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REVISION HISTORY			
DATE	VERSION	UPDATED BY	REMARKS
02 FEB 2016	1.00		REV A RELEASE
16 JUN 2016	2.00		REV B RELEASE
30 NOV 2016	3.00		REV C RELEASE

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Title: **INDEX PAGE**

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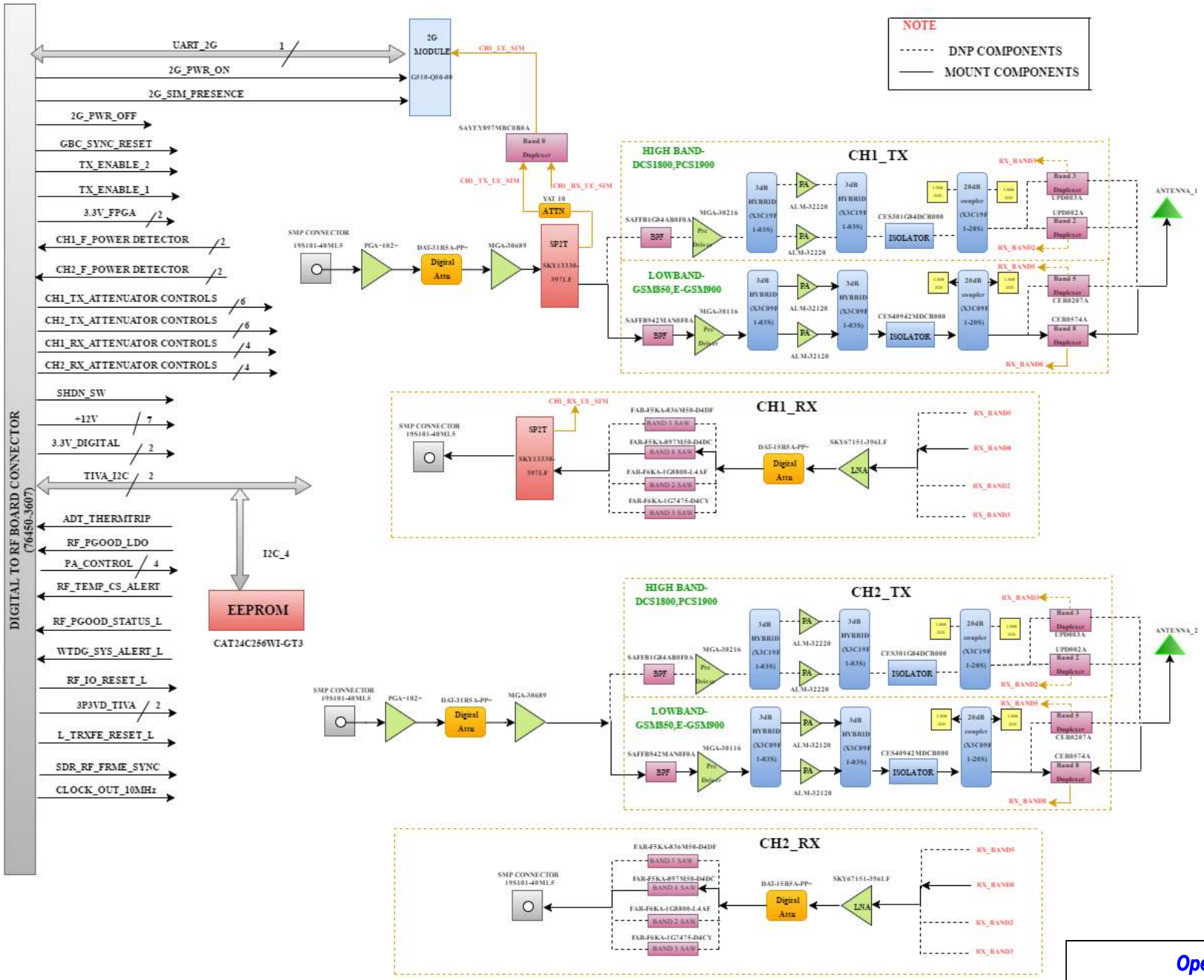
RF FRONT END BLOCK DIAGRAM



OpenCellular connect-1			
Title: RF Block Diagram			
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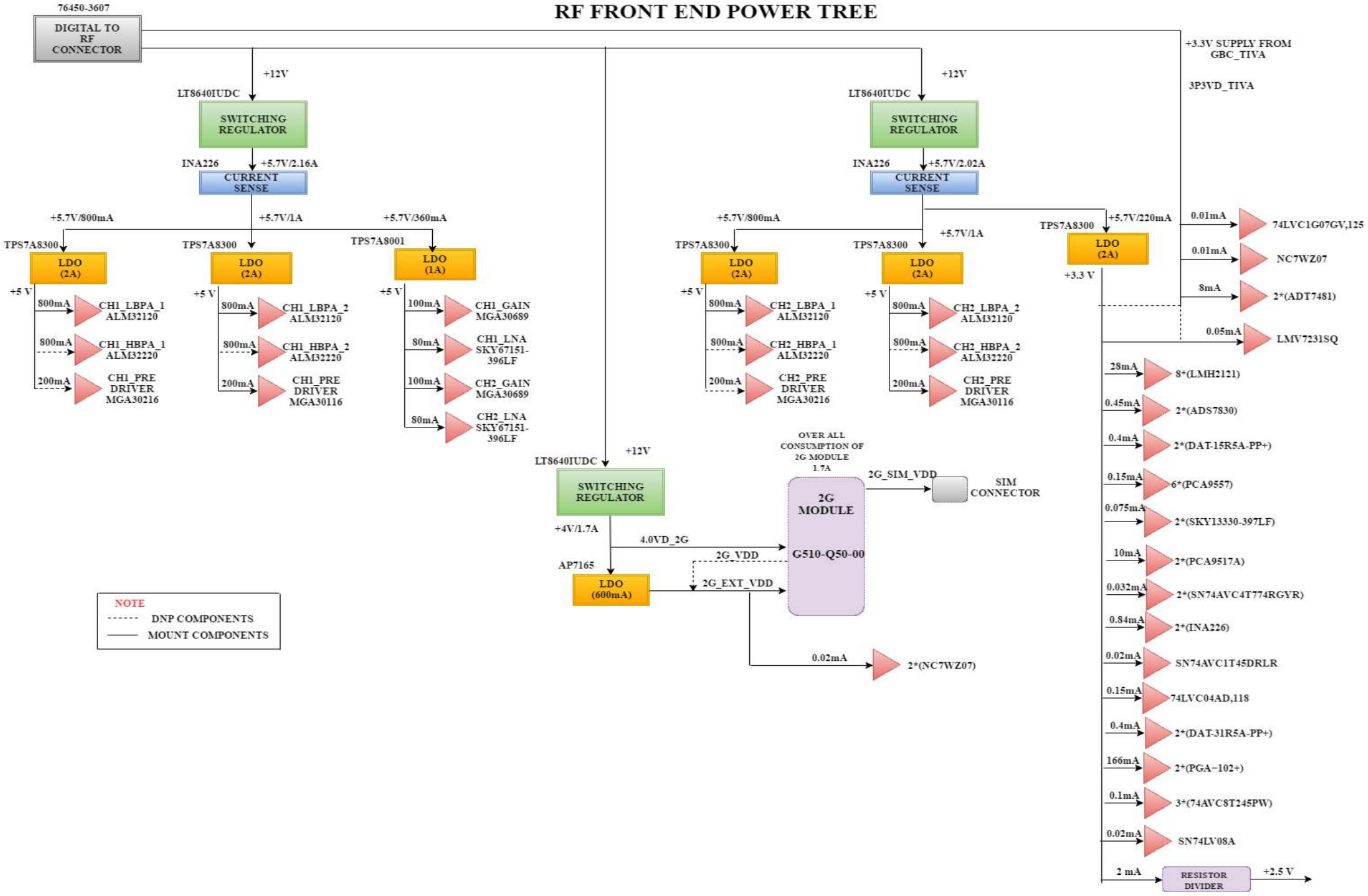
RF FRONT END POWER TREE



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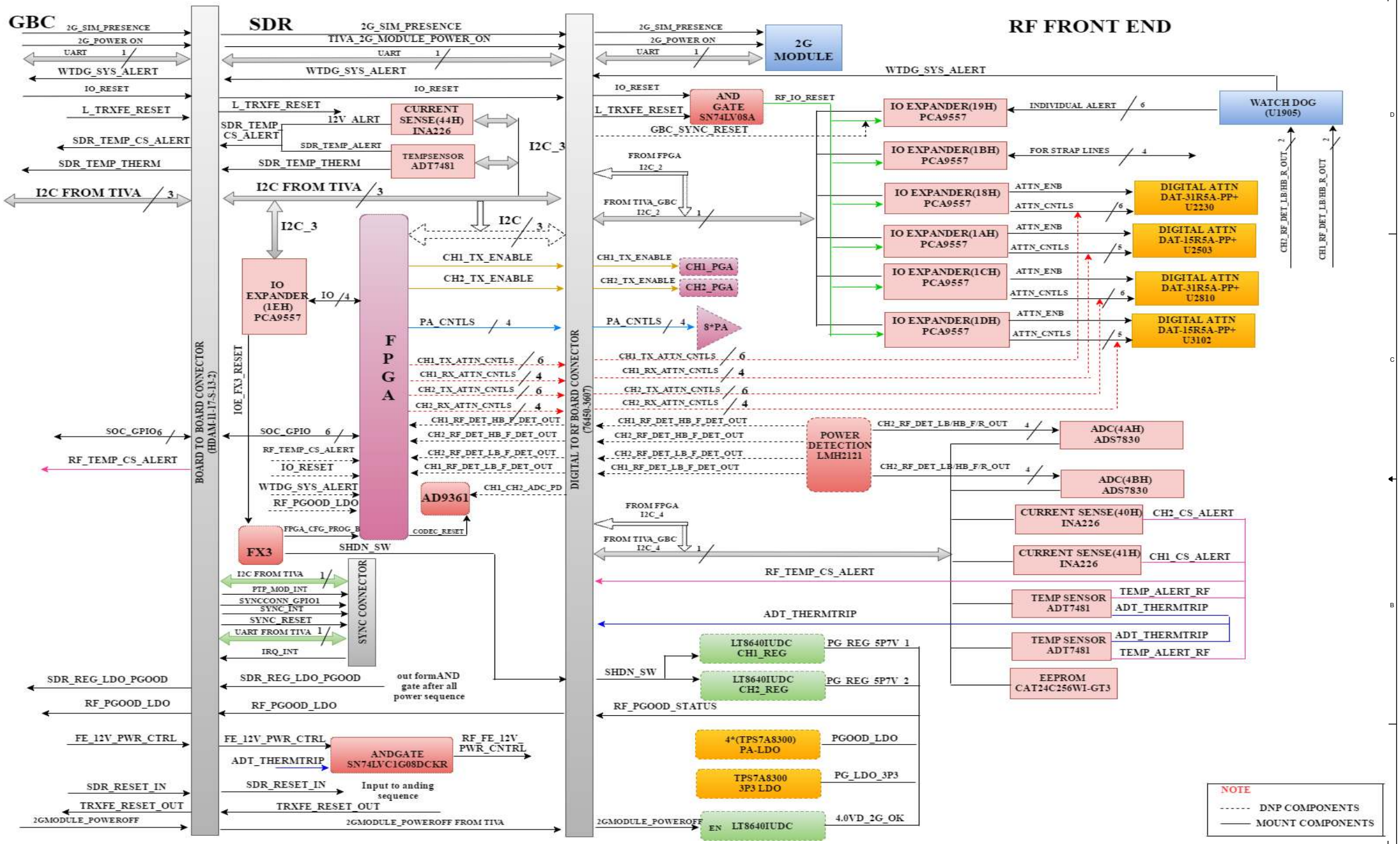

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Title	CONTROL BLOCK DIAGRAM	
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REG_12V_5P7V

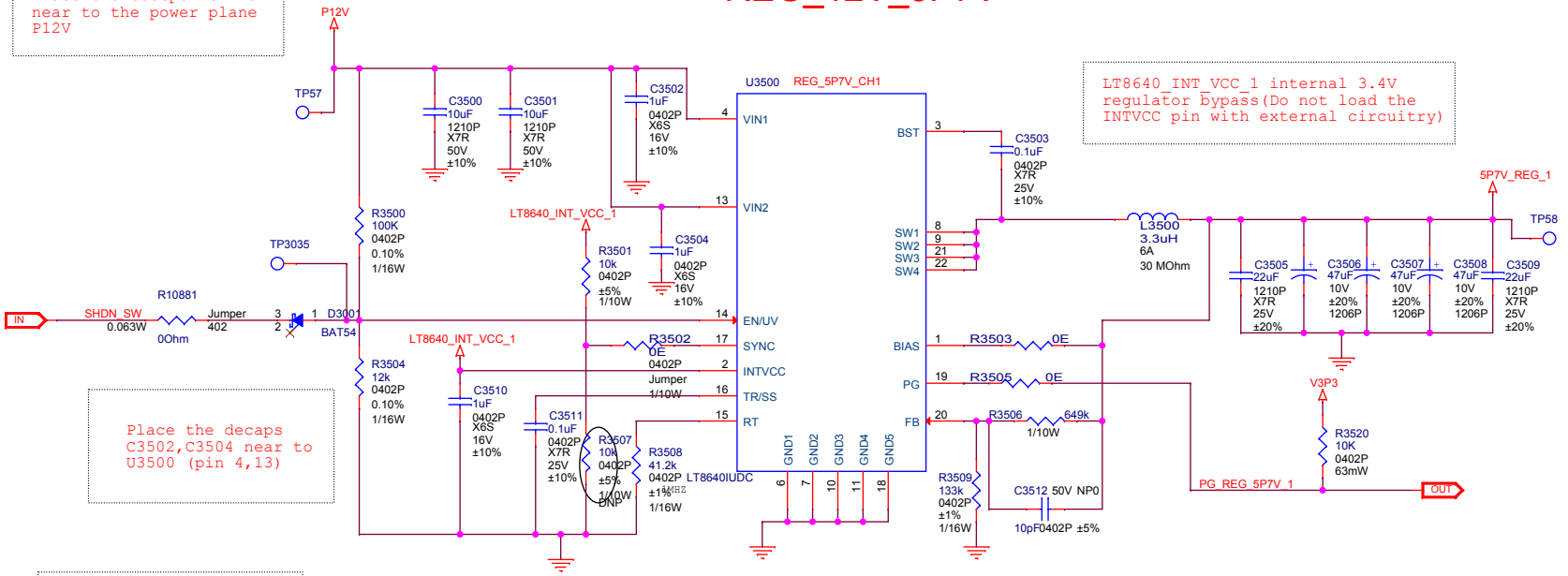
Place the testpoint TP57 near to the power plane P12V

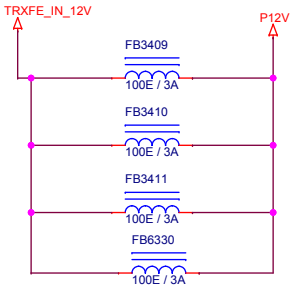
Place the testpoint TP58 near to the power plane 5P7V_REG_1

LT8640_INT_VCC_1 internal 3.4V regulator bypass(Do not load the INTVCC pin with external circuitry)

Place the decaps C3502,C3504 near to U3500 (pin 4,13)

SHDN_SW is board shutdown from FX3(USB controller)



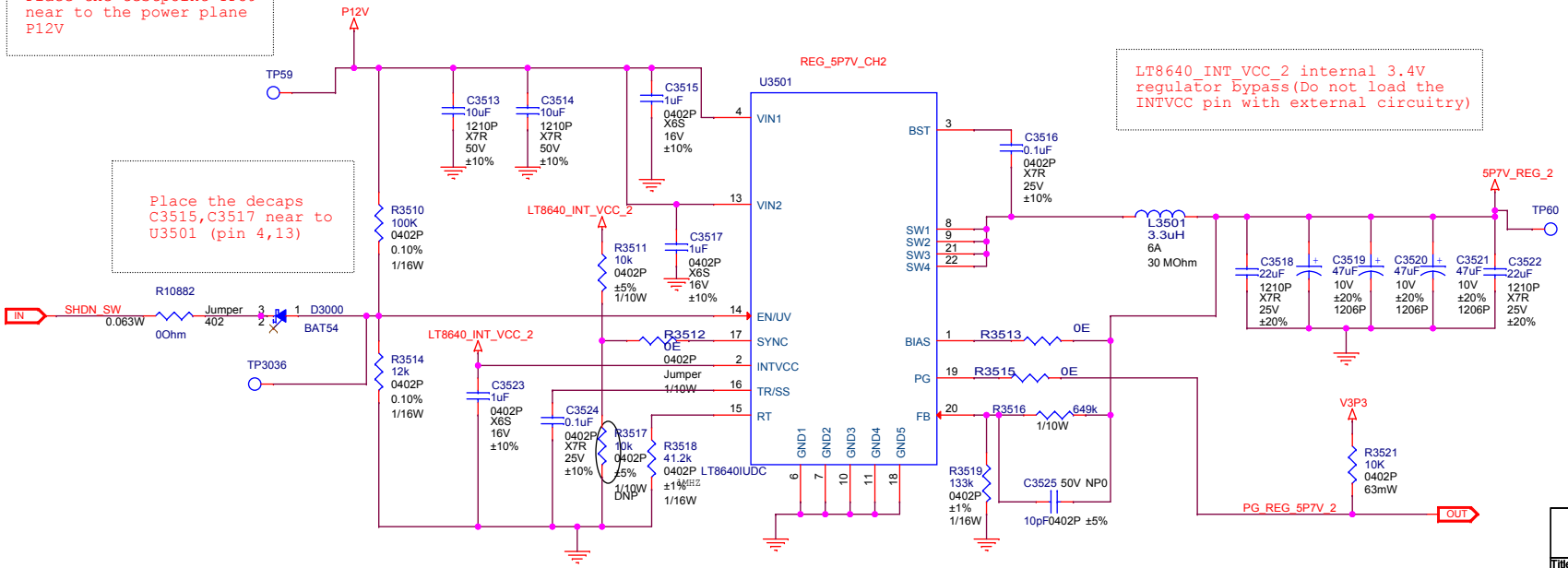


Place the testpoint TP59 near to the power plane P12V

Place the testpoint TP60 near to the power plane 5P7V_REG_2

LT8640_INT_VCC_2 internal 3.4V regulator bypass(Do not load the INTVCC pin with external circuitry)

Place the decaps C3515,C3517 near to U3501 (pin 4,13)



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Title	REG_12V_5P7V	
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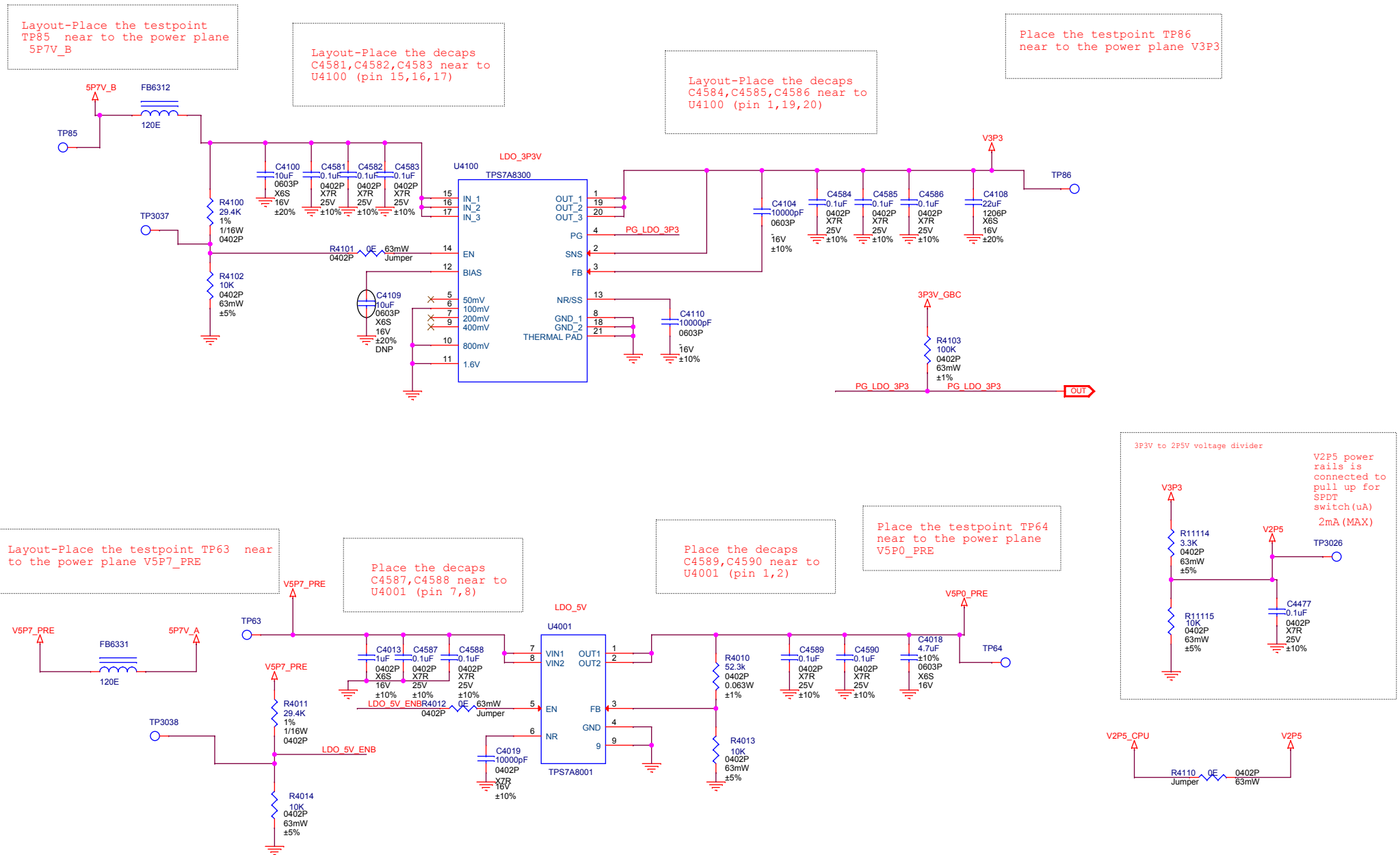
LDO_3P3V_LDO_5V



