

Baseband Schematic

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MODEM Schematic

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The type and specification of the components refer to the BOM

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2.Block Diagramm

:

A

A

B

B

C

C

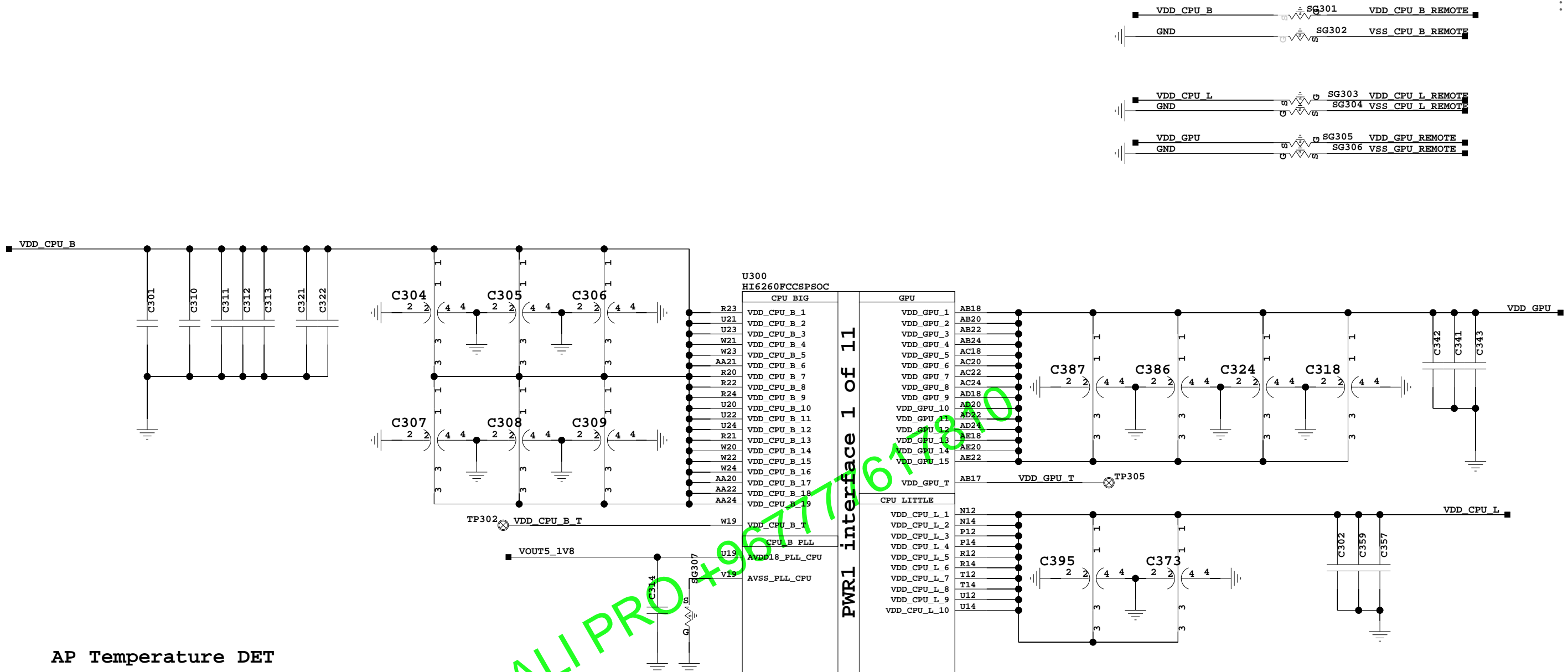
D

D

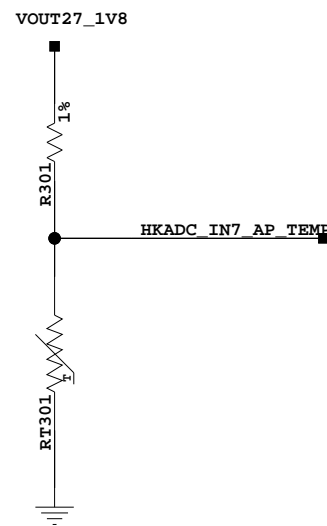
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The type and specification of the components refer to the BOM

3.SOC PWR1



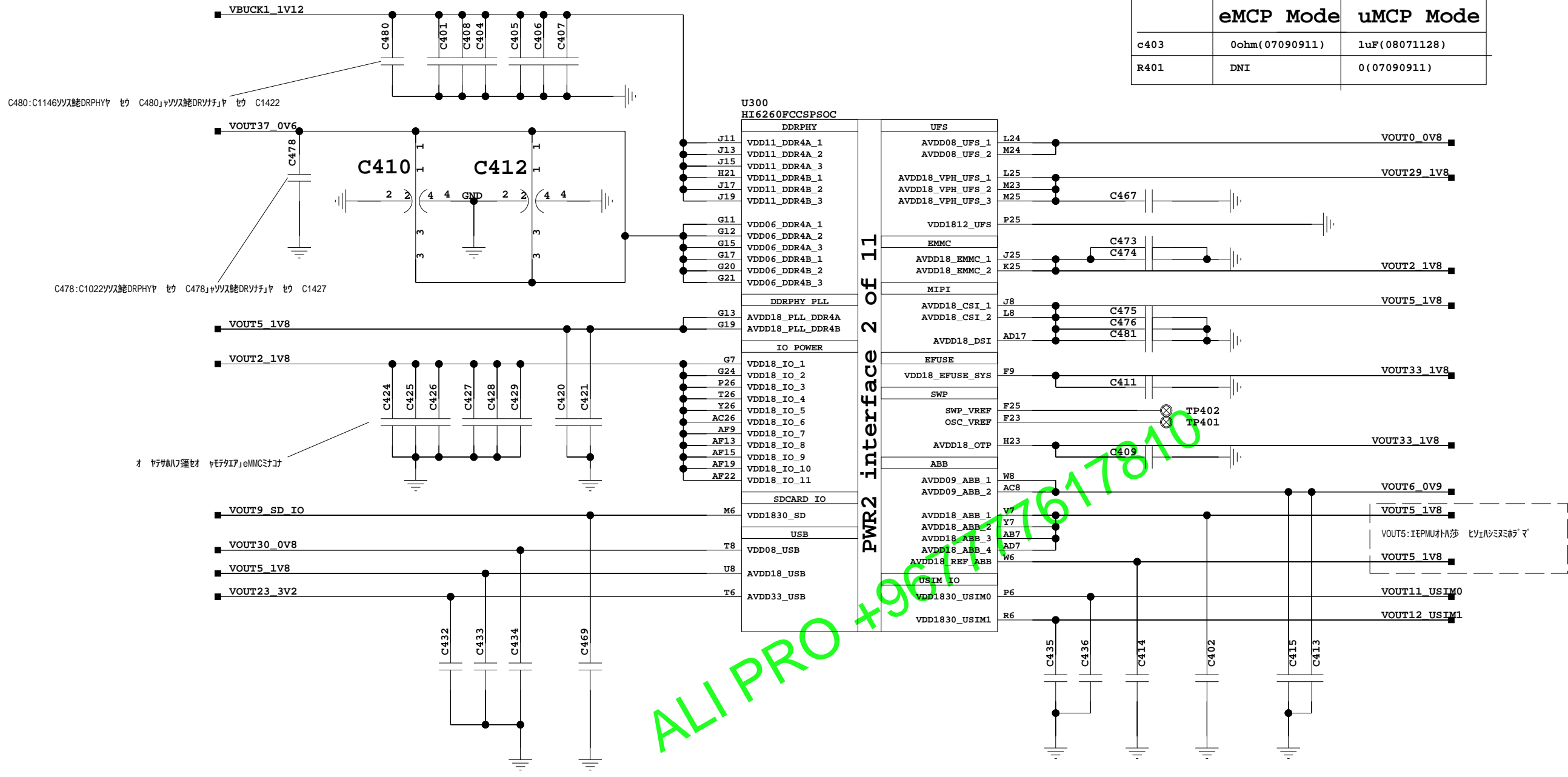
AP Temperature DET



The type and specification of the components refer to the BOM

4.SOC PWR2

| | eMCP Mode | uMCP Mode |
|------|----------------|---------------|
| C403 | 0ohm(07090911) | 1uF(08071128) |
| R401 | DNI | 0(07090911) |

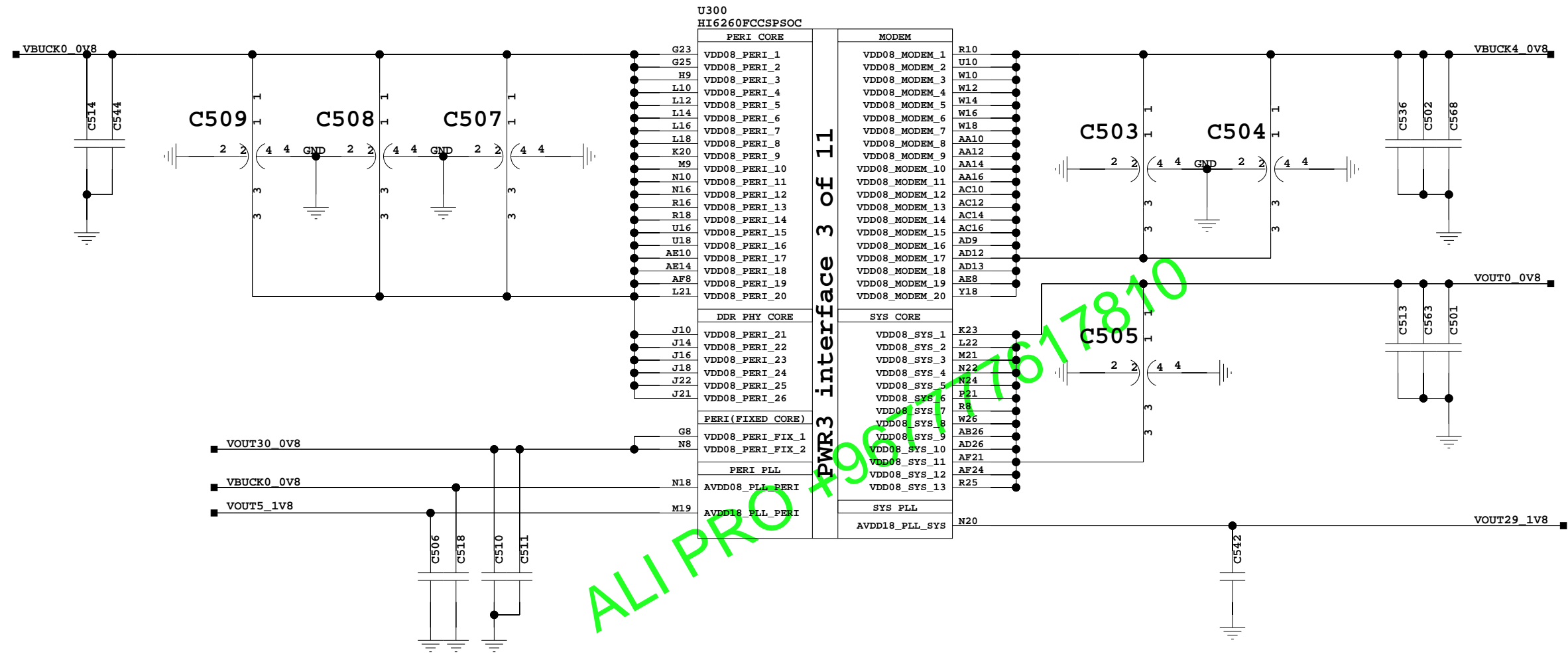


PWR2 interface 2 of 11

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The type and specification of the components refer to the BOM

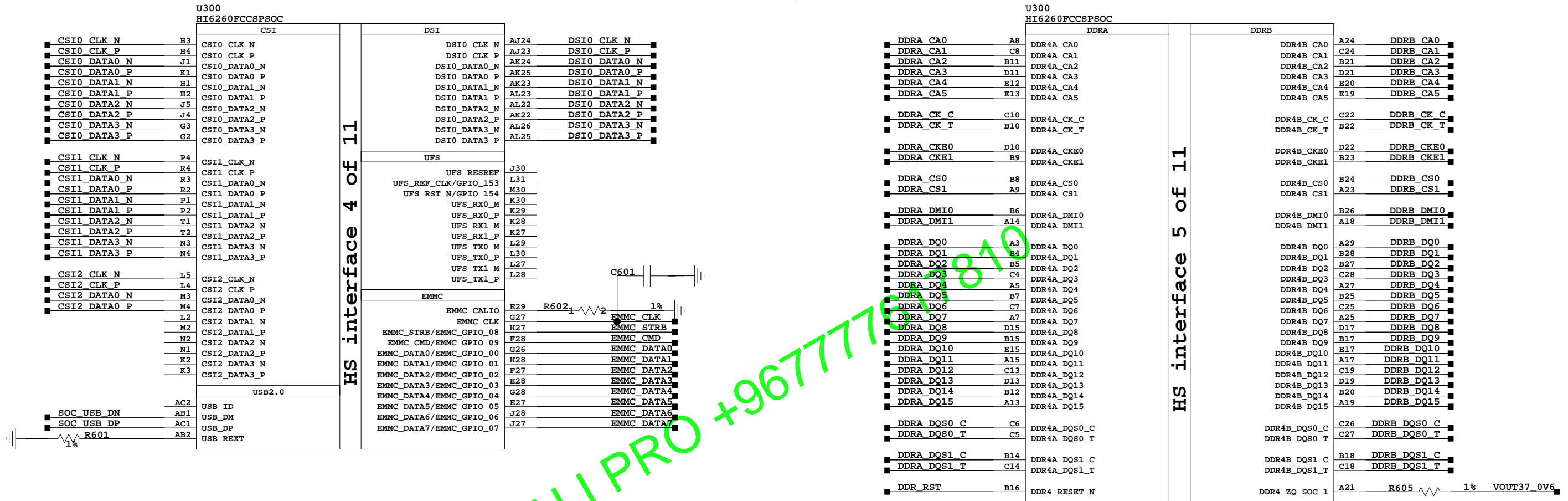
5.SOC PWR3



The type and specification of the components refer to the BOM

6.SOC HS Interface

| | eMCP Mode | uMCP Mode |
|-----------|-----------|-----------|
| R604,R606 | DNI | SMT |
| R602,R603 | SMT | DNI |



The type and specification of the components refer to the BOM

7.SOC GPIO Interface



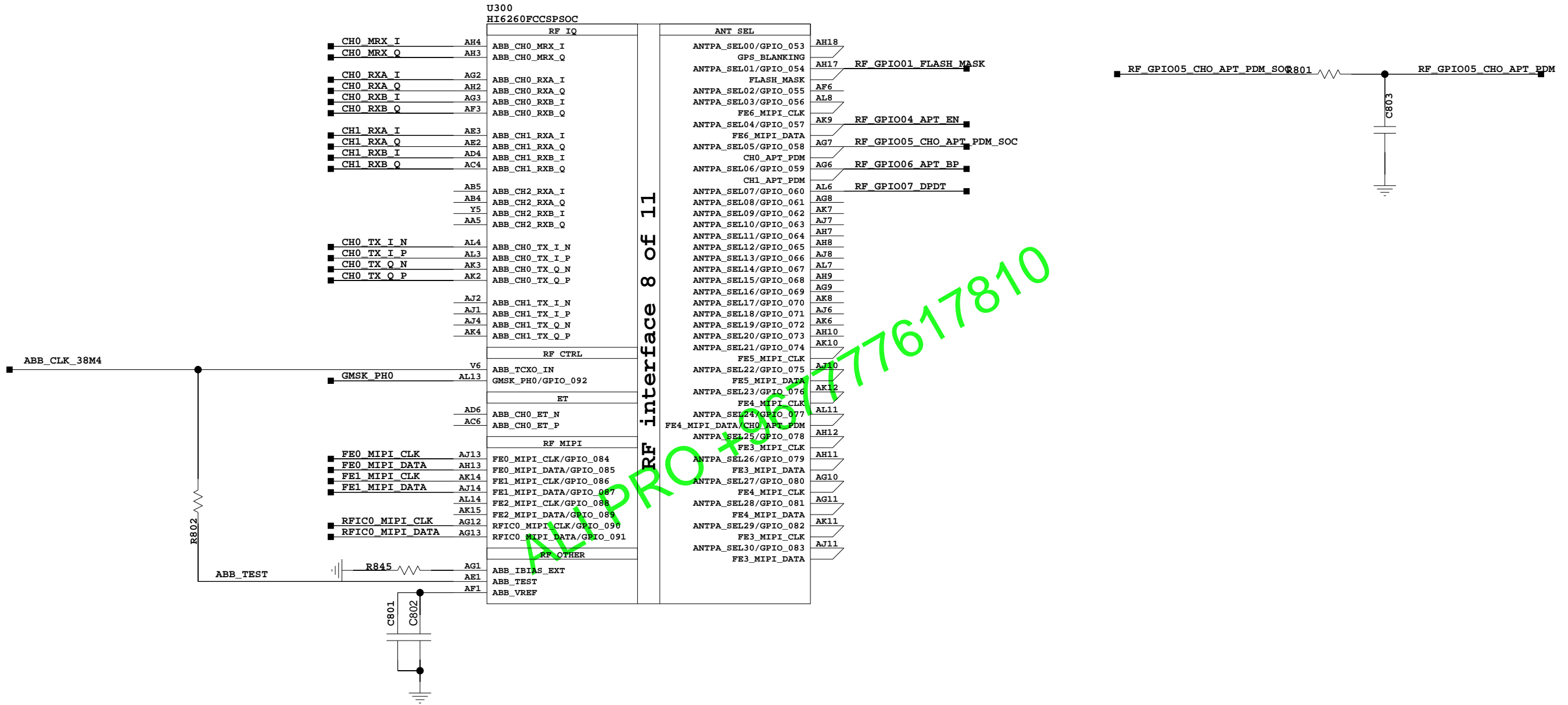
The type and specification of the components refer to the BOM

GPIO Not Used Is marked ***,Used For CAD to Fanout Net

CODE:10100253

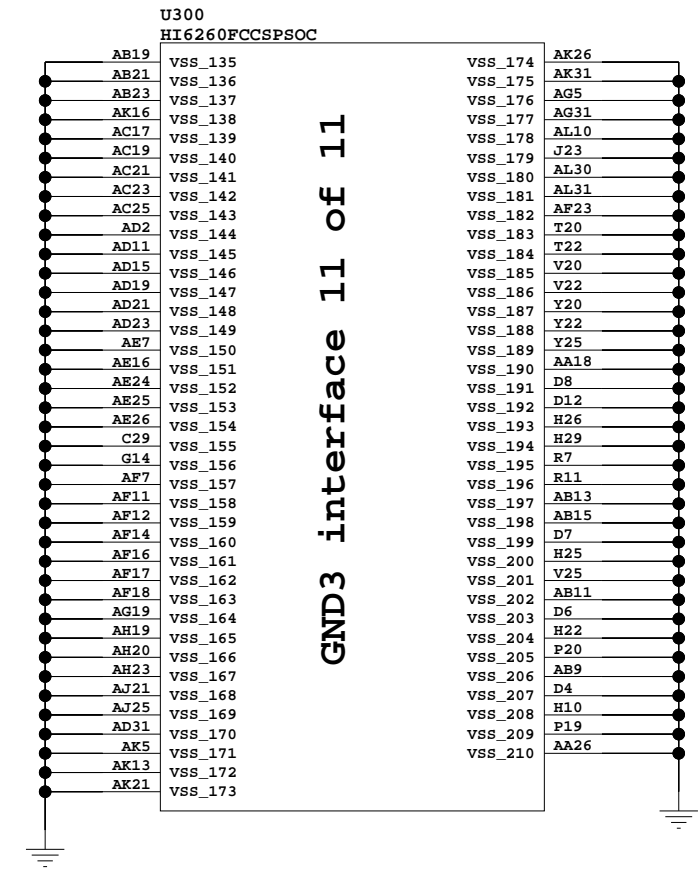
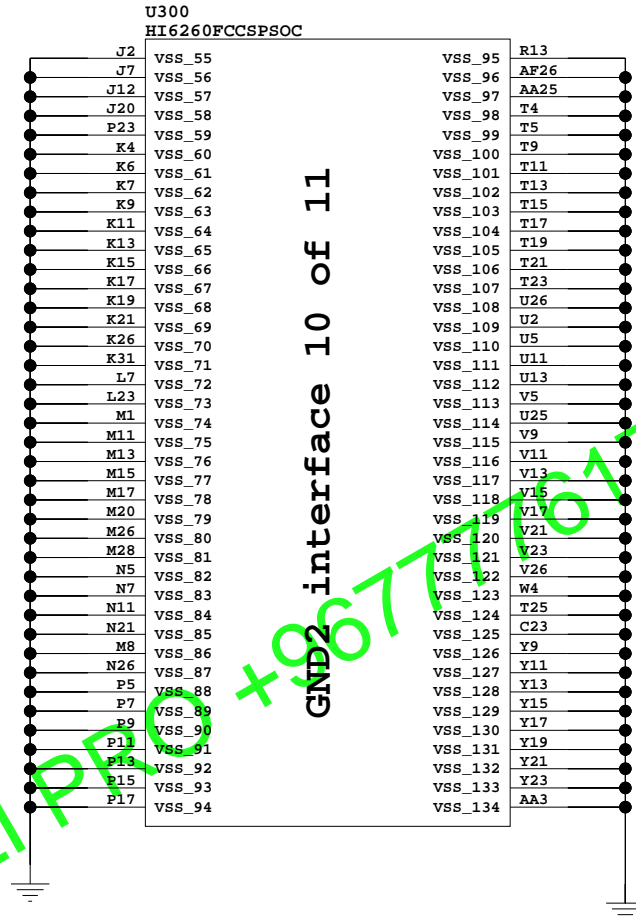
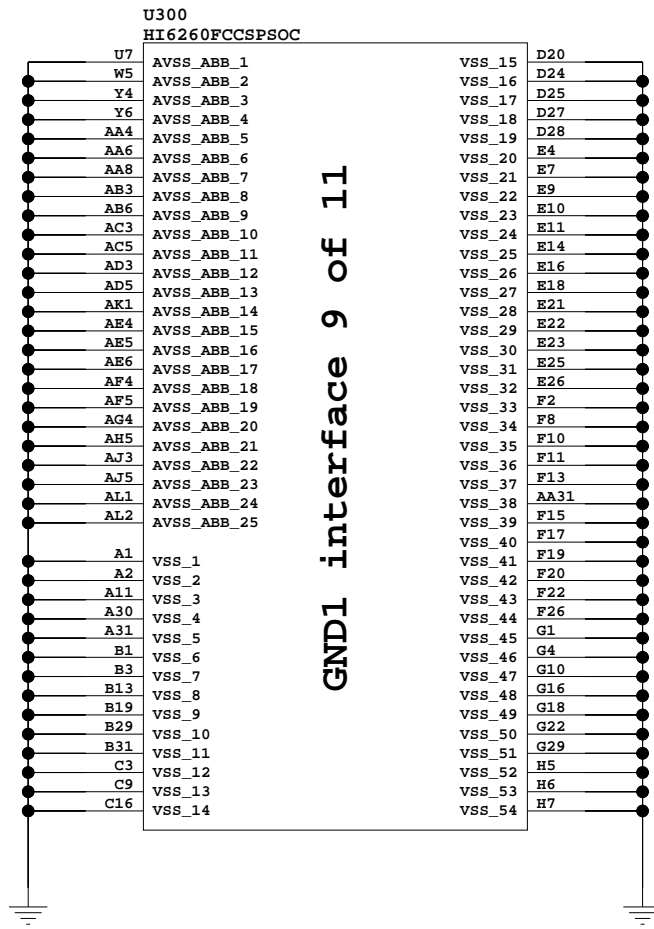
8.SOC RF Interface

