR_TX0_GSM_LB <14>
22PF
+/-5%
0201
C0205
DC 25V
L0203
NM
0201
SDR_TX0_GSM_HB <14>
VREG_S4A_1P8
C0209
100pF
5%
0201
50V
SDR_RFFE0_CLK <07,10,14>
SDR_RFFE0_DATA <07,10,14>
0201 .01 100K R0203
L0207
1.5nH
±0.1nH
0201
L0201
NM
0201
L0202
NM
0201
TRX_DPDT_SWITCH <03>
<14> SDR_FBRX_IN0
R0200 36R
±5%
0201
C0203 33pF
25V
5%
R0201
300R
±5%
0201
R0202
300R
±5%
0201
VREG_L13A_2P7
C0215
100nF
+/-10%
6.3V
0201
S0201
QM11022
GND
VDD
CTL
RF3
RF4
GND
GND
RF1
GND
RF2
SDR_GRFC0 <14>
C0214
100pF
5%
50V
0201
J0202
MM8030-2610B
<02> DRX_ANT
OUT
GND
IN
C0217
1nH
±0.1nH
0201
CR0203
NM
L0206
NM
0201
<05> DRX_IN
L0216
2.7nH
±0.1nH
0201
L0205
0.5pF
0201
50V
±0.05pF
CR0200
NM
<03> TRX_DPDT_SWITCH
J0200
MM8030-2610B
IN
GND
OUT
C0200
1nH
±0.1nH
0201
L0200
100nH
100nH±5%
0201
J0201
818002131
SIG.
GND1
GND4


<07> TX_RF_OUT_B5
C0301
33pF
50V
0201
L0300
8.2nH
±3%
0201
C0300
0.5pF
0201
50V
+/-0.1pF
FL0301
RX_OUTPUT
TX_INPUT
ANTENNA
GND
QLN_PRX_B5 <11>
L0314
12nH
±2%
0201
D5DA881M5K2E4
<03> TRX_B5_GSM850_RX
L0301
5.6nH
±3%
0201
L0302
0201
NM
L0303
8.2nH
±3%
0201
<07> TX_RF_OUT_B8
C0310
33pF
0201
50V
5%
C0308
8.2nH
±3%
0201
L0306
10pF
0201
50V
5%
FL0302
QLN_PRX_B8 <11>
L0315
10nH
±2%
0201
D5DA942M5K2S2
<03> TRX_B8_GSM900_RX
C0302
L0307
NM
0201
4.3nH
±3%
0201
L0308
10nH
±3%
0201
<07> TX_RF_OUT_B20
L0304
NM
0201
L0305
NM
0201
L0311
NM
0201
FL0304_NM
QLN_PRX_B20 <11>
L0324
0R
±5%
0201
B8622
<03> TRX_B20
C0309
NM
0201
L0312
NM
0201
L0313
NM
0201
<07> TX_RF_OUT_B28A
C0304
NM
0201
L0318
NM
0201
L0317
NM
0201
FL0303_NM
QLN_PRX_B28A <11>
L0309
0R
±5%
0201
B8538
<03> TRX_B28A
C0303
NM
0201
L0310
NM
0201
L0316
NM
0201
<07> TX_RF_OUT_B28B
C0306
NM
0201
L0322
NM
0201
L0321
NM
0201
FL0305_NM
QLN_PRX_B28B <11>
L0319
0R
±5%
0201
B8539
<03> TRX_B28B
C0305
NM
0201
L0320
NM
0201
L0323
NM
0201

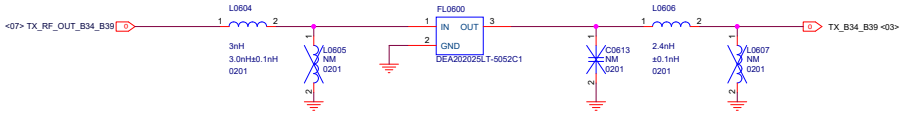

FL0410
<03> DRX_IN
L0416
1nH
±0.1nH
0201
C0409
NM
0201
L0415
NM
0201
CP
GND
GND
GND
HFP
LFP
DPX202690DT-4317A1
DRX_ANT_H <05>
DRX_ANT_L <05>
FL0414
F6QA2G350M2QA
<05> DRX_B40
C0416
1.2nH
±0.1nH
0201
L0437
6.8nH
±5%
0201
IN
OUT
GND1
GND2
GND3
QLN_DRX_B40 <12>
<05> DRX_ANT_L
C0400
5%15pF
0201
25V
L0430
20nH
±3%
0201
S0400
ANT_B
ANT_A
TRXB1
TRXB2
TRXB3
TRXB4
TRXB5
TRXB6
TRXA1
TRXA2
TRXA3
TRXA4
TRXA5
TRXA6
VDD
VIO
SCLK
SDATA
GND
BGSX212MA18
C0418
33pF
0201
50V
5%
L0431
10nH
±3%
0201
DRX_ANT_H <05>
VREG_L16A_2P7
VREG_S4A_1P8
<05> DRX_B28
<05> DRX_B20
<05> DRX_B8
<05> DRX_B5
DRX_TDD_SAWLESS <12>
DRX_B40 <05>
DRX_B1_B3_B7 <05>
DRX_B2 <05>
DRX_B34_B39_B41 <05>
SDR_RFFE2_CLK <14>
SDR_RFFE2_DATA <14>
C0411
100nF
+/-10%
DC 10V
0201
C0410
100nF
+/-10%
DC 10V
0201
FL0411
SAFFB881MAN0F0A
<05> DRX_B5
C0413
8.2pF
+/-0.5pF
50V
0201
L0435
12nH
±3%
0201
L0436
10nH
±3%
0201
QLN_DRX_B5 <12>
FL0409_NM
<02> DRX_B7_4X4
L0426
NM
0201
L0427
NM
0201
SAFFB2G65AA0F0A
L0410
NM
0201
QLN_DRX_4X4_B7 <12>
FL0413
C0414
2.4nH
±0.1nH
0201
L0408
NM
0201
L0422
3.6nH
3.6nH±0.1nH
0201
H6FM2G595T2MZ
ANT
B34
B39
B41
GND
QLN_DRX_B34 <12>
QLN_DRX_B39 <12>
L0434
QLN_DRX_B38_B41 <12>
FL0401_NM
F5QA806M0M2QE
<05> DRX_B20
L0401
NM
0201
L0402
NM
0201
L0403
0R
±5%
0201
QLN_DRX_B20 <12>
FL0412
SAFFB942MAN0F0A
3nH
±0.1nH
0201
<05> DRX_B8
C0415
4nH
±0.1nH
0201
L0413
0.5pF
0201
50V
+/-0.1pF
L0405
6.8nH
±5%
0201
QLN_DRX_B8 <12>
FL0402
<05> DRX_B2
C0401
8pF
0201
50V
+/-0.5pF
L0404
3.6nH
±0.1nH
0201
SAFFB1G96AB0F0A
QLN_DRX_B2 <12>
FL0400
0201
L0407
1.4nH ±0.1nH
<05> DRX_B1_B3_B7
L0425
1.8nH
1.8nH±0.1nH
0201
L0423
NM
0201
L0424
2nH
±0.1nH
0201
ANT. Port
B1 Rx
B3 Rx
B7 Rx
GND
SAFEY1G84AU0F0A
L0417
3nH
±0.1nH
0201
L0421
8.2pF
0201
50V
+/-0.5pF
C0402
NM
0201
QLN_DRX_B1_B4 <12>
QLN_DRX_B3 <12>
L0420
2.4nH
±0.1nH
0201
QLN_DRX_B7 <12>
FL0404_NM
SAFFB780MAA0F0A
<05> DRX_B28
C0412
NM
0201
L0418
NM
0201
L0419
0R
±5%
0201
QLN_DRX_B28 <12>
IN
OUT
GND1
GND2
GND3
GND


B1&B3
B7
B2
PRX B34_B39_B41
PRX MIMO B7
<07> TX_RF_OUT_B3_B4
C0508
33pF
0201
50V
5%
C0530 6pF
25V
0201
+/-0.5pF
L0520
3.9nH
±0.3nH
0201
FL0505
SAPRY1G74BA0B0A
TX(B3)
RX(B3)
ANT(B3)
GND
TX(B1)
RX(B1)
ANT(B1)
GND
QLN_PRX_B3 <11>
C0509
33pF
0201
50V
5%
C0513
5.6pF
0201
50V
+/-0.5pF
L0505
5.1nH
±0.1nH
0201
L0506
NM
0201
TRX_B1_B3_B4_DCS1800_RX <03>
<07> TX_RF_OUT_B1
L0502
1nH
±0.1nH
0201
C0501
15nH
±3%
0201
L0503
15nH
±3%
0201
QLN_PRX_B1_B4 <11>
PRX_MHB_SAWLESS <11>
L0528
33pF
0201
50V
5%
L0522
NM
0201
TRX_B1 <03>
L0521
NM
0201
L0512
NM
0201
<07> TX_RF_OUT_B7
L0515
1.5nH
±0.1nH
0201
L0516
0.5pF
0201
50V
±0.05pF
C0505
15nH
±3%
0201
FL0502
RX_OUTPUT
TX_INPUT
ANTENNA
GND
QM23007
QLN_PRX_B7 <11>
<03> TRX_B7
L0517
5.6pF
0201
50V
+/-0.5pF
C0506
NM
0201
L0518
3.6nH
±0.1nH
0201
C0510
NM
0201
C0504
NM
0201
C0512
NM
0201
L0525
NM
0201
FL0506_NM
Common
Hi-Band
Lo-Band
GND
DPX202690DT-4084A6
L0526
NM
0201
L0524
NM
0201
C0511
NM
0201
FL0503
F6QA2G350M2QA
IN
OUT
GND1
GND2
GND3
<03> PRX_B40
C0507
12pF
0201
50V
5%
L0519
2.7nH
±0.1nH
0201
QLN_PRX_B40 <11>
<07> TX_RF_OUT_B2
L0507
3.5nH
±0.1nH
0201
C0502
0.5pF
0201
50V
+/-0.1pF
L0508
NM
0201
FL0501
RX_OUTPUT
TX_INPUT
ANTENNA
GND
D6DA1G960K2B2
QLN_PRX_B2 <11>
<03> TRX_B2_PCS1900_RX
C0503
1.4nH
±0.1nH
0201
L0509
NM
0201
L0510
3.3nH
3.3nH±0.1nH
0201
<03> PRX_B34_B39_B41
L0513
1nH
±0.1nH
0201
L0504
2.2nH
±0.1nH
0201
FL0504
ANT
B34
B39
B41
GND
H6FM2G595T2MZ
QLN_PRX_B34 <11>
QLN_PRX_B39 <11>
L0514
3nH
±0.1nH
0201
QLN_PRX_B38_B41 <11>
<02> PRX_B7_4X4
L0523
NM
0201
L0527
NM
0201
FL0519_NM
IN
OUT
GND1
GND2
GND3
SAFFB2G65AA0F0A
L0530
NM
0201
QLN_PRX_4X4_B7 <11>

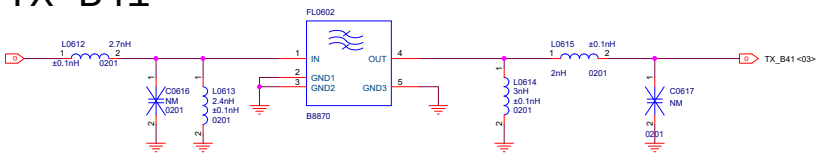
MMMB PA



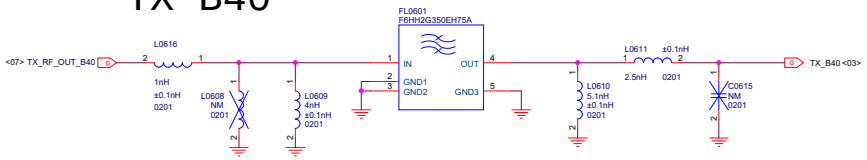
TX B34_B39

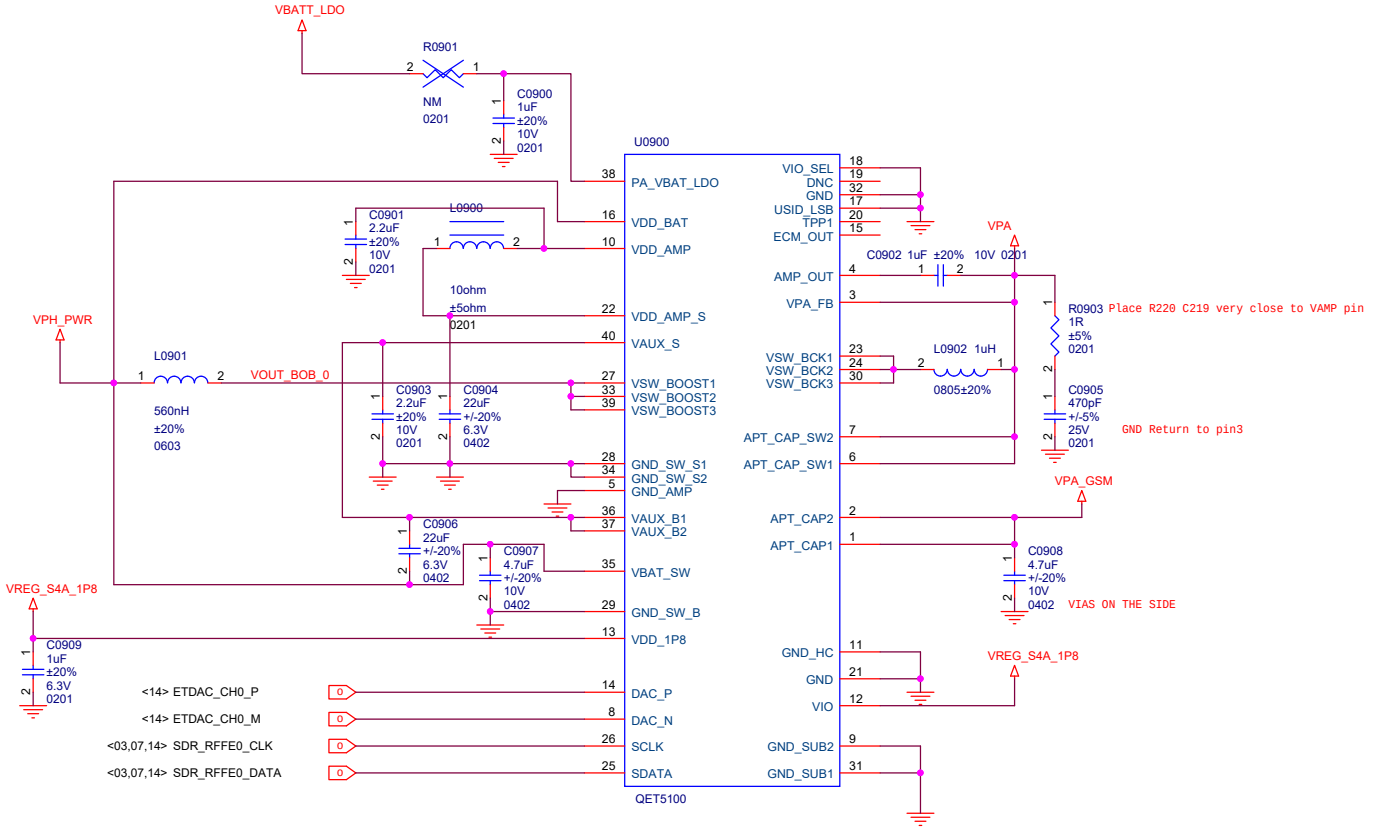


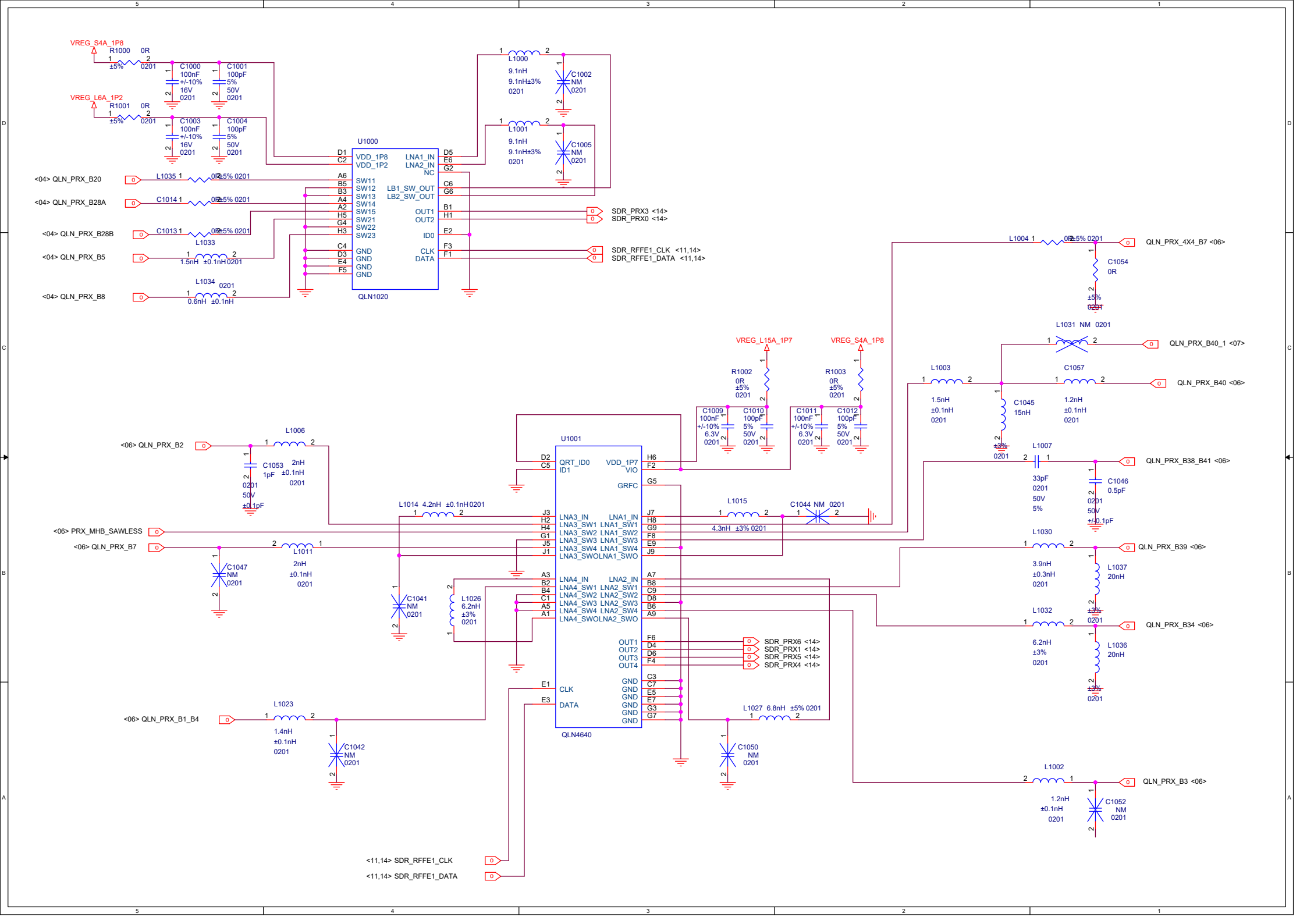
TX B41

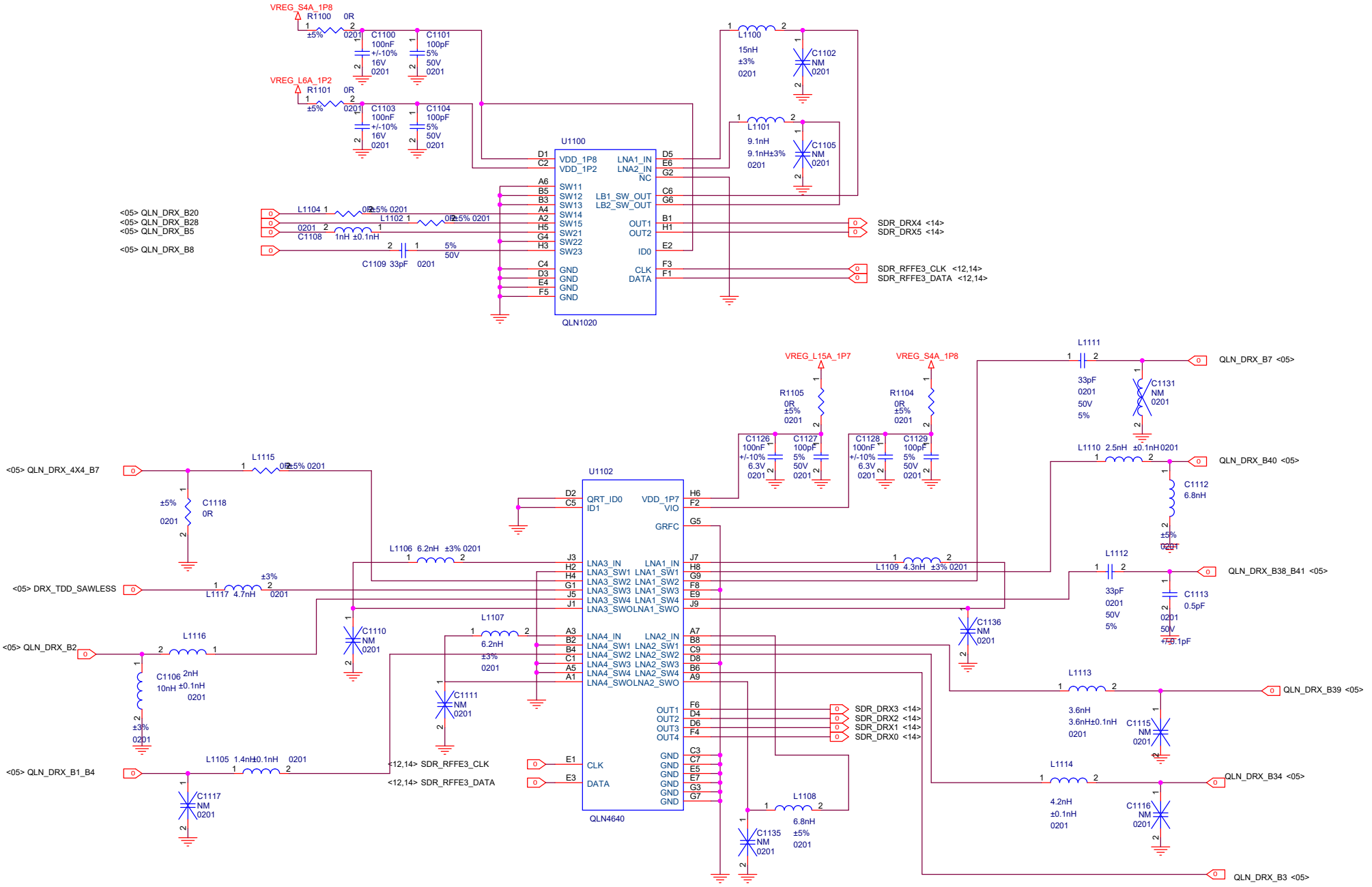


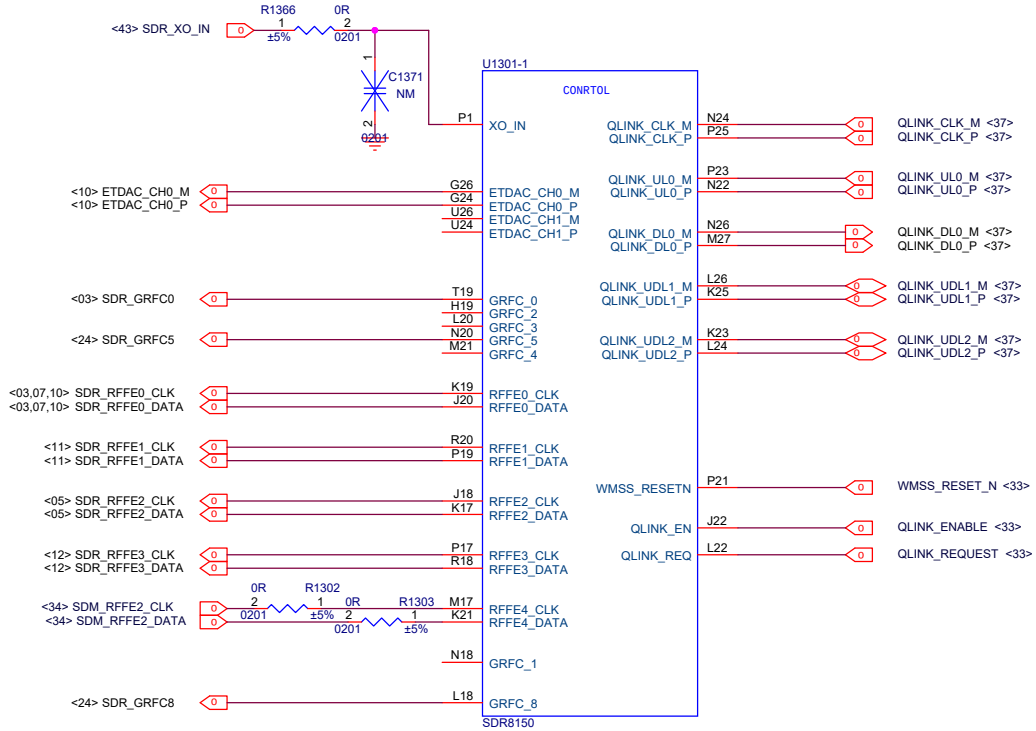
TX B40

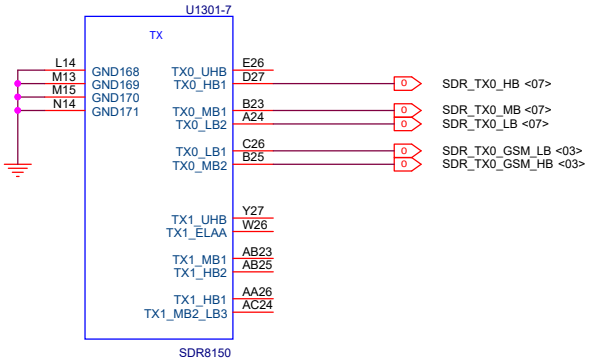


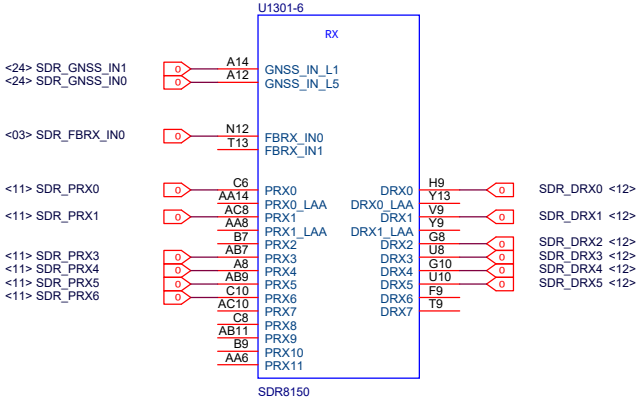

VBATT_LDO
R0901
NM
0201
C0900
1uF
±20%
10V
0201
U0900
PA_VBAT_LDO
VDD_BAT
VDD_AMP
VDD_AMP_S
VAUX_S
VSW_BOOST1
VSW_BOOST2
VSW_BOOST3
GND_SW_S1
GND_SW_S2
GND_AMP
VAUX_B1
VAUX_B2
VBAT_SW
GND_SW_B
VDD_1P8
DAC_P
DAC_N
SCLK
SDATA
QET5100
VIO_SEL
DNC
GND
USID_LSB
TPP1
ECM_OUT
AMP_OUT
VPA_FB
VSW_BCK1
VSW_BCK2
VSW_BCK3
APT_CAP_SW2
APT_CAP_SW1
APT_CAP2
APT_CAP1
GND_HC
GND
VIO
GND_SUB2
GND_SUB1
C0901
2.2uF
±20%
10V
0201
L0900
10ohm
±5ohm
0201
VPH_PWR
L0901
560nH
±20%
0603
VOUT_BOB_0
C0903
2.2uF
±20%
10V
0201
C0904
22uF
+/-20%
6.3V
0402
C0906
22uF
+/-20%
6.3V
0402
C0907
4.7uF
+/-20%
10V
0402
VREG_S4A_1P8
C0909
1uF
±20%
6.3V
0201
<14> ETDAC_CH0_P
<14> ETDAC_CH0_M
<03,07,14> SDR_RFFE0_CLK
<03,07,14> SDR_RFFE0_DATA
0
VPA
C0902 1uF ±20% 10V 0201
L0902 1uH
0805±20%
R0903 Place R220 C219 very close to VAMP pin
1R
±5%
0201
C0905
470pF
+/-5%
25V
0201
GND Return to pin3
VPA_GSM
C0908
4.7uF
+/-20%
10V
0402
VIAS ON THE SIDE
VREG_S4A_1P8

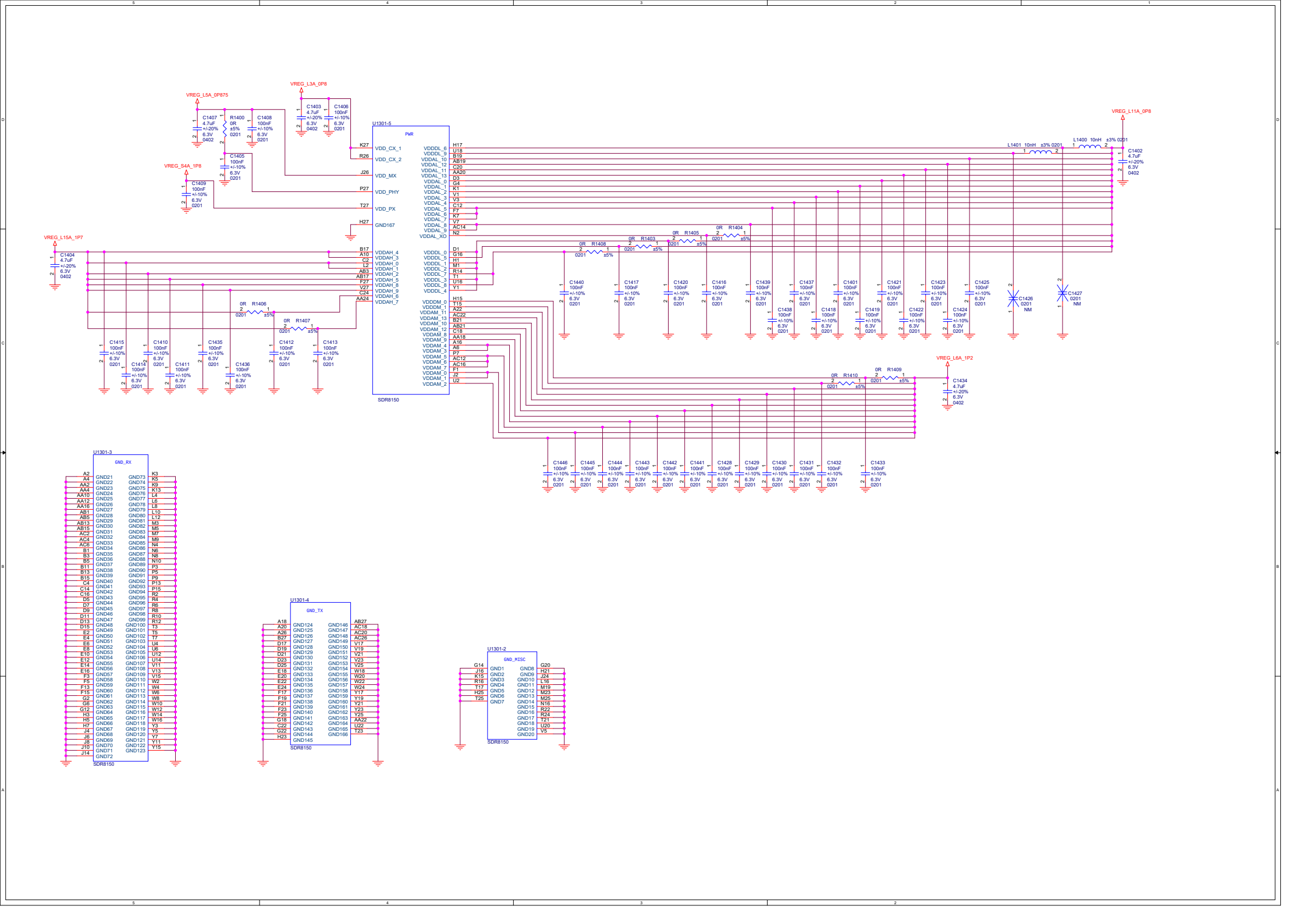

VREG_S4A_1P8
R1000 0R ±5% 0201
C1000 100nF +/-10% 16V 0201
C1001 100pF 5% 50V 0201
VREG_L6A_1P2
R1001 0R ±5% 0201
C1003 100nF +/-10% 16V 0201
C1004 100pF 5% 50V 0201
U1000
VDD_1P8
VDD_1P2
SW11
SW12
SW13
SW14
SW15
SW21
SW22
SW23
GND
GND
GND
GND
GND
LNA1_IN
LNA2_IN
NC
LB1_SW_OUT
LB2_SW_OUT
OUT1
OUT2
ID0
CLK
DATA
QLN1020
L1000 9.1nH ±3% 0201
C1002 NM 0201
L1001 9.1nH ±3% 0201
C1005 NM 0201
<04> QLN_PRX_B20
L1035 0R ±5% 0201
<04> QLN_PRX_B28A
C1014 0R ±5% 0201
<04> QLN_PRX_B28B
C1013 0R ±5% 0201
L1033
<04> QLN_PRX_B5
1.5nH ±0.1nH 0201
<04> QLN_PRX_B8
L1034 0.6nH ±0.1nH 0201
SDR_PRX3 <14>
SDR_PRX0 <14>
SDR_RFFE1_CLK <11,14>
SDR_RFFE1_DATA <11,14>
L1004 0R ±5% 0201
QLN_PRX_4X4_B7 <06>
C1054 0R ±5% 0201
L1031 NM 0201
QLN_PRX_B40_1 <07>
L1003 1.5nH ±0.1nH 0201
C1057 1.2nH ±0.1nH 0201
QLN_PRX_B40 <06>
C1045 15nH ±3% 0201
L1007 33pF 0201 50V 5%
QLN_PRX_B38_B41 <06>
C1046 0.5pF 0201 50V +/-0.1pF
L1030 3.9nH ±0.3nH 0201
QLN_PRX_B39 <06>
L1037 20nH ±3% 0201
L1032 6.2nH ±3% 0201
QLN_PRX_B34 <06>
L1036 20nH ±3% 0201
L1002 1.2nH ±0.1nH 0201
QLN_PRX_B3 <06>
C1052 NM 0201
VREG_L15A_1P7
VREG_S4A_1P8
R1002 0R ±5% 0201
R1003 0R ±5% 0201
C1009 100nF +/-10% 6.3V 0201
C1010 100pF 5% 50V 0201
C1011 100nF +/-10% 6.3V 0201
C1012 100pF 5% 50V 0201
U1001
D2
C5
ID1
VDD_1P7
VIO
GRFC
LNA3_IN
LNA3_SW1
LNA3_SW2
LNA3_SW3
LNA3_SW4
LNA3_SWO
LNA1_IN
LNA1_SW1
LNA1_SW2
LNA1_SW3
LNA1_SW4
LNA1_SWO
LNA4_IN
LNA4_SW1
LNA4_SW2
LNA4_SW3
LNA4_SW4
LNA4_SWO
LNA2_IN
LNA2_SW1
LNA2_SW2
LNA2_SW3
LNA2_SW4
LNA2_SWO
OUT1
OUT2
OUT3
OUT4
CLK
DATA
GND
QLN4640
L1006 2nH ±0.1nH 0201
<06> QLN_PRX_B2
C1053 1pF 0201 50V ±0.1pF
L1014 4.2nH ±0.1nH 0201
L1015 4.3nH ±3% 0201
C1044 NM 0201
<06> PRX_MHB_SAWLESS
<06> QLN_PRX_B7
L1011 2nH ±0.1nH 0201
C1047 NM 0201
C1041 NM 0201
L1026 6.2nH ±3% 0201
SDR_PRX6 <14>
SDR_PRX1 <14>
SDR_PRX5 <14>
SDR_PRX4 <14>
L1027 6.8nH ±5% 0201
C1050 NM 0201
<06> QLN_PRX_B1_B4
L1023 1.4nH ±0.1nH 0201
C1042 NM 0201
<11,14> SDR_RFFE1_CLK
<11,14> SDR_RFFE1_DATA