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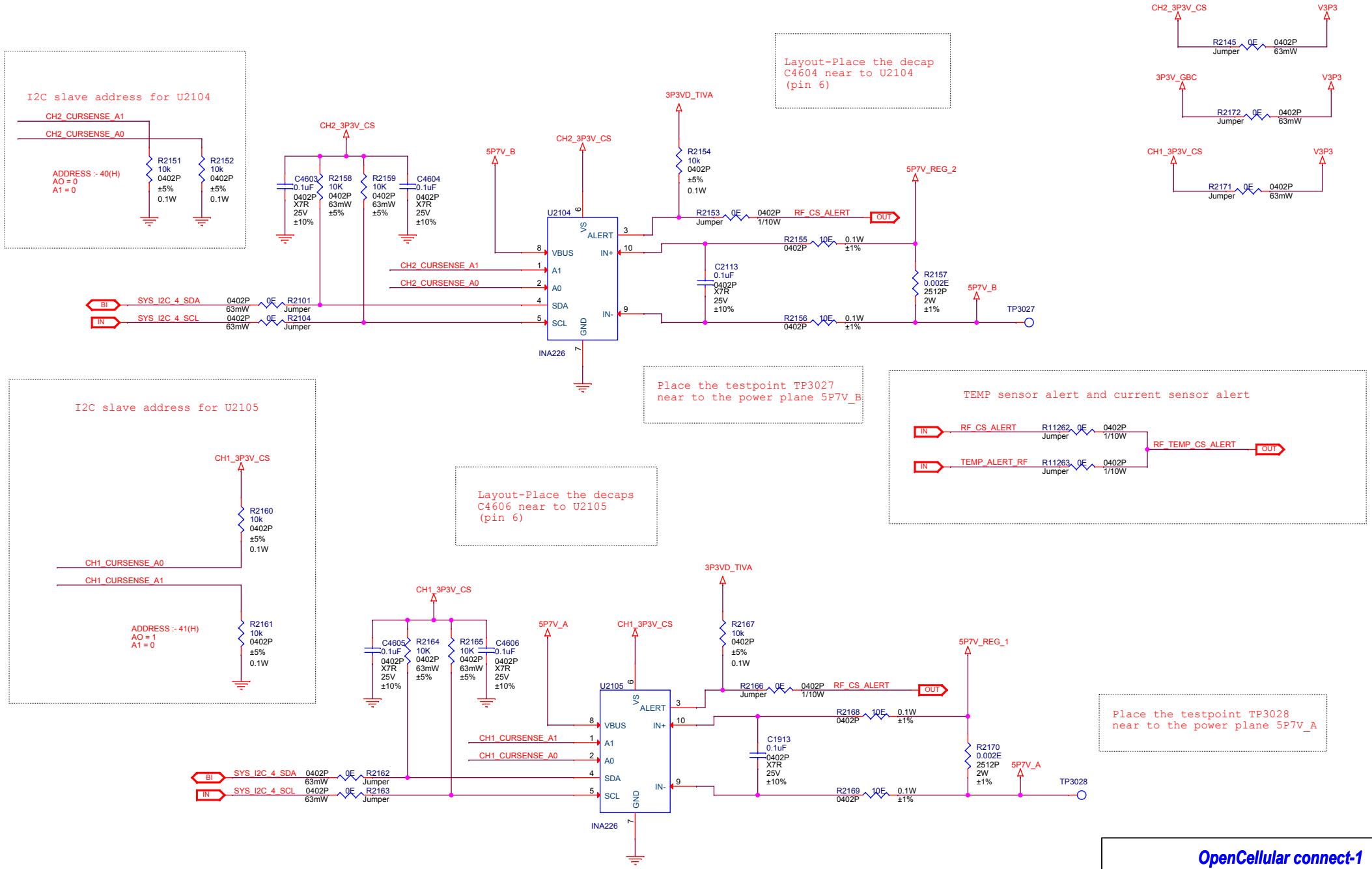
CURRENT SENSING FOR CH1&CH2



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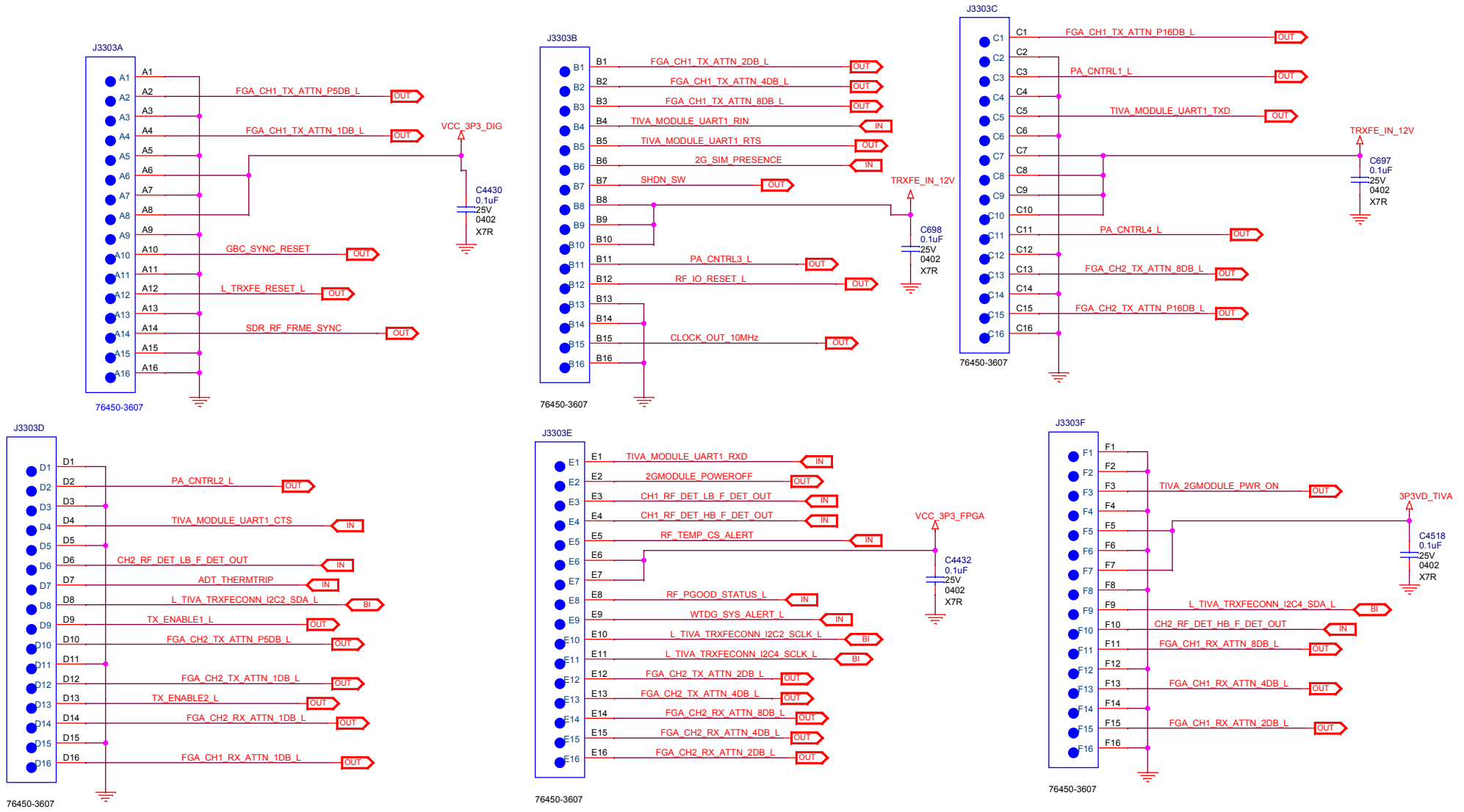
DIGITAL BOARD CONNECTOR



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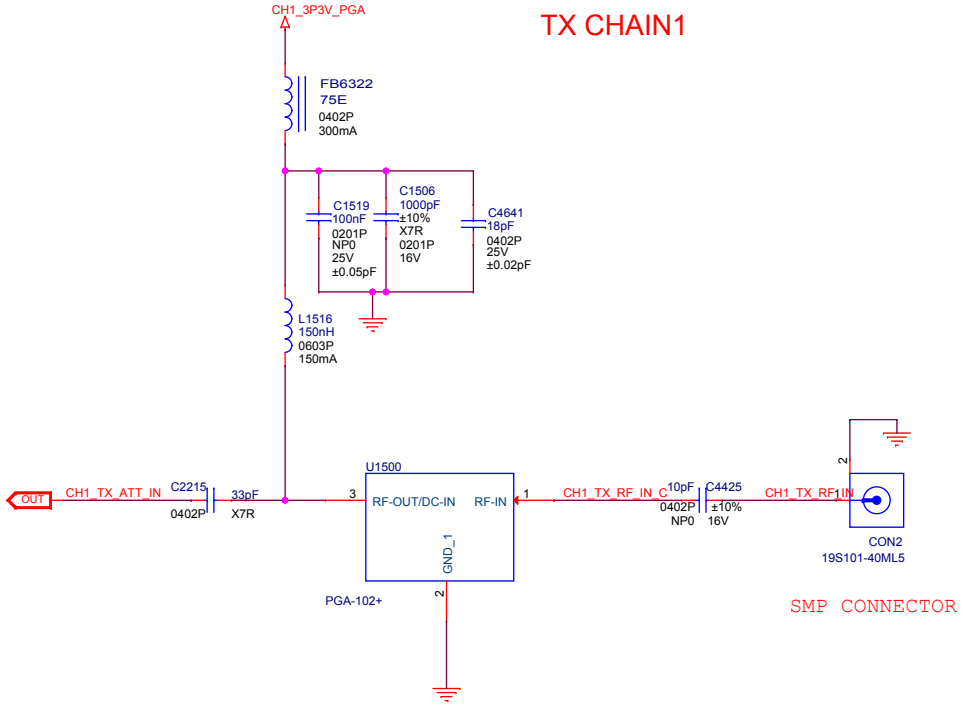
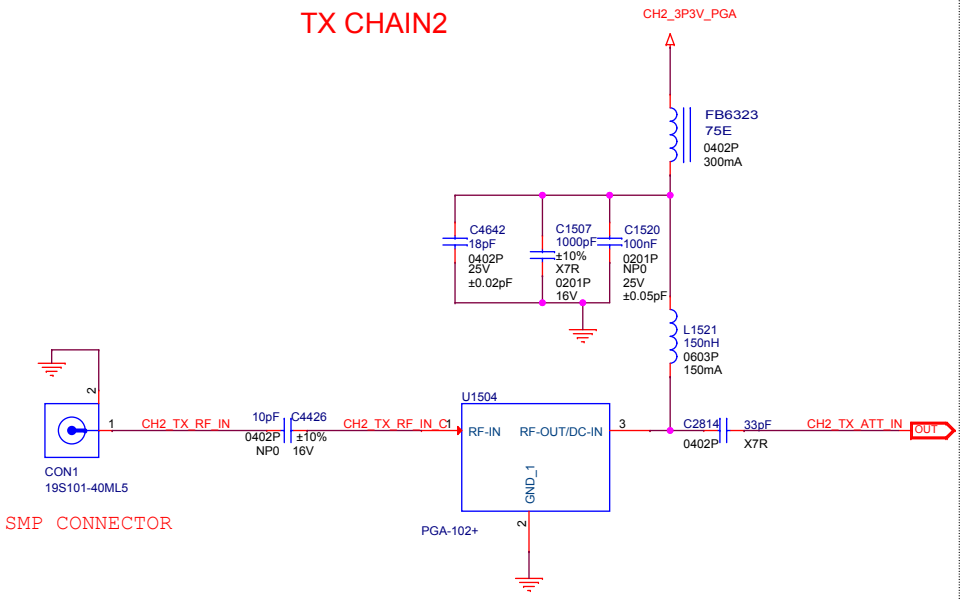
TX_RF_CONNECTOR

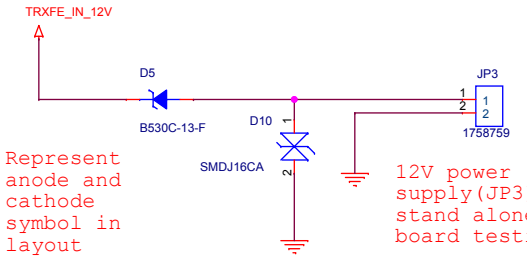
TX CHAIN1



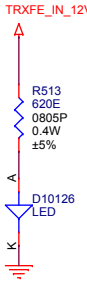
TX CHAIN2



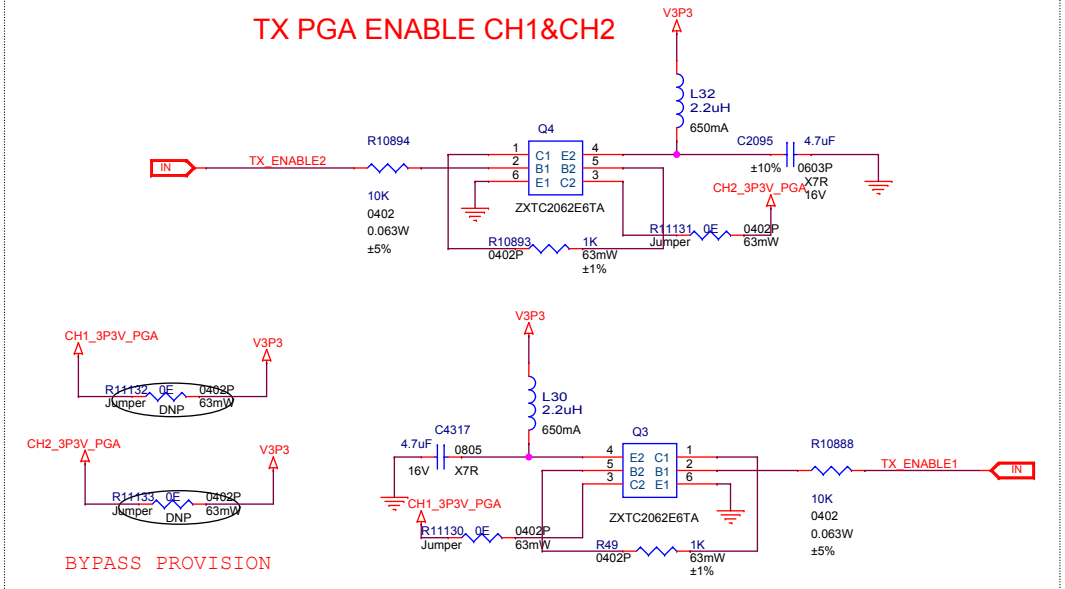
12 Volt Supply



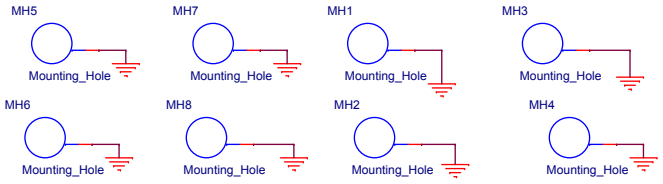
12 Volt LED



TX PGA ENABLE CH1&CH2



MOUNTING HOLES



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CH1_GAIN_ATT

C4519,C2240,C2241,C2242,L2214,C4520 are the matching for 0.2 to 3 GHz-U2203

Place R941 reisitor near to pin 1 on U2230 to avoid freq. resonance

C4665,C4666 are provision in shunt (DNP) for filtering purpose in future-U2203

need to relook the shunt value-R942

place copacitors C4519, C4520 and C2241 near to pin1 ,pin 3 of U2203

Layout-Place the decaps C4643 near to U2230 (pin 6)

Layout-Place the decaps C4614 near to U2205 (pin 16)

1)When mounted control signals are connected to FPGA
2)Layout-Place these resistors close to actual path inorder to avoid stubs-Provide crowfeet option

I2C slave address-U2205

TX PREDRIVE ADDRESS 18(H)
A0 = 0
A1 = 0
A2 = 0

PCA9557

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Title: CH1_GAIN_ATT		
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CH1_RF_PA_PREDRIVE

CH1_+5p0V_HBPA1 — R2201 0E 0402P 63mW Jumper — CH1_+5p0V_HBPRE

CH1_+5p0V_HBPA2 — R2217 0E 0402P 63mW Jumper — CH1_+5p0V_LBPRE

CH1_TX_3P3V_397LF — FB6332 75E 0402P 200mA — V3P3

By default SAW filter is placed for 1800 band, if required we can change it to 1900 band with same footprint-FL3312

FL3312 SAFFB1G84AB0F0A (GND_3, GND_2, GND_1, IN, OUT)

C2236 10pF ±10% 0402P 16V NP0 DNP

Layout-Place capacitor-C2236, C2237 as crowfeet option (3 pad)

Layout-Place the decaps C4644 near to U3204 (pin 9)

U3204 (GND_6, RF2, GND_5, GND_1, RFC, GND_2, GND_3, RF3, GND_4, PAD, VCC, ENB, CTRL)

SKY13330-397LF

C3209 33pF 0402P; C4644 18pF 0402P 25V

R3210 100K 0402P 63mW ±1% DNP; R3211 100K 0402P 63mW ±1%

V2P5_CPU

IN — CH1_TX_PREAMP_OUT

R3212 1K 0402P 63mW ±1% — CH1_2G_LB_BAND_SEL_L — IN

47pF C4482 50V 0402P — CH1_TX_UE_SIM_MODULE — OUT

CNTRL 0 RF3 = UE SIM MODULE
1 RF2 = CH1_HB_LB_SEL

U7141 MM8430-2610 (IN, GND1, GND2, OUT, GND3, GND4)

10pF C4464 0402P NP0 16V ±10% DNP — CH1_HB_RF_CON

U7142 MM8430-2610

10pF C4465 0402P NP0 16V ±10% DNP — CH1_LB_RF_CON

Layout-Place DNP capacitor as crowfeet option (3 pad) near to R2210 ,R2224 respectivly

CH1_HB_LB_SEL

C2237 47pF 0402P 50V 1 %

FL3310 SAFFB942MAN0F0A (GND_3, GND_2, IN, OUT, GND_1)

By default SAW filter is placed for 900 band, if required we can change it to 850 band with same footprint-FL3310

CH1_HB_RF_CON

0402P 63mW 0E R2210 Jumper DNP

C2210 3.3PF 0402P DNP

R2213 887E 0402P 0.063W ±1% DNP DNP

R2214 887E 0402P 0.063W ±1% DNP DNP

L2205 3.3nH 300mA 0402P DNP DNP

C2214 1pF 0402P 25V ±0.02pF DNP

CH1_LB_RF_CON

0402P 63mW 0E R2224 Jumper

C2230 10pF ±10% 0402P

R2225 887E 0402P 0.063W ±1% DNP

R2226 887E 0402P 0.063W ±1% DNP

L2212 9.1 nH 0402P 300mA

C2233 2.7PF 0402P 25V ±0.1pF

C2210,L2205,C2214,C2213,C2206 and L2203 are part of input and output matching for-U2200

C2230,L2212,C2233,C2228,C2234 and L2213 are part of input and output matching for-U2204

L2200 18nH 0402P 300mA DNP

C2200 10pF 16V 0402P NP0 ±10% DNP

CH1_+5p0V_HBPRE_SW

C2205 10pF 16V 0402P NP0 ±10% DNP

R2206 0E 63mW 0402P Jumper DNP

U2200 MGA-30216 (RFGND, VG, GND_2, NC_7, VM, VBIAS, RFIN, NC_1, NC_6, RFOUT_2, RFOUT_1, NC_5, NC_2, NC_3, GND_1, NC_4, PAD)

CH1_+5p0V_HBPRE

FB2200 120E DNP

CH1_+5p0V_HBPRE_SW

L2201 18nH 0402P 300mA DNP

C2203 33pF 0402P X7R 50V ±5% DNP

C2201 10000pF 16V 0603P - ±10% DNP

C2204 2.2uF 0402P X6S 16V ±10% DNP

C2202 10uF 0603P X6S 16V ±20% DNP

Layout-Place C2203 and L2201 close to Pin10,Pin11 of U2200

C2206 ±10% 16V 10pF 0402P NP0 DNP

C2207 ±10% 16V 10pF 0402P NP0 DNP

0402P 63mW 0E R2209 Jumper DNP — CH1_HBPA_RF_IN — OUT

C2213 0.5pF H2H 0402P 16V ±0.1pF DNP

L2203 4.7nH 400mA 0402P DNP

R2211 887E 0402P 0.063W ±1% DNP DNP

R2212 887E 0402P 0.063W ±1% DNP DNP

1)R2210,R2213,R2214,R2209,R2211 and R2212 are input and output Pi pad resistors for U2200
2)Layout-Place these reistors in the Pi shape.

L2208 15nH 250mA 0402P

C2220 100pF 0201P X7R 16V ±10%

CH1_+5p0V_LBPRE_SW

C2245 100pF 0201P X7R 16V ±10%

R2221 0E 63mW 0402P Jumper

U2204 MGA-30116 (RFGND, VG, GND_2, NC_7, VM, VBIAS, RFIN, NC_1, NC_6, RFOUT_2, RFOUT_1, NC_5, NC_2, NC_3, GND_1, NC_4, PAD)

CH1_+5p0V_LBPRE

FB2201 120E

CH1_+5p0V_LBPRE_SW

L2209 6.8nH 0402P 300mA

C2219 33pF 0402P X7R 50V ±5%

C2221 10000pF 0603P - 16V ±10%

C2222 2.2uF 0402P X6S 16V ±10%

C2223 10uF 0603P X6S 16V ±20%

C2228 100pF 0402P 25V; C4419 100pF 0402P 25V

0402P 63mW 0E R2223 Jumper — CH1_LBPA_RF_IN — OUT

C2234 0.5pF 0402P 16V R2H ±0.1pF DNP

L2213 8.2nH 250mA 0402P DNP

R2227 887E 0402P 0.063W ±1% DNP

R2228 887E 0402P 0.063W ±1% DNP

Layout-Place C2219 and L2209 close to Pin10,Pin11 of U2204

1)R2224,R2225,R2226,R2223,R2228 and R2227 are input and output Pi pad resistors for U2204
2)Layout-Place these reistors in the Pi shape.

