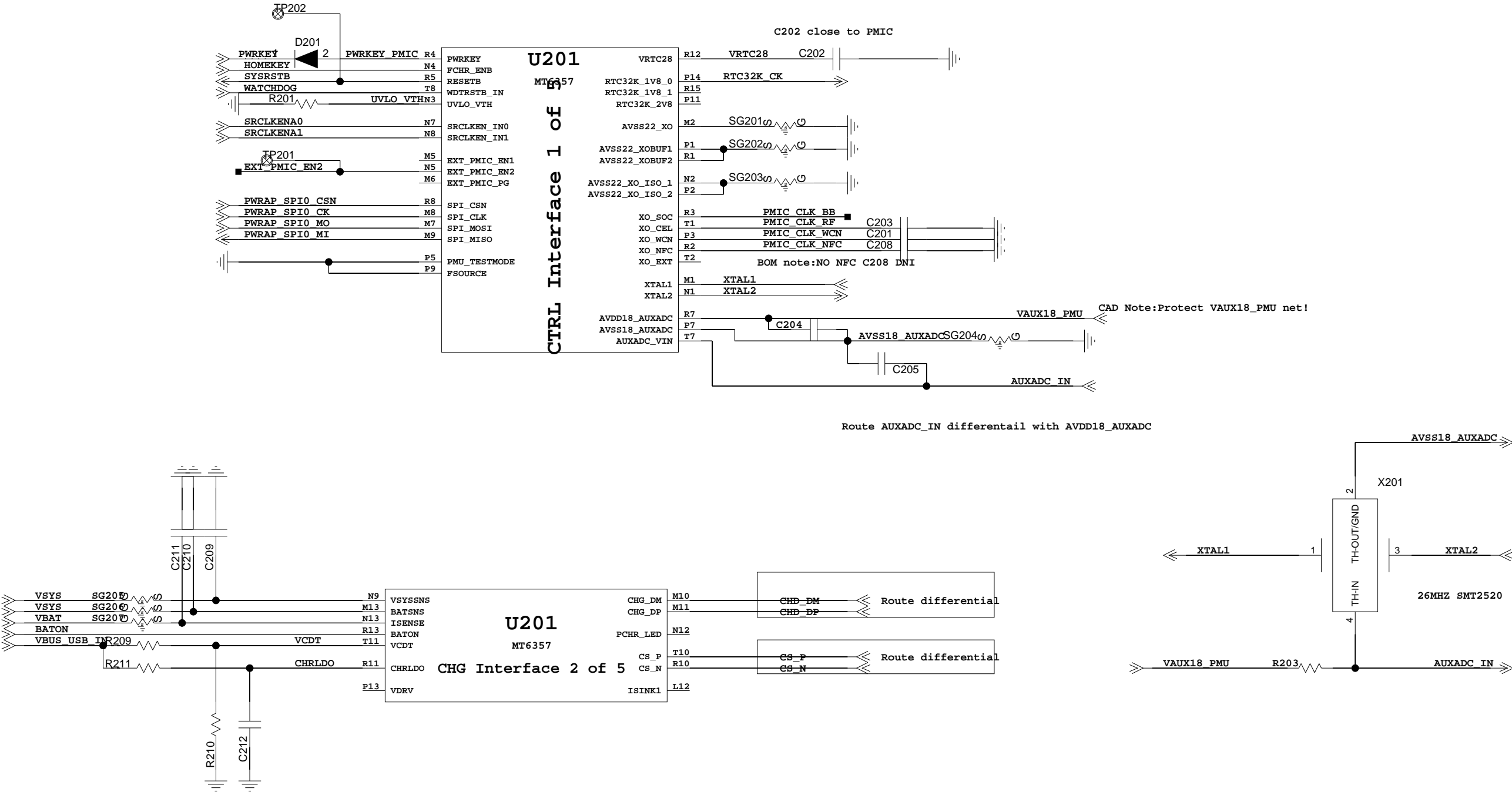


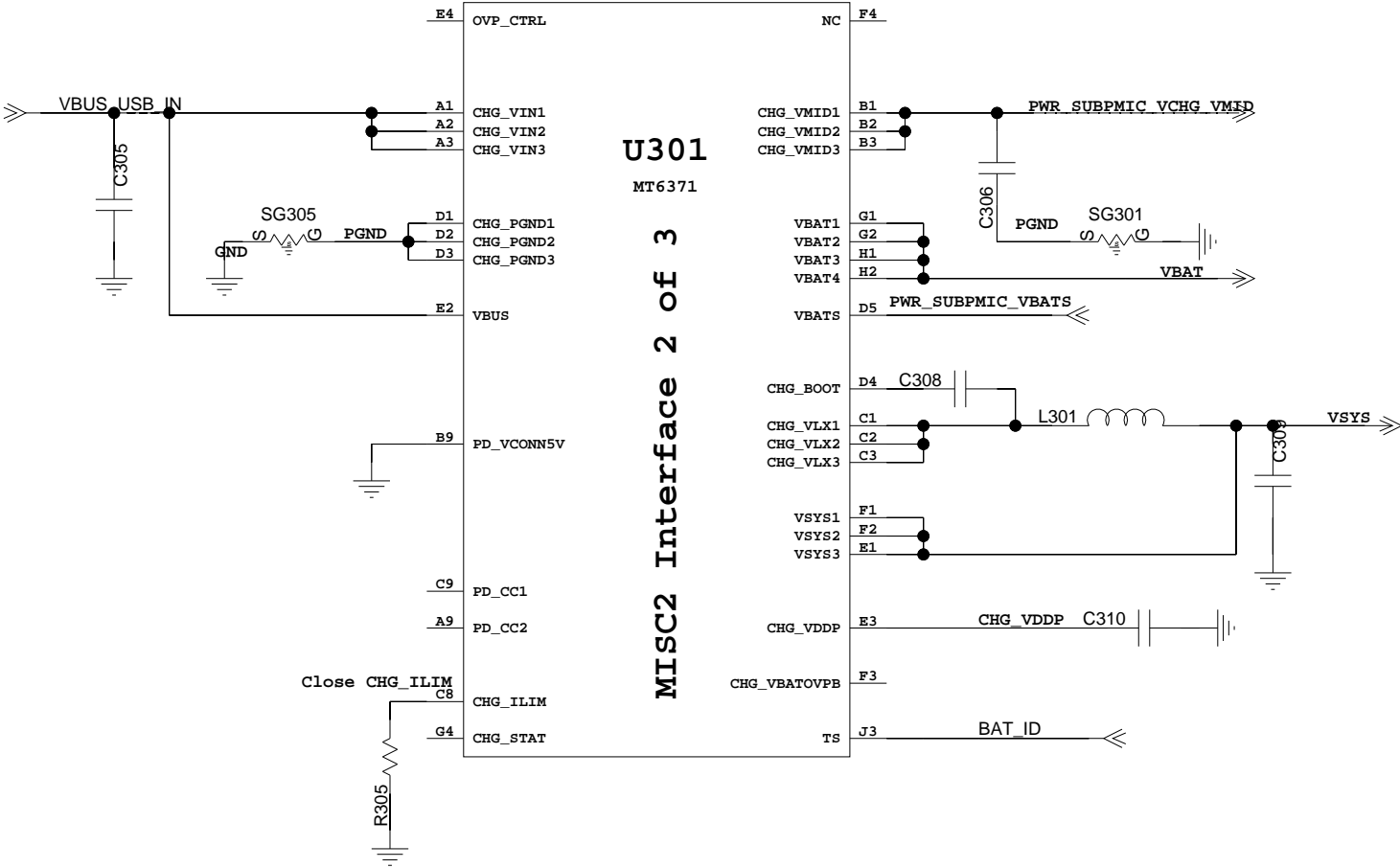
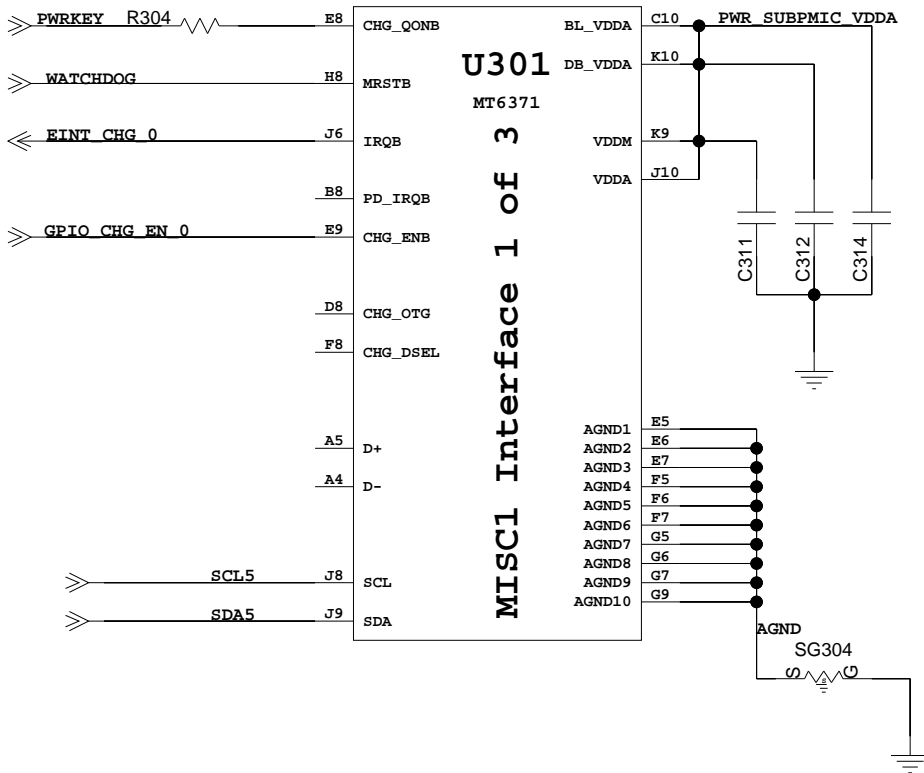
AP SCHEMATIC

- | | | |
|--|--------------------------|-------------------|
| 1. Index | 31.RF Interface | 59.GPS |
| 2. MT6357 Control | 32.RESERVED | 60.WIFI/BT BB |
| 3. MT6371 Charger | 33.Main Antenna Switcher | 61.WIFI/BT RF |
| 4. MT6371 POWER/Contrl | 34.RESERVED | 62.Reserved |
| 5. MT6357 Buck | 35.RESERVED | 63.NFC |
| 6. MT6357 LDO | 36.RESERVED | 64.RESERVED |
| 7. MT6357 Codec | 37.QFE2320(MMPA) | 65.RESERVED |
| 8. MT6762 Control | 38.Circuit of MMPA | 66.ANT Match |
| 9. MT6762 EBIF MIPI | 39.TRX_B1 | 67.MAIN ANT Tuner |
| 10. MT6762 GPIO | 40.TRX_B8 | 68.NFC_BB |
| 11. MT6762 RF IF. | 41.TRX_B5 | 69.Reserved |
| 12. MT6762 Power1 | 42.TRX_B3/GSM1900 | |
| 13. MT6762 Power2 | 43.RESERVED | |
| 14. Ext_BUCK/LDO | 44.RESERVED | |
| 15. eMMC and LPDDR3 | 45.DRX LNA B3/B26 | |
| 16. Battery/Micro USB Connector | 46.RESERVED | |
| 17. Speaker and Vibrator | 47.TRX_B41 | |
| 18. MIC and Receiver | 48.RESERVED | |
| 19. Earphone | 49.RESERVED | |
| 20. LCD interface and backlight driver | 50.RESERVED | |
| 21. Main/Slave Camera and Flash LED | 51.DRX LNA B41/B1 | |
| 22. Sensor | 52.DRX_B1/B3/B26 | |
| 23. SIM/TF card | 53.RESERVED | |
| 24. Keypad/LED/Status indicator | 54.DRX_B41 | |
| 25. Flash LED | 55.DRX_ANT_SWITCH | |
| 26. RESERVED | 56.WTR4905 | |
| 27. RESERVED | 57.RESERVED | |
| 28. RESERVED | 58.ET_APT | |
| 29. Subconnector | | |
| 30. Test Points/Shields | | |

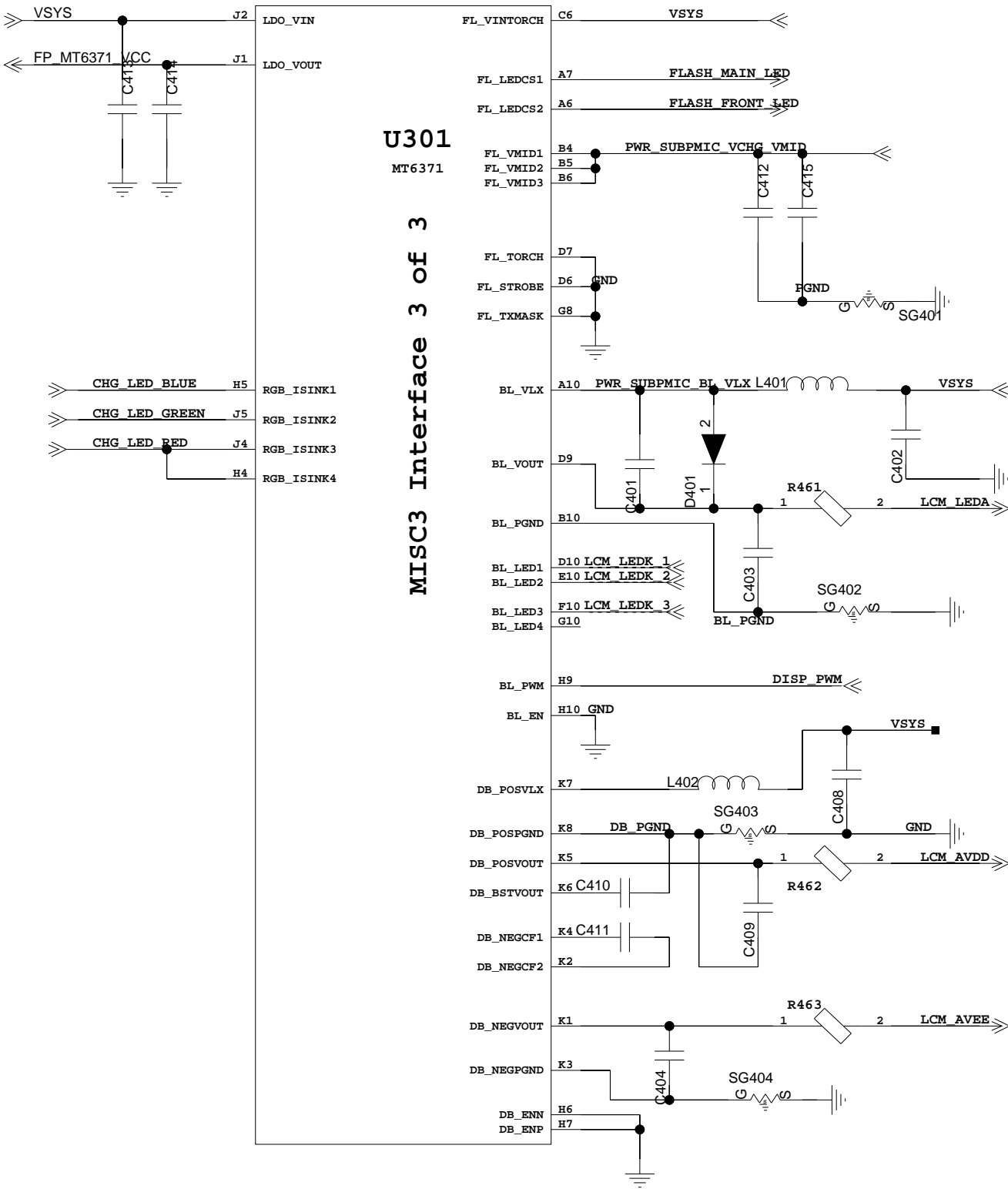
2. MT6357 Control



3. MT6371 Charger

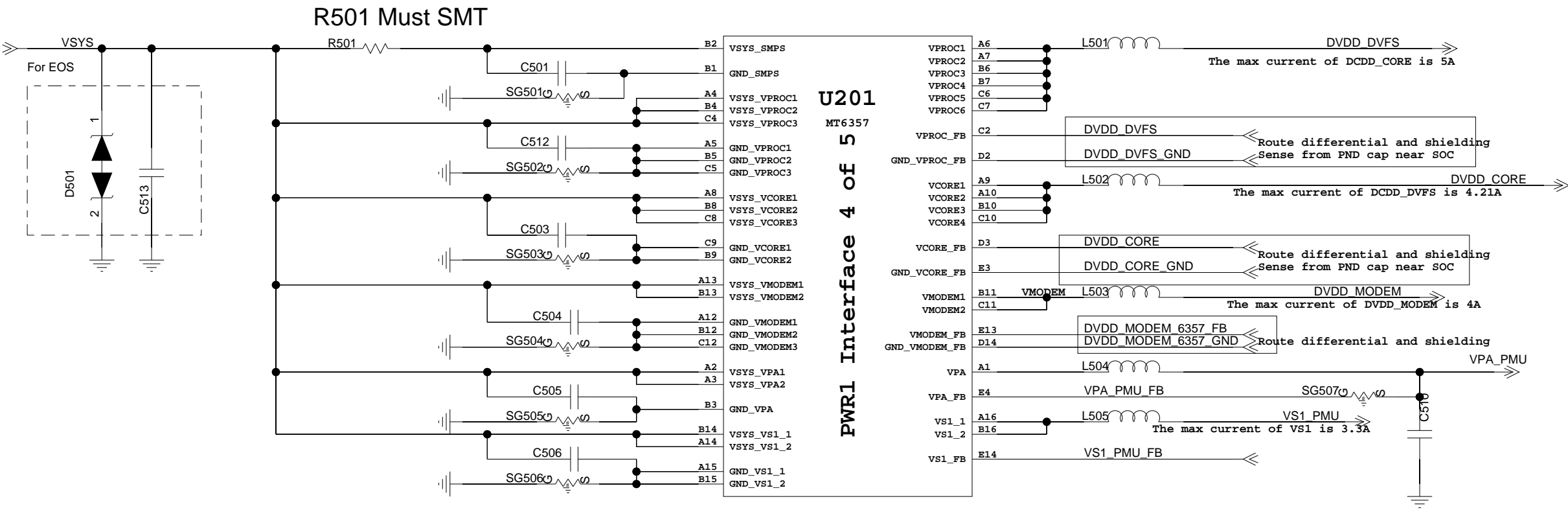


4. MT6371 POWER/Contrl

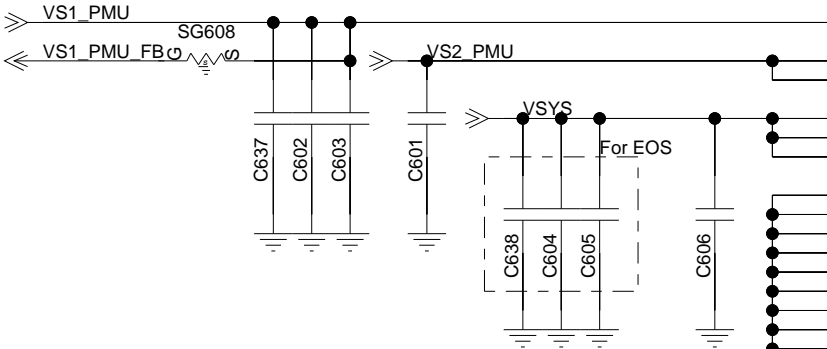
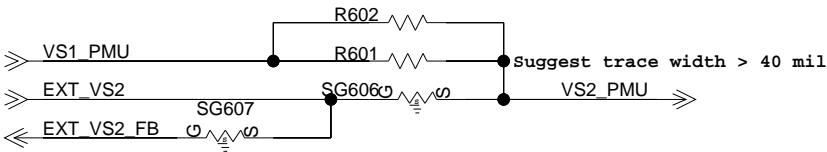


COMPONENT_HIGH_MAX=0.6MM

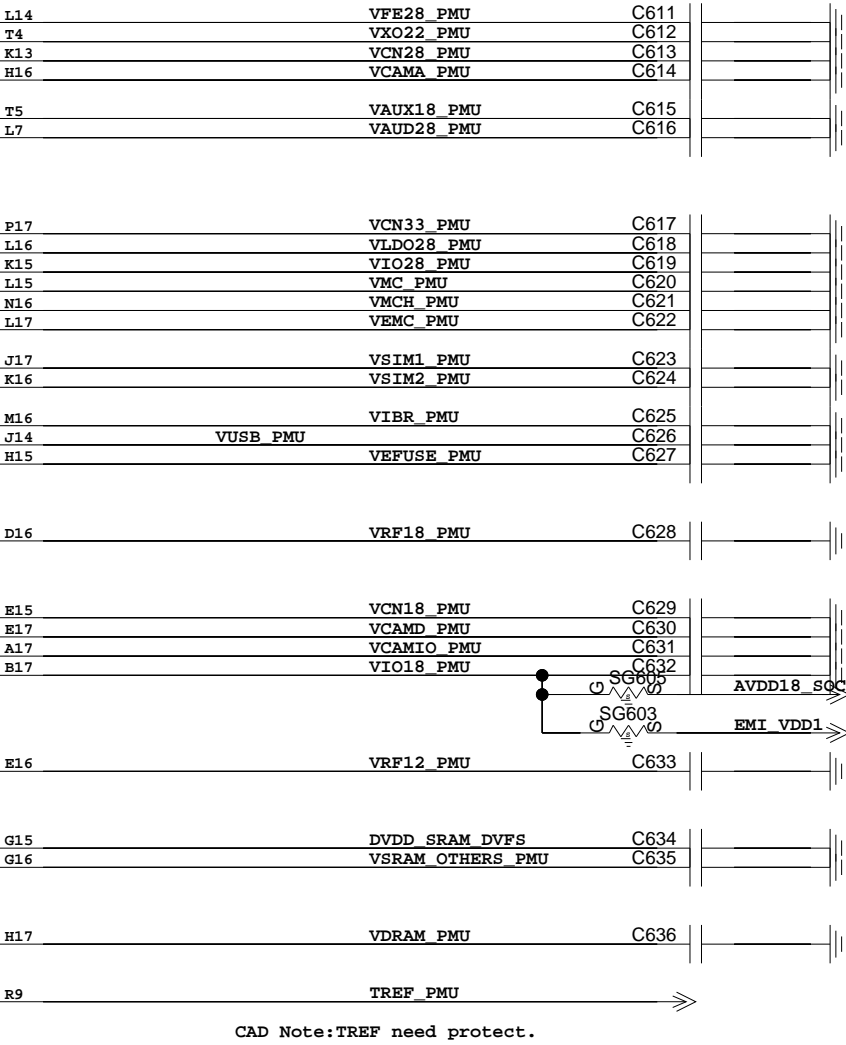
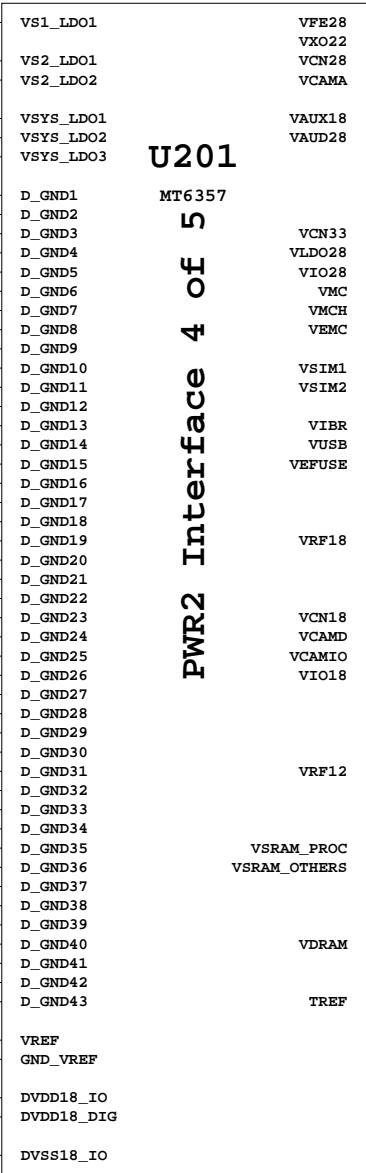
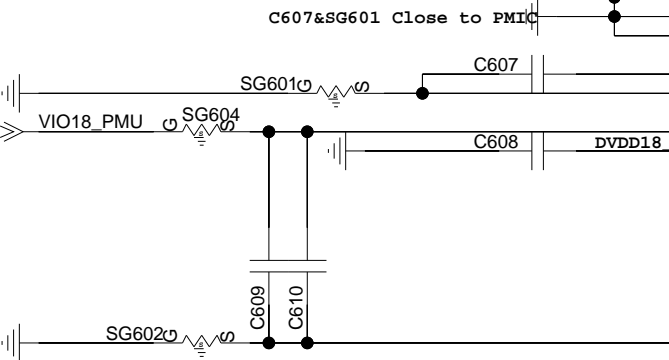
5. MT6357 Buck