RF IO Not Used Is marked ***,Used For CAD to Fanout Net



The type and specification of the components refer to the BOM

9.SOC GND

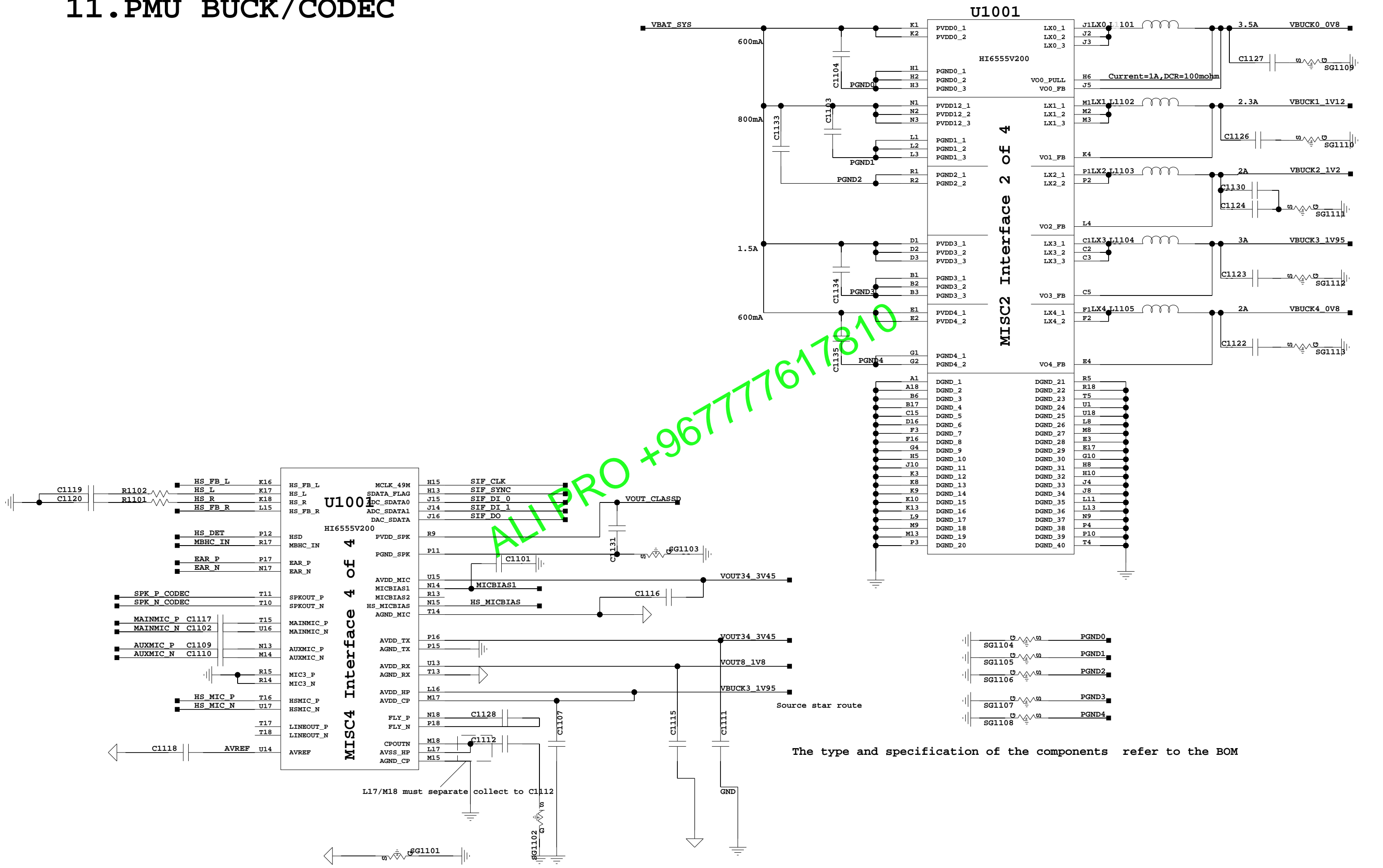


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The type and specification of the components refer to the BOM

11. PMU BUCK/CODEC

Εύρεση BUCK LX0/1/2/3/4_FBDΑ°Α²»ΟΕΔΙ´Οµς, ΔΙΑ·½´©İß

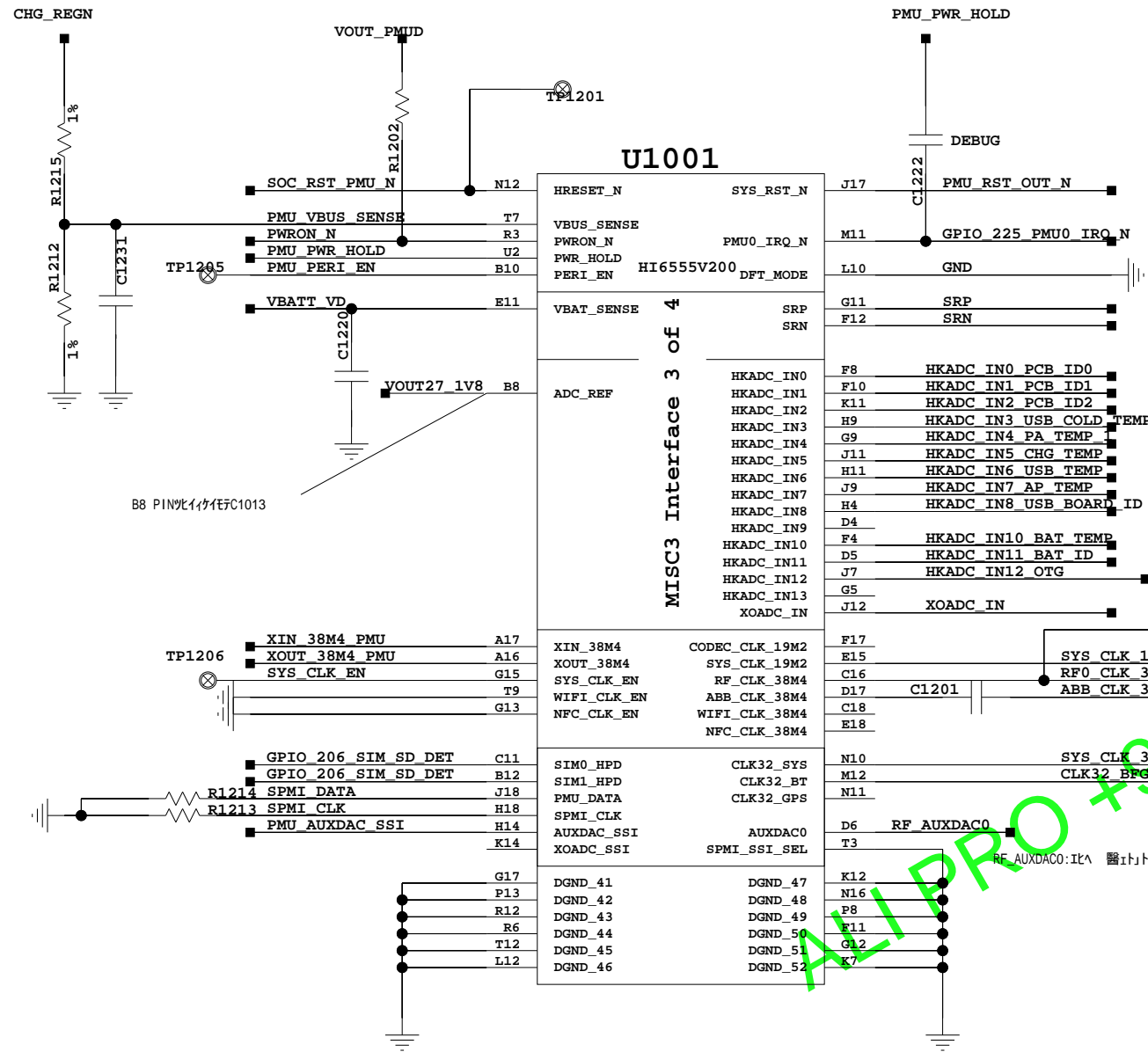


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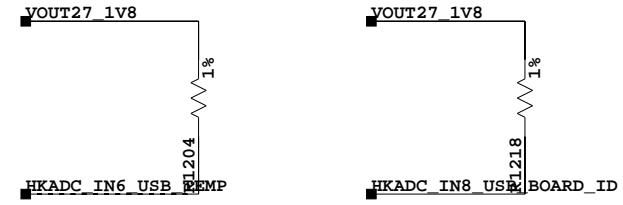
L17/M18 must separate collect to C1112

The type and specification of the components refer to the BOM

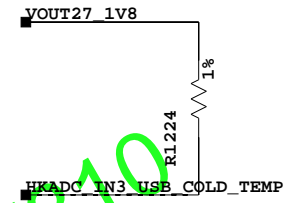
12. PMU Digital



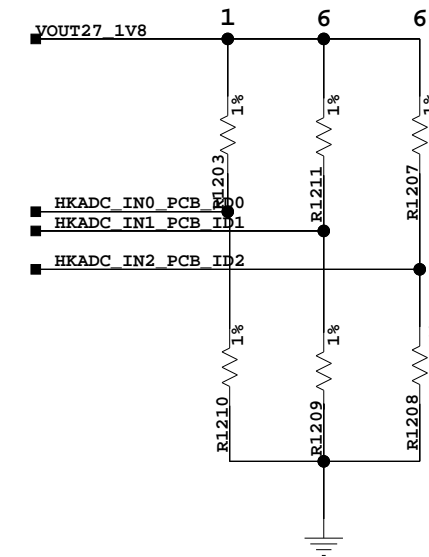
USB CON TEMP DET USB Board ID DET



USB COLD TEMP DET



BOARD ID



HKADC_IN0~13

| | |
|------------|------------------------|
| HKADC_IN0 | APU Board ID0 (RF USE) |
| HKADC_IN1 | APU Board ID1 |
| HKADC_IN2 | APU Board ID2 |
| HKADC_IN3 | RESERVED |
| HKADC_IN4 | PA TEMP DET0 |
| HKADC_IN5 | Charge TEMP |
| HKADC_IN6 | USB_TEMP_ADC |
| HKADC_IN7 | AP TEMP |
| HKADC_IN8 | USB_BOARD_ID |
| HKADC_IN9 | RESERVED |
| HKADC_IN10 | BATT TEMP |
| HKADC_IN11 | BATT ID |
| HKADC_IN12 | RESERVED |
| HKADC_IN13 | RESERVED |

Board ID Resistor Set

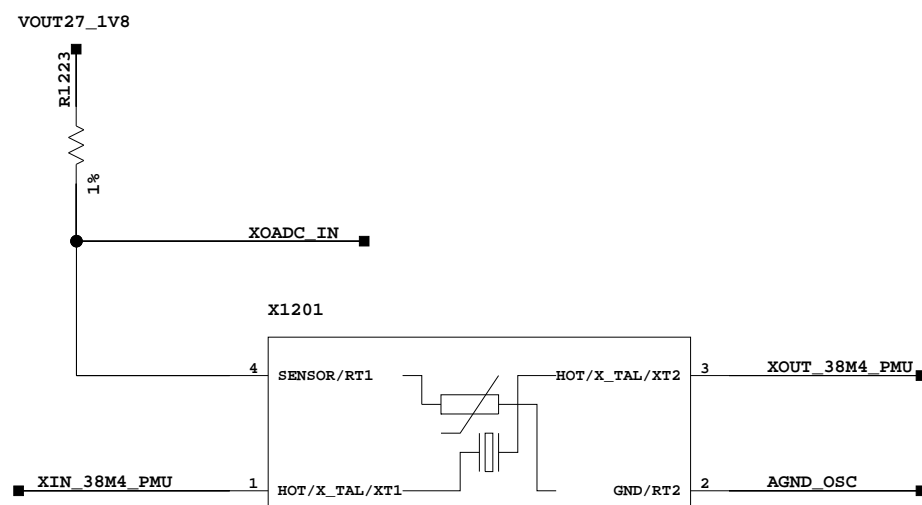
| ID | UP RES | DOWN RES |
|----|--------|----------|
| 0 | NC | 0K |
| 1 | 150K | 22K |
| 2 | 100K | 30K |
| 3 | 200K | 100K |
| 4 | 150K | 121K |
| 5 | 121K | 150K |
| 6 | 51K | 100K |
| 7 | 30K | 100K |
| 8 | 20K | 150K |
| 9 | 150K | NC |

Resistor Code

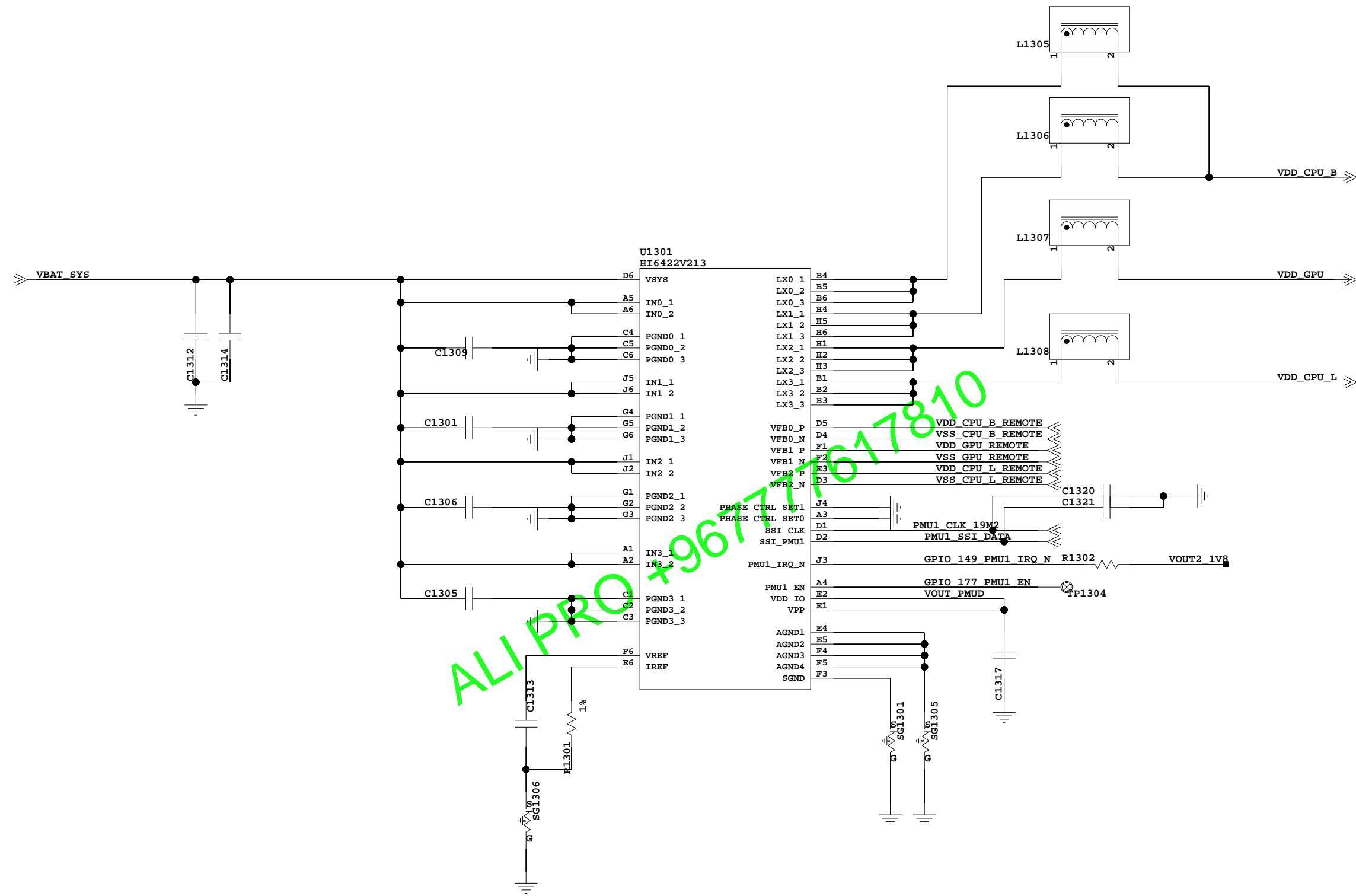
| | |
|------|----------|
| 0K | 07092922 |
| 20K | 07092448 |
| 22K | 07091172 |
| 30K | 07091299 |
| 51K | 07091302 |
| 100K | 07092918 |
| 121K | 07091176 |
| 150K | 07092138 |
| 200K | 07091406 |

Harry-AL10B_V3 7661

The type and specification of the components refer to the BOM

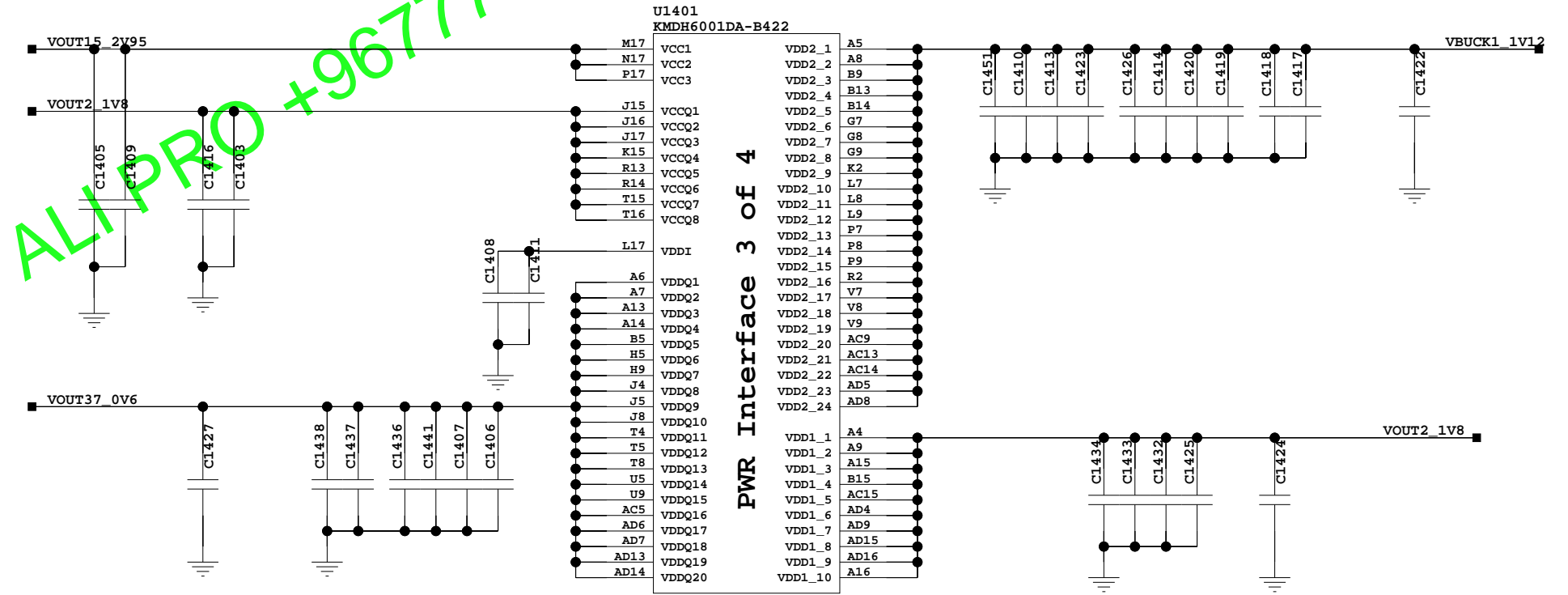
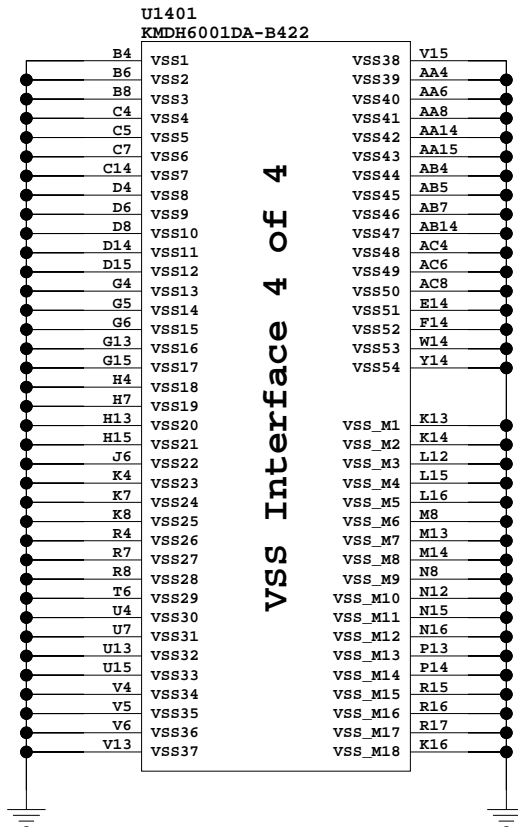
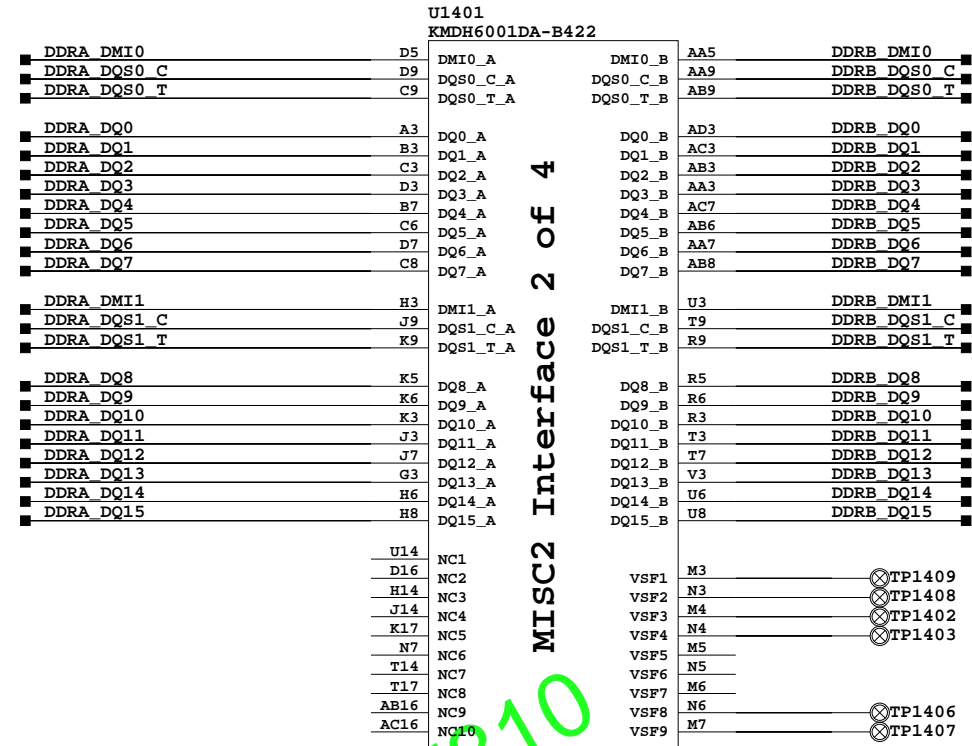
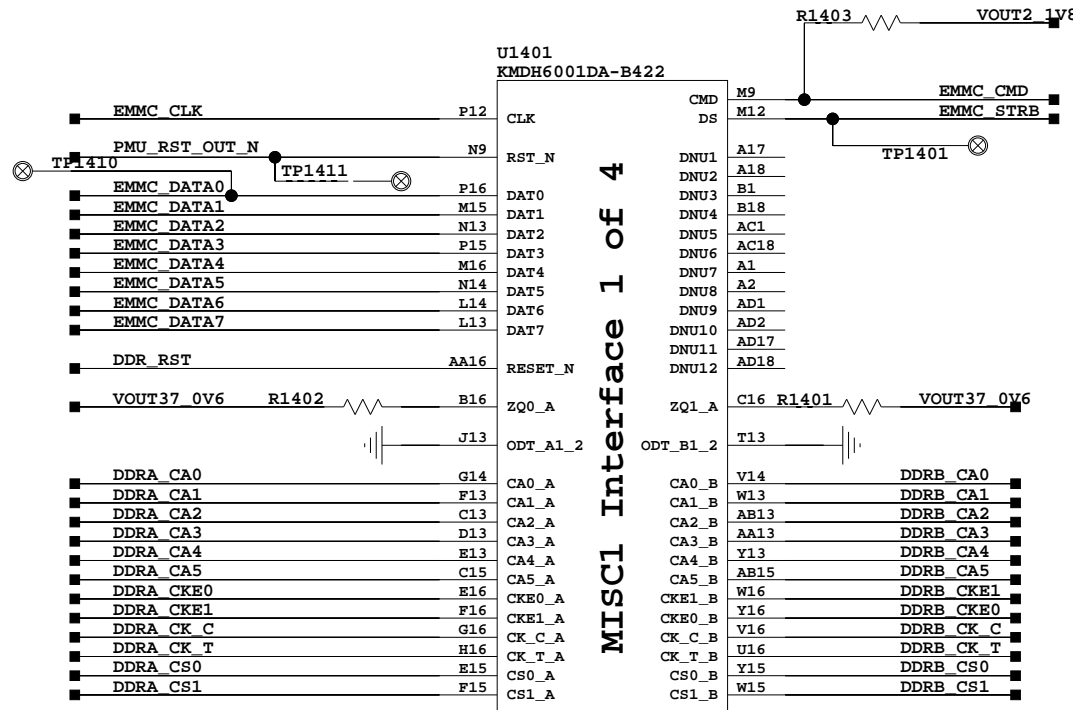