OpenCellular connect-1

Title	CH1_RF_PA_PREDRIVE	
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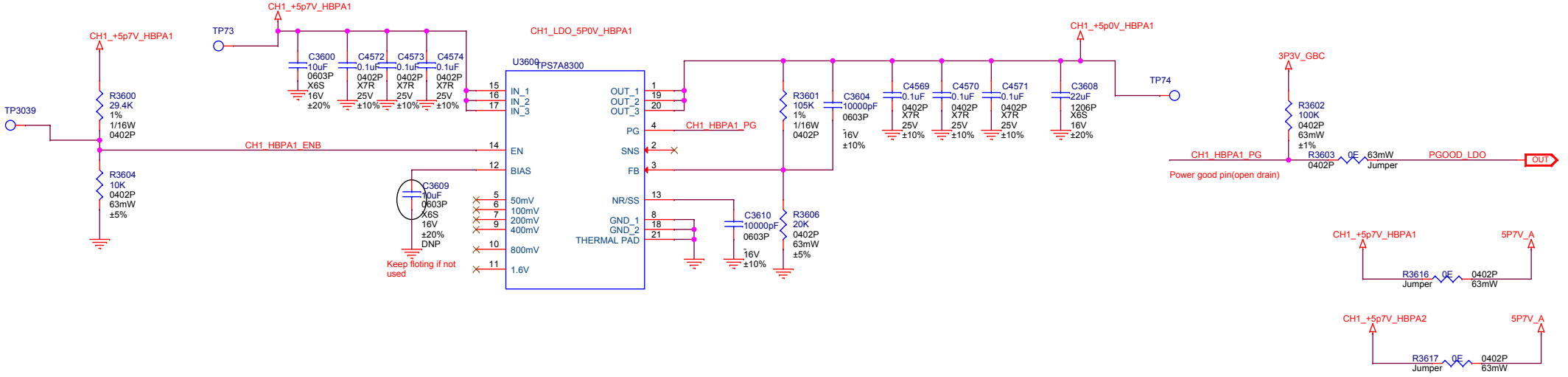
CH1_HB_LDO

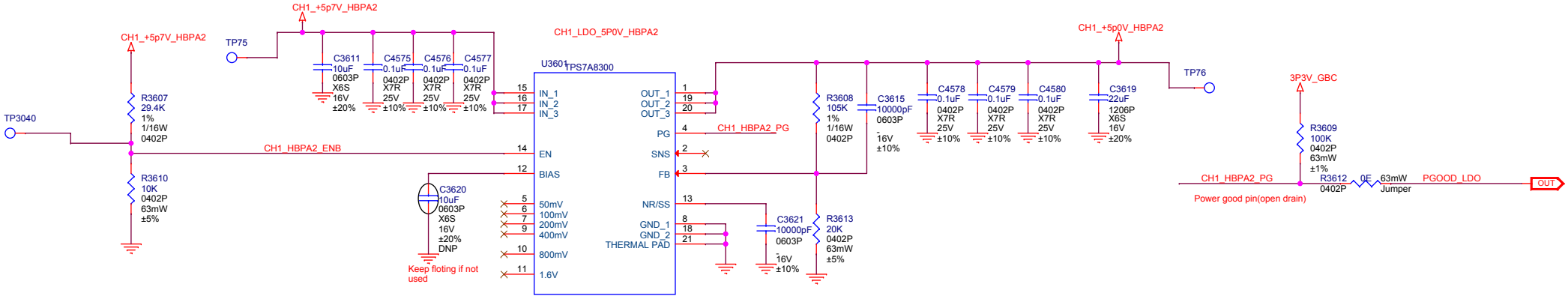
Place the testpoint TP73 near to the power plane CH1_+5p7V_HBPA1-U3600

Place the testpoint TP74 near to the power plane CH1_+5p0V_HBPA1-U3600

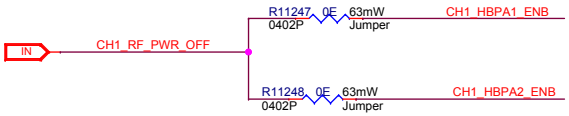


Place the testpoint TP75 near to the power plane CH1_+5p7V_HBPA2-U3601

Place the testpoint TP76 near to the power plane CH1_+5p0V_HBPA2-U3601



CH1 power off control



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Title	CH1_HB_LDO	
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CH1_RF_PA_LB

Layout-Place DNP capacitor-C4413 as crowfeet option (3 pad) near to C4447

Layout-1) Place C2403 capacitor near to pin 20 of -U2400
2) Place C2404 capacitor near to pin 18 of U2400

C2410,C2413,L2402,C2411,C2414,C4421 and L2403 are part of input and output matching for-U2400

R11159,R11158,R11160 aer the 2dB PI pad resistors for the input port of-U2400

R853,R854,R855 aer the PI pad resistors for the ISO port of-U2403

R850,R851,R852 aer the PI pad resistors for the ISO port of-U2402

By default isolator is placed for 900 band, if required we can change it to 850 band with same footprint

Layout-Place DNP capacitor-C4414 as crowfeet option (3 pad) near to C4488

C2439,L2406,C2432,C4422,C2433 ,C4470 and L2407 are part of input and output matching for-U2404

R11163,R11161,R11162 aer the 2dB PI pad resistors for the input port of-U2404

Layout-1) Place C2422 capacitor near to pin 20 of -U2404
2) Place C2423 capacitor near to pin 18 of U2404

power supply-U2404

CH1_+5p0V_HBPA2 — FB2401 120E — CH1_+5p0V_LBPA2_SW

CH1_+5p0V_HBPA1 — FB2400 120E

IN — CH1_+5p0V_LBPA1_VCTRL — FB3412 120E — CH1_+5p0V_LBPA1_VCTRL_FB

C2400 10uF 0603P X6S 16V ±20%
C2401 2.2uF 0402P X6S 16V ±10%
C2402 10000pF 0603P - 16V ±10%
C2403 33pF 0402P X7R 50V ±5%

U2400 ALM-32120 (GND_1 … GND_14, VCTRL, VDD1, RFIN, RFOUT, NC, VDD2)

C2404 33pF 0402P X7R 50V ±5%
C2405 10000pF 0603P - 16V ±10%
C2406 2.2uF 0402P X6S 16V ±10%
C2407 10uF 0603P X6S 16V ±20%

CH1_+5p0V_LBPA1_SW

U7122 MM8430-2610 (IN, OUT, GND1, GND3, GND2, GND4)

10pF C4413 0402P NP0 ±10% 16V DNP

IN — CH1_LBPA_RF_IN — C4447 47pF 0402P 50V

CH1_LBPA_RF_PATH1_IN

R11159 0402P — 11.8E 63mW — L2400 1nH 0402P 300mA — C2410 100pF 0402P 25V — C4421 100pF 0402P 25V — CH1_LBPA_RF_PATH1_OUT — C2411 12pF 0402P

R11158 442E 0402P 63mW ±1%
R11160 442E 0402P 63mW ±1%
L2402 DNP 0603P
C2413 DNP 0603P
C2414 DNP 0603P
L2403 DNP 0603P

U2402 (RFIN, GND, ISO)

CH1_+5p0V_LBPA1_SW

C2415 33pF 0402P X7R 50V ±5%
C2416 10000pF 0603P - 16V ±10%
C2417 2.2uF 0402P X6S 16V ±10%
C2418 10uF 0603P X6S 16V ±20%

U2403 X3C09F1-03S (ISO, GND, RFOUT)

CH1_PA_LB_ISO — R853 0E 0402P — C4522 100pF 0402P 25V — TP2403 T POINT R — R11038 49.9E 1210P

R854 0E 0402P DNP
R855 0E 0402P DNP

X3C09F1-03S

R850 0E 0402P — TP2400 T POINT R — R5526 49.9E 1210P

R851 0E 0402P DNP
R852 0E 0402P DNP

CH1_LBPA_RF_PATH2_IN

IN — CH1_+5p0V_LBPA2_VCTRL — FB3413 120E — CH1_+5p0V_LBPA2_VCTRL_FB

C2419 10uF 0603P X6S 16V ±20%
C2420 2.2uF 0402P X6S 16V ±10%
C2421 10000pF 0603P - 16V ±10%
C2422 33pF 0402P X7R 50V ±5%

U2404 ALM-32120 (GND_1 … GND_14, VCTRL, VDD1, RFIN, RFOUT, NC, VDD2)

CH1_+5p0V_LBPA2_SW

C2423 33pF 0402P X7R 50V ±5%
C2424 10000pF 0603P - 16V ±10%
C2425 2.2uF 0402P X6S 16V ±10%
C2426 10uF 0603P X6S 16V ±20%

R11163 0402P — 11.8E 63mW — L2405 1nH 0402P 300mA — C2439 100pF 0402P 25V — C4422 100pF 0402P 25V — C4470 12pF 0402P

R11161 442E 0402P 63mW ±1%
R11162 442E 0402P 63mW ±1%
L2406 DNP 0603P
C2432 DNP 0603P
C2433 DNP 0603P
L2407 DNP 0603P

CH1_LBPA_RF_PATH2_OUT

CH1_+5p0V_LBPA2_SW

C2435 33pF 0402P X7R 50V ±5%
C2436 10000pF 0603P - 16V ±10%
C2437 2.2uF 0402P X6S 16V ±10%
C2438 10uF 0603P X6S 16V ±20%

U7146 CES40942MDCB000 (GND_1, GND_4, IN, OUT, GND_2, GND_3)

C4488 47pF 0402P 50V — C4449 47pF 0402P 50V — CH1_RF_LB_PA_OUT — OUT

U7123 MM8430-2610 (OUT, IN, GND3, GND1, GND4, GND2)

C4414 10pF ±10% 16V 0402P NP0 DNP

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CH1_RF_PA_HB

Layout-Place DNP capacitor-C4415 as crowfeet option (3 pad) near to C4450

Layout-1)Place C2304 capacitor near to pin 20 of -U2301
2)Place C2305 capacitor near to pin 18 of U2301

R859,R860,R861 aer the PI pad resistors for the ISO port of-U2303

R856,R857,R858 aer the PI pad resistors for the ISO port of-U2302

R11168,R11166,R11167 are the 2dB PI pad resistors for the input port of-U2301

L2300,C2310,L2303,C2314,C2313,C2311,L2302 are part of input and output matching for-U2301

Layout-1)Place C2322 capacitor near to pin 20 of -U2304
2)Place C2323 capacitor near to pin 18 of U2304

By default isolator is placed for 1800 band, if required we can change it to 1900 band with same footprint

R11169,R11164,R11165 are the 2dB PI pad resistors for the input port of-U2304

L2304,C2330,L2307,C2333,C2332,C2329 and L2306 are part of input and output matching for-U2304

Layout-Place DNP capacitor-C4416 as crowfeet option (3 pad) near to C4490

power supply-U2304

CH1_+5p0V_HBPA2

FB2301 120E DNP

CH1_+5p0V_HBPA2_SW

CH1_+5p0V_HBPA1

FB2300 120E DNP

IN CH1_+5p0V_HBPA1_VCTRL

FB3414 120E DNP

CH1_+5p0V_HBPA1_VCTRL_FB

U7124 MM8430-2610 DNP

10pF 0402P NP0 ±10% 16V C4415 DNP

IN CH1_HBPA_RF_IN

C4450 10pF 0402P ±10% 16V NP0 DNP

U2302 X3C19F1-03S

CH1_HBPA_RF_PATH1_IN

R11168 0402P 11.8E 63mW ±1% DNP

R11166 442E 0402P 63mW ±1% DNP

R11167 442E 0402P 63mW ±1% DNP

L2300 1nH 0402P 300mA DNP

C2310 33pF 0402P X7R 50V ±5% DNP

L2303 DNP 0603P DNP

C2314 DNP 0603P DNP

U2301 ALM-32220

VCTRL VDD1 RFIN RFOUT NC VDD2 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

C2301 10uF 0603P X6S 16V ±20% DNP

C2302 2.2uF 0402P X6S 16V ±10% DNP

C2303 10000pF 0603P - 16V ±10% DNP

C2304 33pF 0402P X7R 50V ±5% DNP

CH1_+5p0V_HBPA1_SW

C2305 33pF 0402P X7R 50V ±5% DNP

C2306 10000pF 0603P - 16V ±10% DNP

C2307 2.2uF 0402P X6S 16V ±10% DNP

C2308 10uF 0603P X6S 16V ±20% DNP

R11066 0E 0402P 63mW DNP

CH1_HBPA_RF_PATH1_OUT

C2311 10pF ±10% 0402P 16V NP0 DNP

C2312 DNP 0603P DNP

L2302 DNP 0603P DNP

U2303 X3C19F1-03S

CH1_PA_HB_ISO

C2315 33pF 0402P X7R 50V ±5% DNP

C2316 10000pF 0603P - 16V ±10% DNP

C2317 2.2uF 0402P X6S 16V ±10% DNP

C2318 10uF 0603P X6S 16V ±20% DNP

R859 0E 0402P DNP

R860 0E 0402P DNP DNP

R861 0E 0402P DNP DNP

C4521 100pF 0402P 25V DNP

TP2303 T POINT R R1040 49.9E 1210P DNP DNP

U7148 CES301G84DCB000 DNP

C4490 10pF ±10% 0402P 16V NP0 DNP

C4452 10pF ±10% 0402P 16V NP0 DNP

CH1_RF_HB_PA_OUT OUT

CH1_+5p0V_HBPA2_VCTRL IN

FB3415 120E DNP

CH1_+5p0V_HBPA2_VCTRL_FB

C2319 10uF 0603P X6S 16V ±20% DNP

C2320 2.2uF 0402P X6S 16V ±10% DNP

C2321 10000pF 0603P - 16V ±10% DNP

C2322 33pF 0402P X7R 50V ±5% DNP

U2304 ALM-32220

CH1_+5p0V_HBPA2_SW

C2323 33pF 0402P X7R 50V ±5% DNP

C2324 10000pF 0603P - 16V ±10% DNP

C2325 2.2uF 0402P X6S 16V ±10% DNP

C2326 10uF 0603P X6S 16V ±20% DNP

R11169 0402P 11.8E 63mW ±1% DNP

R11164 442E 0402P 63mW ±1% DNP

R11165 442E 0402P 63mW ±1% DNP

L2304 1nH 0402P 300mA DNP

C2330 33pF 0402P X7R 50V ±5% DNP

L2307 DNP 0603P DNP

C2333 DNP 0603P DNP

R11068 0E 0402P 63mW DNP

C2329 10pF ±10% 0402P 16V NP0 DNP

C2332 DNP 0603P DNP

L2306 DNP 0603P DNP

CH1_HBPA_RF_PATH2_IN

CH1_HBPA_RF_PATH2_OUT

CH1_+5p0V_HBPA2_SW

C2335 33pF 0402P X7R 50V ±5% DNP

C2336 10000pF 0603P - 16V ±10% DNP

C2337 2.2uF 0402P X6S 16V ±10% DNP

C2338 10uF 0603P X6S 16V ±20% DNP

U7125 MM8430-2610 DNP

C4416 10pF ±10% 0402P 16V NP0 DNP DNP

R856 0E 0402P DNP

R857 0E 0402P DNP DNP

R858 0E 0402P DNP DNP

TP2300 T POINT R R11099 49.9E 1210P DNP DNP

X3C19F1-03S DNP

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Title	CH1_RF_PA_HB	
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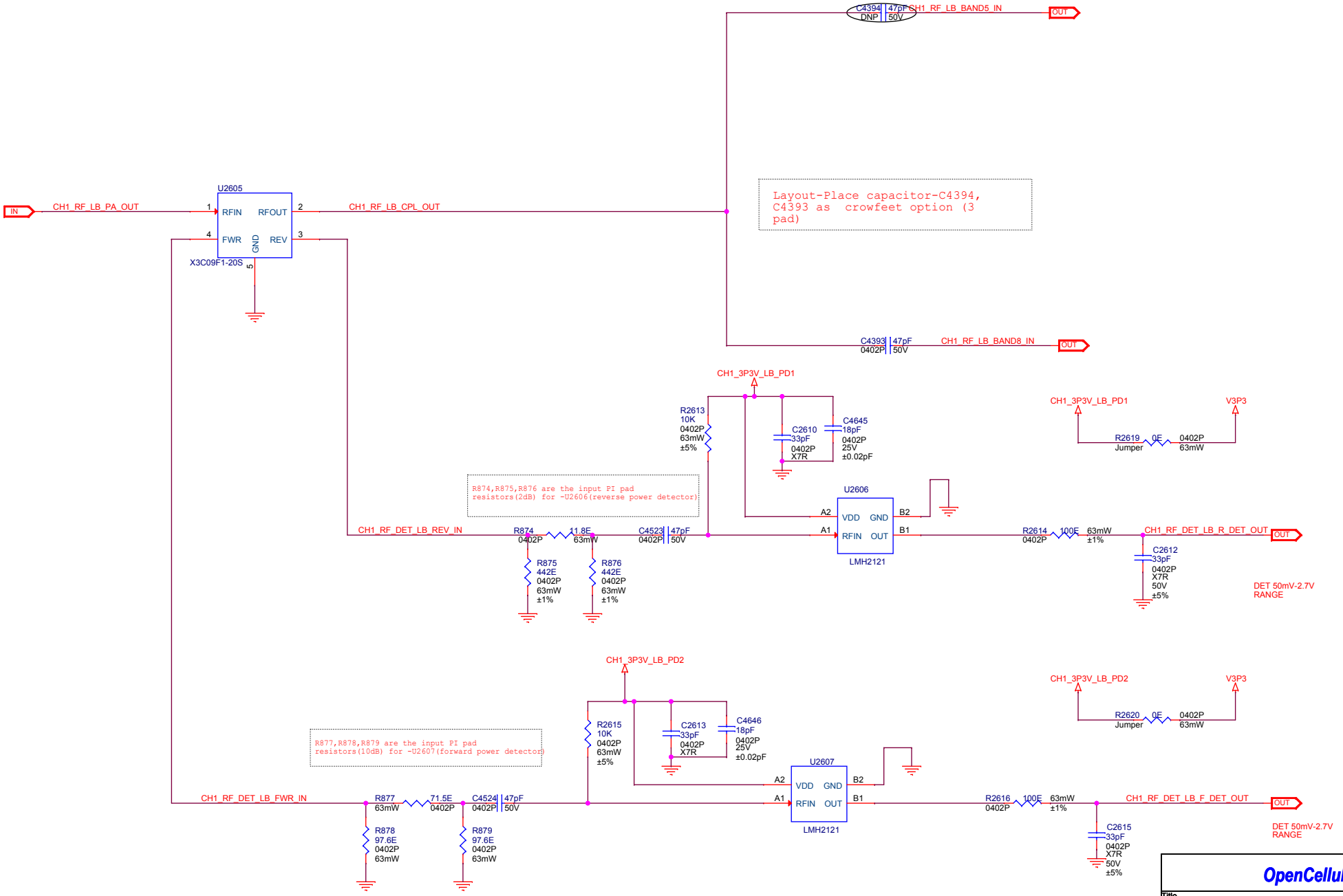
CH1_ANT_INTERFACE_LB



OpenCellular connect-1

Title	CH1_ANT_INTERFACE_LB	
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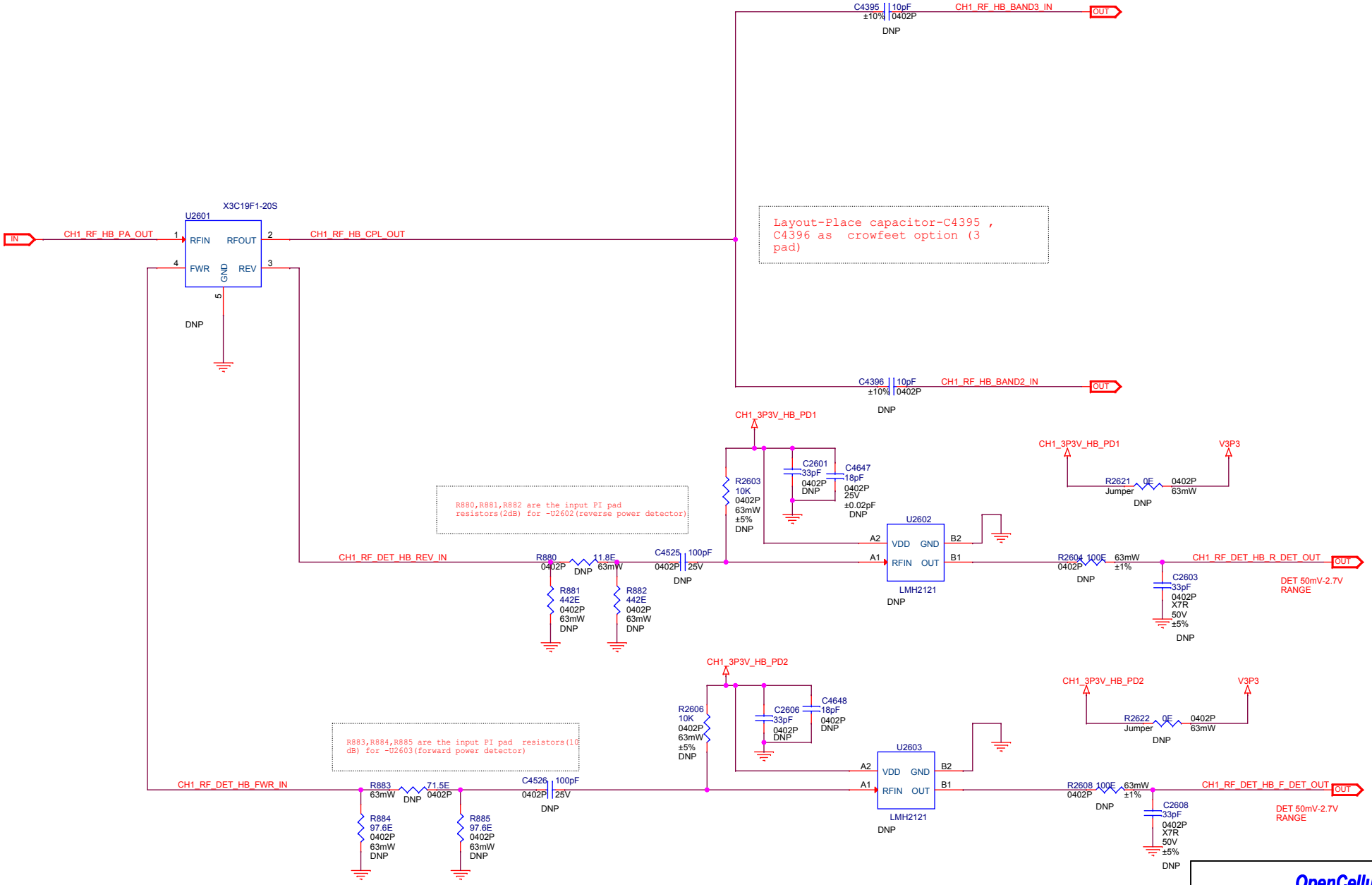
CH1_ANT_INTERFACE_HB