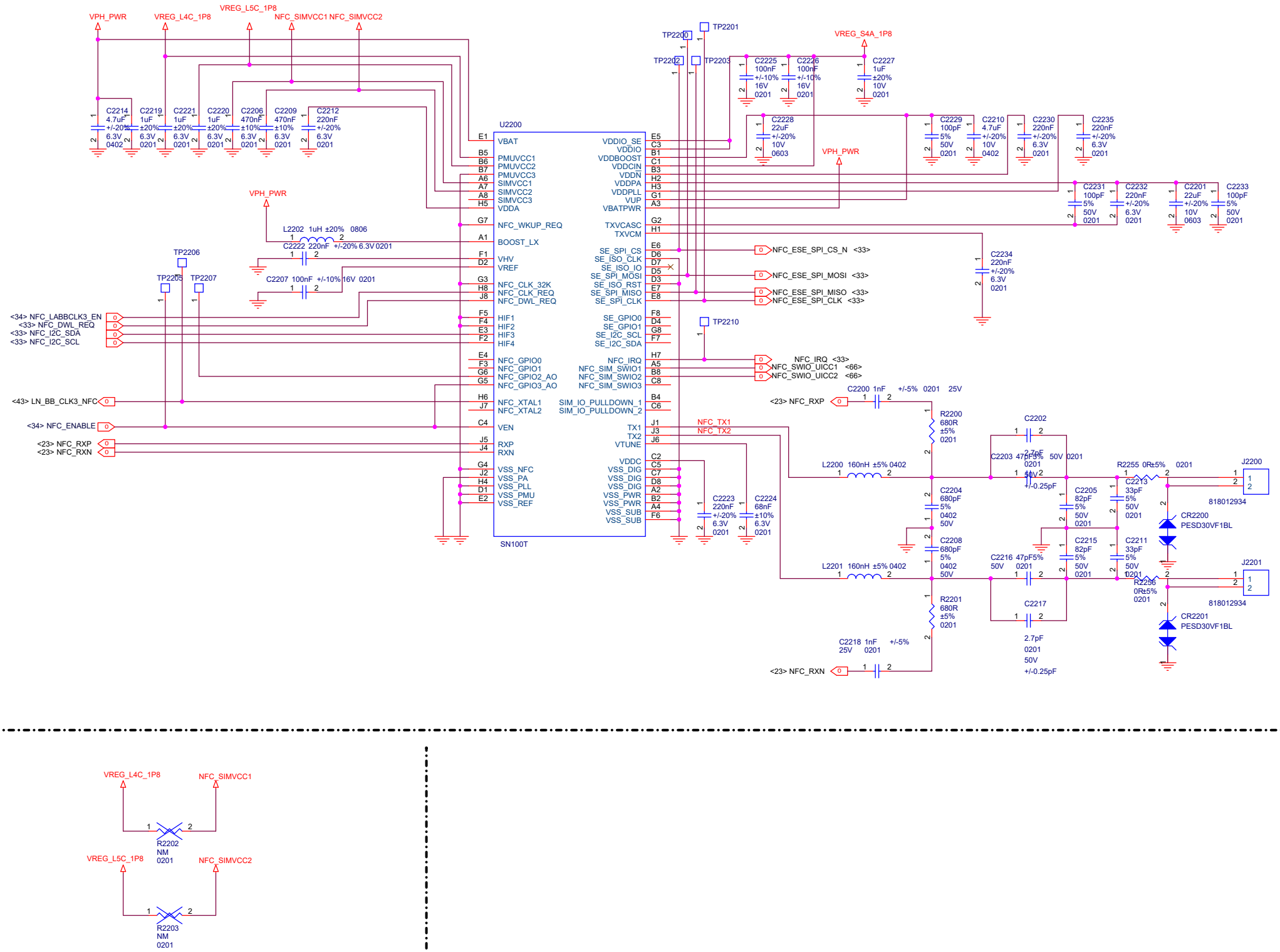

VREG_S4A_1P8
R1100 0R ±5% 0201
C1100 100nF +/-10% 16V 0201
C1101 100pF 5% 50V 0201
VREG_L6A_1P2
R1101 0R ±5% 0201
C1103 100nF +/-10% 16V 0201
C1104 100pF 5% 50V 0201
U1100
VDD_1P8
VDD_1P2
LNA1_IN
LNA2_IN
NC
SW11
SW12
SW13
SW14
SW15
SW21
SW22
SW23
LB1_SW_OUT
LB2_SW_OUT
OUT1
OUT2
ID0
CLK
DATA
GND
QLN1020
L1100 15nH ±3% 0201
C1102 NM 0201
L1101 9.1nH 9.1nH±3% 0201
C1105 NM 0201
<05> QLN_DRX_B20
<05> QLN_DRX_B28
<05> QLN_DRX_B5
<05> QLN_DRX_B8
L1104 0R ±5% 0201
L1102 0R ±5% 0201
C1108 1nH ±0.1nH 0201
C1109 33pF 5% 50V 0201
SDR_DRX4 <14>
SDR_DRX5 <14>
SDR_RFFE3_CLK <12,14>
SDR_RFFE3_DATA <12,14>
VREG_L15A_1P7
VREG_S4A_1P8
R1105 0R ±5% 0201
R1104 0R ±5% 0201
C1126 100nF +/-10% 6.3V 0201
C1127 100pF 5% 50V 0201
C1128 100nF +/-10% 6.3V 0201
C1129 100pF 5% 50V 0201
U1102
QRT_ID0
ID1
VDD_1P7
VIO
GRFC
LNA3_IN
LNA3_SW1
LNA3_SW2
LNA3_SW3
LNA3_SW4
LNA3_SWO
LNA1_IN
LNA1_SW1
LNA1_SW2
LNA1_SW3
LNA1_SW4
LNA1_SWO
LNA4_IN
LNA4_SW1
LNA4_SW2
LNA4_SW3
LNA4_SW4
LNA4_SWO
LNA2_IN
LNA2_SW1
LNA2_SW2
LNA2_SW3
LNA2_SW4
LNA2_SWO
CLK
DATA
GND
QLN4640
<05> QLN_DRX_4X4_B7
L1115 0R ±5% 0201
C1118 0R ±5% 0201
<05> DRX_TDD_SAWLESS
L1117 4.7nH ±3% 0201
<05> QLN_DRX_B2
L1116
C1106 2nH 10nH ±0.1nH 0201
<05> QLN_DRX_B1_B4
L1105 1.4nH±0.1nH 0201
C1117 NM 0201
L1106 6.2nH ±3% 0201
C1110 NM 0201
L1107 6.2nH ±3% 0201
C1111 NM 0201
<12,14> SDR_RFFE3_CLK
<12,14> SDR_RFFE3_DATA
SDR_DRX3 <14>
SDR_DRX2 <14>
SDR_DRX1 <14>
SDR_DRX0 <14>
L1108 6.8nH ±5% 0201
C1135 NM 0201
L1109 4.3nH ±3% 0201
C1136 NM 0201
L1111 33pF 0201 50V 5%
C1131 NM 0201
QLN_DRX_B7 <05>
L1110 2.5nH ±0.1nH 0201
C1112 6.8nH ±5% 0201
QLN_DRX_B40 <05>
L1112 33pF 0201 50V 5%
C1113 0.5pF 0201 50V +/-0.1pF
QLN_DRX_B38_B41 <05>
L1113 3.6nH 3.6nH±0.1nH 0201
C1115 NM 0201
QLN_DRX_B39 <05>
L1114 4.2nH ±0.1nH 0201
C1116 NM 0201
QLN_DRX_B34 <05>
QLN_DRX_B3 <05>

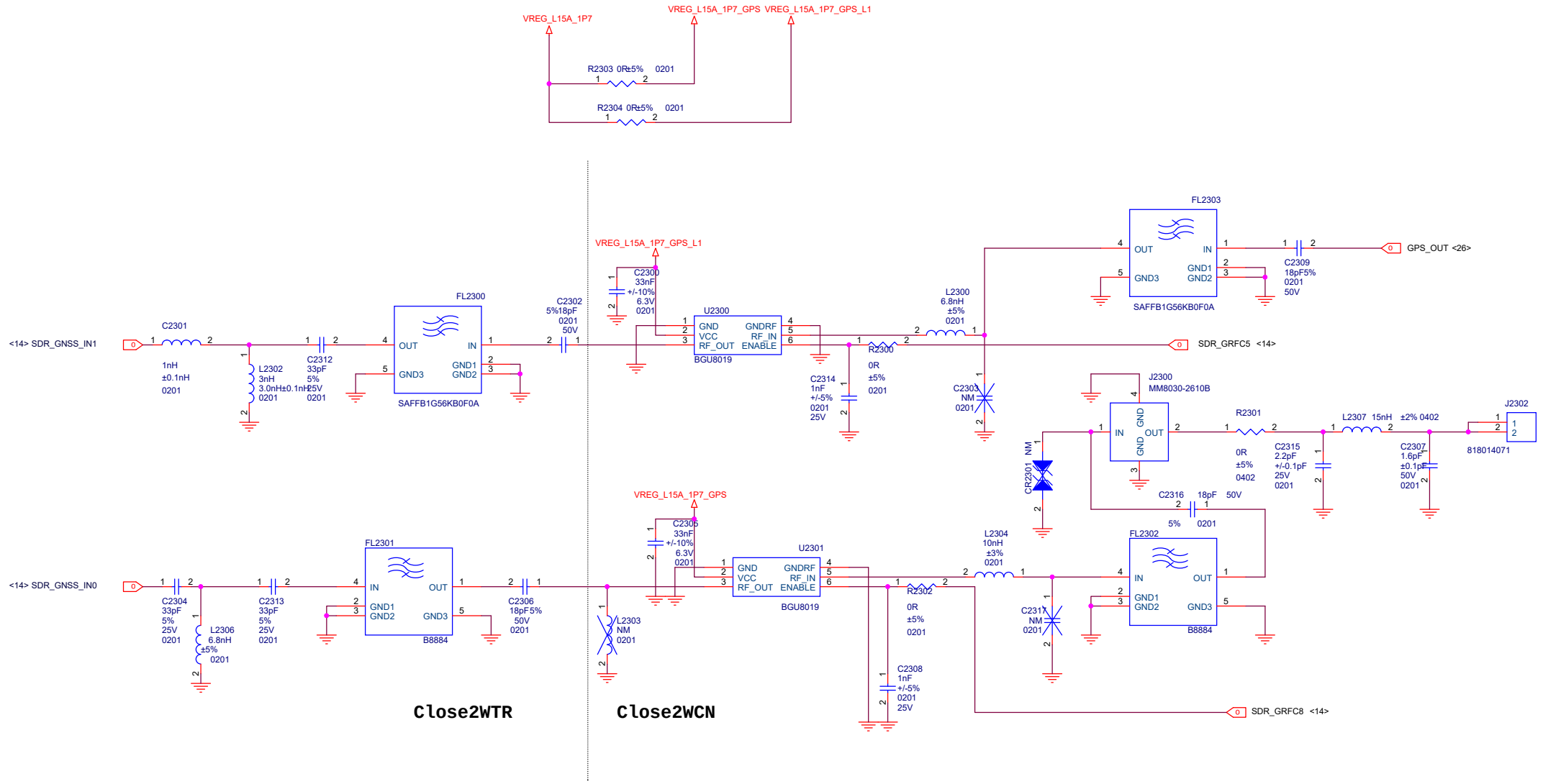

U1301-1
CONRTOL
<43> SDR_XO_IN
R1366
0R
0201
±5%
C1371
NM
0201
P1
XO_IN
<10> ETDAC_CH0_M
<10> ETDAC_CH0_P
G26
G24
U26
U24
ETDAC_CH0_M
ETDAC_CH0_P
ETDAC_CH1_M
ETDAC_CH1_P
<03> SDR_GRFC0
<24> SDR_GRFC5
T19
H19
L20
N20
M21
GRFC_0
GRFC_2
GRFC_3
GRFC_5
GRFC_4
<03,07,10> SDR_RFFE0_CLK
<03,07,10> SDR_RFFE0_DATA
K19
J20
RFFE0_CLK
RFFE0_DATA
<11> SDR_RFFE1_CLK
<11> SDR_RFFE1_DATA
R20
P19
RFFE1_CLK
RFFE1_DATA
<05> SDR_RFFE2_CLK
<05> SDR_RFFE2_DATA
J18
K17
RFFE2_CLK
RFFE2_DATA
<12> SDR_RFFE3_CLK
<12> SDR_RFFE3_DATA
P17
R18
RFFE3_CLK
RFFE3_DATA
<34> SDM_RFFE2_CLK
<34> SDM_RFFE2_DATA
R1302
R1303
M17
K21
RFFE4_CLK
RFFE4_DATA
N18
GRFC_1
<24> SDR_GRFC8
L18
GRFC_8
QLINK_CLK_M
QLINK_CLK_P
N24
P25
QLINK_CLK_M <37>
QLINK_CLK_P <37>
QLINK_UL0_M
QLINK_UL0_P
P23
N22
QLINK_UL0_M <37>
QLINK_UL0_P <37>
QLINK_DL0_M
QLINK_DL0_P
N26
M27
QLINK_DL0_M <37>
QLINK_DL0_P <37>
QLINK_UDL1_M
QLINK_UDL1_P
L26
K25
QLINK_UDL1_M <37>
QLINK_UDL1_P <37>
QLINK_UDL2_M
QLINK_UDL2_P
K23
L24
QLINK_UDL2_M <37>
QLINK_UDL2_P <37>
WMSS_RESETN
P21
WMSS_RESET_N <33>
QLINK_EN
J22
QLINK_ENABLE <33>
QLINK_REQ
L22
QLINK_REQUEST <33>
SDR8150

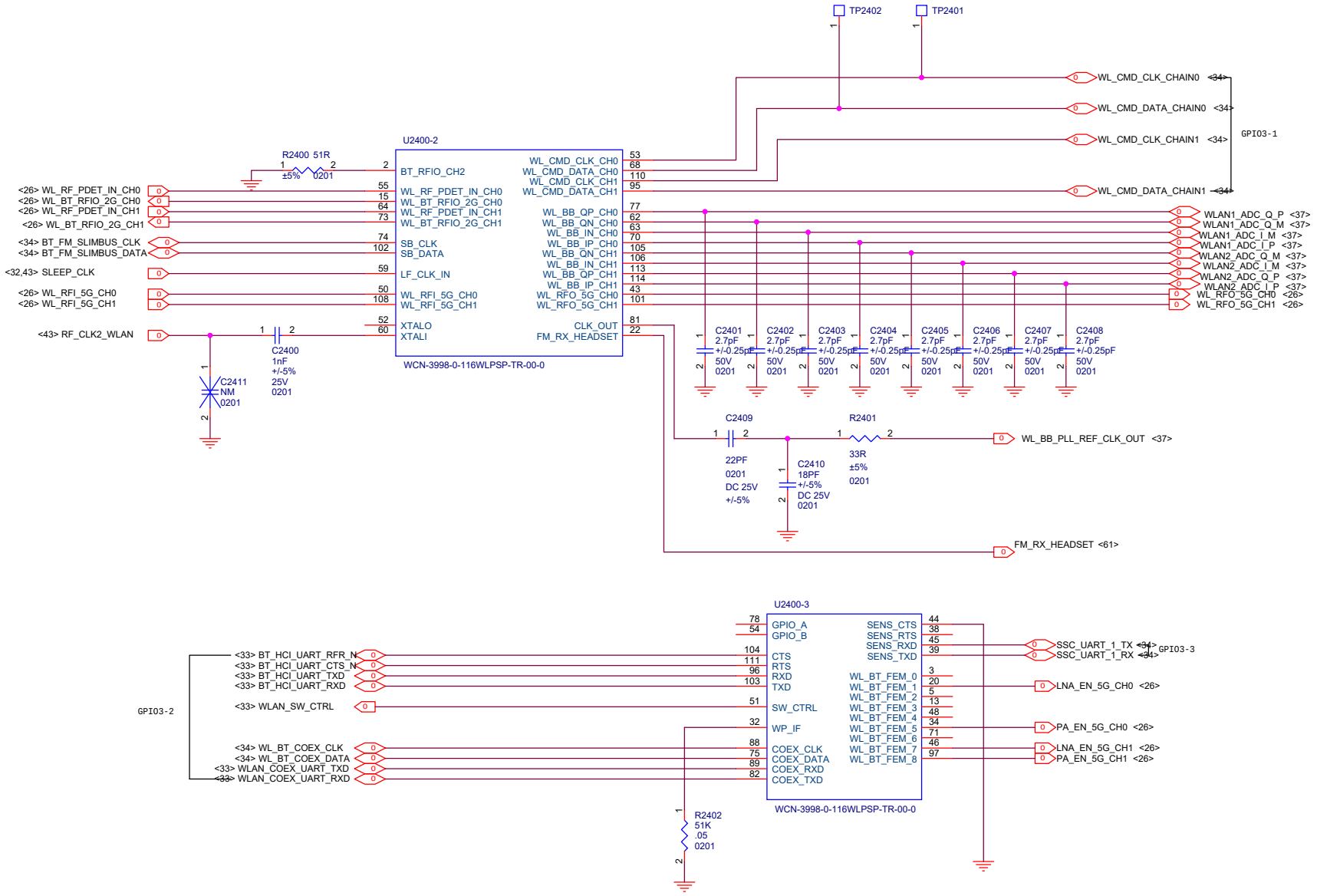

U1301-7
TX
L14
M13
M15
N14
GND168
GND169
GND170
GND171
TX0_UHB
TX0_HB1
TX0_MB1
TX0_LB2
TX0_LB1
TX0_MB2
TX1_UHB
TX1_ELAA
TX1_MB1
TX1_HB2
TX1_HB1
TX1_MB2_LB3
E26
D27
B23
A24
C26
B25
Y27
W26
AB23
AB25
AA26
AC24
SDR_TX0_HB <07>
SDR_TX0_MB <07>
SDR_TX0_LB <07>
SDR_TX0_GSM_LB <03>
SDR_TX0_GSM_HB <03>
SDR8150

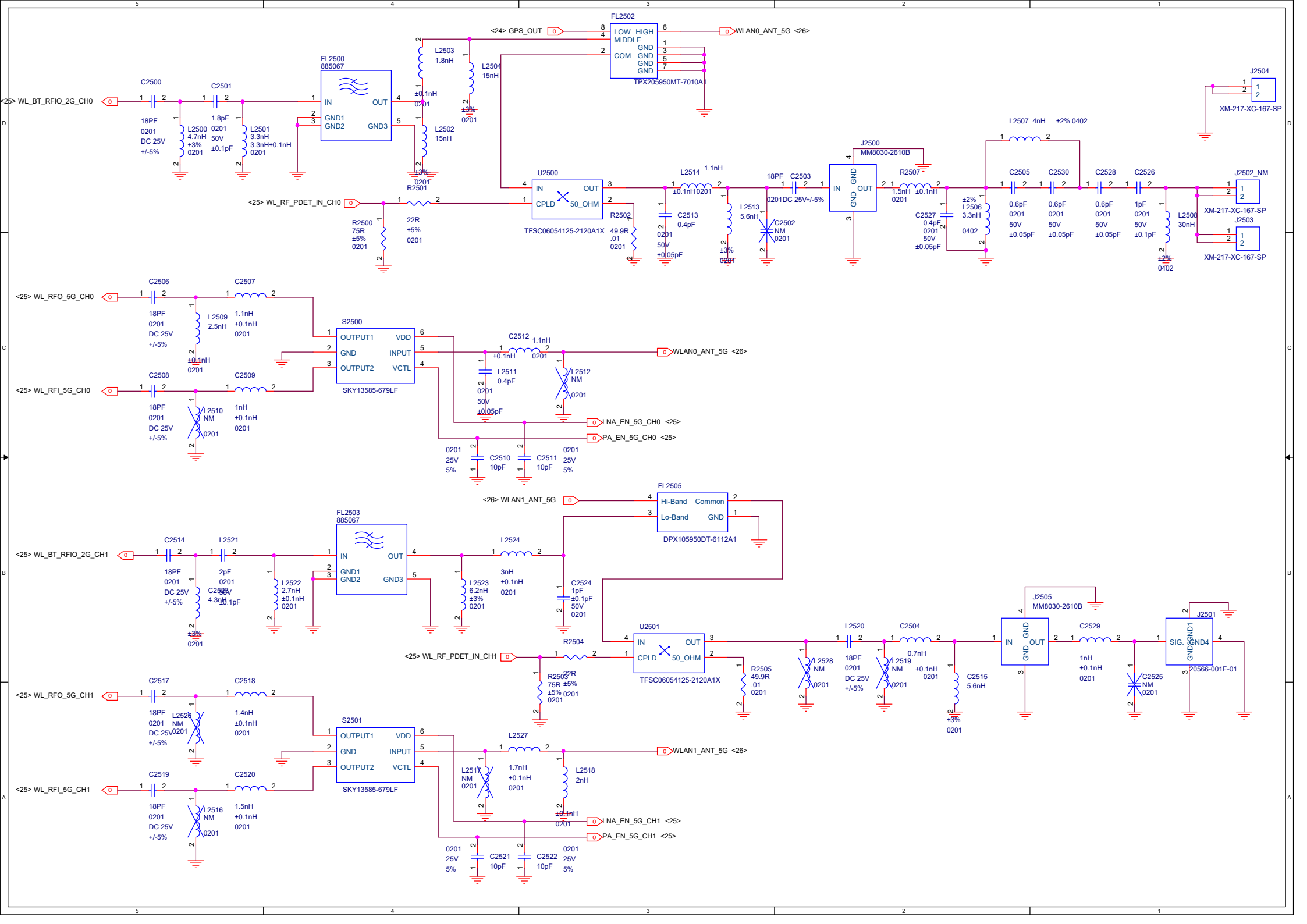

U1301-6
RX
<24> SDR_GNSS_IN1
<24> SDR_GNSS_IN0
A14
A12
GNSS_IN_L1
GNSS_IN_L5
<03> SDR_FBRX_IN0
N12
T13
FBRX_IN0
FBRX_IN1
<11> SDR_PRX0
<11> SDR_PRX1
<11> SDR_PRX3
<11> SDR_PRX4
<11> SDR_PRX5
<11> SDR_PRX6
C6
AA14
AC8
AA8
B7
AB7
A8
AB9
C10
AC10
C8
AB11
B9
AA6
PRX0
PRX0_LAA
PRX1
PRX1_LAA
PRX2
PRX3
PRX4
PRX5
PRX6
PRX7
PRX8
PRX9
PRX10
PRX11
DRX0
DRX0_LAA
DRX1
DRX1_LAA
DRX2
DRX3
DRX4
DRX5
DRX6
DRX7
H9
Y13
V9
Y9
G8
U8
G10
U10
F9
T9
SDR_DRX0 <12>
SDR_DRX1 <12>
SDR_DRX2 <12>
SDR_DRX3 <12>
SDR_DRX4 <12>
SDR_DRX5 <12>
SDR8150

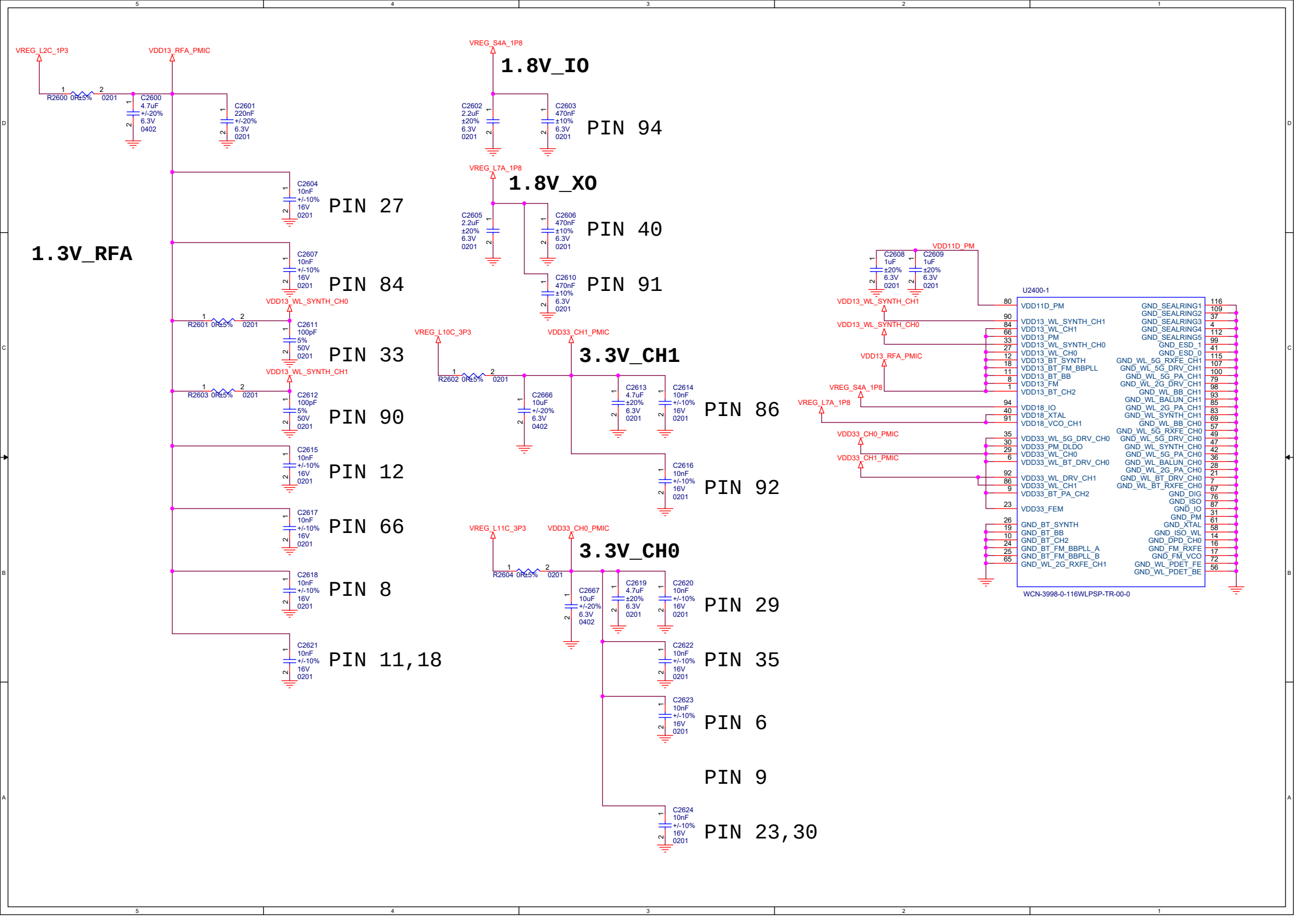

VREG_L5A_0P875
VREG_L3A_0P8
VREG_S4A_1P8
VREG_L15A_1P7
VREG_L11A_0P8
VREG_L6A_1P2
U1301-5
PWR
SDR8150
U1301-3
GND_RX
SDR8150
U1301-4
GND_TX
SDR8150
U1301-2
GND_MISC
SDR8150
C1407 4.7uF +/-20% 6.3V 0402
R1400 0R ±5% 0201
C1408 100nF +/-10% 6.3V 0201
C1405 100nF +/-10% 6.3V 0201
C1403 4.7uF +/-20% 6.3V 0402
C1406 100nF +/-10% 6.3V 0201
C1409 100nF +/-10% 6.3V 0201
C1404 4.7uF +/-20% 6.3V 0402
L1401 10nH ±3% 0201
L1400 10nH ±3% 0201
C1402 4.7uF +/-20% 6.3V 0402
C1426 0201 NM
C1427 0201 NM
C1434 4.7uF +/-20% 6.3V 0402
0R R1404
0R R1405
0R R1403
0R R1408
0R R1406
0R R1407
0R R1410
0R R1409

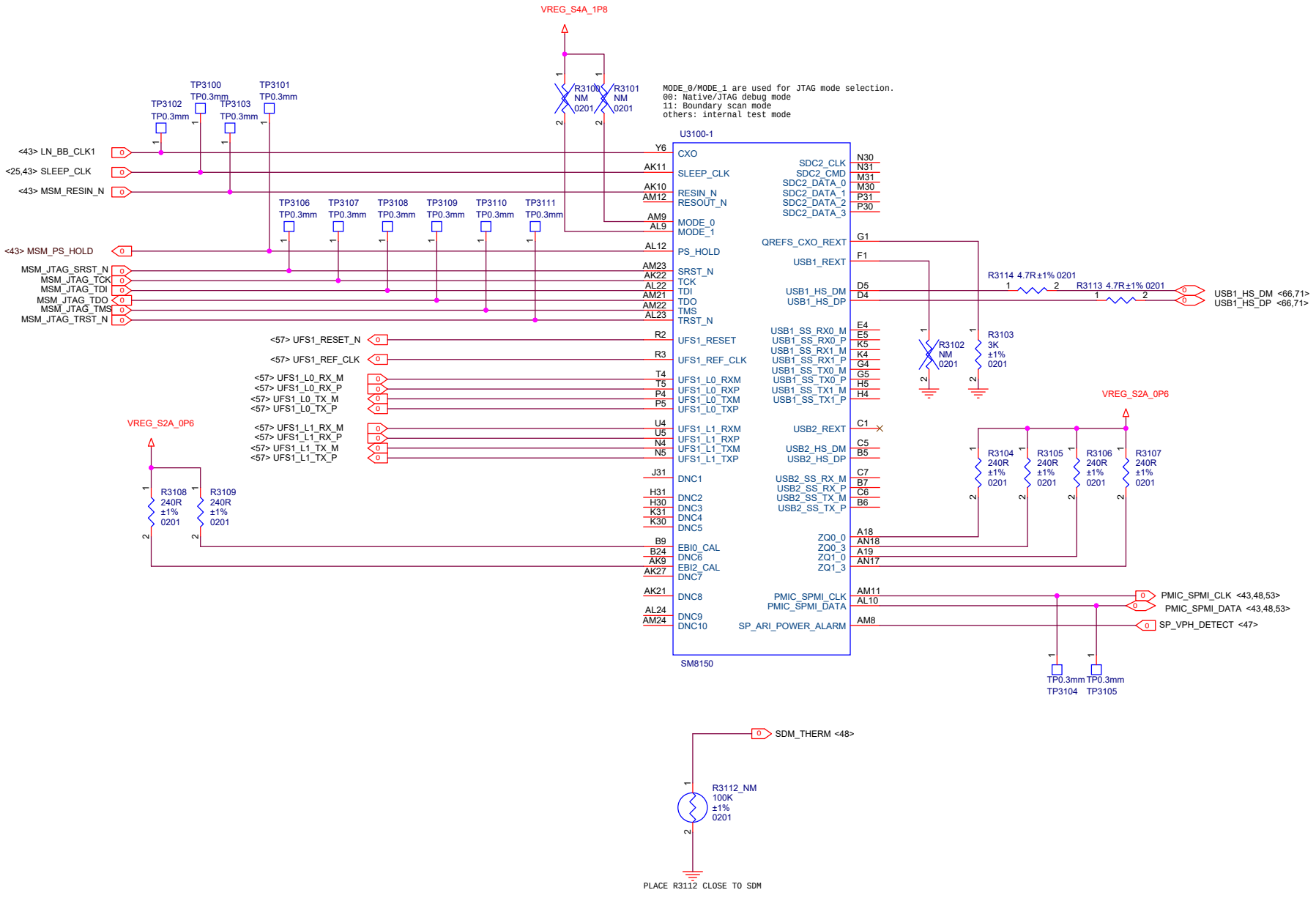

VPH_PWR
VREG_L4C_1P8
VREG_L5C_1P8
NFC_SIMVCC1
NFC_SIMVCC2
VREG_S4A_1P8
U2200
SN100T
VBAT
PMUVCC1
PMUVCC2
PMUVCC3
SIMVCC1
SIMVCC2
SIMVCC3
VDDA
NFC_WKUP_REQ
BOOST_LX
VHV
VREF
NFC_CLK_32K
NFC_CLK_REQ
NFC_DWL_REQ
HIF1
HIF2
HIF3
HIF4
NFC_GPIO0
NFC_GPIO1
NFC_GPIO2_AO
NFC_GPIO3_AO
NFC_XTAL1
NFC_XTAL2
VEN
RXP
RXN
VSS_NFC
VSS_PA
VSS_PLL
VSS_PMU
VSS_REF
VDDIO_SE
VDDIO
VDDBOOST
VDDCIN
VDDN
VDDPA
VDDPLL
VUP
VBATPWR
TXVCASC
TXVCM
SE_SPI_CS
SE_ISO_CLK
SE_ISO_IO
SE_SPI_MOSI
SE_ISO_RST
SE_SPI_MISO
SE_SPI_CLK
SE_GPIO0
SE_GPIO1
SE_I2C_SCL
SE_I2C_SDA
NFC_IRQ
NFC_SIM_SWIO1
NFC_SIM_SWIO2
NFC_SIM_SWIO3
SIM_IO_PULLDOWN_1
SIM_IO_PULLDOWN_2
TX1
TX2
VTUNE
VDDC
VSS_DIG
VSS_PWR
VSS_SUB
NFC_ESE_SPI_CS_N <33>
NFC_ESE_SPI_MOSI <33>
NFC_ESE_SPI_MISO <33>
NFC_ESE_SPI_CLK <33>
NFC_IRQ <33>
NFC_SWIO_UICC1 <66>
NFC_SWIO_UICC2 <66>
NFC_TX1
NFC_TX2
<34> NFC_LABBCLK3_EN
<33> NFC_DWL_REQ
<33> NFC_I2C_SDA
<33> NFC_I2C_SCL
<43> LN_BB_CLK3_NFC
<34> NFC_ENABLE
<23> NFC_RXP
<23> NFC_RXN
TP2200
TP2201
TP2202
TP2203
TP2205
TP2206
TP2207
TP2210
L2202 1uH ±20% 0806
C2222 220nF +/-20% 6.3V 0201
C2207 100nF +/-10% 16V 0201
C2214 4.7uF +/-20% 6.3V 0402
C2219 1uF ±20% 6.3V 0201
C2221 1uF ±20% 6.3V 0201
C2220 1uF ±20% 6.3V 0201
C2206 470nF ±10% 6.3V 0201
C2209 470nF ±10% 6.3V 0201
C2212 220nF +/-20% 6.3V 0201
C2225 100nF +/-10% 16V 0201
C2226 100nF +/-10% 16V 0201
C2227 1uF ±20% 10V 0201
C2228 22uF +/-20% 10V 0603
C2229 100pF 5% 50V 0201
C2210 4.7uF +/-20% 10V 0402
C2230 220nF +/-20% 6.3V 0201
C2235 220nF +/-20% 6.3V 0201
C2231 100pF 5% 50V 0201
C2232 220nF +/-20% 6.3V 0201
C2201 22uF +/-20% 10V 0603
C2233 100pF 5% 50V 0201
C2234 220nF +/-20% 6.3V 0201
C2223 220nF +/-20% 6.3V 0201
C2224 68nF ±10% 6.3V 0201
C2200 1nF +/-5% 0201 25V
C2202 2.7pF 0201 50V +/-0.25pF
C2203 47pF5% 50V 0201
C2204 680pF 5% 0402 50V
C2205 82pF 5% 50V 0201
C2208 680pF 5% 0402 50V
C2213 33pF 5% 50V 0201
C2215 82pF 5% 50V 0201
C2211 33pF 5% 50V 0201
C2216 47pF5% 50V 0201
C2217 2.7pF 0201 50V +/-0.25pF
C2218 1nF +/-5% 25V 0201
R2200 680R ±5% 0201
R2201 680R ±5% 0201
R2255 0R±5% 0201
R2256 0R±5% 0201
L2200 160nH ±5% 0402
L2201 160nH ±5% 0402
J2200
J2201
818012934
CR2200 PESD30VF1BL
CR2201 PESD30VF1BL
R2202 NM 0201
R2203 NM 0201

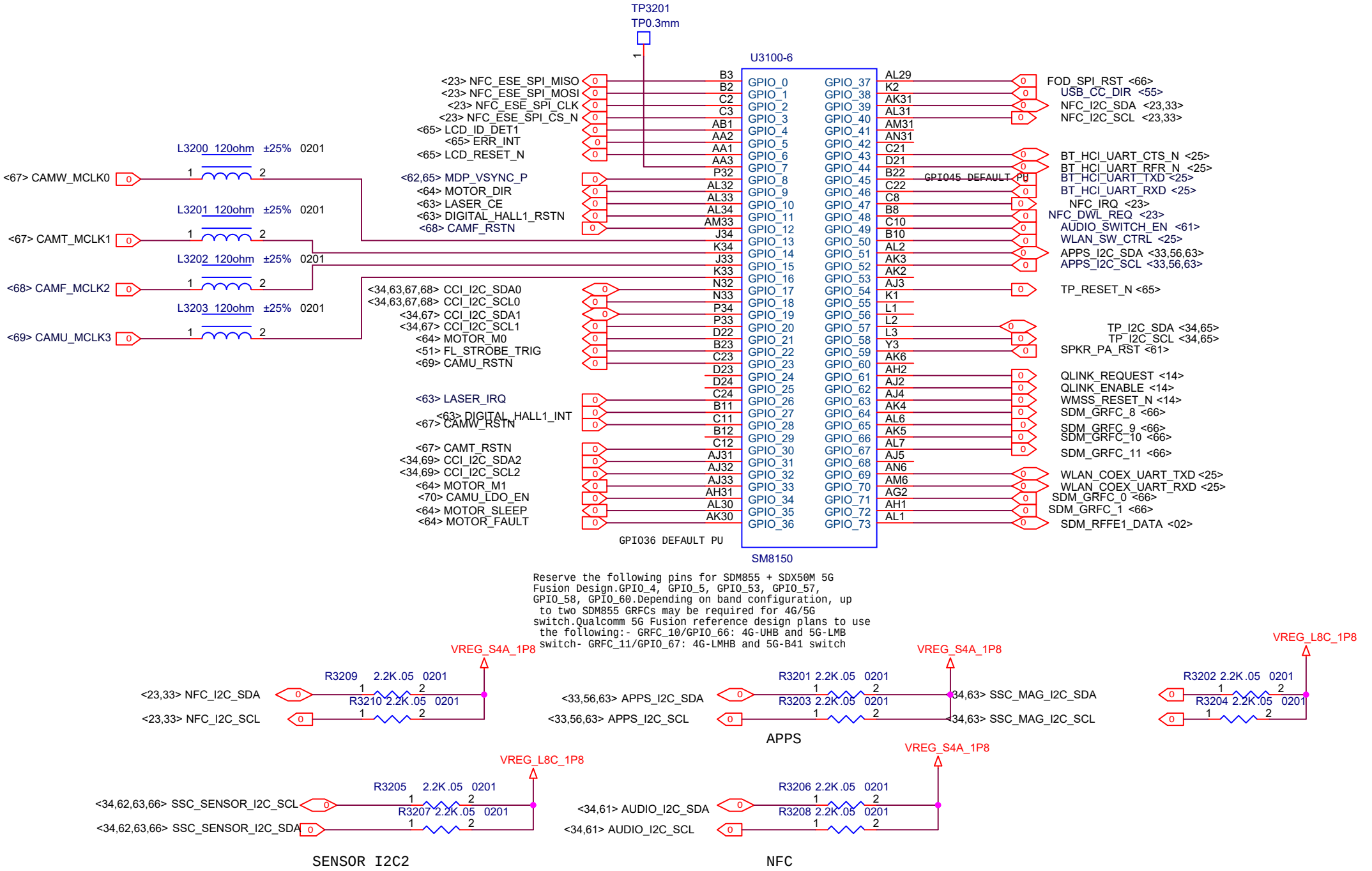

VREG_L15A_1P7
VREG_L15A_1P7_GPS
VREG_L15A_1P7_GPS_L1
R2303 0R±5% 0201
R2304 0R±5% 0201
<14> SDR_GNSS_IN1
<14> SDR_GNSS_IN0
C2301 1nH ±0.1nH 0201
L2302 3nH 3.0nH±0.1nH 0201
C2312 33pF 5% 25V 0201
FL2300
SAFFB1G56KB0F0A
C2302 5%18pF 0201 50V
C2300 33nF +/-10% 6.3V 0201
U2300
GND VCC RF_OUT GNDRF RF_IN ENABLE
BGU8019
R2300 0R ±5% 0201
C2314 1nF +/-5% 0201 25V
L2300 6.8nH ±5% 0201
C2303 NM 0201
FL2303
SAFFB1G56KB0F0A
C2309 18pF5% 0201 50V
GPS_OUT <26>
SDR_GRFC5 <14>
J2300
MM8030-2610B
CR2301 NM
R2301 0R ±5% 0402
C2315 2.2pF +/-0.1pF 25V 0201
L2307 15nH ±2% 0402
C2307 1.6pF ±0.1pF 50V 0201
J2302
818014071
C2316 18pF 50V 5% 0201
C2304 33pF 5% 25V 0201
L2306 6.8nH ±5% 0201
C2313 33pF 5% 25V 0201
FL2301
B8884
C2306 18pF5% 50V 0201
C2305 33nF +/-10% 6.3V 0201
U2301
BGU8019
L2303 NM 0201
L2304 10nH ±3% 0201
R2302 0R ±5% 0201
C2308 1nF +/-5% 0201 25V
C2317 NM 0201
FL2302
B8884
SDR_GRFC8 <14>
Close2WTR
Close2WCN