13.Hi6422



The type and specification of the components refer to the BOM

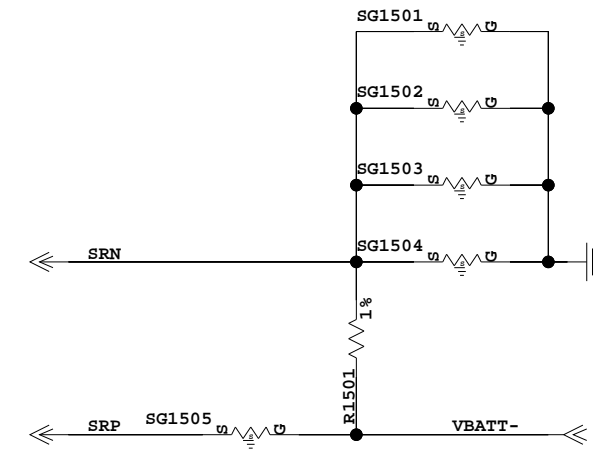
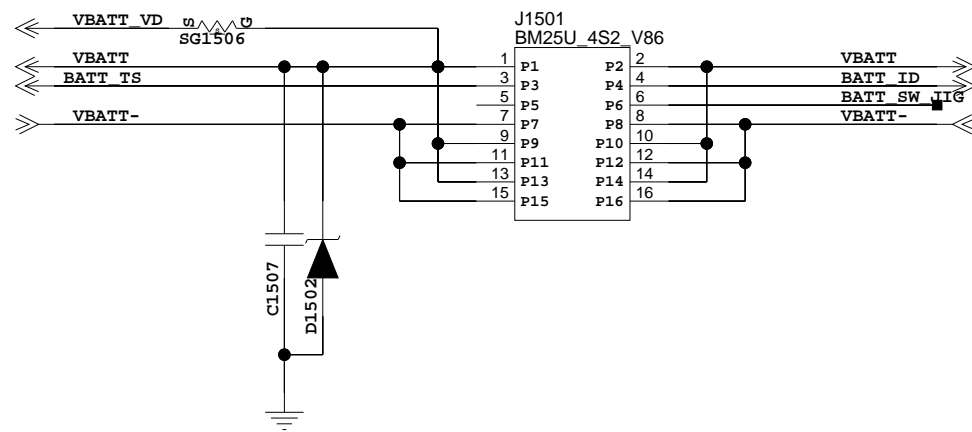
14. eMCP



The type and specification of the components refer to the BOM

15. Battery & Fuel guage

Battery Connector



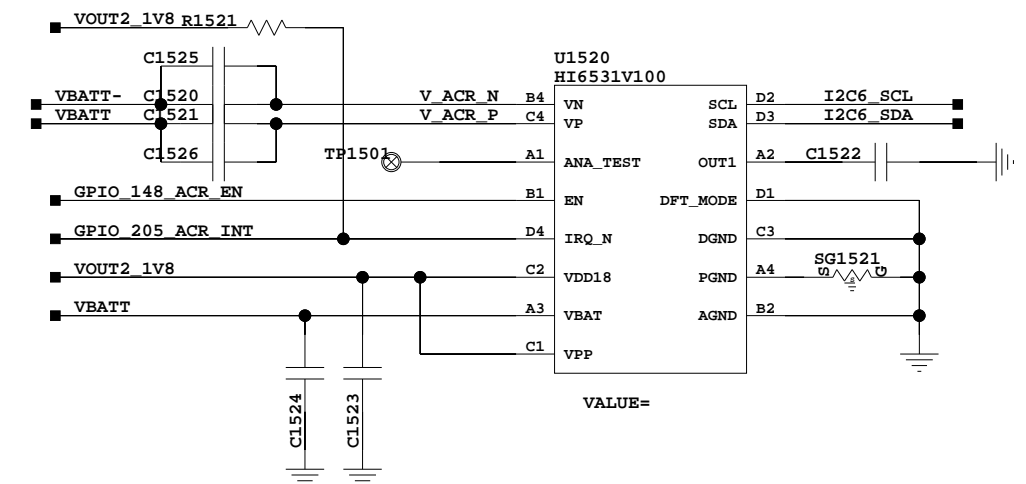
CAD note: 1. Trace for 6A
2. Differential trace



Battery Temperature

Battery ID

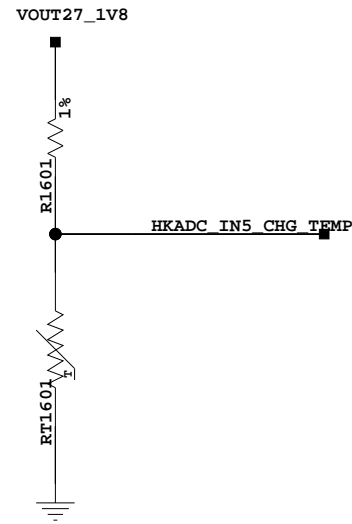
Battery ACR



The type and specification of the components refer to the BOM

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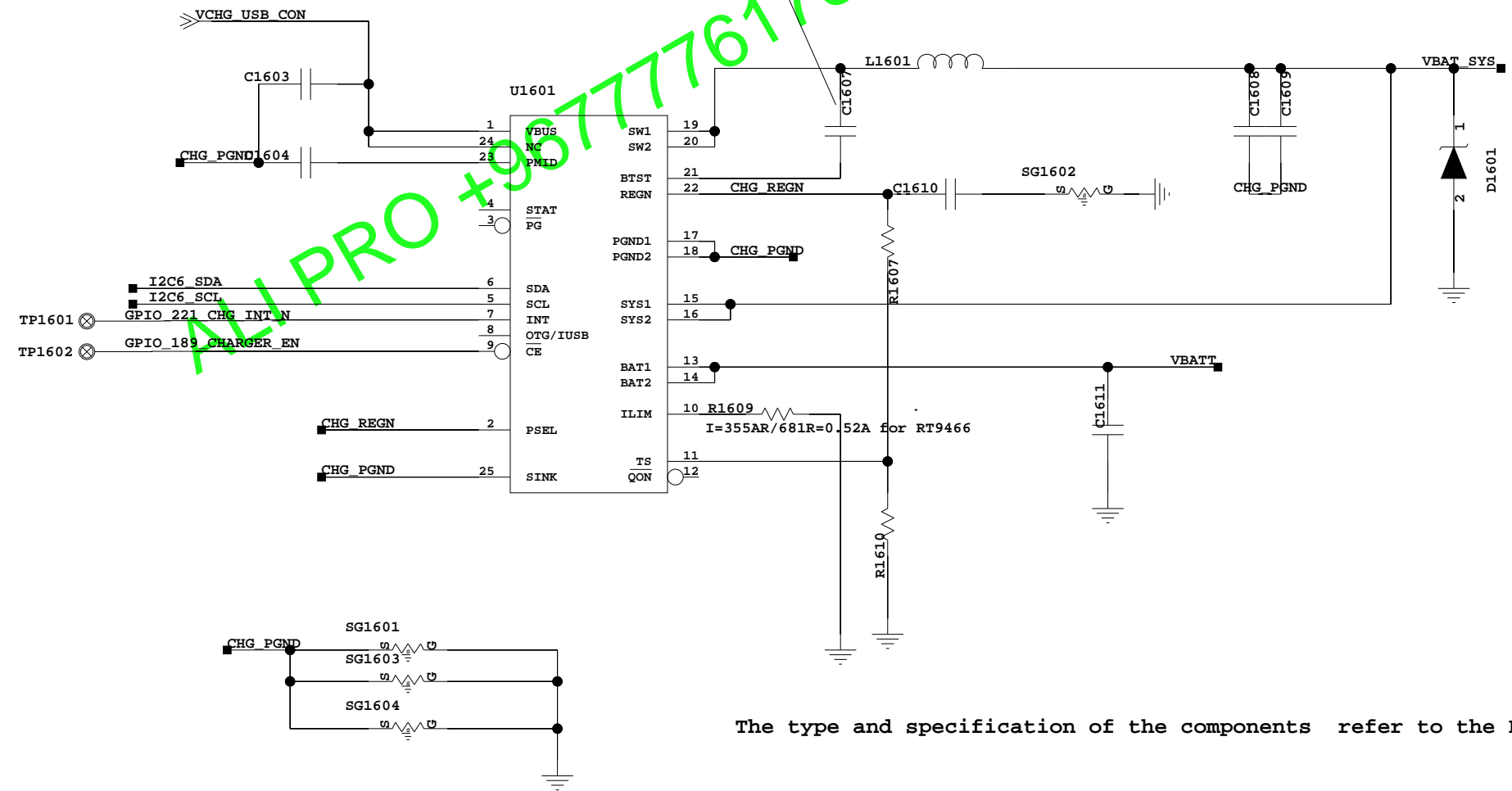
16. Charge Management



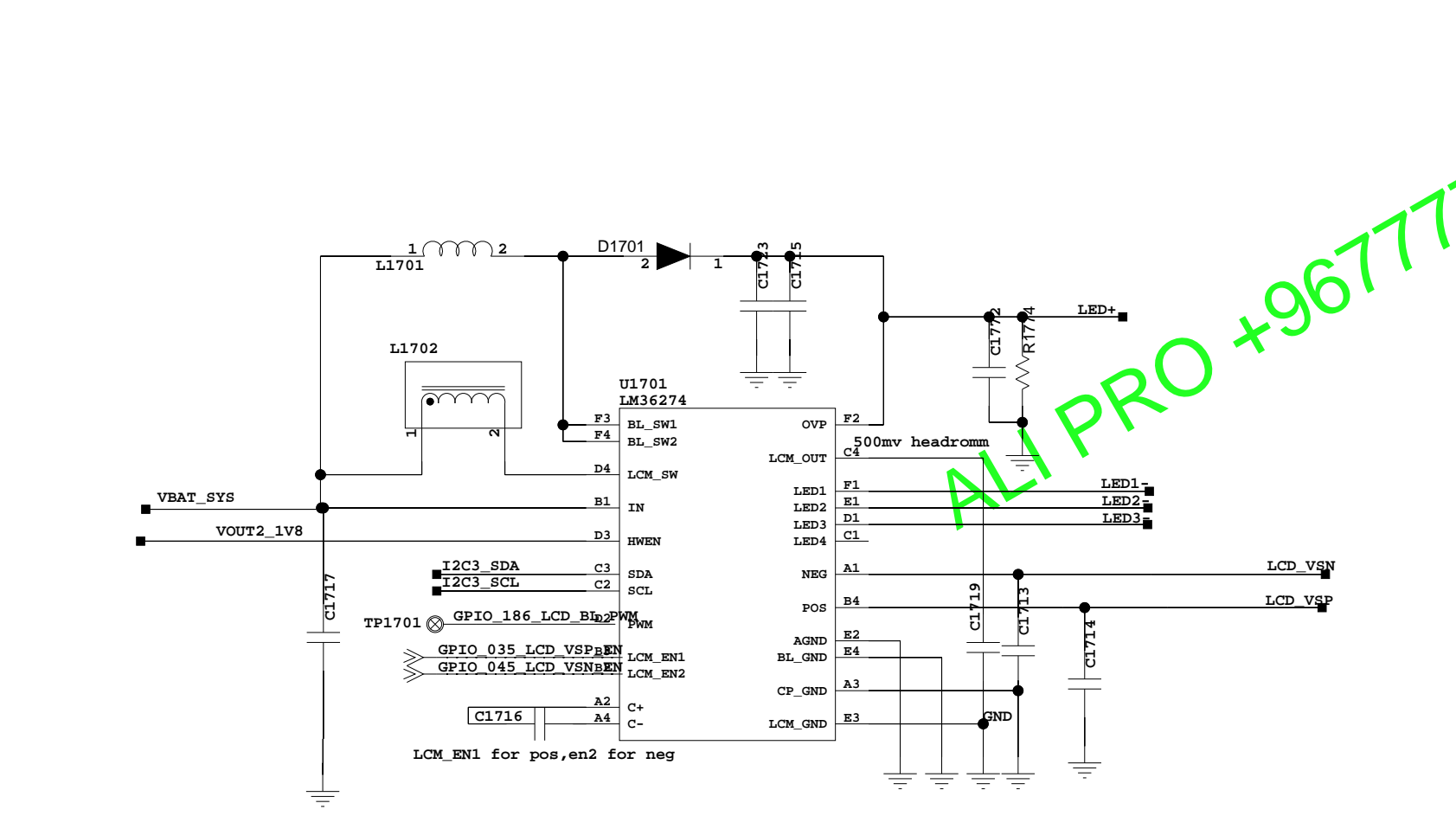
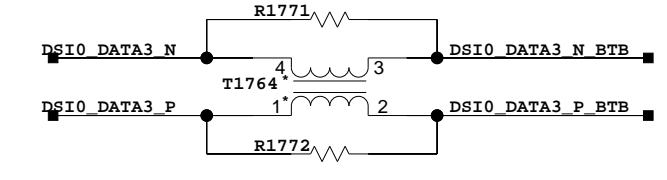
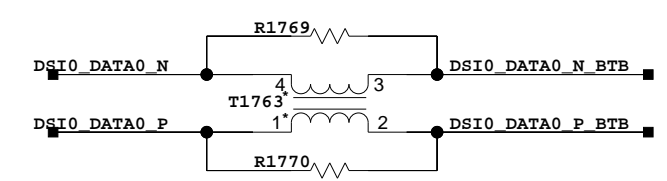
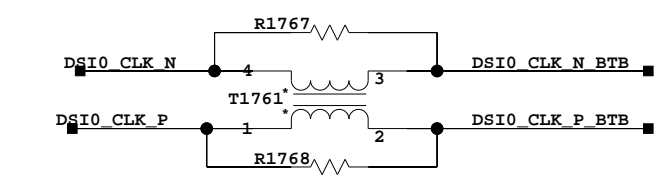
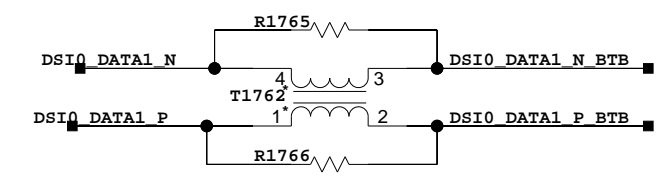
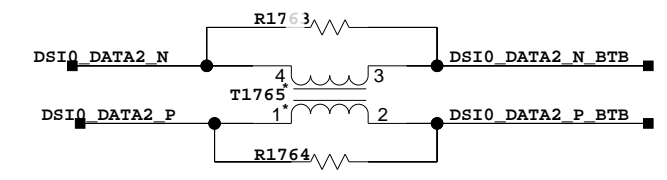
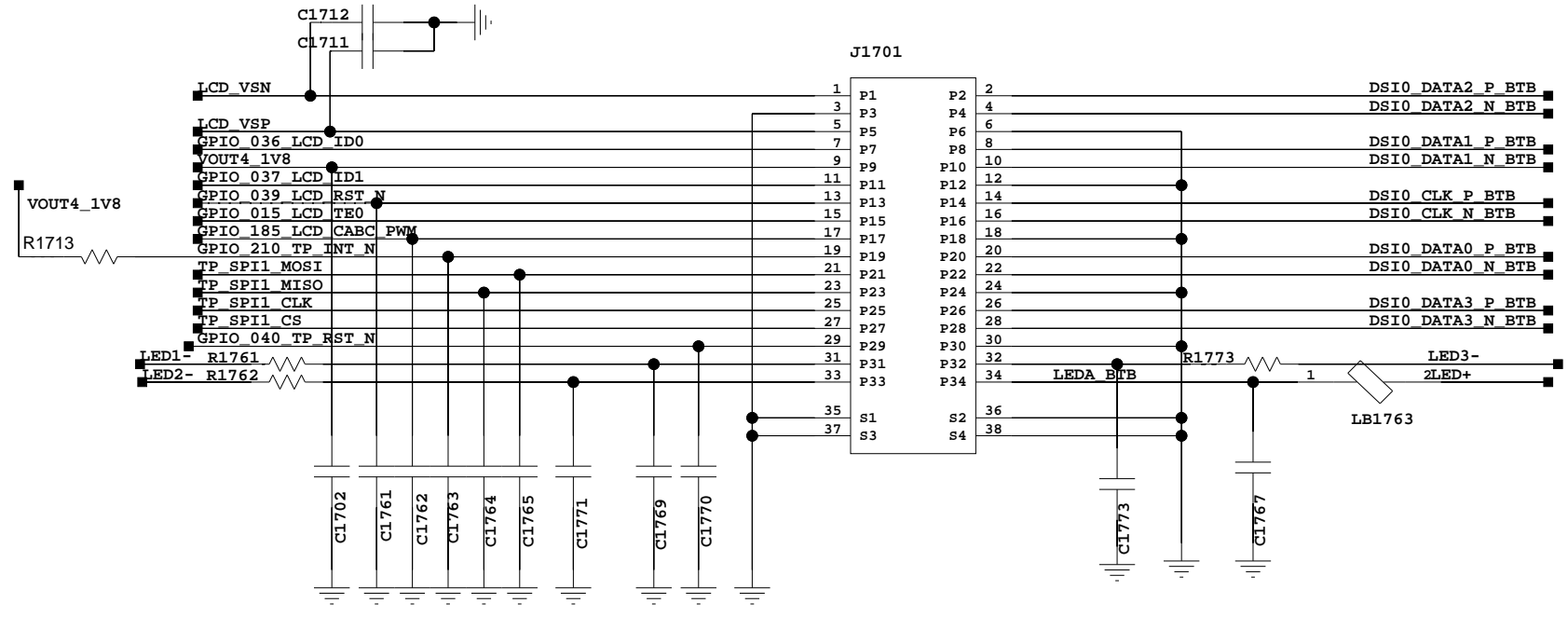
Charger IC

I2C address=1101011b(0x6B)

place close to U1601



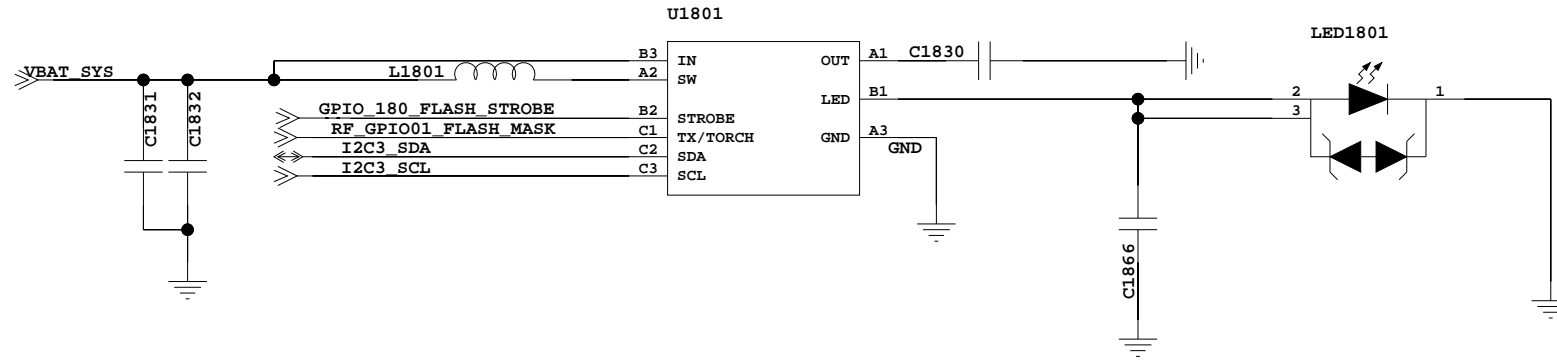
17. LCD and TP INTERFACE



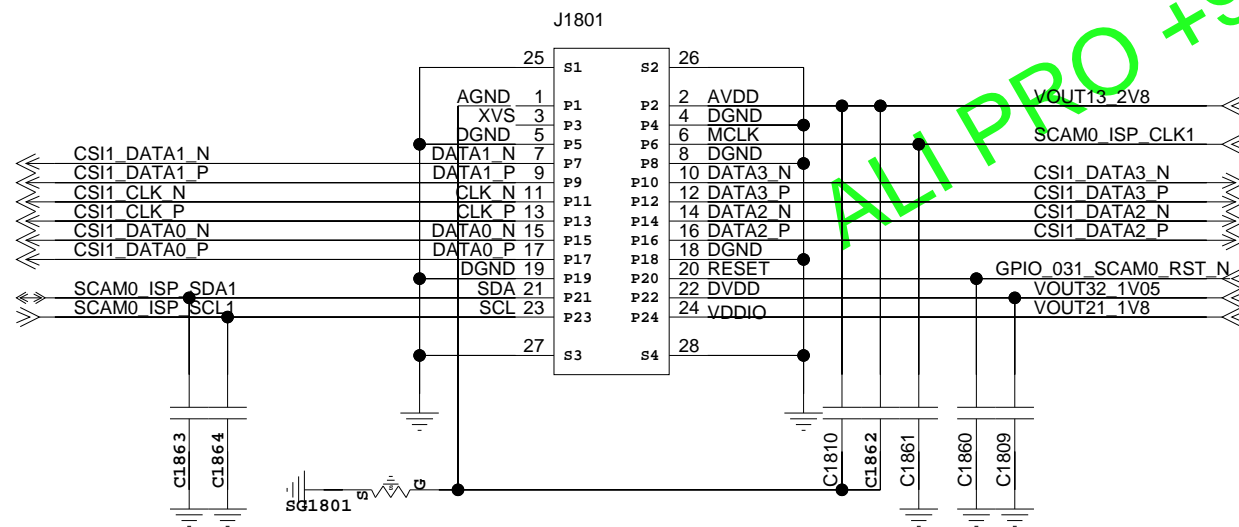
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The type and specification of the components refer to the BOM