6. MT6357 LDO

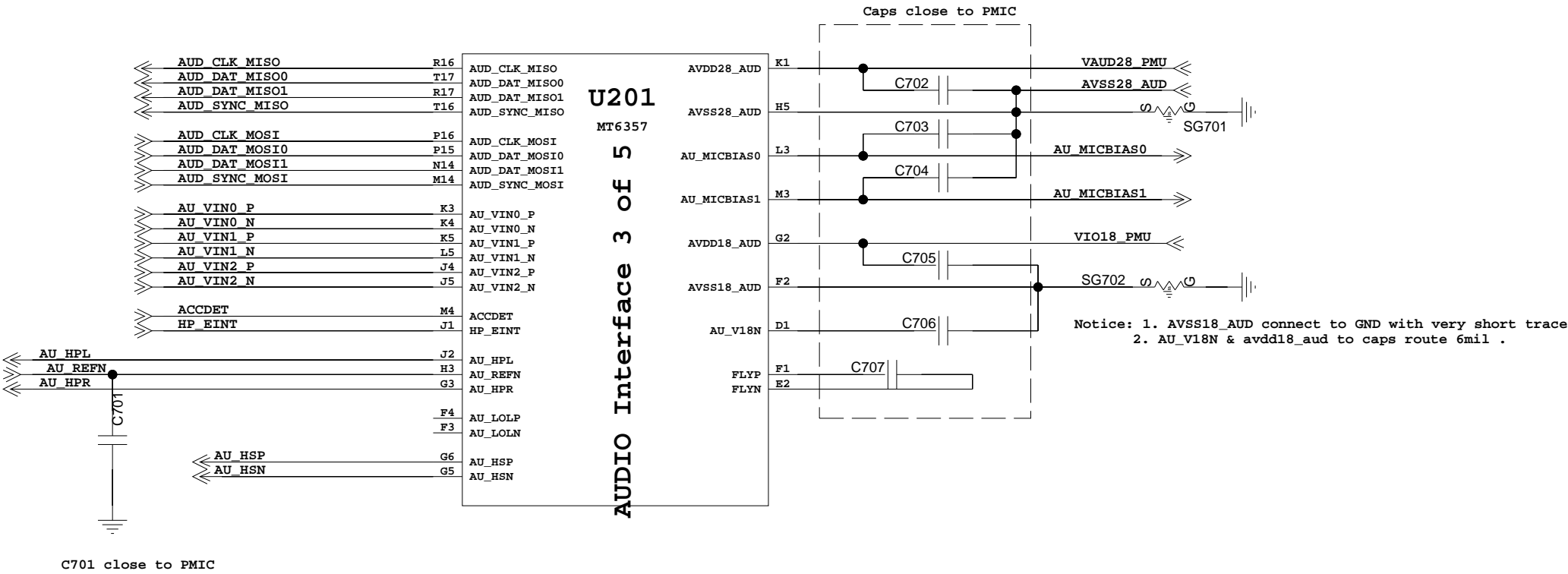


All LDO inout Caps close to PMIC

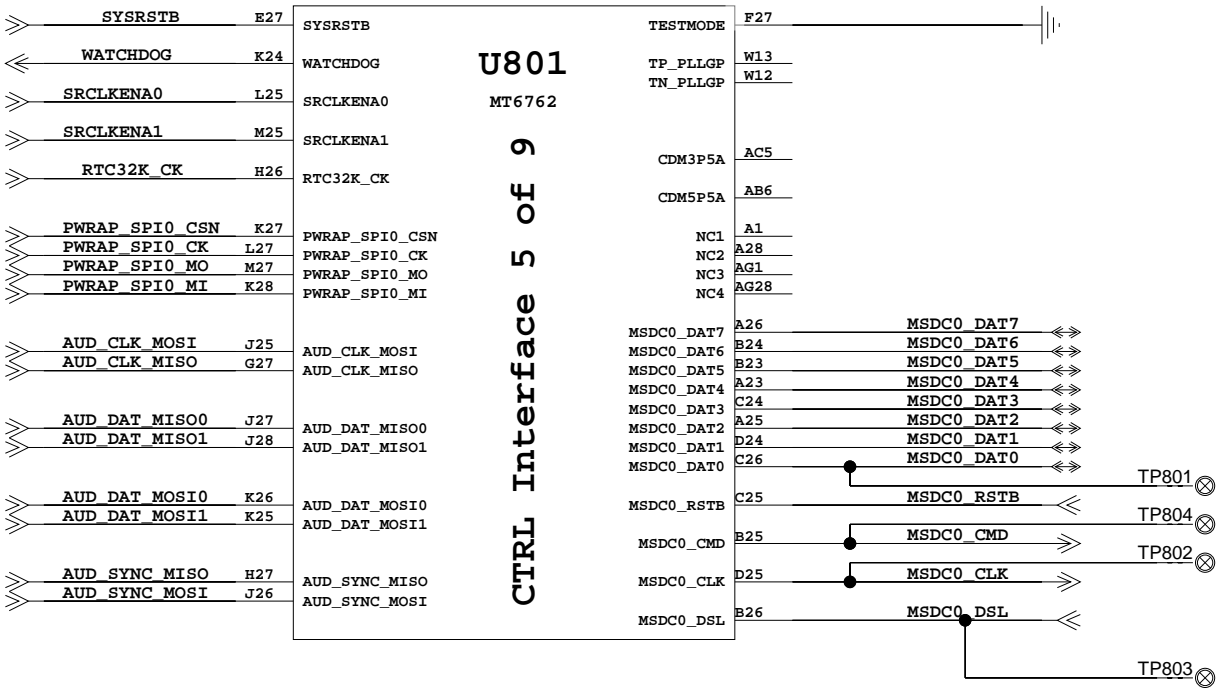


NAME	Output Voltage(V)	I _{max} (mA)	Cap range
VFE28	2.8	40	1---2.2
VXO22	2.24	25	2.2--2.3
VRF18	1.81	450	9.4--10.4
VRF12	1.2	200	1---2.2
VEFUSE	1.2/1.3/1.5/1.8/2.0/2.8/3.0/3.3	200	1---2.2
VCN33	3.3/3.4/3.5/3.6	400	1---1.47
VCN28	2.8	40	1---2.2
VCN18	1.8	200	1---2.2
VCAMA	1.8/2.5/2.7/2.8/2.9/2.95/3	145	1---11
VCAMD	1/1.05/1.1/1.2/1.3/1.5/1.8	350(<=1.5) 200(1.8)	1---5.7
VCAMIO	1.8	140	1---4
VLDO28	2.8/3.0	360	1---7.7
VAUX18	1.8	20	1---2.2
VAUD28	2.8	50	1---2.2
VIO28	2.8	200	1---4
VIO18	1.8	600	4.7-21
VSRAM_PROC	0.75--1.31(1.25)	130	2.2--3.61
VSRAM_OTHERS	0.75---1.3(1.25)	200	2.2--3.61
VDRAM	1.12/1.24	1200	4.7--44
VMC	1.86/2.9/3.0/3.3	200	1---2.2
VMCH	2.9/3.0/3.3	800	1---5.9
VEMC	2.9/3.0/3.3	400	1---5.9
VSIM1	1.7/1.8/1.86/2.76/3.0/3.1	50	1---2.2
VSIM2	1.7/1.8/1.86/2.76/3.0/3.1	50	1---2.2
VIBR	1.2/1.3/1.5/1.8/2.0/2.8/3.0/3.3	200	1---2.2
VUSB	3.07	50	1---2.2
VRTC28	2.8	2	Near end:0.1uF Far:1.5K+super Cap
DVDD18_DIG	1.8	10	1

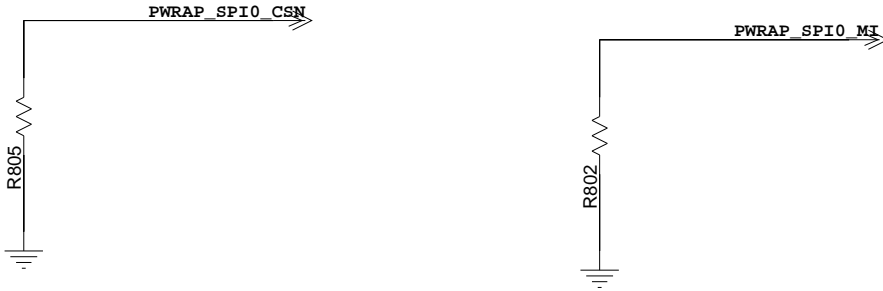
7. MT6357 Codec



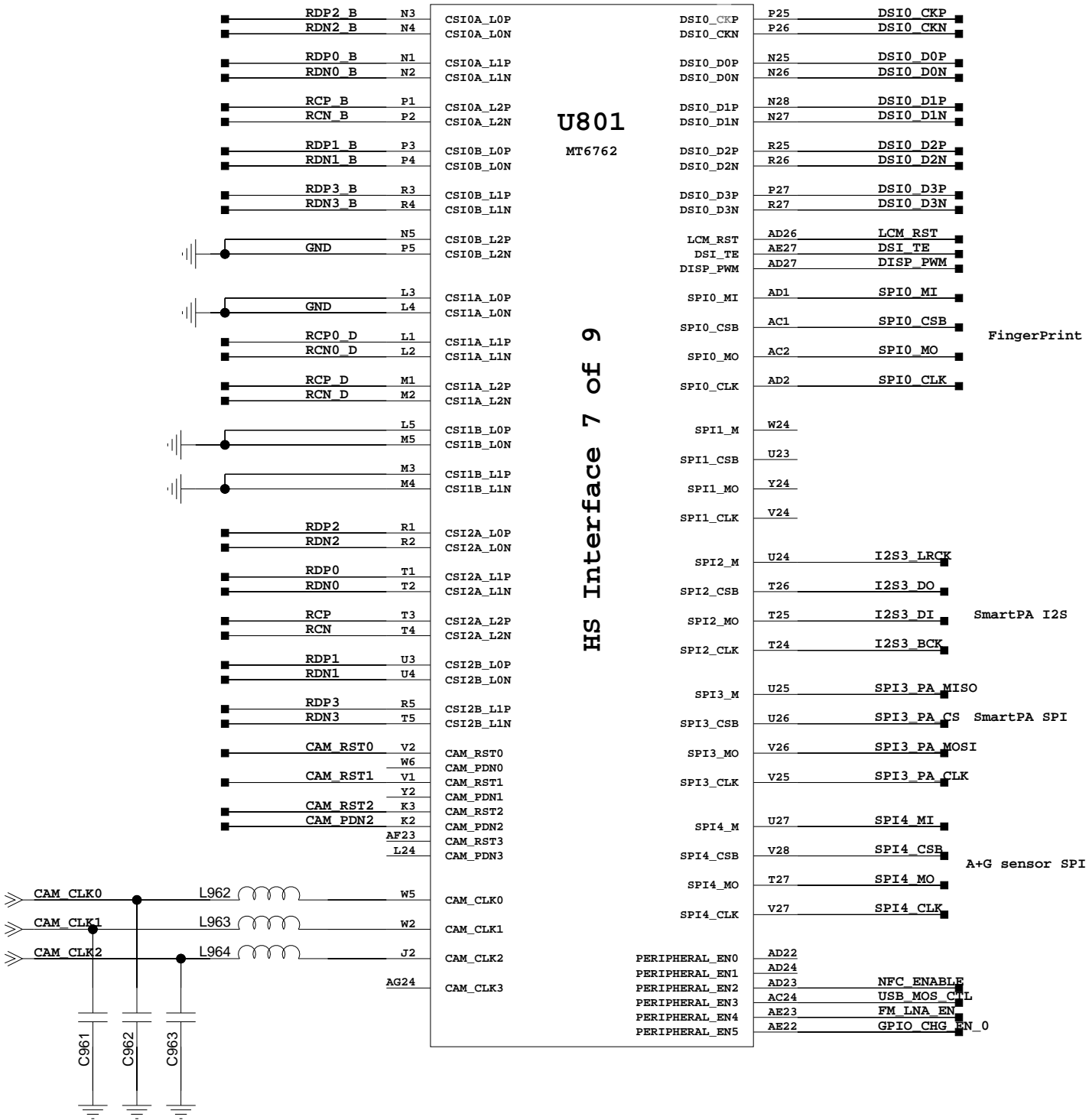
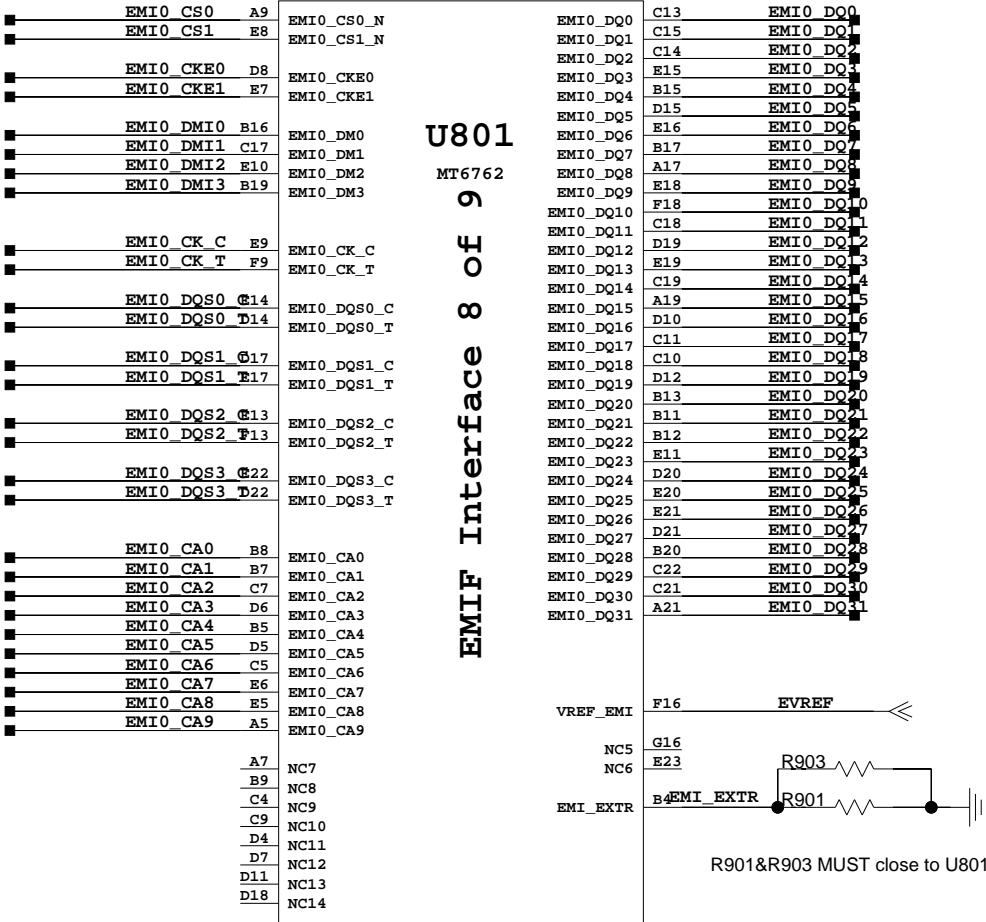
8. MT6762 Control



AP JTAG:CS LO,MOSI LO.
Default:No JTAG modem. BOM SMT as Value



9. MT6762 EBIF MIPI



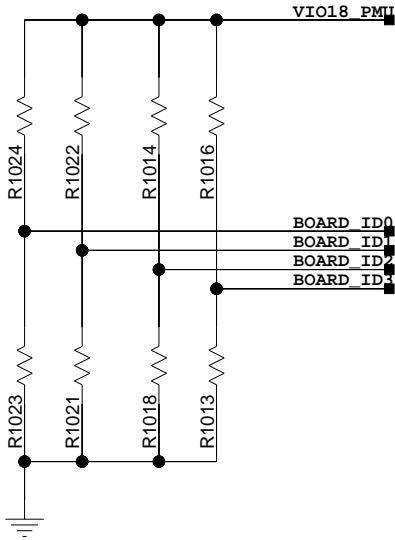
10. MT6762 GPIO

A

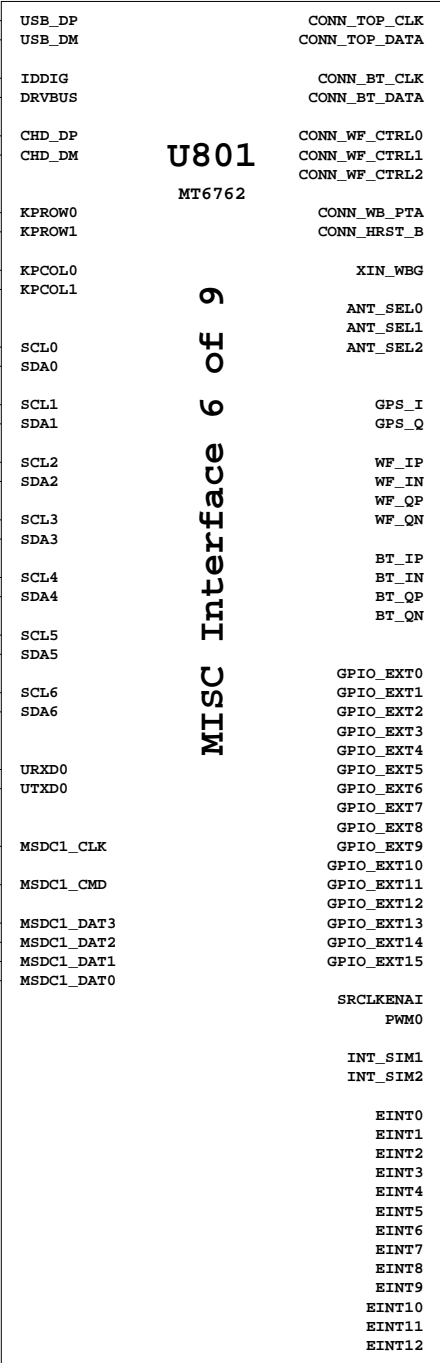
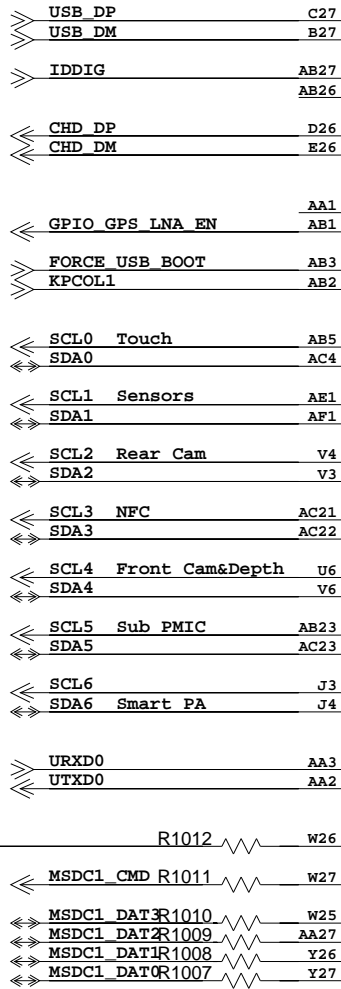
B

C

D



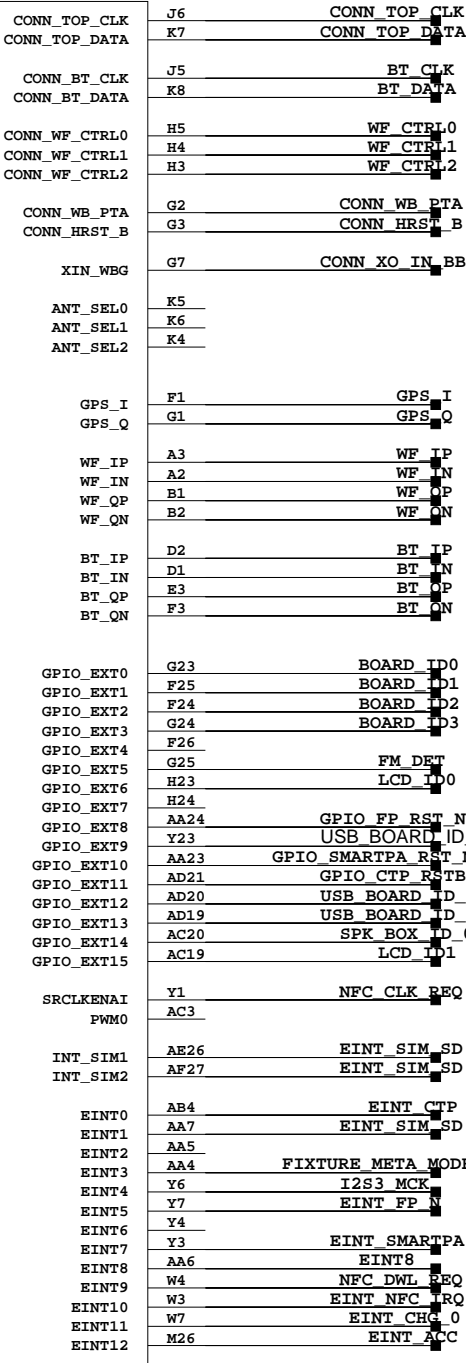
	R1024	R1023	R1022	R1021	R1014	R1018	R1016	R1013
MRD L23/L03	DNI	SMT	DNI	SMT	DNI	SMT	DNI	DNI
MRD L01/L21A	DNI	SMT	SMT	DNI	DNI	SMT	DNI	SMT
MRD L11	DNI	SMT	SMT	DNI	DNI	SMT	DNI	DNI
MRD L22/L02	DNI	SMT	SMT	DNI	DNI	SMT	SMT	DNI
MRD AL00A	DNI	SMT	SMT	DNI	DNI	DNI	DNI	SMT
MRD TL00A	DNI	SMT	SMT	DNI	DNI	DNI	SMT	DNI
JAT L23	DNI	SMT	DNI	SMT	SMT	DNI	SMT	DNI
JAT L21A/L21B	DNI	SMT	DNI	SMT	DNI	DNI	SMT	DNI
JAT L29	DNI	SMT	DNI	SMT	SMT	DNI	DNI	DNI
JAT AL00A/AL00B	DNI	SMT	DNI	SMT	SMT	DNI	DNI	SMT
JAT TL00	DNI	SMT	DNI	SMT	DNI	DNI	DNI	DNI



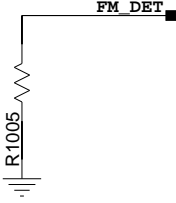
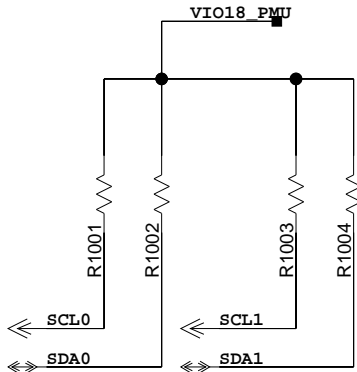
U801

MT6762

MISC Interface 6 of 9



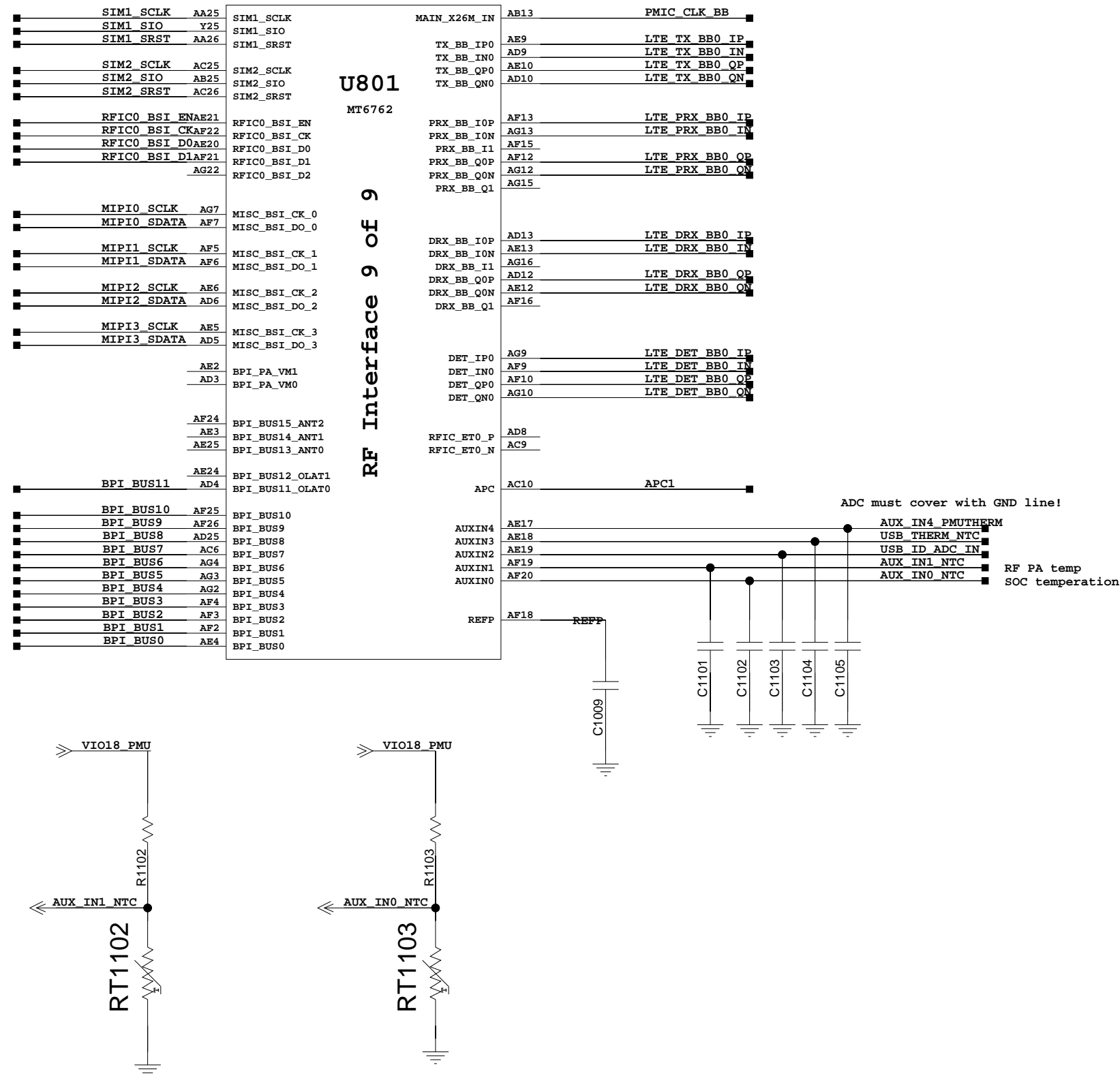
I2C/R271



BOM Note:R1005 SMT with U1901

_SCHZH

11. MT6762 RF IF



Thermistor to sense CHARGER.

3 to 5mm far away from charger.other 10mm more.