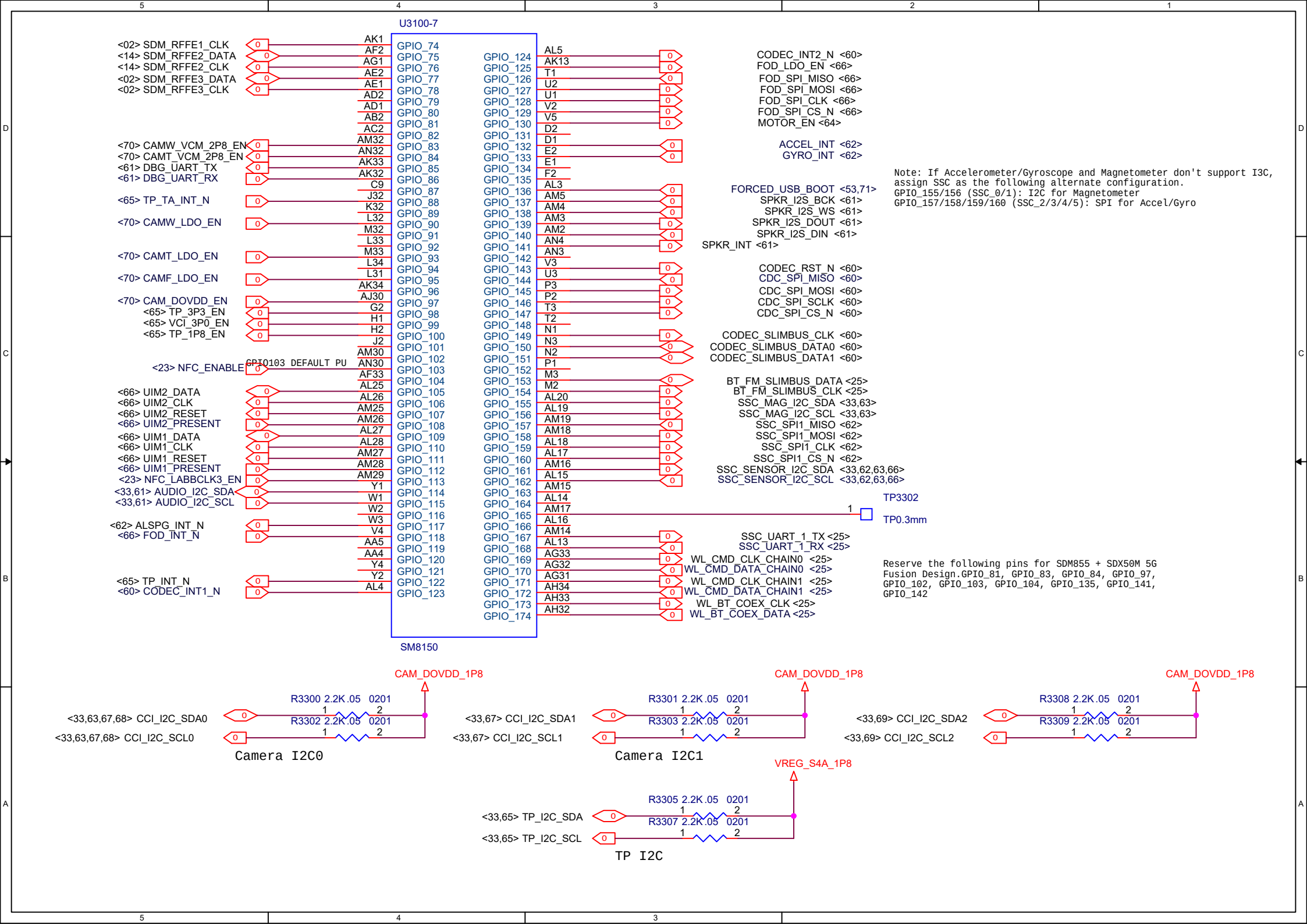

TP2402
TP2401
U2400-2
R2400 51R
±5% 0201
BT_RFIO_CH2
WL_RF_PDET_IN_CH0
WL_BT_RFIO_2G_CH0
WL_RF_PDET_IN_CH1
WL_BT_RFIO_2G_CH1
SB_CLK
SB_DATA
LF_CLK_IN
WL_RFI_5G_CH0
WL_RFI_5G_CH1
XTALO
XTALI
WL_CMD_CLK_CH0
WL_CMD_DATA_CH0
WL_CMD_CLK_CH1
WL_CMD_DATA_CH1
WL_BB_QP_CH0
WL_BB_QN_CH0
WL_BB_IN_CH0
WL_BB_IP_CH0
WL_BB_QN_CH1
WL_BB_IN_CH1
WL_BB_QP_CH1
WL_BB_IP_CH1
WL_RFO_5G_CH0
WL_RFO_5G_CH1
CLK_OUT
FM_RX_HEADSET
WCN-3998-0-116WLPSP-TR-00-0
<26> WL_RF_PDET_IN_CH0
<26> WL_BT_RFIO_2G_CH0
<26> WL_RF_PDET_IN_CH1
<26> WL_BT_RFIO_2G_CH1
<34> BT_FM_SLIMBUS_CLK
<34> BT_FM_SLIMBUS_DATA
<32,43> SLEEP_CLK
<26> WL_RFI_5G_CH0
<26> WL_RFI_5G_CH1
<43> RF_CLK2_WLAN
C2400
1nF
+/-5%
25V
0201
C2411
NM
0201
WL_CMD_CLK_CHAIN0 <34>
WL_CMD_DATA_CHAIN0 <34>
WL_CMD_CLK_CHAIN1 <34>
WL_CMD_DATA_CHAIN1 <34>
GPIO3-1
WLAN1_ADC_Q_P <37>
WLAN1_ADC_Q_M <37>
WLAN1_ADC_I_M <37>
WLAN1_ADC_I_P <37>
WLAN2_ADC_Q_M <37>
WLAN2_ADC_I_M <37>
WLAN2_ADC_Q_P <37>
WLAN2_ADC_I_P <37>
WL_RFO_5G_CH0 <26>
WL_RFO_5G_CH1 <26>
C2401 2.7pF +/-0.25pF 50V 0201
C2402 2.7pF +/-0.25pF 50V 0201
C2403 2.7pF +/-0.25pF 50V 0201
C2404 2.7pF +/-0.25pF 50V 0201
C2405 2.7pF +/-0.25pF 50V 0201
C2406 2.7pF +/-0.25pF 50V 0201
C2407 2.7pF +/-0.25pF 50V 0201
C2408 2.7pF +/-0.25pF 50V 0201
C2409
22PF
0201
DC 25V
+/-5%
C2410
18PF
+/-5%
DC 25V
0201
R2401
33R
±5%
0201
WL_BB_PLL_REF_CLK_OUT <37>
FM_RX_HEADSET <61>
U2400-3
GPIO_A
GPIO_B
CTS
RTS
RXD
TXD
SW_CTRL
WP_IF
COEX_CLK
COEX_DATA
COEX_RXD
COEX_TXD
SENS_CTS
SENS_RTS
SENS_RXD
SENS_TXD
WL_BT_FEM_0
WL_BT_FEM_1
WL_BT_FEM_2
WL_BT_FEM_3
WL_BT_FEM_4
WL_BT_FEM_5
WL_BT_FEM_6
WL_BT_FEM_7
WL_BT_FEM_8
WCN-3998-0-116WLPSP-TR-00-0
GPIO3-2
<33> BT_HCI_UART_RFR_N
<33> BT_HCI_UART_CTS_N
<33> BT_HCI_UART_TXD
<33> BT_HCI_UART_RXD
<33> WLAN_SW_CTRL
<34> WL_BT_COEX_CLK
<34> WL_BT_COEX_DATA
<33> WLAN_COEX_UART_TXD
<33> WLAN_COEX_UART_RXD
SSC_UART_1_TX <34>
SSC_UART_1_RX <34>
GPIO3-3
LNA_EN_5G_CH0 <26>
PA_EN_5G_CH0 <26>
LNA_EN_5G_CH1 <26>
PA_EN_5G_CH1 <26>
R2402
51K
.05
0201

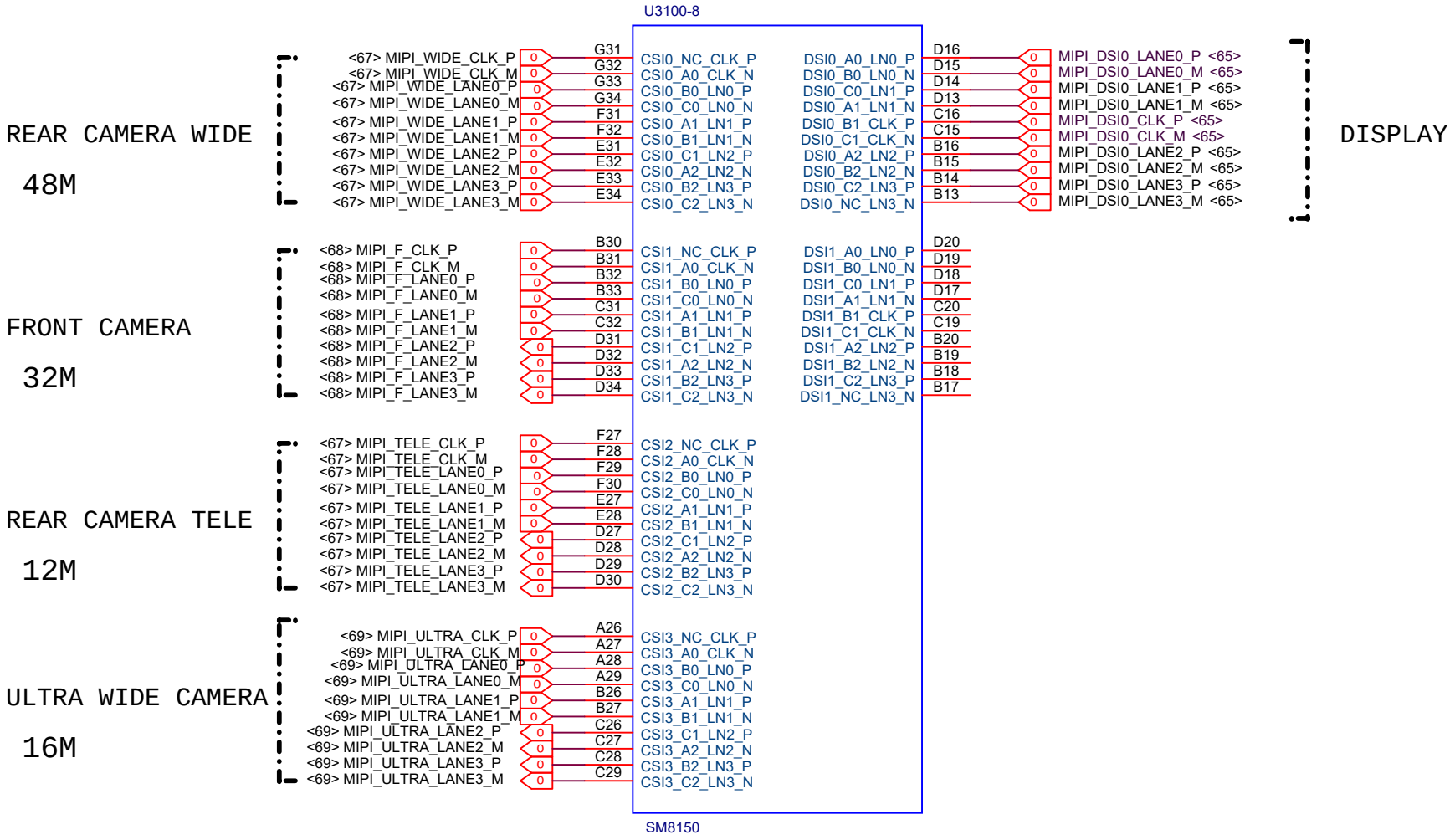

FL2502
<24> GPS_OUT
LOW HIGH
MIDDLE
COM
GND
TPX205950MT-7010A1
WLAN0_ANT_5G <26>
FL2500
885067
IN
OUT
GND1
GND2
GND3
C2500
C2501
L2503 1.8nH
L2504 15nH
L2500 4.7nH ±3% 0201
L2501 3.3nH 3.3nH±0.1nH 0201
L2502 15nH
<25> WL_BT_RFIO_2G_CH0
18PF 0201 DC 25V +/-5%
1.8pF 0201 50V ±0.1pF
U2500
CPLD
50_OHM
TFSC06054125-2120A1X
<25> WL_RF_PDET_IN_CH0
R2500 75R ±5% 0201
R2501 22R ±5% 0201
R2502 49.9R .01 0201
L2514 1.1nH
C2513 0.4pF 0201 50V ±0.05pF
L2513 5.6nH
C2502 NM 0201
18PF C2503 0201DC 25V+/-5%
J2500
MM8030-2610B
R2507 1.5nH ±0.1nH 0201
L2507 4nH ±2% 0402
C2527 0.4pF 0201 50V ±0.05pF
L2506 3.3nH 0402
C2505 0.6pF 0201 50V ±0.05pF
C2530 0.6pF 0201 50V ±0.05pF
C2528 0.6pF 0201 50V ±0.05pF
C2526 1pF 0201 50V ±0.1pF
L2508 30nH ±2% 0402
J2504
XM-217-XC-167-SP
J2502_NM
XM-217-XC-167-SP
J2503
XM-217-XC-167-SP
<25> WL_RFO_5G_CH0
C2506
C2507
L2509 2.5nH
1.1nH ±0.1nH 0201
18PF 0201 DC 25V +/-5%
S2500
OUTPUT1
VDD
GND
INPUT
OUTPUT2
VCTL
SKY13585-679LF
C2512 1.1nH ±0.1nH 0201
L2511 0.4pF 0201 50V ±0.05pF
L2512 NM 0201
WLAN0_ANT_5G <26>
<25> WL_RFI_5G_CH0
C2508
C2509
L2510 NM 0201
1nH ±0.1nH 0201
18PF 0201 DC 25V +/-5%
LNA_EN_5G_CH0 <25>
PA_EN_5G_CH0 <25>
C2510 10pF 0201 25V 5%
C2511 10pF 0201 25V 5%
<26> WLAN1_ANT_5G
FL2505
Hi-Band
Common
Lo-Band
GND
DPX105950DT-6112A1
<25> WL_BT_RFIO_2G_CH1
C2514
L2521
2pF 0201 50V ±0.1pF
C2523 4.3nH ±3% 0201
L2522 2.7nH ±0.1nH 0201
FL2503
885067
L2524 3nH ±0.1nH 0201
L2523 6.2nH ±3% 0201
C2524 1pF ±0.1pF 50V 0201
18PF 0201 DC 25V +/-5%
U2501
CPLD
50_OHM
TFSC06054125-2120A1X
<25> WL_RF_PDET_IN_CH1
R2504 22R ±5% 0201
R2503 75R ±5% 0201
R2505 49.9R .01 0201
L2528 NM 0201
L2520 18PF 0201 DC 25V +/-5%
C2504 0.7nH ±0.1nH 0201
L2519 NM 0201
C2515 5.6nH ±3% 0201
J2505
MM8030-2610B
C2529 1nH ±0.1nH 0201
C2525 NM 0201
J2501
SIG
GND1
GND4
20566-001E-01
<25> WL_RFO_5G_CH1
C2517
C2518
L2526 NM 0201
1.4nH ±0.1nH 0201
18PF 0201 DC 25V +/-5%
S2501
OUTPUT1
VDD
GND
INPUT
OUTPUT2
VCTL
SKY13585-679LF
L2527 1.7nH ±0.1nH 0201
L251X NM 0201
L2518 2nH ±0.1nH 0201
WLAN1_ANT_5G <26>
<25> WL_RFI_5G_CH1
C2519
C2520
L2516 NM 0201
1.5nH ±0.1nH 0201
18PF 0201 DC 25V +/-5%
LNA_EN_5G_CH1 <25>
PA_EN_5G_CH1 <25>
C2521 10pF 0201 25V 5%
C2522 10pF 0201 25V 5%

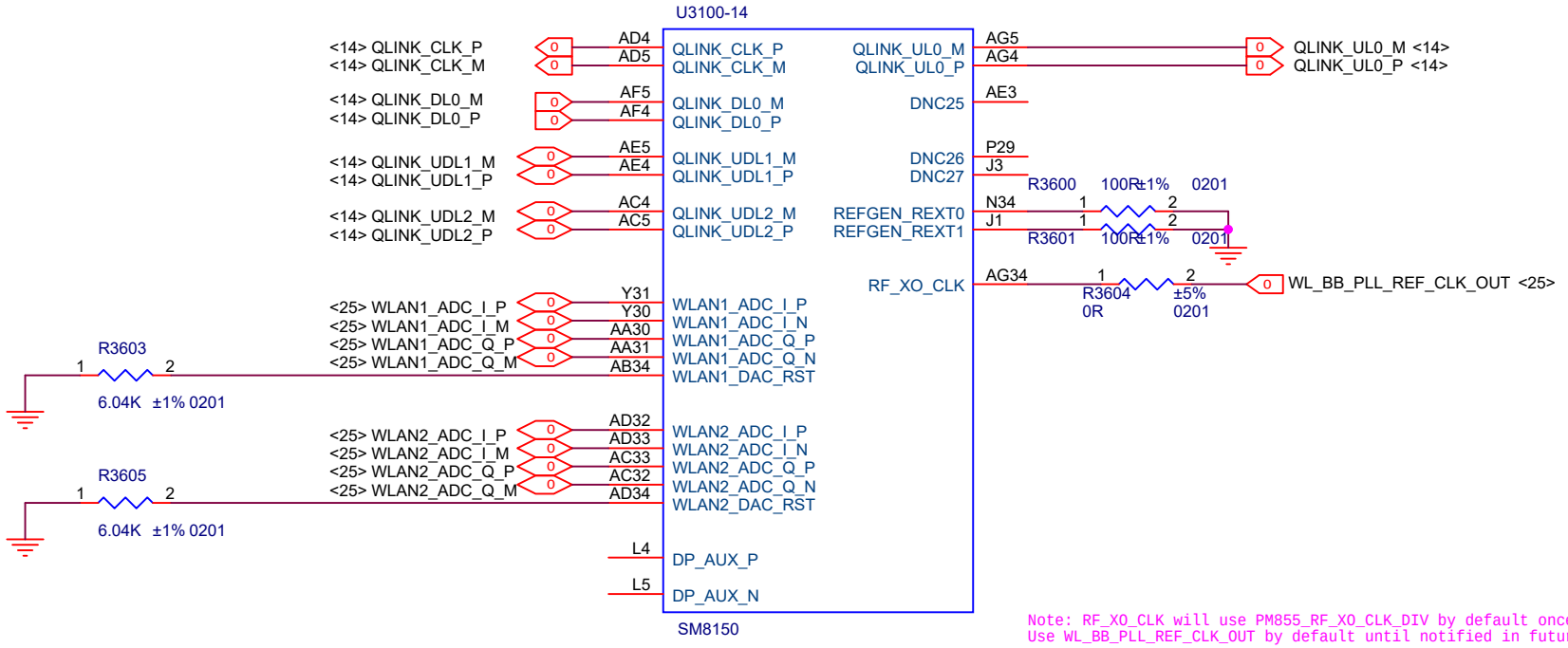

1.3V_RFA
VREG_L2C_1P3
VDD13_RFA_PMIC
R2600 0R±5% 0201
C2600 4.7uF +/-20% 6.3V 0402
C2601 220nF +/-20% 6.3V 0201
C2604 10nF +/-10% 16V 0201
PIN 27
C2607 10nF +/-10% 16V 0201
PIN 84
VDD13_WL_SYNTH_CH0
R2601 0R±5% 0201
C2611 100pF 5% 50V 0201
PIN 33
VDD13_WL_SYNTH_CH1
R2603 0R±5% 0201
C2612 100pF 5% 50V 0201
PIN 90
C2615 10nF +/-10% 16V 0201
PIN 12
C2617 10nF +/-10% 16V 0201
PIN 66
C2618 10nF +/-10% 16V 0201
PIN 8
C2621 10nF +/-10% 16V 0201
PIN 11,18
VREG_S4A_1P8
1.8V_IO
C2602 2.2uF ±20% 6.3V 0201
C2603 470nF ±10% 6.3V 0201
PIN 94
VREG_L7A_1P8
1.8V_XO
C2605 2.2uF ±20% 6.3V 0201
C2606 470nF ±10% 6.3V 0201
PIN 40
C2610 470nF ±10% 6.3V 0201
PIN 91
VREG_L10C_3P3
VDD33_CH1_PMIC
3.3V_CH1
R2602 0R±5% 0201
C2666 10uF +/-20% 6.3V 0402
C2613 4.7uF ±20% 6.3V 0201
C2614 10nF +/-10% 16V 0201
PIN 86
C2616 10nF +/-10% 16V 0201
PIN 92
VREG_L11C_3P3
VDD33_CH0_PMIC
3.3V_CH0
R2604 0R±5% 0201
C2667 10uF +/-20% 6.3V 0402
C2619 4.7uF ±20% 6.3V 0201
C2620 10nF +/-10% 16V 0201
PIN 29
C2622 10nF +/-10% 16V 0201
PIN 35
C2623 10nF +/-10% 16V 0201
PIN 6
PIN 9
C2624 10nF +/-10% 16V 0201
PIN 23,30
VDD11D_PM
C2608 1uF ±20% 6.3V 0201
C2609 1uF ±20% 6.3V 0201
VDD13_WL_SYNTH_CH1
VDD13_WL_SYNTH_CH0
VDD13_RFA_PMIC
VREG_S4A_1P8
VREG_L7A_1P8
VDD33_CH0_PMIC
VDD33_CH1_PMIC
U2400-1
VDD11D_PM
VDD13_WL_SYNTH_CH1
VDD13_WL_CH1
VDD13_PM
VDD13_WL_SYNTH_CH0
VDD13_WL_CH0
VDD13_BT_SYNTH
VDD13_BT_FM_BBPLL
VDD13_BT_BB
VDD13_FM
VDD13_BT_CH2
VDD18_IO
VDD18_XTAL
VDD18_VCO_CH1
VDD33_WL_5G_DRV_CH0
VDD33_PM_DLDO
VDD33_WL_CH0
VDD33_WL_BT_DRV_CH0
VDD33_WL_DRV_CH1
VDD33_WL_CH1
VDD33_BT_PA_CH2
VDD33_FEM
GND_BT_SYNTH
GND_BT_BB
GND_BT_CH2
GND_BT_FM_BBPLL_A
GND_BT_FM_BBPLL_B
GND_WL_2G_RXFE_CH1
GND_SEALRING1
GND_SEALRING2
GND_SEALRING3
GND_SEALRING4
GND_SEALRING5
GND_ESD_1
GND_ESD_0
GND_WL_5G_RXFE_CH1
GND_WL_5G_DRV_CH1
GND_WL_5G_PA_CH1
GND_WL_2G_DRV_CH1
GND_WL_BB_CH1
GND_WL_BALUN_CH1
GND_WL_2G_PA_CH1
GND_WL_SYNTH_CH1
GND_WL_BB_CH0
GND_WL_5G_RXFE_CH0
GND_WL_5G_DRV_CH0
GND_WL_SYNTH_CH0
GND_WL_5G_PA_CH0
GND_WL_BALUN_CH0
GND_WL_2G_PA_CH0
GND_WL_BT_DRV_CH0
GND_WL_BT_RXFE_CH0
GND_DIG
GND_ISO
GND_IO
GND_PM
GND_XTAL
GND_ISO_WL
GND_DPD_CH0
GND_FM_RXFE
GND_FM_VCO
GND_WL_PDET_FE
GND_WL_PDET_BE
WCN-3998-0-116WLPSP-TR-00-0


VREG_S4A_1P8
R3100 NM 0201
R3101 NM 0201
MODE_0/MODE_1 are used for JTAG mode selection.
00: Native/JTAG debug mode
11: Boundary scan mode
others: internal test mode
TP3100 TP0.3mm
TP3101 TP0.3mm
TP3102 TP0.3mm
TP3103 TP0.3mm
TP3106 TP0.3mm
TP3107 TP0.3mm
TP3108 TP0.3mm
TP3109 TP0.3mm
TP3110 TP0.3mm
TP3111 TP0.3mm
<43> LN_BB_CLK1
<25,43> SLEEP_CLK
<43> MSM_RESIN_N
<43> MSM_PS_HOLD
MSM_JTAG_SRST_N
MSM_JTAG_TCK
MSM_JTAG_TDI
MSM_JTAG_TDO
MSM_JTAG_TMS
MSM_JTAG_TRST_N
U3100-1
Y6 CXO
AK11 SLEEP_CLK
AK10 RESIN_N
AM12 RESOUT_N
AM9 MODE_0
AL9 MODE_1
AL12 PS_HOLD
AM23 SRST_N
AK22 TCK
AL22 TDI
AM21 TDO
AM22 TMS
AL23 TRST_N
R2 UFS1_RESET
R3 UFS1_REF_CLK
T4 UFS1_L0_RXM
T5 UFS1_L0_RXP
P4 UFS1_L0_TXM
P5 UFS1_L0_TXP
U4 UFS1_L1_RXM
U5 UFS1_L1_RXP
N4 UFS1_L1_TXM
N5 UFS1_L1_TXP
J31 DNC1
H31 DNC2
H30 DNC3
K31 DNC4
K30 DNC5
B9 EBI0_CAL
B24 DNC6
AK9 EBI2_CAL
AK27 DNC7
AK21 DNC8
AL24 DNC9
AM24 DNC10
SDC2_CLK N30
SDC2_CMD N31
SDC2_DATA_0 M31
SDC2_DATA_1 M30
SDC2_DATA_2 P31
SDC2_DATA_3 P30
QREFS_CXO_REXT G1
USB1_REXT F1
USB1_HS_DM D5
USB1_HS_DP D4
USB1_SS_RX0_M E4
USB1_SS_RX0_P E5
USB1_SS_RX1_M K5
USB1_SS_RX1_P K4
USB1_SS_TX0_M G4
USB1_SS_TX0_P G5
USB1_SS_TX1_M H5
USB1_SS_TX1_P H4
USB2_REXT C1
USB2_HS_DM C5
USB2_HS_DP B5
USB2_SS_RX_M C7
USB2_SS_RX_P B7
USB2_SS_TX_M C6
USB2_SS_TX_P B6
ZQ0_0 A18
ZQ0_3 AN18
ZQ1_0 A19
ZQ1_3 AN17
PMIC_SPMI_CLK AM11
PMIC_SPMI_DATA AL10
SP_ARI_POWER_ALARM AM8
SM8150
R3114 4.7R±1% 0201
R3113 4.7R±1% 0201
USB1_HS_DM <66,71>
USB1_HS_DP <66,71>
R3102 NM 0201
R3103 3K ±1% 0201
VREG_S2A_0P6
R3104 240R ±1% 0201
R3105 240R ±1% 0201
R3106 240R ±1% 0201
R3107 240R ±1% 0201
VREG_S2A_0P6
R3108 240R ±1% 0201
R3109 240R ±1% 0201
PMIC_SPMI_CLK <43,48,53>
PMIC_SPMI_DATA <43,48,53>
SP_VPH_DETECT <47>
TP0.3mm TP3104
TP0.3mm TP3105
<57> UFS1_RESET_N
<57> UFS1_REF_CLK
<57> UFS1_L0_RX_M
<57> UFS1_L0_RX_P
<57> UFS1_L0_TX_M
<57> UFS1_L0_TX_P
<57> UFS1_L1_RX_M
<57> UFS1_L1_RX_P
<57> UFS1_L1_TX_M
<57> UFS1_L1_TX_P
SDM_THERM <48>
R3112_NM 100K ±1% 0201
PLACE R3112 CLOSE TO SDM

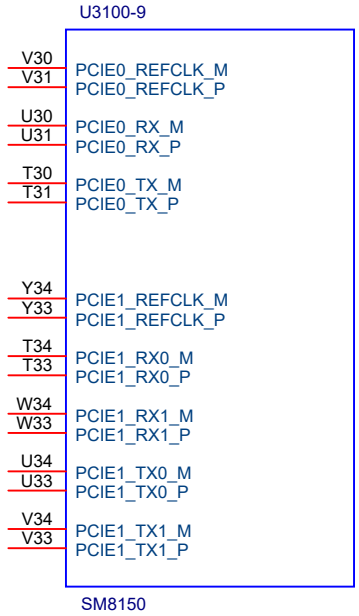

TP3201
TP0.3mm
U3100-6
SM8150
L3200 120ohm ±25% 0201
L3201 120ohm ±25% 0201
L3202 120ohm ±25% 0201
L3203 120ohm ±25% 0201
<67> CAMW_MCLK0
<67> CAMT_MCLK1
<68> CAMF_MCLK2
<69> CAMU_MCLK3
<23> NFC_ESE_SPI_MISO
<23> NFC_ESE_SPI_MOSI
<23> NFC_ESE_SPI_CLK
<23> NFC_ESE_SPI_CS_N
<65> LCD_ID_DET1
<65> ERR_INT
<65> LCD_RESET_N
<62,65> MDP_VSYNC_P
<64> MOTOR_DIR
<63> LASER_CE
<63> DIGITAL_HALL1_RSTN
<68> CAMF_RSTN
<34,63,67,68> CCI_I2C_SDA0
<34,63,67,68> CCI_I2C_SCL0
<34,67> CCI_I2C_SDA1
<34,67> CCI_I2C_SCL1
<64> MOTOR_M0
<51> FL_STROBE_TRIG
<69> CAMU_RSTN
<63> LASER_IRQ
<63> DIGITAL_HALL1_INT
<67> CAMW_RSTN
<67> CAMT_RSTN
<34,69> CCI_I2C_SDA2
<34,69> CCI_I2C_SCL2
<64> MOTOR_M1
<70> CAMU_LDO_EN
<64> MOTOR_SLEEP
<64> MOTOR_FAULT
GPIO36 DEFAULT PU
GPIO45 DEFAULT PU
FOD_SPI_RST <66>
USB_CC_DIR <55>
NFC_I2C_SDA <23,33>
NFC_I2C_SCL <23,33>
BT_HCI_UART_CTS_N <25>
BT_HCI_UART_RFR_N <25>
BT_HCI_UART_TXD <25>
BT_HCI_UART_RXD <25>
NFC_IRQ <23>
NFC_DWL_REQ <23>
AUDIO_SWITCH_EN <61>
WLAN_SW_CTRL <25>
APPS_I2C_SDA <33,56,63>
APPS_I2C_SCL <33,56,63>
TP_RESET_N <65>
TP_I2C_SDA <34,65>
TP_I2C_SCL <34,65>
SPKR_PA_RST <61>
QLINK_REQUEST <14>
QLINK_ENABLE <14>
WMSS_RESET_N <14>
SDM_GRFC_8 <66>
SDM_GRFC_9 <66>
SDM_GRFC_10 <66>
SDM_GRFC_11 <66>
WLAN_COEX_UART_TXD <25>
WLAN_COEX_UART_RXD <25>
SDM_GRFC_0 <66>
SDM_GRFC_1 <66>
SDM_RFFE1_DATA <02>
Reserve the following pins for SDM855 + SDX50M 5G Fusion Design.GPIO_4, GPIO_5, GPIO_53, GPIO_57, GPIO_58, GPIO_60.Depending on band configuration, up to two SDM855 GRFCs may be required for 4G/5G switch.Qualcomm 5G Fusion reference design plans to use the following:- GRFC_10/GPIO_66: 4G-UHB and 5G-LMB switch- GRFC_11/GPIO_67: 4G-LMHB and 5G-B41 switch
VREG_S4A_1P8
R3209 2.2K .05 0201
R3210 2.2K .05 0201
<23,33> NFC_I2C_SDA
<23,33> NFC_I2C_SCL
R3201 2.2K .05 0201
R3203 2.2K .05 0201
<33,56,63> APPS_I2C_SDA
<33,56,63> APPS_I2C_SCL
<34,63> SSC_MAG_I2C_SDA
<34,63> SSC_MAG_I2C_SCL
APPS
VREG_L8C_1P8
R3202 2.2K .05 0201
R3204 2.2K .05 0201
VREG_L8C_1P8
R3205 2.2K .05 0201
R3207 2.2K .05 0201
<34,62,63,66> SSC_SENSOR_I2C_SCL
<34,62,63,66> SSC_SENSOR_I2C_SDA
SENSOR I2C2
VREG_S4A_1P8
R3206 2.2K .05 0201
R3208 2.2K .05 0201
<34,61> AUDIO_I2C_SDA
<34,61> AUDIO_I2C_SCL
NFC