18. Flash/front Camera



Front SUB Camera 16M Sub 23060300 Max Mated High=0.8mm

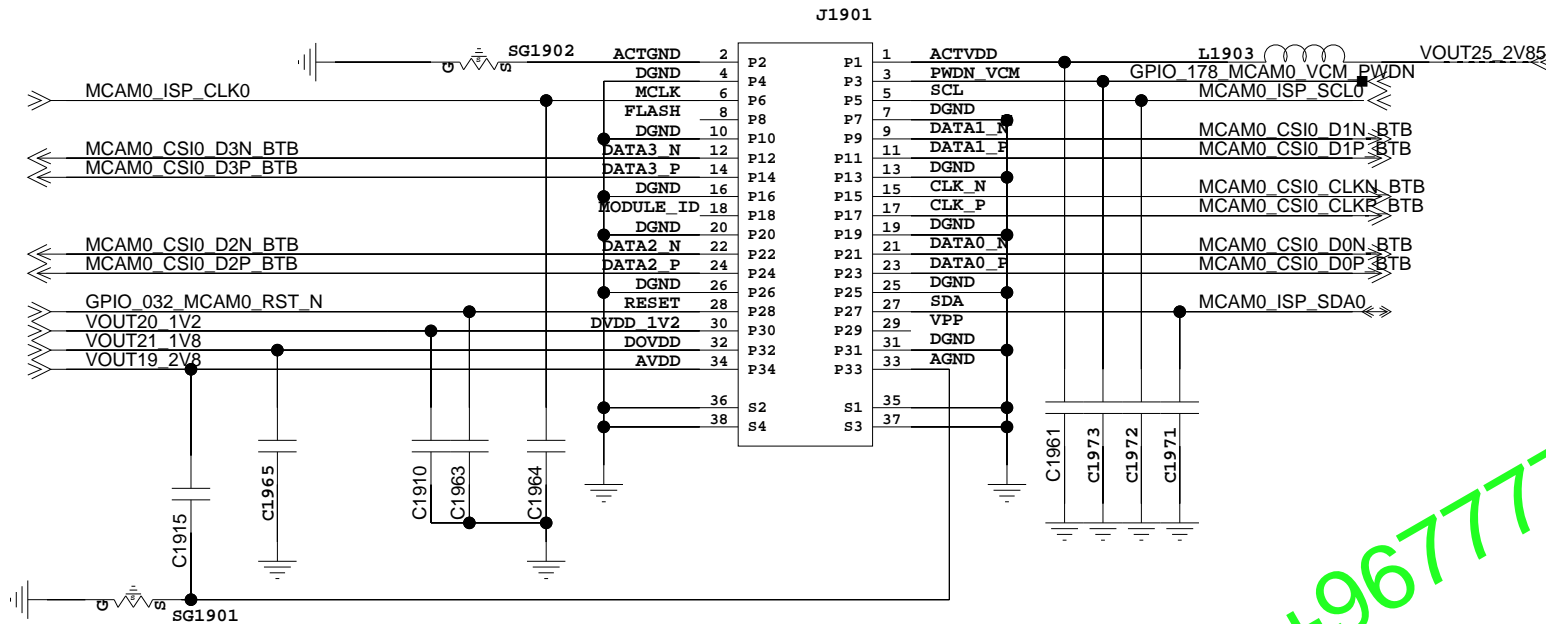


The type and specification of the components refer to the BOM

19. M0/M1

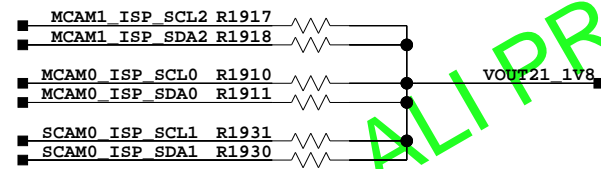
20M MAIN 2306XXXX

USB FOR LAYOUT



Rear MAIN camera

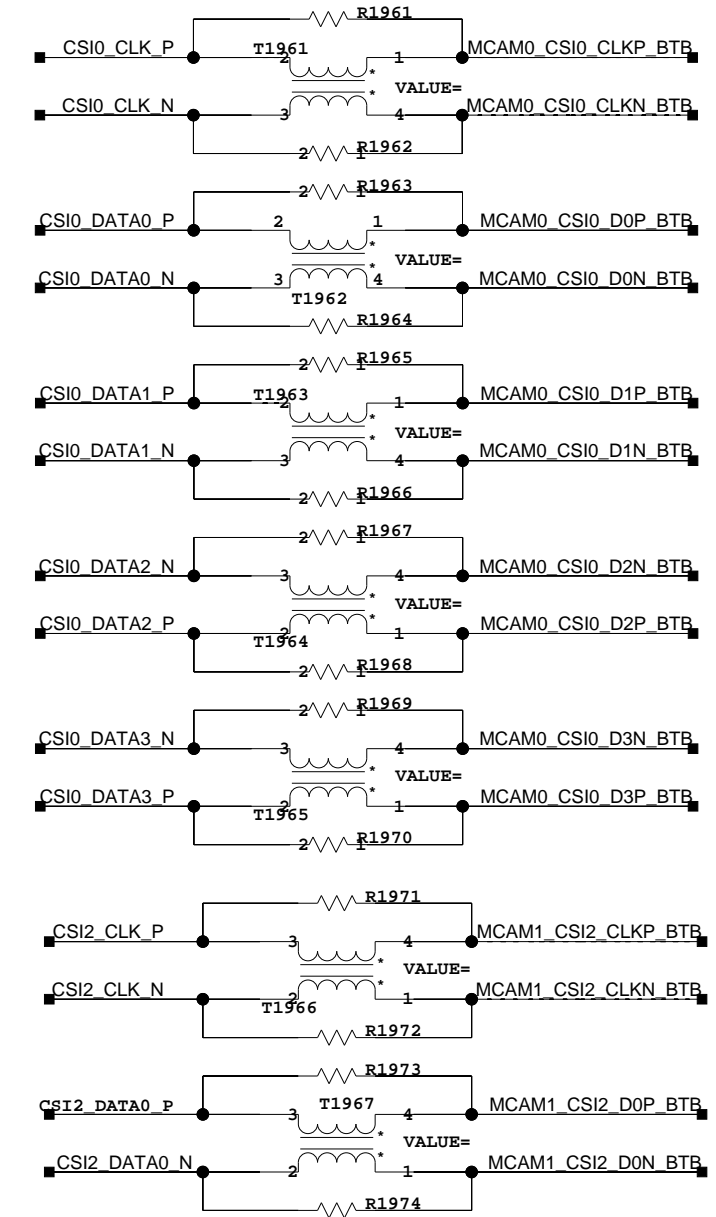
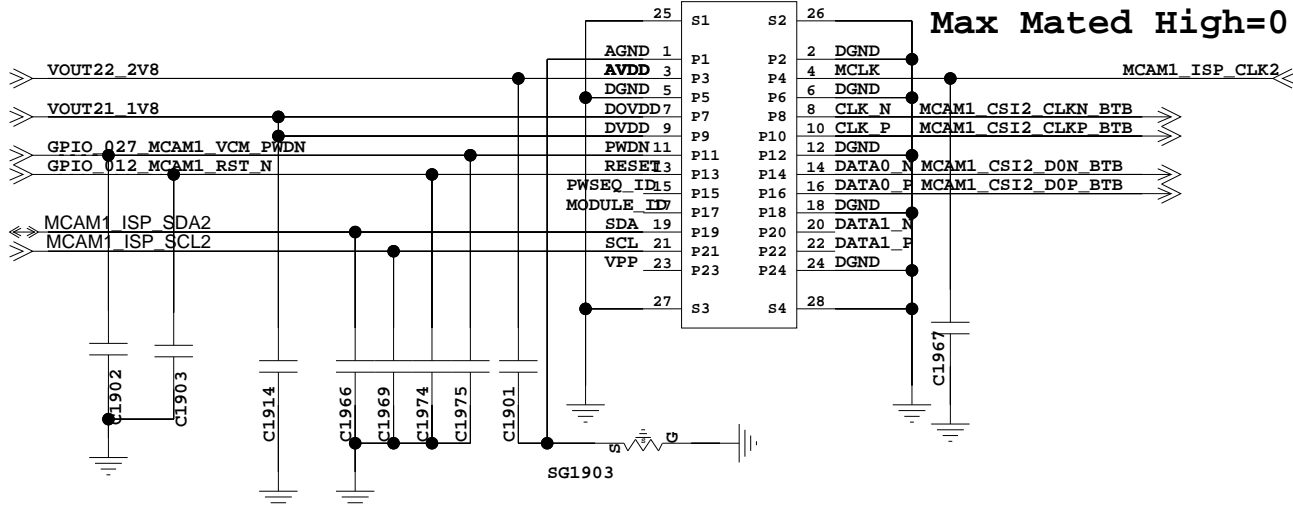
2M MAIN 2306XXXX



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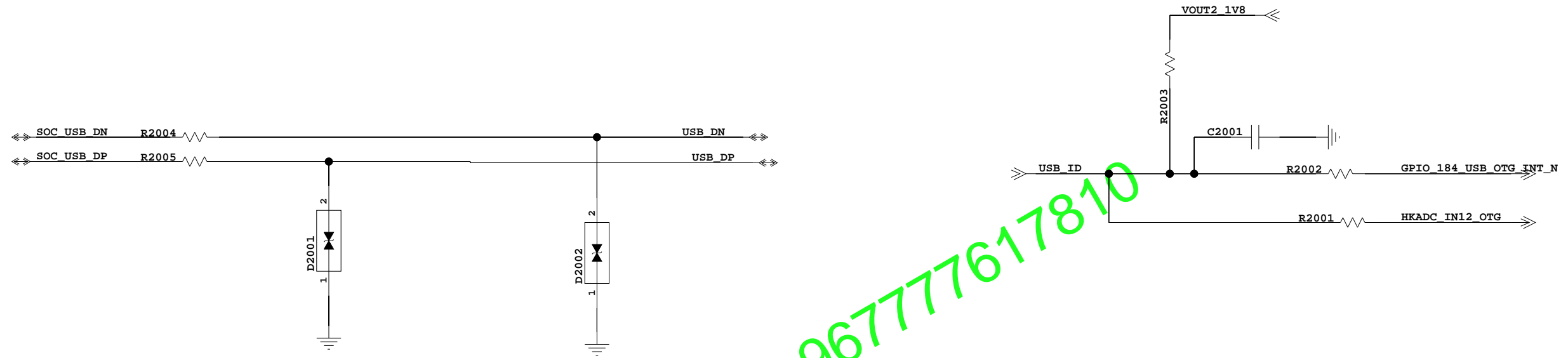
J1902

Max Mated High=0.8mm



The type and specification of the components refer to the BOM

20. USB

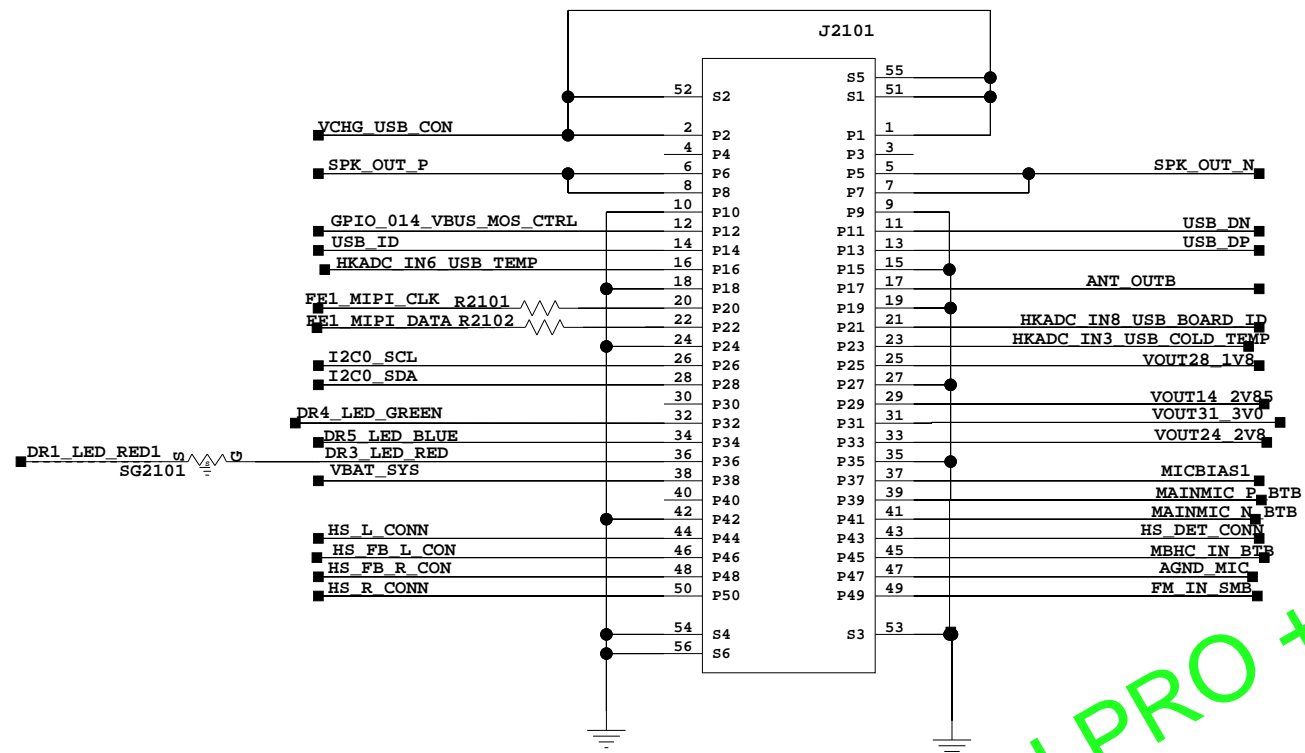


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The type and specification of the components refer to the BOM

21. Main FPC

Main FPC BTB



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The type and specification of the components refer to the BOM

22. MIPI_SW

:

A

A

B

B

C

C

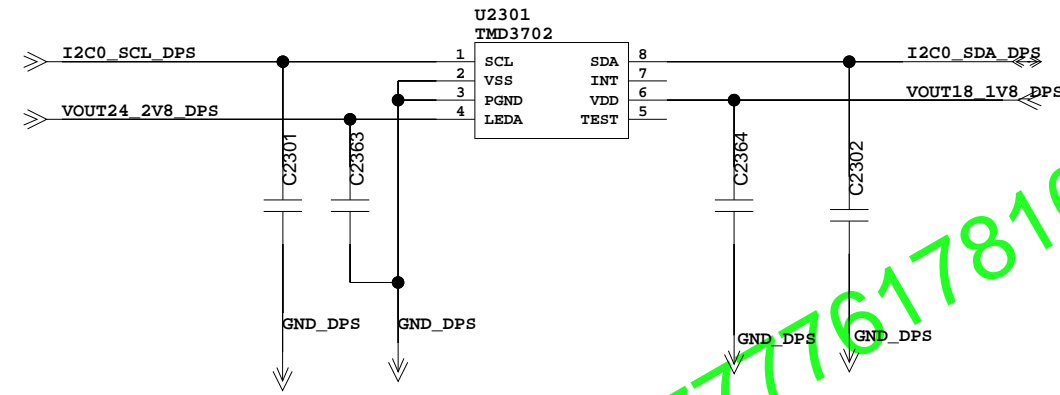
D

D

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The type and specification of the components refer to the BOM

23. DPS

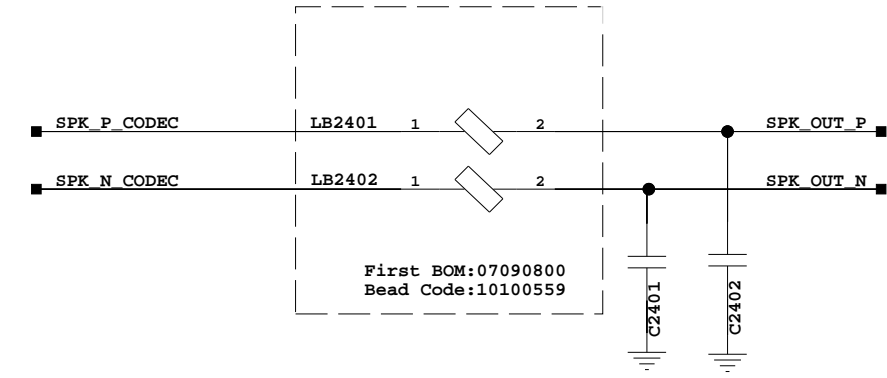


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| | |
|--------|----------------|
| TP2301 | I2C0_SCL_DPS |
| TP2302 | I2C0_SDA_DPS |
| TP2303 | VOUT24_2V8_DPS |
| TP2304 | VOUT18_1V8_DPS |
| TP2305 | GND_DPS |

The type and specification of the components refer to the BOM

24. SPK_PA

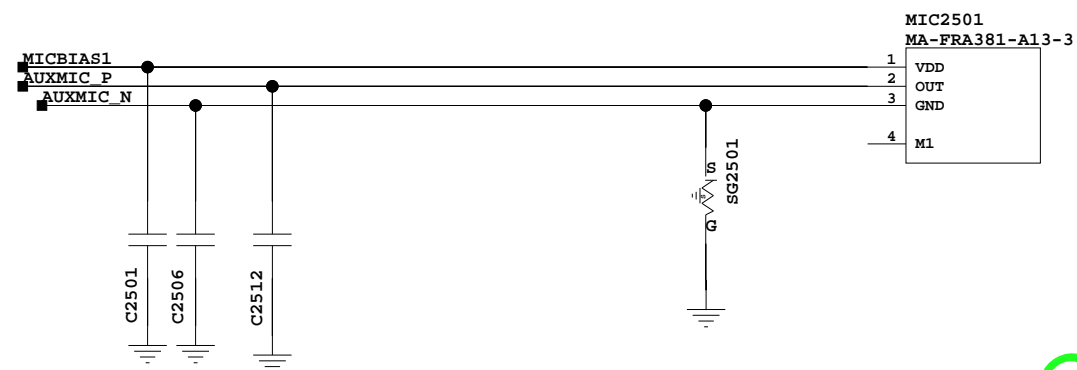


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The type and specification of the components refer to the BOM

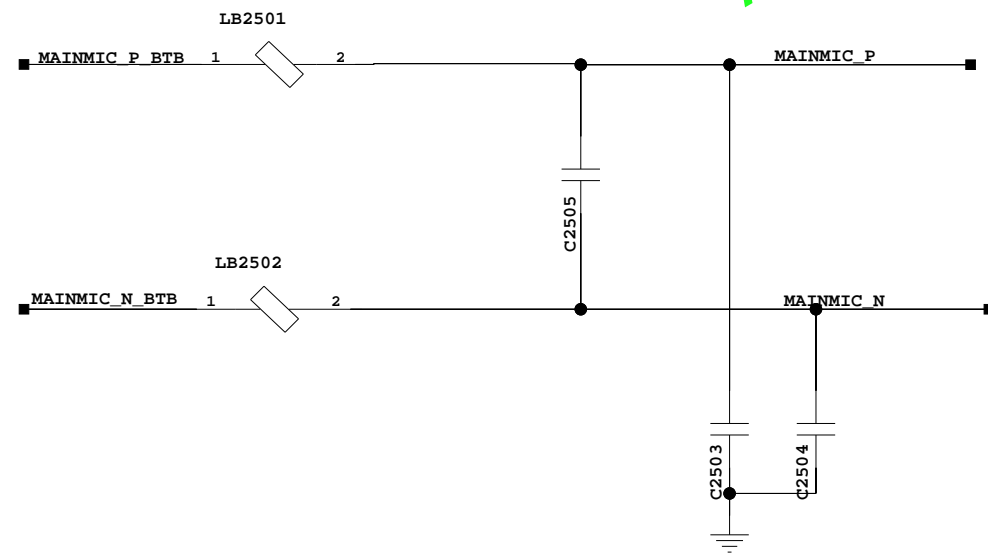
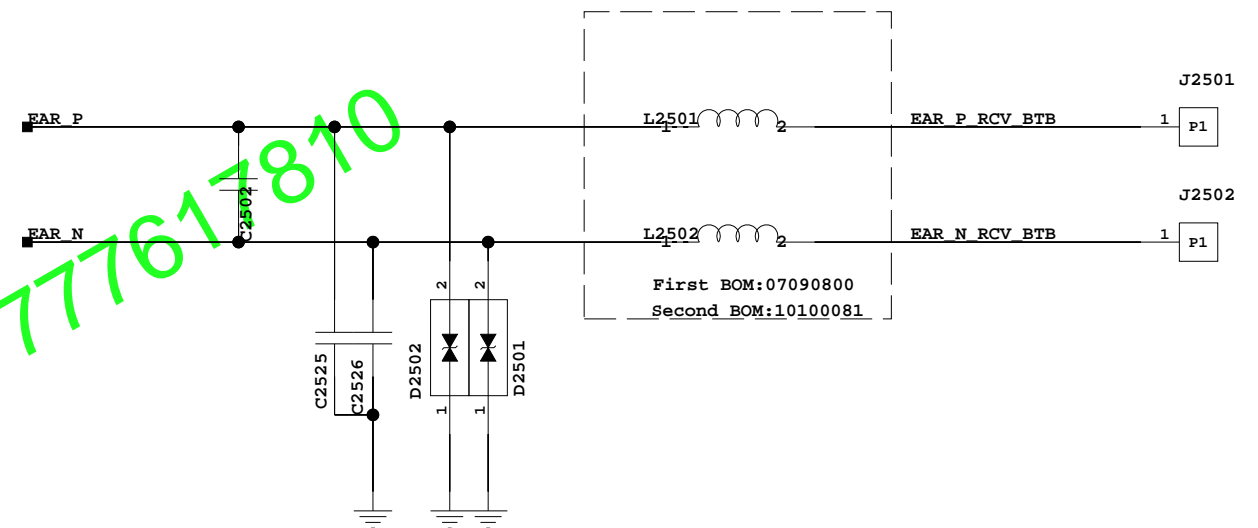
25. MIC/RCV

Second MIC



CAD note: 1, MIC need differential trace
2, MIC GND pad need use cycle via to GND net.