Thermistor to sense RF PA

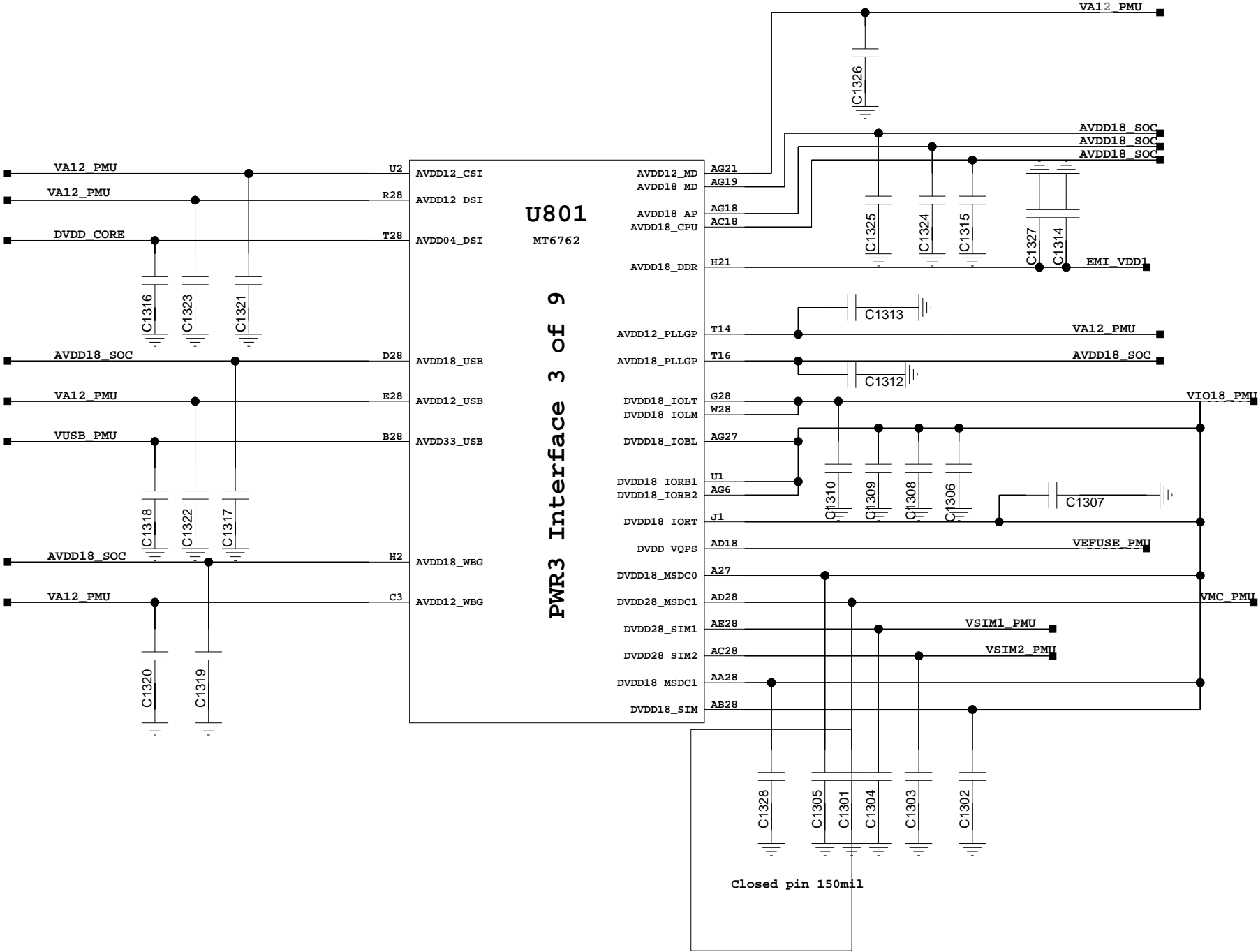
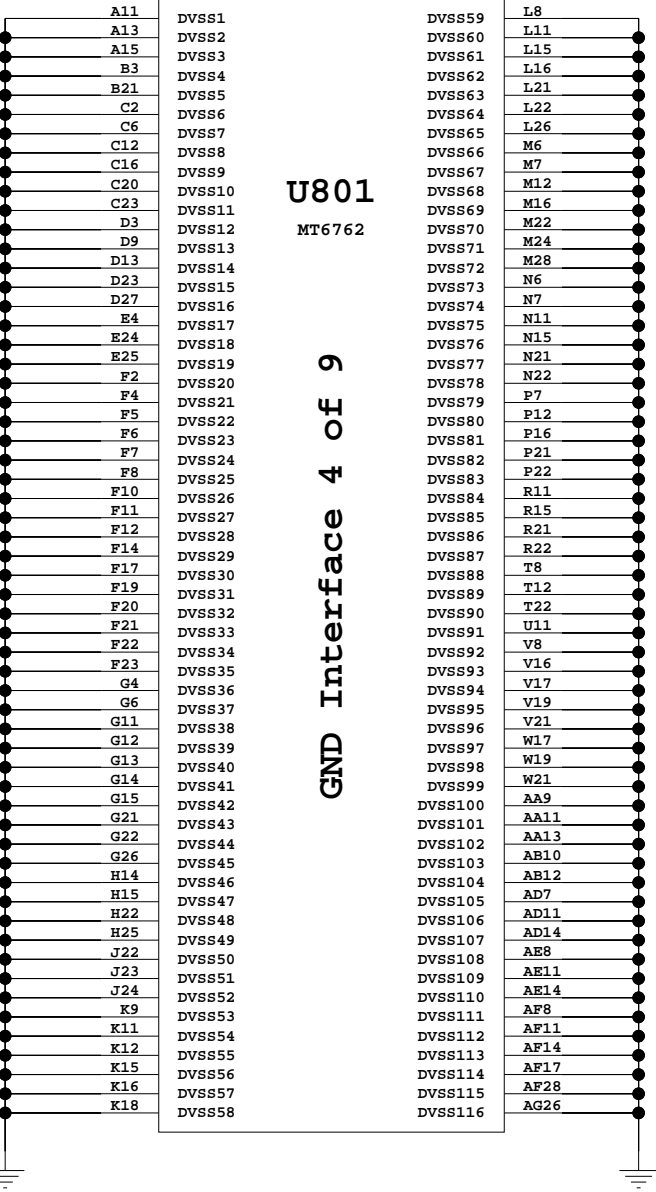
must close to PA or the hottest PA <2mm.

Thermistor to sense AP

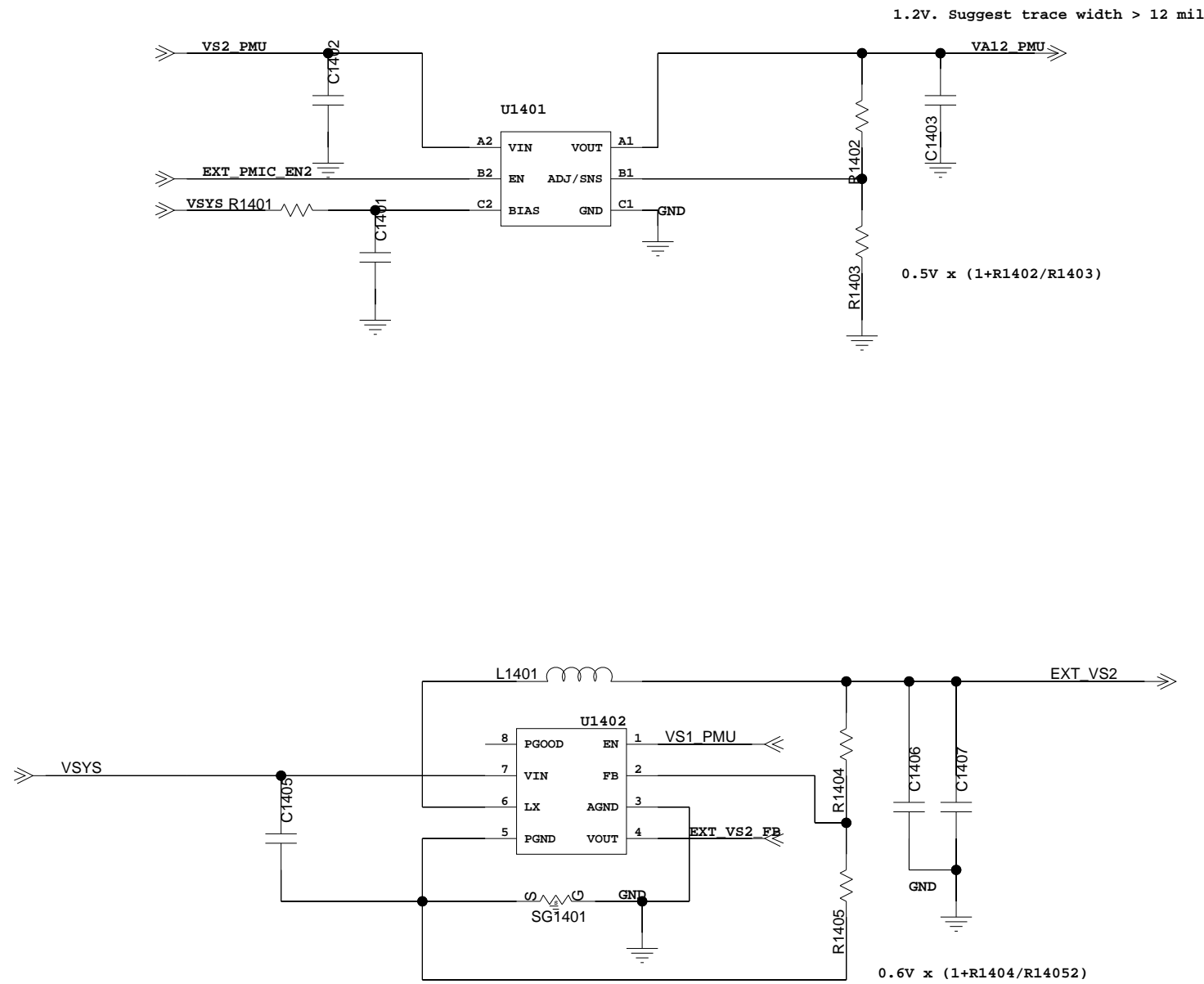
must keep a distance about 68 mm away from AP. other heat sources 10 mm at least.

_SCHZH

13. MT6762 Power2



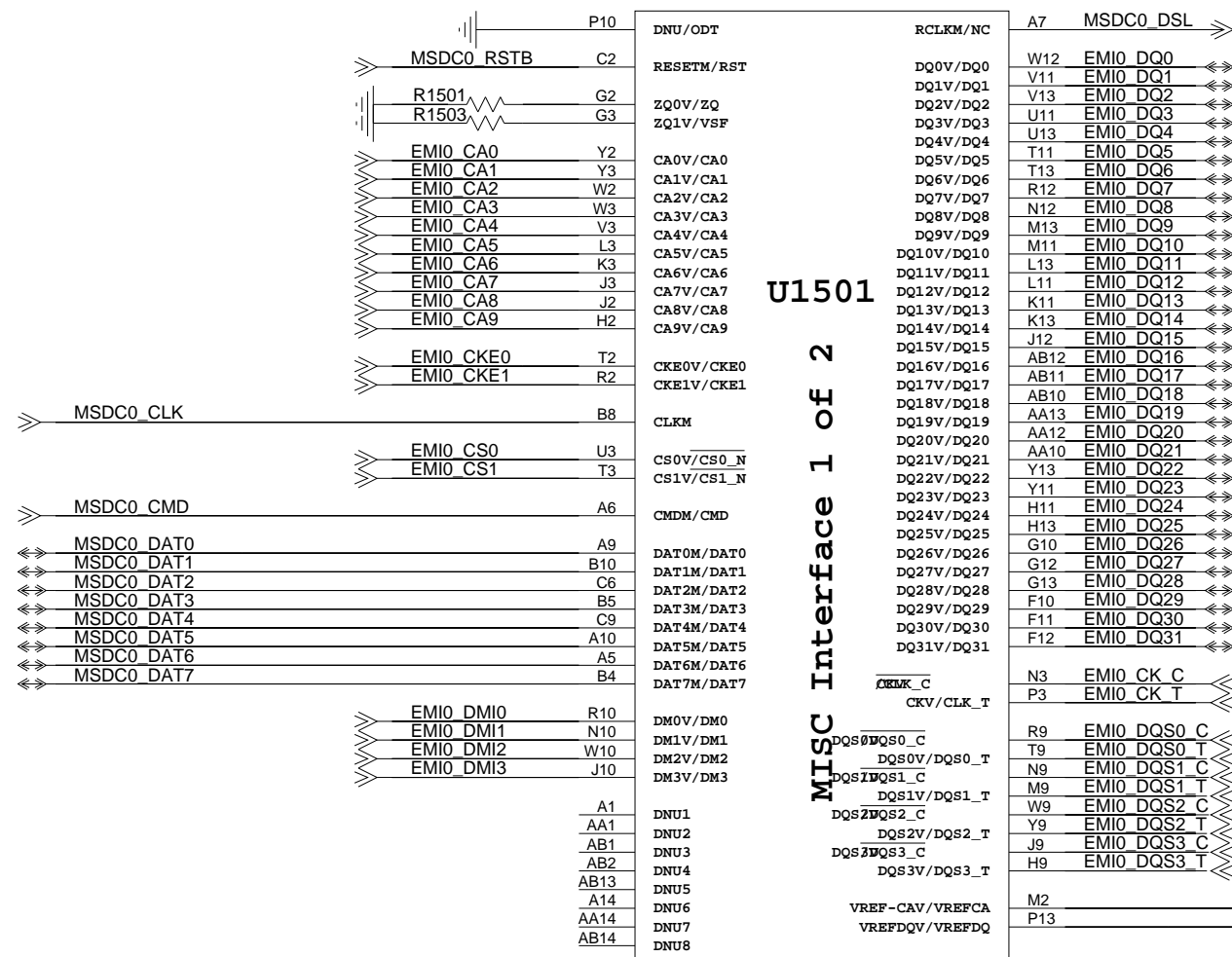
14. Ext_BUCK/LDO



15. eMMC and LPDDR3

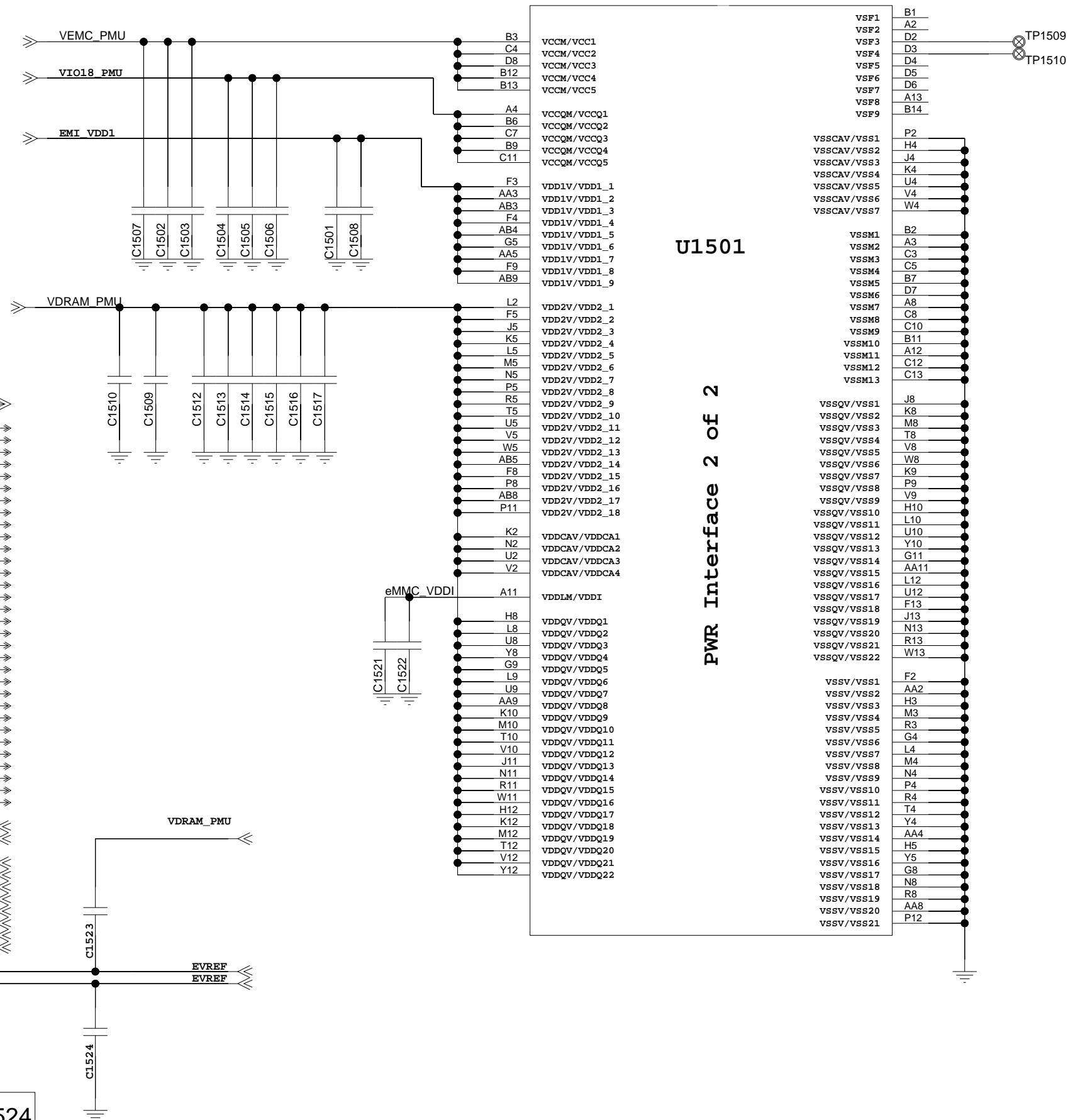
****BOM Notes:**

1+16 1+8 2+16 3+32



BOM notes:default MT6762

Project	C1523	C1524
MT6762	08071733	08071128
MT6761	08072061	08072061



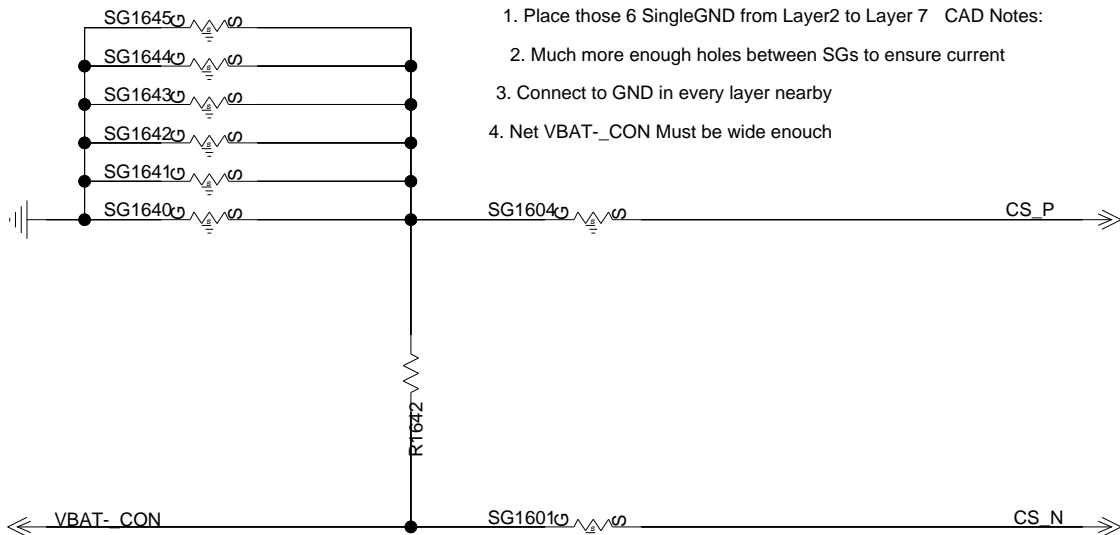
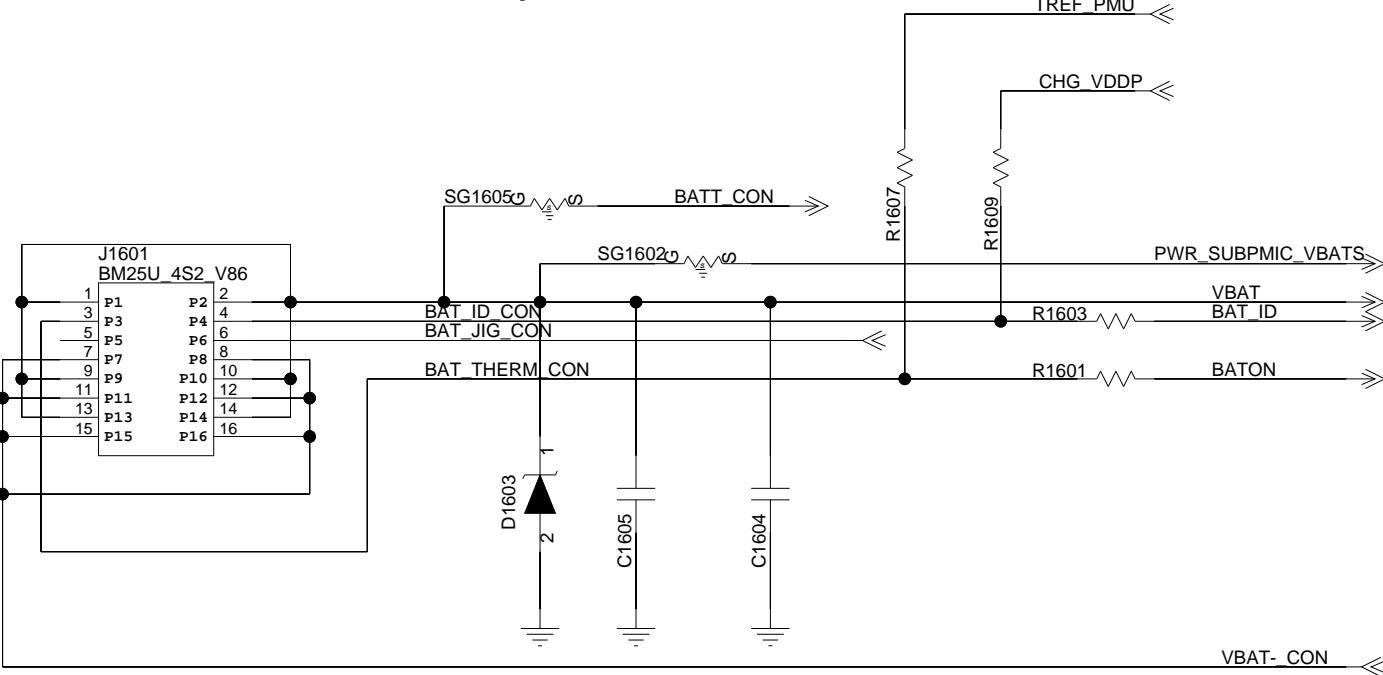
U1501

PWR Interface 2 of 2

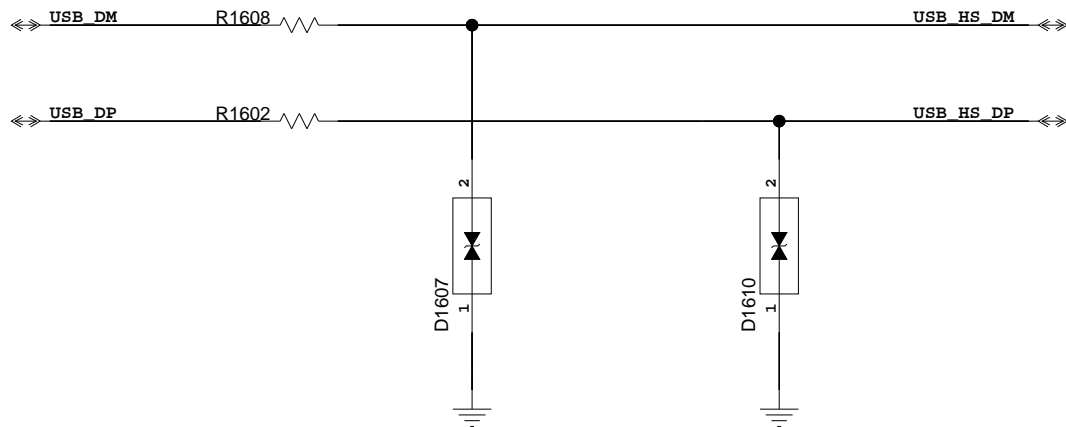
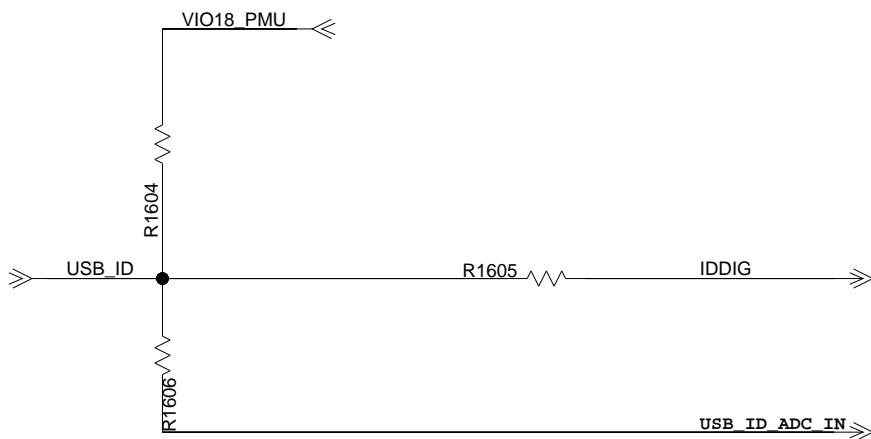
SCHZH

16. Battery/USB IF.

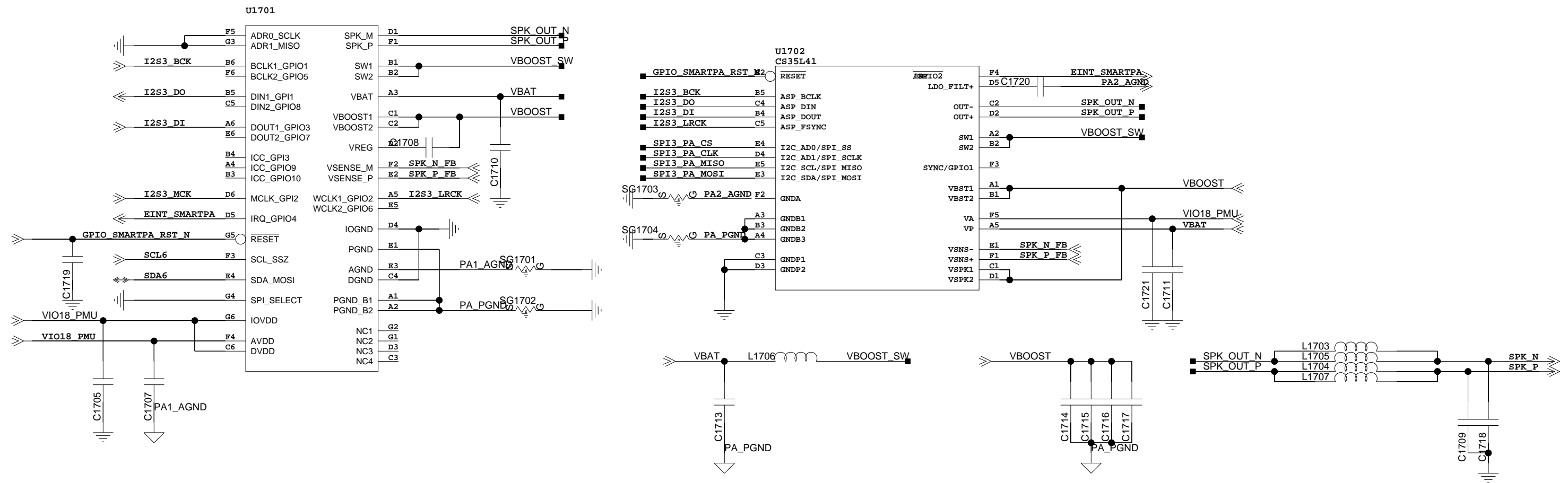
Battery Conector



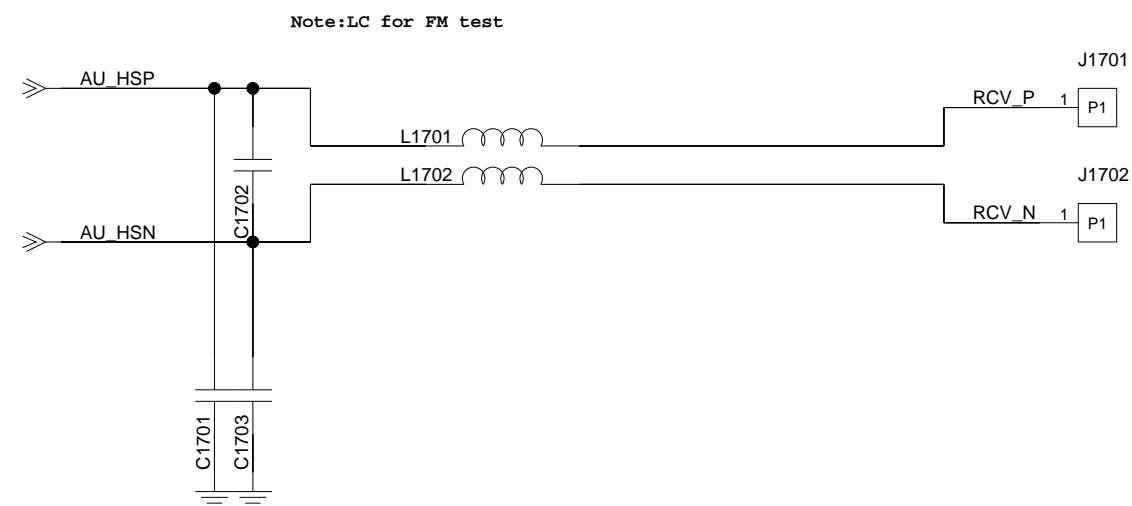
- 1. Place those 6 SingleGND from Layer2 to Layer 7 CAD Notes:
- 2. Much more enough holes between SGs to ensure current
- 3. Connect to GND in every layer nearby
- 4. Net VBAT-_CON Must be wide enough