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Title	CH1_ANT_INTERFACE_HB	
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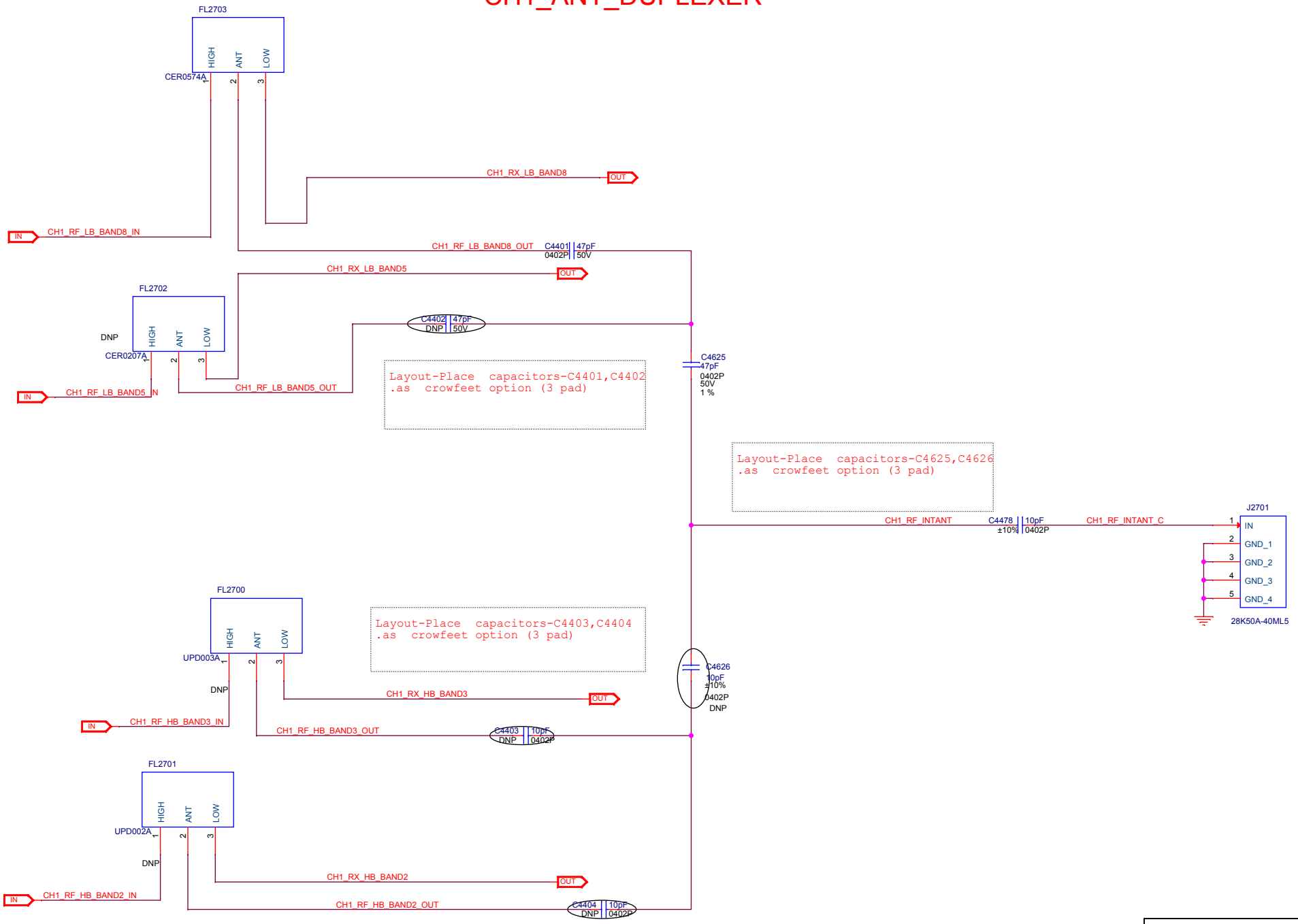
CH1_ANT_DUPLEXER



OpenCellular connect-1

Title	CH1_ANT_DUPLEXER	
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CH1_RF_LNA_ATT

1)When mounted control signals are connected to FPGA
2)Layout-Place these resistors close to actual path inorder to avoid stubs

FGA_CH1_RX_ATTN_8DB_R720 0E DNP FGA_CH1_RX_ATTN_8DB IN
FGA_CH1_RX_ATTN_4DB_R721 0E DNP FGA_CH1_RX_ATTN_4DB IN
FGA_CH1_RX_ATTN_2DB_R722 0E DNP FGA_CH1_RX_ATTN_2DB IN
FGA_CH1_RX_ATTN_1DB_R723 0E DNP FGA_CH1_RX_ATTN_1DB IN

CH1_3P3V_DAT2
V3P3
R2541 0E Jumper 0402P 63mW
R2511 1K 0402P 63mW ±1%
C2509 10000pF 0603P - 16V ±10%
C4649 18pF 0402P 25V ±0.02pF
CH1_RX_ATTN_ENB
R11000 1K ±1% 0402P 63mW
R2510 3K 0402P 0.063W ±5%

CH1_+5p0V_LNA
FB6327 120E
V5P0_PRE
FB2500 120E
L2500 8.2nH 0402P 300mA
C2500 100pF 0402P
C2501 10000pF 0603P - 16V ±10%
C4650 18pF 0402P 25V ±0.02pF
R1650 300 0402P 0.2W ±5%
R1651 9.1k 0402P 63mW ±1%
C4516 10000pF 0603P - 16V ±10%
C4504 1000pF 0402P X7R 50V ±10%

U2503
PAD GND_3 GND_4 GND_5 RFOUT C8 GND_2 GND_1 VDD_2 PUP2 VDD_1 LE NC_3 NC_2 NC_1 RFIN GND_6 C4 C2 C1 C1/2
DAT-15R5A-PP+
OUT CH1_RX_ATTN_OUT
CH1_RX_ATTN_8DB R2520 1K ±1% 0402P 63mW
R10995 3K 0402P 0.063W ±5%
FGA_CH1_RX_ATTN_8DB_R
CH1_RX_NC_3
CH1_RX_NC_2
CH1_RX_NC_1
CH1_RX_ATTN_IN
C4499 0402P 100pF
C4505 1.8pF 0402P X7R 50V ±0.25pF
CH1_RX_LNA_OUT

U7155
VBIAS RFIN RFOUT/VDD EPAD NC_5 NC_4 NC_3 NC_2 NC_1
SKY67151-396LF
C4500 0402P 20pF
L3502 2.2nH 0402P
C4501 33pF 0402P X7R 50V ±5% DNP DNI
L3503 15nH 0402P 250mA
C4502 68pF 0402P X7R 50V ±5%
CH1_RX_LNA_IN

CH1_RX_ATTN_4DB R2522 1K 63mW 0402P ±1%
FGA_CH1_RX_ATTN_4DB_R
R10996 3K 0402P 0.063W ±5%
R10997 3K 0402P 0.063W ±5%
R10998 3K 0402P 0.063W ±5%
R10999 3K 0402P 0.063W ±5%
CH1_RX_ATTN_2DB R2523 1K 63mW 0402P ±1%
CH1_RX_ATTN_1DB R2524 1K 63mW 0402P ±1%
CH1_RX_ATTN_P5DB R2533 1K 63mW 0402P ±1%
FGA_CH1_RX_ATTN_1DB_R
FGA_CH1_RX_ATTN_2DB_R

C4499,C4505,L3503,C4502,C4500,C4501,L3502 ,R1650,L2500,C2500,C2501are part of input and output matching for-U7155

C4499,C4505,L3503,C4502,C4500,C4501,L3502 ,R1651,L2500,C2500,C2501are part of 900 band matching recommendations for other bands please refer datasheet -U7155

1)R1650,L2500,R1651 are for VDD and VBIAS power supply-U7155
2)C2500,C2501,C4516,C4504 are decoupling capacitors.-U7155

Layout-Place capacitors-C4530,C4527as one (3 pad),C4528,C4529 as one (3 pad) C4638,C4637 as crowfeet option (3 pad)

C4530 47pF 0402P 50V CH1_RX_LB_BAND8 IN
C4638 47pF 0402P 50V
C4527 100pF 0402P 25V DNP CH1_RX_LB_BAND5 IN
C4528 100pF 0402P 25V DNP CH1_RX_HB_BAND3 IN
C4637 100pF DNP
C4529 100pF 0402P 25V DNP CH1_RX_HB_BAND2 IN

NC termination for-U2503
CH1_RX_NC_3
CH1_RX_NC_2
CH1_RX_NC_1
R2546 10K 0402P 63mW ±5%
R2547 10K 0402P 63mW ±5%
R2548 10K 0402P 63mW ±5% DNP

I2C slave address -U2505
CH1_3P3V_IO_2
R2531 DNP 0402P
R2534 10K 0402P 63mW ±5%
R2532 DNP 0402P
CH1_RX_I2C_A2
CH1_RX_I2C_A1
CH1_RX_I2C_A0
RX ADDRESS 1A(H)
A0 = 0
A1 = 1
A2 = 0
R2537 10K 0402P 63mW ±5%
R2538 DNP 0402P
R2539 10K 0402P 63mW ±5%

CH1_3P3V_IO_2
V3P3
R2542 0E Jumper 0402P 63mW
R1350 10K 0402 0.063W ±5% DNP
R2525 2.2K 0402P 63mW ±5%
R2526 2.2K 0402P 63mW ±5%
C2515 10000pF 0603P - 16V ±10%
C4615 0.1uF 0402P
C4616 10pF NP0 0402P

U2505
SCL SDA A0 A1 A2 IO_0 IO_1 GND VDD RESET IO_7 IO_6 IO_5 IO_4 IO_3 IO_2
PCA9557
IN SYS_I2C_2_SCL 0402P 63mW 0E R2505 Jumper CH1_RX_I2C_2_SCL
BI SYS_I2C_2_SDA 0402P 63mW 0E R2504 Jumper CH1_RX_I2C_2_SDA
CH1_RX_I2C_A0
CH1_RX_I2C_A1
CH1_RX_I2C_A2
OUT IO_EXP_INVEN_EEPROM_WP 0402P 63mW 0E R1351 Jumper
OUT CH1_2G_LB_BAND_SEL

CH1_RX_ATTN_RESET
CH1_RX_ATTN_ENB
CH1_RX_ATTN_8DB
CH1_RX_ATTN_4DB
CH1_RX_ATTN_2DB
CH1_RX_ATTN_1DB
CH1_RX_ATTN_P5DB

3P3V_GBC
R2527 10K 0402P 63mW DNP
IO_RESET IN
R2549 10K 0402P 63mW DNP

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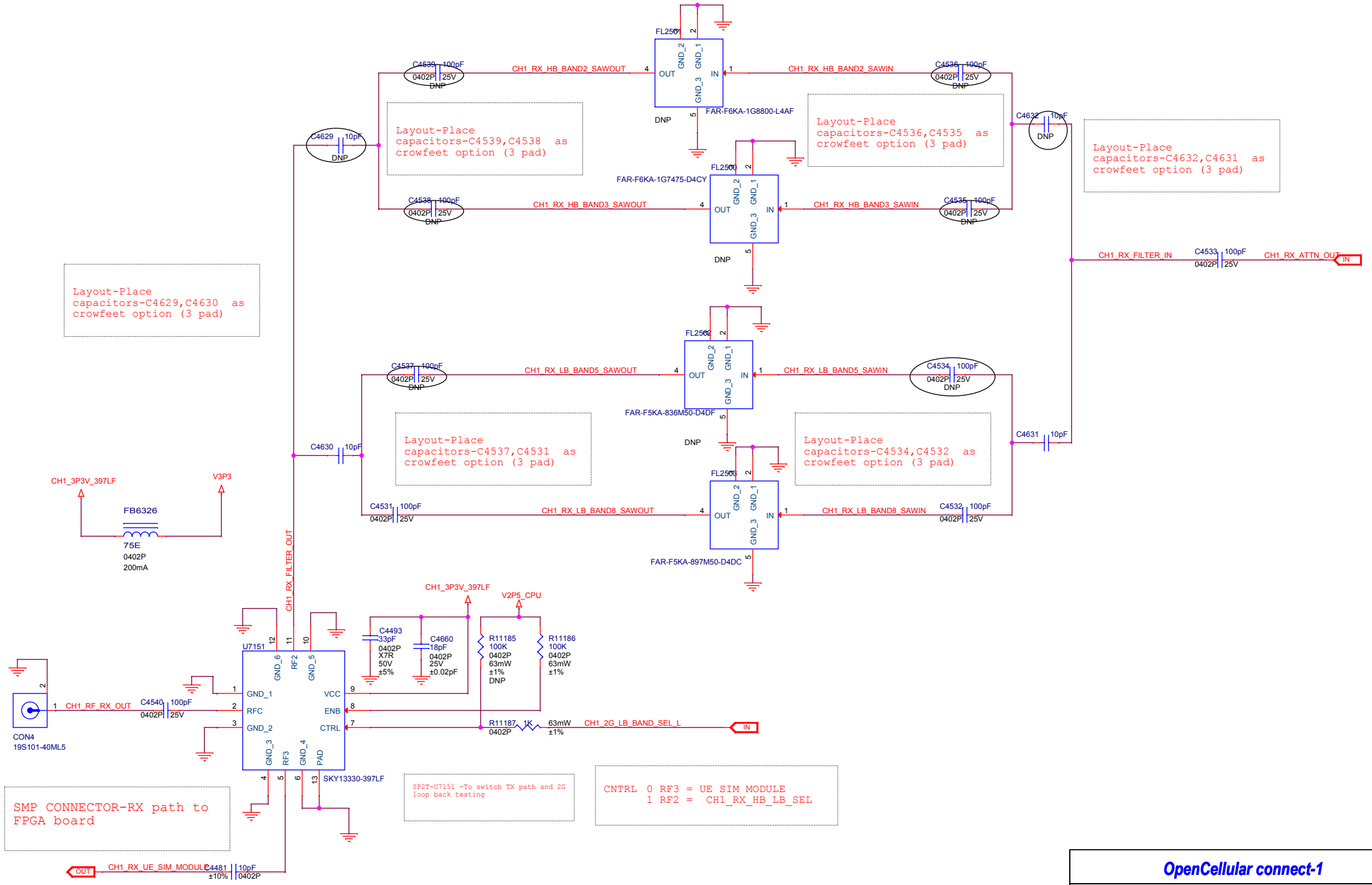
CH1_RF_LNA_SAWFILTERS



OpenCellular connect-1		
Title: CH1_RF_LNA_SAW FILTERS		
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CH2_GAIN_ATT

CH2_TX_ATTN_8DB R2803 1K 0402P ±1% 63mW
CH2_TX_ATTN_4DB R2804 1K 0402P ±1% 63mW
CH2_TX_ATTN_2DB R2805 1K 0402P ±1% 63mW
CH2_TX_ATTN_1DB R2806 1K 0402P ±1% 63mW
CH2_TX_ATTN_P5DB R2808 1K 0402P ±1% 63mW

R11001 3K 0402P 0.063W ±5%
R11002 3K 0402P 0.063W ±5%
R11003 3K 0402P 0.063W ±5%
R11004 3K 0402P 0.063W ±5%
R11005 3K 0402P 0.063W ±5%

FGA_CH2_TX_ATTN_8DB_R
FGA_CH2_TX_ATTN_4DB_R
FGA_CH2_TX_ATTN_2DB_R
FGA_CH2_TX_ATTN_1DB_R
FGA_CH2_TX_ATTN_P5DB_R

CH2_3P3V_DAT1 — FB6324 — V3P3
75E 0402P 200mA

CH2_+5p0V_PRE — R2844 0E 0402P 63mW Jumper — V5P0_PRE
CH2_+5p0V_PRE — FB2802 120E

C2840 2.2uF 0402P X6S 16V ±10%
C2841 10pF NP0 0402P 16V ±10%
C2842 0.1uF 0201P X6S 25V ±10%
L2814 100nH 0603P 200mA

C4667,C4668 are provision in shunt (DNP) for filtering purpose in future-U2803

FGA_CH2_TX_ATTN_P16DB_R
CH2_TX_ATTN_P16DB R840 10K 0402P ±5% 63mW
R841 3K 0402P 0.063W ±5%
need to relook the shunt value-R481

IN CH2_TX_ATT_IN

U2810 DAT51R5A-PP+
RFIN C16 NC PUP1 LE
C8 RFOUT GND_5 GND_4 GND_3 PAD
C1/2 C1 GND_6 C2 C4
VDD_1 PUP2 VDD_2 GND_1 GND_2

CH2_TX_NC_1
CH2_3P3V_DAT1 — R11098 1K 0402P ±1% 63mW — CH2_TX_ATTN_ENB
CH2_TX_ATTN_ENB — R11006 1K 0402P ±1% 63mW
R2819 3K 0402P 0.063W ±5%
R2851 10K 0402P 63mW ±5%

Place R840 reisitor near to pin 1 on U2810 to avoid freq. resonance

C4541 100pF 0402P 25V — C4667 0402P DNP
CH2_ATT_OUT
U2803 MGA-30689 RFIN RFOUT GND
C4542 100pF 0402P 25V — C4668 0402P DNP
CH2_TX_PREAMP_OUT — OUT

place copacitors C4541, C4542 and C2841 near to pin1 ,pin 3 of U2803

1)When mounted control signals are connected to FPGA
2)Layout-Place these resistors close to actual path inorder to avoid stubs-Provide crowfeet option

IN FGA_CH2_TX_ATTN_8DB_R — R356 1K 0402P ±1% 63mW DNP — FGA_CH2_TX_ATTN_8DB_R
IN FGA_CH2_TX_ATTN_4DB_R — R357 1K 0402P ±1% 63mW DNP — FGA_CH2_TX_ATTN_4DB_R
IN FGA_CH2_TX_ATTN_2DB_R — R358 1K 0402P ±1% 63mW DNP — FGA_CH2_TX_ATTN_2DB_R
IN FGA_CH2_TX_ATTN_1DB_R — R359 1K 0402P ±1% 63mW DNP — FGA_CH2_TX_ATTN_1DB_R
IN FGA_CH2_TX_ATTN_P5DB_R — R360 1K 0402P ±1% 63mW DNP — FGA_CH2_TX_ATTN_P5DB_R
IN FGA_CH2_TX_ATTN_P16DB_R — R356 10K 0402P ±5% 63mW DNP — FGA_CH2_TX_ATTN_P16DB_R

CH2_3P3V_DAT1
C4661 18pF 0402P 25V ±0.02pF
C2823 10000pF 0603P - 16V ±10%
CH2_TX_ATTN_ENB — R2820 1K 63mW 0402P ±1%

CH2_3P3V_IO_1 — R2847 0E 0402P 63mW Jumper — V3P3

C2835 10000pF 0603P - 16V ±10%
C4617 0.1uF 0402P
C4618 10pF NP0 0402P
R951 2.2K 63mW 0402P ±5%
R2830 2.2K 63mW 0402P ±5%
R2831 2.2K 63mW 0402P ±5%

U2805 PCA9557
SCL SDA A0 A1 A2 IO_0 IO_1 GND
VDD RESET IO_7 IO_6 IO_5 IO_4 IO_3 IO_2

IN SYS_I2C_2_SCL 0402P 63mW 0E R2801 Jumper CH2_PRE_I2C_2_SCL
BI SYS_I2C_2_SDA 0402P 63mW 0E R2800 Jumper CH2_PRE_I2C_2_SDA
CH2_TXPRE_I2C_A0
CH2_TXPRE_I2C_A1
CH2_TXPRE_I2C_A2
CH2_TX_ATTN_P16DB

3P3V_GBC
R2832 10K 0402P 63mW DNP
R2854 10K 0402P 63mW DNP
CH2_TX_ATTN_RESET — IO_RESET — IN
CH2_TX_ATTN_ENB
CH2_TX_ATTN_8DB
CH2_TX_ATTN_4DB
CH2_TX_ATTN_2DB
CH2_TX_ATTN_1DB
CH2_TX_ATTN_P5DB

I2C slave address-U2805

CH2_3P3V_IO_1
R2841 10K 0402P 63mW ±5%
R2839 DNP 0402P
R2840 DNP 0402P
CH2_TXPRE_I2C_A2
CH2_TXPRE_I2C_A1
CH2_TXPRE_I2C_A0
TX PREDRIVE ADDRESS 1C(H)
AO = 0
A1 = 0
A2 = 1
R2838 DNP 0402P
R2842 10K 0402P 63mW ±5%
R2843 10K 0402P 63mW ±5%

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Title	CH2_GAIN	
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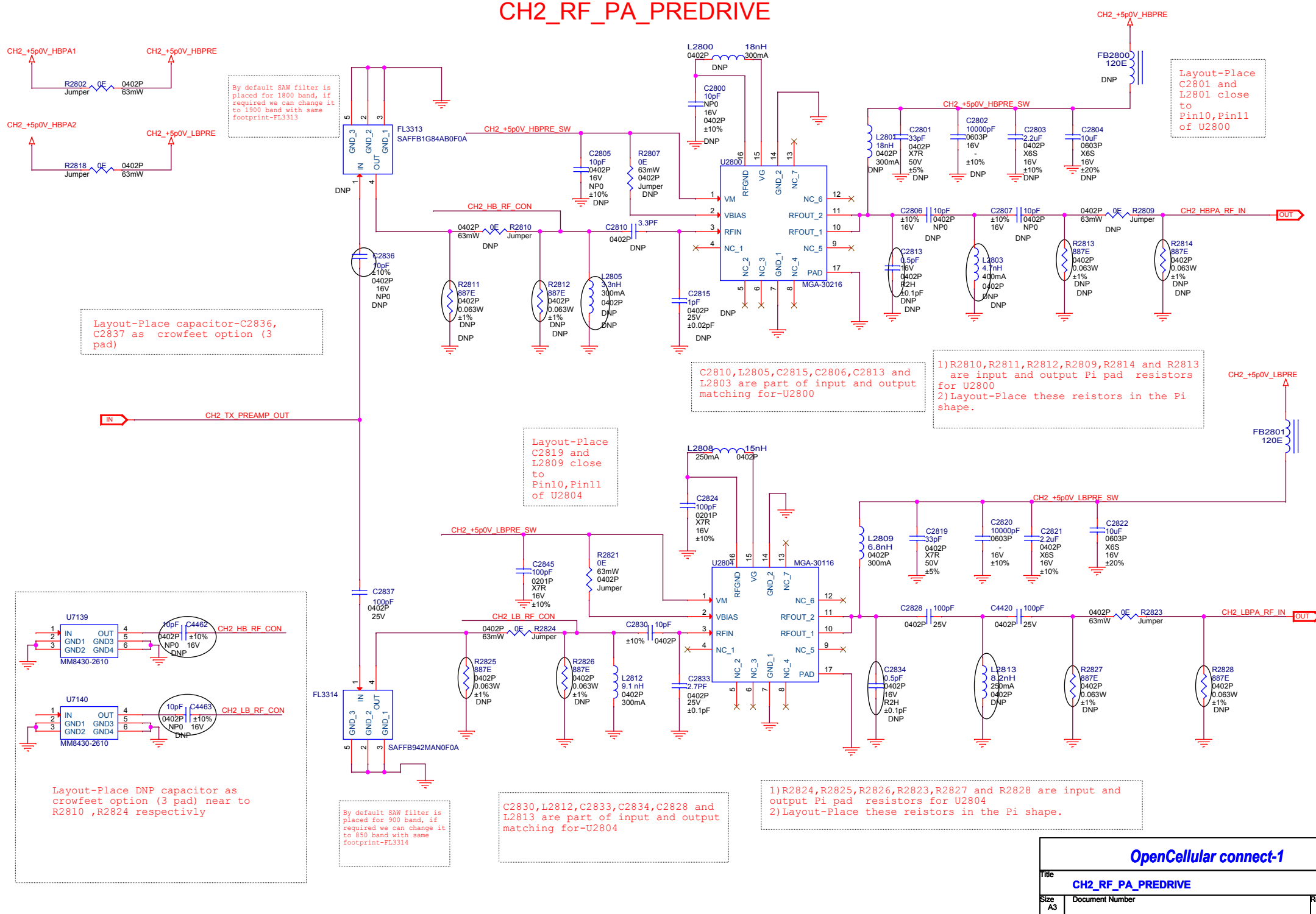
CH2_RF_PA_PREDRIVE