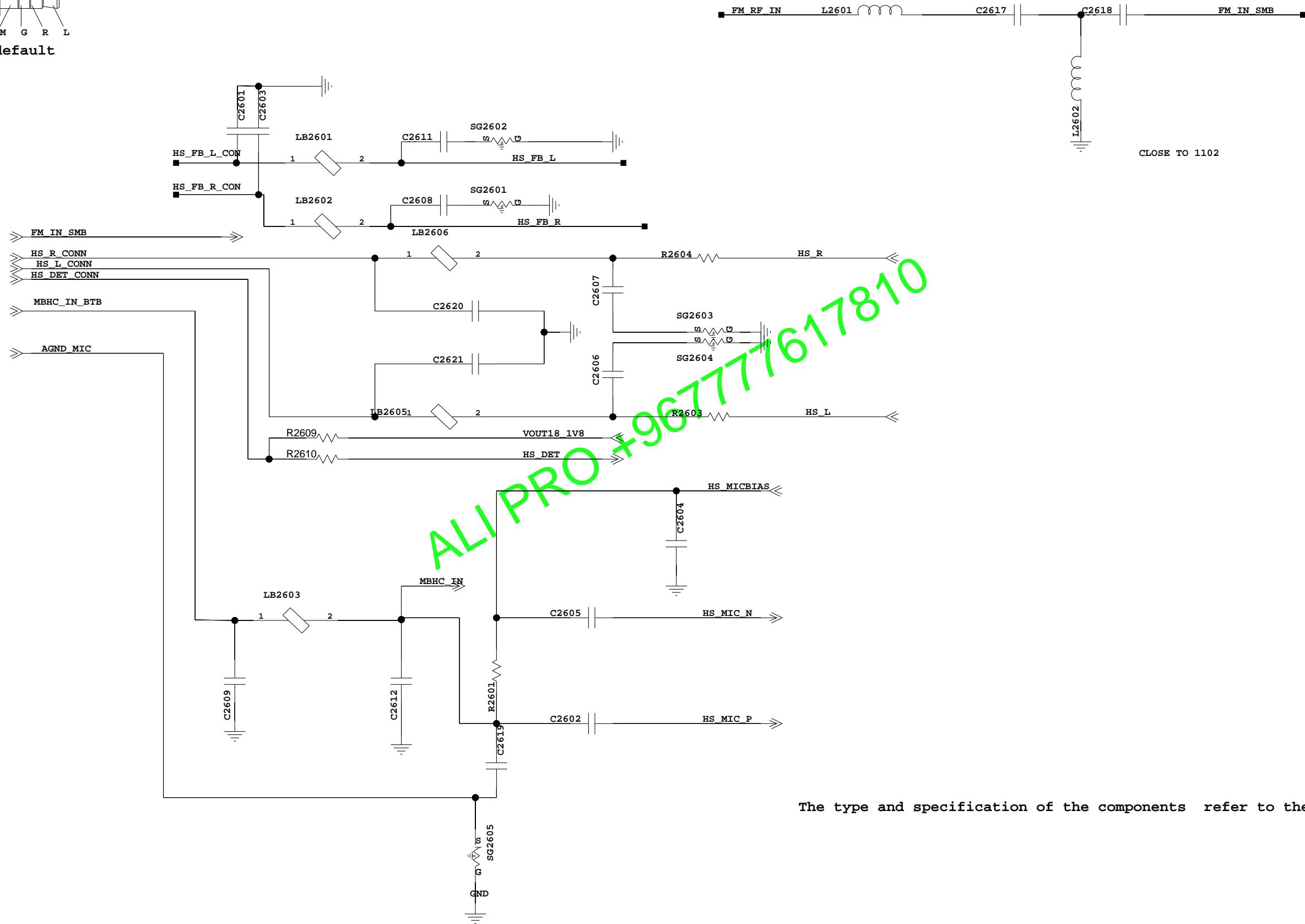
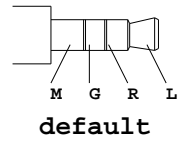
RCV



The type and specification of the components refer to the BOM

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26. Headphone

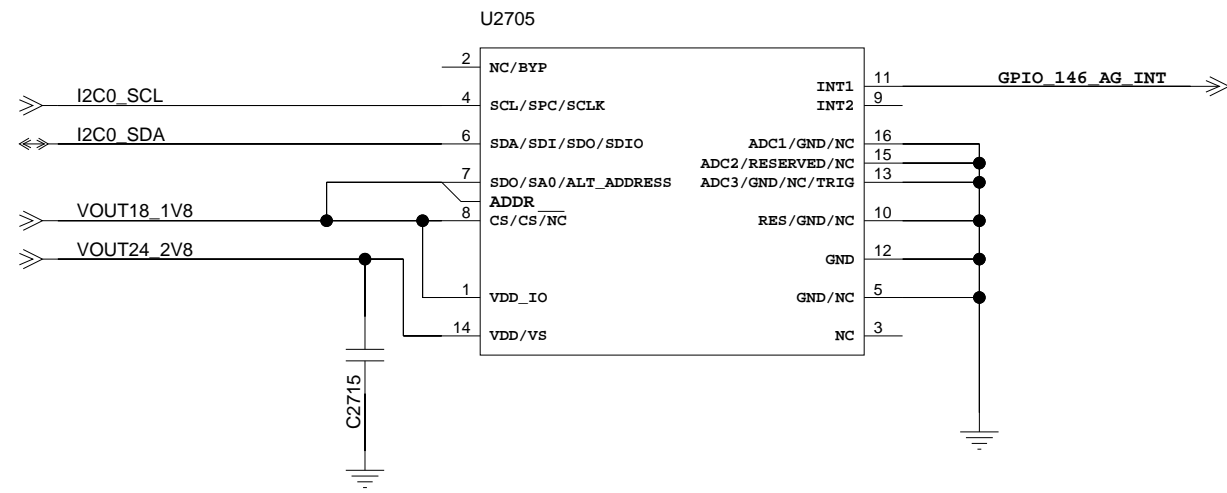


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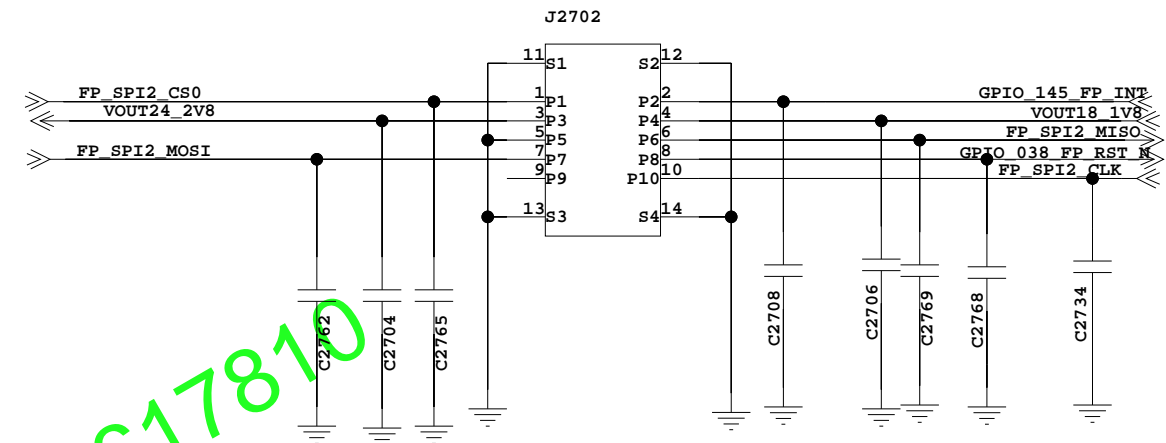
The type and specification of the components refer to the BOM

27. X-Sensor

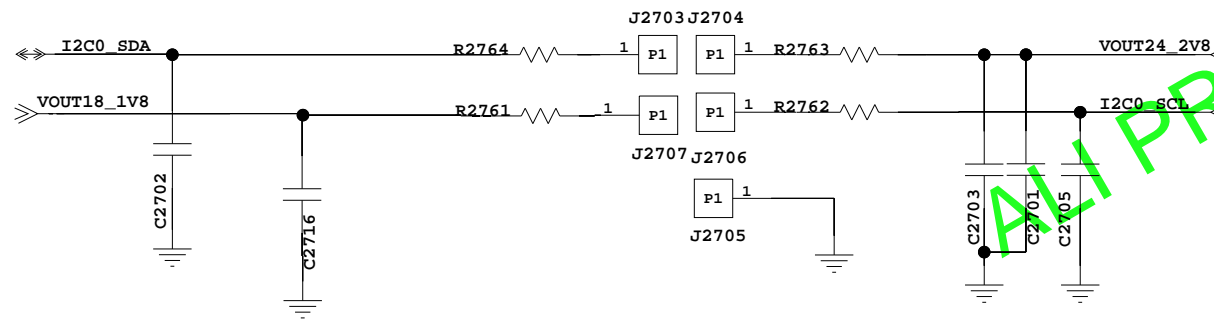
Accelerometer



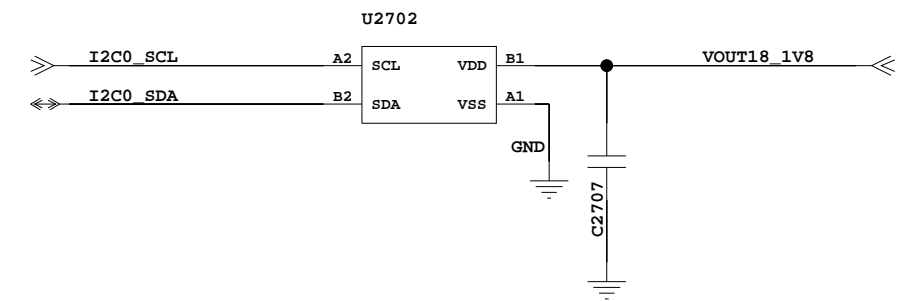
FingerPrint BTB



PROXIMITY Sensor



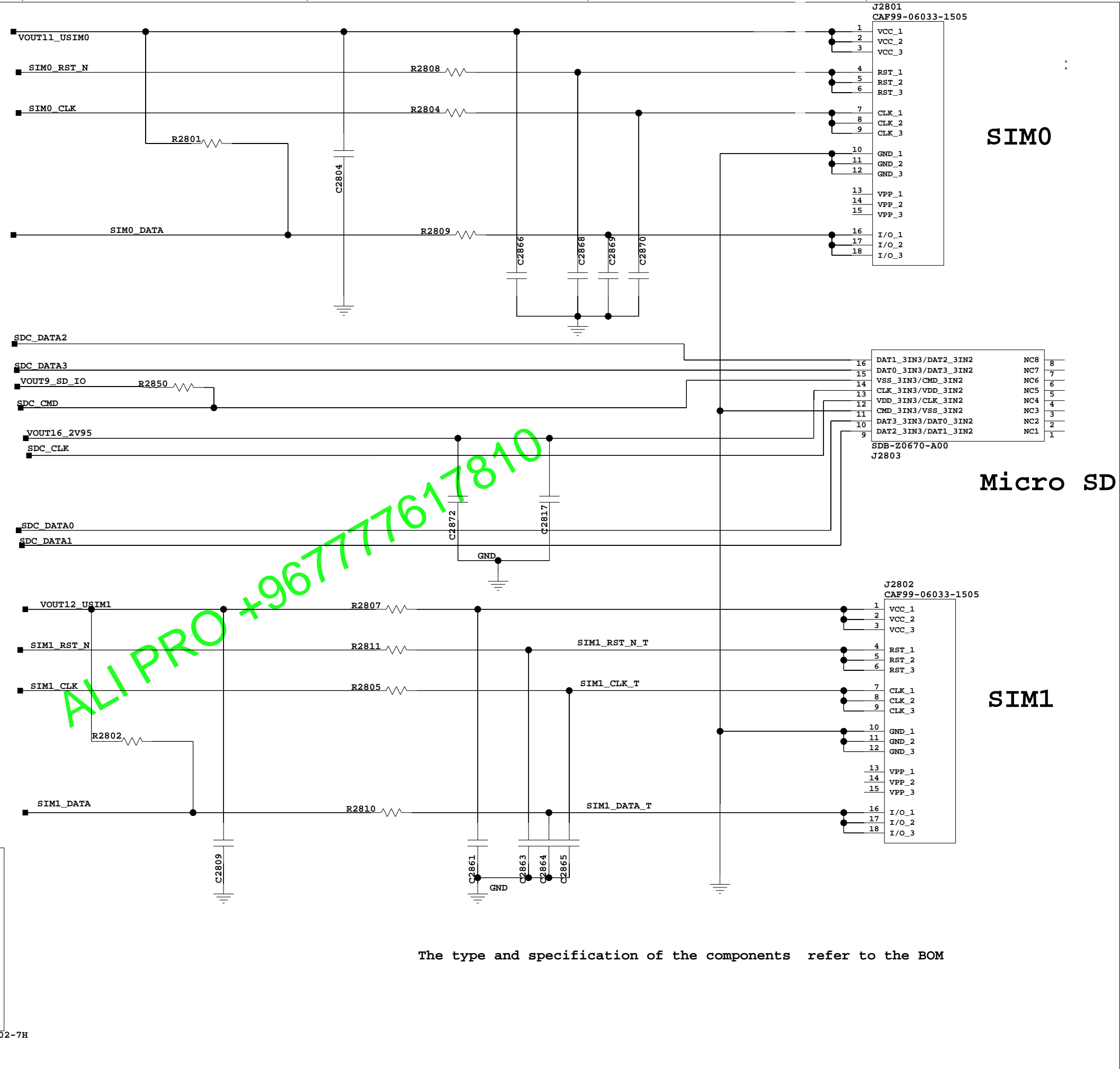
Compass



The type and specification of the components refer to the BOM

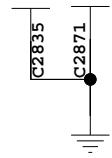
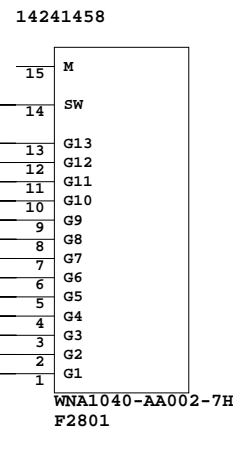
28.SIM/uSD Card

う鯨 サ yok



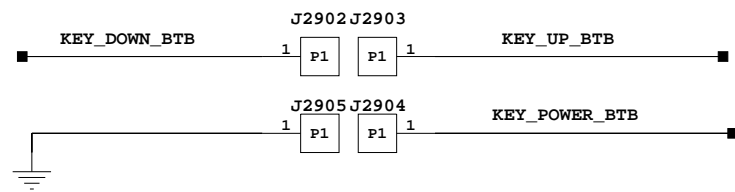
The type and specification of the components refer to the BOM

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29. LED/Key

KEY BTB

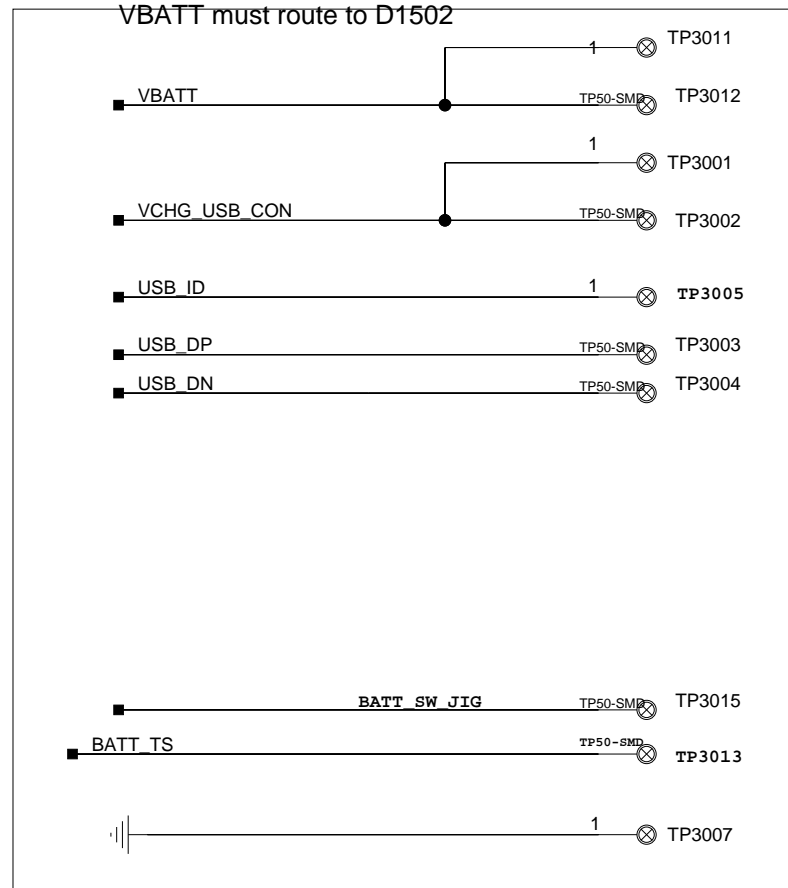


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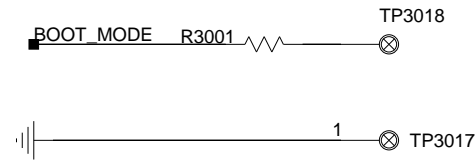
The type and specification of the components refer to the BOM