17. Receiver/SPK/Vibrator TI



Receiver

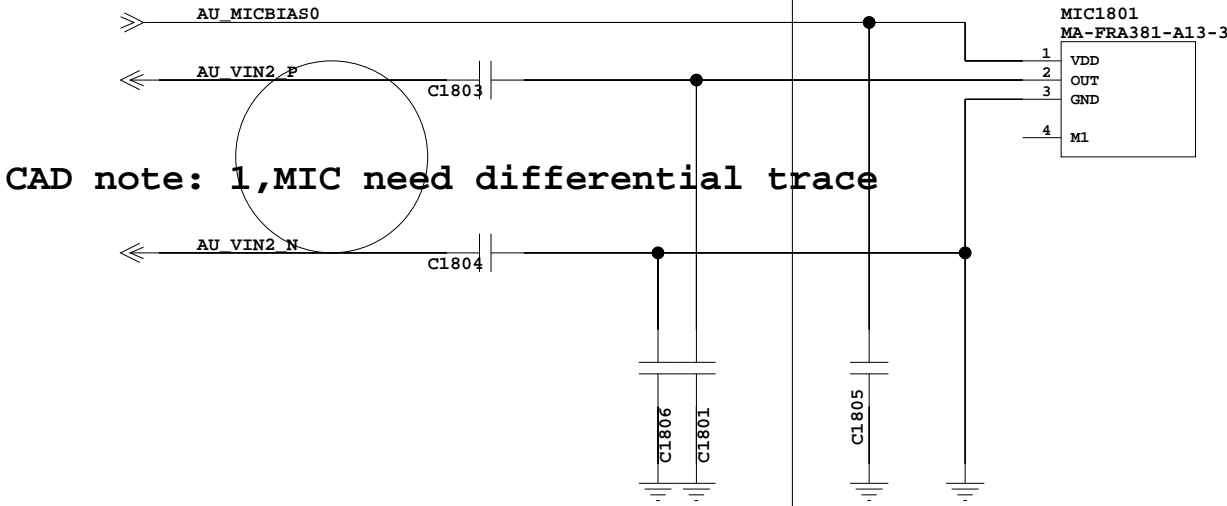


18. MIC

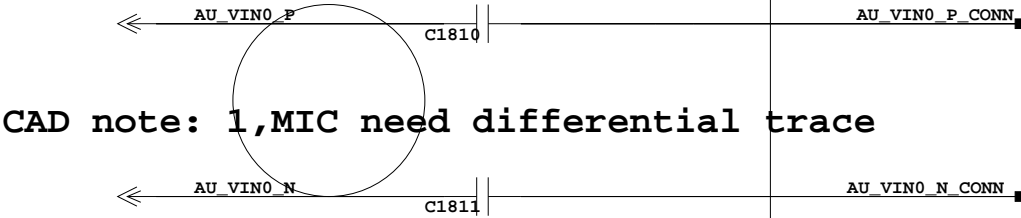
Sub MIC

Close to PMU

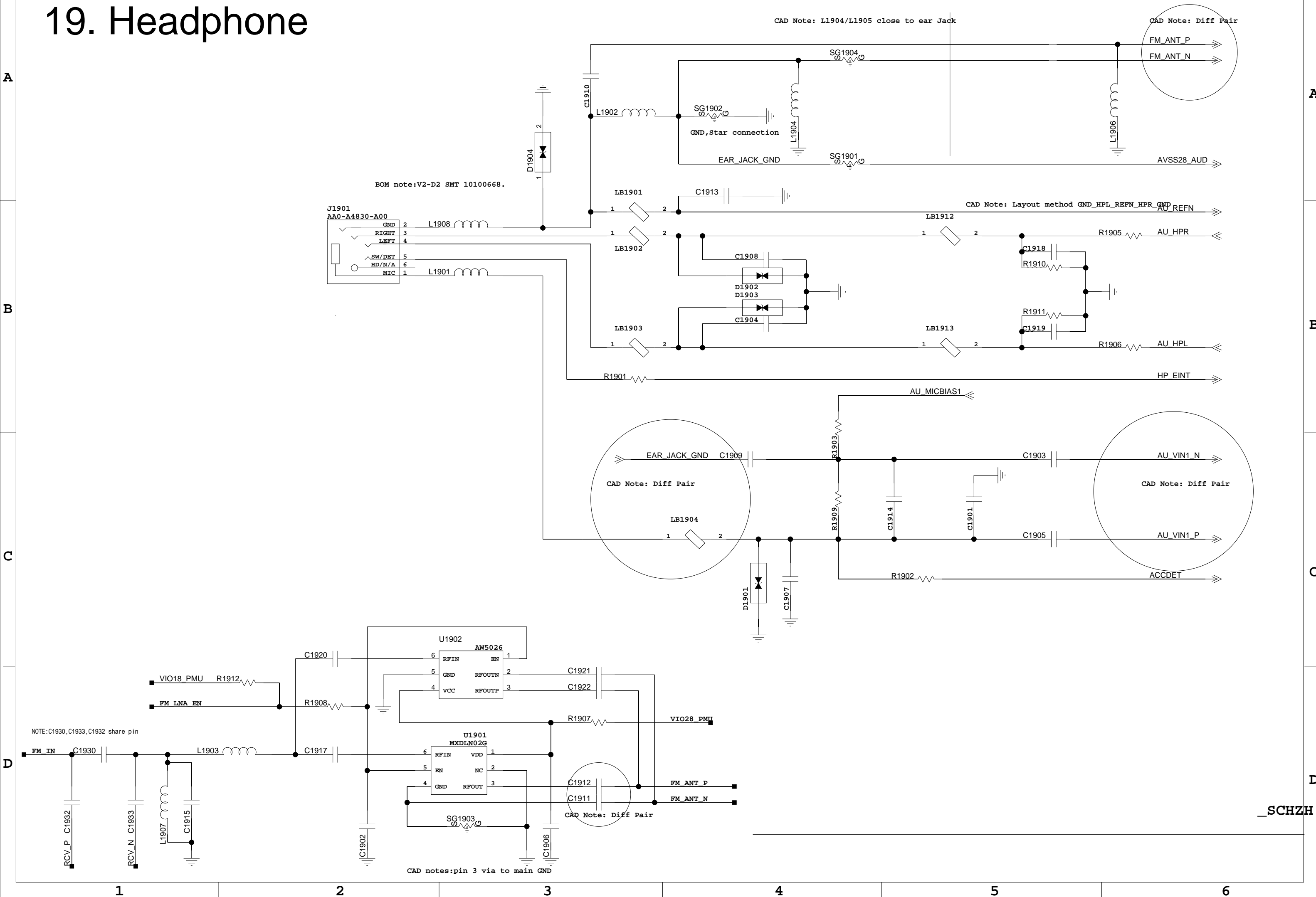
Close to MIC



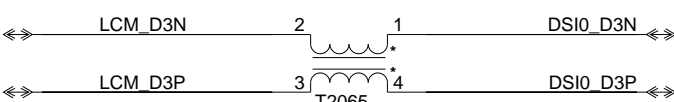
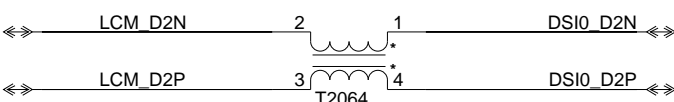
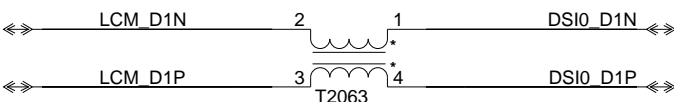
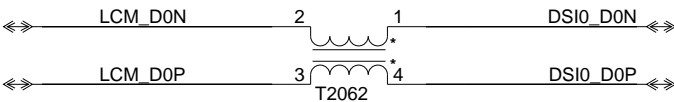
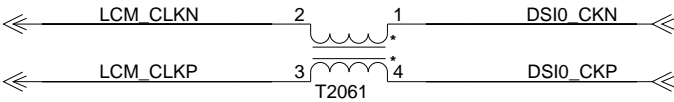
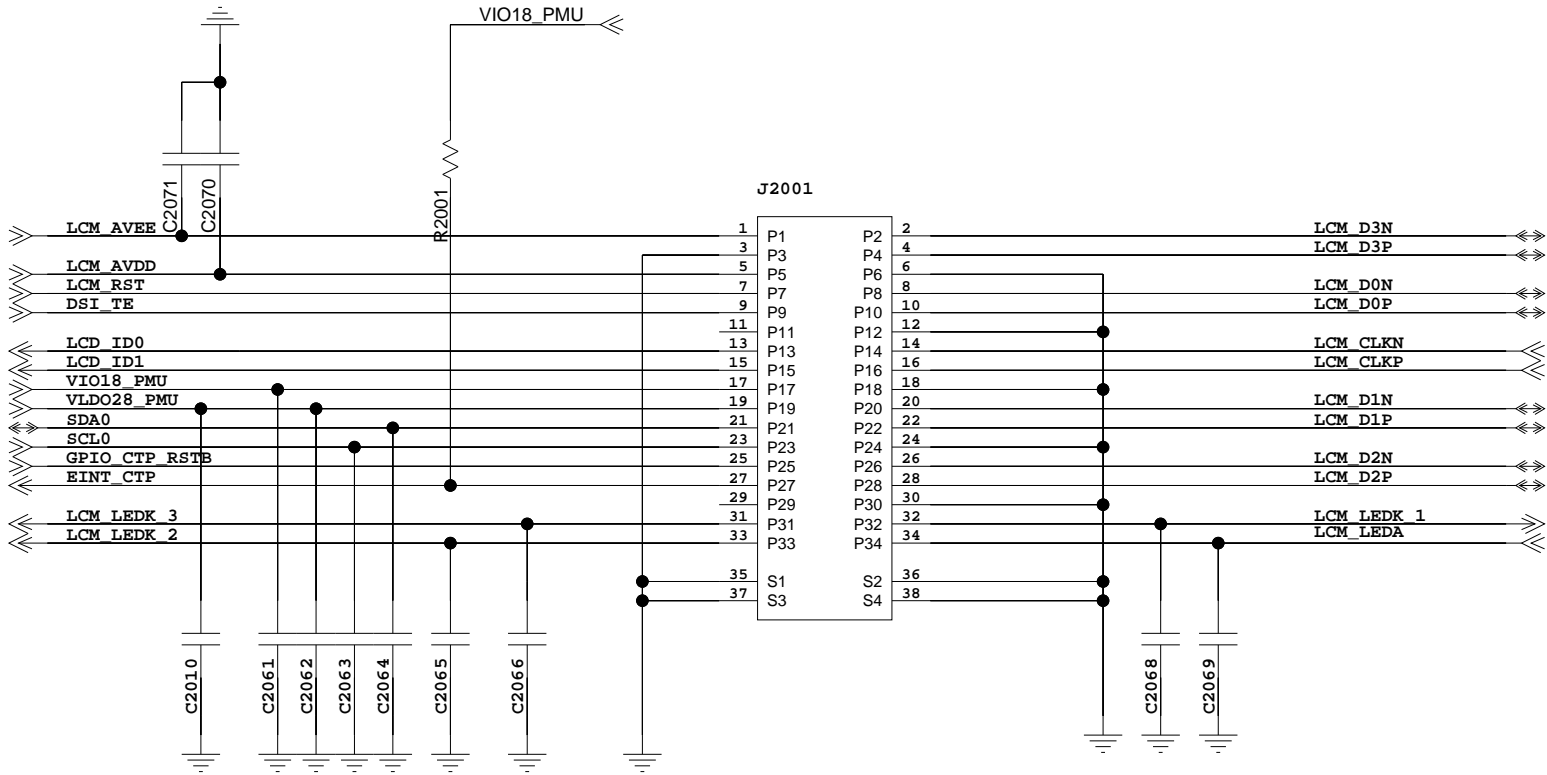
Main MIC



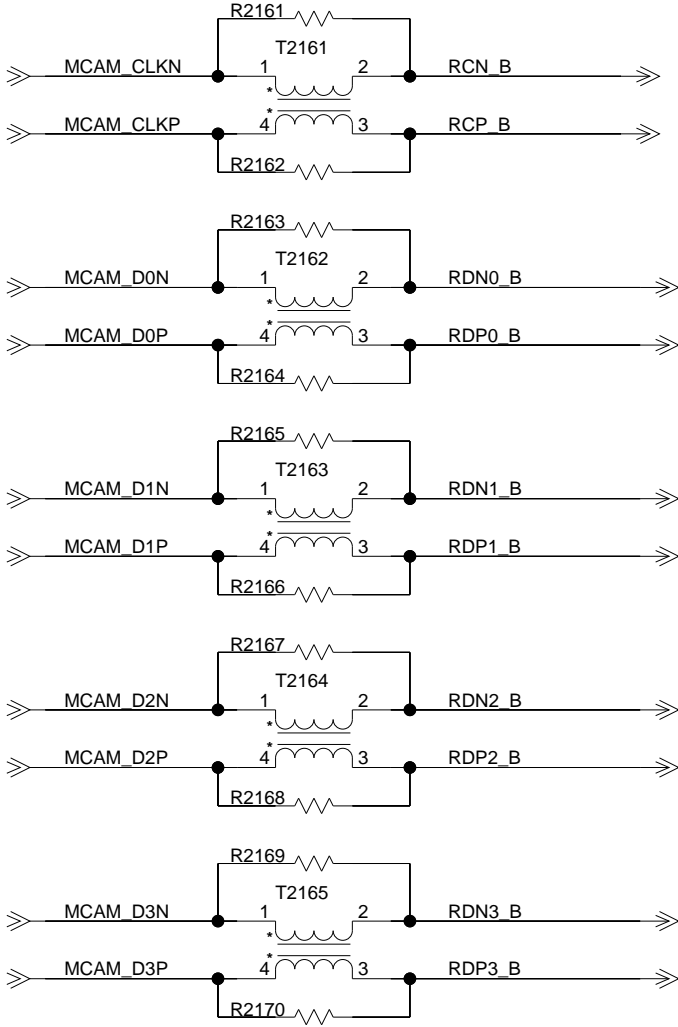
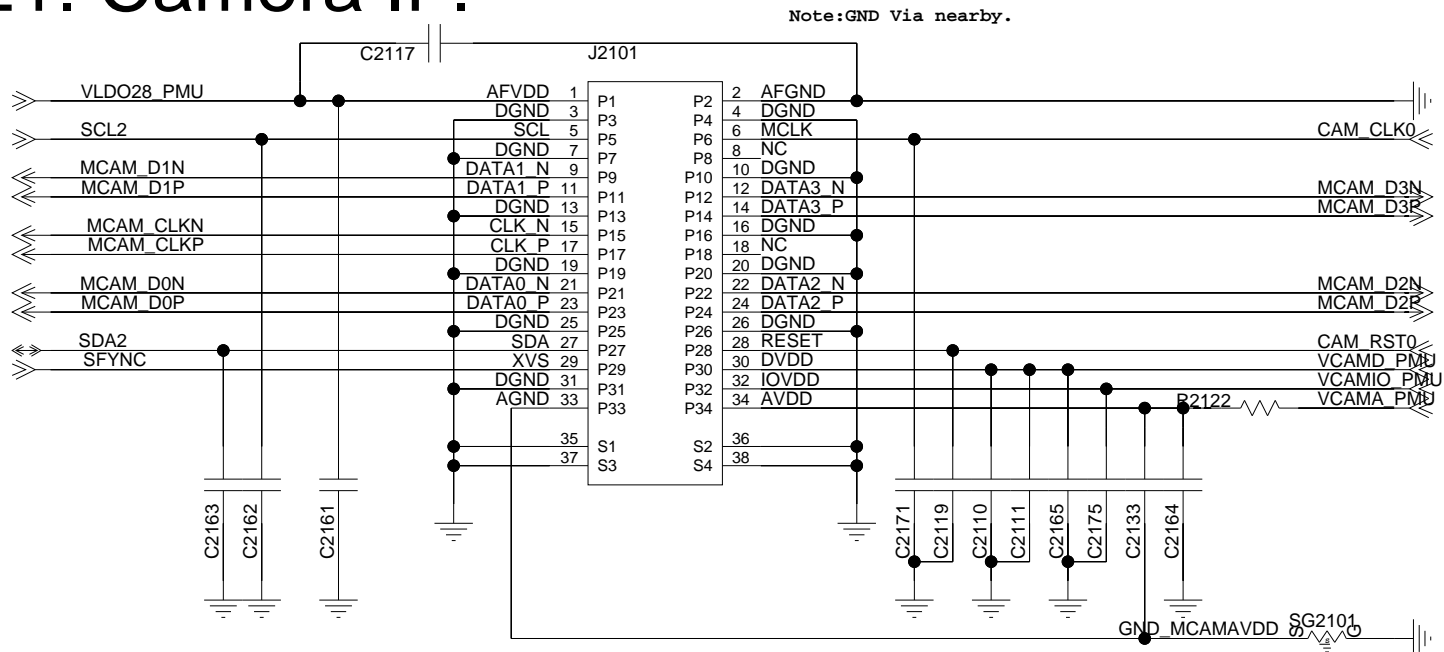
19. Headphone



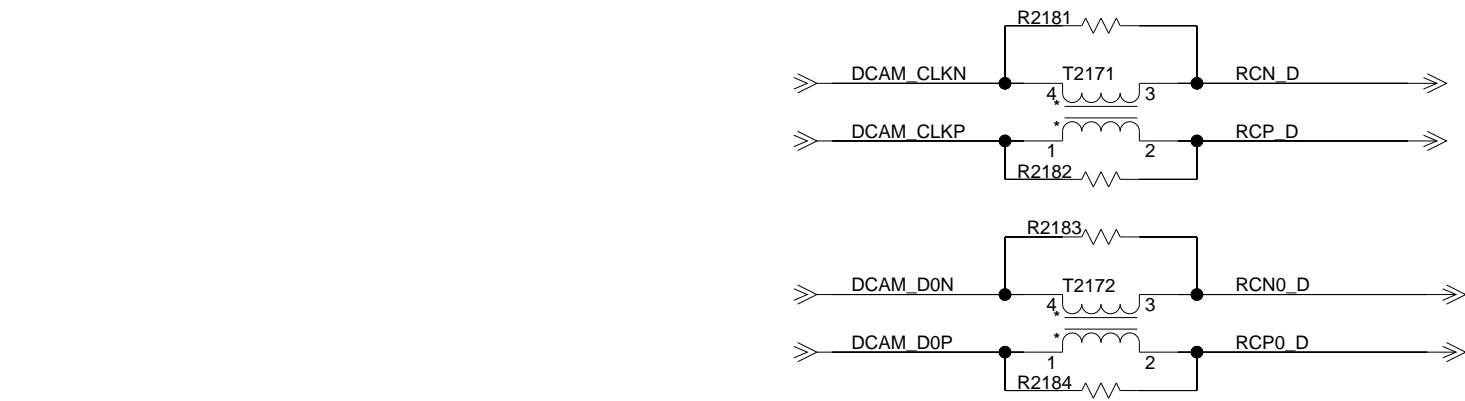
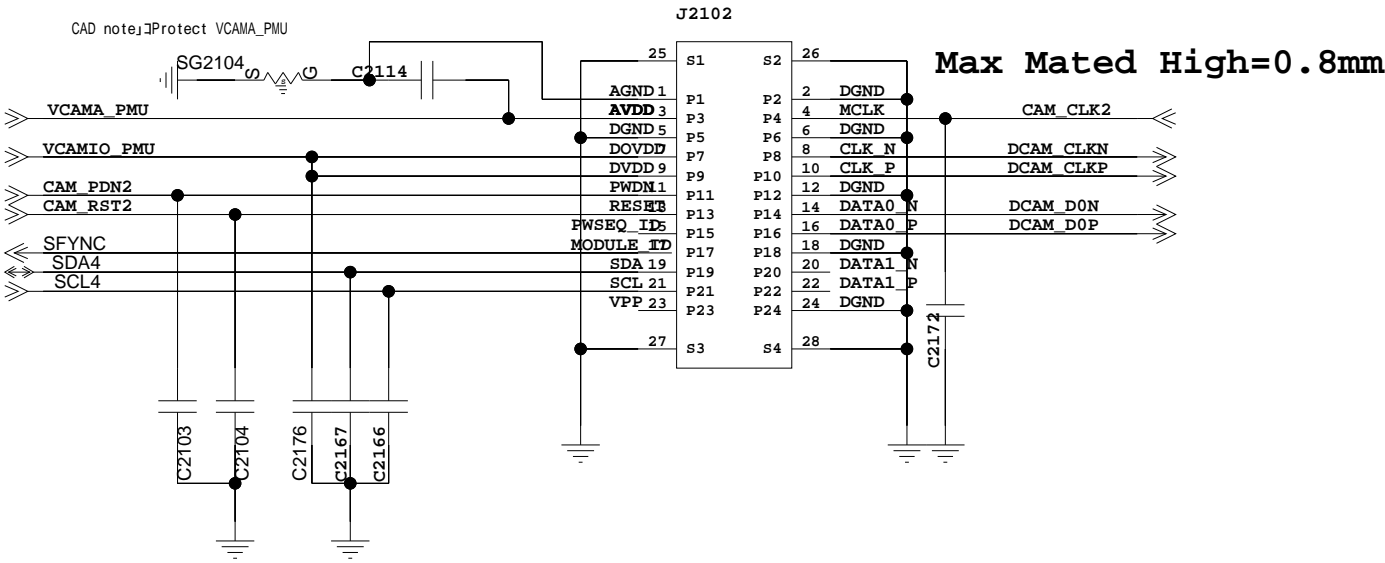
20. LCD/CTP IF.