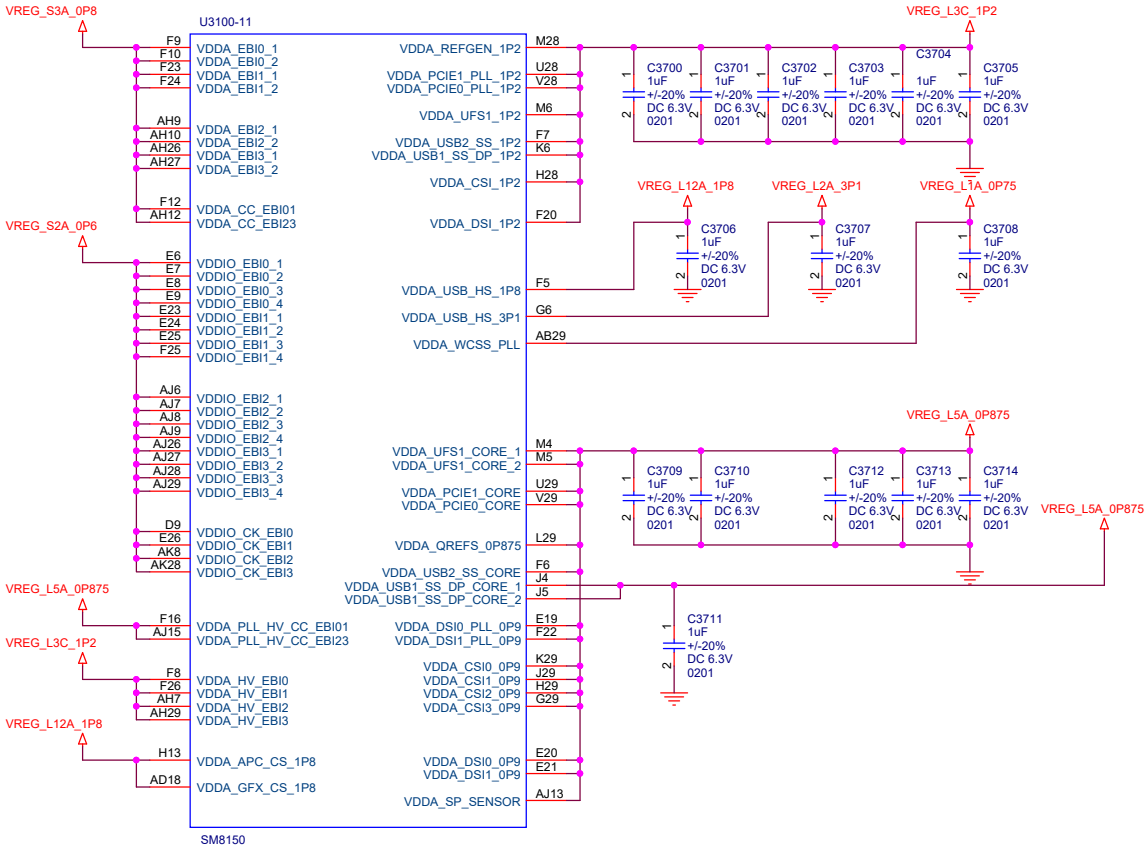

U3100-7
SM8150
<02> SDM_RFFE1_CLK
<14> SDM_RFFE2_DATA
<14> SDM_RFFE2_CLK
<02> SDM_RFFE3_DATA
<02> SDM_RFFE3_CLK
<70> CAMW_VCM_2P8_EN
<70> CAMT_VCM_2P8_EN
<61> DBG_UART_TX
<61> DBG_UART_RX
<65> TP_TA_INT_N
<70> CAMW_LDO_EN
<70> CAMT_LDO_EN
<70> CAMF_LDO_EN
<70> CAM_DOVDD_EN
<65> TP_3P3_EN
<65> VCI_3P0_EN
<65> TP_1P8_EN
<23> NFC_ENABLE
GPIO103 DEFAULT PU
<66> UIM2_DATA
<66> UIM2_CLK
<66> UIM2_RESET
<66> UIM2_PRESENT
<66> UIM1_DATA
<66> UIM1_CLK
<66> UIM1_RESET
<66> UIM1_PRESENT
<23> NFC_LABBCLK3_EN
<33,61> AUDIO_I2C_SDA
<33,61> AUDIO_I2C_SCL
<62> ALSPG_INT_N
<66> FOD_INT_N
<65> TP_INT_N
<60> CODEC_INT1_N
CODEC_INT2_N <60>
FOD_LDO_EN <66>
FOD_SPI_MISO <66>
FOD_SPI_MOSI <66>
FOD_SPI_CLK <66>
FOD_SPI_CS_N <66>
MOTOR_EN <64>
ACCEL_INT <62>
GYRO_INT <62>
FORCED_USB_BOOT <53,71>
SPKR_I2S_BCK <61>
SPKR_I2S_WS <61>
SPKR_I2S_DOUT <61>
SPKR_I2S_DIN <61>
SPKR_INT <61>
CODEC_RST_N <60>
CDC_SPI_MISO <60>
CDC_SPI_MOSI <60>
CDC_SPI_SCLK <60>
CDC_SPI_CS_N <60>
CODEC_SLIMBUS_CLK <60>
CODEC_SLIMBUS_DATA0 <60>
CODEC_SLIMBUS_DATA1 <60>
BT_FM_SLIMBUS_DATA <25>
BT_FM_SLIMBUS_CLK <25>
SSC_MAG_I2C_SDA <33,63>
SSC_MAG_I2C_SCL <33,63>
SSC_SPI1_MISO <62>
SSC_SPI1_MOSI <62>
SSC_SPI1_CLK <62>
SSC_SPI1_CS_N <62>
SSC_SENSOR_I2C_SDA <33,62,63,66>
SSC_SENSOR_I2C_SCL <33,62,63,66>
TP3302
TP0.3mm
SSC_UART_1_TX <25>
SSC_UART_1_RX <25>
WL_CMD_CLK_CHAIN0 <25>
WL_CMD_DATA_CHAIN0 <25>
WL_CMD_CLK_CHAIN1 <25>
WL_CMD_DATA_CHAIN1 <25>
WL_BT_COEX_CLK <25>
WL_BT_COEX_DATA <25>
Note: If Accelerometer/Gyroscope and Magnetometer don't support I3C, assign SSC as the following alternate configuration.
GPIO_155/156 (SSC_0/1): I2C for Magnetometer
GPIO_157/158/159/160 (SSC_2/3/4/5): SPI for Accel/Gyro
Reserve the following pins for SDM855 + SDX50M 5G Fusion Design.GPIO_81, GPIO_83, GPIO_84, GPIO_97, GPIO_102, GPIO_103, GPIO_104, GPIO_135, GPIO_141, GPIO_142
CAM_DOVDD_1P8
R3300 2.2K .05 0201
R3302 2.2K .05 0201
<33,63,67,68> CCI_I2C_SDA0
<33,63,67,68> CCI_I2C_SCL0
Camera I2C0
R3301 2.2K .05 0201
R3303 2.2K .05 0201
<33,67> CCI_I2C_SDA1
<33,67> CCI_I2C_SCL1
Camera I2C1
R3308 2.2K .05 0201
R3309 2.2K .05 0201
<33,69> CCI_I2C_SDA2
<33,69> CCI_I2C_SCL2
VREG_S4A_1P8
R3305 2.2K .05 0201
R3307 2.2K .05 0201
<33,65> TP_I2C_SDA
<33,65> TP_I2C_SCL
TP I2C

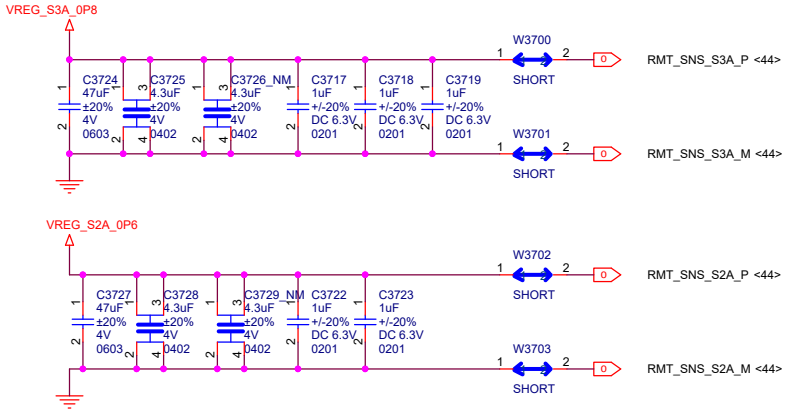

U3100-8
REAR CAMERA WIDE
48M
<67> MIPI_WIDE_CLK_P
<67> MIPI_WIDE_CLK_M
<67> MIPI_WIDE_LANE0_P
<67> MIPI_WIDE_LANE0_M
<67> MIPI_WIDE_LANE1_P
<67> MIPI_WIDE_LANE1_M
<67> MIPI_WIDE_LANE2_P
<67> MIPI_WIDE_LANE2_M
<67> MIPI_WIDE_LANE3_P
<67> MIPI_WIDE_LANE3_M
G31
G32
G33
G34
F31
F32
E31
E32
E33
E34
CSI0_NC_CLK_P
CSI0_A0_CLK_N
CSI0_B0_LN0_P
CSI0_C0_LN0_N
CSI0_A1_LN1_P
CSI0_B1_LN1_N
CSI0_C1_LN2_P
CSI0_A2_LN2_N
CSI0_B2_LN3_P
CSI0_C2_LN3_N
DSI0_A0_LN0_P
DSI0_B0_LN0_N
DSI0_C0_LN1_P
DSI0_A1_LN1_N
DSI0_B1_CLK_P
DSI0_C1_CLK_N
DSI0_A2_LN2_P
DSI0_B2_LN2_N
DSI0_C2_LN3_P
DSI0_NC_LN3_N
D16
D15
D14
D13
C16
C15
B16
B15
B14
B13
MIPI_DSI0_LANE0_P <65>
MIPI_DSI0_LANE0_M <65>
MIPI_DSI0_LANE1_P <65>
MIPI_DSI0_LANE1_M <65>
MIPI_DSI0_CLK_P <65>
MIPI_DSI0_CLK_M <65>
MIPI_DSI0_LANE2_P <65>
MIPI_DSI0_LANE2_M <65>
MIPI_DSI0_LANE3_P <65>
MIPI_DSI0_LANE3_M <65>
DISPLAY
FRONT CAMERA
32M
<68> MIPI_F_CLK_P
<68> MIPI_F_CLK_M
<68> MIPI_F_LANE0_P
<68> MIPI_F_LANE0_M
<68> MIPI_F_LANE1_P
<68> MIPI_F_LANE1_M
<68> MIPI_F_LANE2_P
<68> MIPI_F_LANE2_M
<68> MIPI_F_LANE3_P
<68> MIPI_F_LANE3_M
B30
B31
B32
B33
C31
C32
D31
D32
D33
D34
CSI1_NC_CLK_P
CSI1_A0_CLK_N
CSI1_B0_LN0_P
CSI1_C0_LN0_N
CSI1_A1_LN1_P
CSI1_B1_LN1_N
CSI1_C1_LN2_P
CSI1_A2_LN2_N
CSI1_B2_LN3_P
CSI1_C2_LN3_N
DSI1_A0_LN0_P
DSI1_B0_LN0_N
DSI1_C0_LN1_P
DSI1_A1_LN1_N
DSI1_B1_CLK_P
DSI1_C1_CLK_N
DSI1_A2_LN2_P
DSI1_B2_LN2_N
DSI1_C2_LN3_P
DSI1_NC_LN3_N
D20
D19
D18
D17
C20
C19
B20
B19
B18
B17
REAR CAMERA TELE
12M
<67> MIPI_TELE_CLK_P
<67> MIPI_TELE_CLK_M
<67> MIPI_TELE_LANE0_P
<67> MIPI_TELE_LANE0_M
<67> MIPI_TELE_LANE1_P
<67> MIPI_TELE_LANE1_M
<67> MIPI_TELE_LANE2_P
<67> MIPI_TELE_LANE2_M
<67> MIPI_TELE_LANE3_P
<67> MIPI_TELE_LANE3_M
F27
F28
F29
F30
E27
E28
D27
D28
D29
D30
CSI2_NC_CLK_P
CSI2_A0_CLK_N
CSI2_B0_LN0_P
CSI2_C0_LN0_N
CSI2_A1_LN1_P
CSI2_B1_LN1_N
CSI2_C1_LN2_P
CSI2_A2_LN2_N
CSI2_B2_LN3_P
CSI2_C2_LN3_N
ULTRA WIDE CAMERA
16M
<69> MIPI_ULTRA_CLK_P
<69> MIPI_ULTRA_CLK_M
<69> MIPI_ULTRA_LANE0_P
<69> MIPI_ULTRA_LANE0_M
<69> MIPI_ULTRA_LANE1_P
<69> MIPI_ULTRA_LANE1_M
<69> MIPI_ULTRA_LANE2_P
<69> MIPI_ULTRA_LANE2_M
<69> MIPI_ULTRA_LANE3_P
<69> MIPI_ULTRA_LANE3_M
A26
A27
A28
A29
B26
B27
C26
C27
C28
C29
CSI3_NC_CLK_P
CSI3_A0_CLK_N
CSI3_B0_LN0_P
CSI3_C0_LN0_N
CSI3_A1_LN1_P
CSI3_B1_LN1_N
CSI3_C1_LN2_P
CSI3_A2_LN2_N
CSI3_B2_LN3_P
CSI3_C2_LN3_N
SM8150

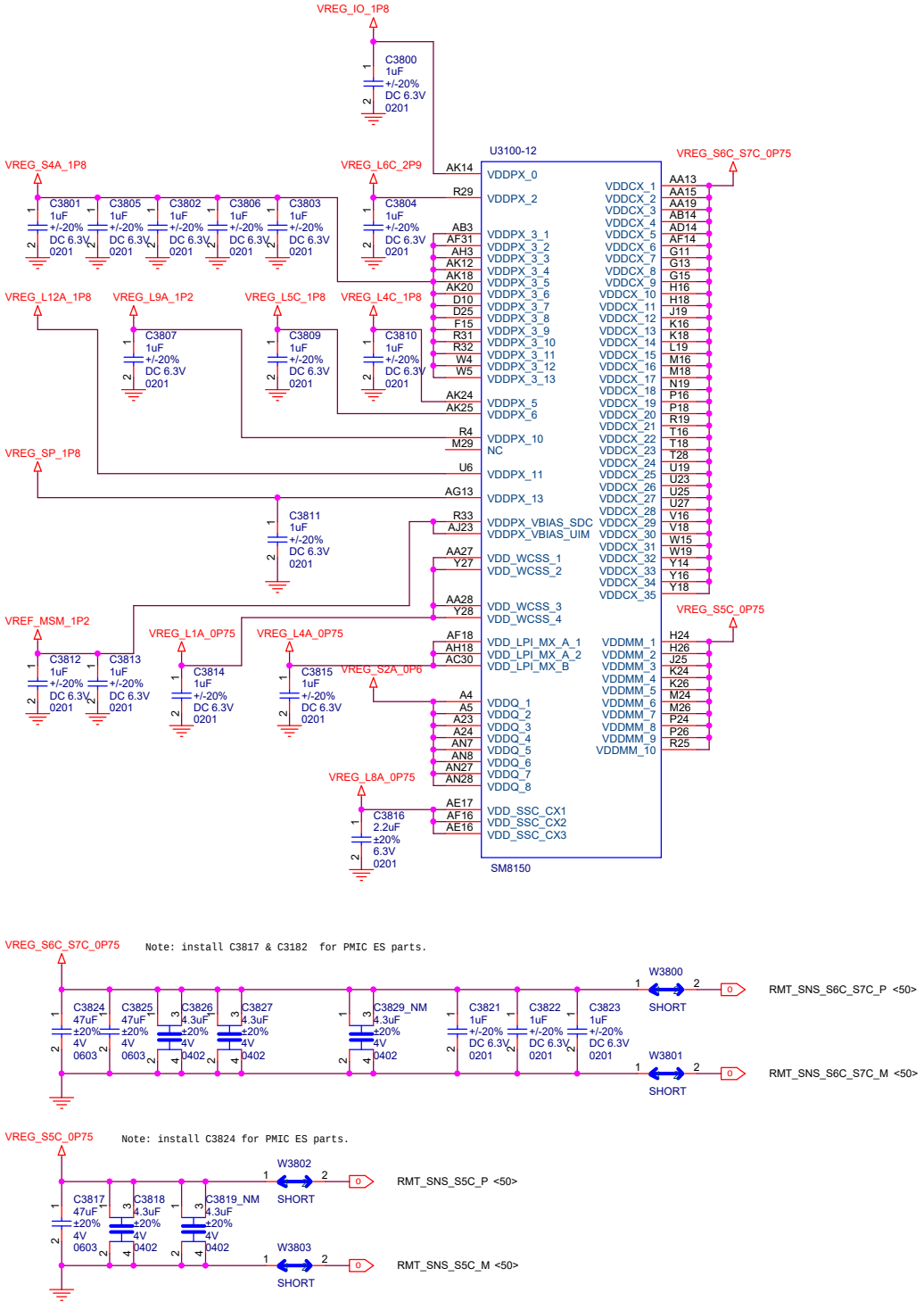


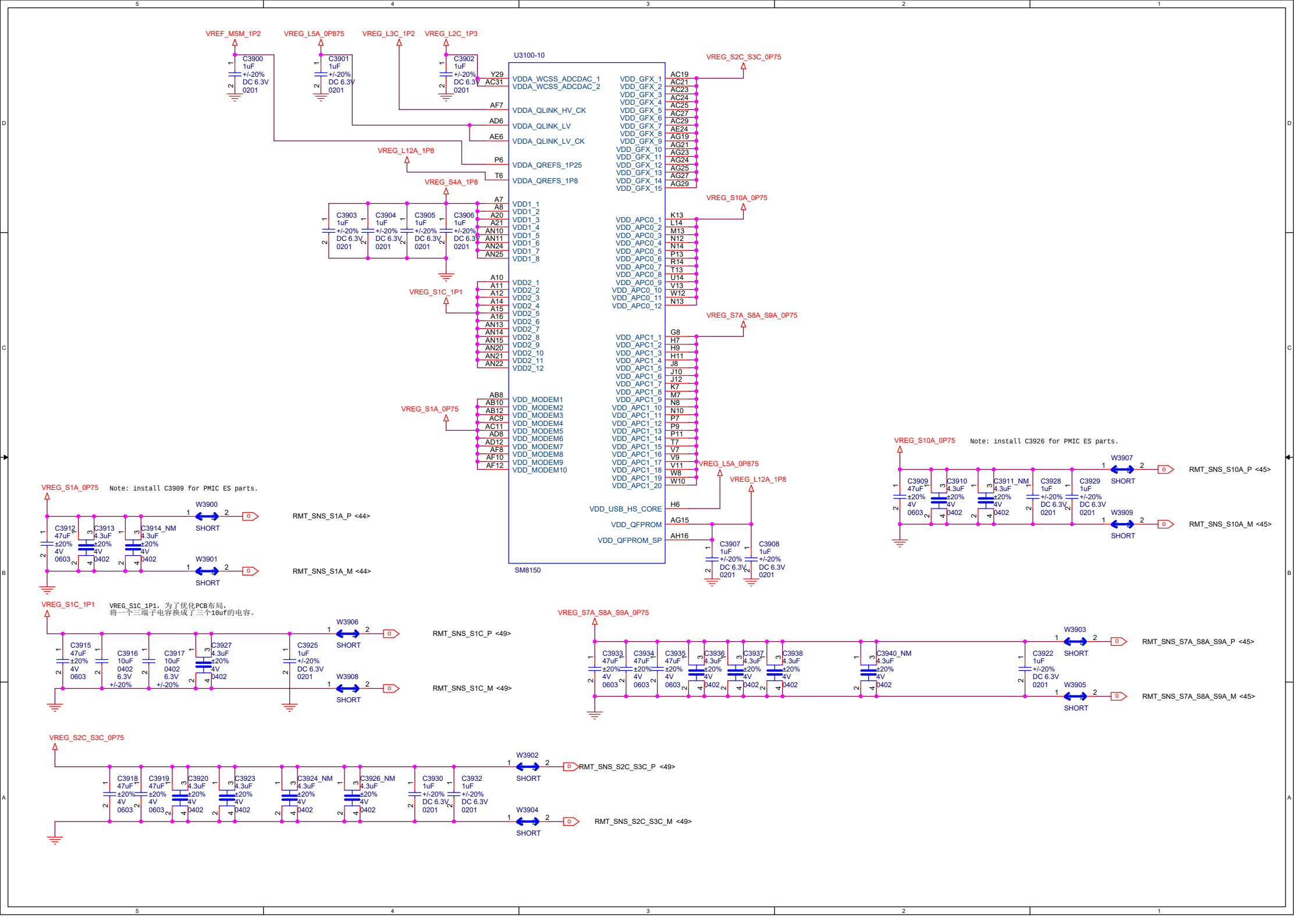
Note: RF_XO_CLK will use PM855_RF_XO_CLK_DIV by default once validated by Qualcomm.
Use WL_BB_PLL_REF_CLK_OUT by default until notified in future revision.

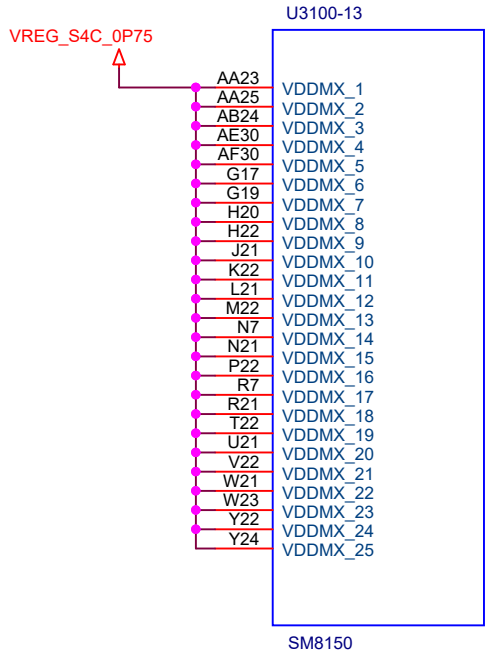


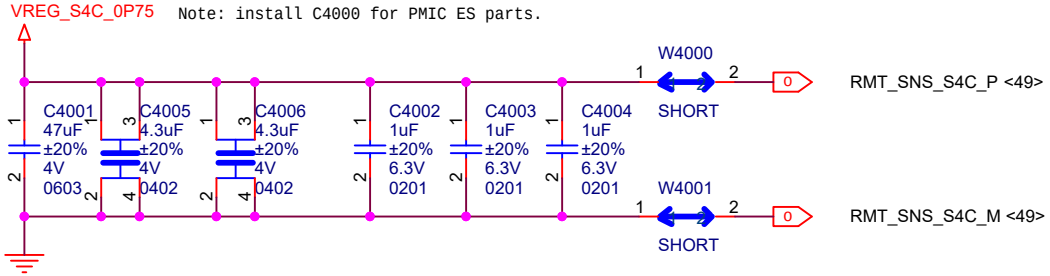

U3100-11
SM8150
VREG_S3A_0P8
VREG_S2A_0P6
VREG_L3C_1P2
VREG_L12A_1P8
VREG_L2A_3P1
VREG_L1A_0P75
VREG_L5A_0P875
F9 VDDA_EBI0_1
F10 VDDA_EBI0_2
F23 VDDA_EBI1_1
F24 VDDA_EBI1_2
AH9
AH10 VDDA_EBI2_1
AH26 VDDA_EBI2_2
AH27 VDDA_EBI3_1
VDDA_EBI3_2
F12
AH12 VDDA_CC_EBI01
VDDA_CC_EBI23
E6 VDDIO_EBI0_1
E7 VDDIO_EBI0_2
E8 VDDIO_EBI0_3
E9 VDDIO_EBI0_4
E23 VDDIO_EBI1_1
E24 VDDIO_EBI1_2
E25 VDDIO_EBI1_3
F25 VDDIO_EBI1_4
AJ6
AJ7 VDDIO_EBI2_1
AJ8 VDDIO_EBI2_2
AJ9 VDDIO_EBI2_3
AJ26 VDDIO_EBI2_4
AJ27 VDDIO_EBI3_1
AJ28 VDDIO_EBI3_2
AJ29 VDDIO_EBI3_3
VDDIO_EBI3_4
D9
E26 VDDIO_CK_EBI0
AK8 VDDIO_CK_EBI1
AK28 VDDIO_CK_EBI2
VDDIO_CK_EBI3
F16 VDDA_PLL_HV_CC_EBI01
AJ15 VDDA_PLL_HV_CC_EBI23
F8 VDDA_HV_EBI0
F26 VDDA_HV_EBI1
AH7 VDDA_HV_EBI2
AH29 VDDA_HV_EBI3
H13 VDDA_APC_CS_1P8
AD18 VDDA_GFX_CS_1P8
VDDA_REFGEN_1P2 M28
U28 VDDA_PCIE1_PLL_1P2
V28 VDDA_PCIE0_PLL_1P2
VDDA_UFS1_1P2 M6
VDDA_USB2_SS_1P2 F7
VDDA_USB1_SS_DP_1P2 K6
VDDA_CSI_1P2 H28
VDDA_DSI_1P2 F20
VDDA_USB_HS_1P8 F5
VDDA_USB_HS_3P1 G6
VDDA_WCSS_PLL AB29
VDDA_UFS1_CORE_1 M4
VDDA_UFS1_CORE_2 M5
VDDA_PCIE1_CORE U29
VDDA_PCIE0_CORE V29
VDDA_QREFS_0P875 L29
VDDA_USB2_SS_CORE F6
VDDA_USB1_SS_DP_CORE_1 J4
VDDA_USB1_SS_DP_CORE_2 J5
VDDA_DSI0_PLL_0P9 E19
VDDA_DSI1_PLL_0P9 F22
VDDA_CSI0_0P9 K29
VDDA_CSI1_0P9 J29
VDDA_CSI2_0P9 H29
VDDA_CSI3_0P9 G29
VDDA_DSI0_0P9 E20
VDDA_DSI1_0P9 E21
VDDA_SP_SENSOR AJ13
C3700 1uF +/-20% DC 6.3V 0201
C3701 1uF +/-20% DC 6.3V 0201
C3702 1uF +/-20% DC 6.3V 0201
C3703 1uF +/-20% DC 6.3V 0201
C3704 1uF +/-20% DC 6.3V 0201
C3705 1uF +/-20% DC 6.3V 0201
C3706 1uF +/-20% DC 6.3V 0201
C3707 1uF +/-20% DC 6.3V 0201
C3708 1uF +/-20% DC 6.3V 0201
C3709 1uF +/-20% DC 6.3V 0201
C3710 1uF +/-20% DC 6.3V 0201
C3711 1uF +/-20% DC 6.3V 0201
C3712 1uF +/-20% DC 6.3V 0201
C3713 1uF +/-20% DC 6.3V 0201
C3714 1uF +/-20% DC 6.3V 0201

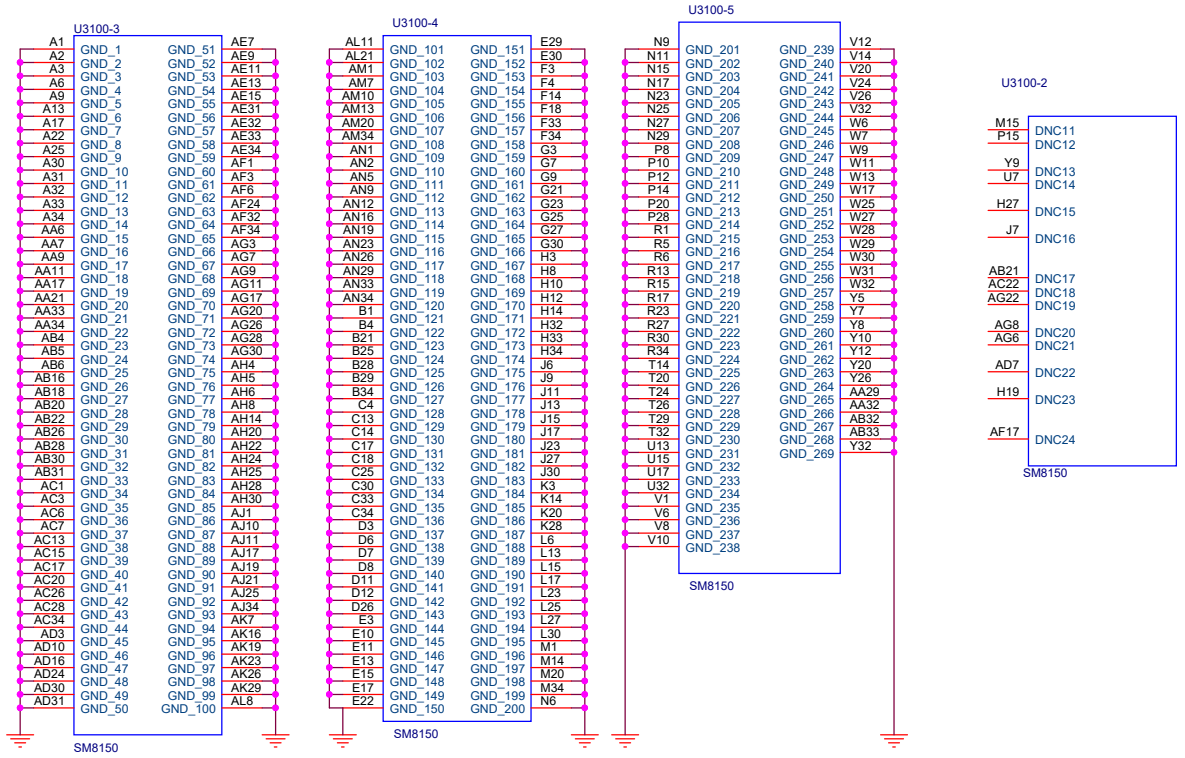

VREG_S3A_0P8
VREG_S2A_0P6
C3724 47uF ±20% 4V 0603
C3725 4.3uF ±20% 4V 0402
C3726_NM 4.3uF ±20% 4V 0402
C3717 1uF +/-20% DC 6.3V 0201
C3718 1uF +/-20% DC 6.3V 0201
C3719 1uF +/-20% DC 6.3V 0201
C3727 47uF ±20% 4V 0603
C3728 4.3uF ±20% 4V 0402
C3729_NM 4.3uF ±20% 4V 0402
C3722 1uF +/-20% DC 6.3V 0201
C3723 1uF +/-20% DC 6.3V 0201
W3700 SHORT
W3701 SHORT
W3702 SHORT
W3703 SHORT
RMT_SNS_S3A_P <44>
RMT_SNS_S3A_M <44>
RMT_SNS_S2A_P <44>
RMT_SNS_S2A_M <44>


VREG_IO_1P8
C3800 1uF +/-20% DC 6.3V 0201
U3100-12
VREG_S4A_1P8
VREG_L6C_2P9
VREG_S6C_S7C_0P75
C3801 1uF +/-20% DC 6.3V 0201
C3805 1uF +/-20% DC 6.3V 0201
C3802 1uF +/-20% DC 6.3V 0201
C3806 1uF +/-20% DC 6.3V 0201
C3803 1uF +/-20% DC 6.3V 0201
C3804 1uF +/-20% DC 6.3V 0201
AK14 VDDPX_0
R29 VDDPX_2
AB3 VDDPX_3_1
AF31 VDDPX_3_2
AH3 VDDPX_3_3
AK12 VDDPX_3_4
AK18 VDDPX_3_5
AK20 VDDPX_3_6
D10 VDDPX_3_7
D25 VDDPX_3_8
F15 VDDPX_3_9
R31 VDDPX_3_10
R32 VDDPX_3_11
W4 VDDPX_3_12
W5 VDDPX_3_13
AK24 VDDPX_5
AK25 VDDPX_6
R4 VDDPX_10
M29 NC
U6 VDDPX_11
AG13 VDDPX_13
R33 VDDPX_VBIAS_SDC
AJ23 VDDPX_VBIAS_UIM
AA27 VDD_WCSS_1
Y27 VDD_WCSS_2
AA28 VDD_WCSS_3
Y28 VDD_WCSS_4
AF18 VDD_LPI_MX_A_1
AH18 VDD_LPI_MX_A_2
AC30 VDD_LPI_MX_B
A4 VDDQ_1
A5 VDDQ_2
A23 VDDQ_3
A24 VDDQ_4
AN7 VDDQ_5
AN8 VDDQ_6
AN27 VDDQ_7
AN28 VDDQ_8
AE17 VDD_SSC_CX1
AF16 VDD_SSC_CX2
AE16 VDD_SSC_CX3
SM8150
AA13 VDDCX_1
AA15 VDDCX_2
AA19 VDDCX_3
AB14 VDDCX_4
AD14 VDDCX_5
AF14 VDDCX_6
G11 VDDCX_7
G13 VDDCX_8
G15 VDDCX_9
H16 VDDCX_10
H18 VDDCX_11
J19 VDDCX_12
K16 VDDCX_13
K18 VDDCX_14
L19 VDDCX_15
M16 VDDCX_16
M18 VDDCX_17
N19 VDDCX_18
P16 VDDCX_19
P18 VDDCX_20
R19 VDDCX_21
T16 VDDCX_22
T18 VDDCX_23
T28 VDDCX_24
U19 VDDCX_25
U23 VDDCX_26
U25 VDDCX_27
U27 VDDCX_28
V16 VDDCX_29
V18 VDDCX_30
W15 VDDCX_31
W19 VDDCX_32
Y14 VDDCX_33
Y16 VDDCX_34
Y18 VDDCX_35
VREG_L12A_1P8
VREG_L9A_1P2
VREG_L5C_1P8
VREG_L4C_1P8
C3807 1uF +/-20% DC 6.3V 0201
C3809 1uF +/-20% DC 6.3V 0201
C3810 1uF +/-20% DC 6.3V 0201
VREG_SP_1P8
C3811 1uF +/-20% DC 6.3V 0201
VREF_MSM_1P2
VREG_L1A_0P75
VREG_L4A_0P75
VREG_S2A_0P6
VREG_S5C_0P75
C3812 1uF +/-20% DC 6.3V 0201
C3813 1uF +/-20% DC 6.3V 0201
C3814 1uF +/-20% DC 6.3V 0201
C3815 1uF +/-20% DC 6.3V 0201
H24 VDDMM_1
H26 VDDMM_2
J25 VDDMM_3
K24 VDDMM_4
K26 VDDMM_5
M24 VDDMM_6
M26 VDDMM_7
P24 VDDMM_8
P26 VDDMM_9
R25 VDDMM_10
VREG_L8A_0P75
C3816 2.2uF ±20% 6.3V 0201
VREG_S6C_S7C_0P75
Note: install C3817 & C3182 for PMIC ES parts.
C3824 47uF ±20% 4V 0603
C3825 47uF ±20% 4V 0603
C3826 4.3uF ±20% 4V 0402
C3827 4.3uF ±20% 4V 0402
C3829_NM 4.3uF ±20% 4V 0402
C3821 1uF +/-20% DC 6.3V 0201
C3822 1uF +/-20% DC 6.3V 0201
C3823 1uF +/-20% DC 6.3V 0201
W3800 SHORT
W3801 SHORT
RMT_SNS_S6C_S7C_P <50>
RMT_SNS_S6C_S7C_M <50>
VREG_S5C_0P75
Note: install C3824 for PMIC ES parts.
C3817 47uF ±20% 4V 0603
C3818 4.3uF ±20% 4V 0402
C3819_NM 4.3uF ±20% 4V 0402
W3802 SHORT
W3803 SHORT
RMT_SNS_S5C_P <50>
RMT_SNS_S5C_M <50>


VREF_MSM_1P2
VREG_L5A_0P875
VREG_L3C_1P2
VREG_L2C_1P3
C3900 1uF +/-20% DC 6.3V 0201
C3901 1uF +/-20% DC 6.3V 0201
C3902 1uF +/-20% DC 6.3V 0201
U3100-10
VDDA_WCSS_ADCDAC_1
VDDA_WCSS_ADCDAC_2
VDDA_QLINK_HV_CK
VDDA_QLINK_LV
VDDA_QLINK_LV_CK
VDDA_QREFS_1P25
VDDA_QREFS_1P8
VREG_L12A_1P8
VREG_S4A_1P8
C3903 1uF +/-20% DC 6.3V 0201
C3904 1uF +/-20% DC 6.3V 0201
C3905 1uF +/-20% DC 6.3V 0201
C3906 1uF +/-20% DC 6.3V 0201
VDD1_1
VDD1_2
VDD1_3
VDD1_4
VDD1_5
VDD1_6
VDD1_7
VDD1_8
VREG_S1C_1P1
VDD2_1
VDD2_2
VDD2_3
VDD2_4
VDD2_5
VDD2_6
VDD2_7
VDD2_8
VDD2_9
VDD2_10
VDD2_11
VDD2_12
VREG_S1A_0P75
VDD_MODEM1
VDD_MODEM2
VDD_MODEM3
VDD_MODEM4
VDD_MODEM5
VDD_MODEM6
VDD_MODEM7
VDD_MODEM8
VDD_MODEM9
VDD_MODEM10
VDD_GFX_1
VDD_GFX_2
VDD_GFX_3
VDD_GFX_4
VDD_GFX_5
VDD_GFX_6
VDD_GFX_7
VDD_GFX_8
VDD_GFX_9
VDD_GFX_10
VDD_GFX_11
VDD_GFX_12
VDD_GFX_13
VDD_GFX_14
VDD_GFX_15
VREG_S2C_S3C_0P75
VDD_APC0_1
VDD_APC0_2
VDD_APC0_3
VDD_APC0_4
VDD_APC0_5
VDD_APC0_6
VDD_APC0_7
VDD_APC0_8
VDD_APC0_9
VDD_APC0_10
VDD_APC0_11
VDD_APC0_12
VREG_S10A_0P75
VDD_APC1_1
VDD_APC1_2
VDD_APC1_3
VDD_APC1_4
VDD_APC1_5
VDD_APC1_6
VDD_APC1_7
VDD_APC1_8
VDD_APC1_9
VDD_APC1_10
VDD_APC1_11
VDD_APC1_12
VDD_APC1_13
VDD_APC1_14
VDD_APC1_15
VDD_APC1_16
VDD_APC1_17
VDD_APC1_18
VDD_APC1_19
VDD_APC1_20
VREG_S7A_S8A_S9A_0P75
VDD_USB_HS_CORE
VDD_QFPROM
VDD_QFPROM_SP
VREG_L5A_0P875
VREG_L12A_1P8
C3907 1uF +/-20% DC 6.3V 0201
C3908 1uF +/-20% DC 6.3V 0201
SM8150
VREG_S1A_0P75
Note: install C3909 for PMIC ES parts.
C3912 47uF ±20% 4V 0603
C3913 4.3uF ±20% 4V 0402
C3914_NM 4.3uF ±20% 4V 0402
W3900 SHORT
W3901 SHORT
RMT_SNS_S1A_P <44>
RMT_SNS_S1A_M <44>
VREG_S10A_0P75
Note: install C3926 for PMIC ES parts.
C3909 47uF ±20% 4V 0603
C3910 4.3uF ±20% 4V 0402
C3911_NM 4.3uF ±20% 4V 0402
C3928 1uF +/-20% DC 6.3V 0201
C3929 1uF +/-20% DC 6.3V 0201
W3907 SHORT
W3909 SHORT
RMT_SNS_S10A_P <45>
RMT_SNS_S10A_M <45>
VREG_S1C_1P1
VREG_S1C_1P1，为了优化PCB布局，
将一个三端子电容换成了三个10uf的电容。
C3915 47uF ±20% 4V 0603
C3916 10uF 0402 6.3V +/-20%
C3917 10uF 0402 6.3V +/-20%
C3927 4.3uF ±20% 4V 0402
C3925 1uF +/-20% DC 6.3V 0201
W3906 SHORT
W3908 SHORT
RMT_SNS_S1C_P <49>
RMT_SNS_S1C_M <49>
VREG_S7A_S8A_S9A_0P75
C3933 47uF ±20% 4V 0603
C3934 47uF ±20% 4V 0603
C3935 47uF ±20% 4V 0603
C3936 4.3uF ±20% 4V 0402
C3937 4.3uF ±20% 4V 0402
C3938 4.3uF ±20% 4V 0402
C3940_NM 4.3uF ±20% 4V 0402
C3922 1uF +/-20% DC 6.3V 0201
W3903 SHORT
W3905 SHORT
RMT_SNS_S7A_S8A_S9A_P <45>
RMT_SNS_S7A_S8A_S9A_M <45>
VREG_S2C_S3C_0P75
C3918 47uF ±20% 4V 0603
C3919 47uF ±20% 4V 0603
C3920 4.3uF ±20% 4V 0402
C3923 4.3uF ±20% 4V 0402
C3924_NM 4.3uF ±20% 4V 0402
C3926_NM 4.3uF ±20% 4V 0402
C3930 1uF +/-20% DC 6.3V 0201
C3932 1uF +/-20% DC 6.3V 0201
W3902 SHORT
W3904 SHORT
RMT_SNS_S2C_S3C_P <49>
RMT_SNS_S2C_S3C_M <49>