30. Test Points/Shields

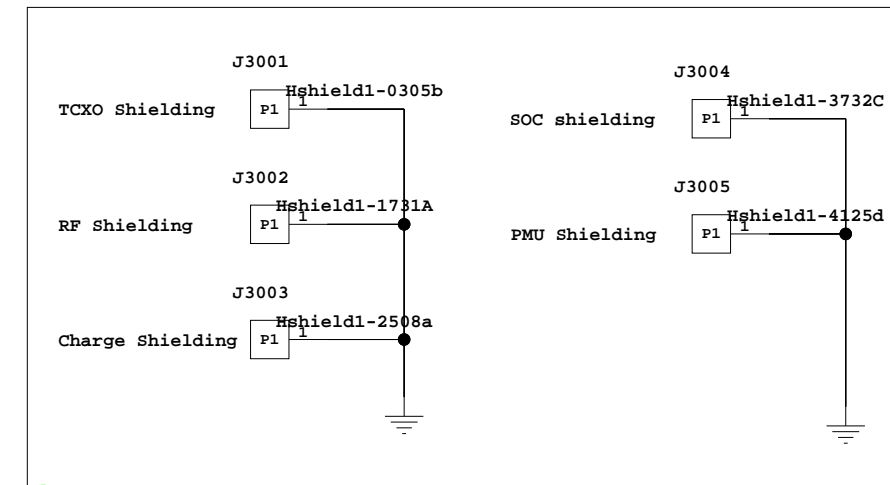
CBT/PT



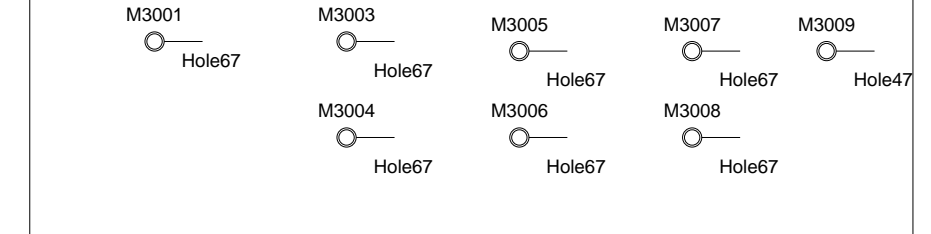
BOOT MODE



Shielding



HOLE

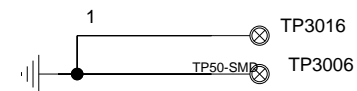


FUNCTION TEST

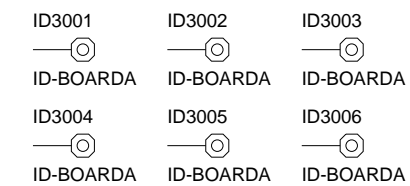
LCD BL

MICBIAS

GND



MARK POINT



The type and specification of the components refer to the BOM

31.RF Interface

RFIC IQ

CH0 RXA I
 CH0 RXA O
 CH1 RXA I
 CH1 RXA O

CH0 RXB I
 CH0 RXB O
 CH1 RXB I
 CH1 RXB O

CH0 TX I P
 CH0 TX I N
 CH0 TX O P
 CH0 TX O N

CH0 MRX I
 CH0 MRX O

POWER

VBAT SYS
 VBATT

VOUT2 1V8
 VOUT3 1V8
 VOUT1 1V09
 VREF RF

VOUT14 2V85
 VOUT28 1V8

VOUT27 1V8
 VOUT23 3V2

NC Interface

VOUT18 1V8

BTFM I2S2 CLK
 BTFM I2S2 MOSI
 BTFM I2S2 MISO
 BTFM I2S2 SYNC

GPIO 229 BFGN WAKEUP_AP
 H1102 UART4 RTS N
 H1102 UART4 CTS N
 H1102 UART4 TX
 H1102 UART4 RX
 CDMA GPS SYNC

LTE INACTIVE

AP GPS REF_CLK
 LTE TX ACTIVE
 GPIO 030 H1102 PWRON
 CLK32 BFGN
 GPIO 211 WIFI WAKEUP_AP

GPIO Interface

RF GPIO04 APT EN APT
 RF GPIO05 CHO APT PDM
 RF GPIO06 APT BP

RF GPIO07 DPDT DPDT

GPIO 207 ANT DET 0 ANT_DETECT

MIPI Interface

RFIC0 MIPI CLK
 RFIC0 MIPI DATA

FE0 MIPI CLK
 FE0 MIPI DATA

FE1 MIPI CLK
 FE1 MIPI DATA

WL SDIO CLK
 WL SDIO CMD
 WL SDIO DATA0
 WL SDIO DATA1
 WL SDIO DATA2
 WL SDIO DATA3

ANT Interface

GSM

RF AUXDAC0

GSMK PH0

CLK

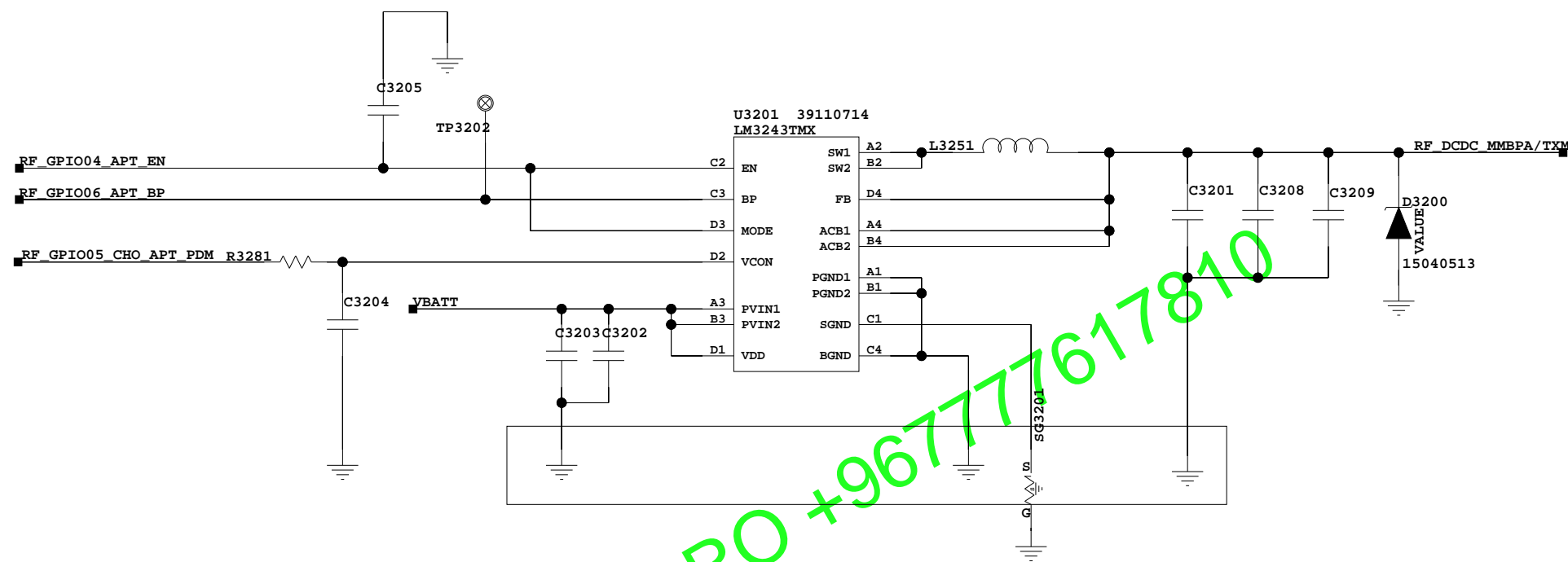
RF0 CLK 38M4

HKADC

HKADC IN4 PA TEMP 1

The type and specification of the components refer to the BOM

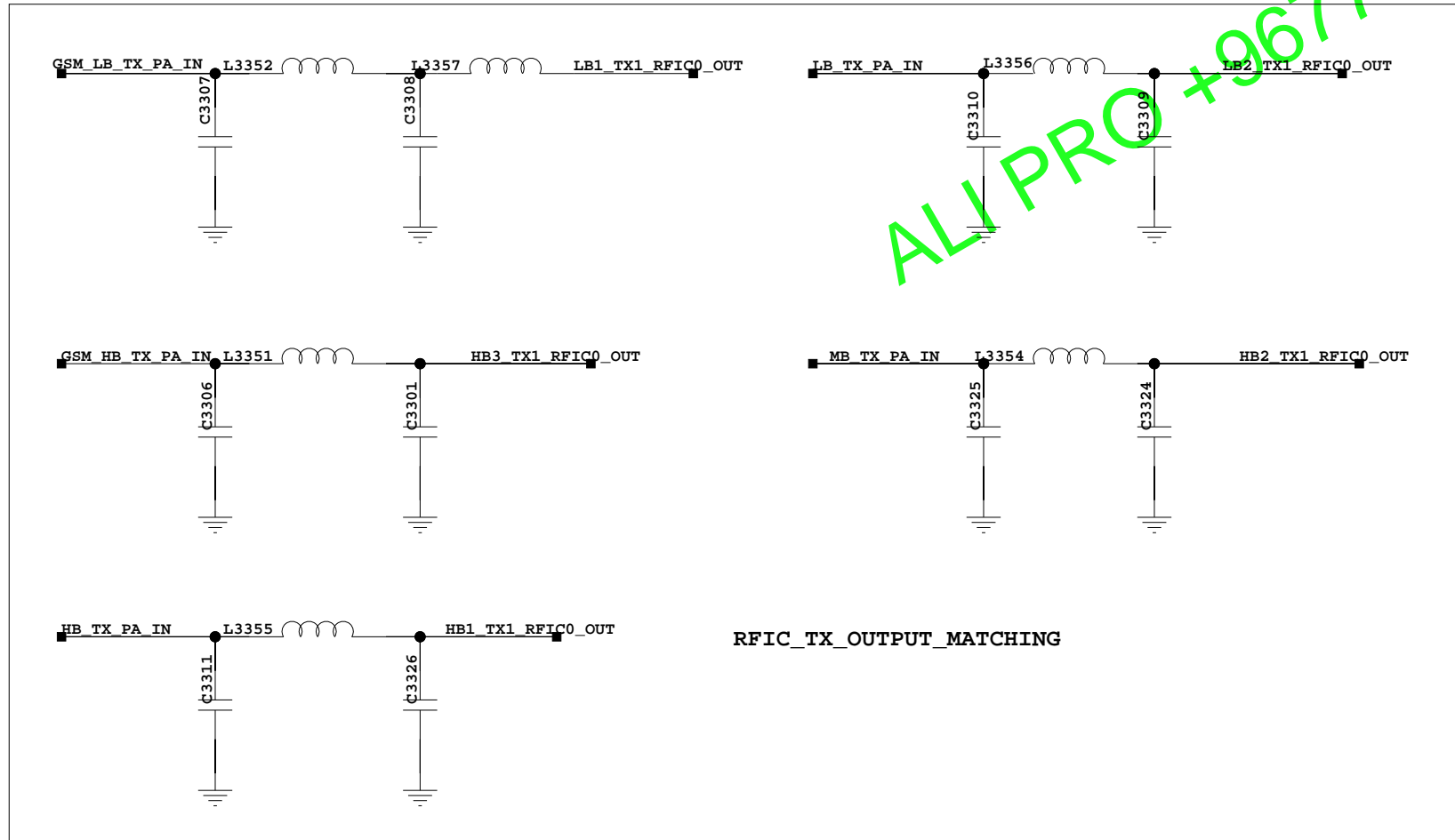
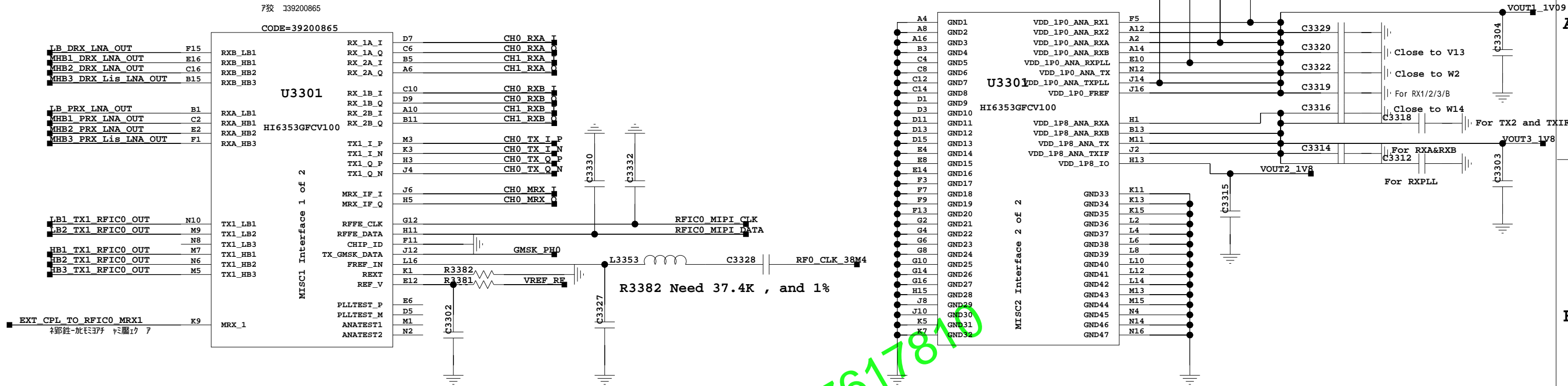
32 APT_LM3243



1. DCDCの出力にPAキタサ、ケ総サツオの出力ノイソキヨ
2. イスマ ハアマネセユケ ホネムケケワD3200「ヤヤルミヌミヘラ」マケ AコハTXMケケオ
3. イスマ ハアソツヌヌマ ソ忻欣ハDCDCケ SMケケオ醋ア「ヤミ睡」ヨ、ヘイチ ス3A

The type and specification of the components refer to the BOM

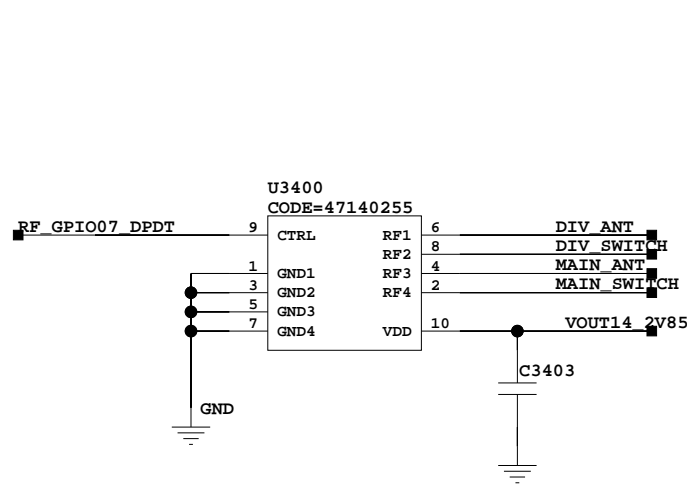
33.RFIC0_Hi6353



The type and specification of the components refer to the BOM

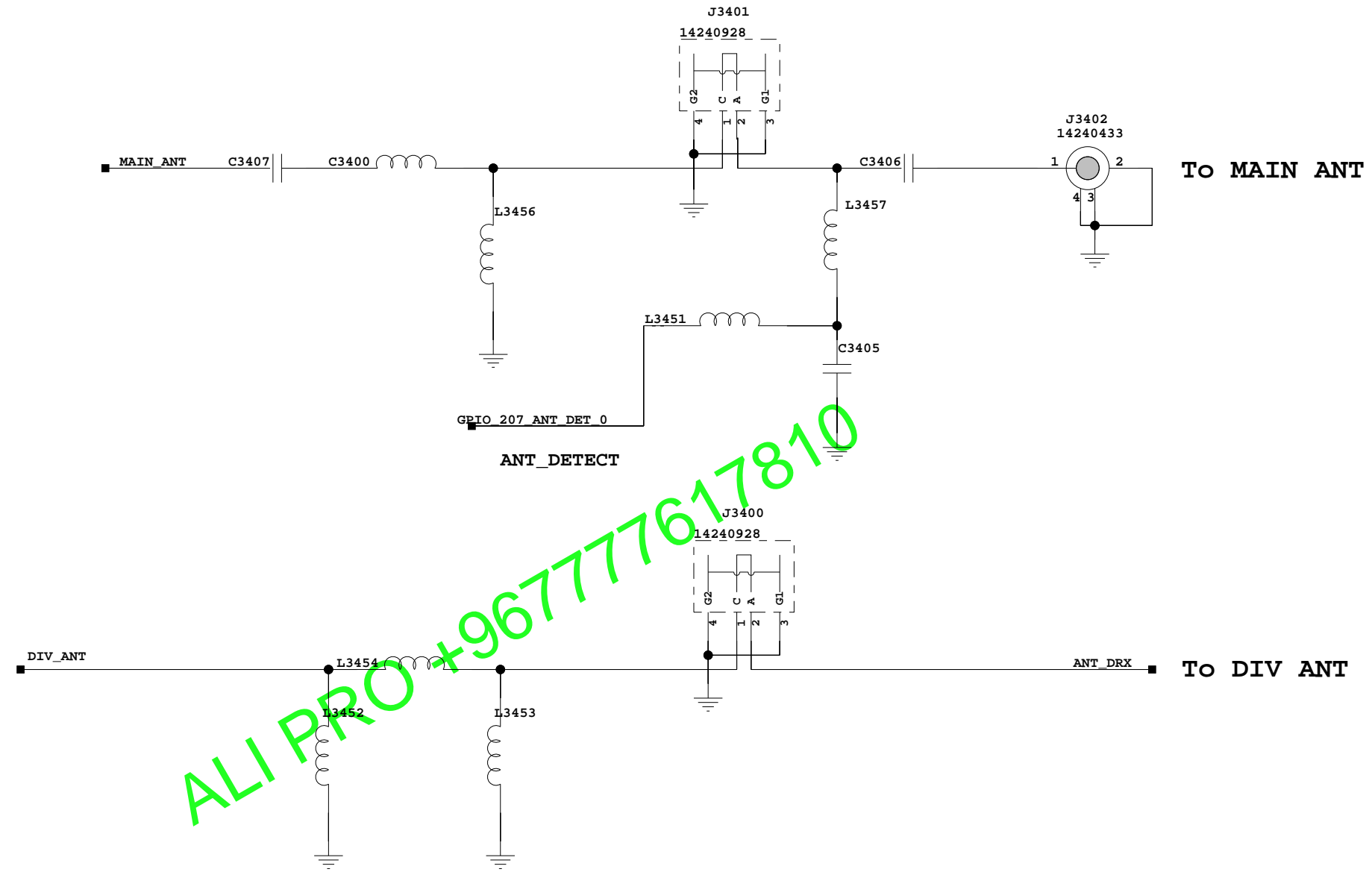
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34 DPDT_Connector



U3400(47140255) Truth Table

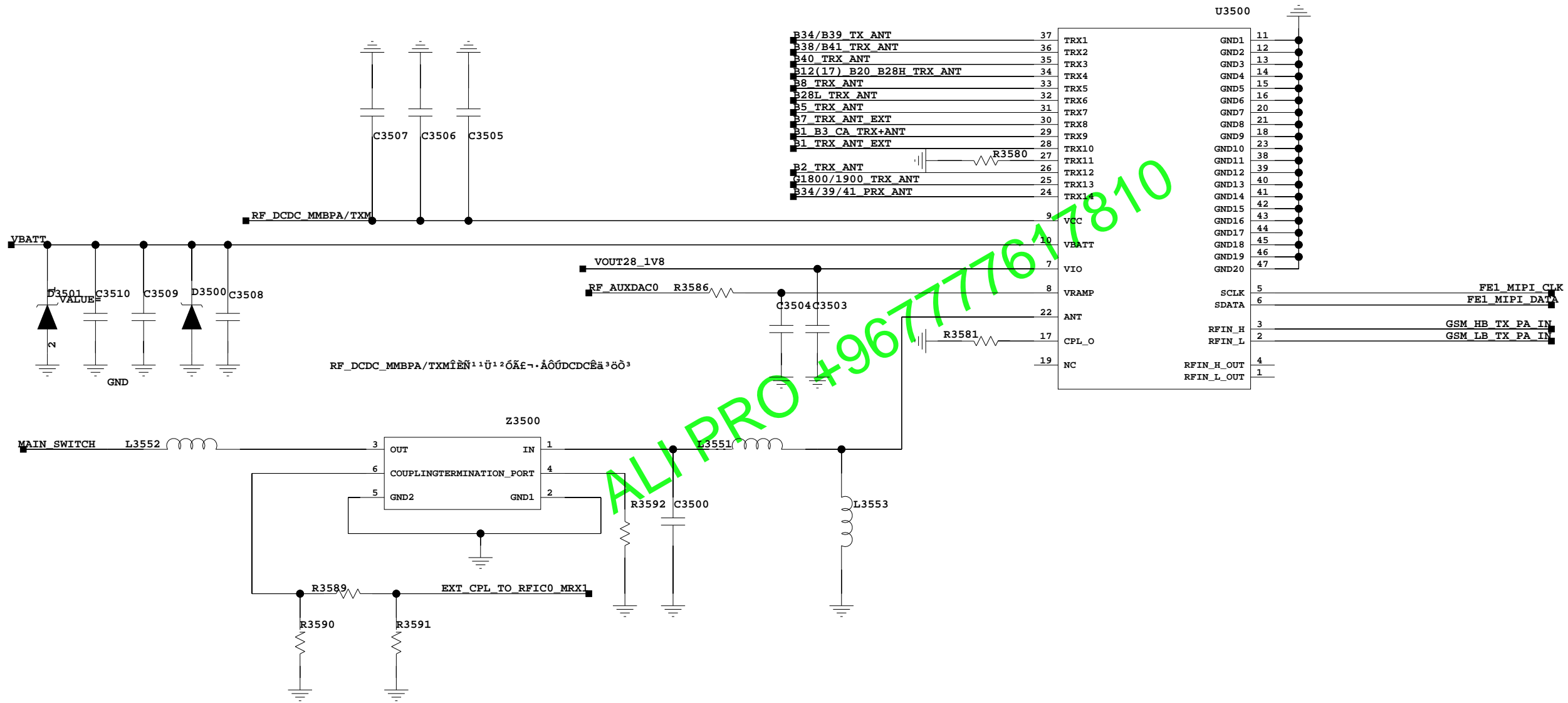
| CTRL1 | State |
|-------|------------------|
| 0 | RF1-RF2, RF3-RF4 |
| 1 | RF1-RF4, RF3-RF2 |



The type and specification of the components refer to the BOM

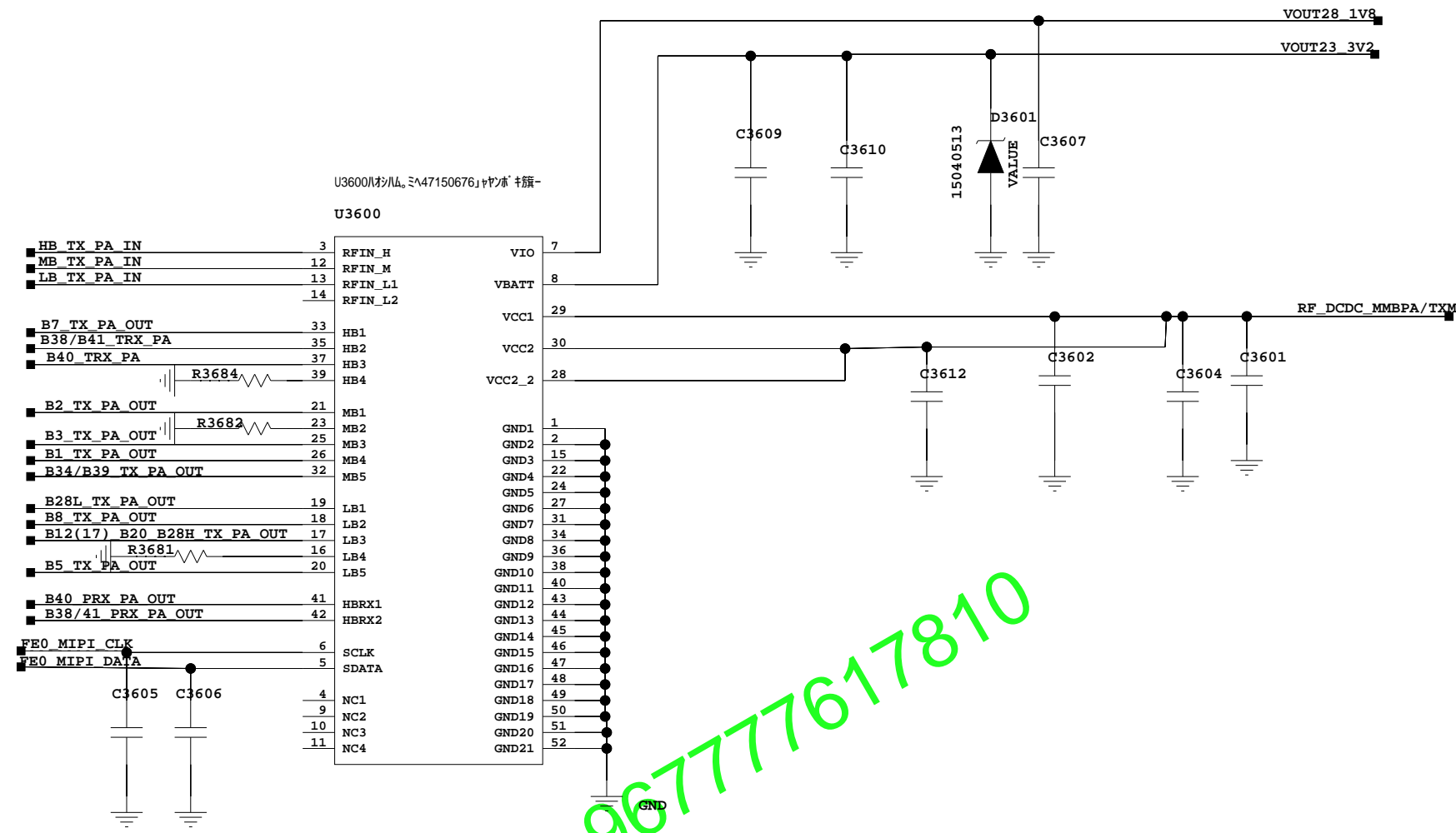
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35. TXM