21. Camera IF. 13M Main



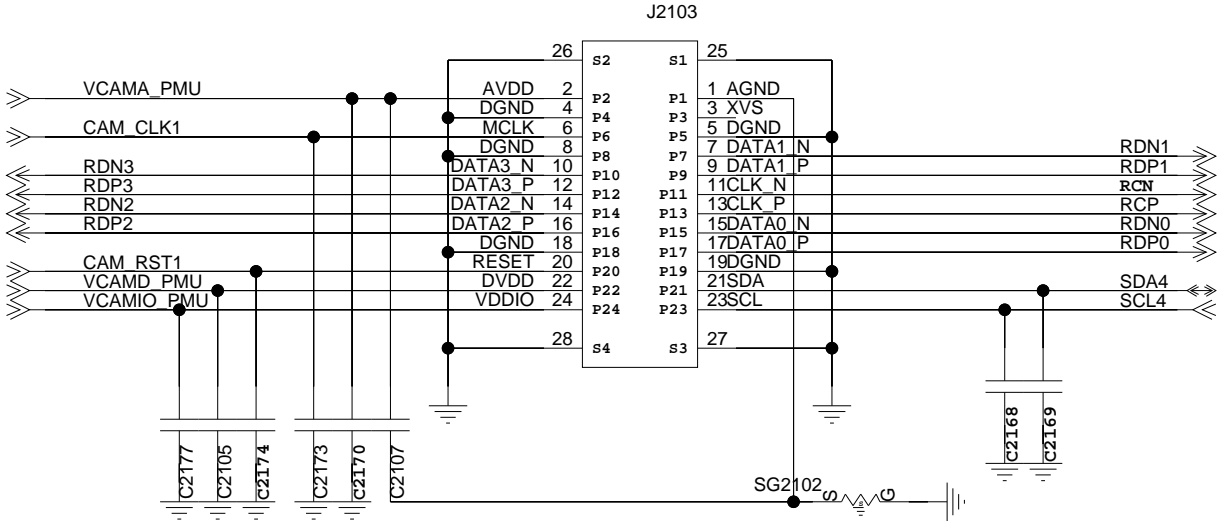
2M Depth



Front SUB Camera

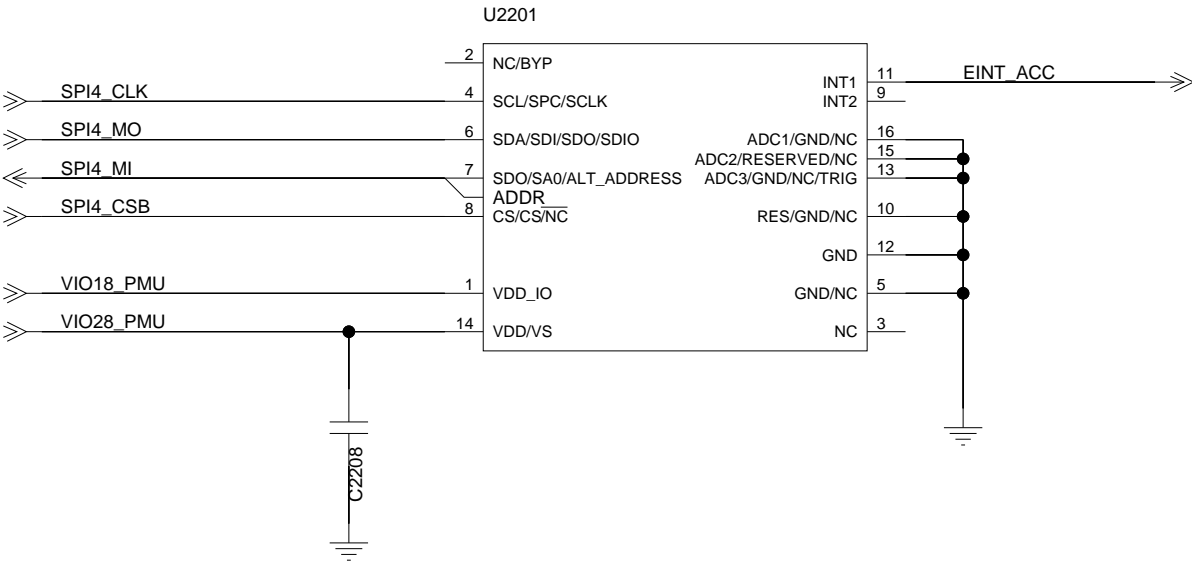
5/8M Sub

Max Mated High=0.8mm

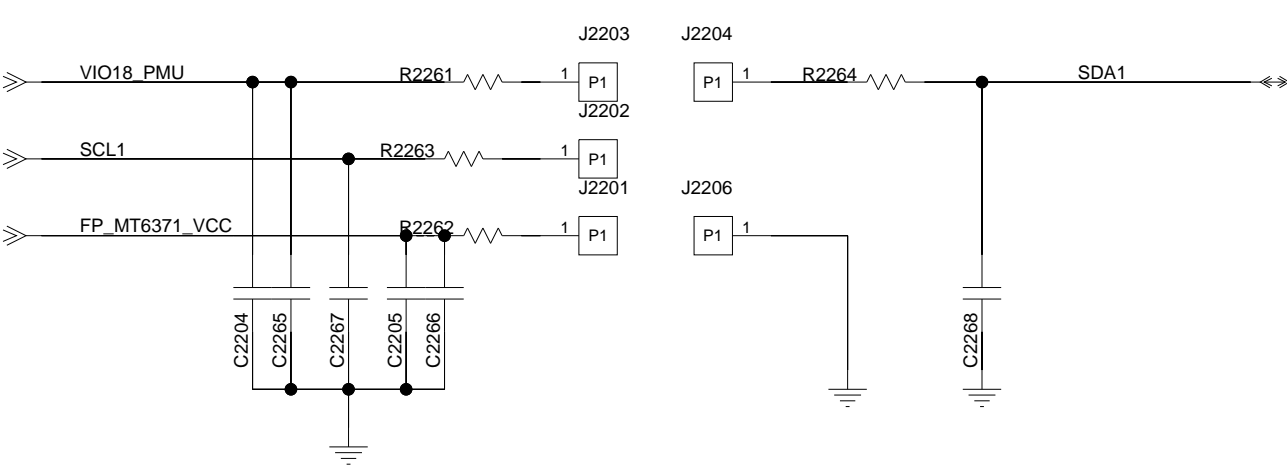


22. Sensor

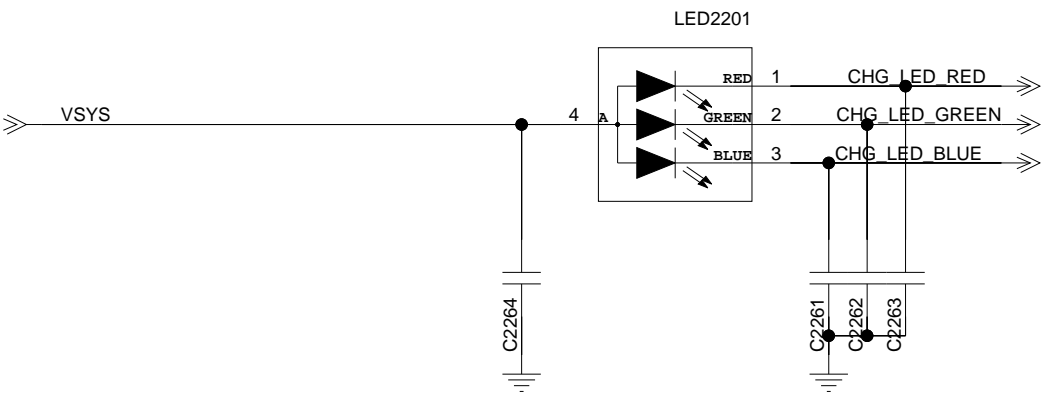
Accelerometer



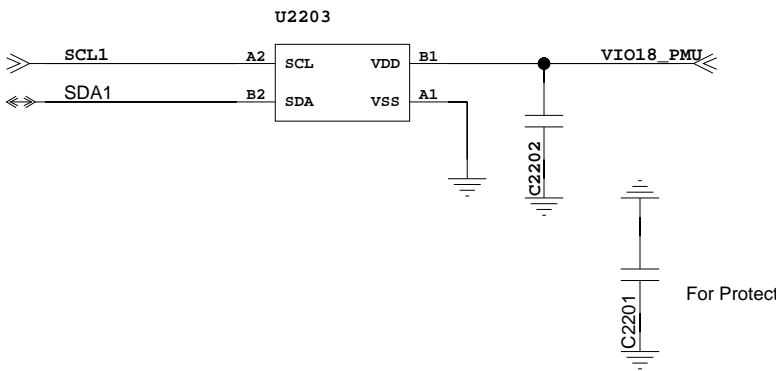
Ambient Light



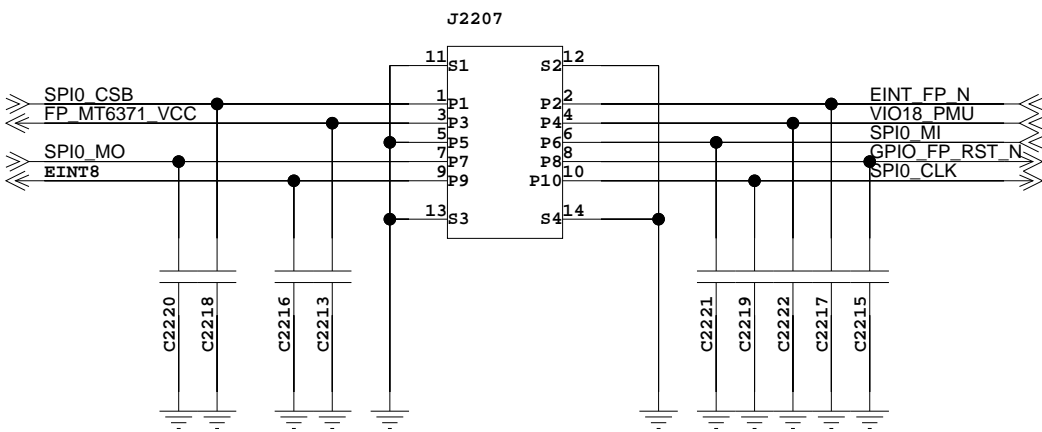
Status indicator



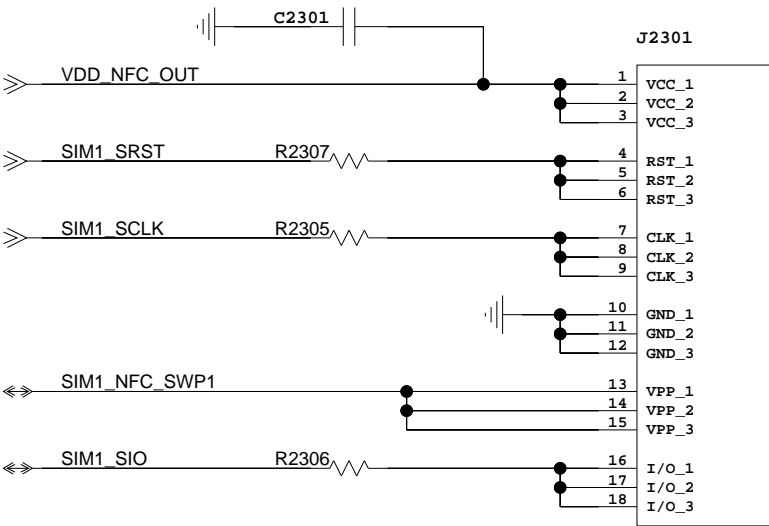
Compass



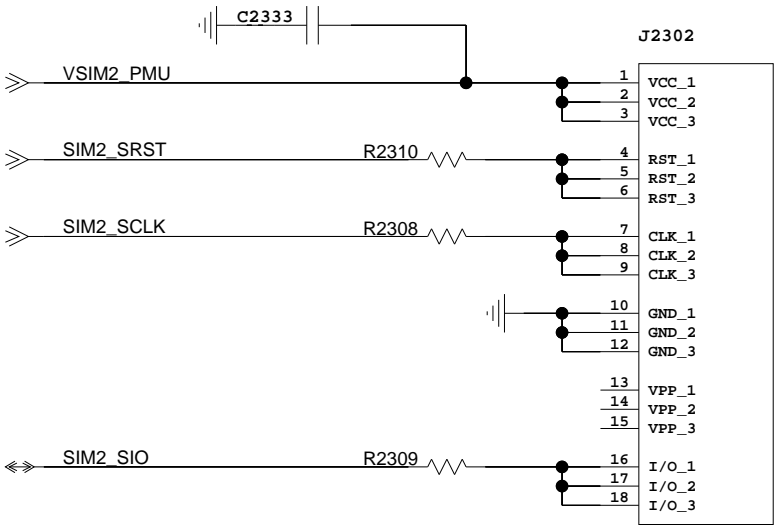
FingerPrint



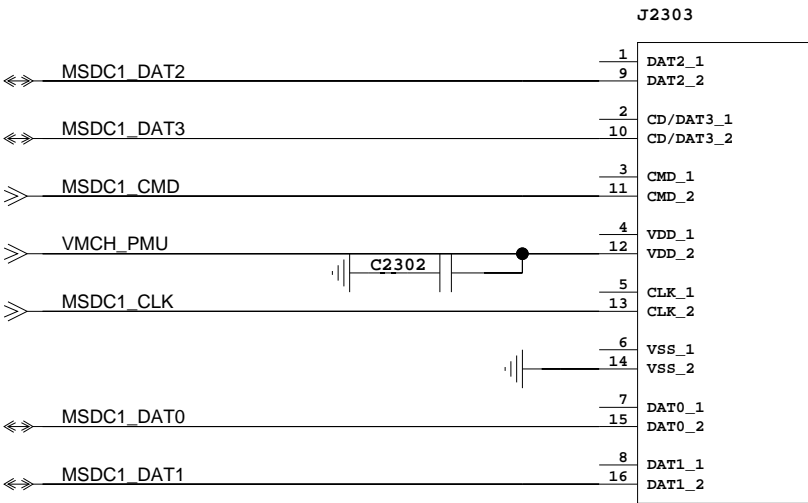
23. SIM/TF IF.



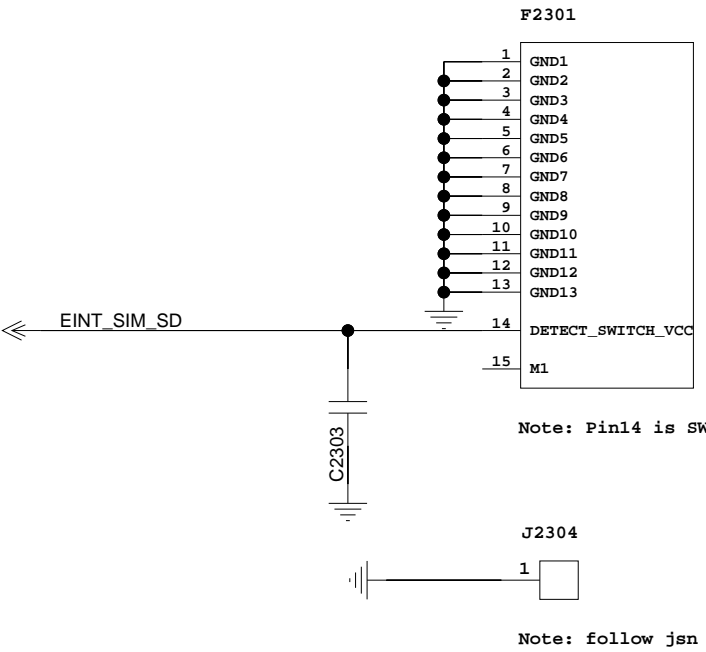
SIM1



SIM2



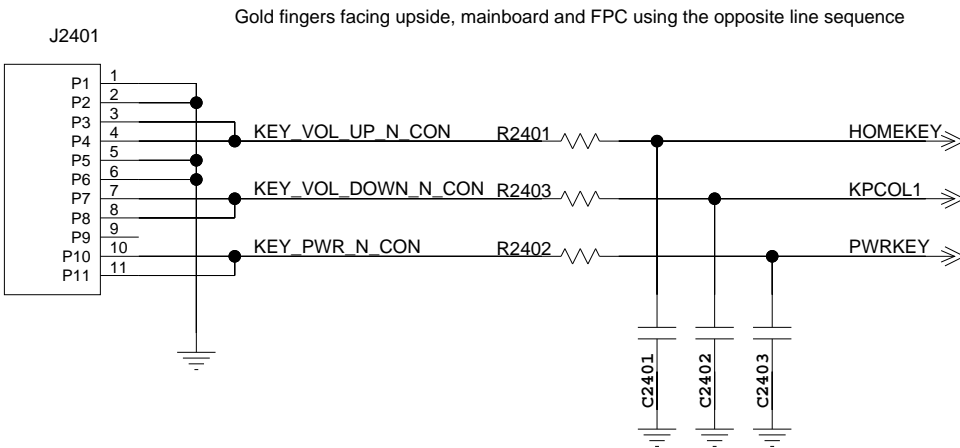
Micro SD



Holder

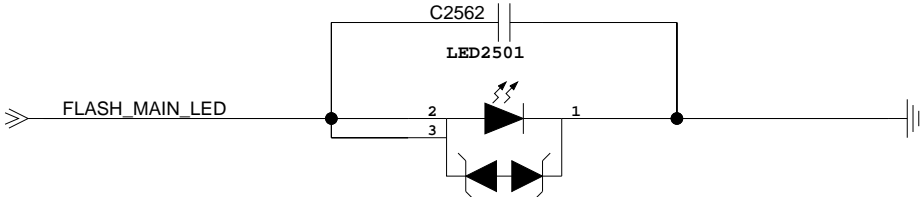
24. Sidekey

Side KEY

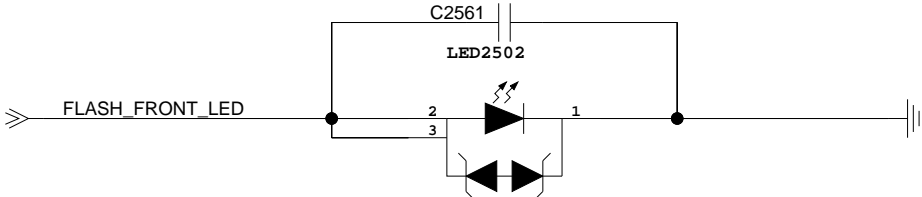


25. Flash

Main Flash Light



Front Flash Light



1

2

3

4

5

6

26_Reserved

A

A

B

B

C

C

D

D

_SCHZH

1

2

3

4

5

6

1

2

3

4

5

6

27_Reserved

A

A

B

B

C

C

D

D

_SCHZH

1

2

3

4

5

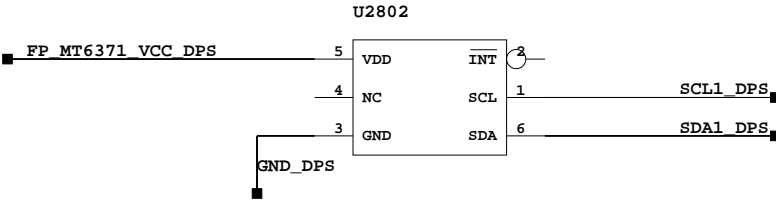
6

28. PROXIMITY AMBIENT Sensor

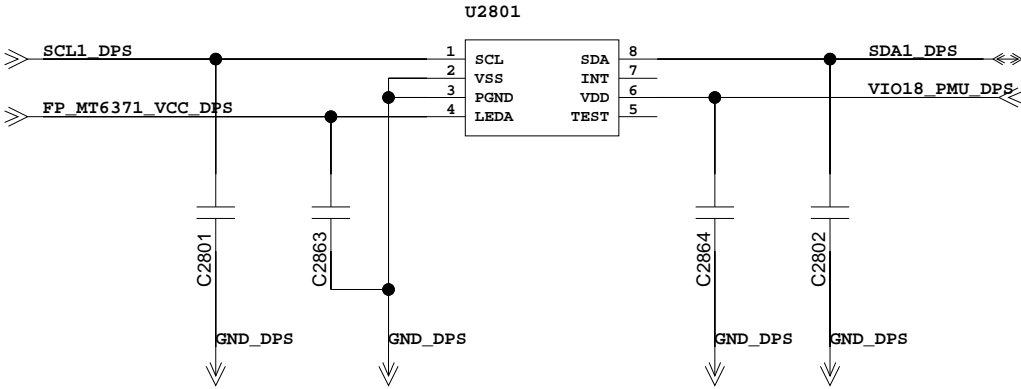
BOM note: Don't SMT board 1 & board 2 simultaneously, refer to BOM checklist carefully

Board1

Ambient light

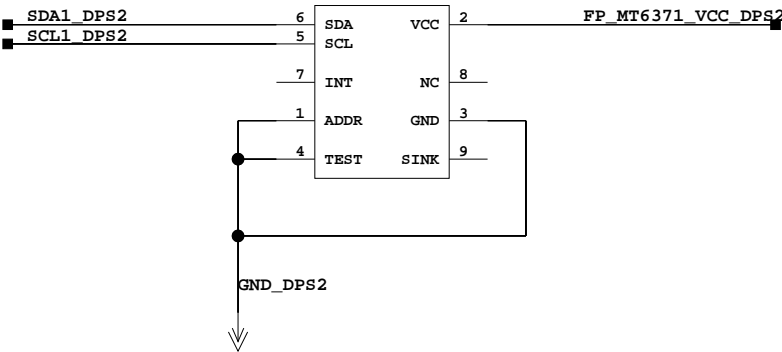


Proximity Sensor

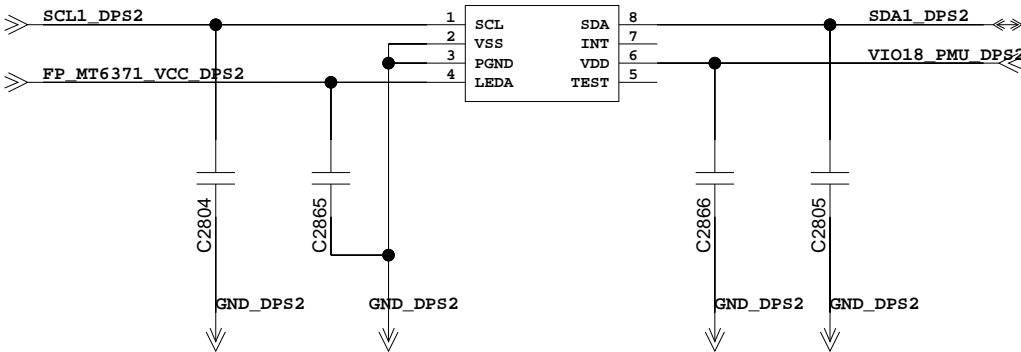


Board2

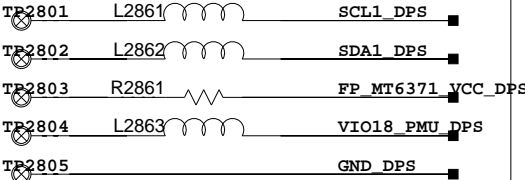
U2803



U2804

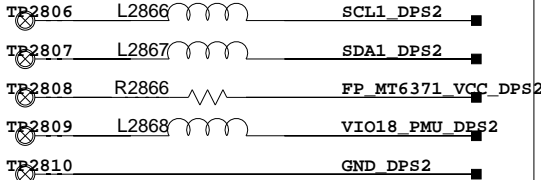


Proximity Board 1



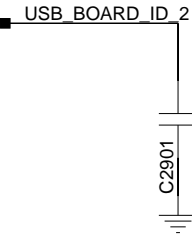
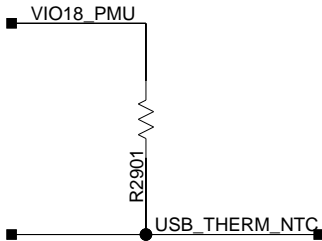
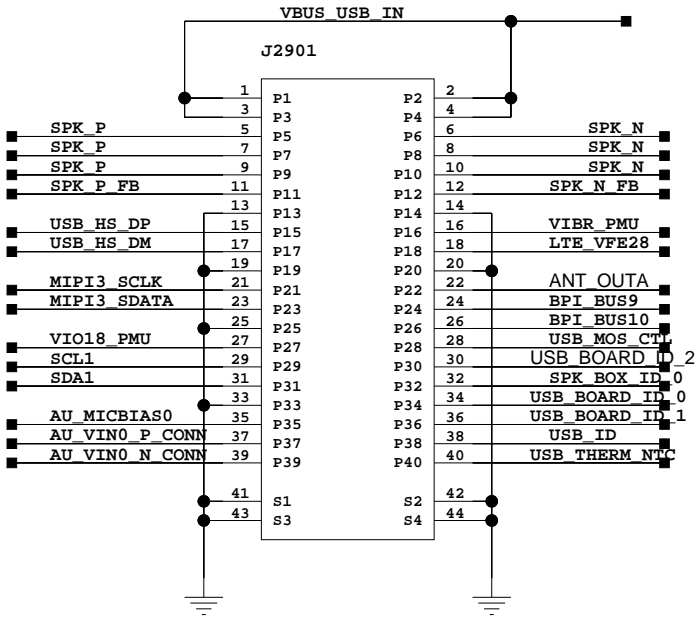
M2801
HOLE47

Proximity Board2



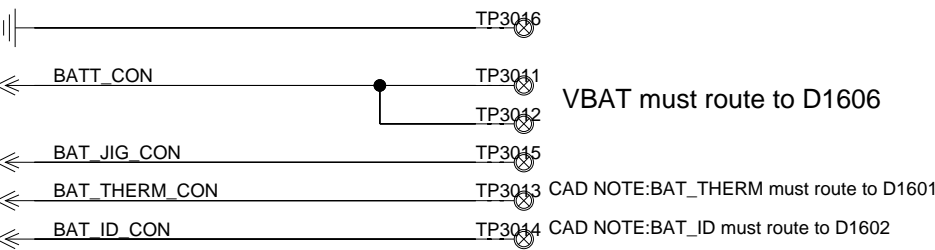
29_Sub PCB IF

Main FPC BTB

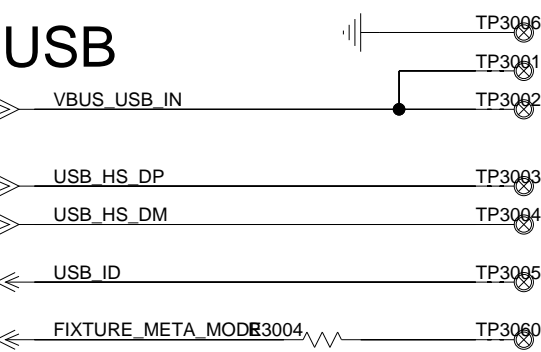


30. Test Points/Shields

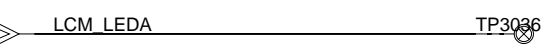
CT BT



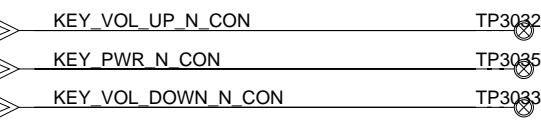
USB



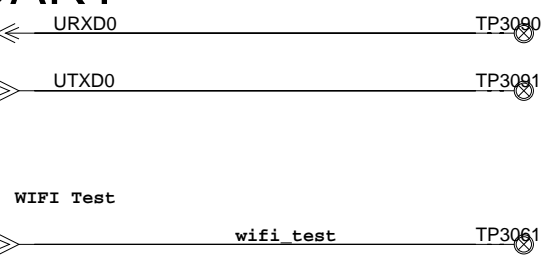
LCM



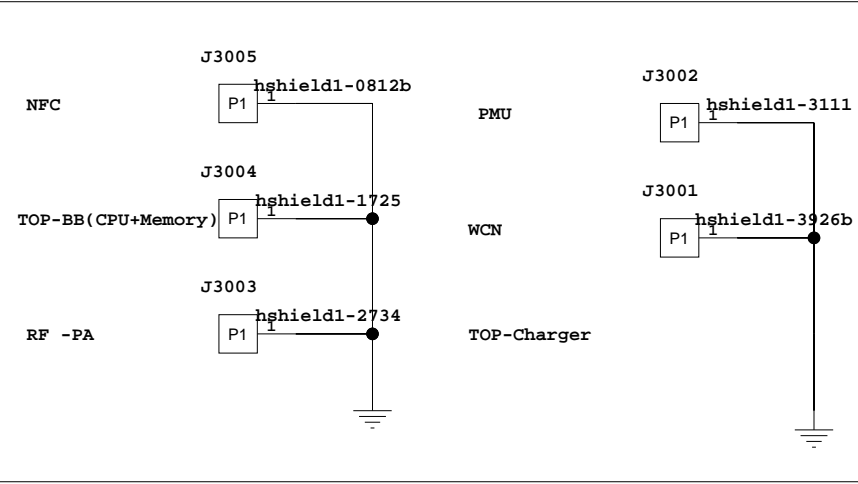
Keys



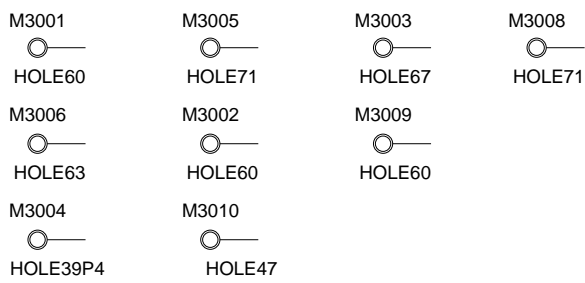
UART



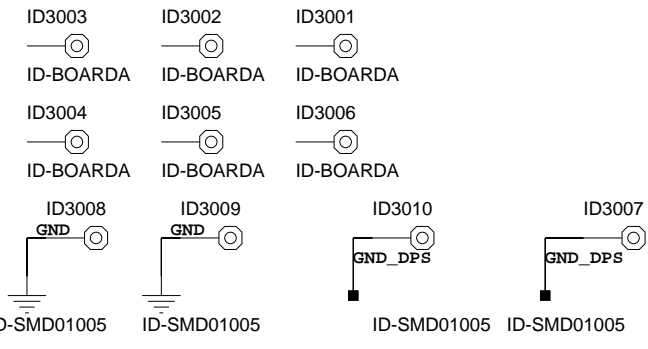
Shielding



HOLE



MARK POINT

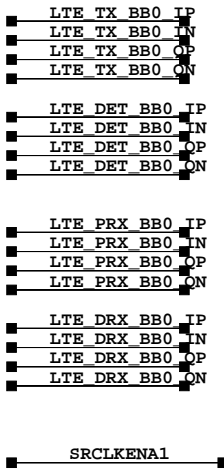


31.RF Interface

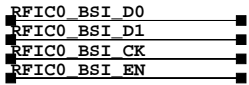
- 32.RESERVED
- 33.Main Antenna Switcher
- 34.Primary ASM
- 35.RF_SWITCH
- 36.MMPA
- 37.MATCHING_CIRCUIT_of_MMMBPA
- 38.TR_B1_TRX_DUP
- 39.TRX_B2_TRX_DUP
- 40.TRX B3/B4_TRX_dup
- 41.Reserved
- 42.RESERVED
- 43.RESERVED
- 44.TRX B5/8
- 45.TRX B12/20/28
- 46.Reserved
- 47.TRX B40/41
- 48.TRX B7
- 49.TRX_B34/39
- 50.Diversity_ASM
- 51.DRX_B7
- 52.DRX_B34/B39
- 53.DRX_B40/41
- 54.DRX B1+3/2+4
- 55.DRX B12/20/28
- 56.DRX B5/B8
- 57.Reserved
- 58.Reserved
- 59.MT6177
- 60.GPS
- 61.MT6631 BB
- 62.MT6631 RF
- 63.RESERVED
- 64.RESERVED
- 65.RESERVED