U3100-13
VREG_S4C_0P75
AA23
AA25
AB24
AE30
AF30
G17
G19
H20
H22
J21
K22
L21
M22
N7
N21
P22
R7
R21
T22
U21
V22
W21
W23
Y22
Y24
VDDMX_1
VDDMX_2
VDDMX_3
VDDMX_4
VDDMX_5
VDDMX_6
VDDMX_7
VDDMX_8
VDDMX_9
VDDMX_10
VDDMX_11
VDDMX_12
VDDMX_13
VDDMX_14
VDDMX_15
VDDMX_16
VDDMX_17
VDDMX_18
VDDMX_19
VDDMX_20
VDDMX_21
VDDMX_22
VDDMX_23
VDDMX_24
VDDMX_25
SM8150


VREG_S4C_0P75
Note: install C4000 for PMIC ES parts.
C4001
47uF
±20%
4V
0603
C4005
4.3uF
±20%
4V
0402
C4006
4.3uF
±20%
4V
0402
C4002
1uF
±20%
6.3V
0201
C4003
1uF
±20%
6.3V
0201
C4004
1uF
±20%
6.3V
0201
W4000
SHORT
W4001
SHORT
0
RMT_SNS_S4C_P <49>
RMT_SNS_S4C_M <49>


U3100-3
A1 A2 A3 A6 A9 A13 A17 A22 A25 A30 A31 A32 A33 A34 AA6 AA7 AA9 AA11 AA17 AA21 AA33 AA34 AB4 AB5 AB6 AB16 AB18 AB20 AB22 AB26 AB28 AB30 AB31 AC1 AC3 AC6 AC7 AC13 AC15 AC17 AC20 AC26 AC28 AC34 AD3 AD10 AD16 AD24 AD30 AD31
GND_1 GND_2 GND_3 GND_4 GND_5 GND_6 GND_7 GND_8 GND_9 GND_10 GND_11 GND_12 GND_13 GND_14 GND_15 GND_16 GND_17 GND_18 GND_19 GND_20 GND_21 GND_22 GND_23 GND_24 GND_25 GND_26 GND_27 GND_28 GND_29 GND_30 GND_31 GND_32 GND_33 GND_34 GND_35 GND_36 GND_37 GND_38 GND_39 GND_40 GND_41 GND_42 GND_43 GND_44 GND_45 GND_46 GND_47 GND_48 GND_49 GND_50
GND_51 GND_52 GND_53 GND_54 GND_55 GND_56 GND_57 GND_58 GND_59 GND_60 GND_61 GND_62 GND_63 GND_64 GND_65 GND_66 GND_67 GND_68 GND_69 GND_70 GND_71 GND_72 GND_73 GND_74 GND_75 GND_76 GND_77 GND_78 GND_79 GND_80 GND_81 GND_82 GND_83 GND_84 GND_85 GND_86 GND_87 GND_88 GND_89 GND_90 GND_91 GND_92 GND_93 GND_94 GND_95 GND_96 GND_97 GND_98 GND_99 GND_100
AE7 AE9 AE11 AE13 AE15 AE31 AE32 AE33 AE34 AF1 AF3 AF6 AF24 AF32 AF34 AG3 AG7 AG9 AG11 AG17 AG20 AG26 AG28 AG30 AH4 AH5 AH6 AH8 AH14 AH20 AH22 AH24 AH25 AH28 AH30 AJ1 AJ10 AJ11 AJ17 AJ19 AJ21 AJ25 AJ34 AK7 AK16 AK19 AK23 AK26 AK29 AL8
SM8150
U3100-4
AL11 AL21 AM1 AM7 AM10 AM13 AM20 AM34 AN1 AN2 AN5 AN9 AN12 AN16 AN19 AN23 AN26 AN29 AN33 AN34 B1 B4 B21 B25 B28 B29 B34 C4 C13 C14 C17 C18 C25 C30 C33 C34 D3 D6 D7 D8 D11 D12 D26 E3 E10 E11 E13 E15 E17 E22
GND_101 GND_102 GND_103 GND_104 GND_105 GND_106 GND_107 GND_108 GND_109 GND_110 GND_111 GND_112 GND_113 GND_114 GND_115 GND_116 GND_117 GND_118 GND_119 GND_120 GND_121 GND_122 GND_123 GND_124 GND_125 GND_126 GND_127 GND_128 GND_129 GND_130 GND_131 GND_132 GND_133 GND_134 GND_135 GND_136 GND_137 GND_138 GND_139 GND_140 GND_141 GND_142 GND_143 GND_144 GND_145 GND_146 GND_147 GND_148 GND_149 GND_150
GND_151 GND_152 GND_153 GND_154 GND_155 GND_156 GND_157 GND_158 GND_159 GND_160 GND_161 GND_162 GND_163 GND_164 GND_165 GND_166 GND_167 GND_168 GND_169 GND_170 GND_171 GND_172 GND_173 GND_174 GND_175 GND_176 GND_177 GND_178 GND_179 GND_180 GND_181 GND_182 GND_183 GND_184 GND_185 GND_186 GND_187 GND_188 GND_189 GND_190 GND_191 GND_192 GND_193 GND_194 GND_195 GND_196 GND_197 GND_198 GND_199 GND_200
E29 E30 F3 F4 F14 F18 F33 F34 G3 G7 G9 G21 G23 G25 G27 G30 H3 H8 H10 H12 H14 H32 H33 H34 J6 J9 J11 J13 J15 J17 J23 J27 J30 K3 K14 K20 K28 L6 L13 L15 L17 L23 L25 L27 L30 M1 M14 M20 M34 N6
SM8150
U3100-5
N9 N11 N15 N17 N23 N25 N27 N29 P8 P10 P12 P14 P20 P28 R1 R5 R6 R13 R15 R17 R23 R27 R30 R34 T14 T20 T24 T26 T29 T32 U13 U15 U17 U32 V1 V6 V8 V10
GND_201 GND_202 GND_203 GND_204 GND_205 GND_206 GND_207 GND_208 GND_209 GND_210 GND_211 GND_212 GND_213 GND_214 GND_215 GND_216 GND_217 GND_218 GND_219 GND_220 GND_221 GND_222 GND_223 GND_224 GND_225 GND_226 GND_227 GND_228 GND_229 GND_230 GND_231 GND_232 GND_233 GND_234 GND_235 GND_236 GND_237 GND_238
GND_239 GND_240 GND_241 GND_242 GND_243 GND_244 GND_245 GND_246 GND_247 GND_248 GND_249 GND_250 GND_251 GND_252 GND_253 GND_254 GND_255 GND_256 GND_257 GND_258 GND_259 GND_260 GND_261 GND_262 GND_263 GND_264 GND_265 GND_266 GND_267 GND_268 GND_269
V12 V14 V20 V24 V26 V32 W6 W7 W9 W11 W13 W17 W25 W27 W28 W29 W30 W31 W32 Y5 Y7 Y8 Y10 Y12 Y20 Y26 AA29 AA32 AB32 AB33 Y32
SM8150
U3100-2
M15 P15 Y9 U7 H27 J7 AB21 AC22 AG22 AG8 AG6 AD7 H19 AF17
DNC11 DNC12 DNC13 DNC14 DNC15 DNC16 DNC17 DNC18 DNC19 DNC20 DNC21 DNC22 DNC23 DNC24
SM8150

Critical Layout Guidelines for Clocks
Coupling to any RFCLK or LNBBCLK output from each aggressor should be < 50 fF.
1. SMPS components (Buck, Boost, Charger)
2. VSW_Sx traces (Buck, Boost, Charger)
3. All other RFCLK, LNBBCLK
4. Any high speed digital signal
5. Any other noisy signals

Trace from pin to cap and ONE dedicated via from cap to main ground plane.
Do NOT connect to any other ground.

AVDD_BYP should be routed
away from noisy traces

Layout Note:
No trace shall be present in at-least two immediate layers below XTAL

Y4200
HOT2 SENSOR GND HOT1
38.4MHz

U4200-2
PM8150

GND_WLP_TST 61
XTAL_IN_1 1
XTAL_IN_2 2
XTAL_OUT_1 10
XTAL_OUT_2 11
CBL_PWR_N 117
KPD_PWR_N 108
PON_RESET_N 129
PS_HOLD 110
RESIN_N 109
FAULT_N 118
SPMI_CLK 102
SPMI_DATA 93
VDD_LDO_XO_RF 59
RF_CLK1 42
RF_CLK2 41
RF_CLK3 51
LN_BB_CLK1 40
LN_BB_CLK2 50
LN_BB_CLK3 60
XO_THERM 53
GND_XOADC 43

AVDD_BYP 80
DVDD_BYP 89
TEST_EN_VPP 92
VPH_PWR 99
VIO_IN 136
VIO_OUT 70
VCOIN 154
VREF_MSM 73
VREG_SP 33
SLEEP_CLK 83
VREG_RF_CLK 30
GND_RF 49
VREG_XO 29
GND_XO 20
REF_BYP 87
REF_GND 78
AMUX_1 34
AMUX_2 24

<55> AUTO_ON_N
<53,62> PHONE_ON_N
<32> MSM_RESIN_N
<32> MSM_PS_HOLD
<62> PM_RESIN_N
<48,53> PM_FAULT_N
<32,48,53> PMIC_SPMI_CLK
<32,48,53> PMIC_SPMI_DATA
<14> SDR_XO_IN
<43> PM855_RF_CLK2
<32> LN_BB_CLK1
<59> LN_BB_CLK_WCD
<23> LN_BB_CLK3_NFC
SLEEP_CLK <25,32>
QUIET_THERM <43>

VPH_PWR
VREG_S4A_1P8
VCOIN
VREF_MSM_1P2
VREG_IO_1P8
VREG_SP_1P8

C4201 1uF ±20% 6.3V 0201
C4200 1uF ±20% 6.3V 0201
C4202 10uF +/-20% 6.3V 0402
C4203 NM 0201
C4204 10uF +/-20% 6.3V 0402
C4205 1uF ±20% 6.3V 0201
C4206 NM 0402
C4207 1uF ±20% 6.3V 0201
C4208 100nF +/-10% 6.3V 0201
C4209 1nF +/-5% 25V 0201
C4210 10uF +/-20% 6.3V 0402
C4211 47uF +/-20% 6.3V 0603
C4216 NM 0201
R4200 0R ±5% 0201
W4201 SHORT

Dedicated trace from REF_BYP to cap.
Dedicated trace from REF_GND to cap.
Dedicated via to main ground plane right under REF_GND pin
or as close to the pin as possible.
Do NOT add via at C4208

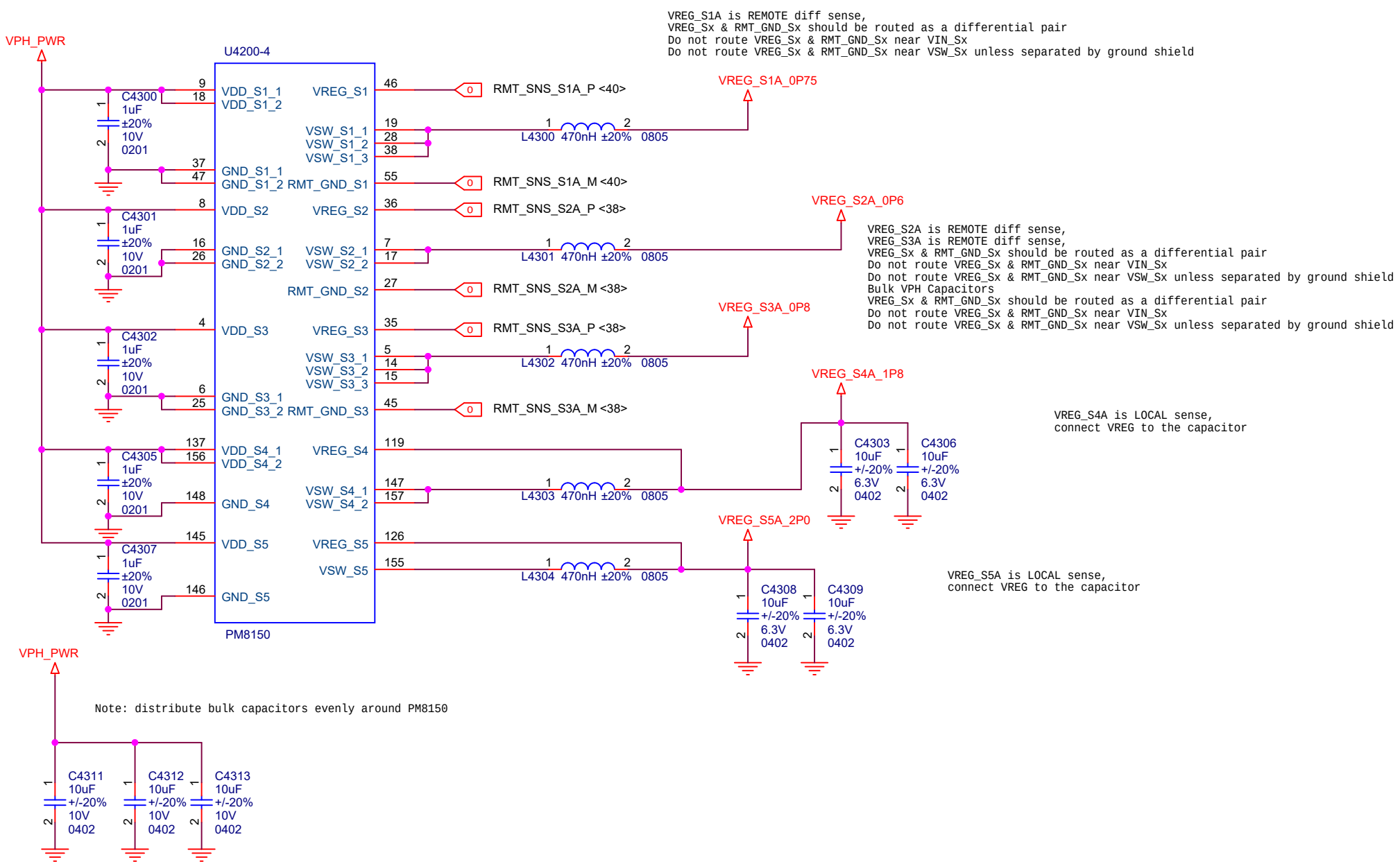
REF_BYP and REF_GND should be
routed away from noisy traces

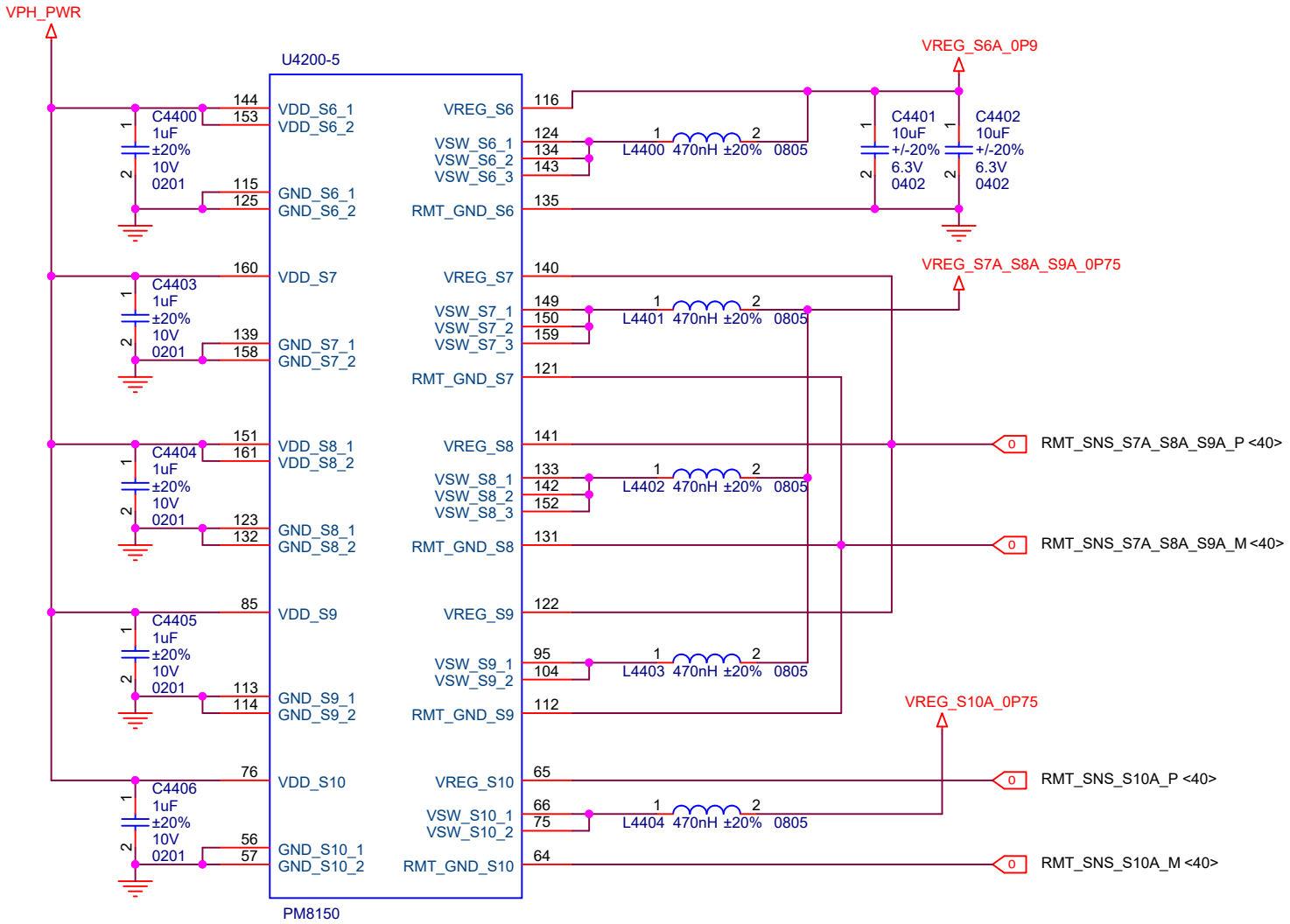
GND_XOADC
Skinny trace to XTAL components ground.
One dedicated via to main ground place as close to PMIC pin as possible

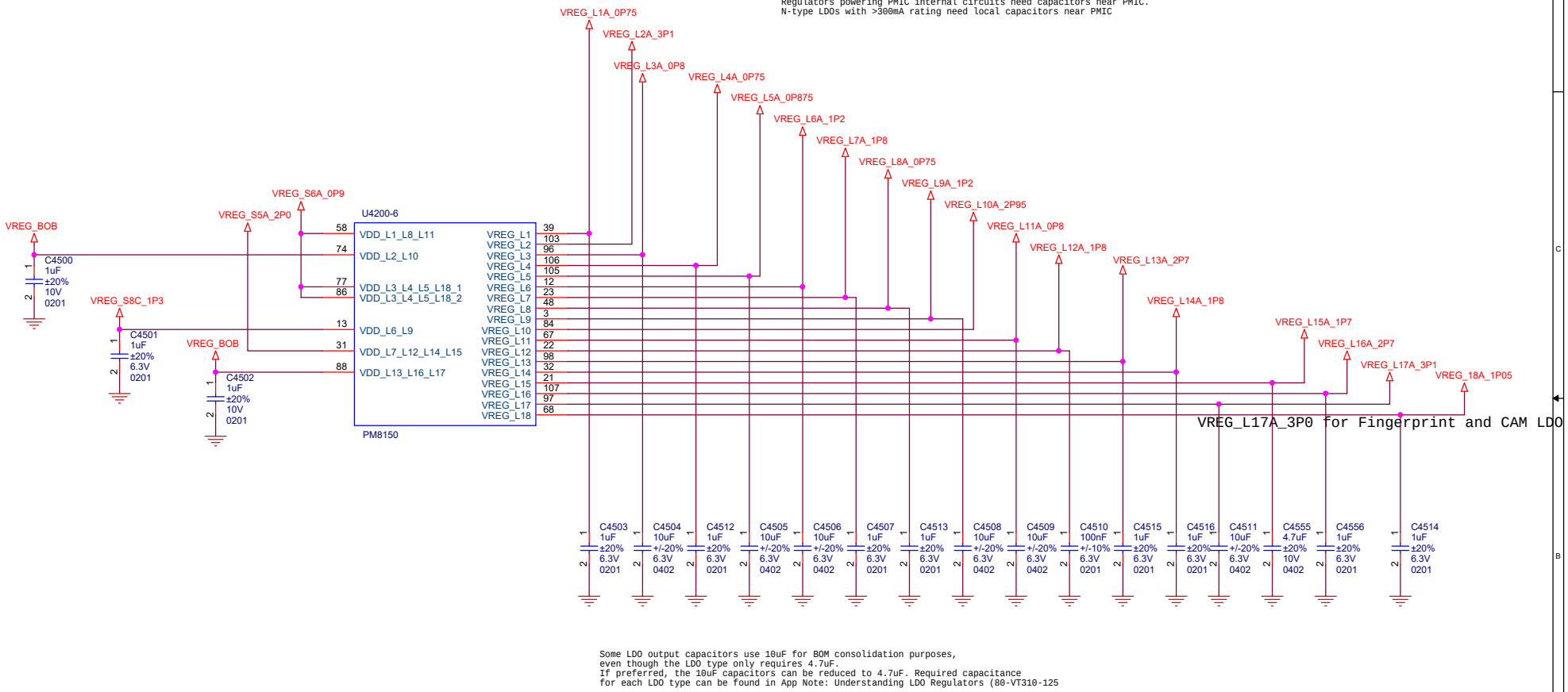
Critical Layout Guidelines for VREG_XO
Short, dedicated route to VREG_XO cap,
away from noisy signals and dedicated via to main ground plane at cap.
Do NOT connect to any other ground except the main GND plane

<43> PM855_RF_CLK2
R4201 0R ±5% 0201
RF_CLK2_WLAN <25>

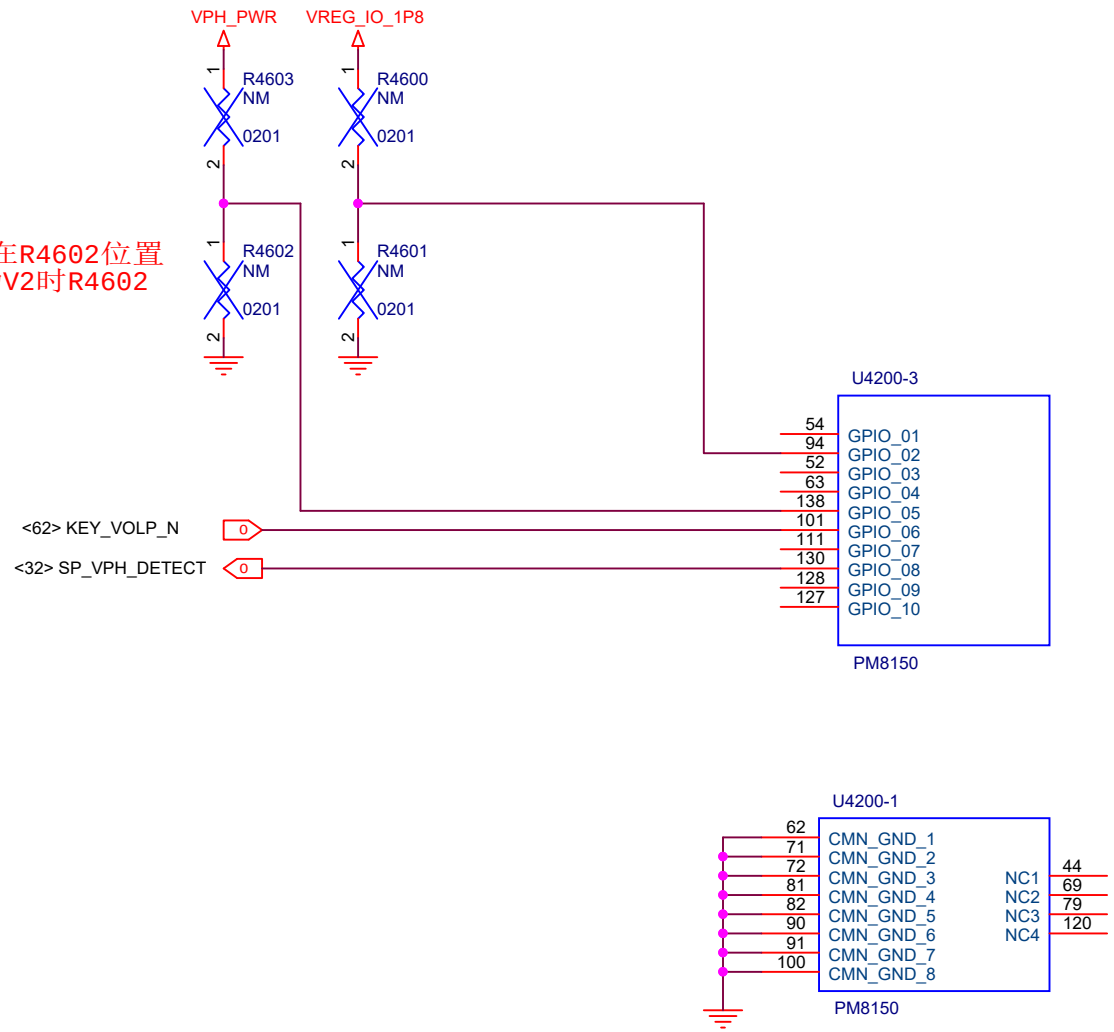
R4204 100K ±1% 0201
PLACE R4204 TO A COOL PLACE

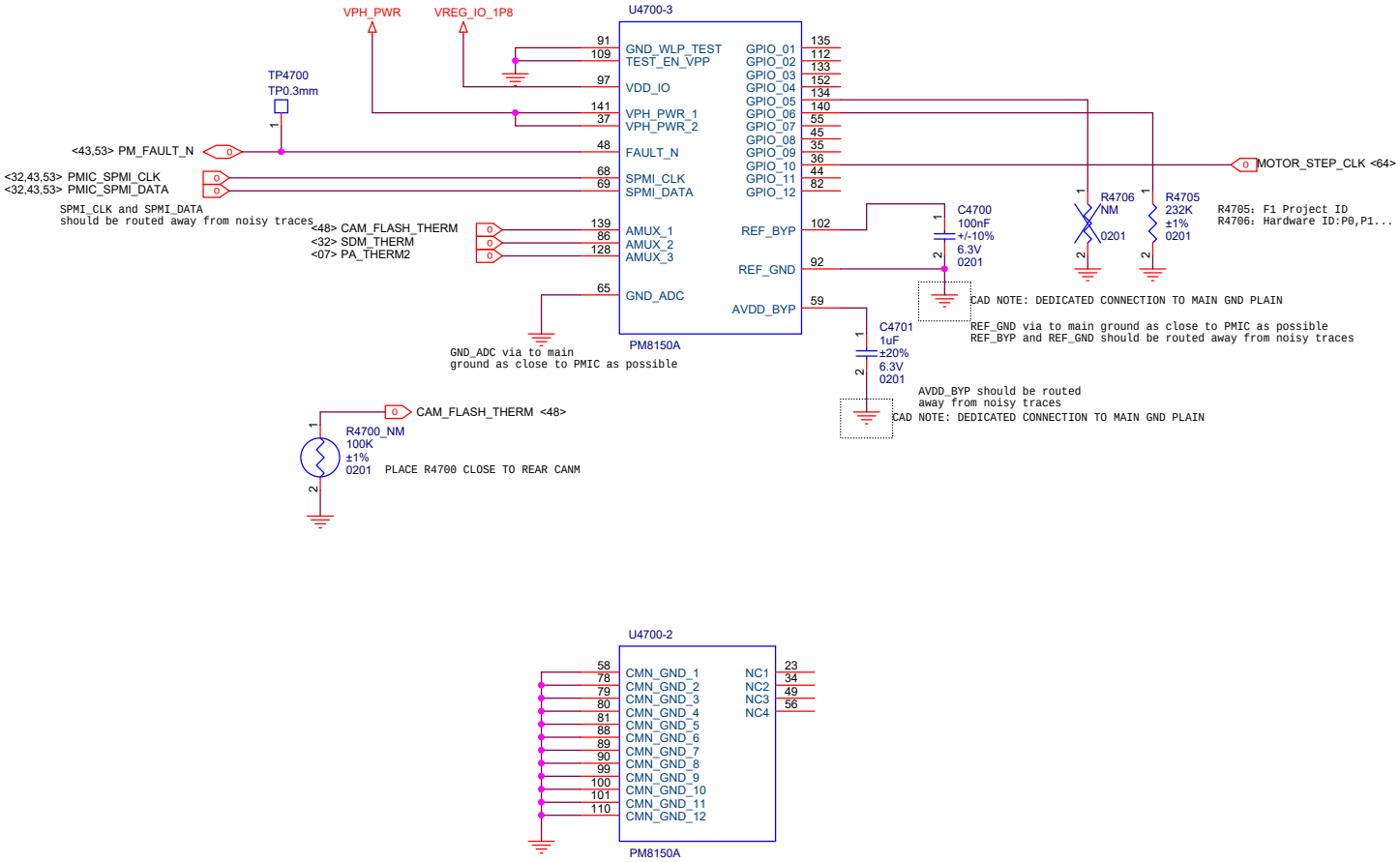

VREG_S1A is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
VPH_PWR
U4200-4
VDD_S1_1
VDD_S1_2
VREG_S1
VSW_S1_1
VSW_S1_2
VSW_S1_3
GND_S1_1
GND_S1_2
RMT_GND_S1
VDD_S2
VREG_S2
GND_S2_1
GND_S2_2
VSW_S2_1
VSW_S2_2
RMT_GND_S2
VDD_S3
VREG_S3
VSW_S3_1
VSW_S3_2
VSW_S3_3
GND_S3_1
GND_S3_2
RMT_GND_S3
VDD_S4_1
VDD_S4_2
VREG_S4
VSW_S4_1
VSW_S4_2
GND_S4
VDD_S5
VREG_S5
VSW_S5
GND_S5
PM8150
C4300 1uF ±20% 10V 0201
C4301 1uF ±20% 10V 0201
C4302 1uF ±20% 10V 0201
C4305 1uF ±20% 10V 0201
C4307 1uF ±20% 10V 0201
RMT_SNS_S1A_P <40>
RMT_SNS_S1A_M <40>
RMT_SNS_S2A_P <38>
RMT_SNS_S2A_M <38>
RMT_SNS_S3A_P <38>
RMT_SNS_S3A_M <38>
L4300 470nH ±20% 0805
L4301 470nH ±20% 0805
L4302 470nH ±20% 0805
L4303 470nH ±20% 0805
L4304 470nH ±20% 0805
VREG_S1A_0P75
VREG_S2A_0P6
VREG_S3A_0P8
VREG_S4A_1P8
VREG_S5A_2P0
C4303 10uF +/-20% 6.3V 0402
C4306 10uF +/-20% 6.3V 0402
C4308 10uF +/-20% 6.3V 0402
C4309 10uF +/-20% 6.3V 0402
VREG_S2A is REMOTE diff sense,
VREG_S3A is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
Bulk VPH Capacitors
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
VREG_S4A is LOCAL sense,
connect VREG to the capacitor
VREG_S5A is LOCAL sense,
connect VREG to the capacitor
VPH_PWR
Note: distribute bulk capacitors evenly around PM8150
C4311 10uF +/-20% 10V 0402
C4312 10uF +/-20% 10V 0402
C4313 10uF +/-20% 10V 0402

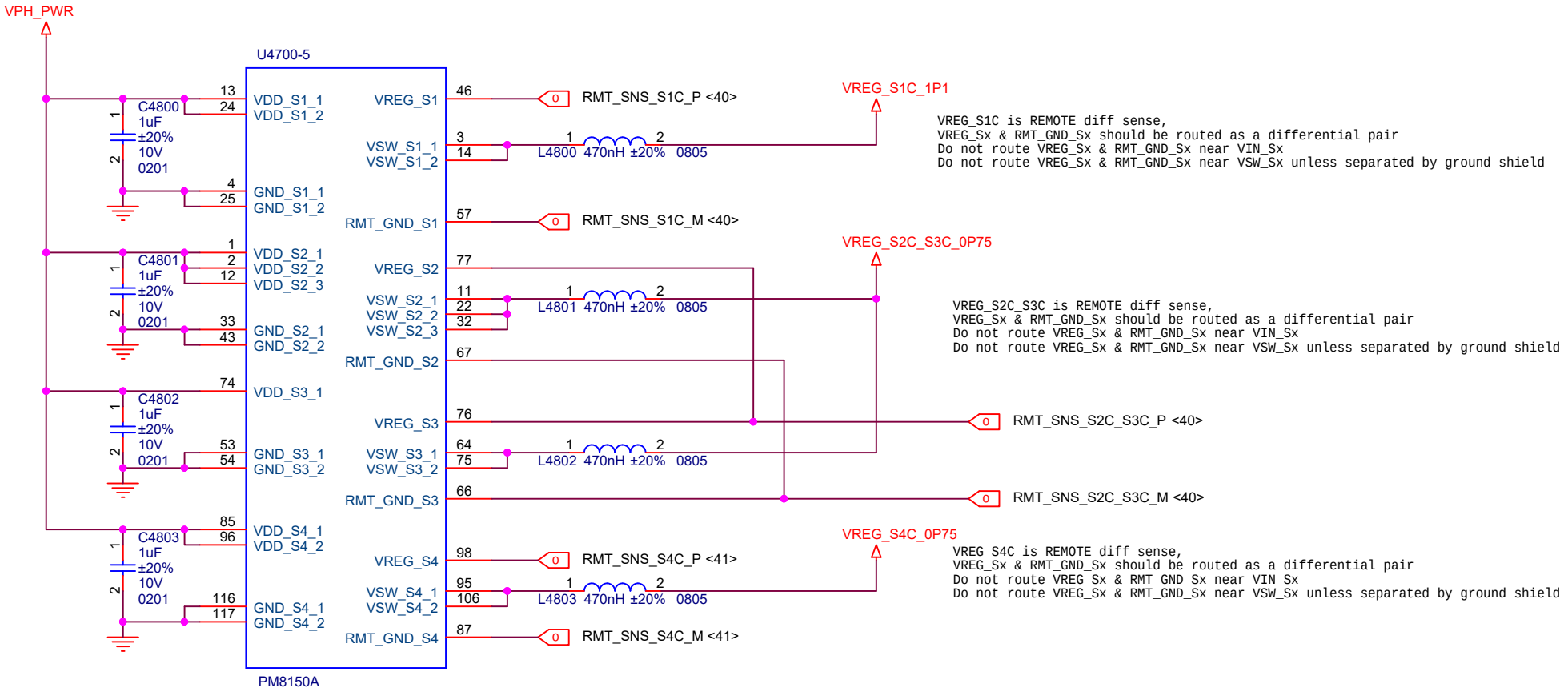

VPH_PWR
U4200-5
VDD_S6_1
VDD_S6_2
GND_S6_1
GND_S6_2
VDD_S7
GND_S7_1
GND_S7_2
VDD_S8_1
VDD_S8_2
GND_S8_1
GND_S8_2
VDD_S9
GND_S9_1
GND_S9_2
VDD_S10
GND_S10_1
GND_S10_2
VREG_S6
VSW_S6_1
VSW_S6_2
VSW_S6_3
RMT_GND_S6
VREG_S7
VSW_S7_1
VSW_S7_2
VSW_S7_3
RMT_GND_S7
VREG_S8
VSW_S8_1
VSW_S8_2
VSW_S8_3
RMT_GND_S8
VREG_S9
VSW_S9_1
VSW_S9_2
RMT_GND_S9
VREG_S10
VSW_S10_1
VSW_S10_2
RMT_GND_S10
PM8150
C4400
1uF
±20%
10V
0201
C4403
C4404
C4405
C4406
L4400 470nH ±20% 0805
L4401 470nH ±20% 0805
L4402 470nH ±20% 0805
L4403 470nH ±20% 0805
L4404 470nH ±20% 0805
C4401
10uF
+/-20%
6.3V
0402
C4402
VREG_S6A_0P9
VREG_S7A_S8A_S9A_0P75
VREG_S10A_0P75
RMT_SNS_S7A_S8A_S9A_P <40>
RMT_SNS_S7A_S8A_S9A_M <40>
RMT_SNS_S10A_P <40>
RMT_SNS_S10A_M <40>