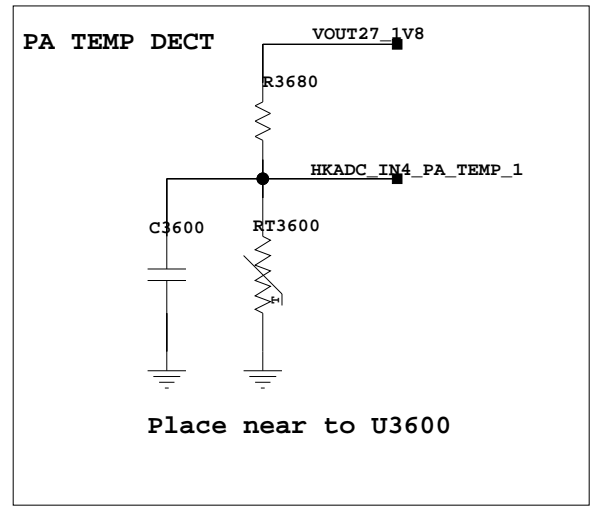


The type and specification of the components refer to the BOM

36 MMBPA



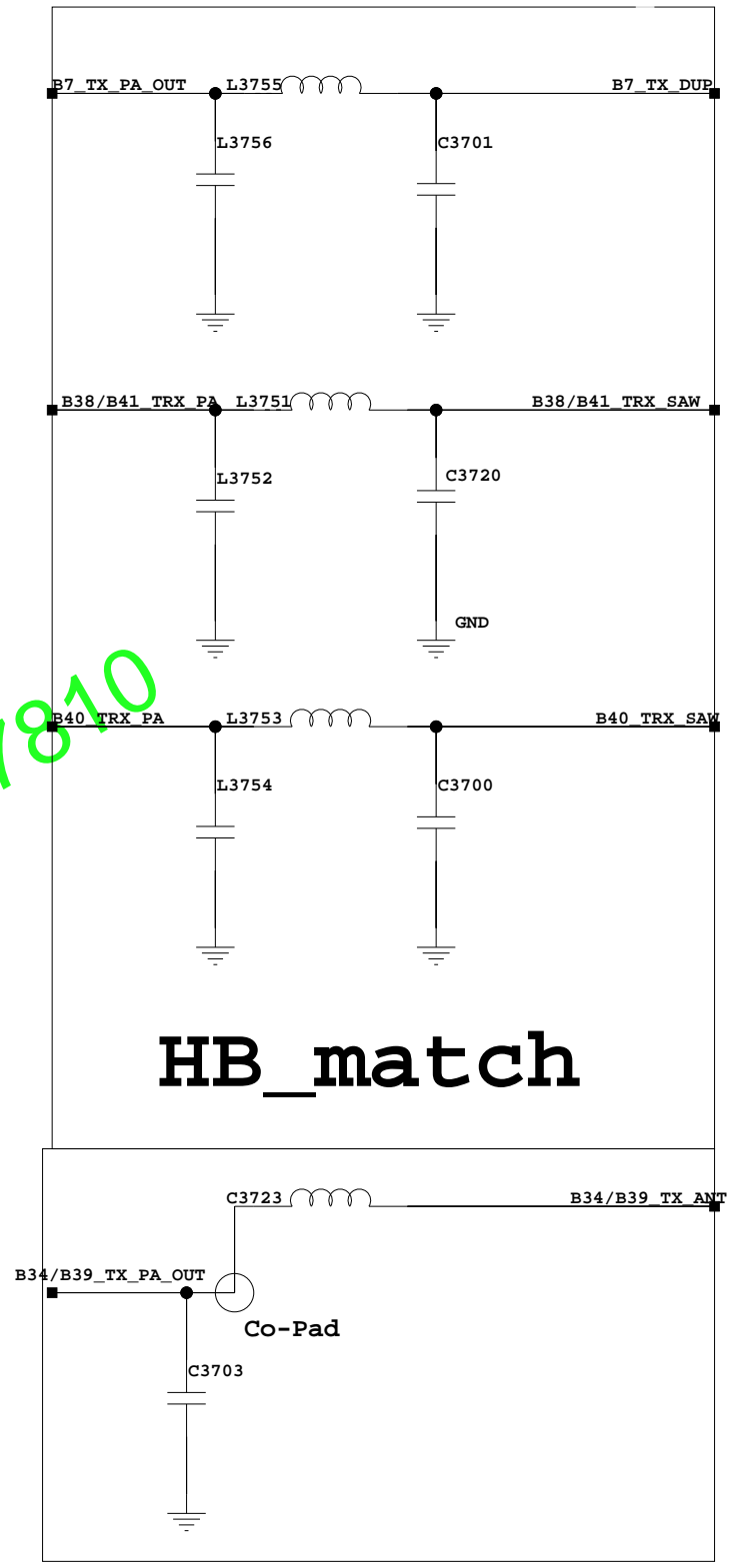
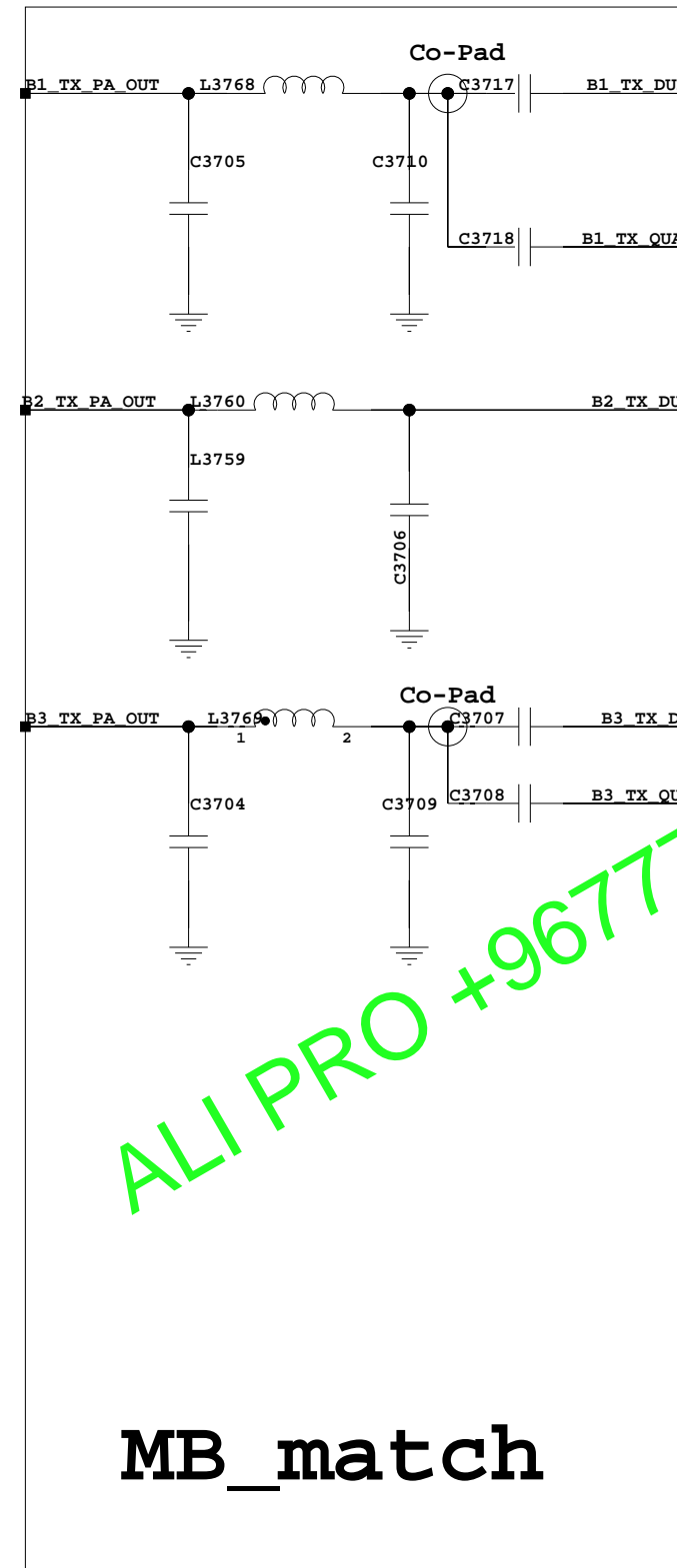
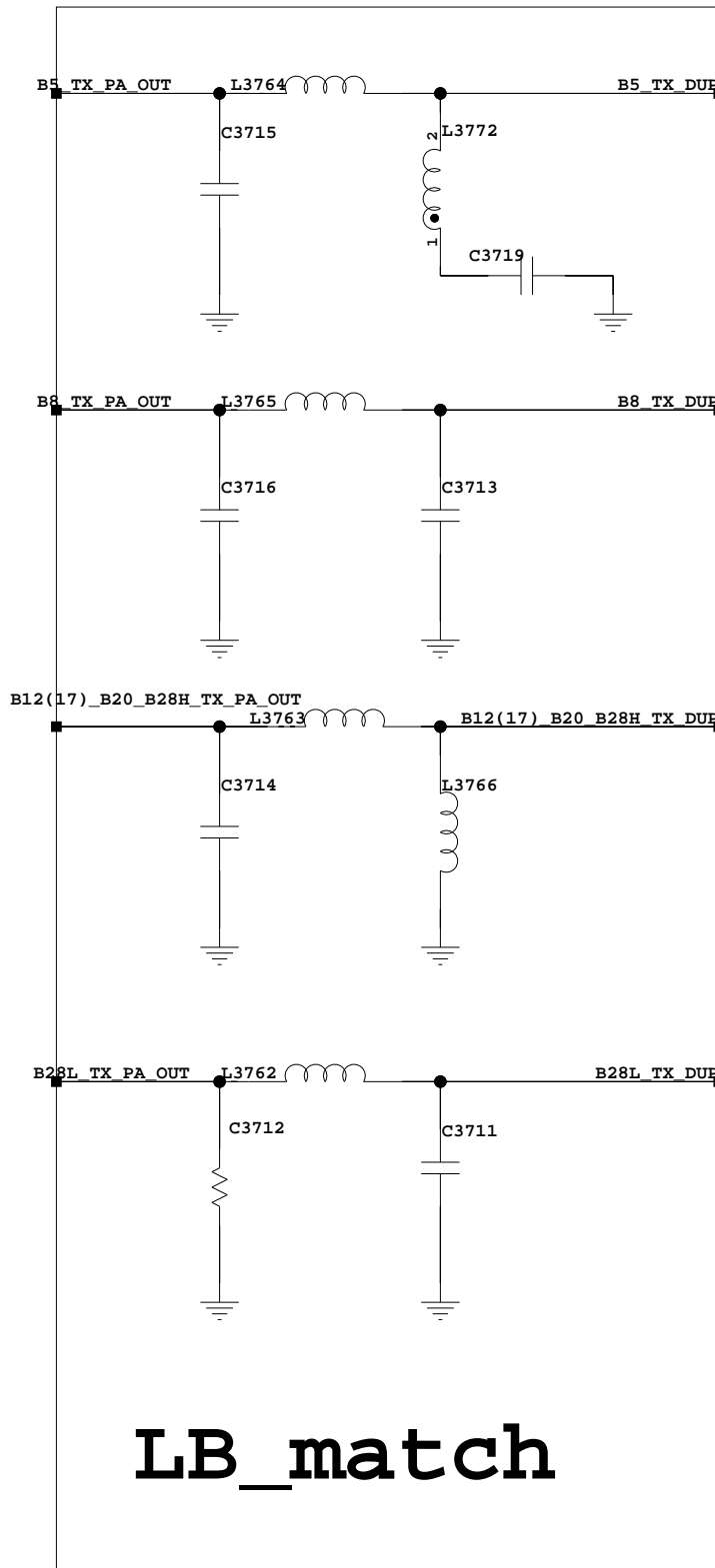
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1. 部品番号を記載 A) 部品仕様書 及び PCB 設計書 及び 部品リスト EPA_TEMP_DET2;
2. 部品名 EPA_TEMP_DET2, 部品仕様書 Sub-TMG 及び 部品リスト HKADC_IN9.

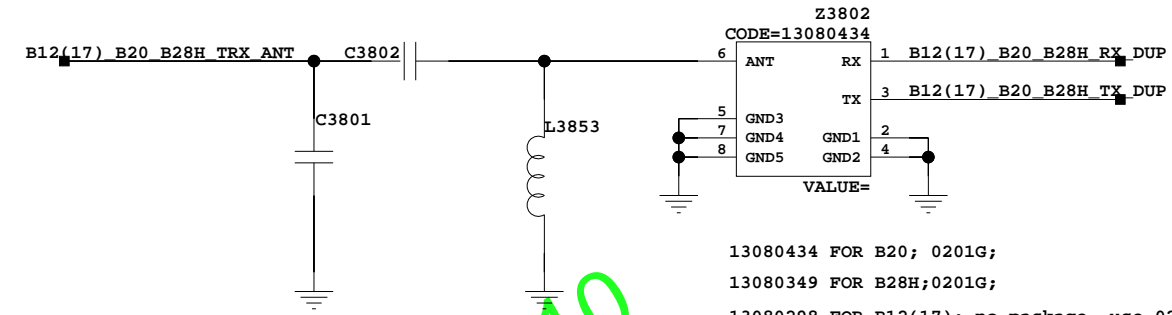
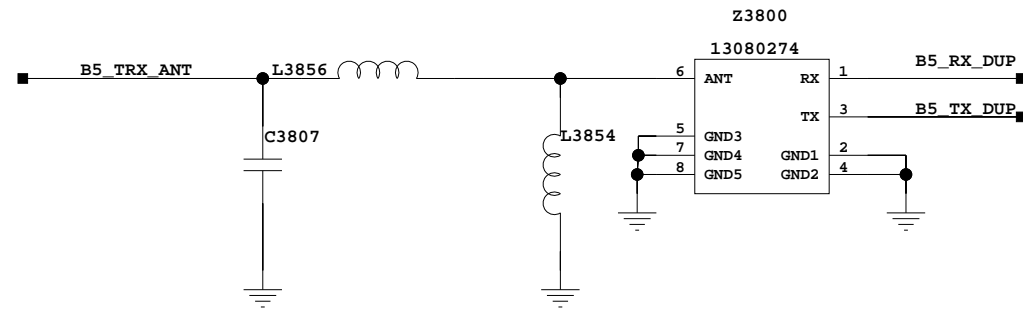
The type and specification of the components refer to the BOM

37.TX_Loadpull

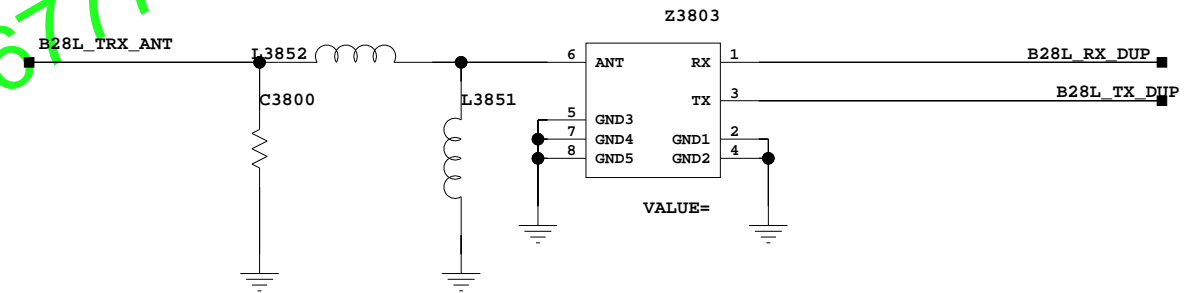
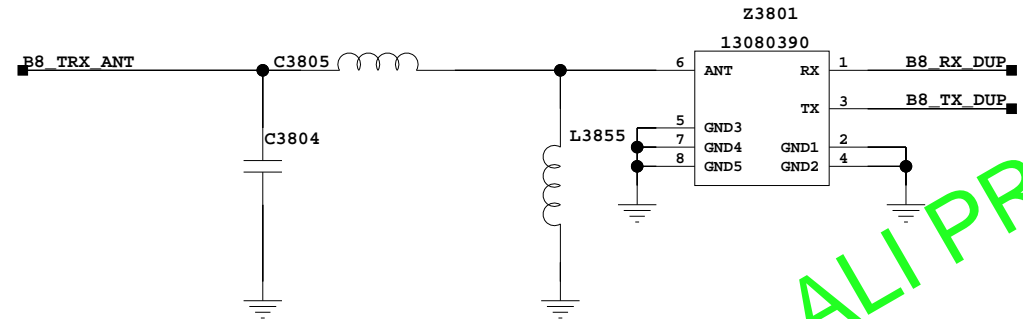


The type and specification of the components refer to the BOM

38 TRX_LB_1



13080434 FOR B20; 0201G;
13080349 FOR B28H;0201G;
13080298 FOR B12(17): no package, use 0201H temporarily;check with DFX before product



13080348 FOR B28L- Package SFLT8-0201G

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The type and specification of the components refer to the BOM

39 TRX_LB_2

:

A

A

B

B

C

C

D

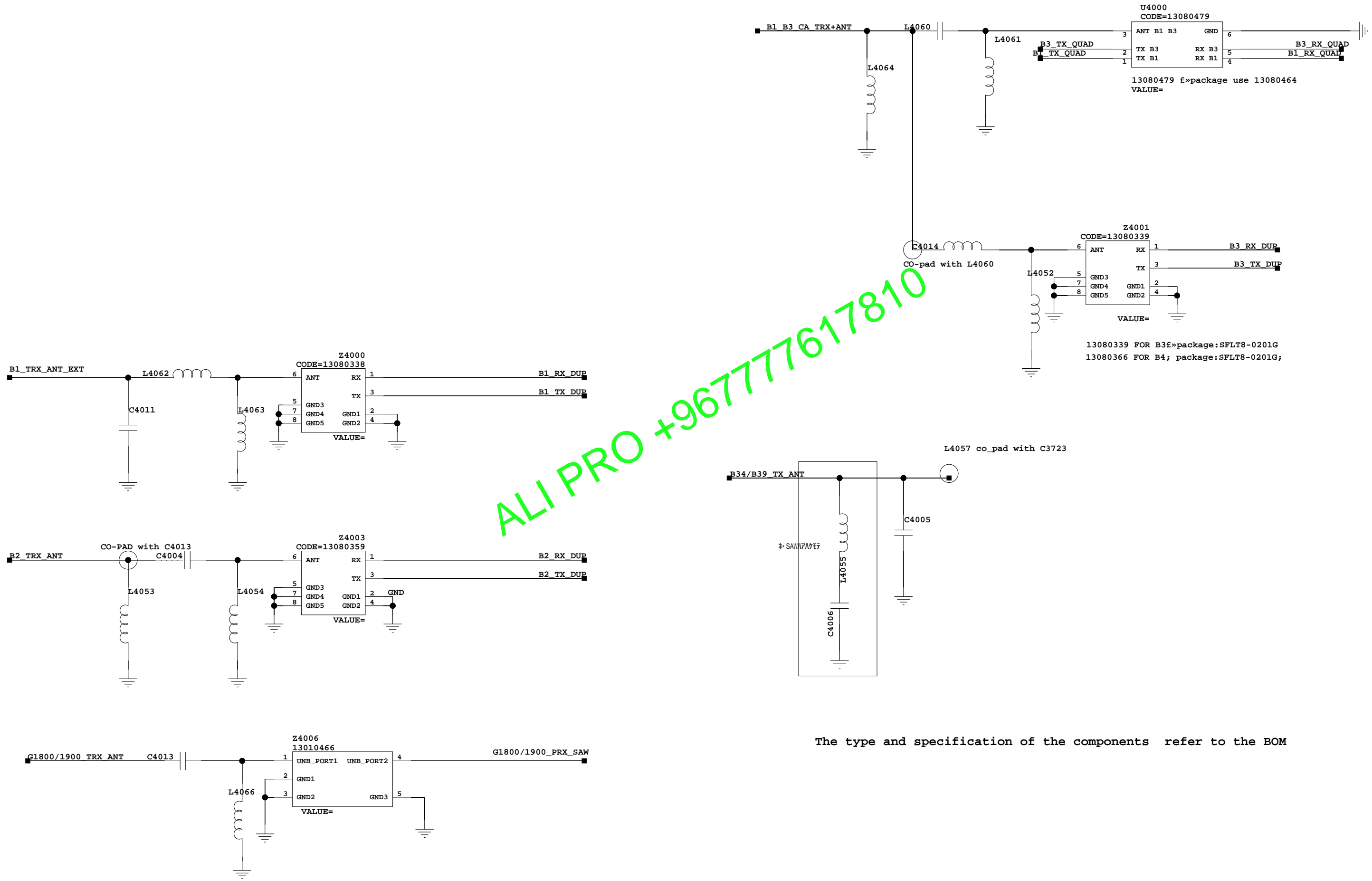
D

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The type and specification of the components refer to the BOM

39 TRX_LB_2_Reserved

40 TRX_MB_1



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The type and specification of the components refer to the BOM

41 TRX_MB_2

:

A

A

B

B

C

C

D

D

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The type and specification of the components refer to the BOM

41 TRX_MB_2_Reserved

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43. TRX_HB_2

:

A

A

B

B

C

C

D

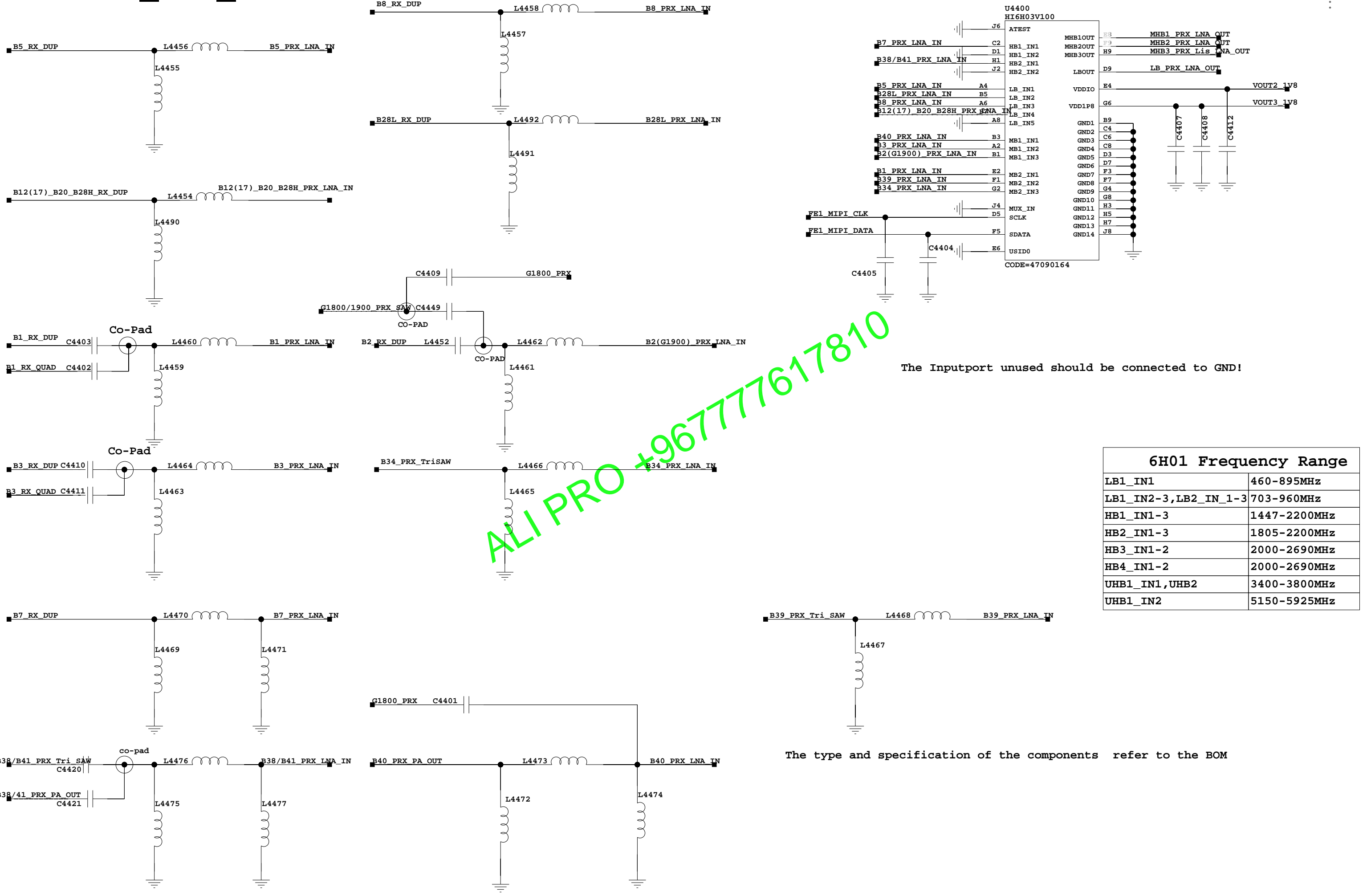
D

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The type and specification of the components refer to the BOM

43 TRX_HB_2_Reserved

44. PRX_LNA_Module



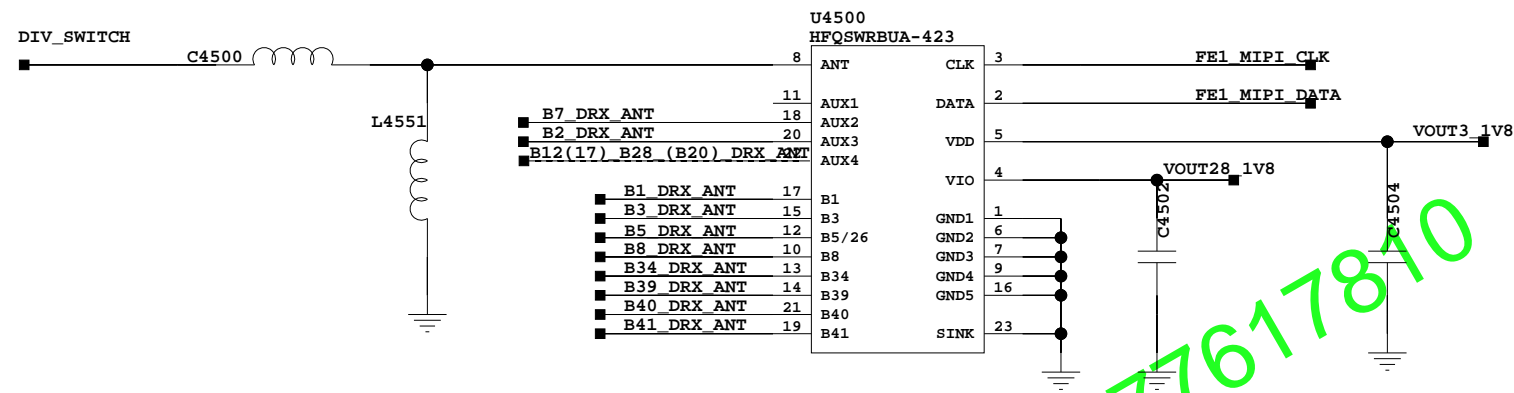
The Inputport unused should be connected to GND!

| 6H01 Frequency Range | |
|-----------------------|--------------|
| LB1_IN1 | 460-895MHz |
| LB1_IN2-3, LB2_IN_1-3 | 703-960MHz |
| HB1_IN1-3 | 1447-2200MHz |
| HB2_IN1-3 | 1805-2200MHz |
| HB3_IN1-2 | 2000-2690MHz |
| HB4_IN1-2 | 2000-2690MHz |
| UHB1_IN1, UHB2 | 3400-3800MHz |
| UHB1_IN2 | 5150-5925MHz |

The type and specification of the components refer to the BOM

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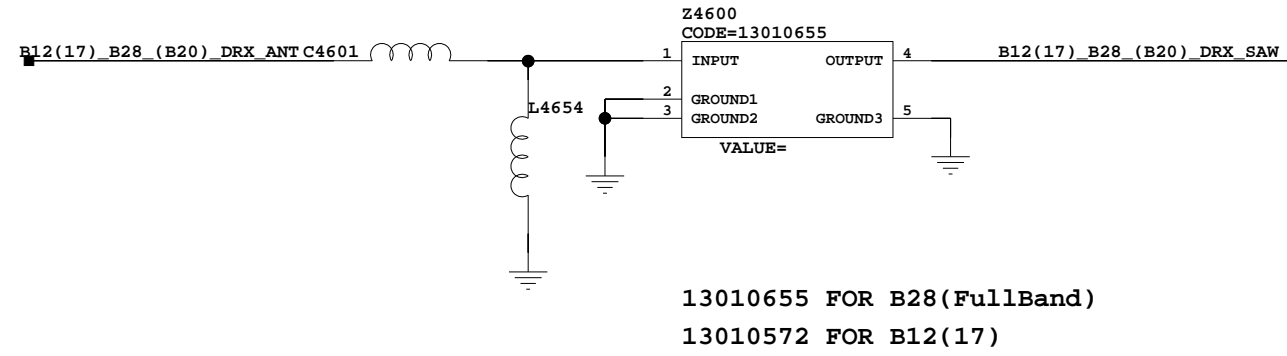
45.DRX_SWITCH



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The type and specification of the components refer to the BOM