- 66.ANT TUNER
- 67.ANTENNA MATCH
- 68.Reserved
- 69.Reserved

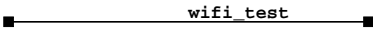
Transceiver RF Interface



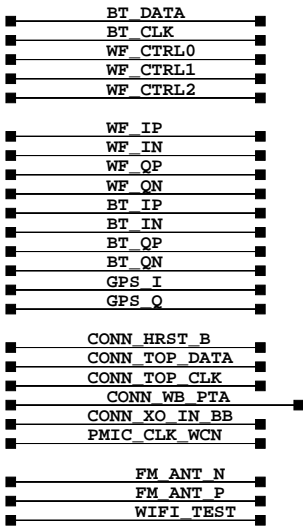
Transceiver BSI Interface



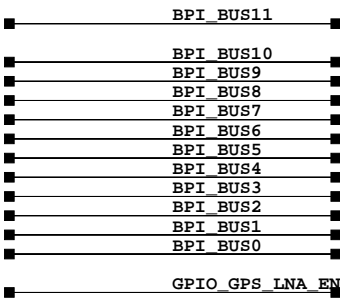
IIC Interface



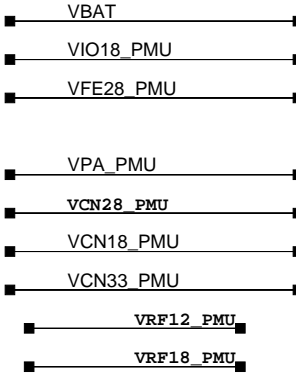
NC Interface



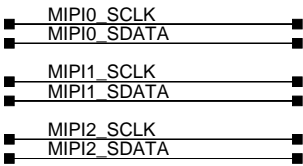
GPIO Interface



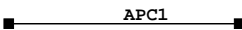
PWR Interface



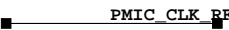
MIPI Interface



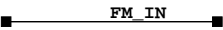
PA ramp



Clock Interface



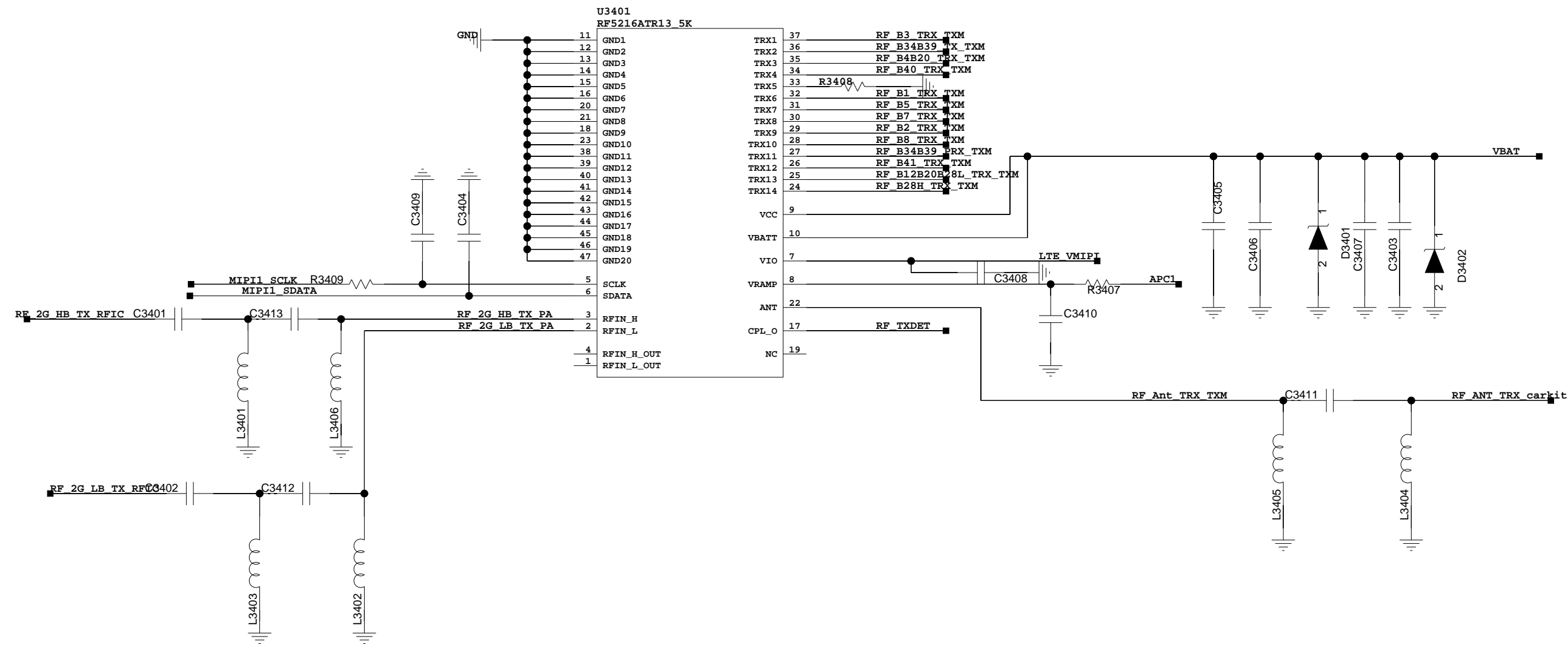
FM



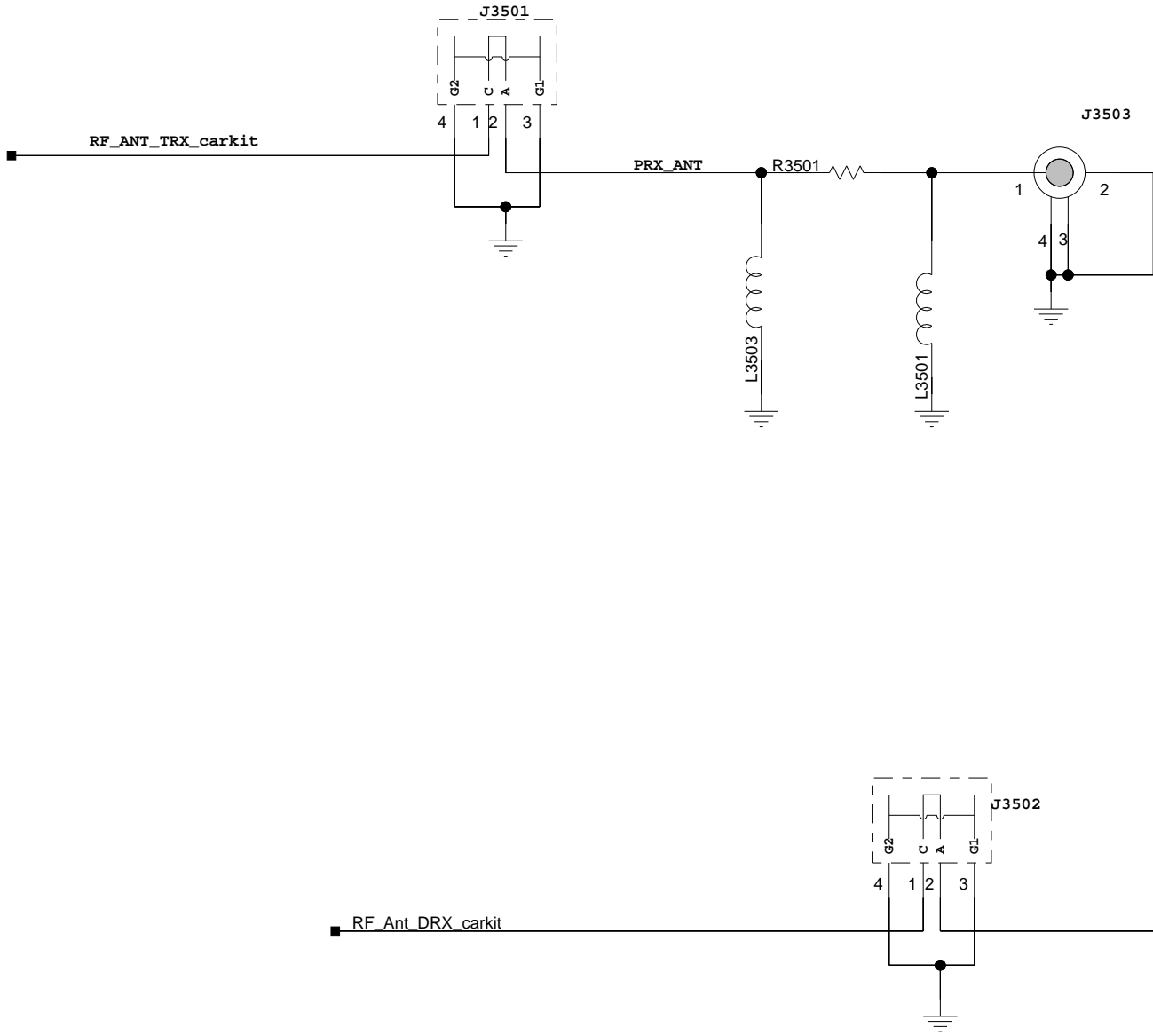
32_Reserved					
1	2	3	4	5	6
A					
B					
C					
D					