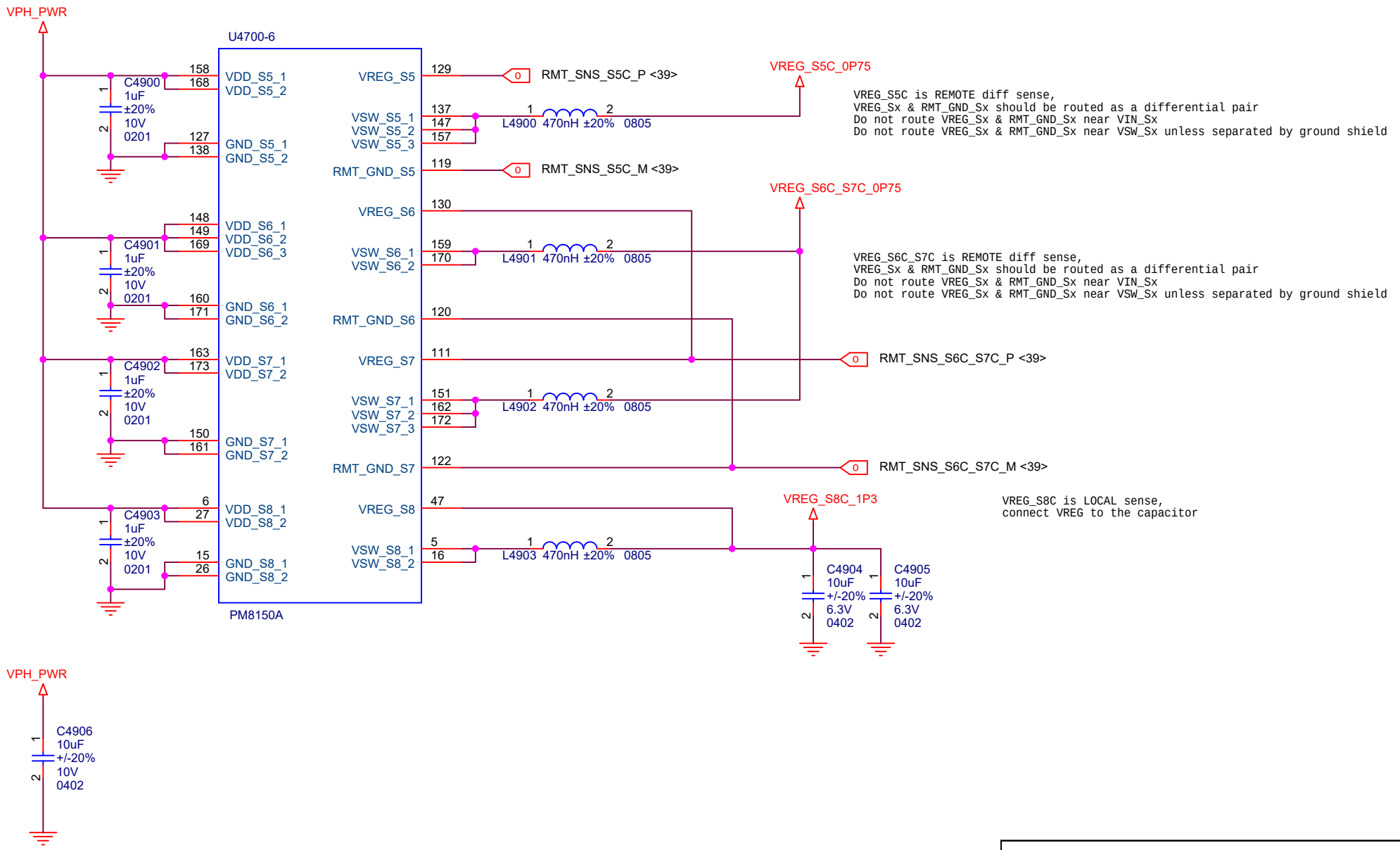

P-type LDOs are psuedo-capless, capacitors can be placed near load.
Regulators powering PMIC internal circuits need capacitors near PMIC.
N-type LDOs with >300mA rating need local capacitors near PMIC
U4200-6
PM8150
VREG_BOB
VREG_S6A_0P9
VREG_S5A_2P0
VREG_S8C_1P3
VREG_BOB
VDD_L1_L8_L11
VDD_L2_L10
VDD_L3_L4_L5_L18_1
VDD_L3_L4_L5_L18_2
VDD_L6_L9
VDD_L7_L12_L14_L15
VDD_L13_L16_L17
VREG_L1
VREG_L2
VREG_L3
VREG_L4
VREG_L5
VREG_L6
VREG_L7
VREG_L8
VREG_L9
VREG_L10
VREG_L11
VREG_L12
VREG_L13
VREG_L14
VREG_L15
VREG_L16
VREG_L17
VREG_L18
VREG_L1A_0P75
VREG_L2A_3P1
VREG_L3A_0P8
VREG_L4A_0P75
VREG_L5A_0P875
VREG_L6A_1P2
VREG_L7A_1P8
VREG_L8A_0P75
VREG_L9A_1P2
VREG_L10A_2P95
VREG_L11A_0P8
VREG_L12A_1P8
VREG_L13A_2P7
VREG_L14A_1P8
VREG_L15A_1P7
VREG_L16A_2P7
VREG_L17A_3P1
VREG_18A_1P05
VREG_L17A_3P0 for Fingerprint and CAM LDO
C4500 1uF ±20% 10V 0201
C4501 1uF ±20% 6.3V 0201
C4502 1uF ±20% 10V 0201
C4503 1uF ±20% 6.3V 0201
C4504 10uF +/-20% 6.3V 0402
C4512 1uF ±20% 6.3V 0201
C4505 10uF +/-20% 6.3V 0402
C4506 10uF +/-20% 6.3V 0402
C4507 1uF ±20% 6.3V 0201
C4513 1uF ±20% 6.3V 0201
C4508 10uF +/-20% 6.3V 0402
C4509 10uF +/-20% 6.3V 0402
C4510 100nF +/-10% 6.3V 0201
C4515 1uF ±20% 6.3V 0201
C4516 1uF ±20% 6.3V 0201
C4511 10uF +/-20% 6.3V 0402
C4555 4.7uF ±20% 10V 0402
C4556 1uF ±20% 6.3V 0201
C4514 1uF ±20% 6.3V 0201
Some LDO output capacitors use 10uF for BOM consolidation purposes,
even though the LDO type only requires 4.7uF.
If preferred, the 10uF capacitors can be reduced to 4.7uF. Required capacitance
for each LDO type can be found in App Note: Understanding LDO Regulators (80-VT310-125

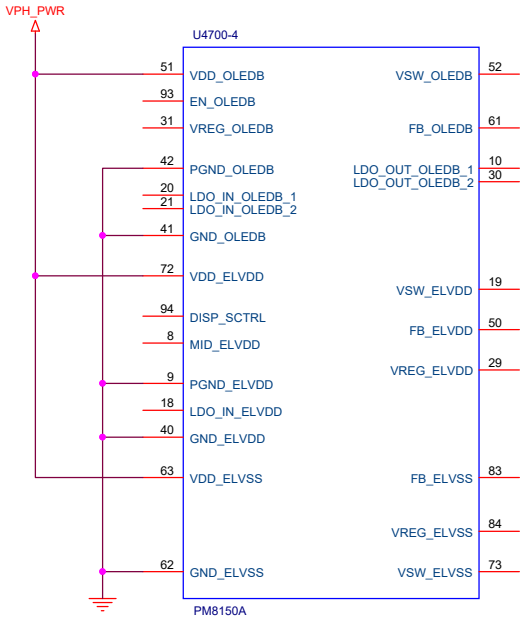
当使用PM8150 V3时需要在R4602位置贴0R电阻，目前ES芯片为V2时R4602不贴

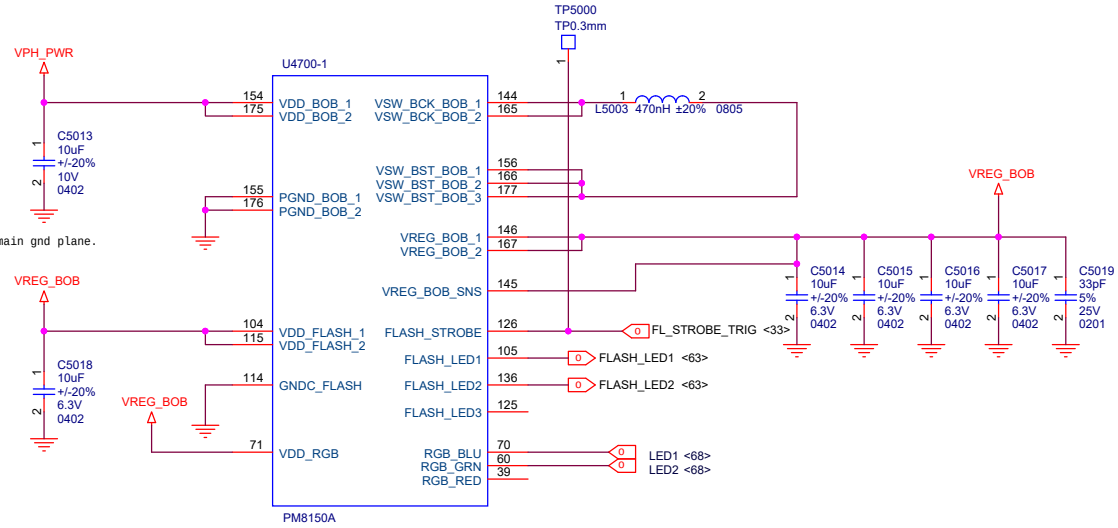



VPH_PWR
VREG_IO_1P8
U4700-3
TP4700
TP0.3mm
<43,53> PM_FAULT_N
<32,43,53> PMIC_SPMI_CLK
<32,43,53> PMIC_SPMI_DATA
SPMI_CLK and SPMI_DATA
should be routed away from noisy traces
<48> CAM_FLASH_THERM
<32> SDM_THERM
<07> PA_THERM2
GND_ADC via to main
ground as close to PMIC as possible
GND_WLP_TEST
TEST_EN_VPP
VDD_IO
VPH_PWR_1
VPH_PWR_2
FAULT_N
SPMI_CLK
SPMI_DATA
AMUX_1
AMUX_2
AMUX_3
GND_ADC
GPIO_01
GPIO_02
GPIO_03
GPIO_04
GPIO_05
GPIO_06
GPIO_07
GPIO_08
GPIO_09
GPIO_10
GPIO_11
GPIO_12
REF_BYP
REF_GND
AVDD_BYP
PM8150A
MOTOR_STEP_CLK <64>
C4700
100nF
+/-10%
6.3V
0201
R4706
NM
0201
R4705
232K
±1%
0201
R4705: F1 Project ID
R4706: Hardware ID:P0,P1...
CAD NOTE: DEDICATED CONNECTION TO MAIN GND PLAIN
REF_GND via to main ground as close to PMIC as possible
REF_BYP and REF_GND should be routed away from noisy traces
C4701
1uF
±20%
6.3V
0201
AVDD_BYP should be routed
away from noisy traces
CAD NOTE: DEDICATED CONNECTION TO MAIN GND PLAIN
CAM_FLASH_THERM <48>
R4700_NM
100K
±1%
0201
PLACE R4700 CLOSE TO REAR CANM
U4700-2
CMN_GND_1
CMN_GND_2
CMN_GND_3
CMN_GND_4
CMN_GND_5
CMN_GND_6
CMN_GND_7
CMN_GND_8
CMN_GND_9
CMN_GND_10
CMN_GND_11
CMN_GND_12
NC1
NC2
NC3
NC4
PM8150A

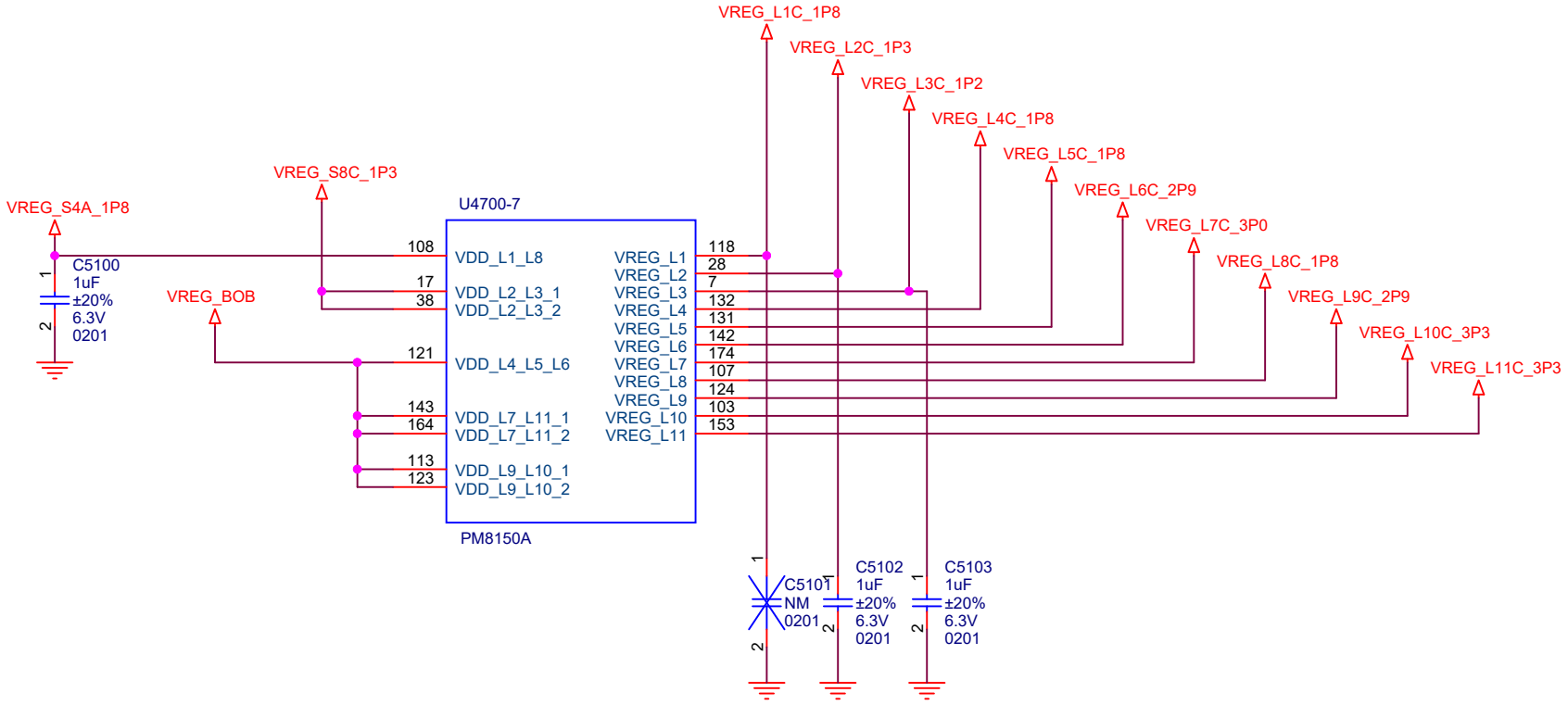

VPH_PWR
U4700-5
PM8150A
C4800
1uF
±20%
10V
0201
C4801
1uF
±20%
10V
0201
C4802
1uF
±20%
10V
0201
C4803
1uF
±20%
10V
0201
13
24
4
25
1
2
12
33
43
74
53
54
85
96
116
117
VDD_S1_1
VDD_S1_2
GND_S1_1
GND_S1_2
VDD_S2_1
VDD_S2_2
VDD_S2_3
GND_S2_1
GND_S2_2
VDD_S3_1
GND_S3_1
GND_S3_2
VDD_S4_1
VDD_S4_2
GND_S4_1
GND_S4_2
VREG_S1
VSW_S1_1
VSW_S1_2
RMT_GND_S1
VREG_S2
VSW_S2_1
VSW_S2_2
VSW_S2_3
RMT_GND_S2
VREG_S3
VSW_S3_1
VSW_S3_2
RMT_GND_S3
VREG_S4
VSW_S4_1
VSW_S4_2
RMT_GND_S4
46
3
14
57
77
11
22
32
67
76
64
75
66
98
95
106
87
L4800 470nH ±20% 0805
L4801 470nH ±20% 0805
L4802 470nH ±20% 0805
L4803 470nH ±20% 0805
RMT_SNS_S1C_P <40>
RMT_SNS_S1C_M <40>
RMT_SNS_S2C_S3C_P <40>
RMT_SNS_S2C_S3C_M <40>
RMT_SNS_S4C_P <41>
RMT_SNS_S4C_M <41>
VREG_S1C_1P1
VREG_S2C_S3C_0P75
VREG_S4C_0P75
VREG_S1C is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
VREG_S2C_S3C is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
VREG_S4C is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield

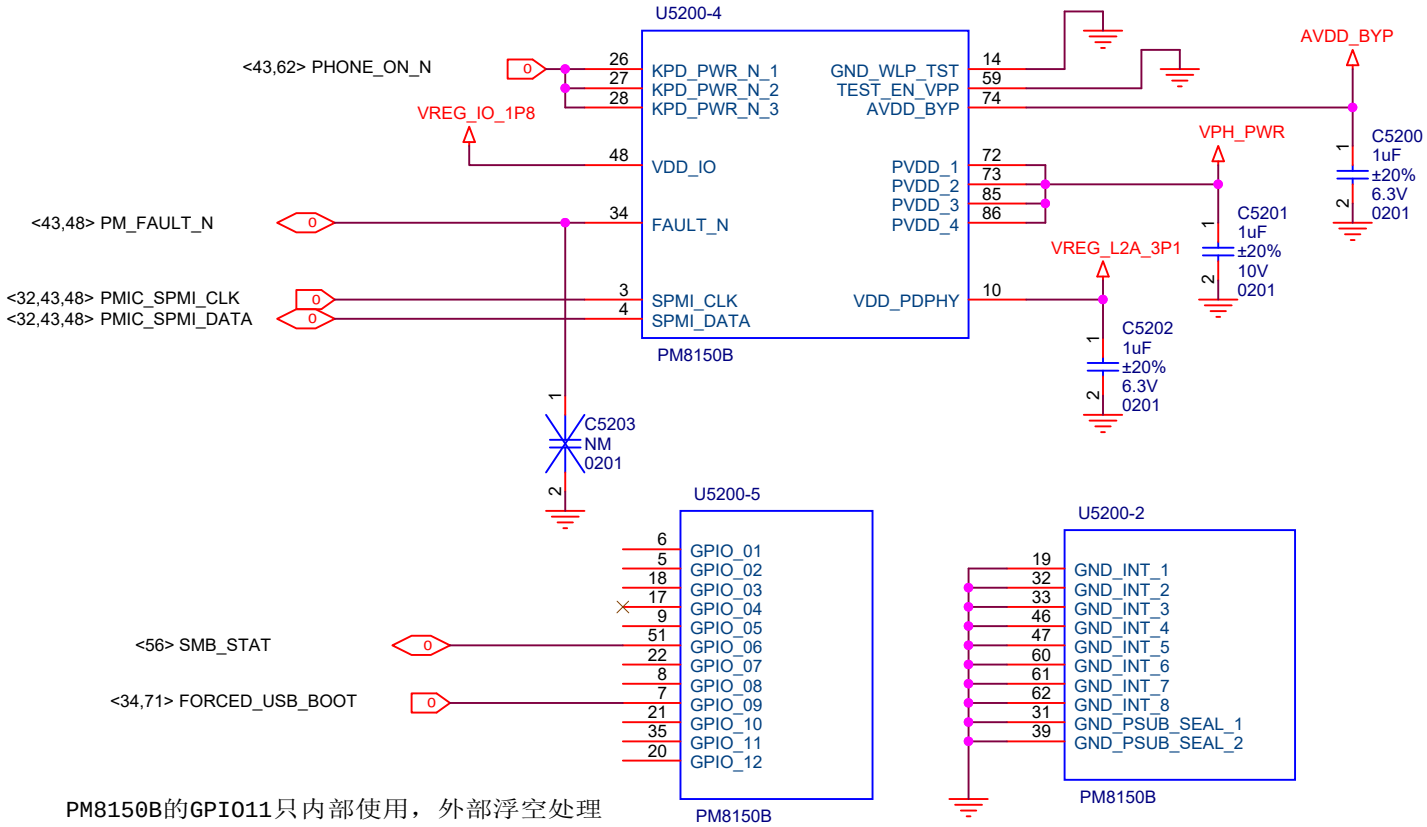

VPH_PWR
U4700-6
C4900
1uF
±20%
10V
0201
C4901
1uF
±20%
10V
0201
C4902
1uF
±20%
10V
0201
C4903
1uF
±20%
10V
0201
158
168
127
138
148
149
169
160
171
163
173
150
161
6
27
15
26
VDD_S5_1
VDD_S5_2
GND_S5_1
GND_S5_2
VDD_S6_1
VDD_S6_2
VDD_S6_3
GND_S6_1
GND_S6_2
VDD_S7_1
VDD_S7_2
GND_S7_1
GND_S7_2
VDD_S8_1
VDD_S8_2
GND_S8_1
GND_S8_2
PM8150A
VREG_S5
VSW_S5_1
VSW_S5_2
VSW_S5_3
RMT_GND_S5
VREG_S6
VSW_S6_1
VSW_S6_2
RMT_GND_S6
VREG_S7
VSW_S7_1
VSW_S7_2
VSW_S7_3
RMT_GND_S7
VREG_S8
VSW_S8_1
VSW_S8_2
129
137
147
157
119
130
159
170
120
111
151
162
172
122
47
5
16
0
RMT_SNS_S5C_P <39>
RMT_SNS_S5C_M <39>
RMT_SNS_S6C_S7C_P <39>
RMT_SNS_S6C_S7C_M <39>
L4900 470nH ±20% 0805
L4901 470nH ±20% 0805
L4902 470nH ±20% 0805
L4903 470nH ±20% 0805
VREG_S5C_0P75
VREG_S6C_S7C_0P75
VREG_S8C_1P3
VREG_S5C is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
VREG_S6C_S7C is REMOTE diff sense,
VREG_Sx & RMT_GND_Sx should be routed as a differential pair
Do not route VREG_Sx & RMT_GND_Sx near VIN_Sx
Do not route VREG_Sx & RMT_GND_Sx near VSW_Sx unless separated by ground shield
VREG_S8C is LOCAL sense,
connect VREG to the capacitor
C4904
10uF
+/-20%
6.3V
0402
C4905
10uF
+/-20%
6.3V
0402
VPH_PWR
C4906
10uF
+/-20%
10V
0402
Date:
Sheet



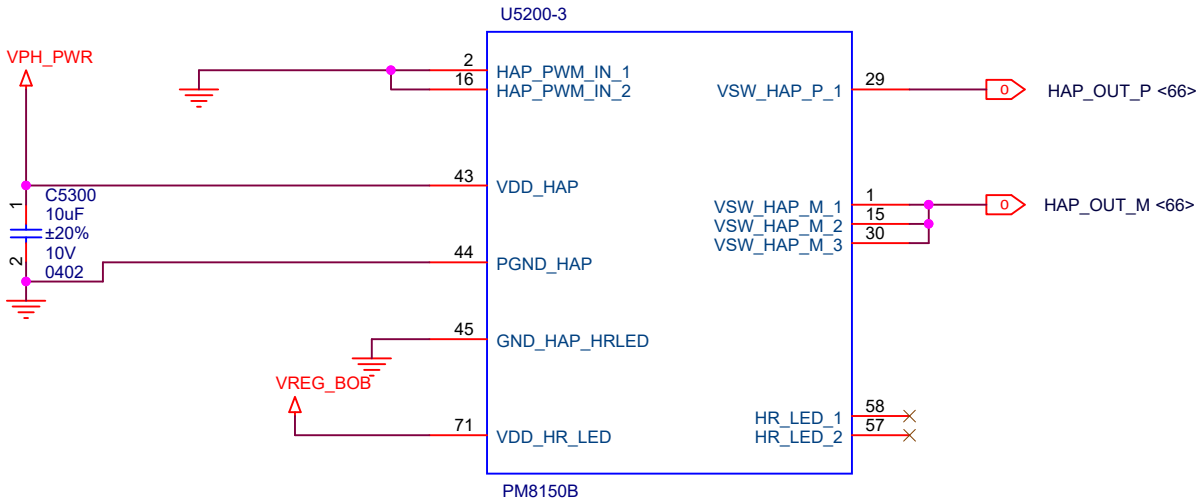


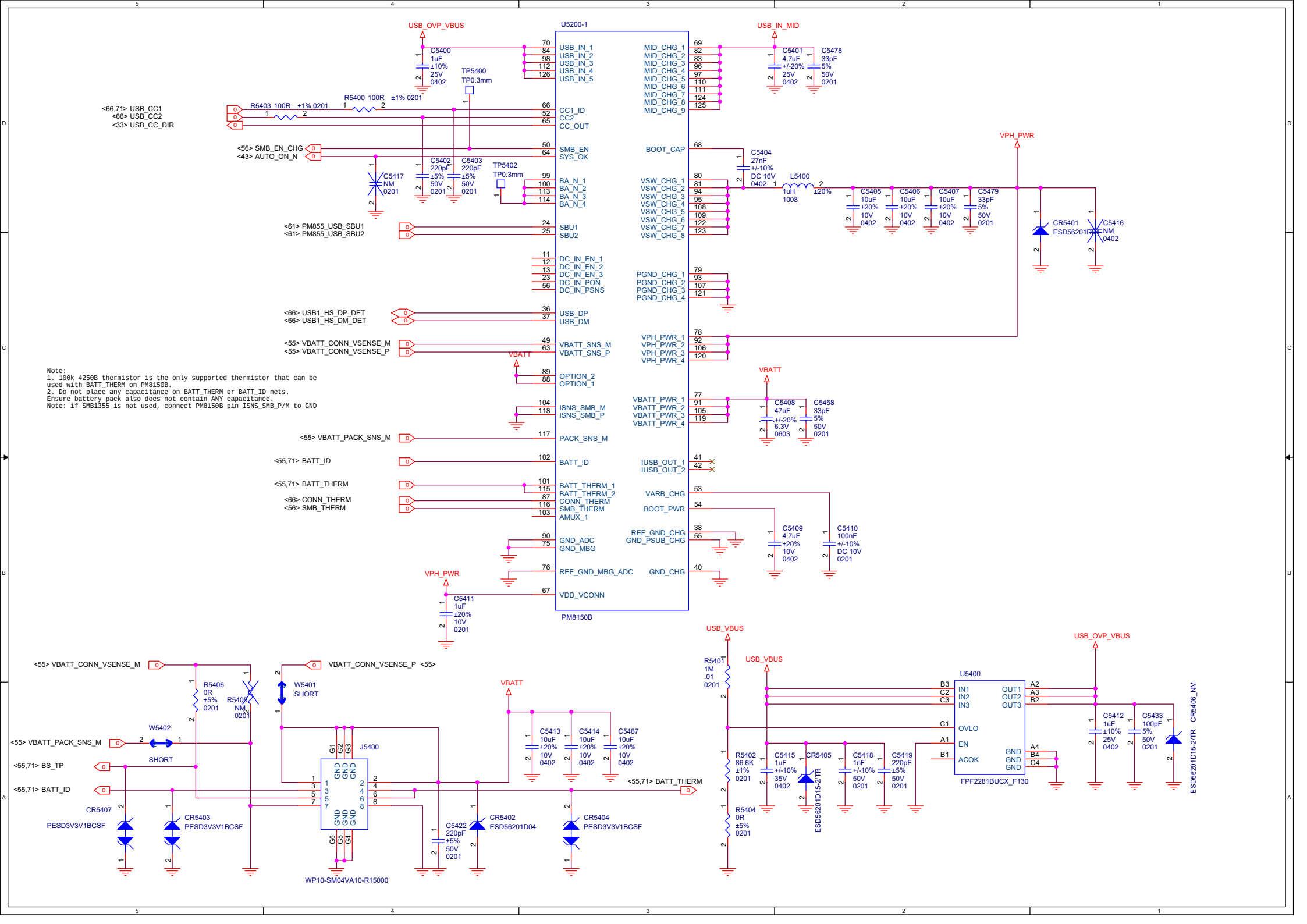
Layout Note:PGND_BOB
Dedicated trace from pin to COUT1 and Cin. Dedicated vias from cap directly to main gnd plane.
Trace and vias should be able to handle 3A of continuous current.
Do NOT connect to any other grounds."

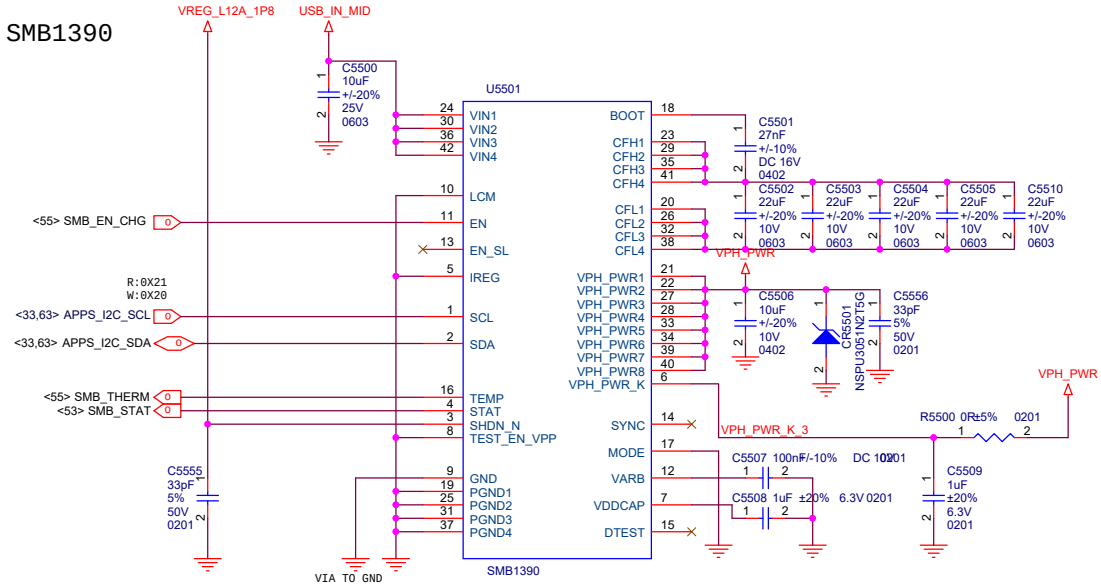

VREG_L1C_1P8
VREG_L2C_1P3
VREG_L3C_1P2
VREG_L4C_1P8
VREG_L5C_1P8
VREG_L6C_2P9
VREG_L7C_3P0
VREG_L8C_1P8
VREG_L9C_2P9
VREG_L10C_3P3
VREG_L11C_3P3
VREG_S8C_1P3
VREG_S4A_1P8
VREG_BOB
U4700-7
108
VDD_L1_L8
17
38
VDD_L2_L3_1
VDD_L2_L3_2
121
VDD_L4_L5_L6
143
164
VDD_L7_L11_1
VDD_L7_L11_2
113
123
VDD_L9_L10_1
VDD_L9_L10_2
VREG_L1
VREG_L2
VREG_L3
VREG_L4
VREG_L5
VREG_L6
VREG_L7
VREG_L8
VREG_L9
VREG_L10
VREG_L11
118
28
7
132
131
142
174
107
124
103
153
PM8150A
C5100
1uF
±20%
6.3V
0201
C5101
NM
0201
C5102
1uF
±20%
6.3V
0201
C5103
1uF
±20%
6.3V
0201

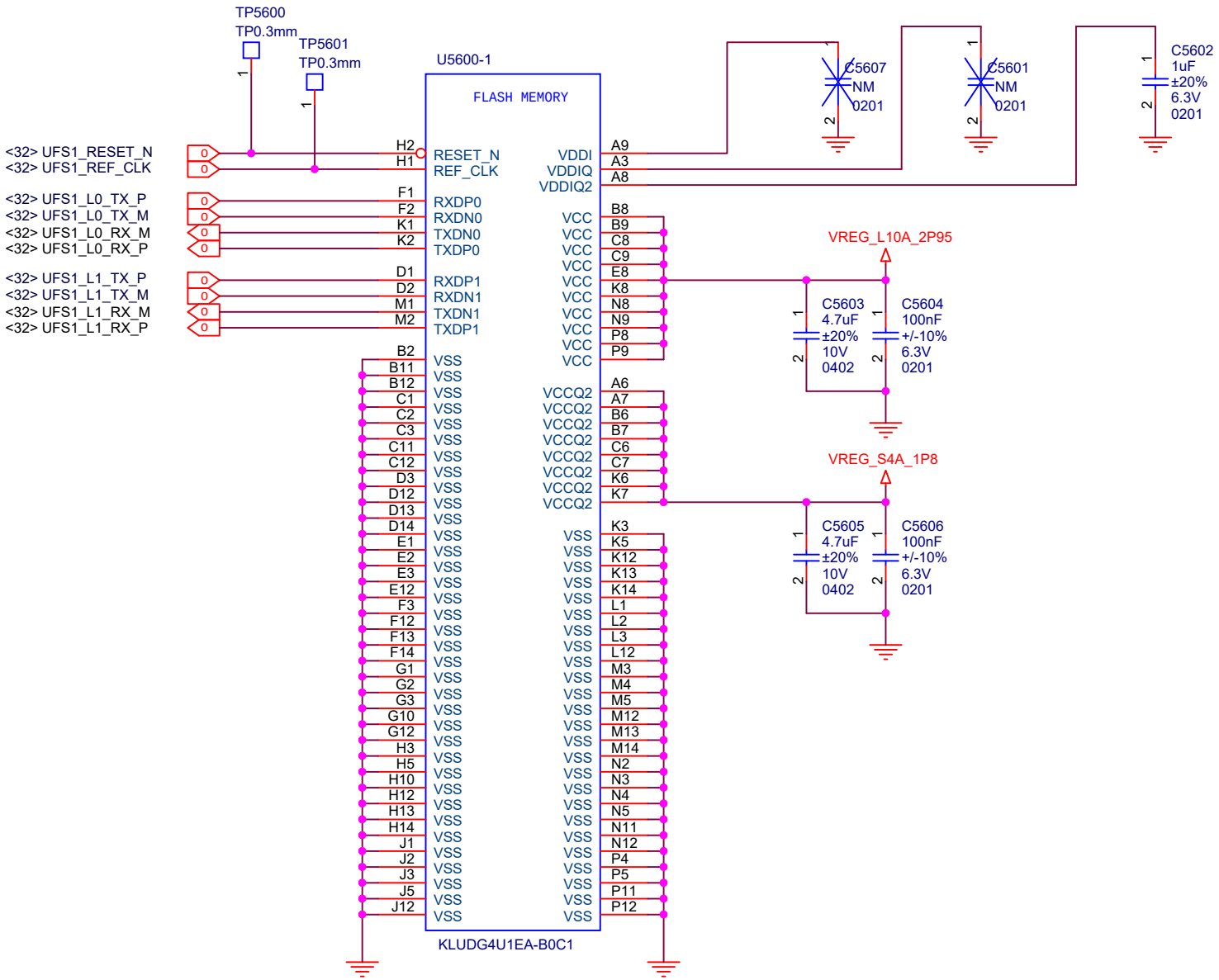


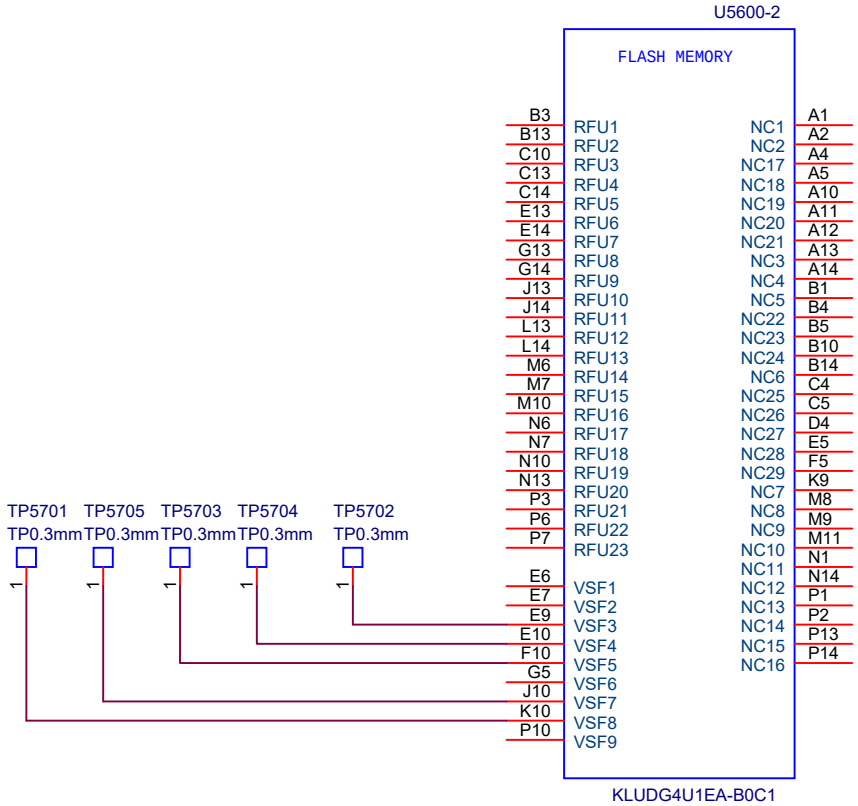
PM8150B的GPIO11只内部使用，外部浮空处理


U5200-3
VPH_PWR
2
16
HAP_PWM_IN_1
HAP_PWM_IN_2
VSW_HAP_P_1
29
HAP_OUT_P <66>
43
VDD_HAP
C5300
10uF
±20%
10V
0402
1
2
VSW_HAP_M_1
VSW_HAP_M_2
VSW_HAP_M_3
1
15
30
HAP_OUT_M <66>
44
PGND_HAP
45
GND_HAP_HRLED
VREG_BOB
71
VDD_HR_LED
HR_LED_1
HR_LED_2
58
57
PM8150B