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Title: CH2_RF_PA_PREDRIVE		
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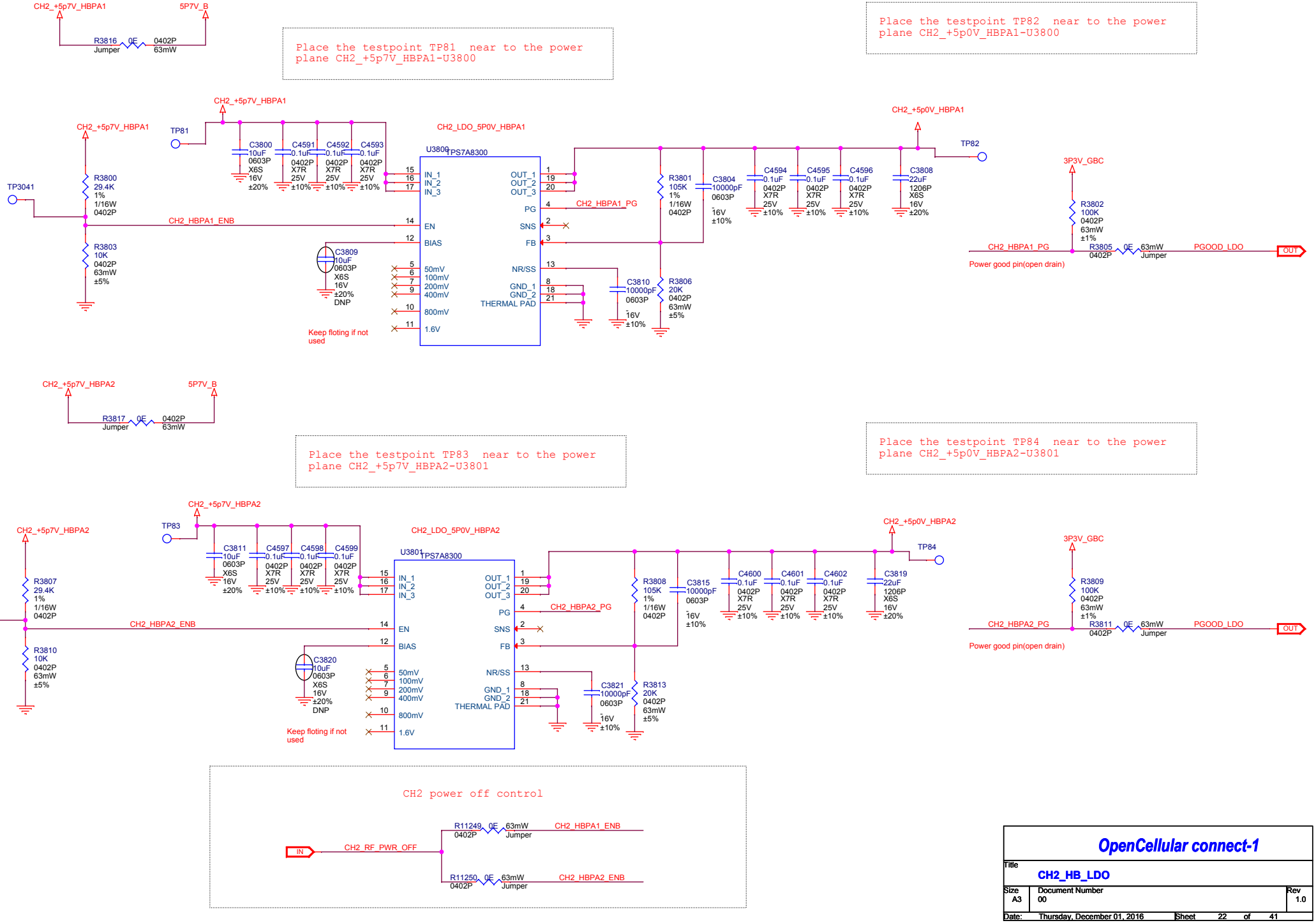
CH2_HB_LDO



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Title: CH2_HB_LDO		
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CH2_RF_PA_LB

Layout-Place DNP capacitor-C4453 as crowfeet option (3 pad) near to C4455

Layout-1)Place C3003 capacitor near to pin 20 of -U3000
2)Place C3004 capacitor near to pin 18 of U3000

R865,R866,R867 aer the PI pad resistors for the ISO port of-U3003

R862,R863,R864 aer the PI pad resistors for the ISO port of-U3002

R11171,R11175,R11174 are the 2dB PI pad resistors for the input port of-U3000

L3000,C3010,L3002,C3013,C4423,C3014,C4471,L3003 are part of input and output matching for-U3000

Layout-1)Place C3022 capacitor near to pin 20 of -U3004
2)Place C3023 capacitor near to pin 18 of U3004

By default isolator is placed for 900 band, if required we can change it to 850 band with same footprint

R11170,R11176,R11177 are the 2dB PI pad resistors for the input port of-U3004

L3004,C3030,L3006,C3032,C4424,C3033,C4472,L3007 are part of input and output matching for-U3004

power supply-U3004

Layout-Place DNP capacitor-C4454 as crowfeet option (3 pad) near to C4489

CH2_+5p0V_HBPA1
FB3000 120E
CH2_+5p0V_LBPA1_SW
C3004 33pF 0402P X7R 50V ±5%
C3005 10000pF 0603P - 16V ±10%
C3006 2.2uF 0402P X6S 16V ±10%
C3007 10uF 0603P X6S 16V ±20%

IN
CH2_+5p0V_LBPA1_VCTRL
FB3416 120E
CH2_+5p0V_LBPA1_VCTRL_FB
C3000 10uF 0603P X6S 16V ±20%
C3001 2.2uF 0402P X6S 16V ±10%
C3002 10000pF 0603P - 16V ±10%
C3003 33pF 0402P X7R 50V ±5%

U7136
C4453 10pF ±10% 16V NP0 0402P DNP
OUT IN GND3 GND1 GND4 GND2
MM8430-2610

U3000 ALM-32120
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
VCTRL VDD1 RFIN RFOUT NC VDD2

IN
CH2_LBPA_RF_IN
C4455 10pF ±10% 16V NP0 0402P
CH2_LBPA_RF_PATH1_IN
R11171 0402P
11.8E 63mW 0402P
L3000 300mA
1nH
C3010 100pF 0402P 25V
R11174 442E 0402P 63mW ±1%
R11175 442E 0402P 63mW ±1%
L3002 DNP 0603P
C3013 DNP 0603P
C4423 100pF 0402P 25V
CH2_LBPA_RF_PATH1_OUT
C4471 12pF 0402P
C3014 DNP 0603P
L3003 DNP 0603P

U3002 RFIN ISO GND 0 -90 5
X3C09F1-03S

CH2_+5p0V_LBPA1_SW
C3015 33pF 0402P X7R 50V ±5%
C3016 10000pF 0603P - 16V ±10%
C3017 2.2uF 0402P X6S 16V ±10%
C3018 10uF 0603P X6S 16V ±20%

U3003 ISO GND RFOUT 0 -90 5
X3C09F1-03S

CH2_PA_LB_ISO
R865 0E 0402P DNP
C4543 100pF 0402P 25V
TP3003 T POINT R
R866 0E 0402P DNP
R867 0E 0402P DNP
R11042 49.9E 1210P

U7147
C4489 10pF ±10% 16V NP0 0402P
GND_1 GND_4 IN OUT GND_2 GND_3
C4457 10pF ±10% 16V NP0 0402P
CH2_RF_LB_PA_OUT
OUT
CES40942MDCB000

CH2_LBPA_RF_PATH1_IN
CH2_LBPA_RF_PATH2_IN
CH2_LBPA_RF_PATH2_OUT

CH2_+5p0V_LBPA2_VCTRL
IN
FB3417 120E
CH2_+5p0V_LBPA2_VCTRL_FB
C3019 10uF 0603P X6S 16V ±20%
C3020 2.2uF 0402P X6S 16V ±10%
C3021 10000pF 0603P - 16V ±10%
C3022 33pF 0402P X7R 50V ±5%

CH2_+5p0V_LBPA2_SW
C3023 33pF 0402P X7R 50V ±5%
C3024 10000pF 0603P - 16V ±10%
C3025 2.2uF 0402P X6S 16V ±10%
C3026 10uF 0603P X6S 16V ±20%

U3004 ALM-32120
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
VCTRL VDD1 RFIN RFOUT NC VDD2

R11170 0402P
11.8E 63mW 0402P
L3004 300mA
1nH
C3030 100pF 0402P 25V
R11176 442E 0402P 63mW ±1%
R11177 442E 0402P 63mW ±1%
L3006 DNP 0603P
C3032 0603P DNP
C4424 100pF 0402P 25V
C4472 12pF 0402P
C3033 DNP 0603P
L3007 DNP 0603P

CH2_+5p0V_LBPA2_SW
C3035 33pF 0402P X7R 50V ±5%
C3036 10000pF 0603P - 16V ±10%
C3037 2.2uF 0402P X6S 16V ±10%
C3038 10uF 0603P X6S 16V ±20%

R862 0E 0402P
TP3000 T POINT R
R863 0E 0402P DNP
R864 0E 0402P DNP
R11041 49.9E 1210P

CH2_+5p0V_HBPA2
FB3001 120E
CH2_+5p0V_LBPA2_SW

U7137
C4454 10pF ±10% 16V NP0 0402P DNP
OUT IN GND3 GND1 GND4 GND2
MM8430-2610

OpenCellular connect-1

Title	CH2_RF_PA_LB	
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CH2_RF_PA_HB

Layout-Place DNP capacitor-C4458 as crowfeet option (3 pad) near to C4459

Layout-1)Place C2904 capacitor near to pin 20 of -U2900
2)Place C2905 capacitor near to pin 18 of U2900

R871,R872,R873 aer the PI pad resistors for the ISO port of-U2903

R868,R869,R870 aer the PI pad resistors for the ISO port of-U2902

R11173,R11178,R11179 are the 2dB PI pad resistors for the input port of-U2900

C2910,L2903,C2914,C2912,L2902,C2911,L2900 are part of input and output matching for-U2900

Layout-1)Place C2922 capacitor near to pin 20 of -U2904
2)Place C2923 capacitor near to pin 18 of U2904

To place a ground plane at 0.3mm from the top surface is recommended-U7149

By default isolator is placed for 1800 band, if required we can change it to 1900 band with same footprint

R11172,R11180,R11181 are the 2dB PI pad resistors for the input port of-U2904

L2905,L2907,C2929,C2933,C2932 ,C2930 and L2906 are part of input and output matching for-U2904

Layout-Place DNP capacitor-C4411 as crowfeet option (3 pad) near to C4491

power supply-U2904

CH2_+5p0V_HBPA2

FB2901 120E DNP

CH2_+5p0V_HBPA2_SW

OpenCellular connect-1

Title: CH2_RF_PA_HB

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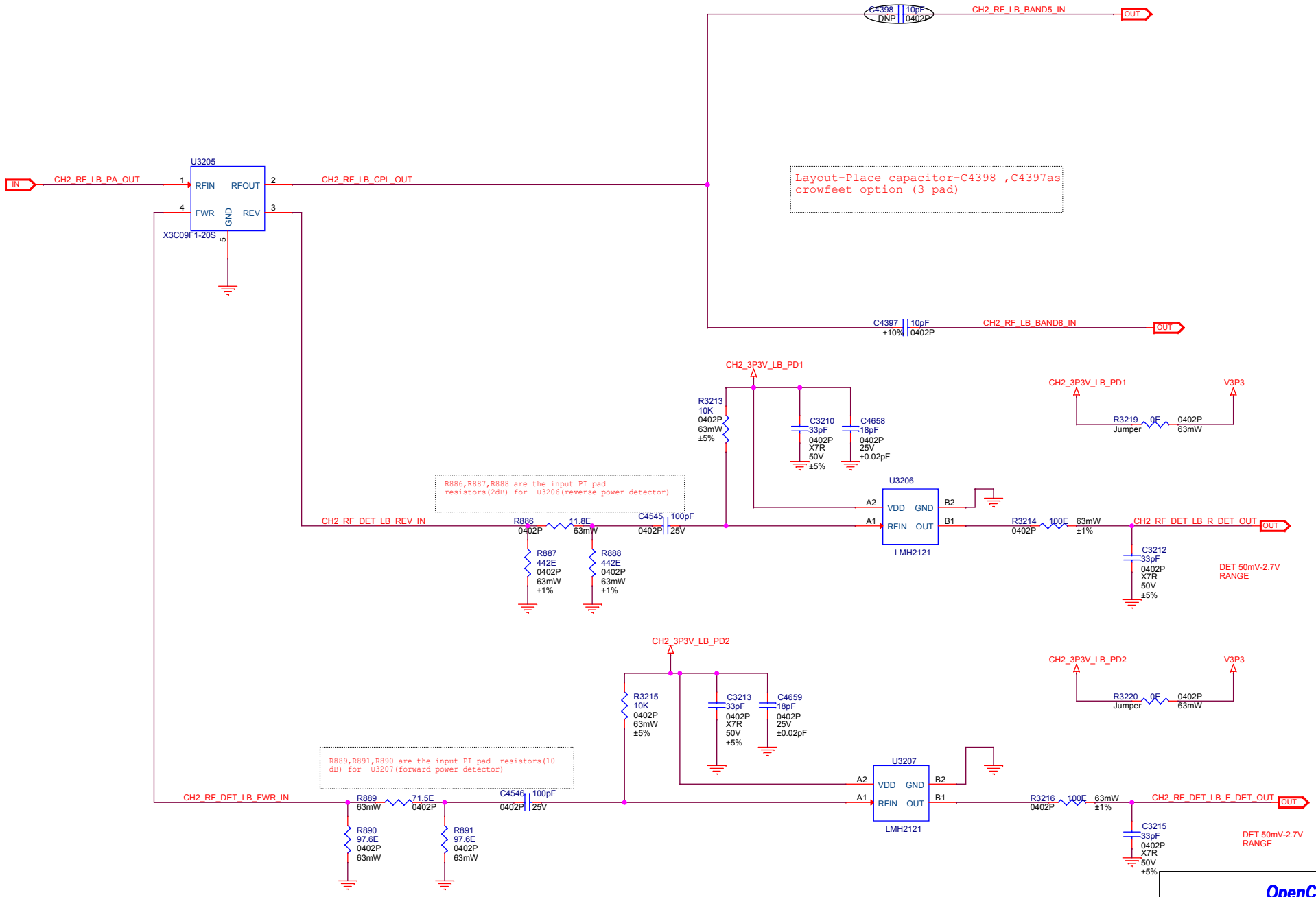
CH2_ANT_INTERFACE_LB



OpenCellular connect-1

Title	CH2_ANT_INTERFACE_LB	
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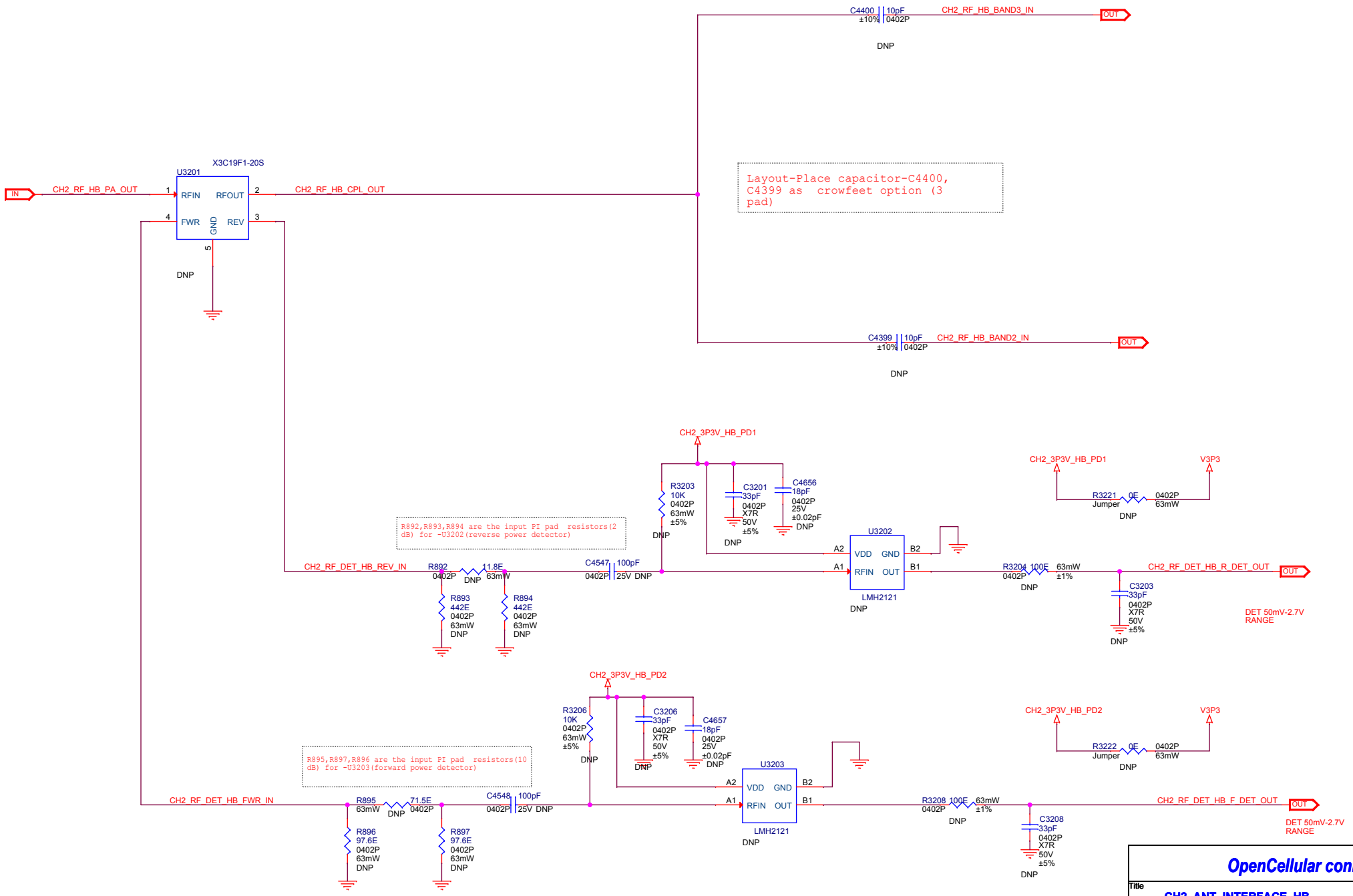
CH2_ANT_INTERFACE_HB



OpenCellular connect-1		
Title: CH2_ANT_INTERFACE_HB		
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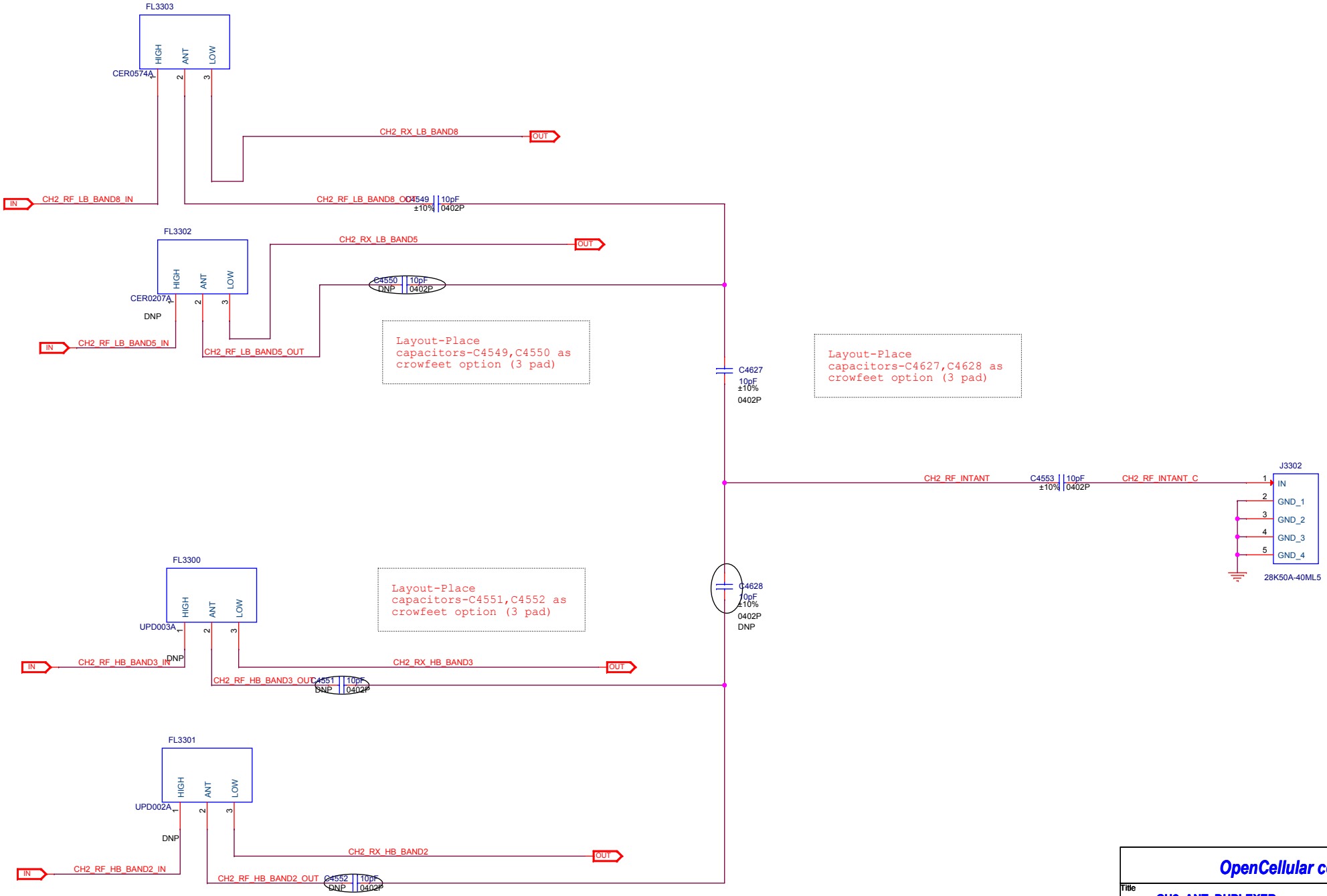
CH2_ANT_DUPLEXER