33_Reserved					
1	2	3	4	5	6
A					
B					
C					
D					

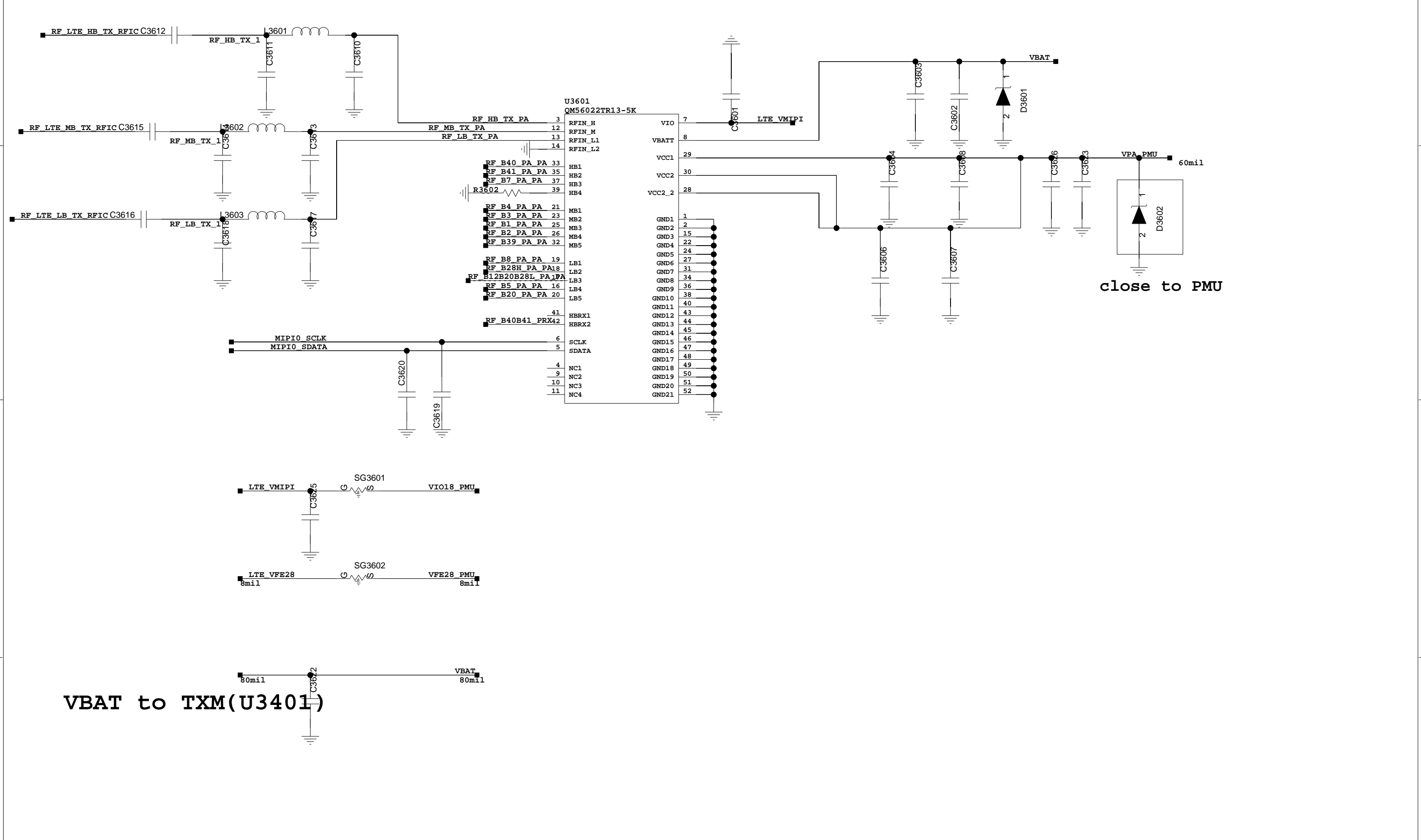
34_Primary ASM



35_RF SWITCH

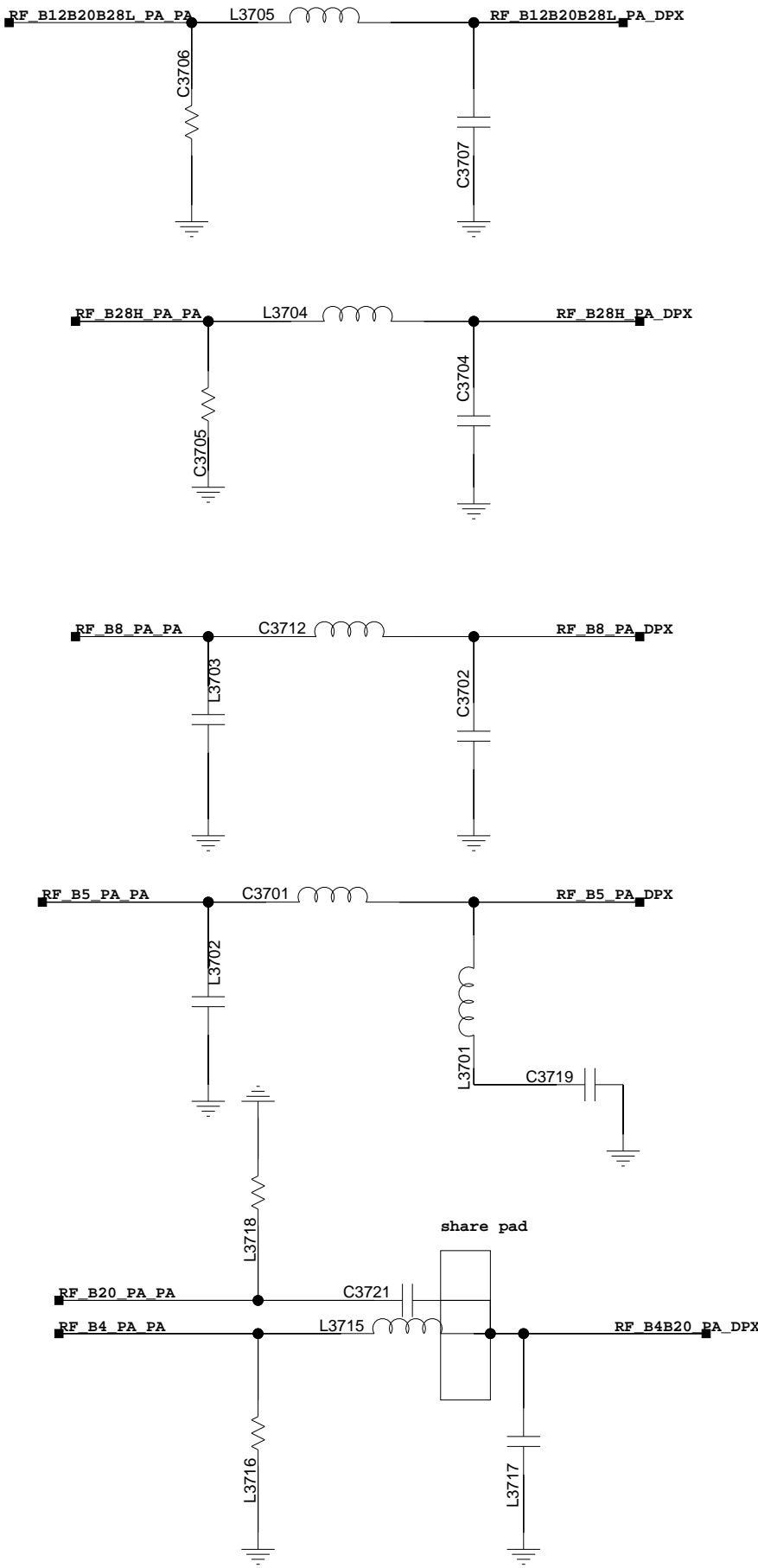


36_MMPA

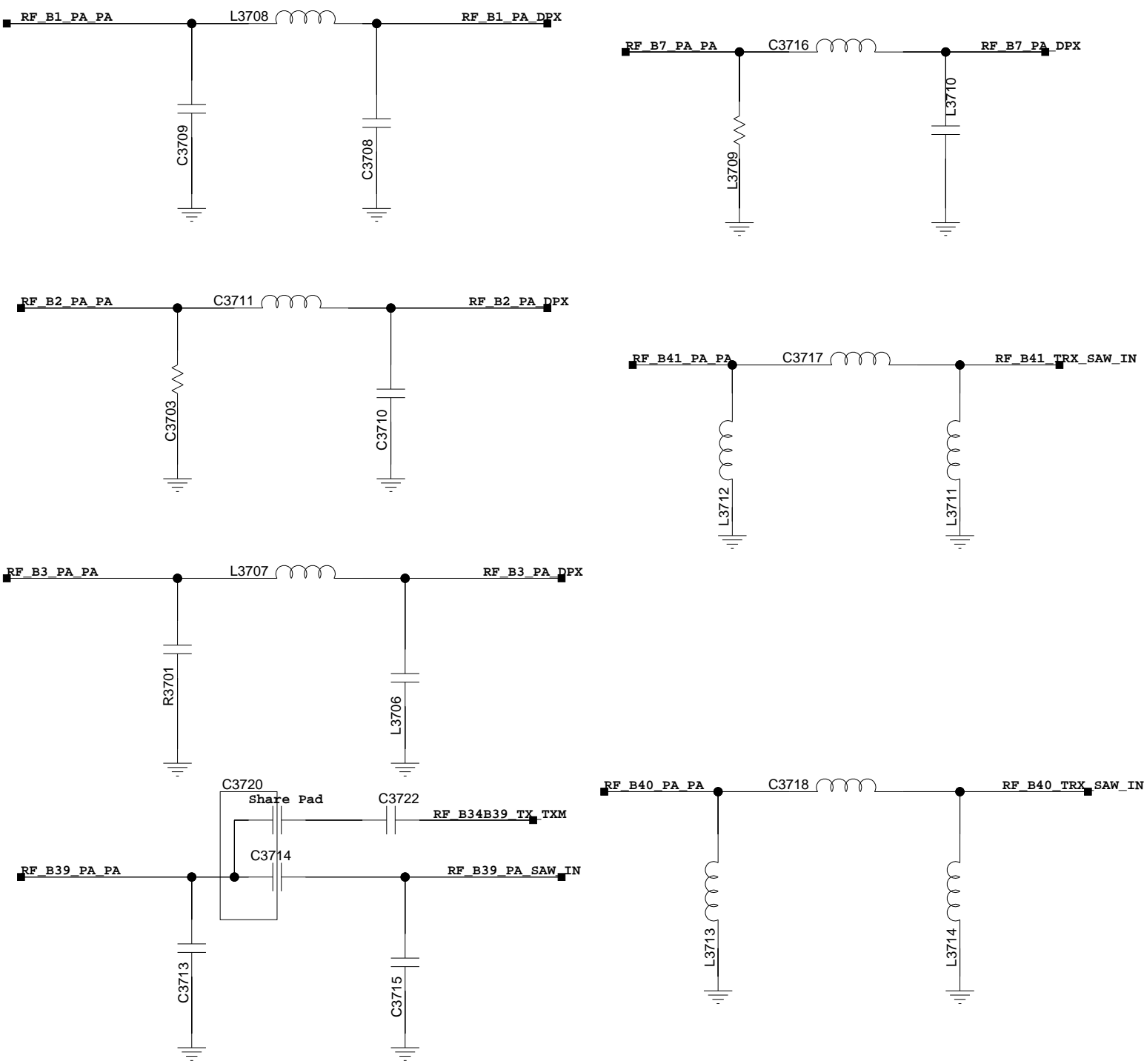


37_MATCHING_CIRCUIT_of_MMMBPA

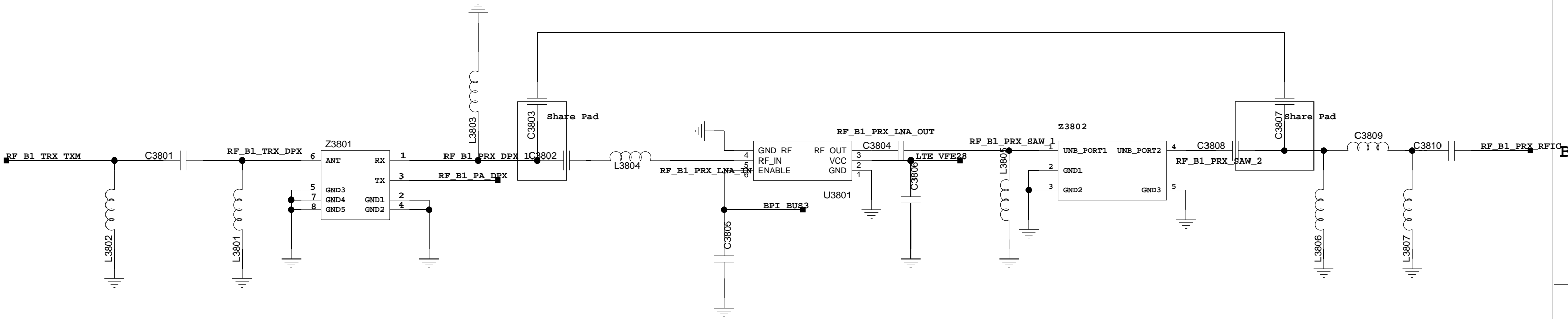
Close to MMMB PA



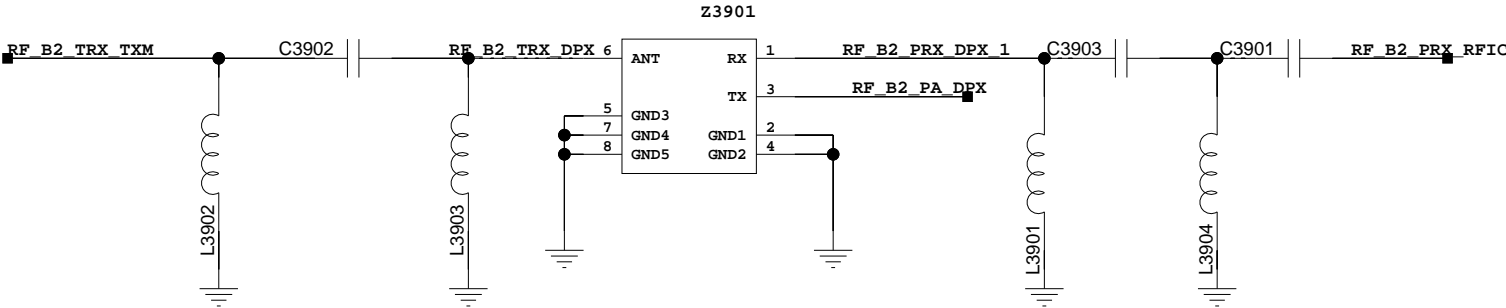
Close to MMMB PA



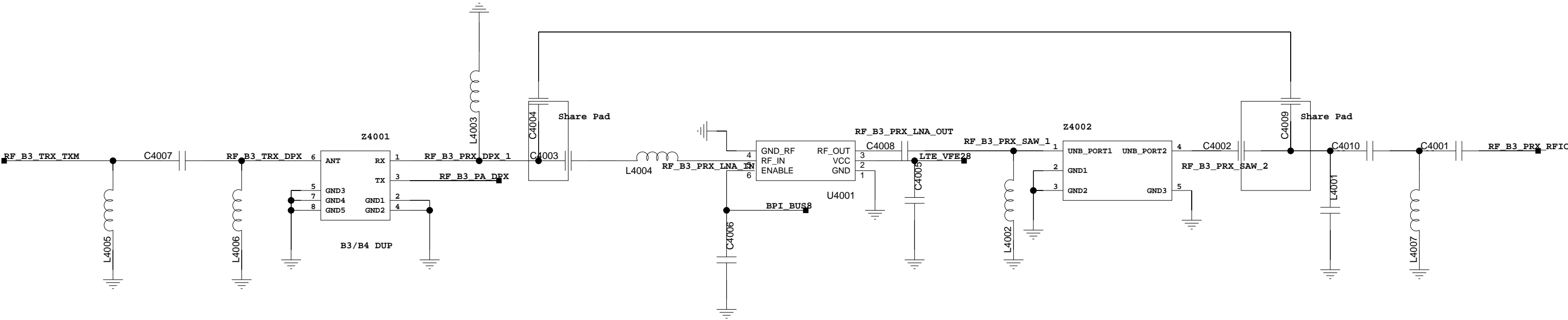
38_TRX B1 TRX



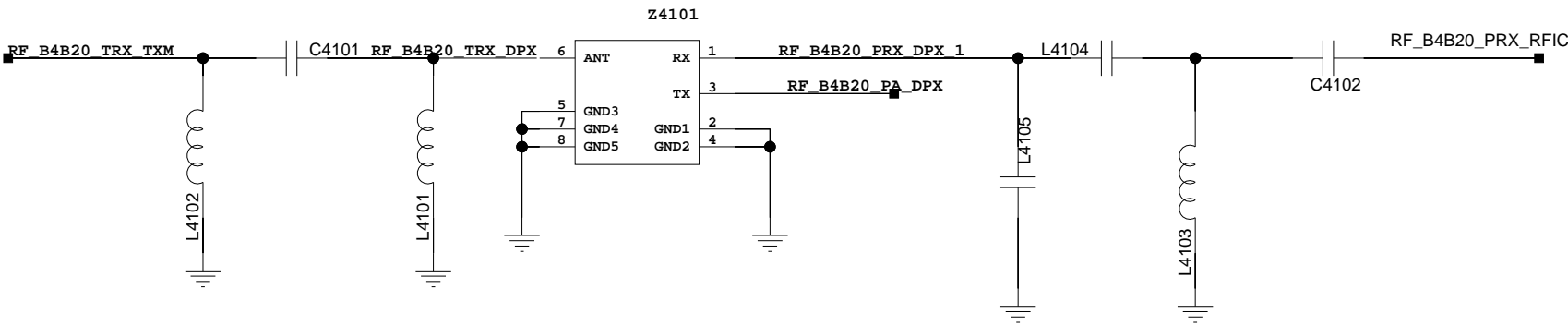
40_TRX_B2



40_TRX B3



41_TRX_B4/B28_TRX_dup



1

2

3

4

5

6

42_Reserved

A

A

B

B

C

C

D

D

1

2

3

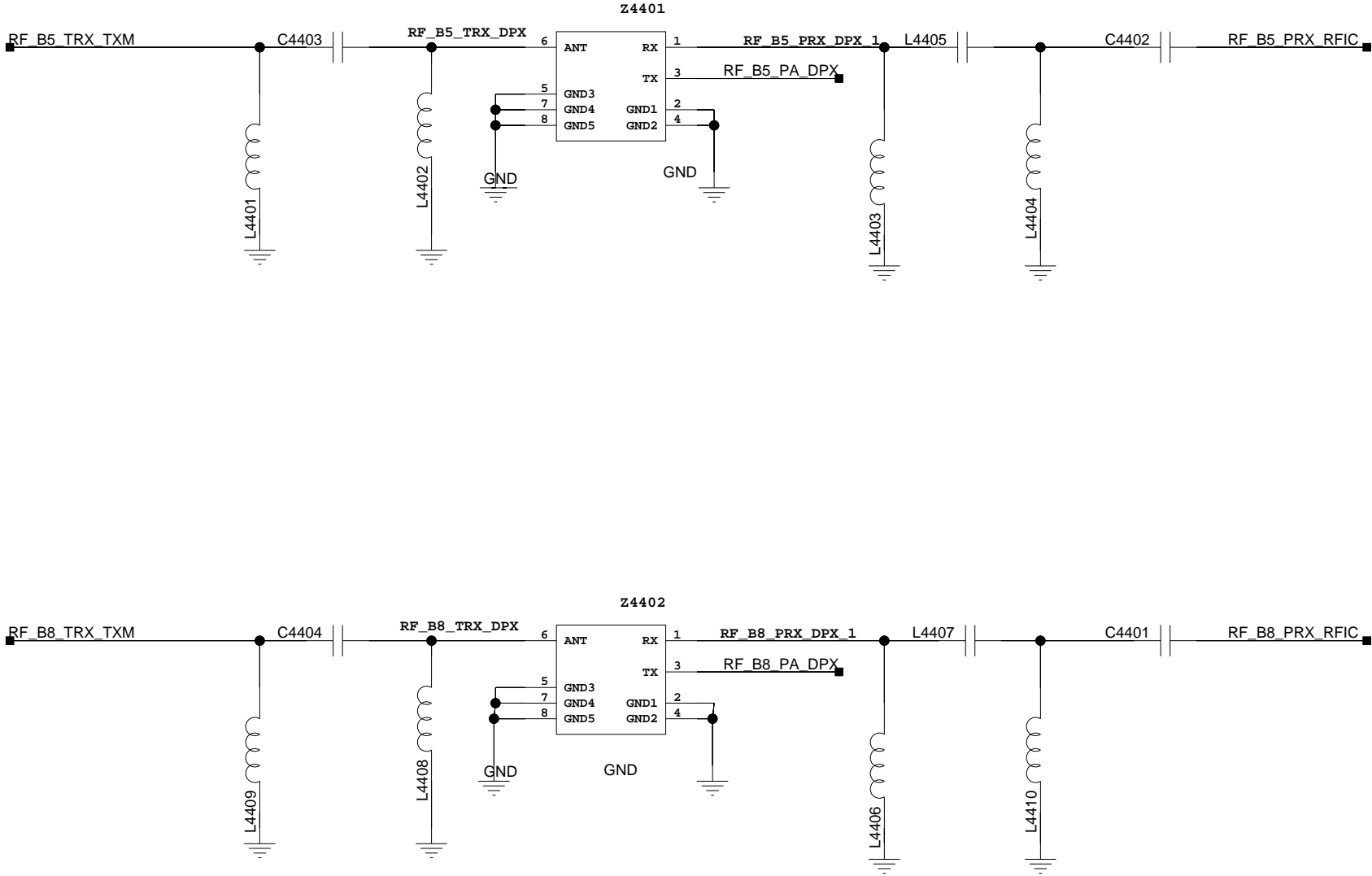
4

5

6

43_Reserved					
1	2	3	4	5	6
A					A
B					B
C					C
D					D

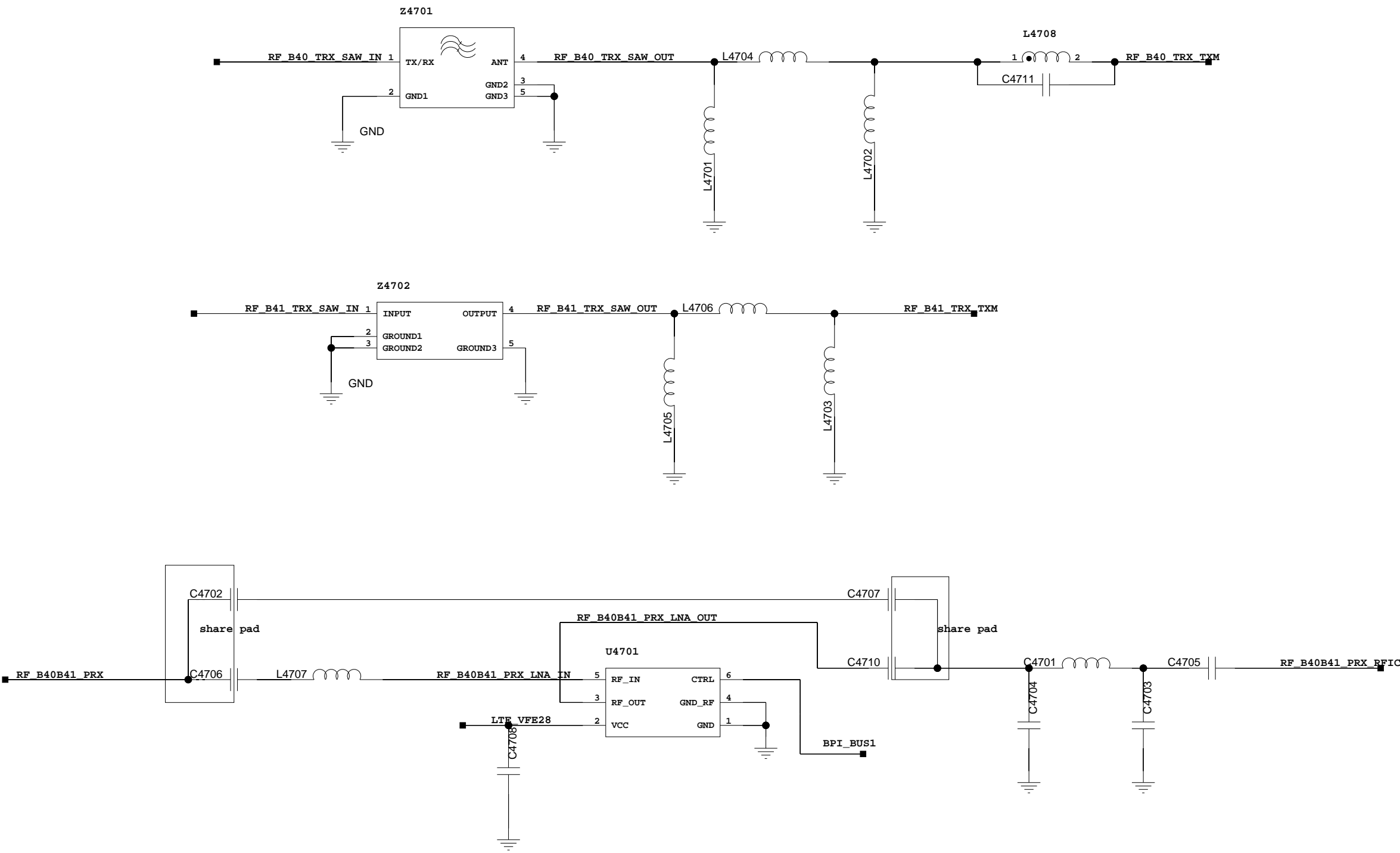
44_TRX_B5/8



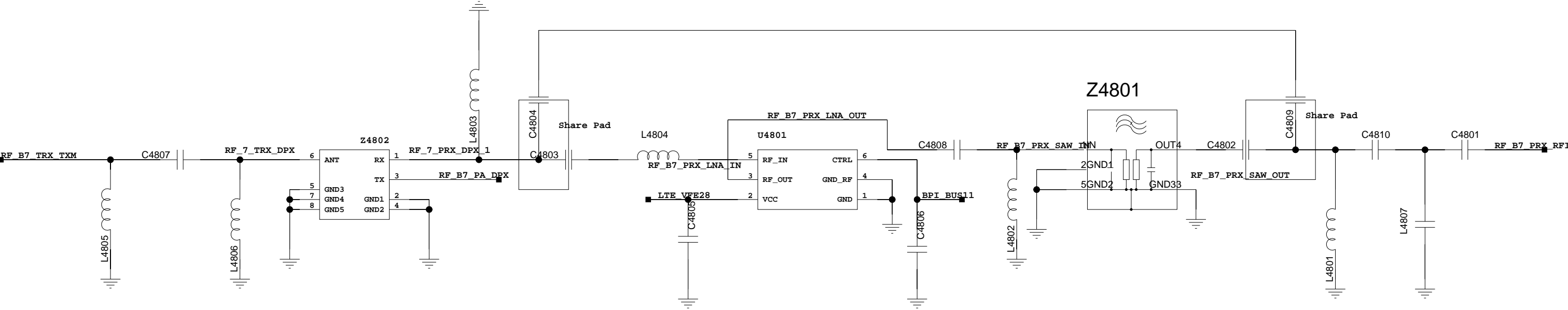
[illegible]

46_Reserved					
1	2	3	4	5	6
A					
B					
C					
D					

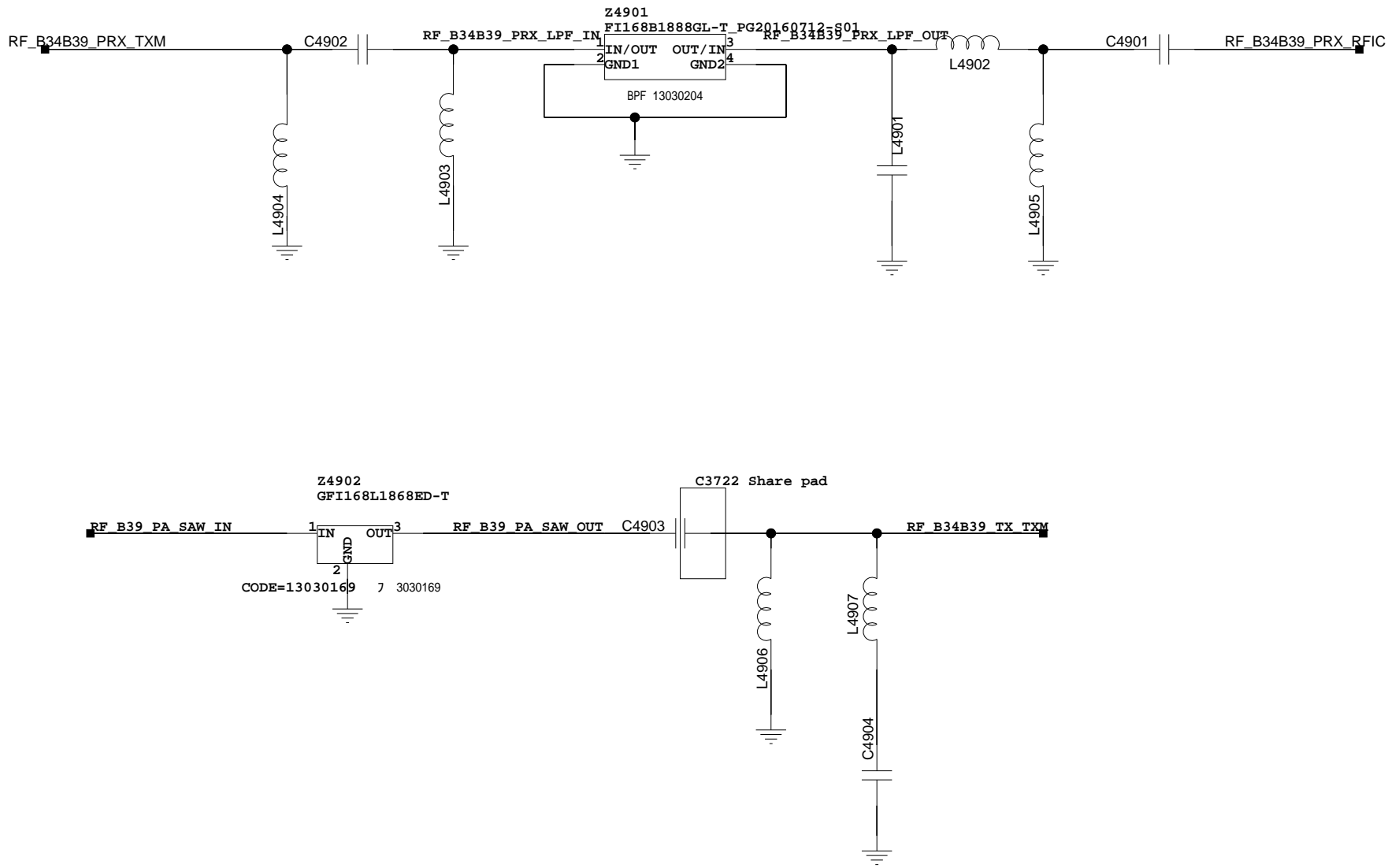
47_TRX_40&PRX_B38/B41



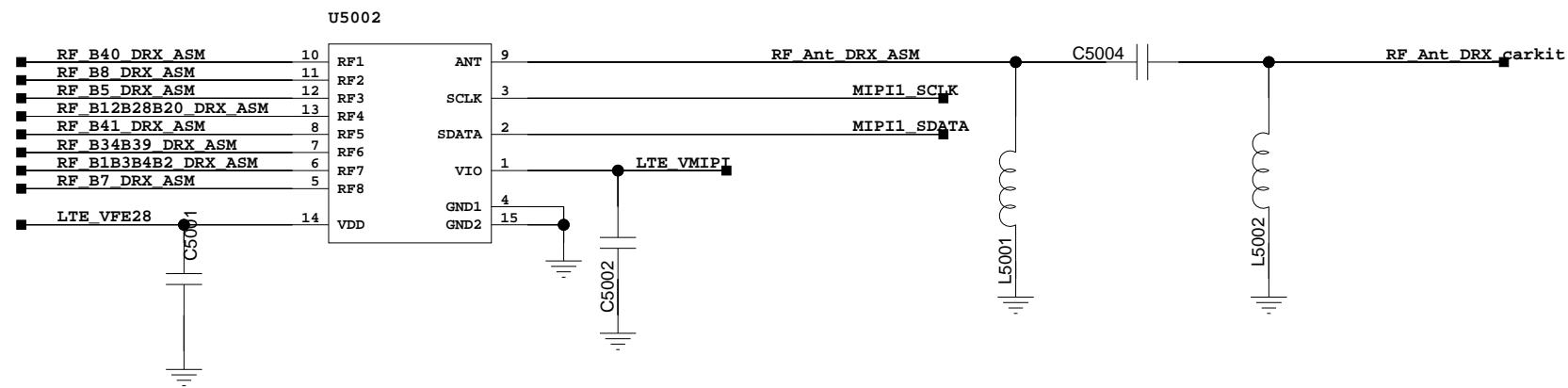
48_TRX_B7



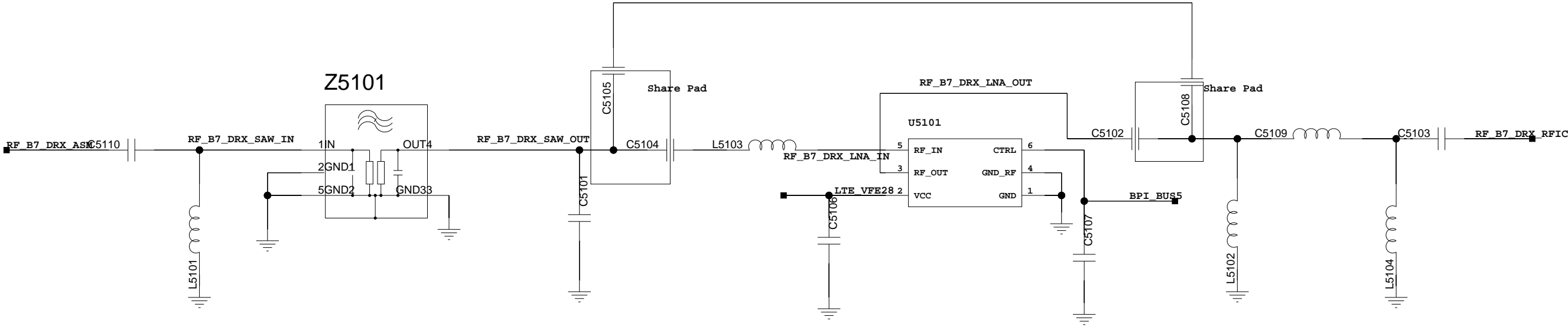
49_TRX_B34/B39



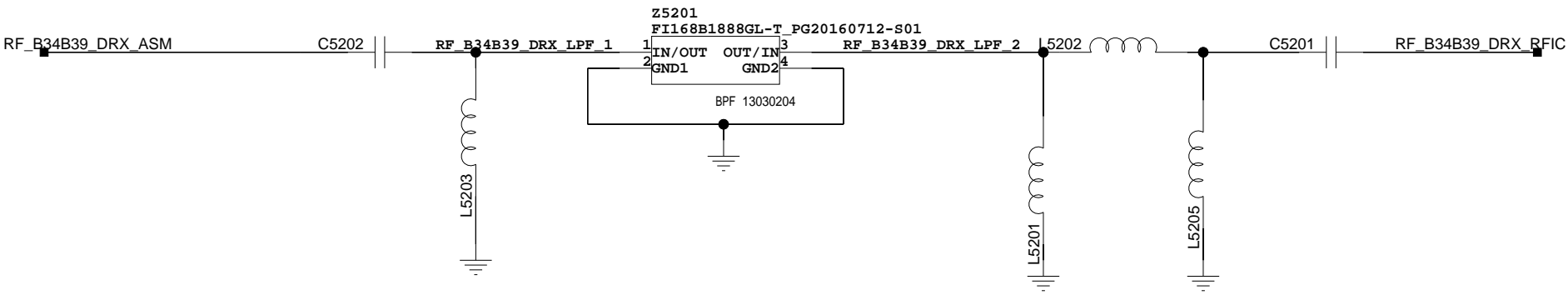
50_Diversity_ASM



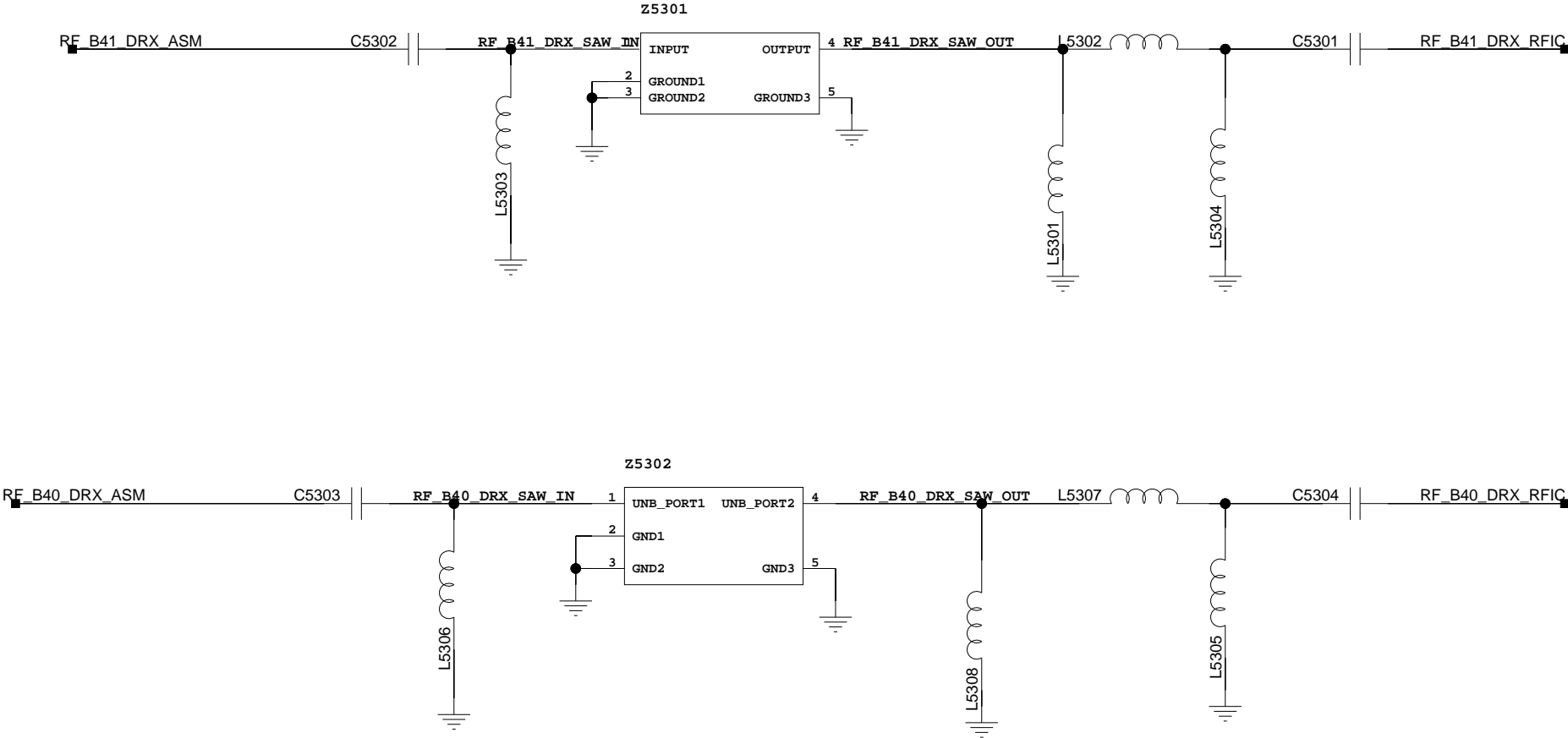
51_DRX_B7



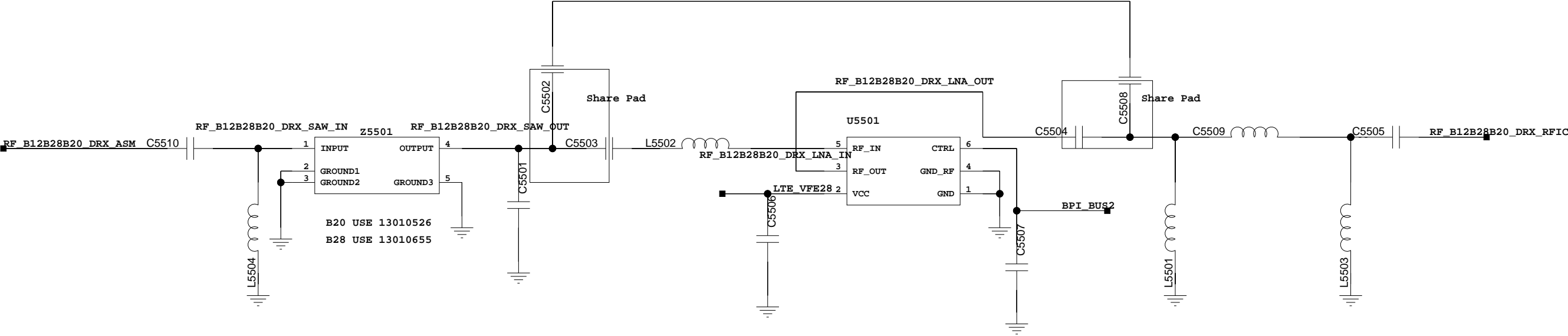
52_DRX_B34/39



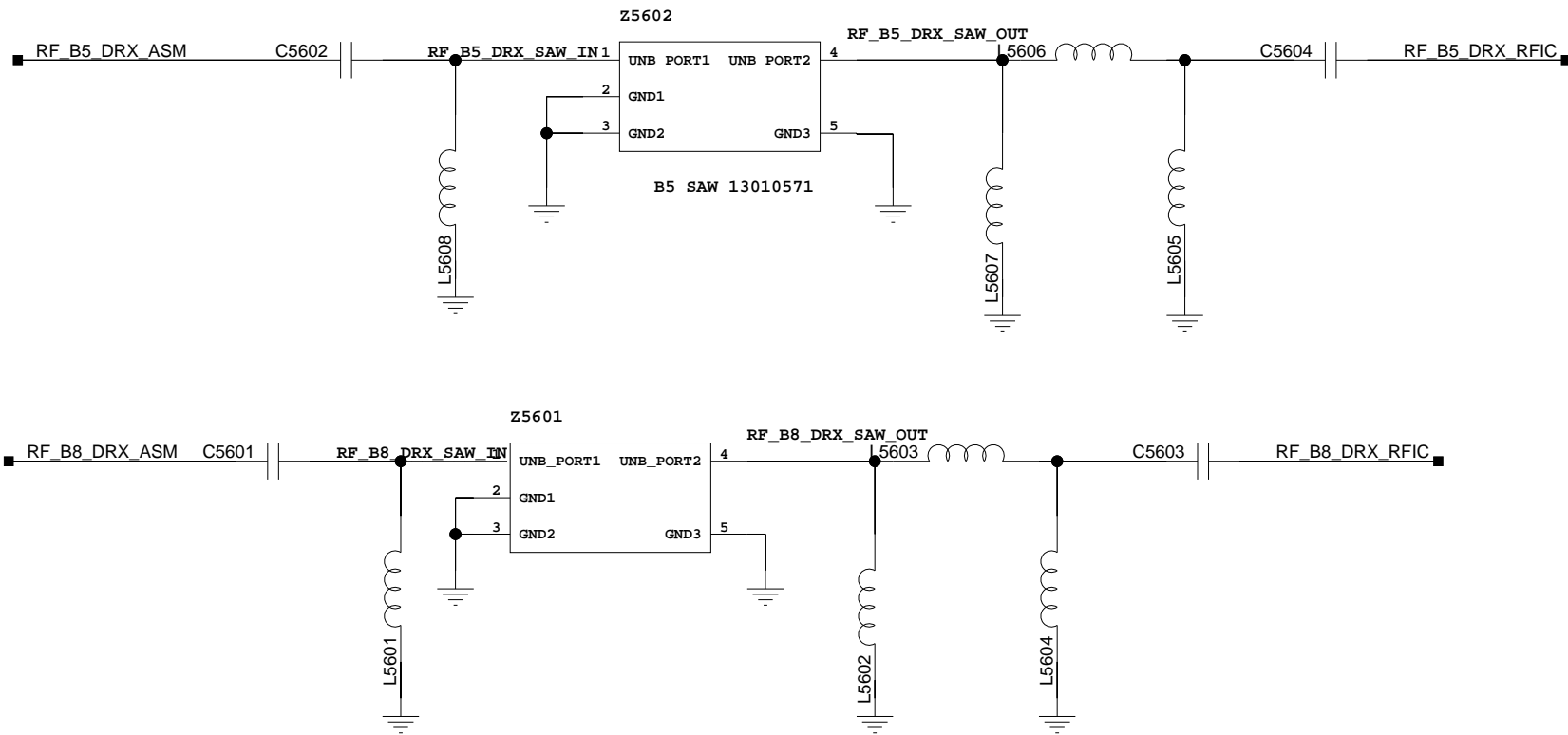
53_DRX_B38/41/40



55_DRX_B28/20/12



56_DRX_B5/B8



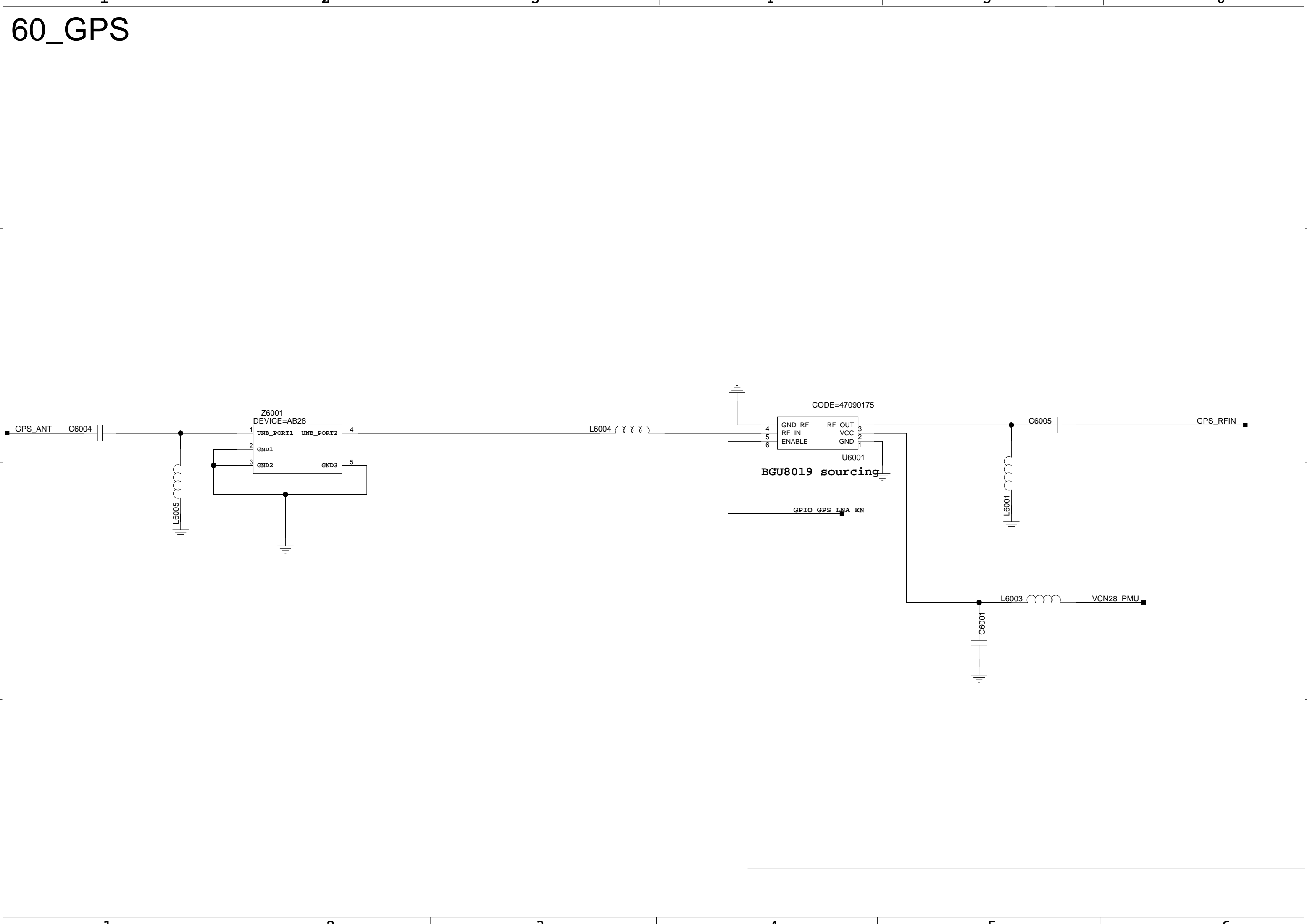
1	2	3	4	5	6
57_Reserved					
A					A
B					B
C					C
D					D
					_SCHZH