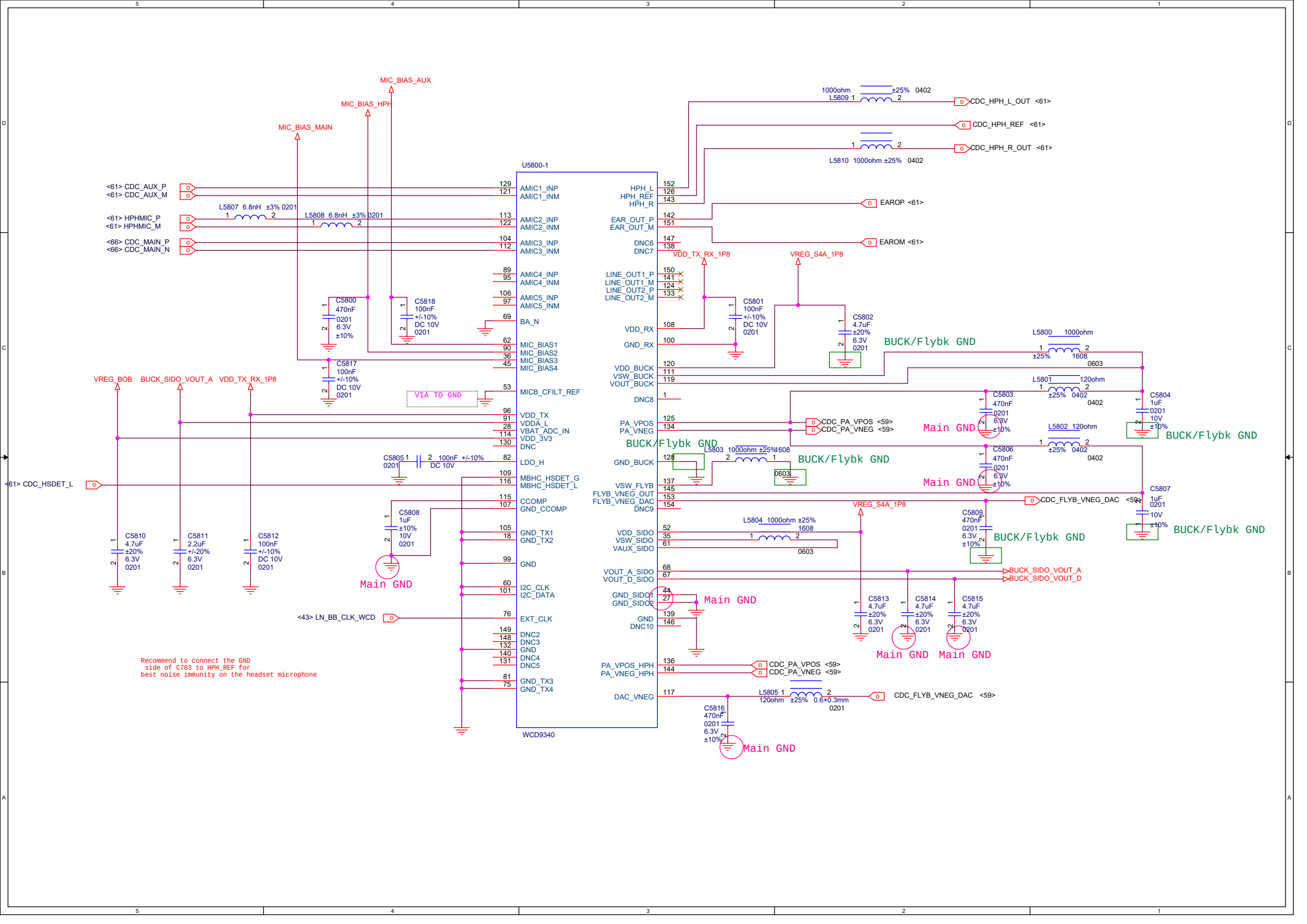

U5200-1
PM8150B
USB_OVP_VBUS
USB_IN_MID
VPH_PWR
VBATT
USB_VBUS
Note:
1. 100k 4250B thermistor is the only supported thermistor that can be used with BATT_THERM on PM8150B.
2. Do not place any capacitance on BATT_THERM or BATT_ID nets. Ensure battery pack also does not contain ANY capacitance.
Note: if SMB1355 is not used, connect PM8150B pin ISNS_SMB_P/M to GND
USB_IN_1
USB_IN_2
USB_IN_3
USB_IN_4
USB_IN_5
CC1_ID
CC2
CC_OUT
SMB_EN
SYS_OK
BOOT_CAP
BA_N_1
BA_N_2
BA_N_3
BA_N_4
SBU1
SBU2
DC_IN_EN_1
DC_IN_EN_2
DC_IN_EN_3
DC_IN_PON
DC_IN_PSNS
USB_DP
USB_DM
VBATT_SNS_M
VBATT_SNS_P
OPTION_2
OPTION_1
ISNS_SMB_M
ISNS_SMB_P
PACK_SNS_M
BATT_ID
BATT_THERM_1
BATT_THERM_2
CONN_THERM
SMB_THERM
AMUX_1
GND_ADC
GND_MBG
REF_GND_MBG_ADC
VDD_VCONN
MID_CHG_1
MID_CHG_2
MID_CHG_3
MID_CHG_4
MID_CHG_5
MID_CHG_6
MID_CHG_7
MID_CHG_8
MID_CHG_9
VSW_CHG_1
VSW_CHG_2
VSW_CHG_3
VSW_CHG_4
VSW_CHG_5
VSW_CHG_6
VSW_CHG_7
VSW_CHG_8
PGND_CHG_1
PGND_CHG_2
PGND_CHG_3
PGND_CHG_4
VPH_PWR_1
VPH_PWR_2
VPH_PWR_3
VPH_PWR_4
VBATT_PWR_1
VBATT_PWR_2
VBATT_PWR_3
VBATT_PWR_4
IUSB_OUT_1
IUSB_OUT_2
VARB_CHG
BOOT_PWR
REF_GND_CHG
GND_PSUB_CHG
GND_CHG
C5400 1uF ±10% 25V 0402
TP5400 TP0.3mm
R5400 100R ±1% 0201
R5403 100R ±1% 0201
C5402 220pF ±5% 50V 0201
C5403 220pF ±5% 50V 0201
C5417 NM 0201
TP5402 TP0.3mm
C5401 4.7uF +/-20% 25V 0402
C5478 33pF 5% 50V 0201
C5404 27nF +/-10% DC 16V 0402
L5400 1uH 1008 ±20%
C5405 10uF ±20% 10V 0402
C5406 10uF ±20% 10V 0402
C5407 10uF ±20% 10V 0402
C5479 33pF 5% 50V 0201
CR5401 ESD56201D15
C5416 NM 0402
C5408 47uF +/-20% 6.3V 0603
C5458 33pF 5% 50V 0201
C5409 4.7uF ±20% 10V 0402
C5410 100nF +/-10% DC 10V 0201
C5411 1uF ±20% 10V 0201
<66,71> USB_CC1
<66> USB_CC2
<33> USB_CC_DIR
<56> SMB_EN_CHG
<43> AUTO_ON_N
<61> PM855_USB_SBU1
<61> PM855_USB_SBU2
<66> USB1_HS_DP_DET
<66> USB1_HS_DM_DET
<55> VBATT_CONN_VSENSE_M
<55> VBATT_CONN_VSENSE_P
<55> VBATT_PACK_SNS_M
<55,71> BATT_ID
<55,71> BATT_THERM
<66> CONN_THERM
<56> SMB_THERM
<55> VBATT_CONN_VSENSE_M
VBATT_CONN_VSENSE_P <55>
R5406 0R ±5% 0201
R5408 NM 0201
W5401 SHORT
W5402 SHORT
<55> VBATT_PACK_SNS_M
<55,71> BS_TP
<55,71> BATT_ID
<55,71> BATT_THERM
J5400
WP10-SM04VA10-R15000
C5413 10uF ±20% 10V 0402
C5414 10uF ±20% 10V 0402
C5467 10uF ±20% 10V 0402
C5422 220pF ±5% 50V 0201
CR5407 PESD3V3V1BCSF
CR5403 PESD3V3V1BCSF
CR5402 ESD56201D04
CR5404 PESD3V3V1BCSF
R5401 1M .01 0201
R5402 86.6K ±1% 0201
R5404 0R ±5% 0201
C5415 1uF +/-10% 35V 0402
CR5405 ESD56201D15-2/TR
C5418 1nF +/-10% 50V 0201
C5419 220pF ±5% 50V 0201
U5400
FPF2281BUCX_F130
IN1
IN2
IN3
OVLO
EN
ACOK
OUT1
OUT2
OUT3
GND
C5412 1uF ±10% 25V 0402
C5433 100pF 5% 50V 0201
CR5406_NM ESD56201D15-2/TR

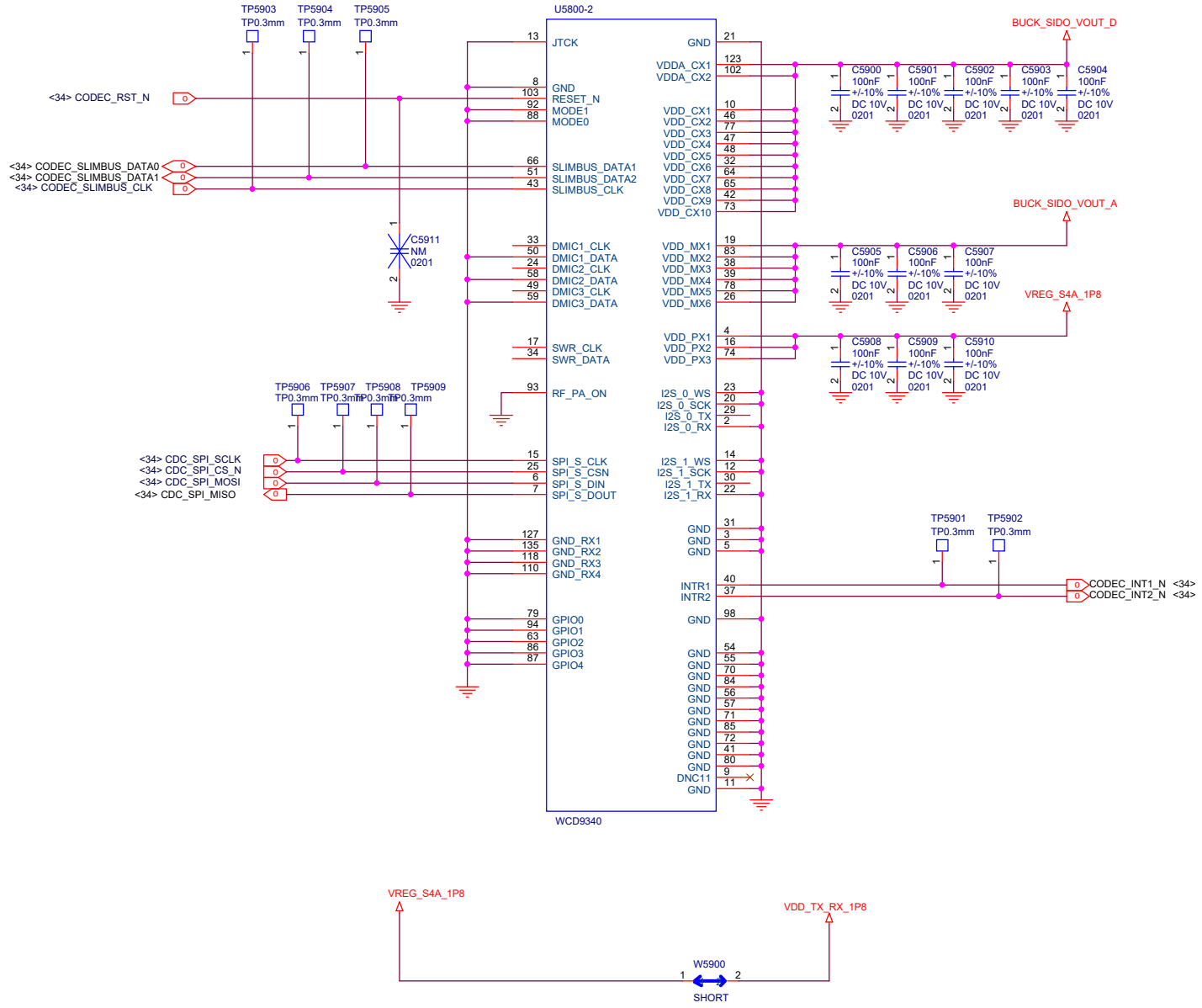

SMB1390
VREG_L12A_1P8
USB_IN_MID
C5500
10uF
+/-20%
25V
0603
U5501
VIN1
VIN2
VIN3
VIN4
LCM
EN
EN_SL
IREG
SCL
SDA
TEMP
STAT
SHDN_N
TEST_EN_VPP
GND
PGND1
PGND2
PGND3
PGND4
BOOT
CFH1
CFH2
CFH3
CFH4
CFL1
CFL2
CFL3
CFL4
VPH_PWR1
VPH_PWR2
VPH_PWR3
VPH_PWR4
VPH_PWR5
VPH_PWR6
VPH_PWR7
VPH_PWR8
VPH_PWR_K
SYNC
MODE
VARB
VDDCAP
DTEST
SMB1390
<55> SMB_EN_CHG
R:0X21
W:0X20
<33,63> APPS_I2C_SCL
<33,63> APPS_I2C_SDA
<55> SMB_THERM
<53> SMB_STAT
C5555
33pF
5%
50V
0201
VIA TO GND
C5501
27nF
+/-10%
DC 16V
0402
C5502
22uF
+/-20%
10V
0603
C5503
22uF
+/-20%
10V
0603
C5504
22uF
+/-20%
10V
0603
C5505
22uF
+/-20%
10V
0603
C5510
22uF
+/-20%
10V
0603
VPH_PWR
C5506
10uF
+/-20%
10V
0402
CR5501
NSPU130S1N2T5G
C5556
33pF
5%
50V
0201
VPH_PWR_K_3
R5500 0R ±5% 0201
VPH_PWR
C5507 100nF +/-10% DC 10V 0201
C5508 1uF ±20% 6.3V 0201
C5509
1uF
±20%
6.3V
0201


TP5600
TP0.3mm
TP5601
TP0.3mm
U5600-1
FLASH MEMORY
KLUDG4U1EA-B0C1
<32> UFS1_RESET_N
<32> UFS1_REF_CLK
<32> UFS1_L0_TX_P
<32> UFS1_L0_TX_M
<32> UFS1_L0_RX_M
<32> UFS1_L0_RX_P
<32> UFS1_L1_TX_P
<32> UFS1_L1_TX_M
<32> UFS1_L1_RX_M
<32> UFS1_L1_RX_P
RESET_N
REF_CLK
RXDP0
RXDN0
TXDN0
TXDP0
RXDP1
RXDN1
TXDN1
TXDP1
VDDI
VDDIQ
VDDIQ2
VCC
VCCQ2
VSS
C5607
NM
0201
C5601
NM
0201
C5602
1uF
±20%
6.3V
0201
VREG_L10A_2P95
C5603
4.7uF
±20%
10V
0402
C5604
100nF
+/-10%
6.3V
0201
VREG_S4A_1P8
C5605
4.7uF
±20%
10V
0402
C5606
100nF
+/-10%
6.3V
0201

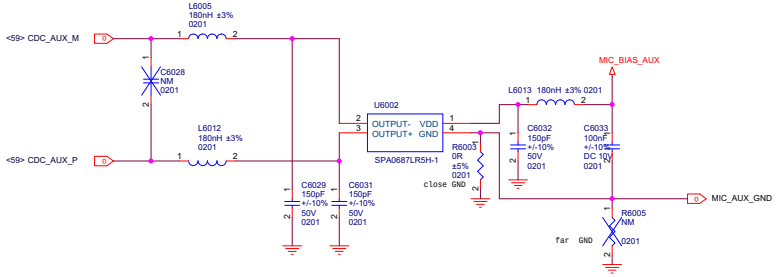


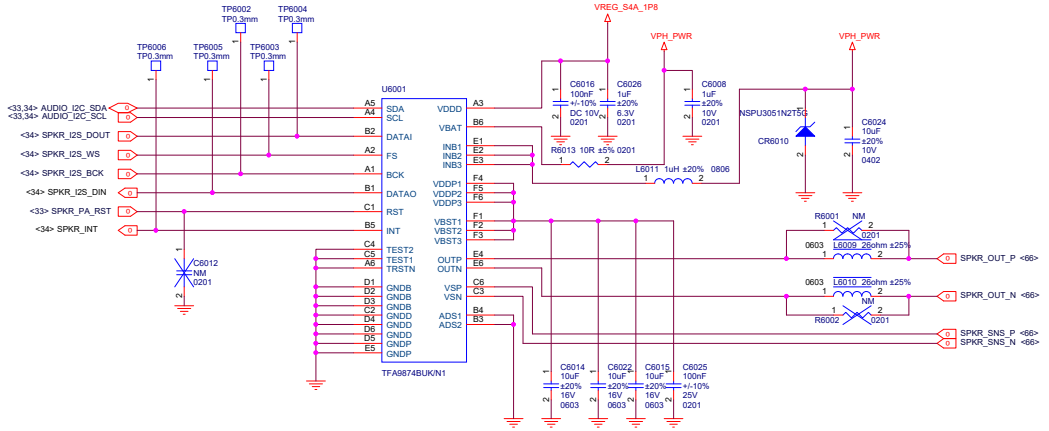
Date:	Tuesday, April 02, 2019	Sheet


MIC_BIAS_AUX
MIC_BIAS_HPH
MIC_BIAS_MAIN
U5800-1
WCD9340
<61> CDC_AUX_P
<61> CDC_AUX_M
<61> HPHMIC_P
<61> HPHMIC_M
<66> CDC_MAIN_P
<66> CDC_MAIN_N
L5807 6.8nH ±3% 0201
L5808 6.8nH ±3% 0201
AMIC1_INP
AMIC1_INM
AMIC2_INP
AMIC2_INM
AMIC3_INP
AMIC3_INM
AMIC4_INP
AMIC4_INM
AMIC5_INP
AMIC5_INM
BA_N
MIC_BIAS1
MIC_BIAS2
MIC_BIAS3
MIC_BIAS4
MICB_CFILT_REF
VDD_TX
VDDA_L
VBAT_ADC_IN
VDD_3V3
DNC
LDO_H
MBHC_HSDET_G
MBHC_HSDET_L
CCOMP
GND_CCOMP
GND_TX1
GND_TX2
GND
I2C_CLK
I2C_DATA
EXT_CLK
DNC2
DNC3
GND
DNC4
DNC5
GND_TX3
GND_TX4
C5800 470nF 0201 6.3V ±10%
C5817 100nF +/-10% DC 10V 0201
C5818 100nF +/-10% DC 10V 0201
C5805 100nF +/-10% DC 10V 0201
C5808 1uF ±10% 10V 0201
C5810 4.7uF ±20% 6.3V 0201
C5811 2.2uF +/-20% 6.3V 0201
C5812 100nF +/-10% DC 10V 0201
VIA TO GND
VREG_BOB
BUCK_SIDO_VOUT_A
VDD_TX_RX_1P8
<61> CDC_HSDET_L
<43> LN_BB_CLK_WCD
Main GND
Recommend to connect the GND
side of C703 to HPH_REF for
best noise immunity on the headset microphone
HPH_L
HPH_REF
HPH_R
EAR_OUT_P
EAR_OUT_M
DNC6
DNC7
LINE_OUT1_P
LINE_OUT1_M
LINE_OUT2_P
LINE_OUT2_M
VDD_RX
GND_RX
VDD_BUCK
VSW_BUCK
VOUT_BUCK
DNC8
PA_VPOS
PA_VNEG
GND_BUCK
VSW_FLYB
FLYB_VNEG_OUT
FLYB_VNEG_DAC
DNC9
VDD_SIDO
VSW_SIDO
VAUX_SIDO
VOUT_A_SIDO
VOUT_D_SIDO
GND_SIDO1
GND_SIDO2
GND
DNC10
PA_VPOS_HPH
PA_VNEG_HPH
DAC_VNEG
1000ohm ±25% 0402
L5809
CDC_HPH_L_OUT <61>
CDC_HPH_REF <61>
CDC_HPH_R_OUT <61>
L5810 1000ohm ±25% 0402
EAROP <61>
EAROM <61>
VDD_TX_RX_1P8
VREG_S4A_1P8
C5801 100nF +/-10% DC 10V 0201
C5802 4.7uF ±20% 6.3V 0201
BUCK/Flybk GND
L5800 1000ohm ±25% 1608 0603
L5801 120ohm ±25% 0402 0402
L5802 120ohm ±25% 0402 0402
C5803 470nF 0201 6.3V ±10%
C5804 1uF 0201 10V ±10%
C5806 470nF 0201 6.3V ±10%
C5807 1uF 0201 10V ±10%
C5809 470nF 0201 6.3V ±10%
CDC_PA_VPOS <59>
CDC_PA_VNEG <59>
L5803 1000ohm ±25% 1608 0603
L5804 1000ohm ±25% 1608 0603
CDC_FLYB_VNEG_DAC <59>
BUCK_SIDO_VOUT_A
BUCK_SIDO_VOUT_D
C5813 4.7uF ±20% 6.3V 0201
C5814 4.7uF ±20% 6.3V 0201
C5815 4.7uF ±20% 6.3V 0201
L5805 120ohm ±25% 0.6×0.3mm 0201
C5816 470nF 0201 6.3V ±10%
Main GND


U5800-2
WCD9340
TP5903
TP5904
TP5905
TP0.3mm
<34> CODEC_RST_N
<34> CODEC_SLIMBUS_DATA0
<34> CODEC_SLIMBUS_DATA1
<34> CODEC_SLIMBUS_CLK
C5911
NM
0201
JTCK
GND
RESET_N
MODE1
MODE0
SLIMBUS_DATA1
SLIMBUS_DATA2
SLIMBUS_CLK
DMIC1_CLK
DMIC1_DATA
DMIC2_CLK
DMIC2_DATA
DMIC3_CLK
DMIC3_DATA
SWR_CLK
SWR_DATA
RF_PA_ON
SPI_S_CLK
SPI_S_CSN
SPI_S_DIN
SPI_S_DOUT
GND_RX1
GND_RX2
GND_RX3
GND_RX4
GPIO0
GPIO1
GPIO2
GPIO3
GPIO4
VDDA_CX1
VDDA_CX2
VDD_CX1
VDD_CX2
VDD_CX3
VDD_CX4
VDD_CX5
VDD_CX6
VDD_CX7
VDD_CX8
VDD_CX9
VDD_CX10
VDD_MX1
VDD_MX2
VDD_MX3
VDD_MX4
VDD_MX5
VDD_MX6
VDD_PX1
VDD_PX2
VDD_PX3
I2S_0_WS
I2S_0_SCK
I2S_0_TX
I2S_0_RX
I2S_1_WS
I2S_1_SCK
I2S_1_TX
I2S_1_RX
INTR1
INTR2
DNC11
BUCK_SIDO_VOUT_D
BUCK_SIDO_VOUT_A
VREG_S4A_1P8
C5900
C5901
C5902
C5903
C5904
C5905
C5906
C5907
C5908
C5909
C5910
100nF
+/-10%
DC 10V
0201
TP5906
TP5907
TP5908
TP5909
<34> CDC_SPI_SCLK
<34> CDC_SPI_CS_N
<34> CDC_SPI_MOSI
<34> CDC_SPI_MISO
TP5901
TP5902
CODEC_INT1_N <34>
CODEC_INT2_N <34>
VREG_S4A_1P8
VDD_TX_RX_1P8
W5900
SHORT