OpenCellular connect-1		
Title: CH2_ANT_DUPLEXER		
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CH2_RF_LNA_ATT

1)When mounted control signals are connected to FPGA
2)Layout-Place these resistors close to actual path inorder to avoid stubs

FGA_CH2_RX_ATTN_8DB_R R3124 0E DNP → FGA_CH2_RX_ATTN_8DB IN
FGA_CH2_RX_ATTN_4DB_R R3125 0E DNP → FGA_CH2_RX_ATTN_4DB IN
FGA_CH2_RX_ATTN_2DB_R R3126 0E DNP → FGA_CH2_RX_ATTN_2DB IN
FGA_CH2_RX_ATTN_1DB_R R3127 0E DNP → FGA_CH2_RX_ATTN_1DB IN

CH2_3P3V_DAT2 R3141 0E 0402P Jumper 63mW V3P3

CH2_3P3V_DAT2 R3111 1K 0402P 63mW ±1%
C3109 10000pF 0603P - 16V ±10%
C4654 18pF 0402P 25V ±0.02pF
CH2_RX_ATTN_ENB
R11012 1K ±1% 0402P 63mW CH2_RX_ATTN_ENB
R3110 3K 0402P 0.063W ±5%

U3102 DAT-15R5A-PP+
PAD, GND_3, GND_4, GND_5, RFOUT, C8, GND_2, GND_1, VDD_2, PUP2, VDD_1, LE, NC_3, NC_2, NC_1, RFIN, C4, C2, GND_6, C1, C1/2

OUT CH2_RX_ATTN_OUT
CH2_RX_ATTN_8DB R3121 1K ±1% 0402P 63mW
R11007 3K 0402P 0.063W ±5%
FGA_CH2_RX_ATTN_8DB_R
CH2_RX_ATTN_4DB R3122 1K 63mW ±1% 0402P
R11008 3K 0402P 0.063W ±5%
FGA_CH2_RX_ATTN_4DB_R
R11009 3K 0402P 0.063W ±5%
R11010 3K 0402P 0.063W ±5%
R11011 3K 0402P 0.063W ±5%
CH2_RX_ATTN_2DB R3123 1K 63mW ±1% 0402P
CH2_RX_ATTN_1DB R3124 1K 63mW ±1% 0402P
CH2_RX_ATTN_P5DB R3135 1K 63mW ±1% 0402P
FGA_CH2_RX_ATTN_1DB_R
FGA_CH2_RX_ATTN_2DB_R

CH2_RX_NC_3
CH2_RX_NC_2
CH2_RX_NC_1
CH2_RX_ATTN_IN

C4513 0402P 100pF
C4514 1.8pF 0402P X7R 50V ±0.25pF 1.8pf

C4513,C4514,L3505,C4510,C4508,C4509,L3504,R1652,L3506,C4511,C4512 are part of input and output matching for-U7156

1)R1652,L3506, R1653 are for VDD and VBIAS power supply-U7156
2)C4511,C4512,C4517,C4507 are decoupling capacitors.-U7156

CH2_+5p0V_LNA
FB6328 120E
L3506 8.2nH 0402P 300mA
C451 100pF 0402P
C4512 10000pF 0603P 16V - ±10%
C4655 18pF 0402P 25V ±0.02pF
R1652 300 0402P 0.2W ±5%

U7156 SKY67151-396LF
RFOUT/VDD, EPAD, VBIAS, RFIN, NC_5, NC_4, NC_3, NC_2, NC_1

CH2_+5p0V_LNA
R1653 9.1k 0402P 63mW ±1%
C4517 10000pF 0603P 16V - ±10%
C4507 1000pF 0402P X7R 50V ±10%
L3505 15nH 0402P 250mA
C4510 68pF 0402P X7R 50V ±5%
C4508 0402P 20pF
20pf
C4509 33pF 0402P X7R 50V ±5% DNI DNP
L3504 2.2nH 0402P
CH2_RX_LNA_IN

C4639 100pF
C4640 100pF DNP
C4557 100pF 0402P 25V CH2_RX_LB_BAND8 IN
C4554 100pF 0402P 25V DNP CH2_RX_LB_BAND5 IN
C4555 100pF 0402P 25V DNP CH2_RX_HB_BAND3 IN
C4556 100pF 0402P 25V DNP CH2_RX_HB_BAND2 IN

Layout-Place capacitors-C4557,C4554 as one 3 pad,C4555,C4556 as one 3 pad, C4639,C4640 crowfeet option (3 pad)

NC termination for-U3102
CH2_RX_NC_3 R3146 10K 0402P 63mW ±5%
CH2_RX_NC_2 R3147 10K 0402P 63mW ±5%
CH2_RX_NC_1 R3148 10K 0402P 63mW ±5% DNP

CH2_3P3V_IO_2 R3142 0E 0402P Jumper 63mW V3P3

CH2_3P3V_IO_2
C3115 10000pF 0603P 16V ±10%
C4619 0.1uF 0402P
C4620 10pF NP0 0402P
R953 2.2K 0402P 63mW ±5%
R3125 2.2K 0402P 63mW ±5%
R3126 2.2K 0402P 63mW ±5%

U3105 PCA9557
SCL, SDA, A0, A1, A2, IO_0, IO_1, GND, VDD, RESET, IO_7, IO_6, IO_5, IO_4, IO_3, IO_2

IN SYS_I2C_2_SCL 0402P 63mW 0E R3105 Jumper CH2_RX_I2C_2_SCL
BI SYS_I2C_2_SDA 0402P 63mW 0E R3104 Jumper CH2_RX_I2C_2_SDA
CH2_RX_I2C_A0
CH2_RX_I2C_A1
CH2_RX_I2C_A2
OUT CH1_RF_PWR_OFF 0402P 63mW 0E R11251 Jumper

CH2_+5p0V_LNA FB6329 120E V5P0_PRE

3P3V_GBC
R3127 10K 0402P 63mW DNP
R3149 10K 0402P 63mW DNP

CH2_RX_ATTN_RESET → IO_RESET IN
CH2_RX_ATTN_ENB
CH2_RX_ATTN_8DB
CH2_RX_ATTN_4DB
CH2_RX_ATTN_2DB
CH2_RX_ATTN_1DB
CH2_RX_ATTN_P5DB

I2C slave address-U3105
CH2_3P3V_IO_2
R3137 10K 0402P 63mW ±5%
R3138 DNP 0402P
R3139 10K 0402P 63mW ±5%
CH2_RX_I2C_A2
CH2_RX_I2C_A1
CH2_RX_I2C_A0
RX ADDRESS 1D(H)
AO = 1
A1 = 0
A2 = 1
R3133 DNP 0402P
R3136 10K 0402P 63mW ±5%
R3134 DNP 0402P

C4513,C4514,L3505,C4510,C4508,C4509,L3504,R1652,L3506,C4511,C4512,R1653,C4507,C4517are part of 900 band matching recommendations for other bands please refer datasheet-U7156

OpenCellular connect-1

Title	CH2_RF_LNA_1	
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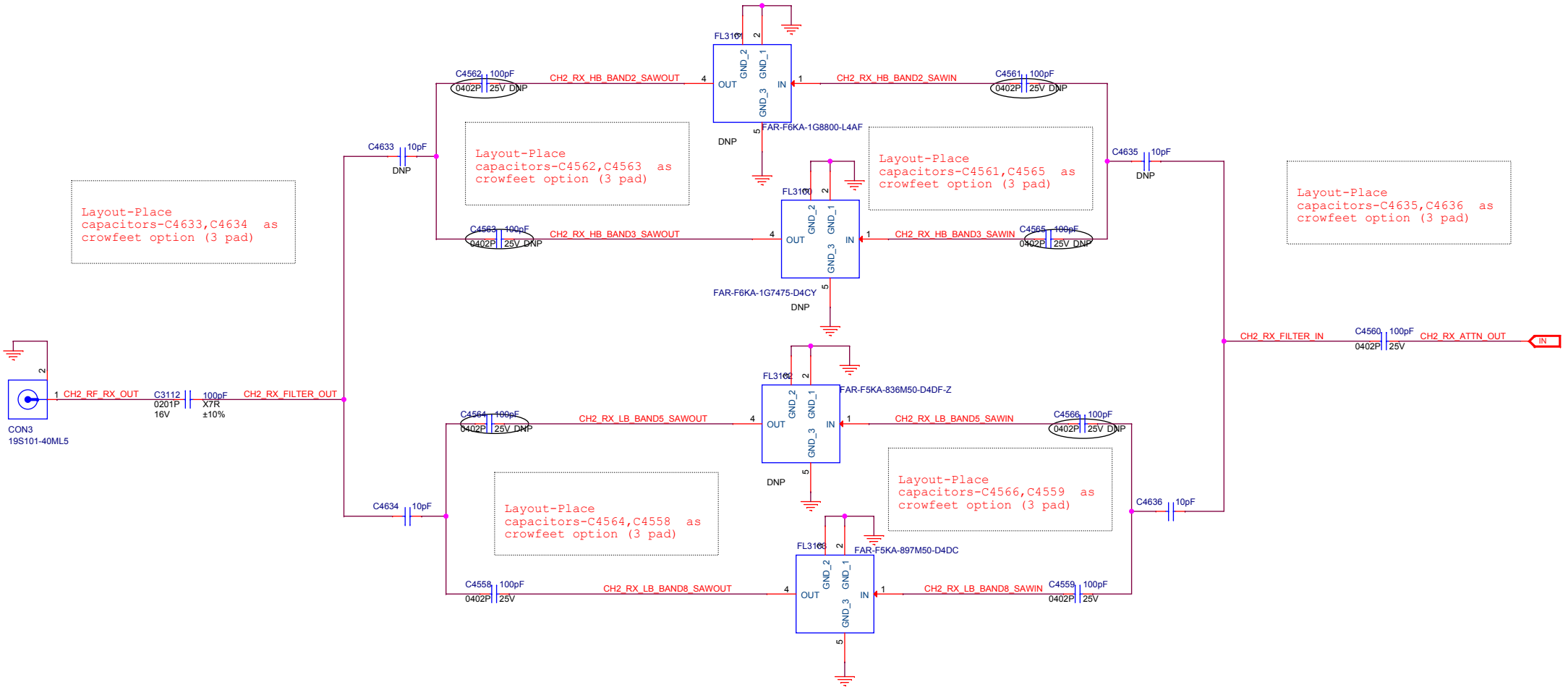
CH2_RF_LNA_SAWFILTERS



OpenCellular connect-1		
Title: CH2_RF_LNA_2		
Size: A3	Document Number: 00	Rev: 1.0
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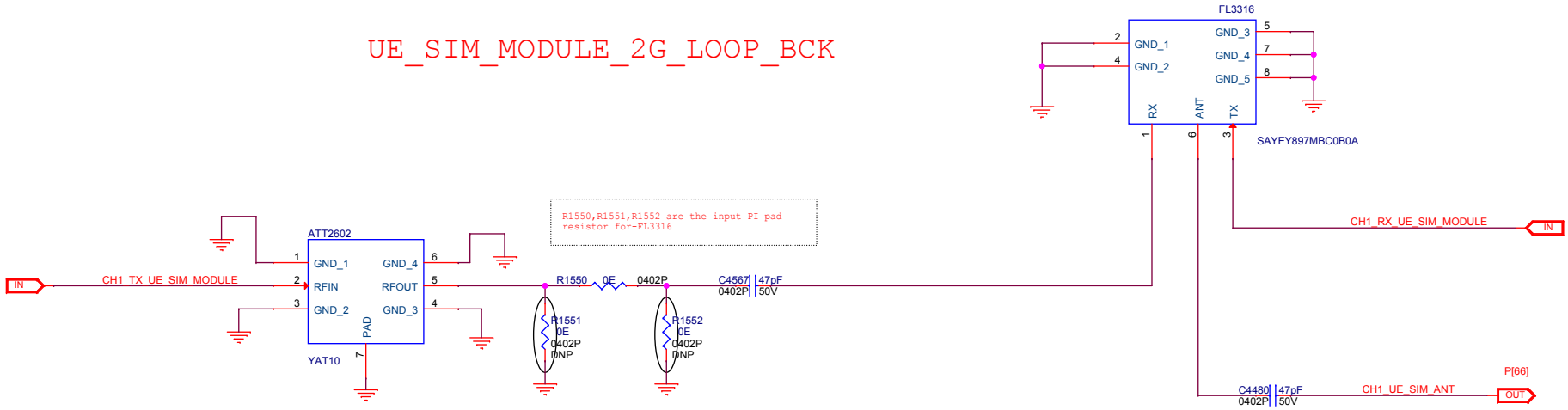
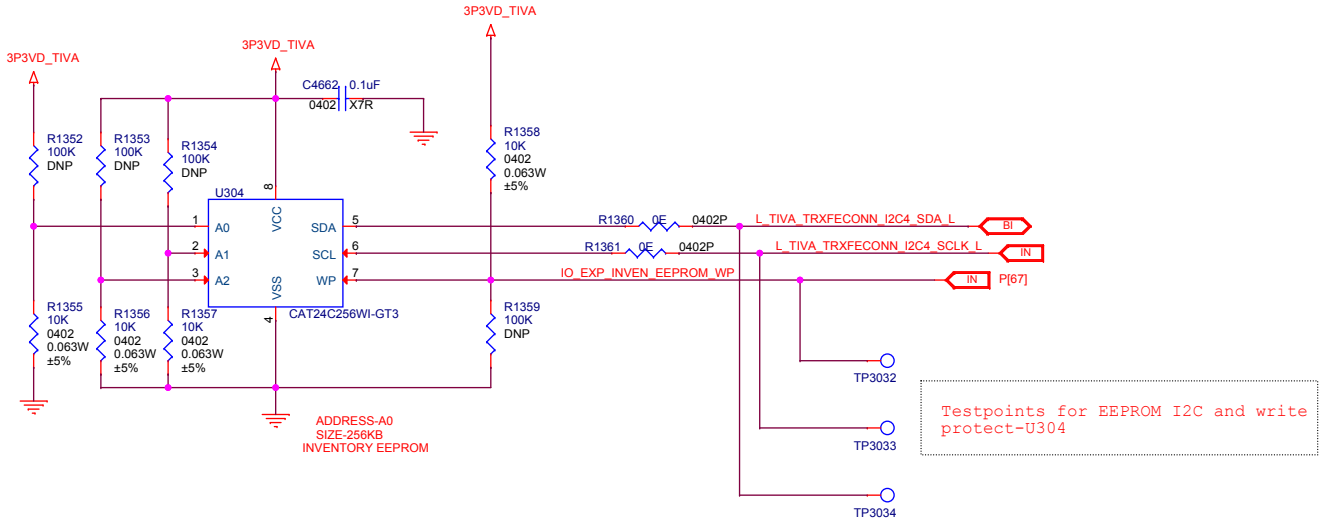
UE_SIM_MODULE_2G_LOOP_BCK



INVENTORY EEPROM-256KB



OpenCellular connect-1		
Title: UE_SIM_MODULE		
Size: A3	Document Number	Rev: 1.0
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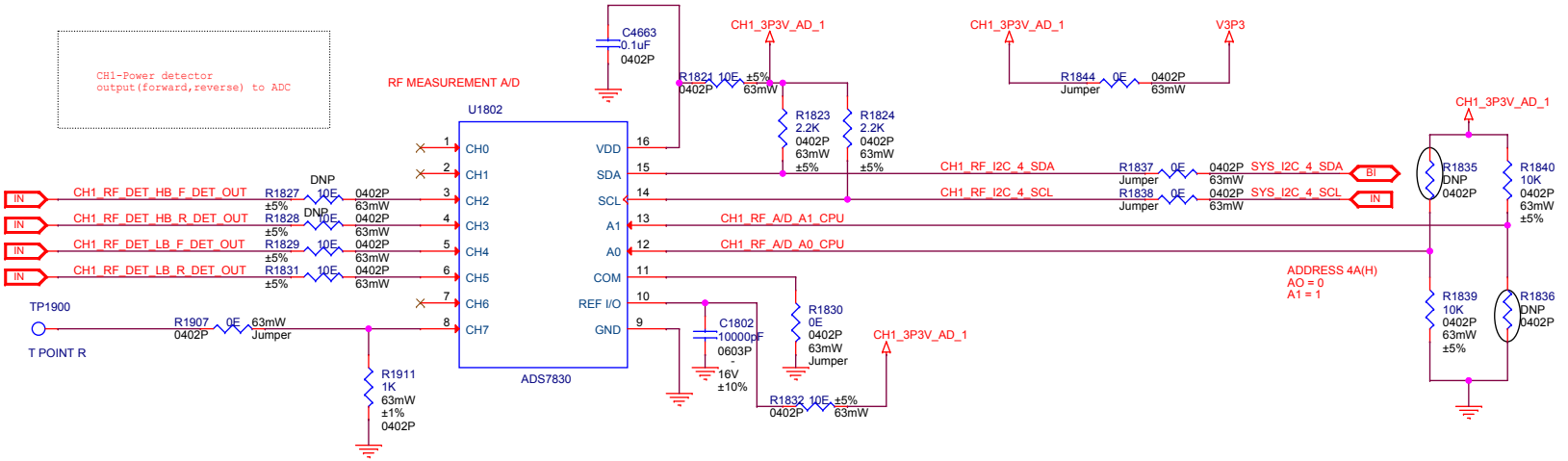
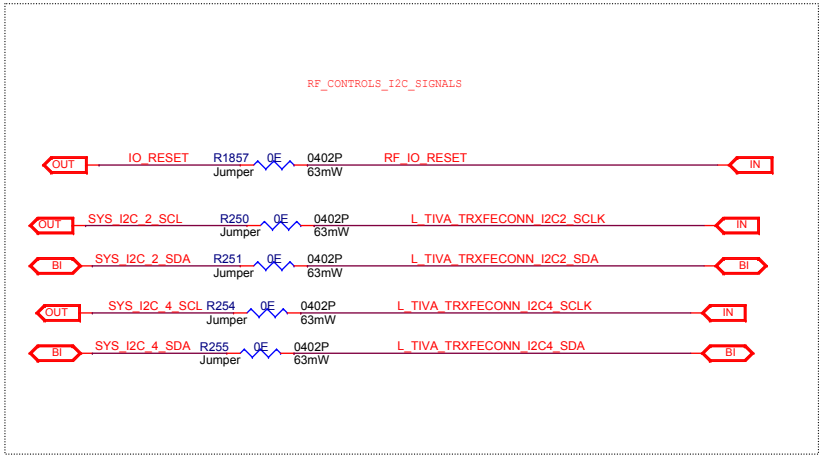
CONTROL_SECTION_1





OpenCellular connect-1

Title	CH1_CPU_SECTION_1	
Size A3	Document Number 00	Rev 1.0
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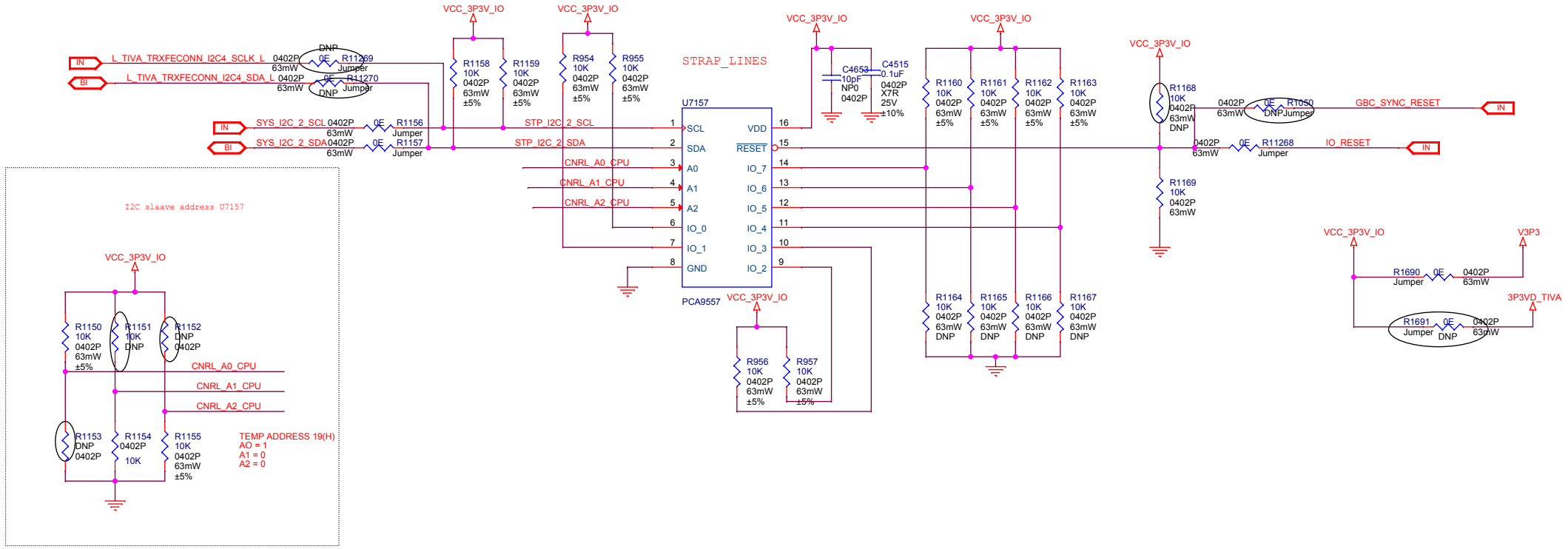
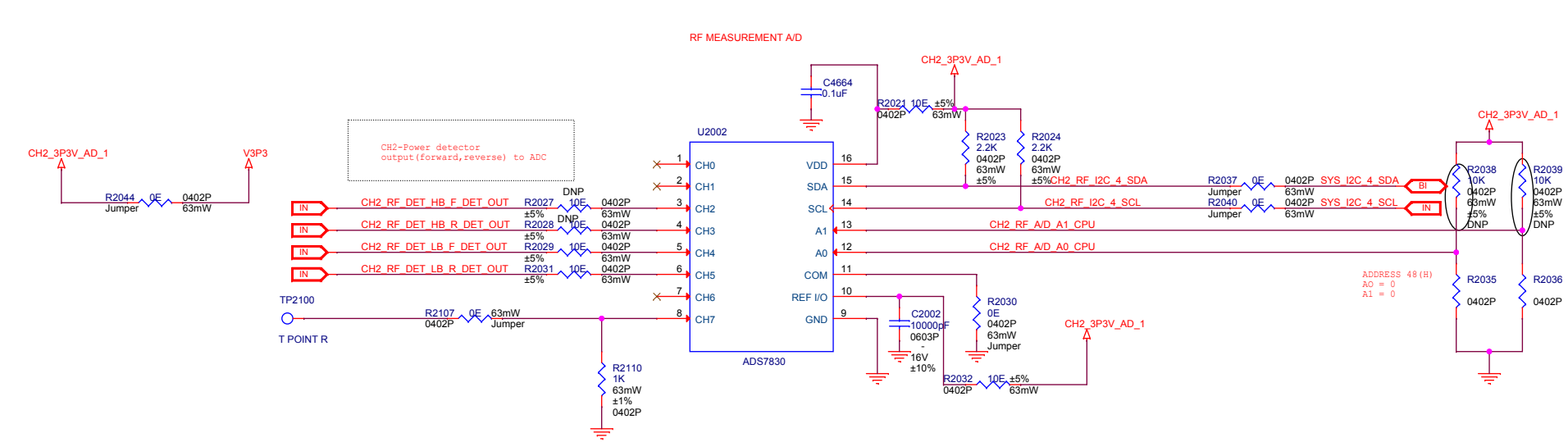
CONTROL_SECTION_2