58_Reserved					
1	2	3	4	5	6
A					
B					
C					
D					

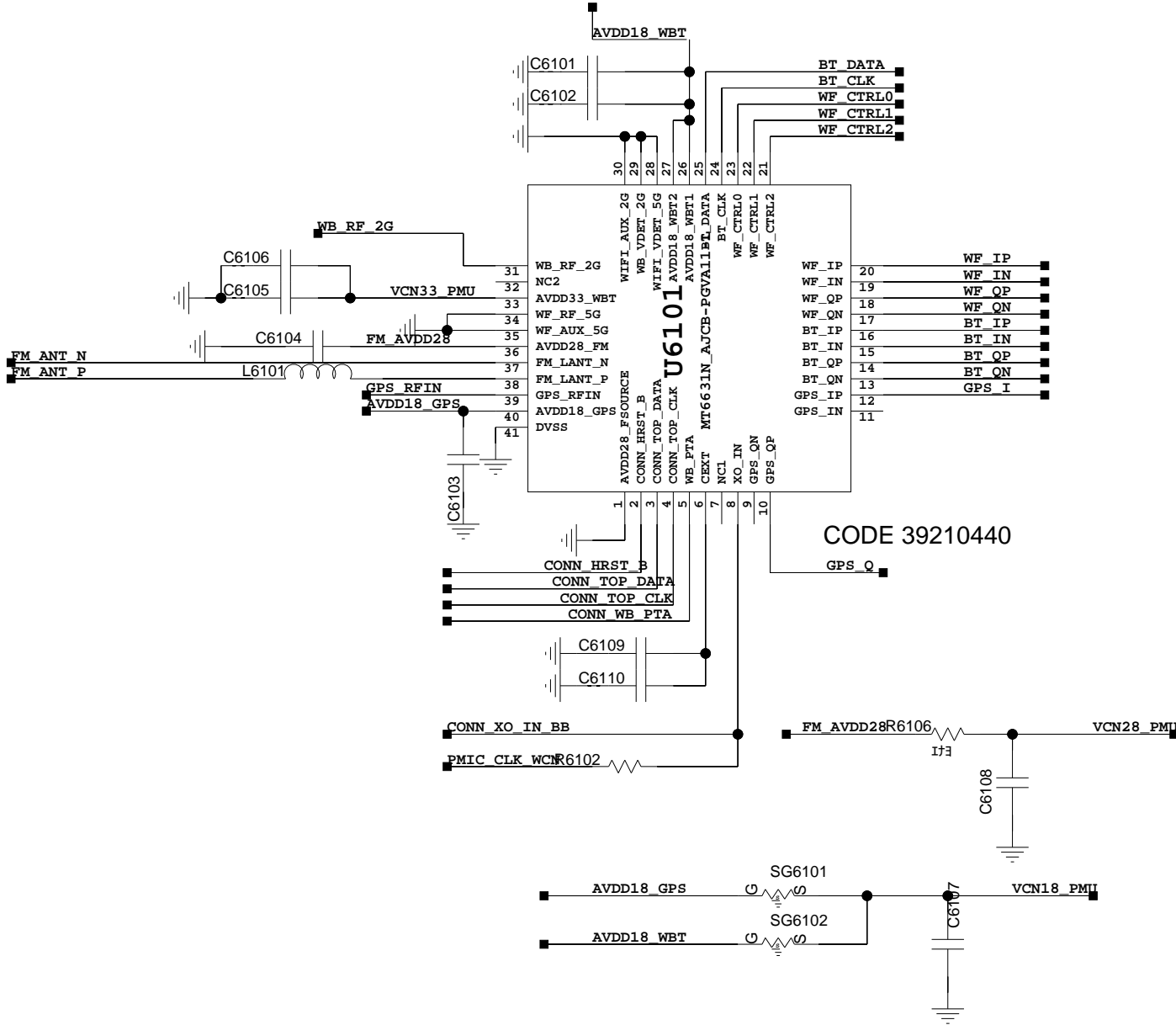
A



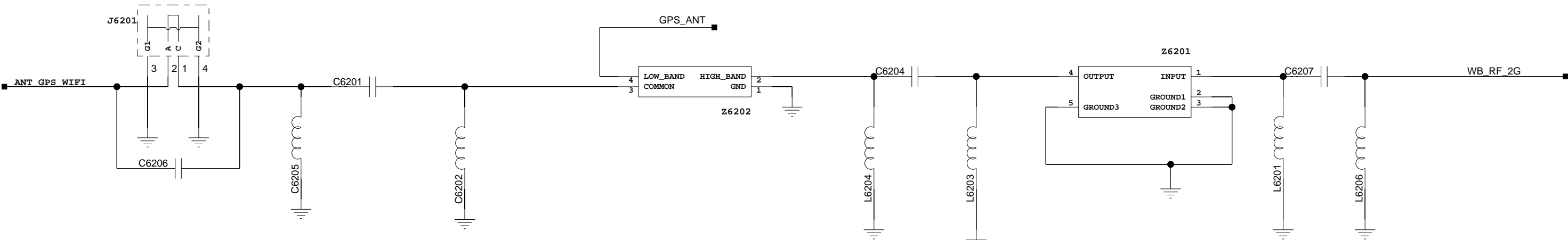
60_GPS



61_MT6631B



62_MT6625 RF



63.Reserved					
1	2	3	4	5	6
A					
B					
C					
D					

1	2	3	4	5	6
65.Reserved					
A					A
B					B
C					C
D					D
1	2	3	4	5	6

65.Reserved					
1	2	3	4	5	6
A					
B					
C					
D					

1

2

3

4

5

6

66 ANT TUNER

A

A

B

B

C

C

D

D

1

2

3

4

5

6

1

2

3

4

5

6

67.ANTENNA MATCH

A

A

B

B

C

C

D

D

1

2

3

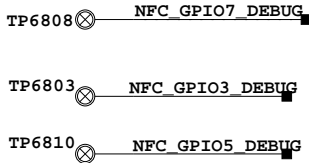
4

5

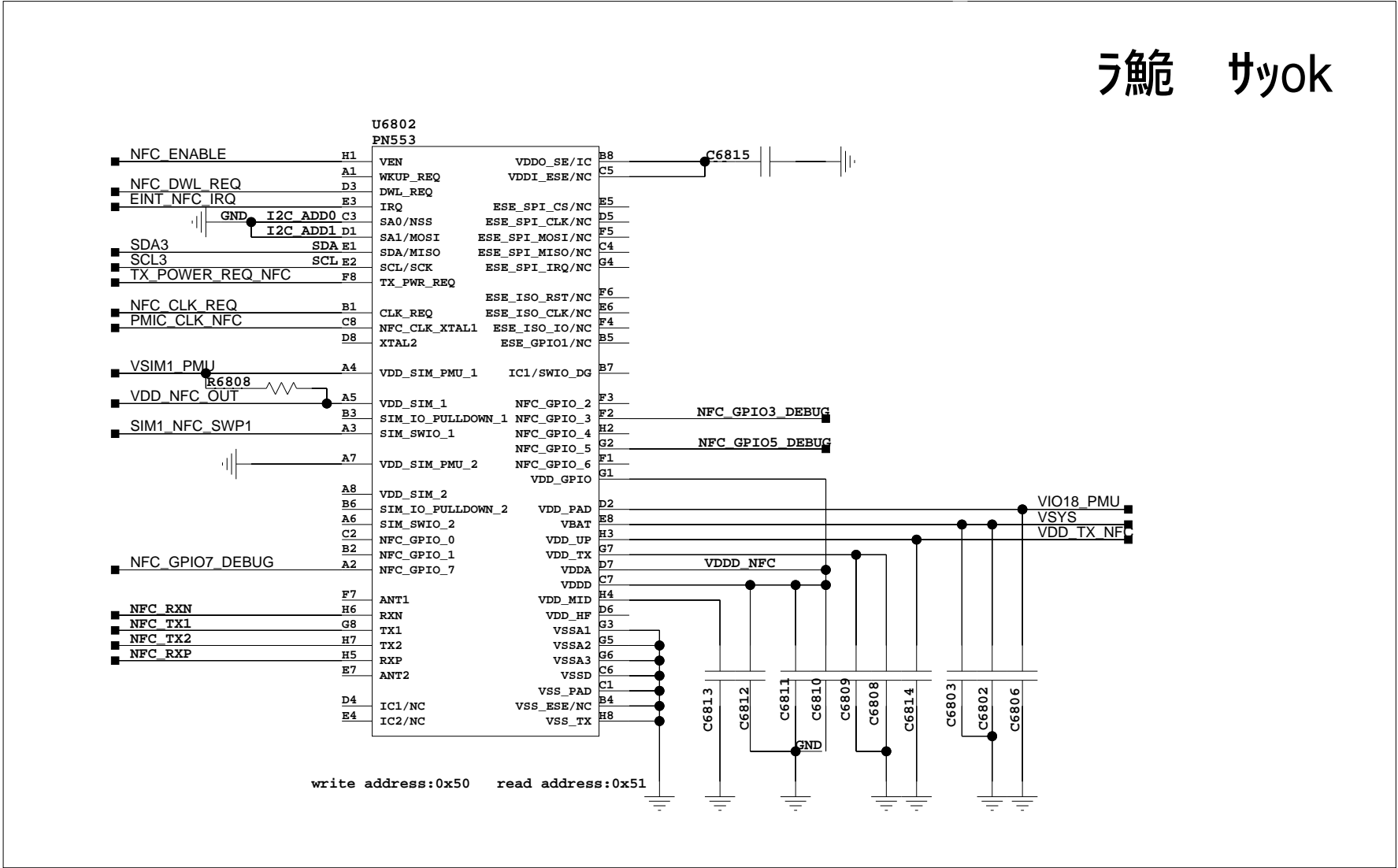
6

68. NFC_BB

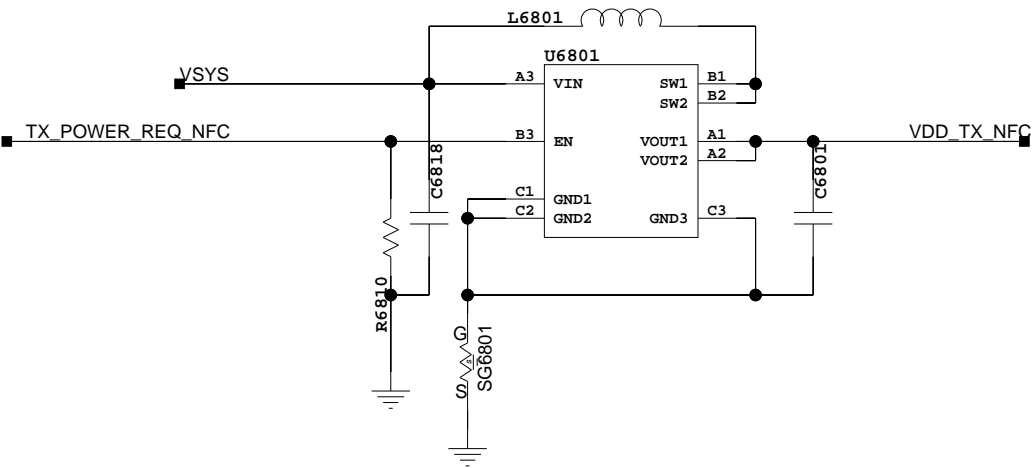
う鮠 サツok



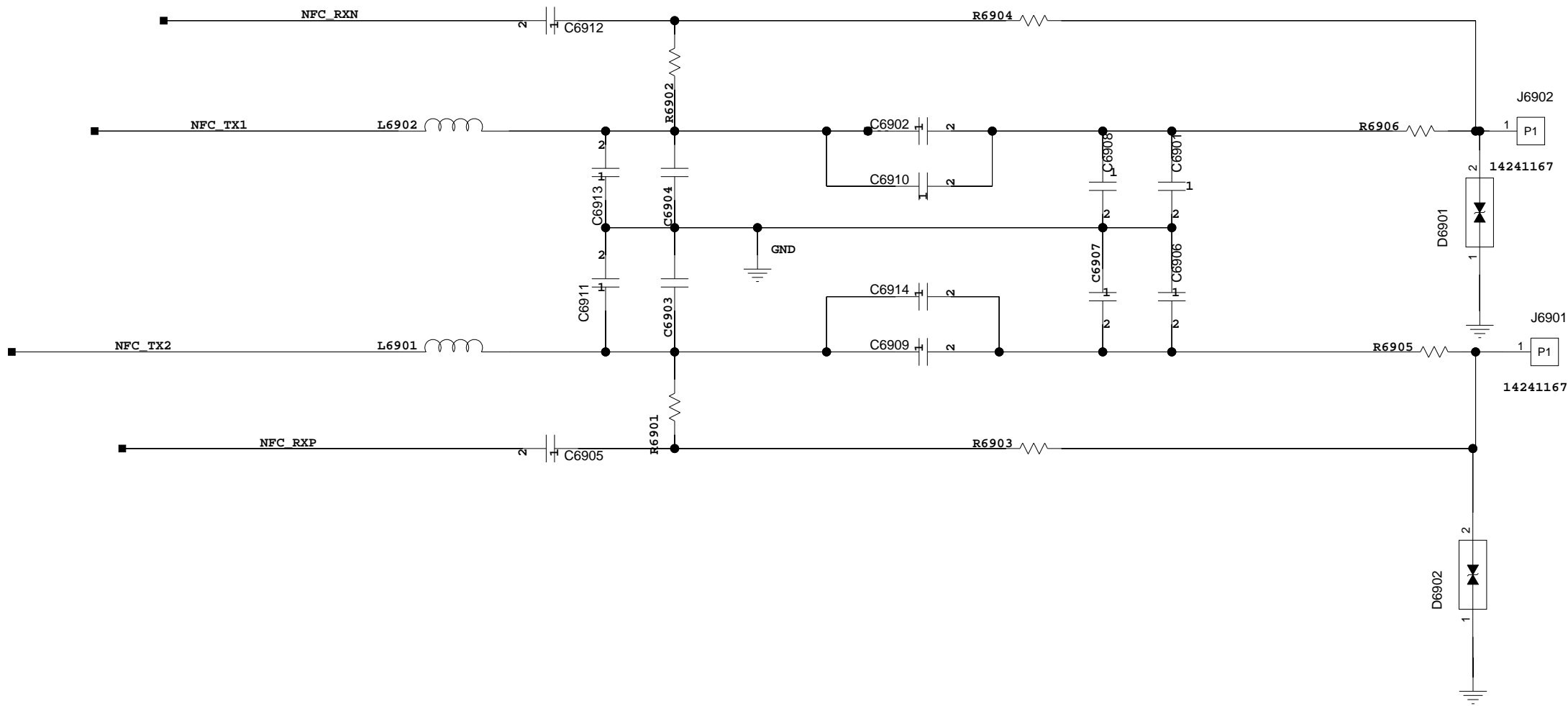
Page	Refdes	NFC SMT	NFC NC
page68	R6808	DNI	SMT
page2	C208	SMT	DNI



う鮠 サツok



69. ANT_NFC

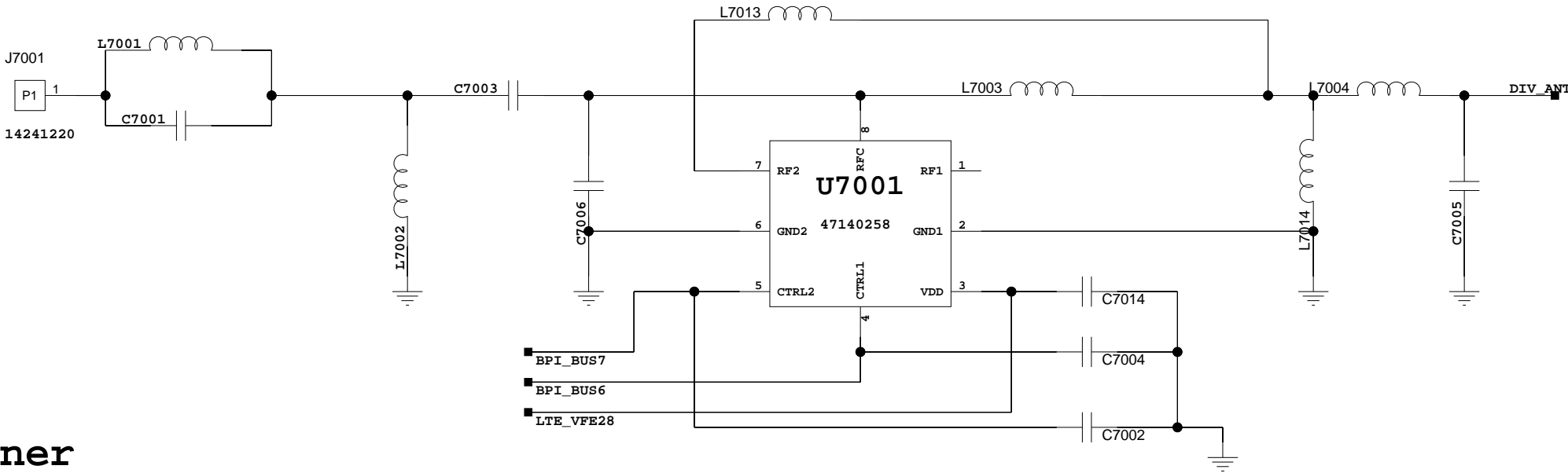


70.ANT_DIV

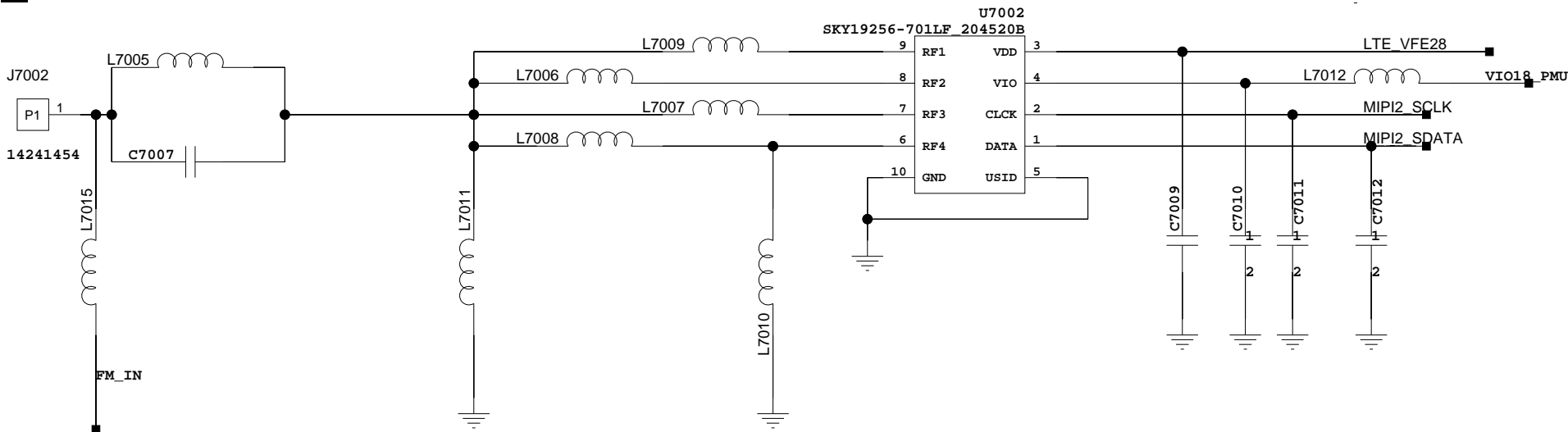
USID Setting Table(Register:0X1F D3:D0)

USID PIN BIAS Condition	USID			
	D3	D2	D1	D0
GND	0	1	1	0
Open	0	1	1	1
VIO	1	0	0	1

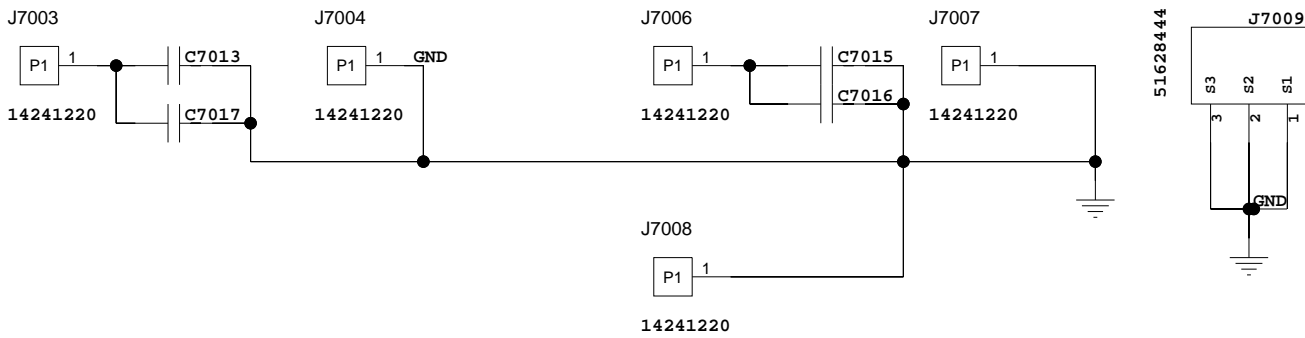
DIV ANT



Div_Tuner

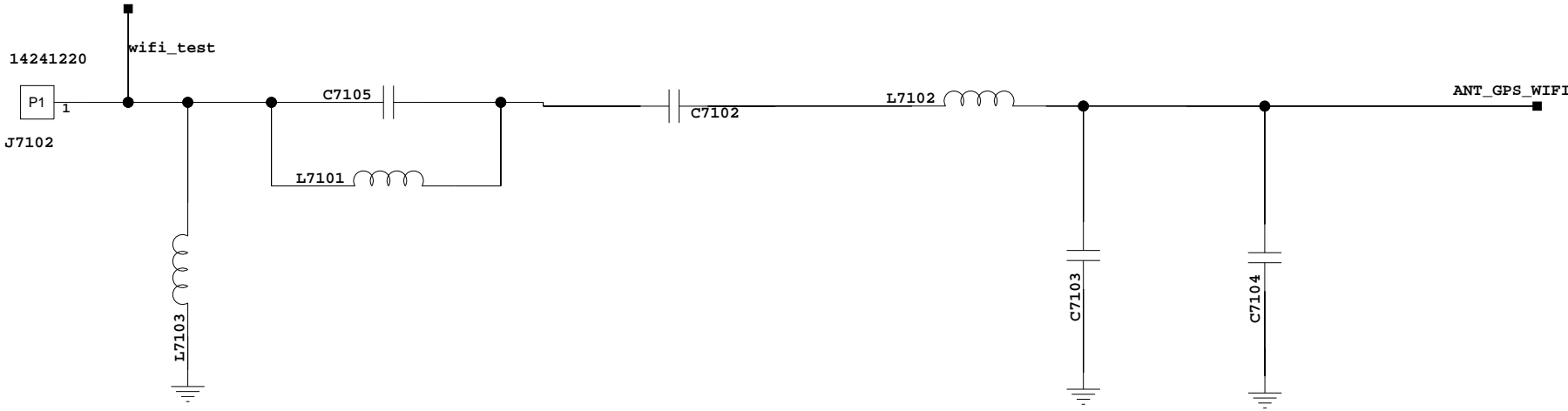


GND on TOP

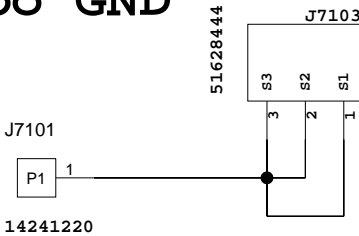


71 ANT_GPS_WIFI

Combo Feed



Combo GND



72.ANT_Tuner_Controller