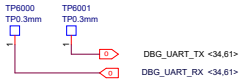
AUX MIC



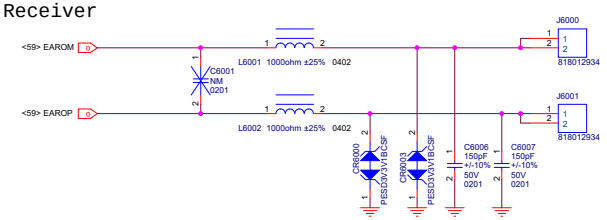


AUX MIC

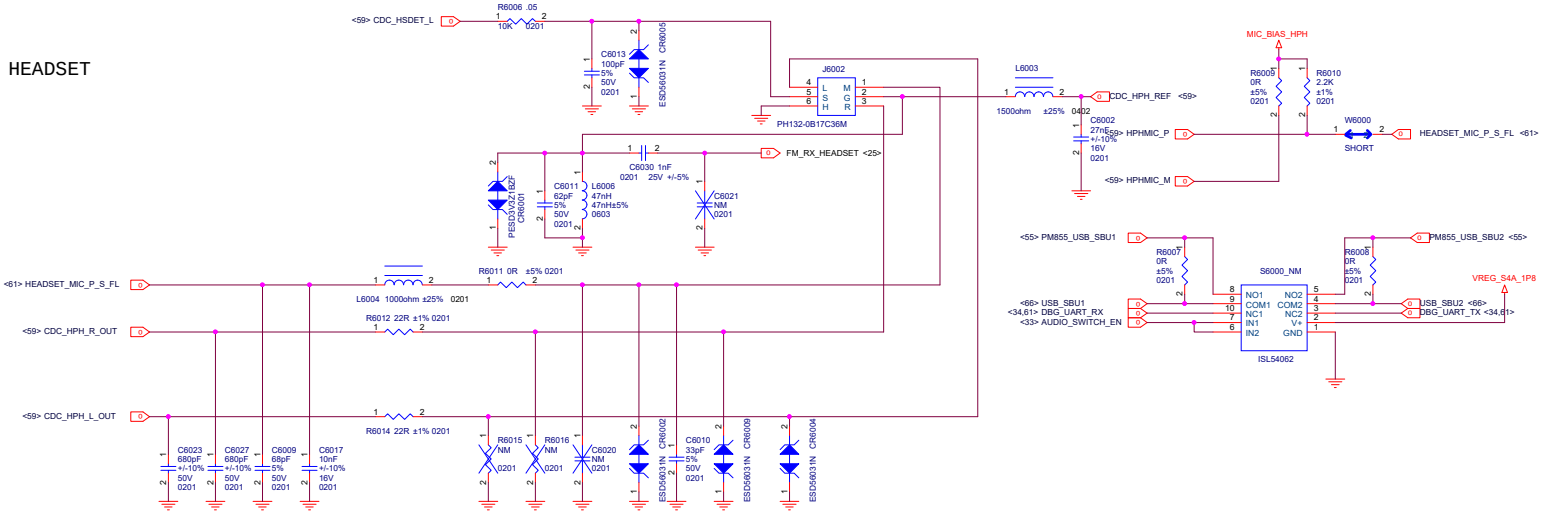
UART SWITCH



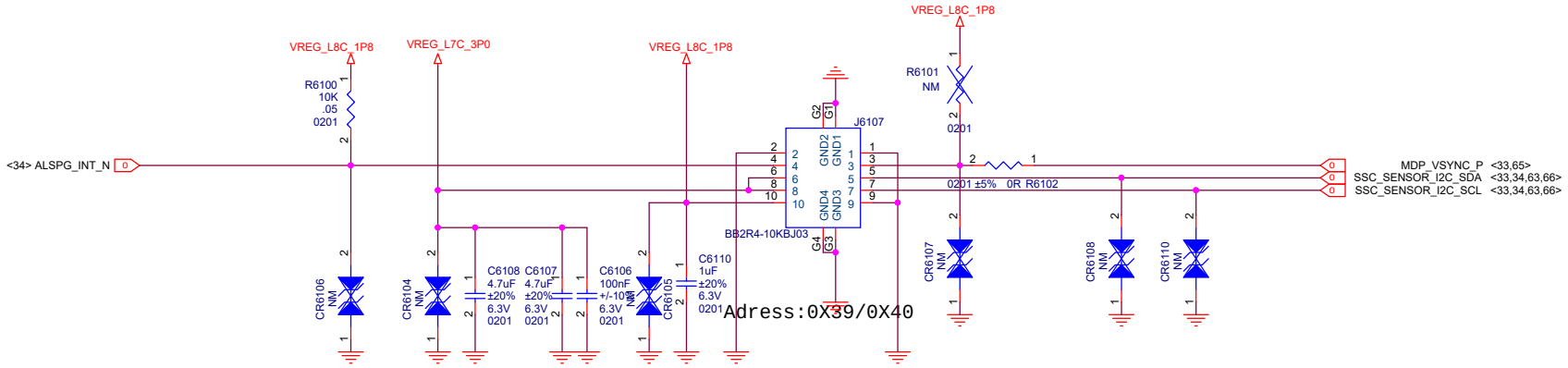
Receiver



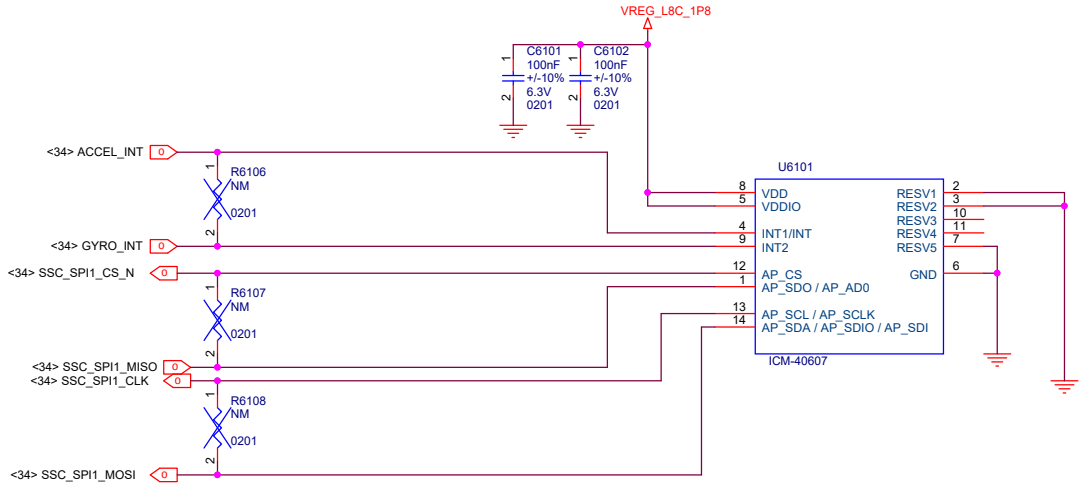
HEADSET



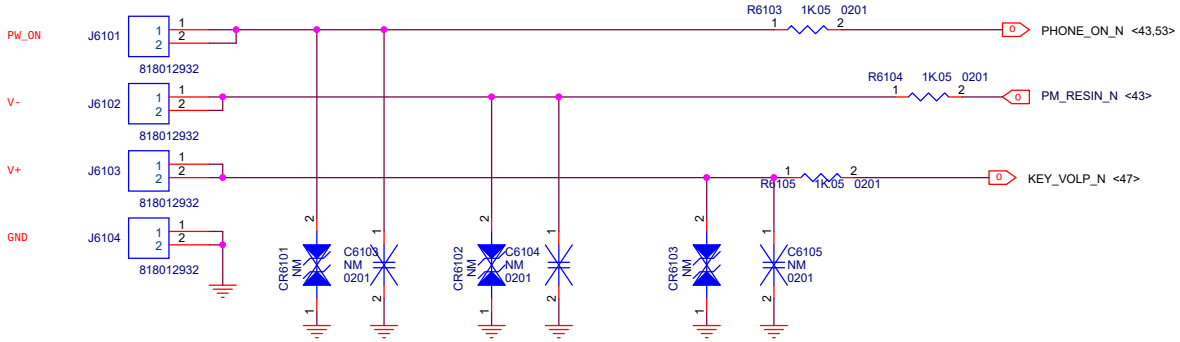
P&L-sensor



A+G

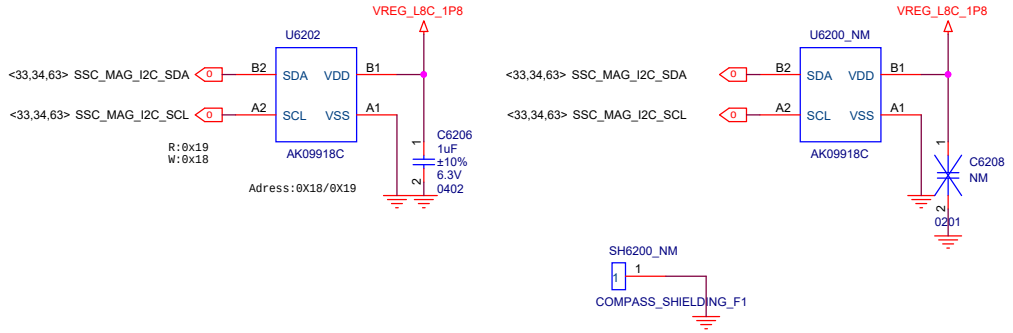


Sidekey

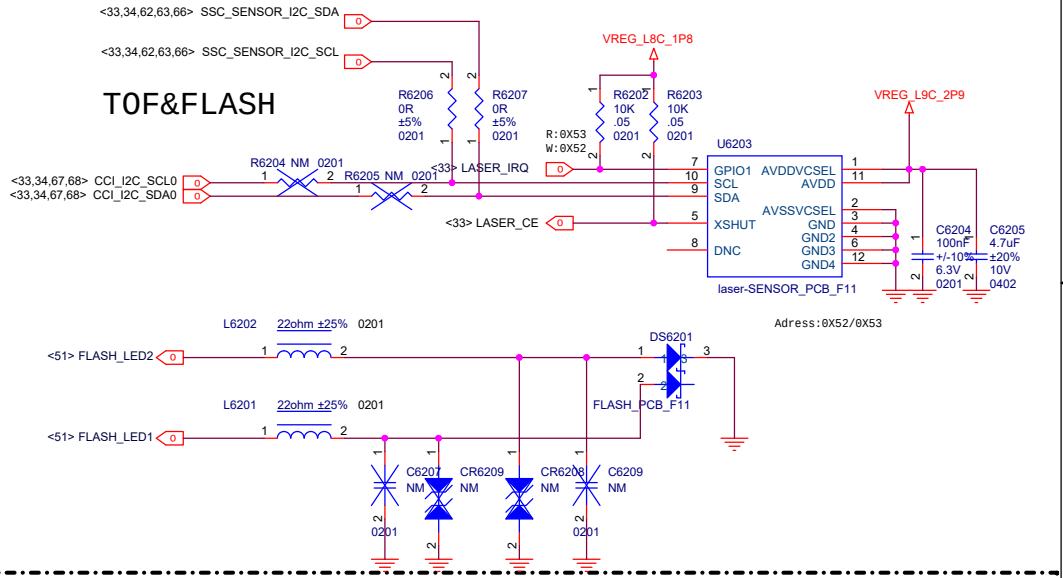


FingerPrint to SUB board

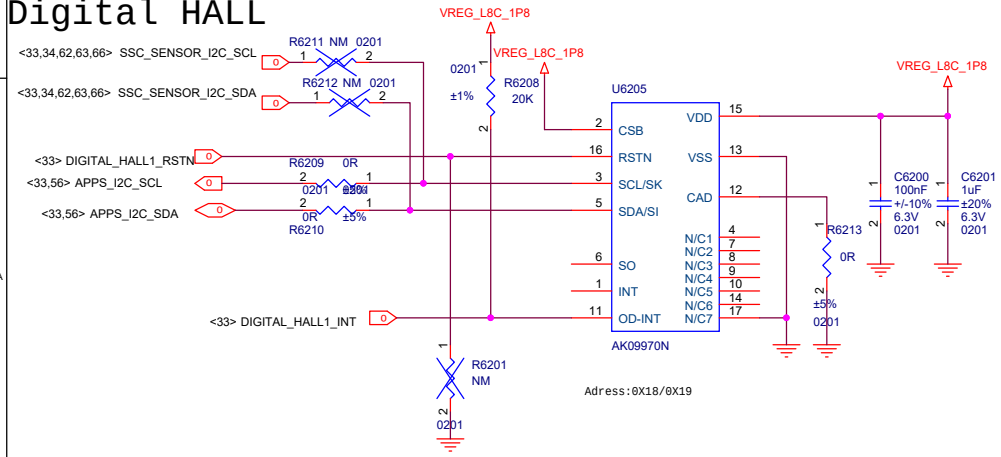
COMPASS



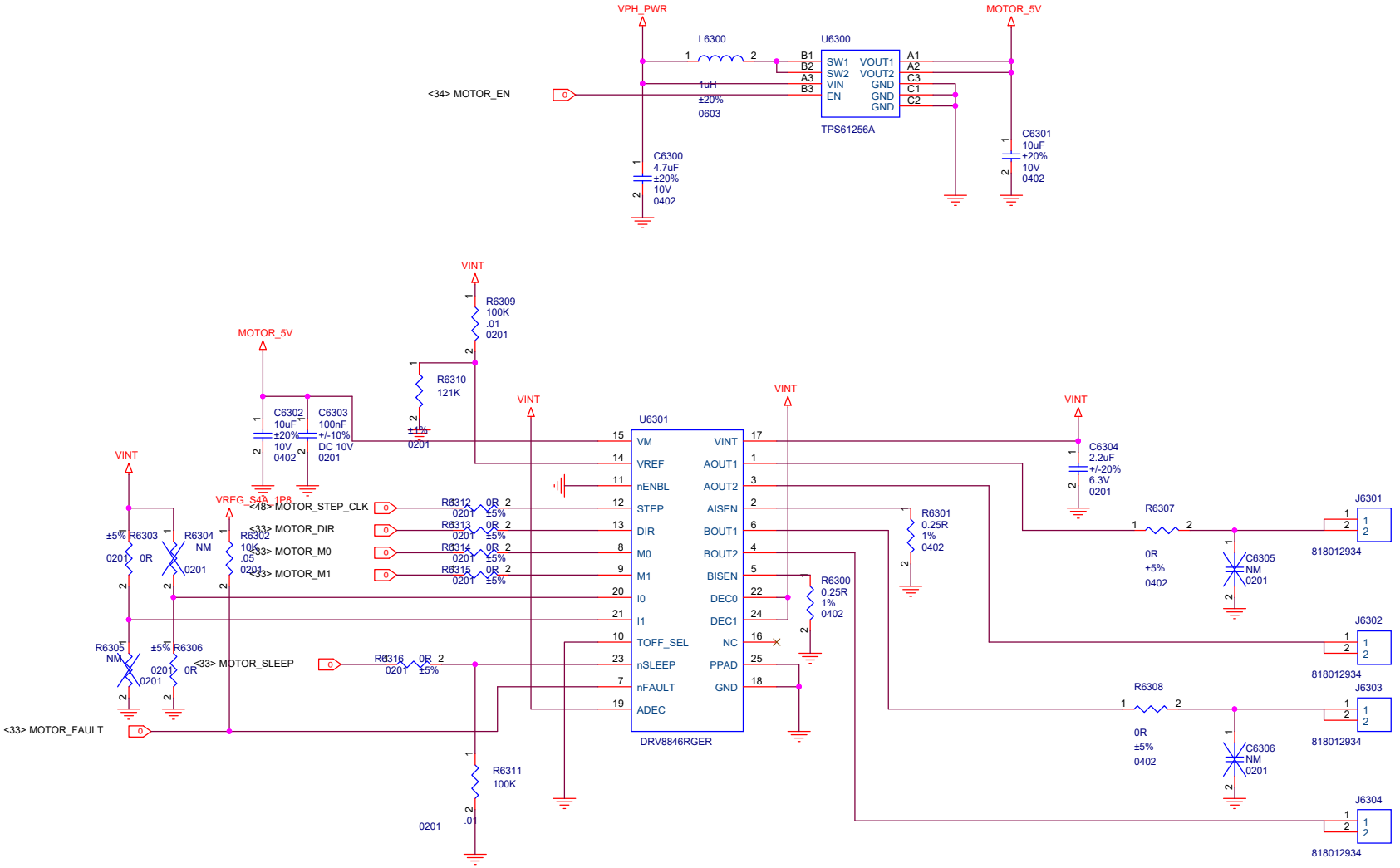
TOF&FLASH

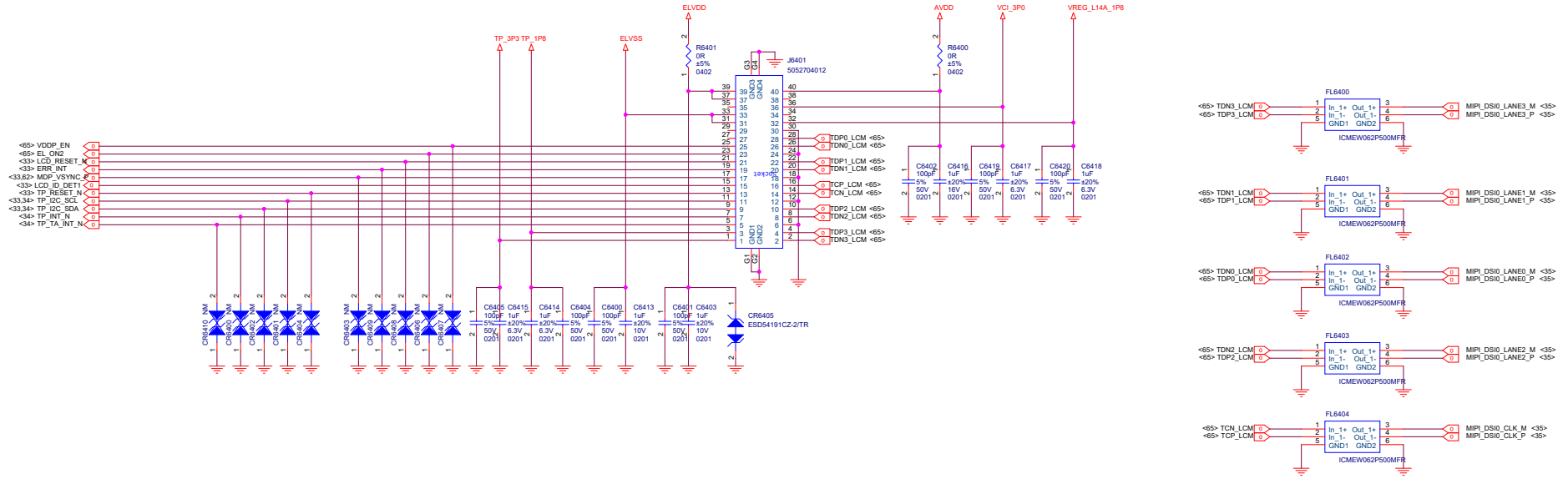


Digital HALL

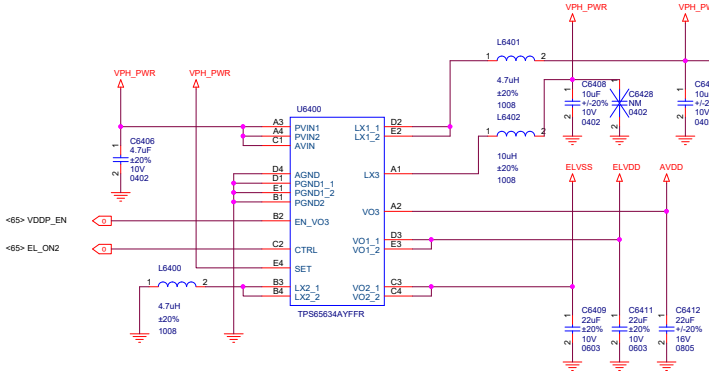


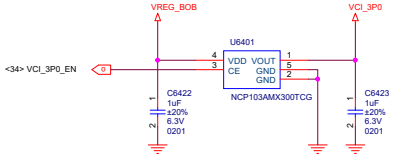
HALL

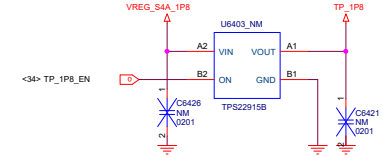

VPH_PWR
L6300
1uH
±20%
0603
U6300
SW1
SW2
VIN
EN
VOUT1
VOUT2
GND
GND
GND
B1
B2
A3
B3
A1
A2
C3
C1
C2
TPS61256A
MOTOR_5V
<34> MOTOR_EN
C6300
4.7uF
±20%
10V
0402
C6301
10uF
±20%
10V
0402
VINT
R6309
100K
.01
0201
R6310
121K
±1%
0201
MOTOR_5V
C6302
10uF
±20%
10V
0402
C6303
100nF
+/-10%
DC 10V
0201
U6301
VM
VREF
nENBL
STEP
DIR
M0
M1
I0
I1
TOFF_SEL
nSLEEP
nFAULT
ADEC
VINT
AOUT1
AOUT2
AISEN
BOUT1
BOUT2
BISEN
DEC0
DEC1
NC
PPAD
GND
DRV8846RGER
C6304
2.2uF
+/-20%
6.3V
0201
R6307
0R
±5%
0402
C6305
NM
0201
J6301
818012934
R6301
0.25R
1%
0402
R6300
0.25R
1%
0402
R6308
0R
±5%
0402
C6306
NM
0201
J6302
818012934
J6303
818012934
J6304
818012934
VREG_S4A_1P8
R6303
0R
R6304
NM
R6302
10K
.05
0201
R6305
NM
R6306
0R
<48> MOTOR_STEP_CLK
<33> MOTOR_DIR
<33> MOTOR_M0
<33> MOTOR_M1
<33> MOTOR_SLEEP
<33> MOTOR_FAULT
R6312
R6313
R6314
R6315
R6316
0R
±5%
0201
R6311
100K
.01
0201

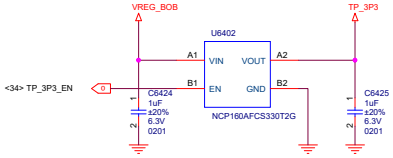

ELVDD
AVDD
VCI_3P0
VREG_L14A_1P8
TP_3P3
TP_1P8
ELVSS
R6401
0R
±5%
0402
R6400
J6401
5052704012
<65> VDDP_EN
<65> EL_ON2
<33> LCD_RESET_N
<33> ERR_INT
<33,62> MDP_VSYNC_P
<33> LCD_ID_DET1
<33> TP_RESET_N
<33,34> TP_I2C_SCL
<33,34> TP_I2C_SDA
<34> TP_INT_N
<34> TP_TA_INT_N
TDP0_LCM <65>
TDN0_LCM <65>
TDP1_LCM <65>
TDN1_LCM <65>
TCP_LCM <65>
TCN_LCM <65>
TDP2_LCM <65>
TDN2_LCM <65>
TDP3_LCM <65>
TDN3_LCM <65>
CR6410_NM
CR6411_NM
CR6412_NM
CR6413_NM
CR6414_NM
CR6415_NM
CR6416_NM
CR6417_NM
CR6418_NM
CR6419_NM
CR6420_NM
CR6421_NM
C6405 100pF 5% 50V 0201
C6415 1uF ±20% 6.3V 0201
C6414 1uF ±20% 6.3V 0201
C6404 100pF 5% 50V 0201
C6400 100pF 5% 50V 0201
C6413 1uF ±20% 10V 0201
C6401 100pF 5% 50V 0201
C6403 1uF ±20% 10V 0201
CR6405
ESD54191CZ-2/TR
C6402 100pF 5% 50V 0201
C6416 1uF ±20% 16V 0201
C6419 100pF 5% 50V 0201
C6417 1uF ±20% 6.3V 0201
C6420 100pF 5% 50V 0201
C6418 1uF ±20% 6.3V 0201

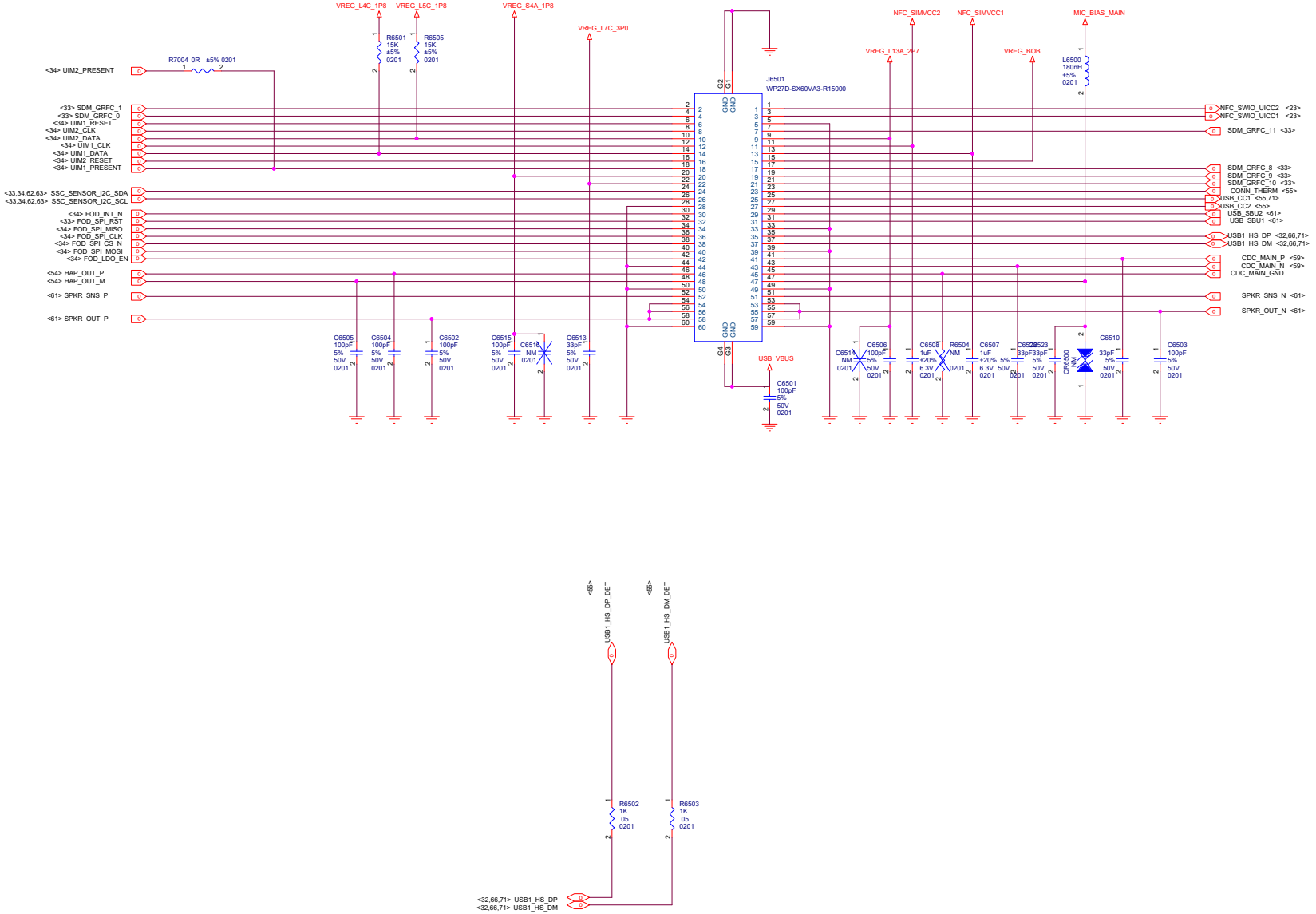
FL6400
FL6401
FL6402
FL6403
FL6404
ICMEW062P500MFR
<65> TDN3_LCM
<65> TDP3_LCM
<65> TDN1_LCM
<65> TDP1_LCM
<65> TDN0_LCM
<65> TDP0_LCM
<65> TDN2_LCM
<65> TDP2_LCM
<65> TCN_LCM
<65> TCP_LCM
MIPI_DSI0_LANE3_M <35>
MIPI_DSI0_LANE3_P <35>
MIPI_DSI0_LANE1_M <35>
MIPI_DSI0_LANE1_P <35>
MIPI_DSI0_LANE0_M <35>
MIPI_DSI0_LANE0_P <35>
MIPI_DSI0_LANE2_M <35>
MIPI_DSI0_LANE2_P <35>
MIPI_DSI0_CLK_M <35>
MIPI_DSI0_CLK_P <35>

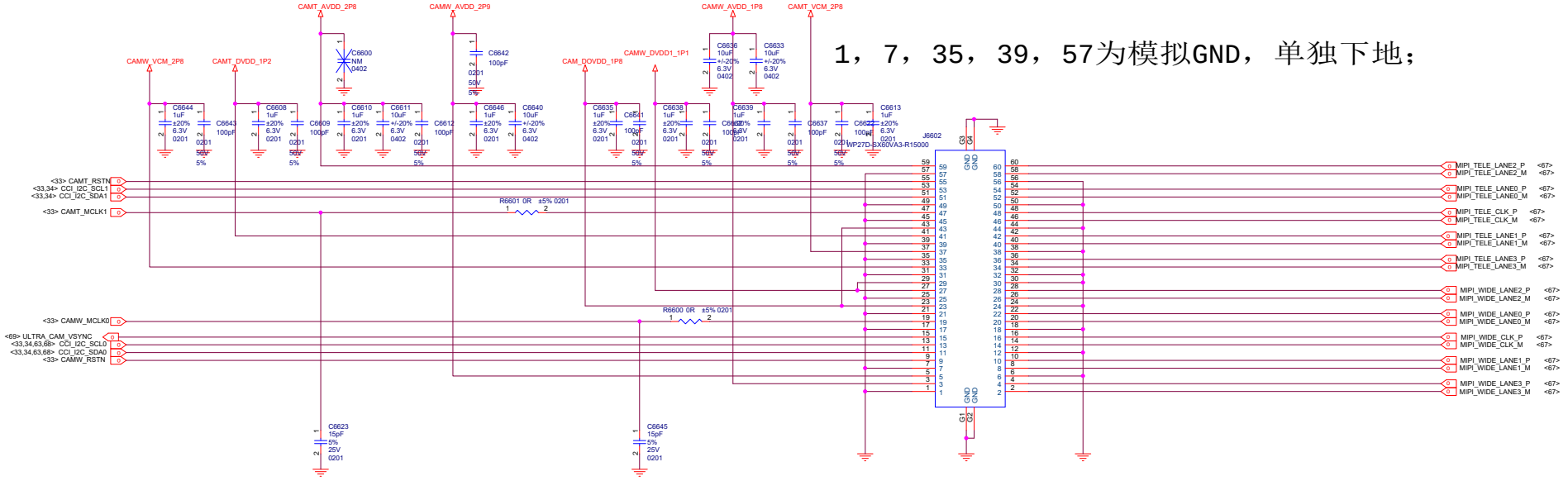

VPH_PWR
U6400
TPS65634AYFFR
L6401
4.7uH ±20% 1008
L6402
10uH ±20% 1008
L6400
4.7uH ±20% 1008
C6406 4.7uF ±20% 10V 0402
C6408 10uF +/-20% 10V 0402
C6428 NM 0402
C6407 10uF +/-20% 10V 0402
C6427 NM 0402
C6409 22uF ±20% 10V 0603
C6411 22uF ±20% 10V 0603
C6412 22uF +/-20% 16V 0805
ELVSS
ELVDD
AVDD
<65> VDDP_EN
<65> EL_ON2
PVIN1
PVIN2
AVIN
AGND
PGND1_1
PGND1_2
PGND2
EN_VO3
CTRL
SET
LX1_1
LX1_2
LX3
VO3
VO1_1
VO1_2
LX2_1
LX2_2
VO2_1
VO2_2


VREG_BOB
VCI_3P0
U6401
NCP103AMX300TCG
<34> VCI_3P0_EN
C6422 1uF ±20% 6.3V 0201
C6423 1uF ±20% 6.3V 0201


VREG_S4A_1P8
TP_1P8
U6403_NM
TPS22915B
<34> TP_1P8_EN
C6426 NM 0201
C6421 NM 0201


VREG_BOB
TP_3P3
U6402
NCP160AFCS330T2G
<34> TP_3P3_EN
C6424 1uF ±20% 6.3V 0201
C6425 1uF ±20% 6.3V 0201


VREG_L4C_1P8
VREG_L5C_1P8
VREG_S4A_1P8
VREG_L7C_3P0
NFC_SIMVCC2
NFC_SIMVCC1
MIC_BIAS_MAIN
VREG_L13A_2P7
VREG_BOB
R6501 15K ±5% 0201
R6505 15K ±5% 0201
R7004 0R ±5% 0201
L6500 180nH ±5% 0201
J6501
WP27D-SX60VA3-R15000
<34> UIM2_PRESENT
<33> SDM_GRFC_1
<33> SDM_GRFC_0
<34> UIM1_RESET
<34> UIM2_CLK
<34> UIM2_DATA
<34> UIM1_CLK
<34> UIM1_DATA
<34> UIM2_RESET
<34> UIM1_PRESENT
<33,34,62,63> SSC_SENSOR_I2C_SDA
<33,34,62,63> SSC_SENSOR_I2C_SCL
<34> FOD_INT_N
<33> FOD_SPI_RST
<34> FOD_SPI_MISO
<34> FOD_SPI_CLK
<34> FOD_SPI_CS_N
<34> FOD_SPI_MOSI
<34> FOD_LDO_EN
<54> HAP_OUT_P
<54> HAP_OUT_M
<61> SPKR_SNS_P
<61> SPKR_OUT_P
NFC_SWIO_UICC2 <23>
NFC_SWIO_UICC1 <23>
SDM_GRFC_11 <33>
SDM_GRFC_8 <33>
SDM_GRFC_9 <33>
SDM_GRFC_10 <33>
CONN_THERM <55>
USB_CC1 <55,71>
USB_CC2 <55>
USB_SBU2 <61>
USB_SBU1 <61>
USB1_HS_DP <32,66,71>
USB1_HS_DM <32,66,71>
CDC_MAIN_P <59>
CDC_MAIN_N <59>
CDC_MAIN_GND
SPKR_SNS_N <61>
SPKR_OUT_N <61>
C6505 100pF 5% 50V 0201
C6504 100pF 5% 50V 0201
C6502 100pF 5% 50V 0201
C6515 100pF 5% 50V 0201
C6514 NM 0201
C6513 33pF 5% 50V 0201
C6511 NM 0201
C6506 100pF 5% 50V 0201
C6508 1uF ±20% 6.3V 0201
R6504 NM 0201
C6507 1uF ±20% 6.3V 0201
C6509 33pF 5% 50V 0201
C6523 33pF 5% 50V 0201
CR6500 NM
C6510 33pF 5% 50V 0201
C6503 100pF 5% 50V 0201
USB_VBUS
C6501 100pF 5% 50V 0201
<55>
USB1_HS_DP_DET
USB1_HS_DM_DET
R6502 1K .05 0201
R6503 1K .05 0201
<32,66,71> USB1_HS_DP
<32,66,71> USB1_HS_DM


1，7，35，39，57为模拟GND，单独下地；
CAMT_AVDD_2P8
CAMW_AVDD_2P9
CAMW_AVDD_1P8
CAMT_VCM_2P8
CAMW_VCM_2P8
CAMT_DVDD_1P2
CAM_DOVDD_1P8
CAMW_DVDD1_1P1
C6600 NM 0402
C6642 100pF 0201 50V 5%
C6636 10uF +/-20% 6.3V 0402
C6633 10uF +/-20% 6.3V 0402
C6644 1uF ±20% 6.3V 0201
C6643 100pF 0201 50V 5%
C6608 1uF ±20% 6.3V 0201
C6609 100pF 0201 50V 5%
C6610 1uF ±20% 6.3V 0201
C6611 10uF +/-20% 6.3V 0402
C6612 100pF 0201 50V 5%
C6646 1uF ±20% 6.3V 0201
C6640 10uF +/-20% 6.3V 0402
C6635 1uF ±20% 6.3V 0201
C6641 100pF 0201 50V 5%
C6638 1uF ±20% 6.3V 0201
C6639 1uF ±20% 6.3V 0201
C6637 100pF 0201 50V 5%
C6622 100pF 0201 50V 5%
C6613 1uF ±20% 6.3V 0201
J6602
WP27D-3X60VA3-R15000
R6601 0R ±5% 0201
R6600 0R ±5% 0201
C6623 15pF 5% 25V 0201
C6645 15pF 5% 25V 0201
<33> CAMT_RSTN
<33,34> CCI_I2C_SCL1
<33,34> CCI_I2C_SDA1
<33> CAMT_MCLK1
<33> CAMW_MCLK0
<69> ULTRA_CAM_VSYNC
<33,34,63,68> CCI_I2C_SCL0
<33,34,63,68> CCI_I2C_SDA0
<33> CAMW_RSTN
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MIPI_TELE_LANE0_P <67>
MIPI_TELE_LANE0_M <67>
MIPI_TELE_CLK_P <67>
MIPI_TELE_CLK_M <67>
MIPI_TELE_LANE1_P <67>
MIPI_TELE_LANE1_M <67>
MIPI_TELE_LANE3_P <67>
MIPI_TELE_LANE3_M <67>
MIPI_WIDE_LANE2_P <67>
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MIPI_WIDE_LANE0_P <67>
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MIPI_WIDE_CLK_P <67>
MIPI_WIDE_CLK_M <67>
MIPI_WIDE_LANE1_P <67>
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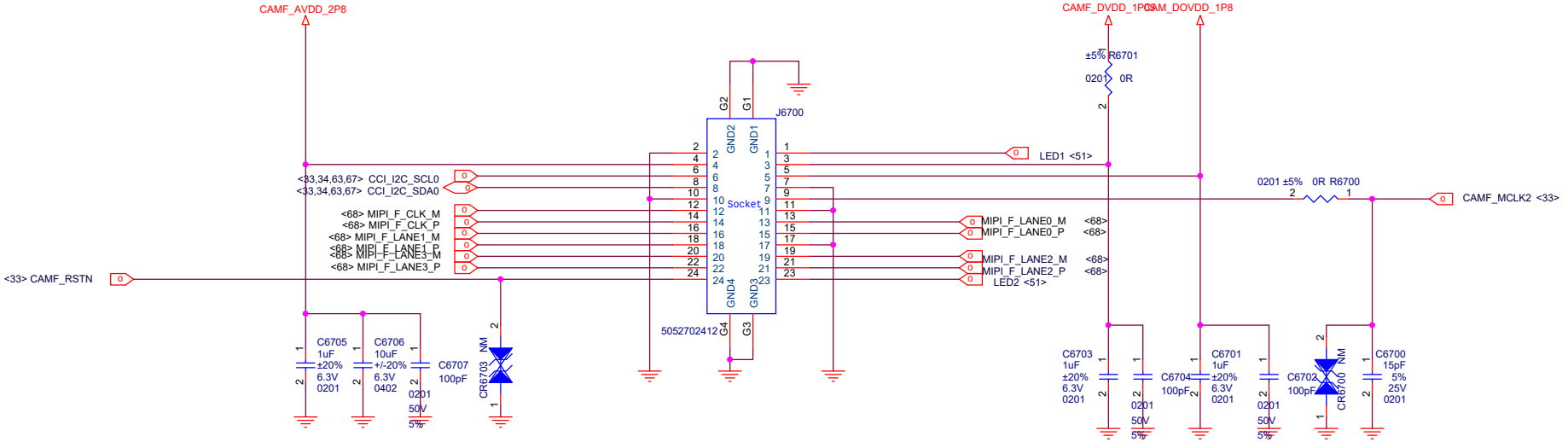
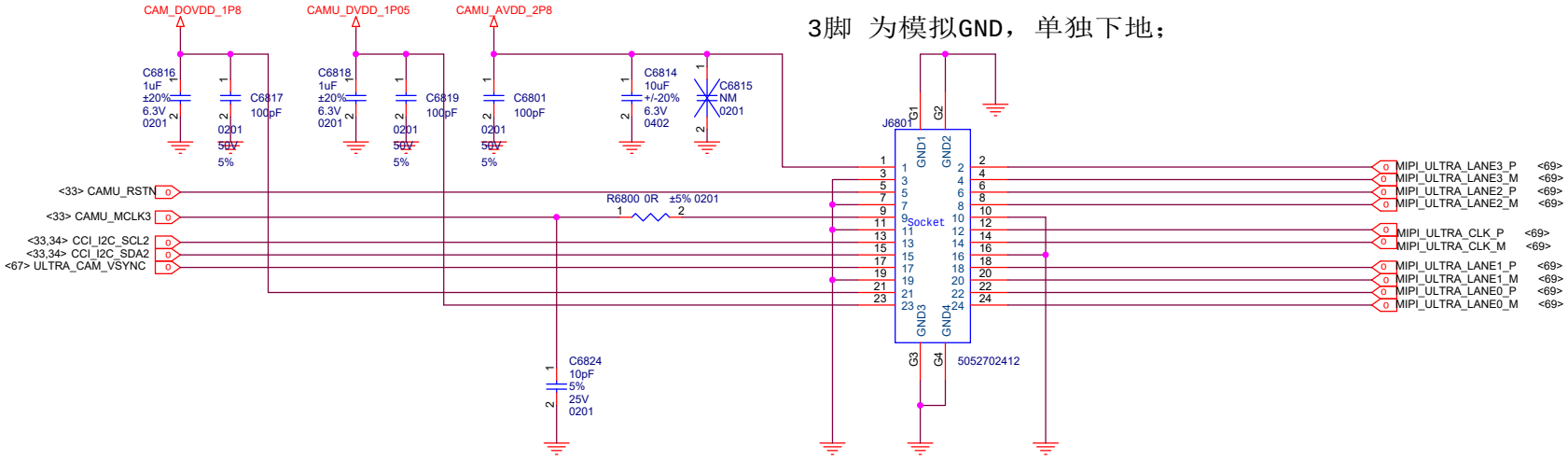
MIPI_WIDE_LANE3_M <67>
GND


CAMF_AVDD_2P8
CAMF_DVDD_1P8
CAM_DOVDD_1P8
J6700
Socket
5052702412
<33,34,63,67> CCI_I2C_SCL0
<33,34,63,67> CCI_I2C_SDA0
<68> MIPI_F_CLK_M
<68> MIPI_F_CLK_P
<68> MIPI_F_LANE1_M
<68> MIPI_F_LANE1_P
<68> MIPI_F_LANE3_M
<68> MIPI_F_LANE3_P
<33> CAMF_RSTN
LED1 <51>
LED2 <51>
MIPI_F_LANE0_M
MIPI_F_LANE0_P
MIPI_F_LANE2_M
MIPI_F_LANE2_P
R6701 0R
0201 ±5%
R6700 0R
0201 ±5%
CAMF_MCLK2 <33>
C6705 1uF ±20% 6.3V 0201
C6706 10uF +/-20% 6.3V 0402
C6707 100pF 0201 50V 5%
CR6703 NM
C6703 1uF ±20% 6.3V 0201
C6704 100pF
C6701 1uF ±20% 6.3V 0201
C6702 100pF
CR6700 NM
C6700 15pF 5% 25V 0201


3脚 为模拟GND，单独下地；
CAM_DOVDD_1P8
CAMU_DVDD_1P05
CAMU_AVDD_2P8
C6816 1uF ±20% 6.3V 0201
C6817 100pF 0201 50V 5%
C6818 1uF ±20% 6.3V 0201
C6819 100pF 0201 50V 5%
C6801 100pF 0201 50V 5%
C6814 10uF +/-20% 6.3V 0402
C6815 NM 0201
J6801
Socket
5052702412
R6800 0R ±5% 0201
C6824 10pF 5% 25V 0201
<33> CAMU_RSTN
<33> CAMU_MCLK3
<33,34> CCI_I2C_SCL2
<33,34> CCI_I2C_SDA2
<67> ULTRA_CAM_VSYNC
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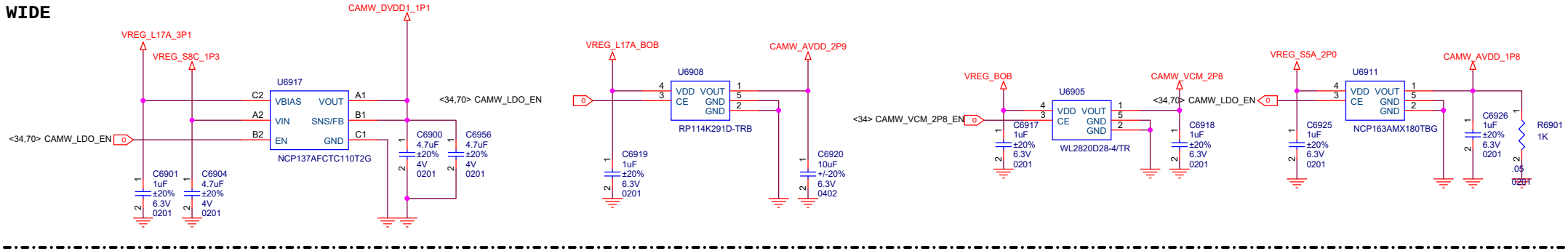
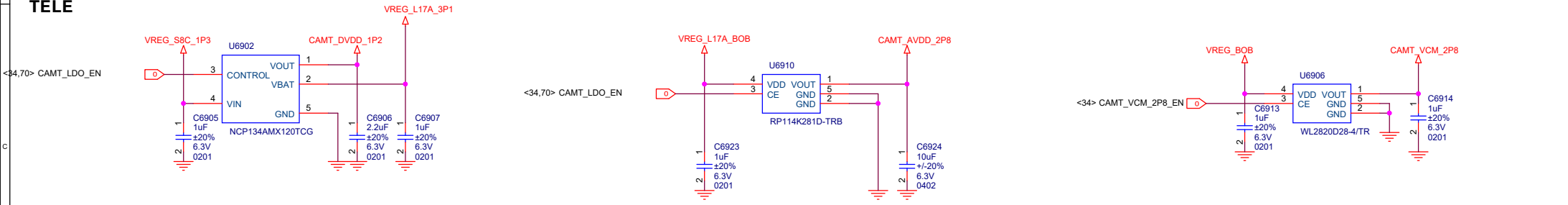
MIPI_ULTRA_LANE3_M <69>
MIPI_ULTRA_LANE2_P <69>
MIPI_ULTRA_LANE2_M <69>
MIPI_ULTRA_CLK_P <69>
MIPI_ULTRA_CLK_M <69>
MIPI_ULTRA_LANE1_P <69>
MIPI_ULTRA_LANE1_M <69>
MIPI_ULTRA_LANE0_P <69>
MIPI_ULTRA_LANE0_M <69>

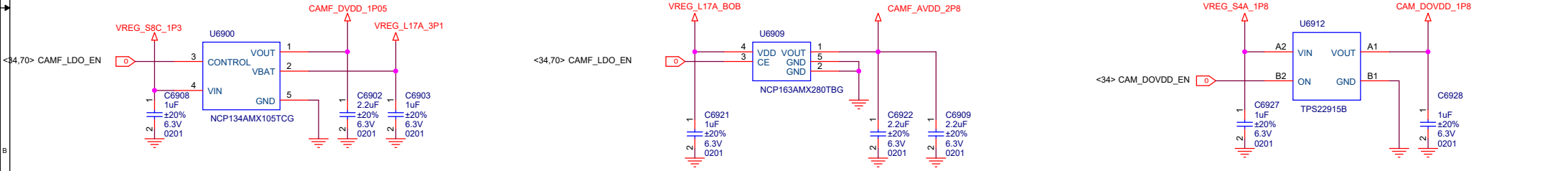
WIDE



TELE

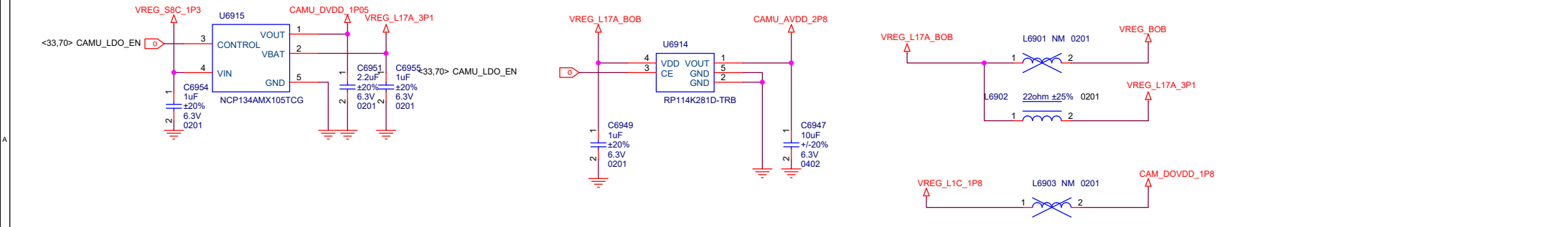


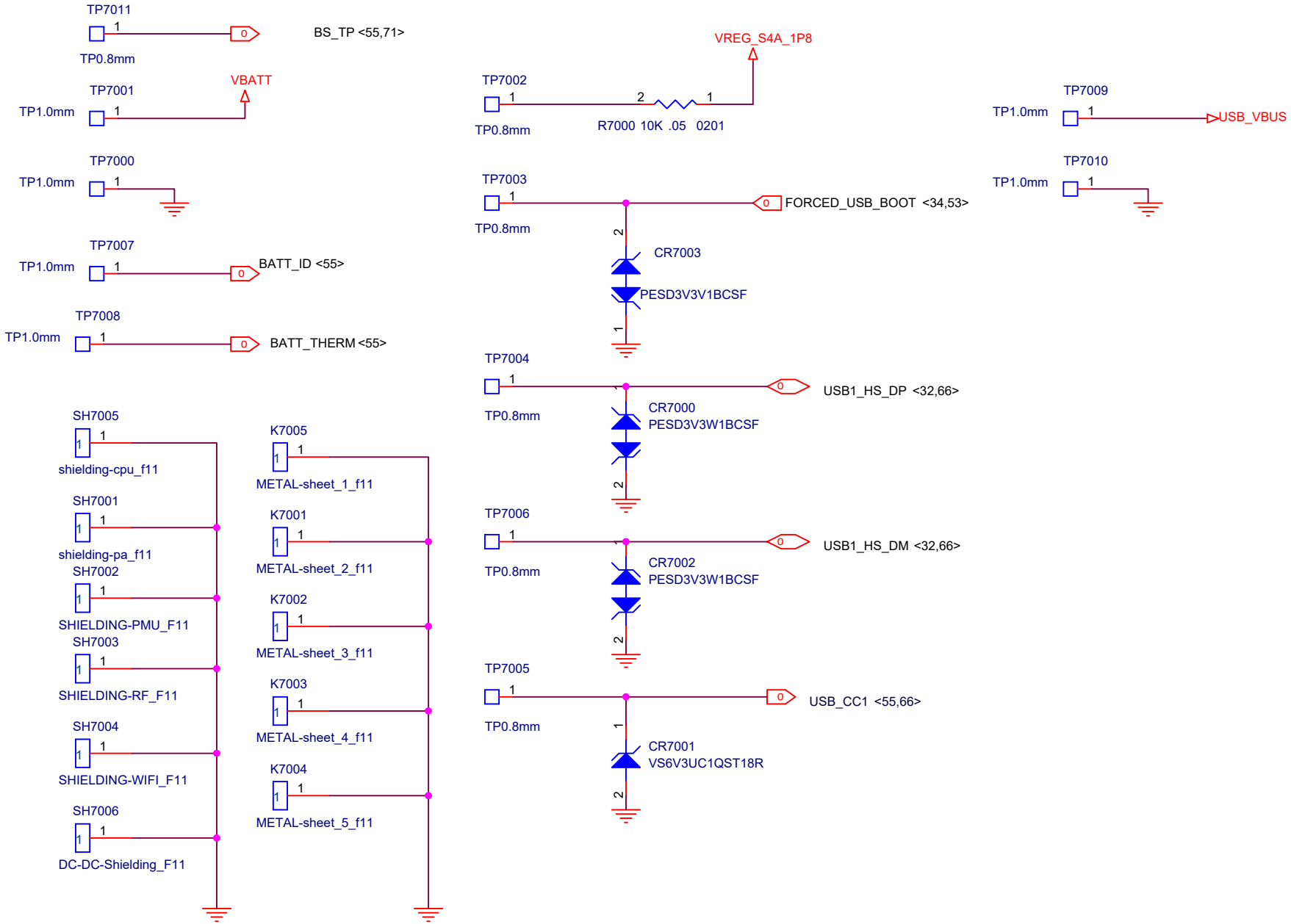
FRONT



CAM IO

ULTRA




TP7011
TP0.8mm
BS_TP <55,71>
TP7001
TP1.0mm
VBATT
TP7000
TP1.0mm
TP7007
TP1.0mm
BATT_ID <55>
TP7008
TP1.0mm
BATT_THERM <55>
TP7002
TP0.8mm
R7000 10K .05 0201
VREG_S4A_1P8
TP7009
TP1.0mm
USB_VBUS
TP7010
TP1.0mm
TP7003
TP0.8mm
FORCED_USB_BOOT <34,53>
CR7003
PESD3V3V1BCSF
TP7004
TP0.8mm
USB1_HS_DP <32,66>
CR7000
PESD3V3W1BCSF
TP7006
TP0.8mm
USB1_HS_DM <32,66>
CR7002
PESD3V3W1BCSF
TP7005
TP0.8mm
USB_CC1 <55,66>
CR7001
VS6V3UC1QST18R
SH7005
shielding-cpu_f11
SH7001
shielding-pa_f11
SH7002
SHIELDING-PMU_F11
SH7003
SHIELDING-RF_F11
SH7004
SHIELDING-WIFI_F11
SH7006
DC-DC-Shielding_F11
K7005
METAL-sheet_1_f11
K7001
METAL-sheet_2_f11
K7002
METAL-sheet_3_f11
K7003
METAL-sheet_4_f11
K7004
METAL-sheet_5_f11