OpenCellular connect-1		
Title: **CH2_CPU_SECTION_1**		
Size: A3	Document Number: 00	Rev: 1.0
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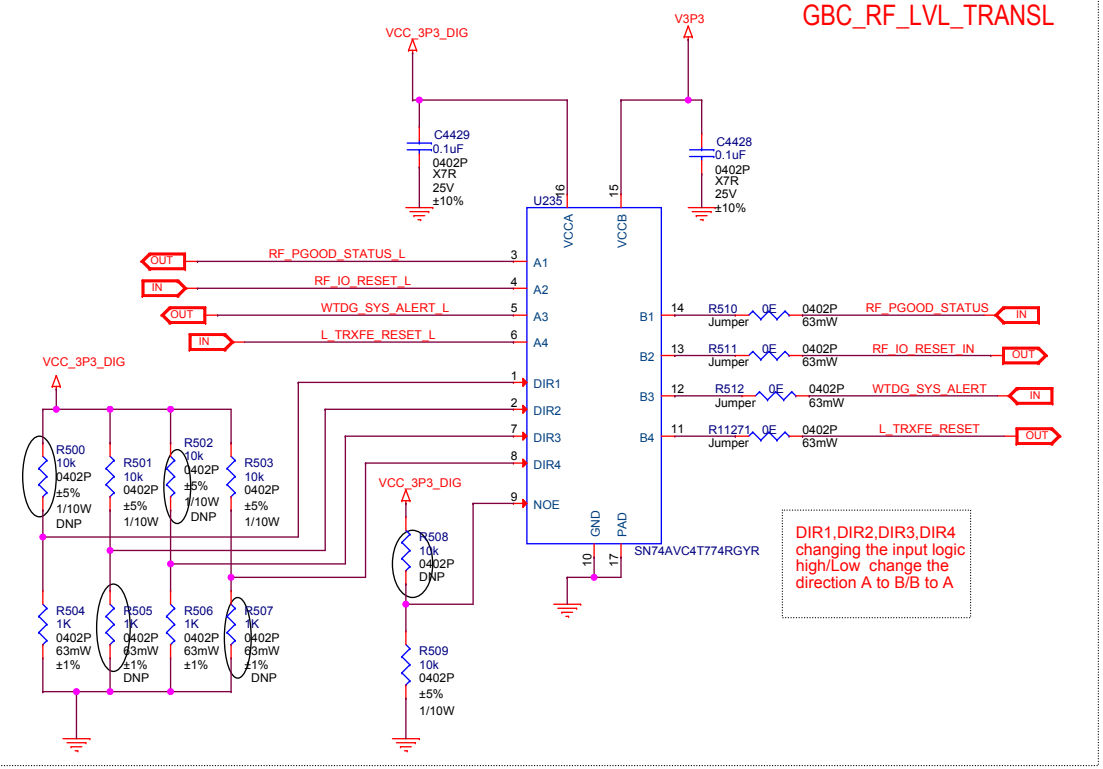
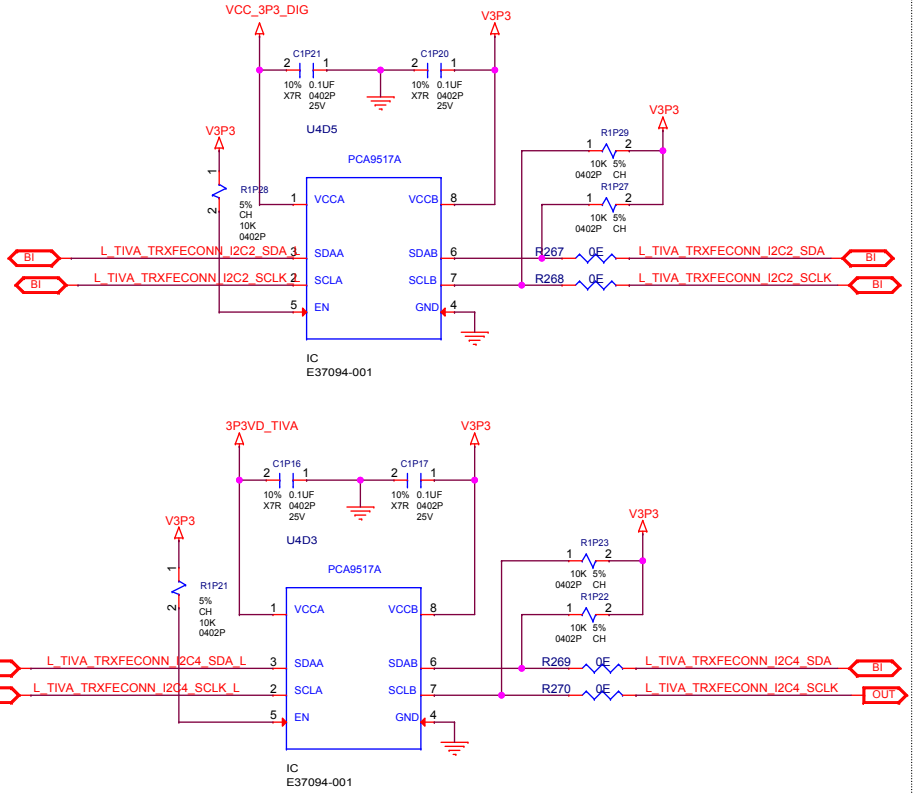
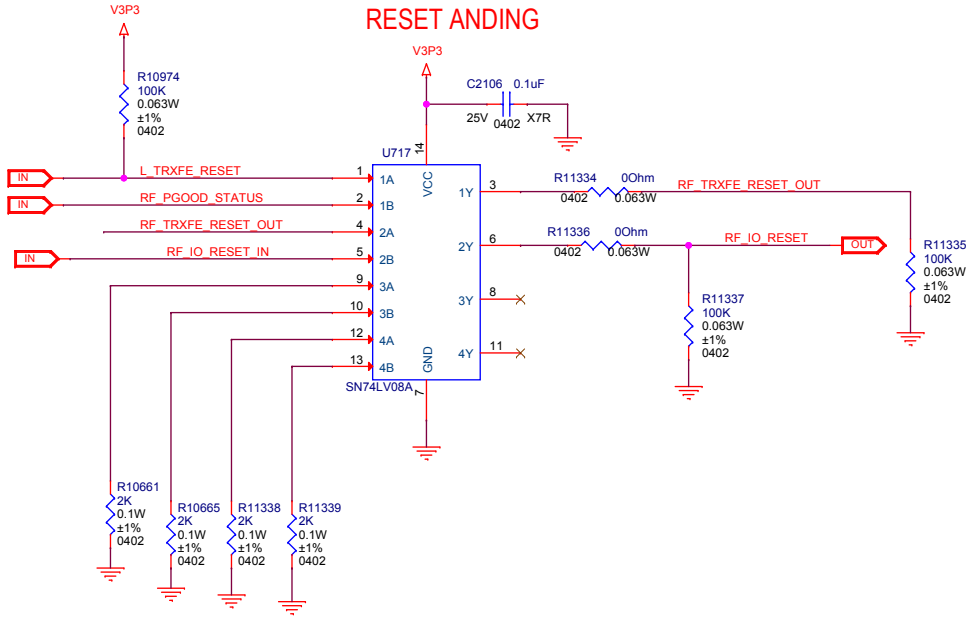
GBC_RF_LVL_TRANSL



FPGA I2C BUFFERS



RESET ANDING



OpenCellular connect-1

Title	FPGA_LVL_TRANSL_1	
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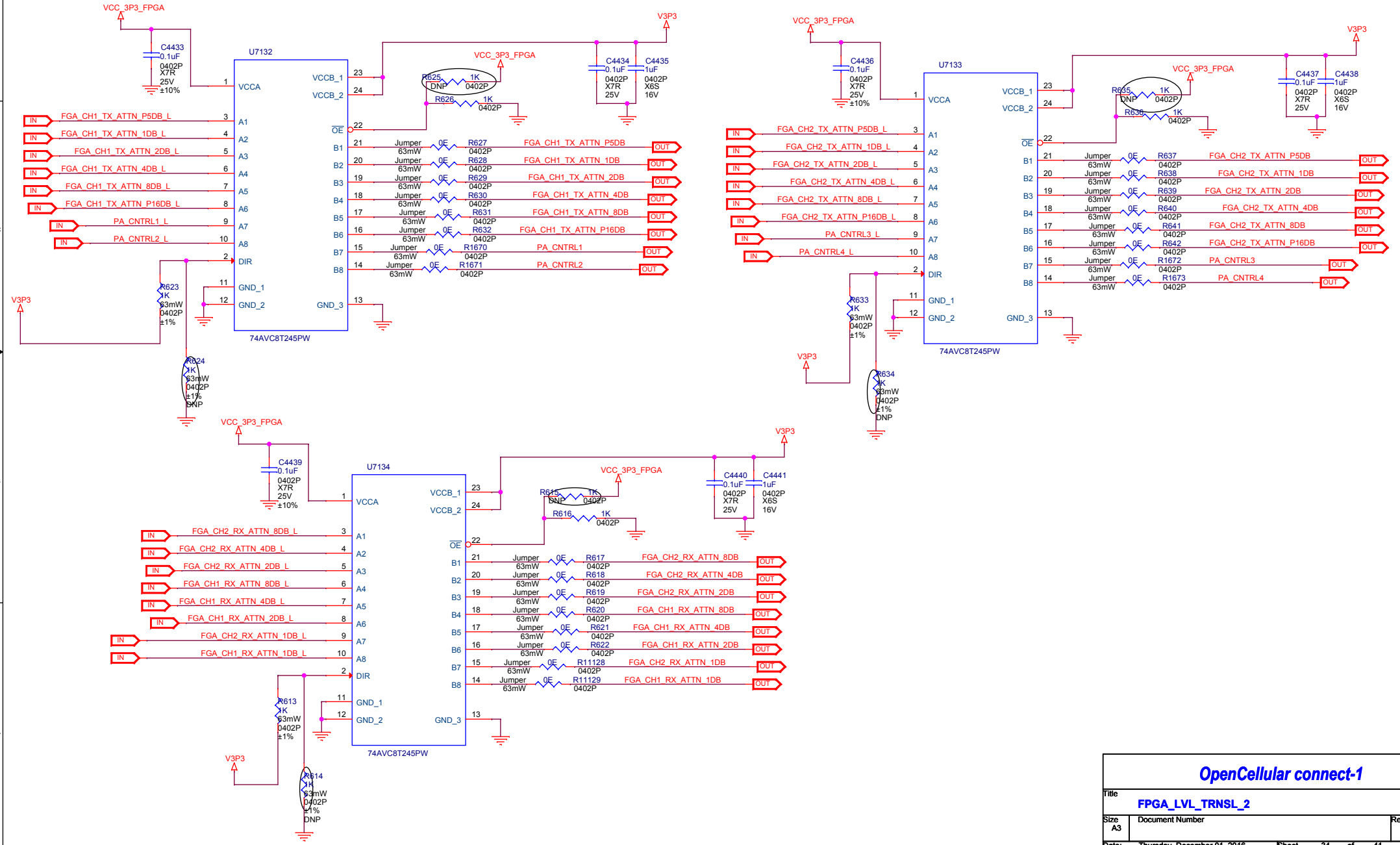
FPGA_RF_LVL_TRANSL



OpenCellular connect-1			
Title: FPGA_LVL_TRNSL_2			
Size: A3	Document Number		Rev: 1.0
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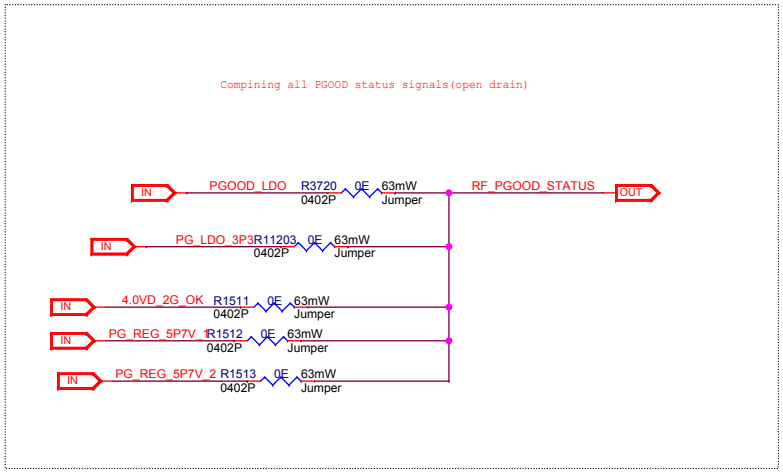
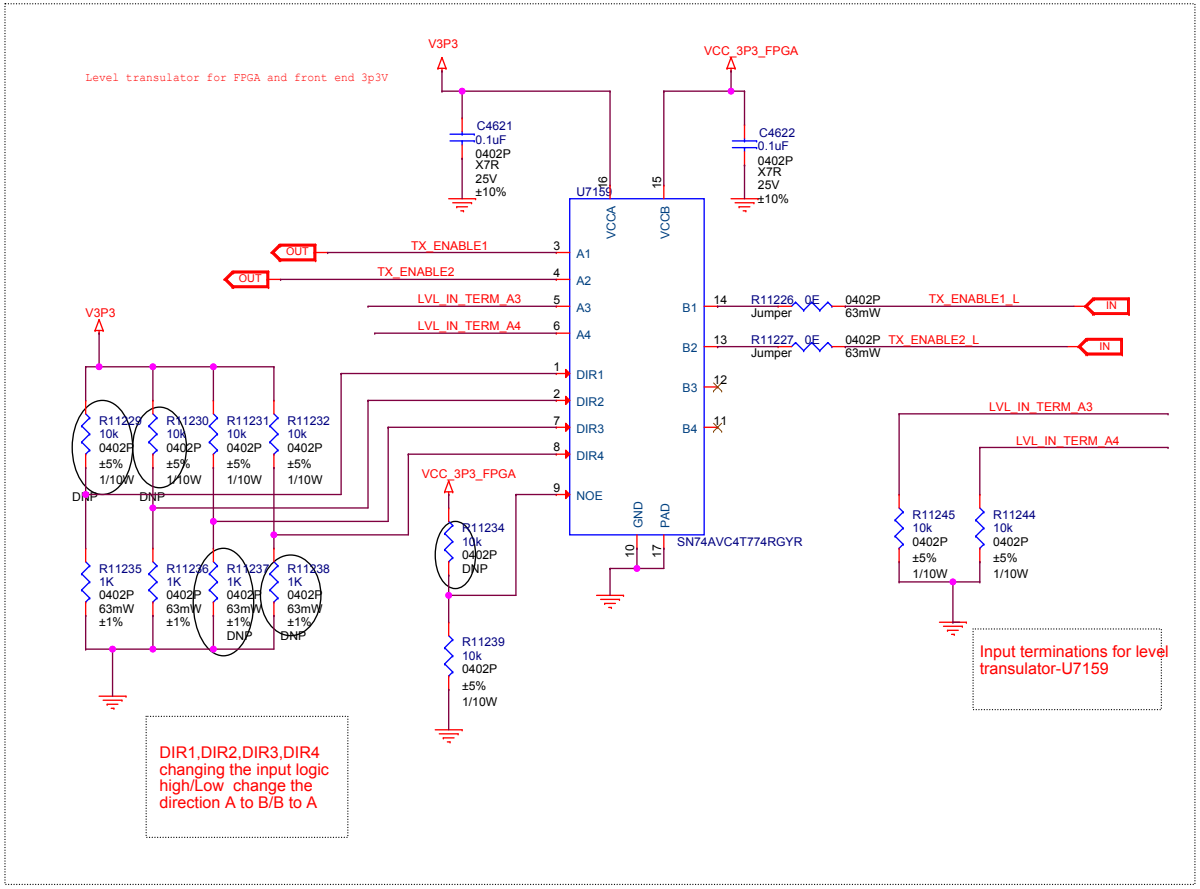
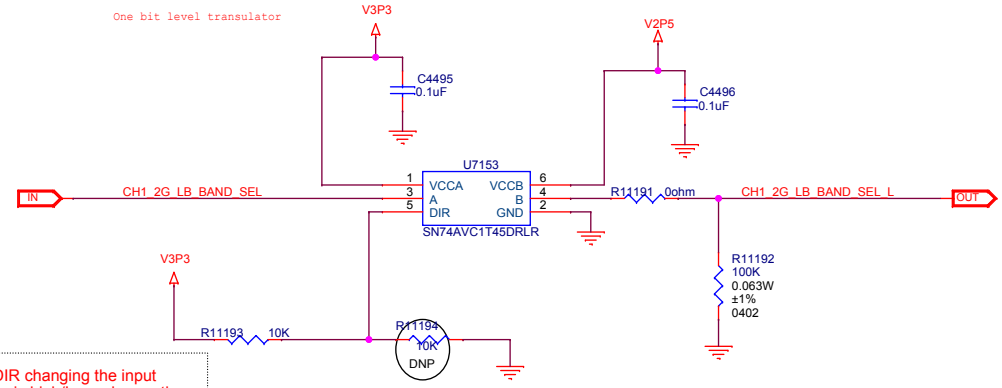
TX ENABLE LVL TRNSL







OpenCellular connect-1

Title	PG0OD_LVL_TRNSL	
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WATCHDOG FOR CH1&CH2

R1850,R1851,R1852,R1853,R1854,R1855 are the input terminations resistors for CH1,CH2 of-U1905 , Need to calculate the values of the resistors.

change to 121 E

Watchdog alert

I2C slave address for U1906

TX PREDRIVE ADDRESS 1B(H)
AO = 1
A1 = 1
A2 = 0

Title	WATCHDOG FOR CH1&CH2	
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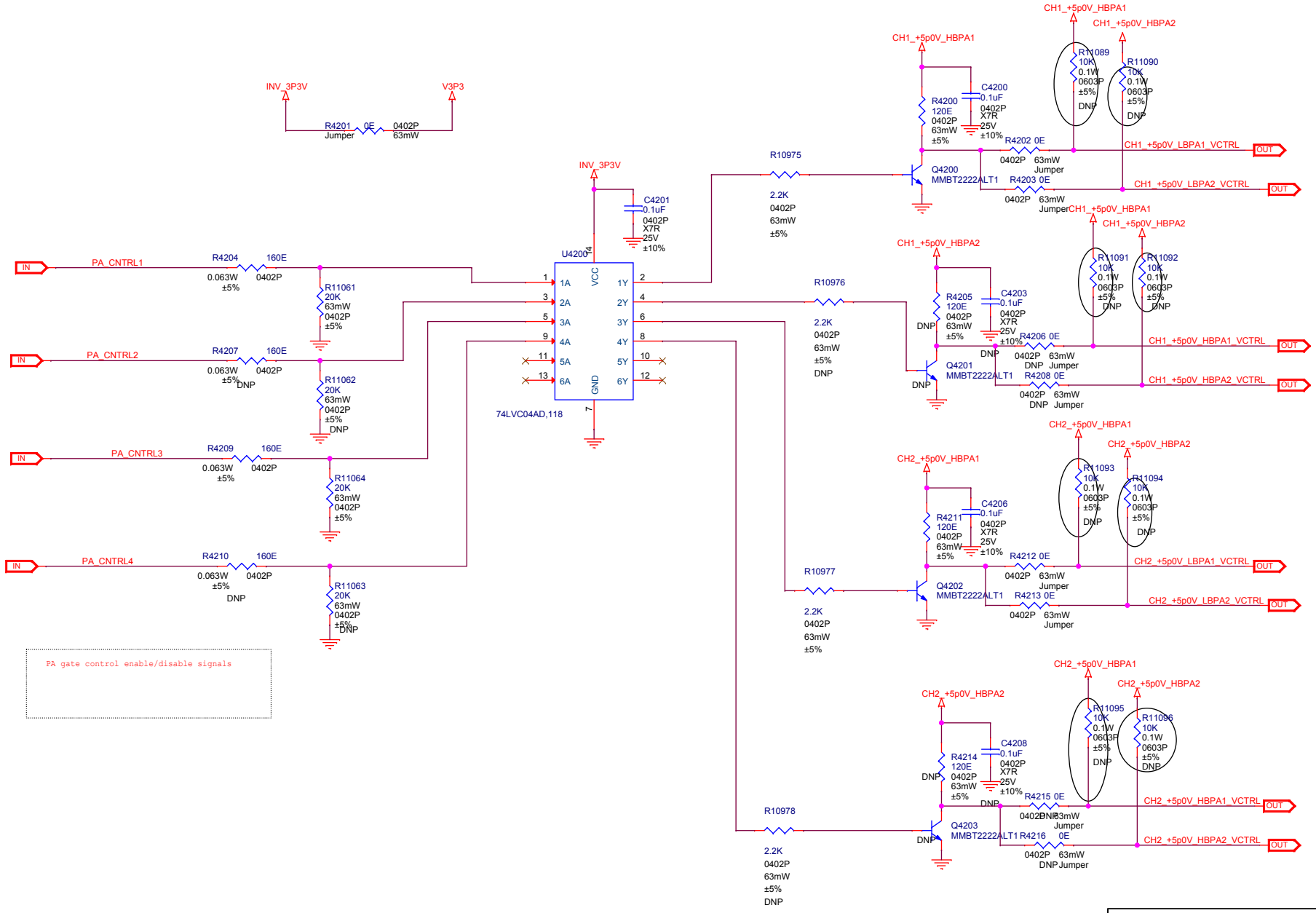
OpenCellular connect-1

PA_ENABLE_CIRCUIT



OpenCellular connect-1

Title	PA_ENABLES	
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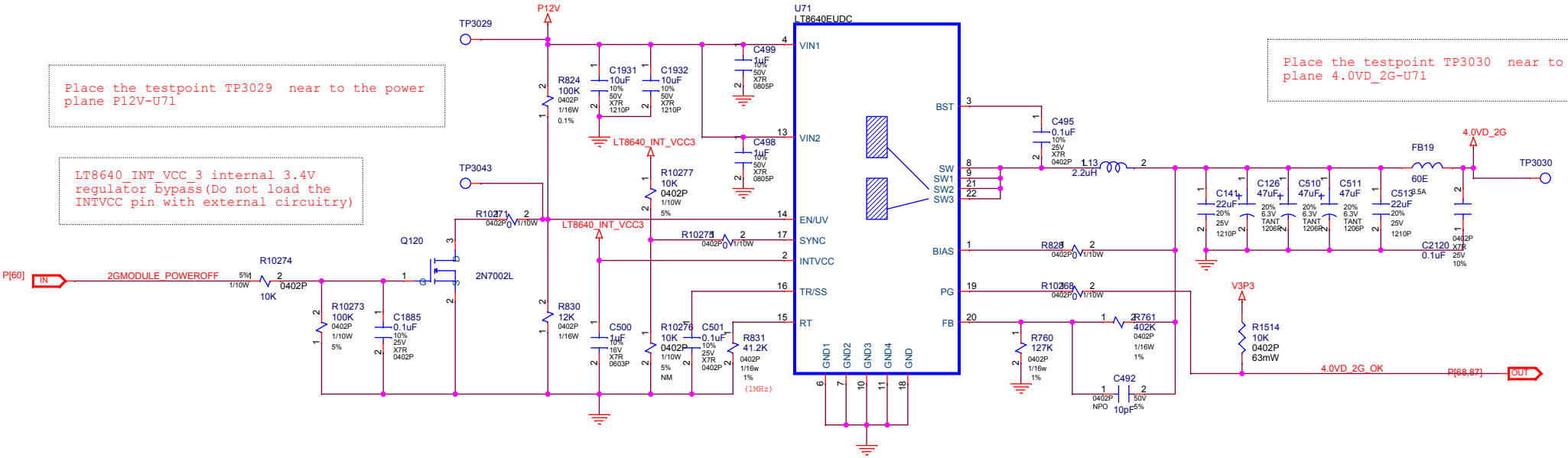
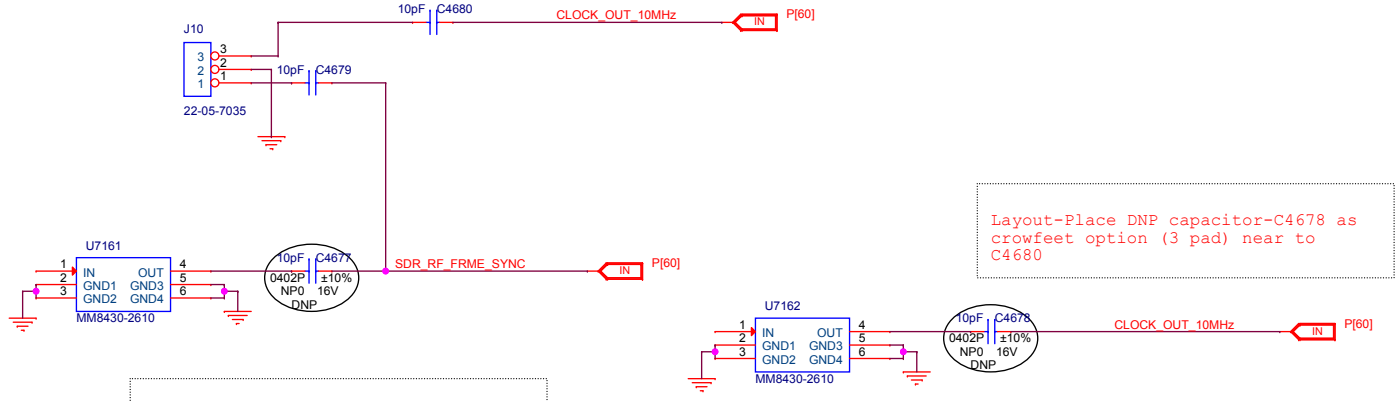
12V_4V_2G_MODULE_POWER_SUPPLY



TEST CONNECTORS-10MHz,FRAM_SYNC



OpenCellular connect-1		
Title: 12V_4V_REG_TEST_CONN		
Size: A3	Document Number	Rev: 1.0
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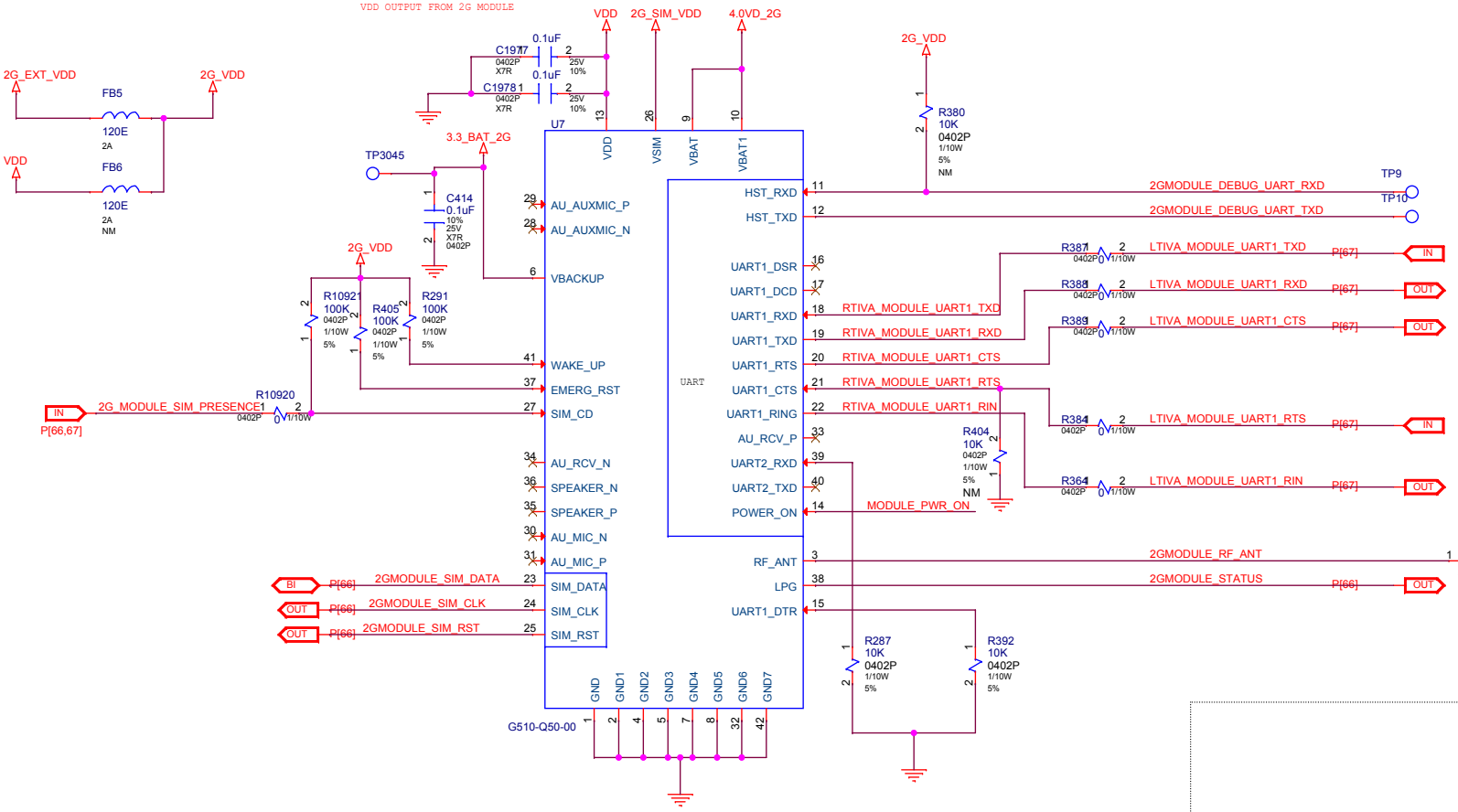
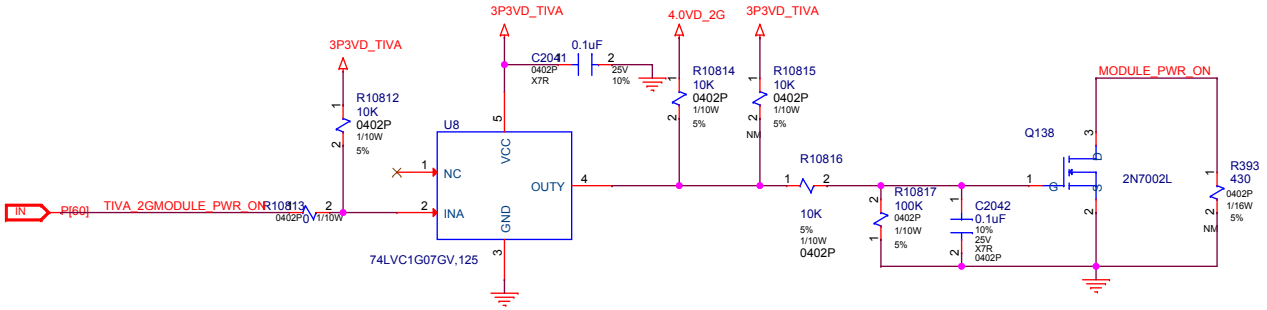
2G MODULE

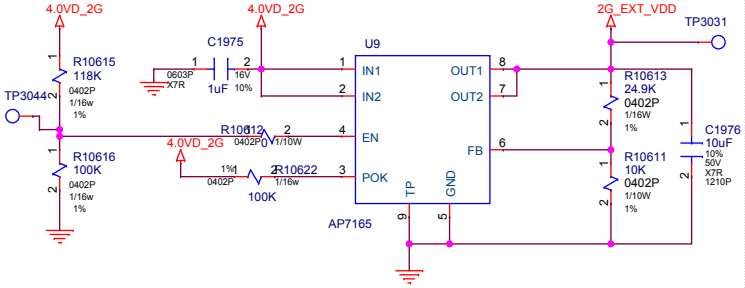


BUFFER WITH OPEN DRAIN OUTPUT



2G_EXT_VDD LDO

Place the testpoint TP3031 near to the power plane 2G_EXT_VDD-U9



OpenCellular connect-1

Title	2G MODULE_1	
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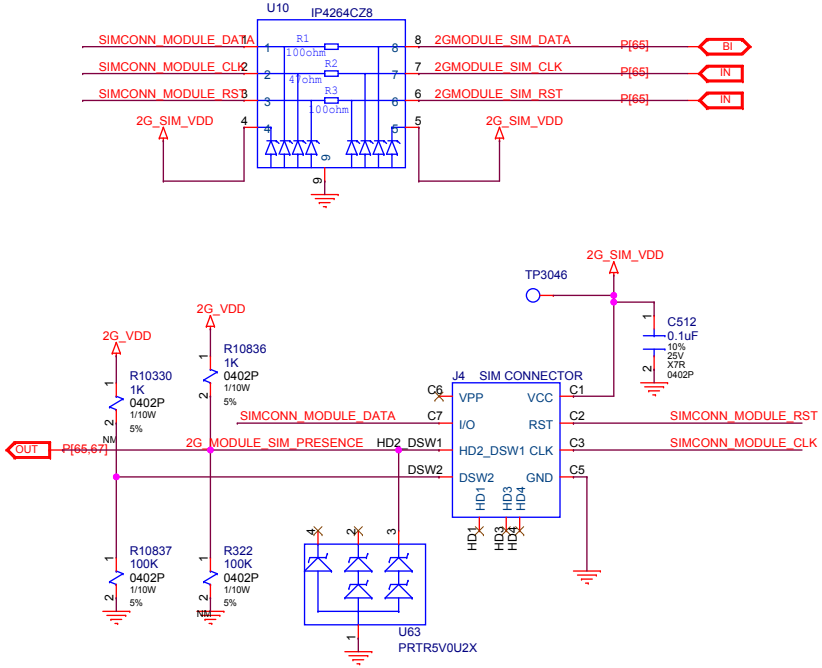
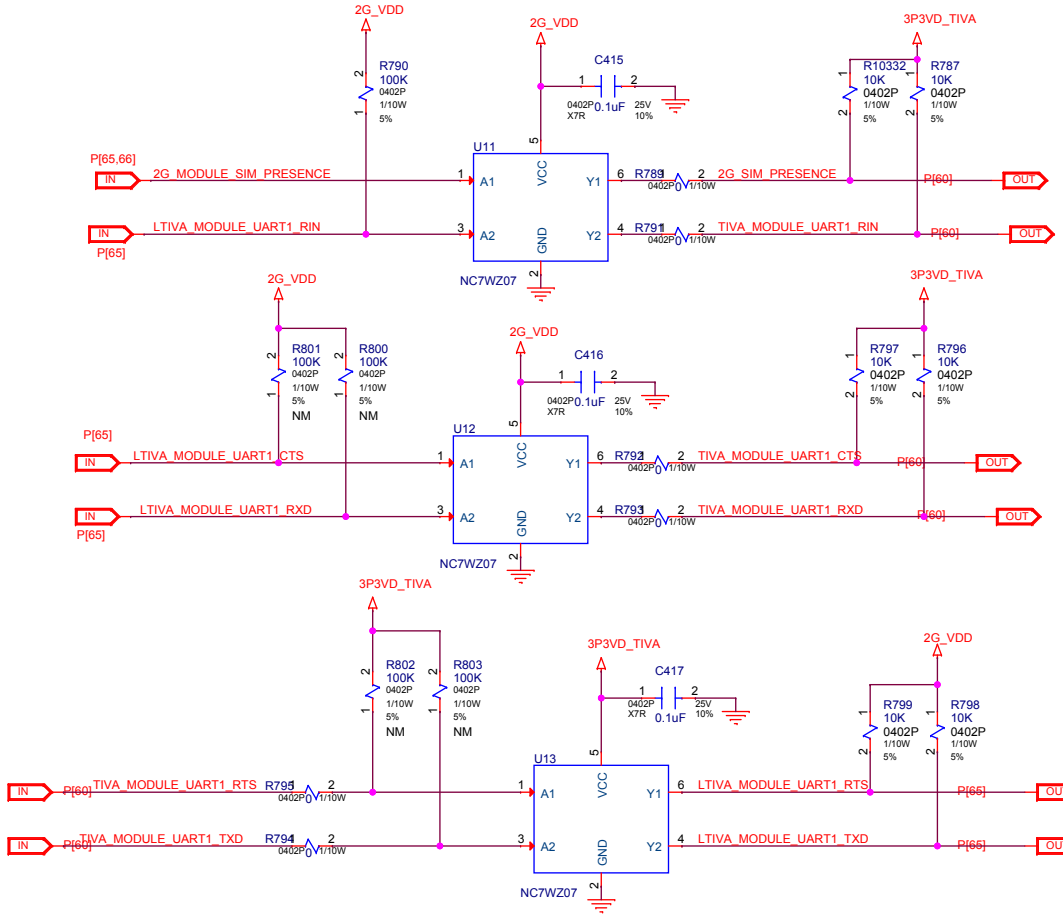
2G MODULE 2

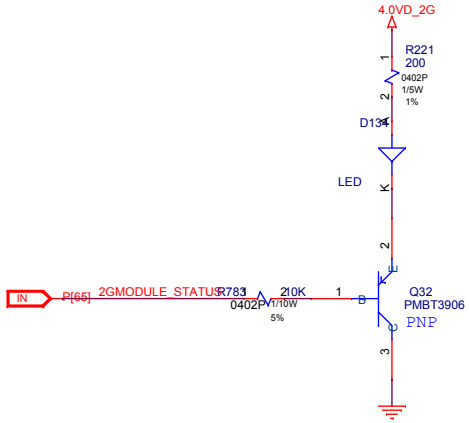
SIM CONNECTOR



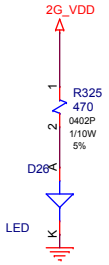
DUAL BUFFER



2G_MODULE STATUS LED INDICATION



2G_VDD LED INDICATION



OpenCellular connect-1

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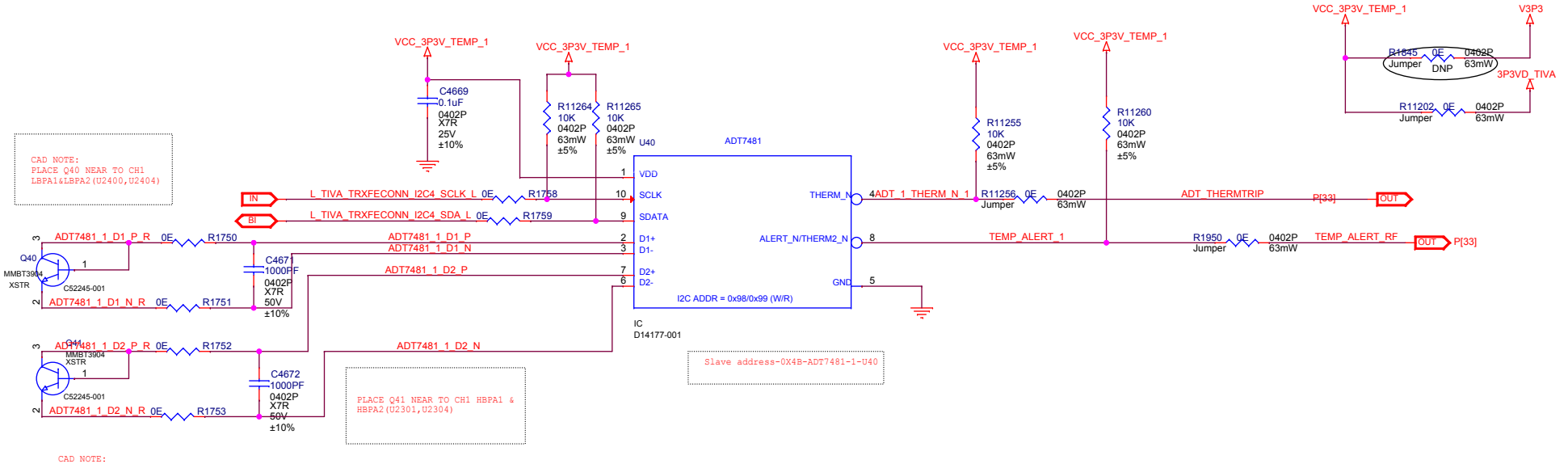
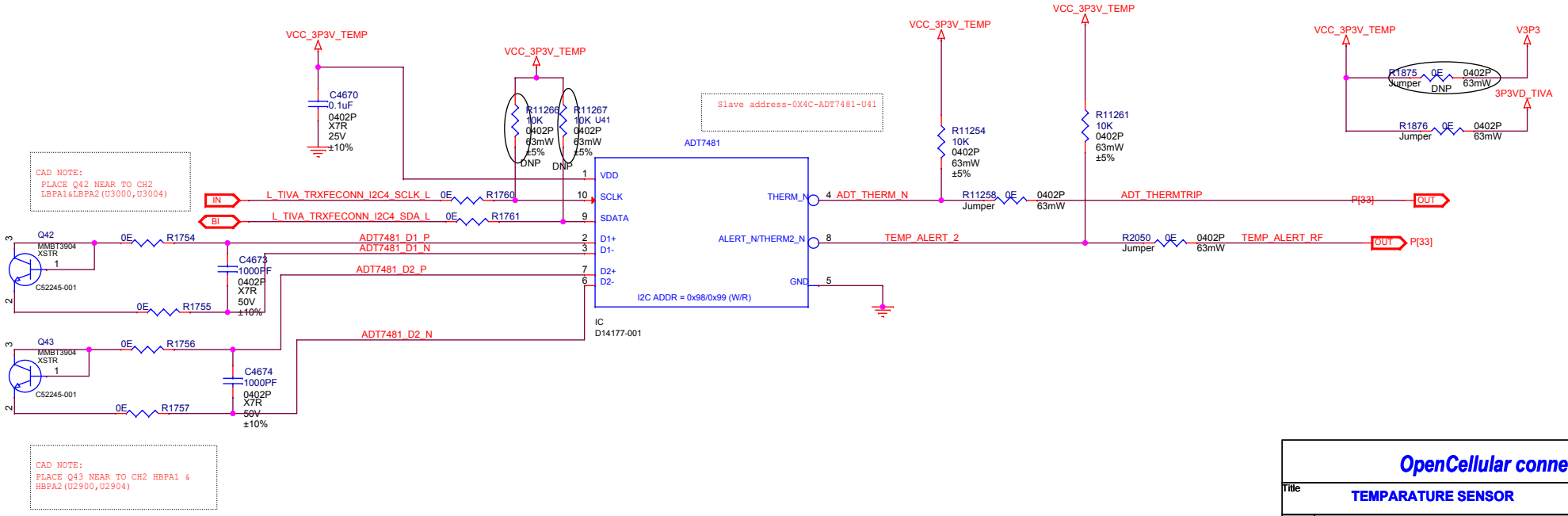
TEMPARATURE SENSOR





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