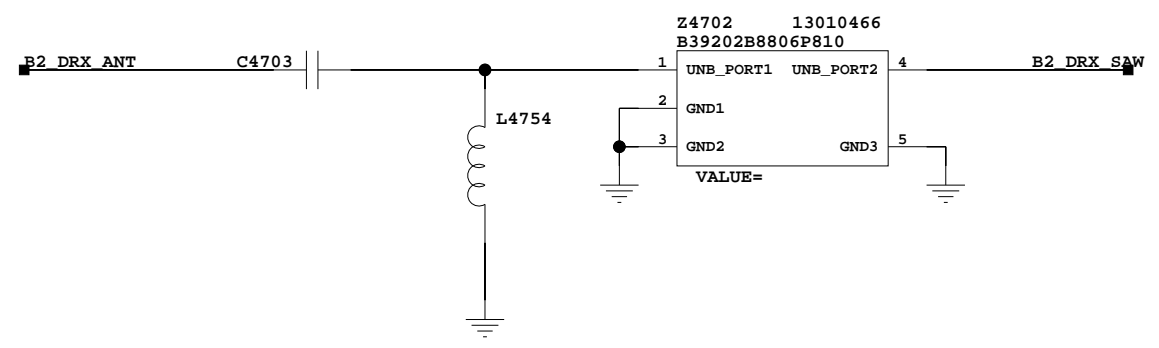
46. DRX_LB



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The type and specification of the components refer to the BOM

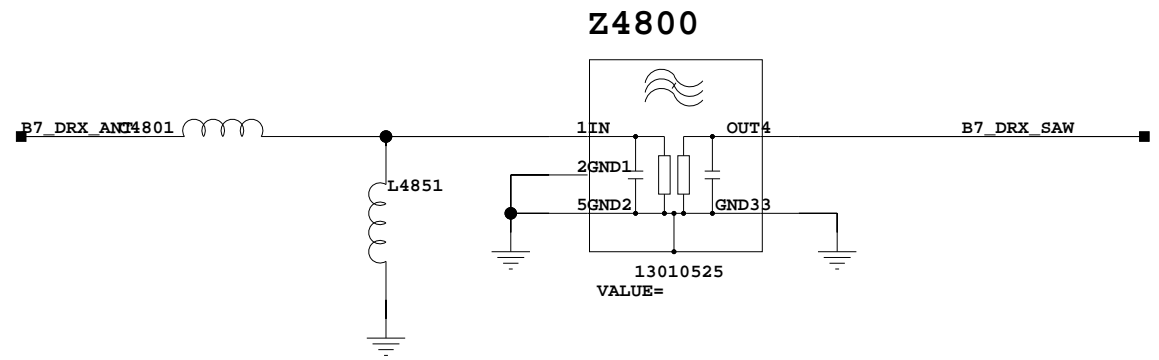
47. DRX_MB



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The type and specification of the components refer to the BOM

48. DRX_HB

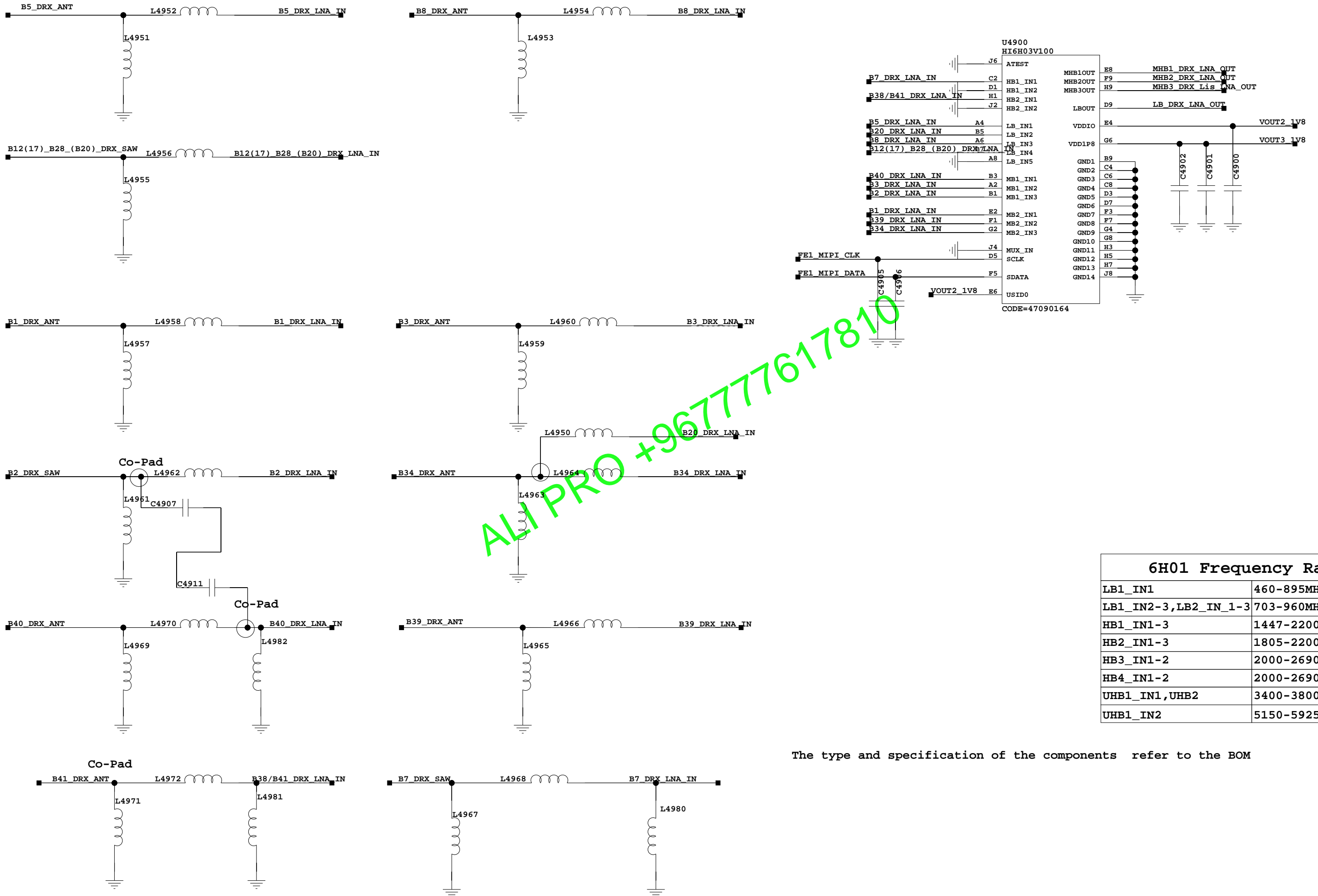


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The type and specification of the components refer to the BOM

49. DRX_LNA_Module

The Inputport unused should be connected to GND!



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| 6H01 Frequency Range | |
|-----------------------|--------------|
| LB1_IN1 | 460-895MHz |
| LB1_IN2-3, LB2_IN_1-3 | 703-960MHz |
| HB1_IN1-3 | 1447-2200MHz |
| HB2_IN1-3 | 1805-2200MHz |
| HB3_IN1-2 | 2000-2690MHz |
| HB4_IN1-2 | 2000-2690MHz |
| UHB1_IN1, UHB2 | 3400-3800MHz |
| UHB1_IN2 | 5150-5925MHz |

1

2

3

4

5

6

50. Reserved

:

A

A

B

B

C

C

D

D

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The type and specification of the components refer to the BOM

1

2

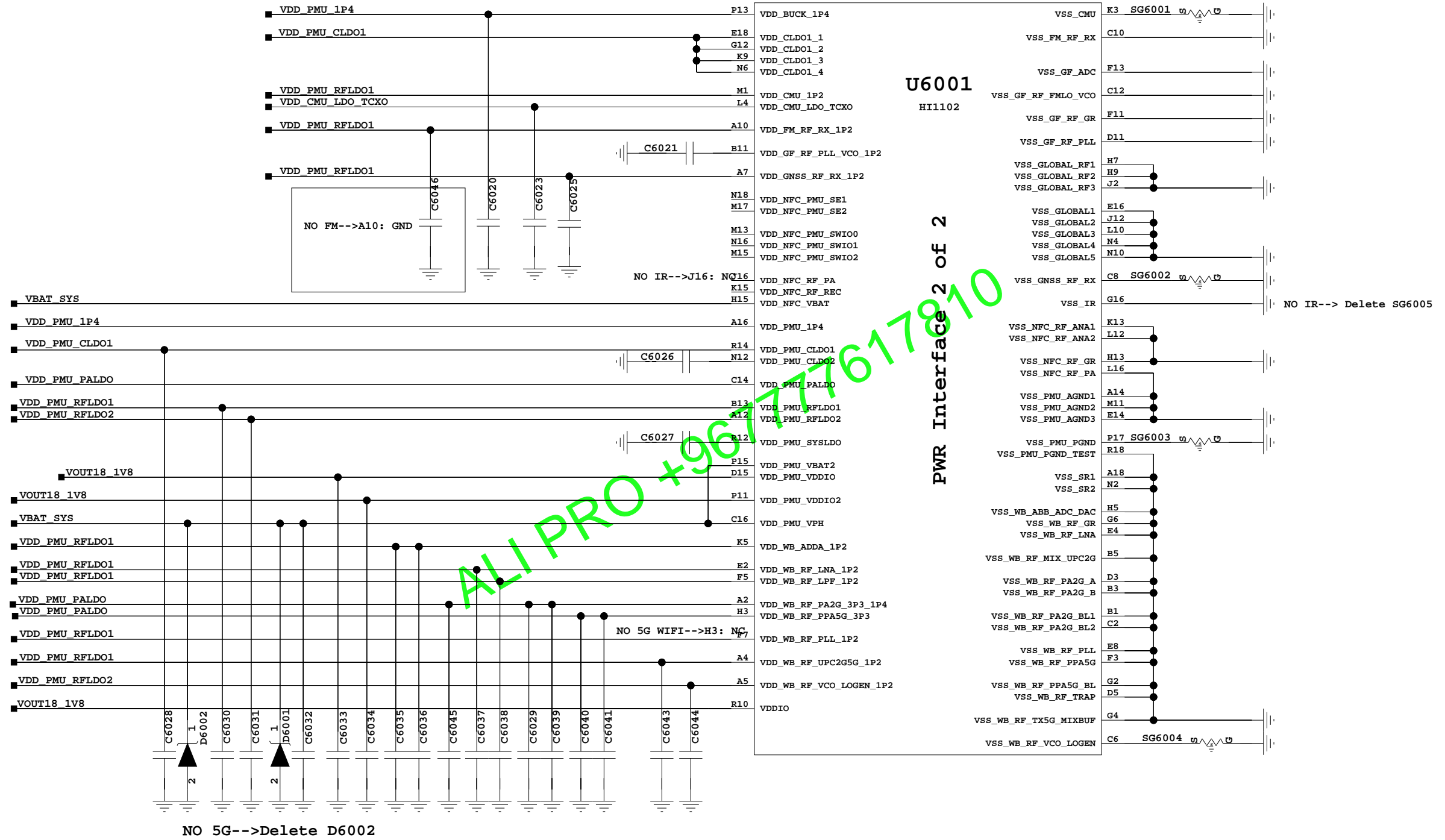
3

4

5

6

60 NC_POWER

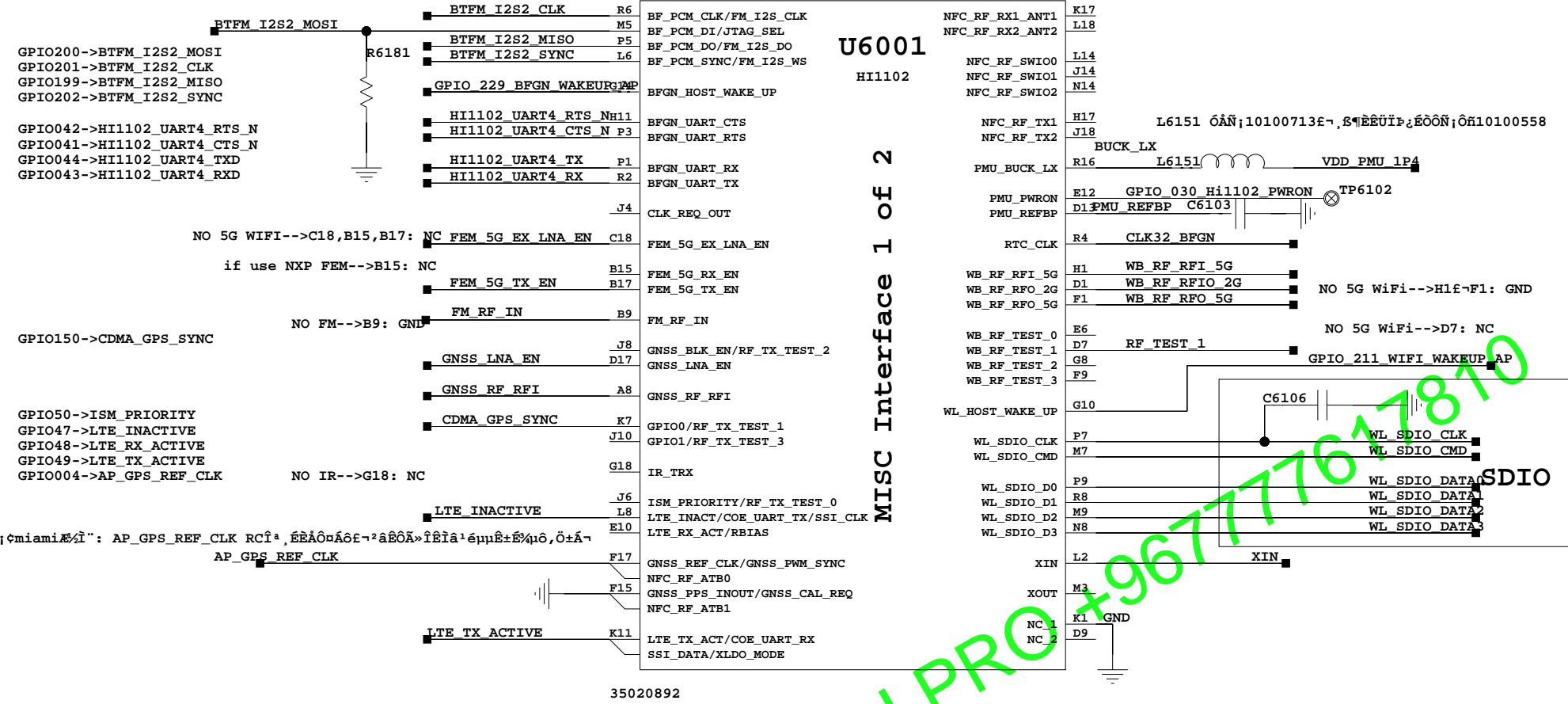


Add by Hisilicon for debug

- VOUT18_1V8
- VBAT_SYS

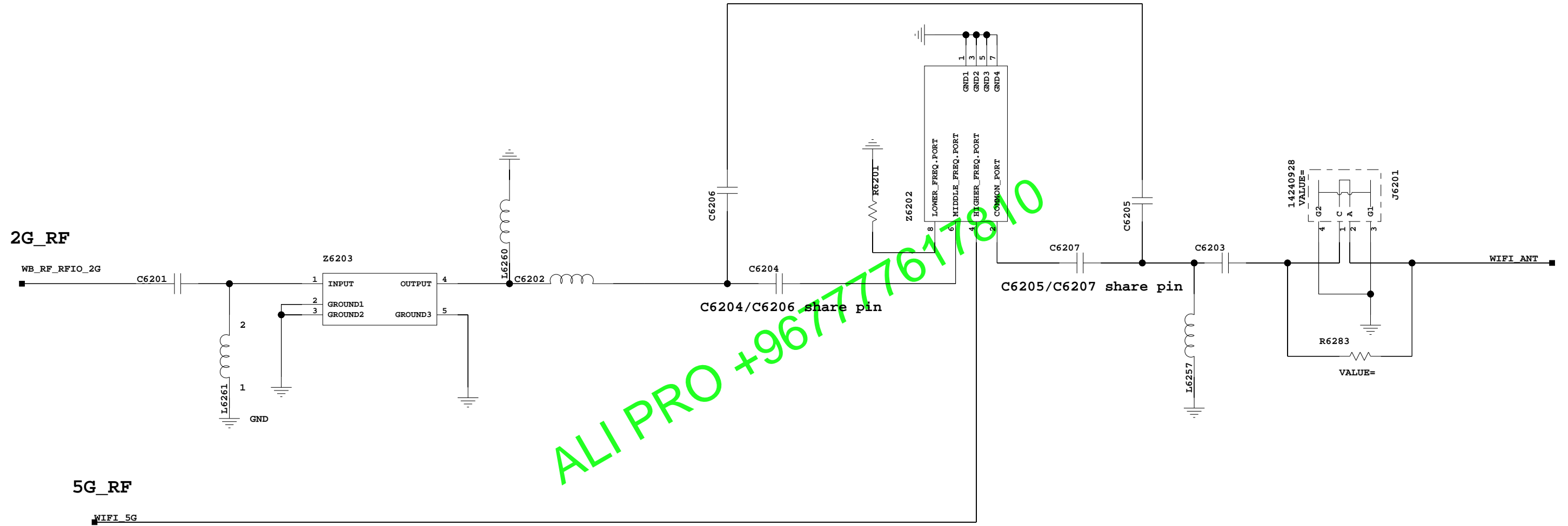
Boston, Miami: VOUT2->VOUT18_1V8
 Chicago, Dallas: VOUT2

61 NC_BB

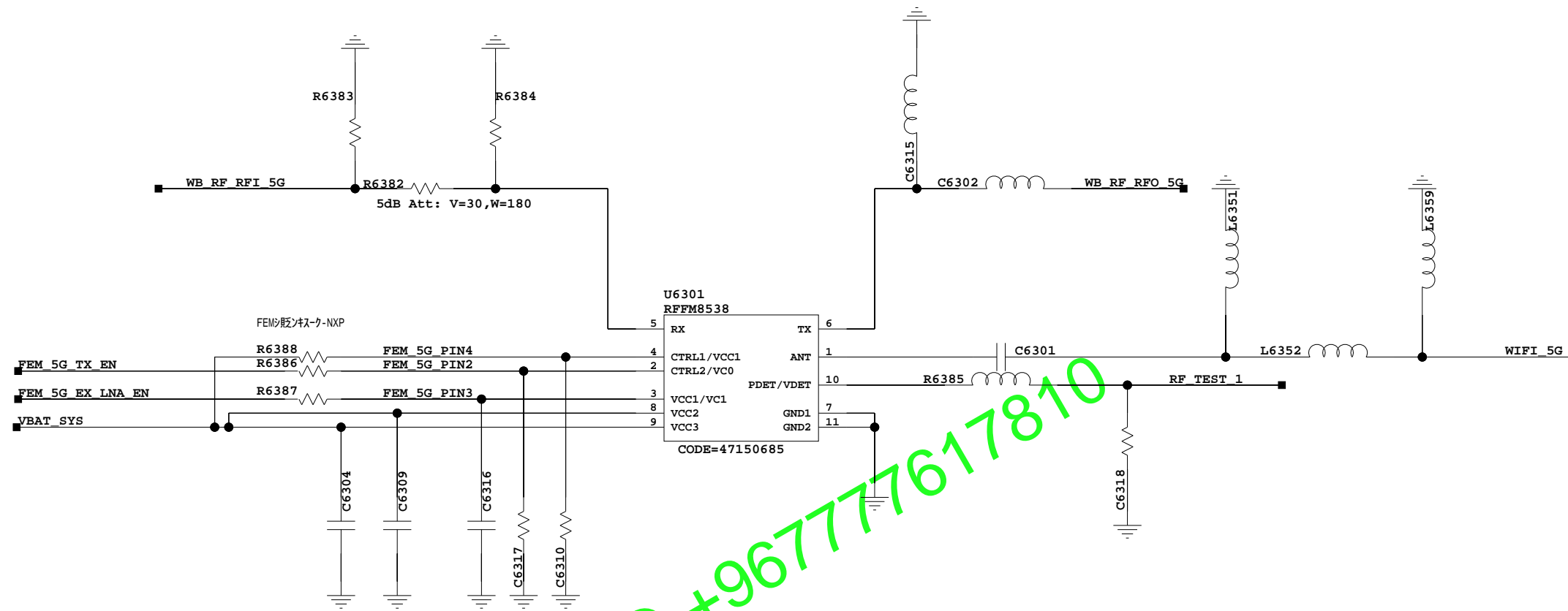


The type and specification of the components refer to the BOM

62 NC_2G/5G/GPS



63 NC_FE_WIFI_5G



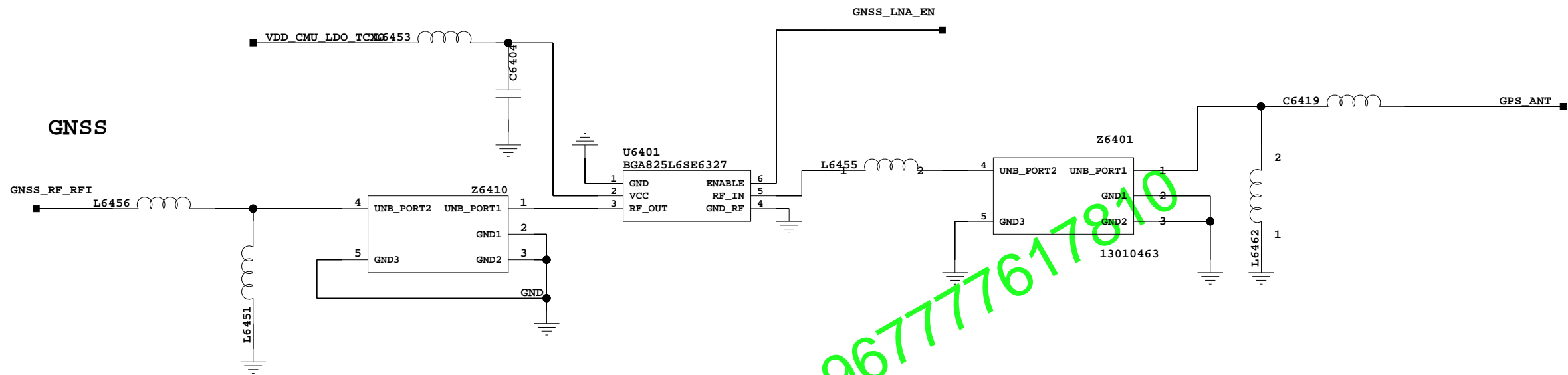
FEMの駆動用-RFFM8538

| | | |
|------------------|-------|-------------|
| FEM_5G_EX_LNA_EN | R6389 | FEM_5G_PIN2 |
| VBAT_SYS | R6390 | FEM_5G_PIN3 |
| FEM_5G_TX_EN | R6391 | FEM_5G_PIN4 |

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The type and specification of the components refer to the BOM

64 NC_GPS

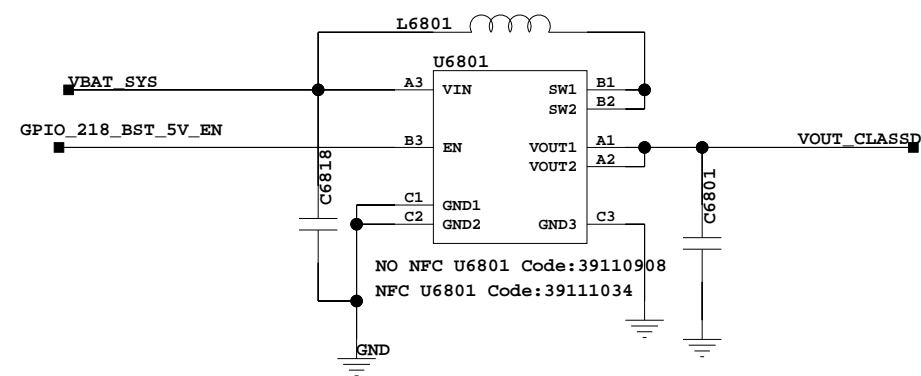


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68. NFC_BB

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ラレサツok



The type and specification of the components refer to the BOM

69. ANT_NFC

:

A

B

C

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The type and specification of the components refer to the BOM

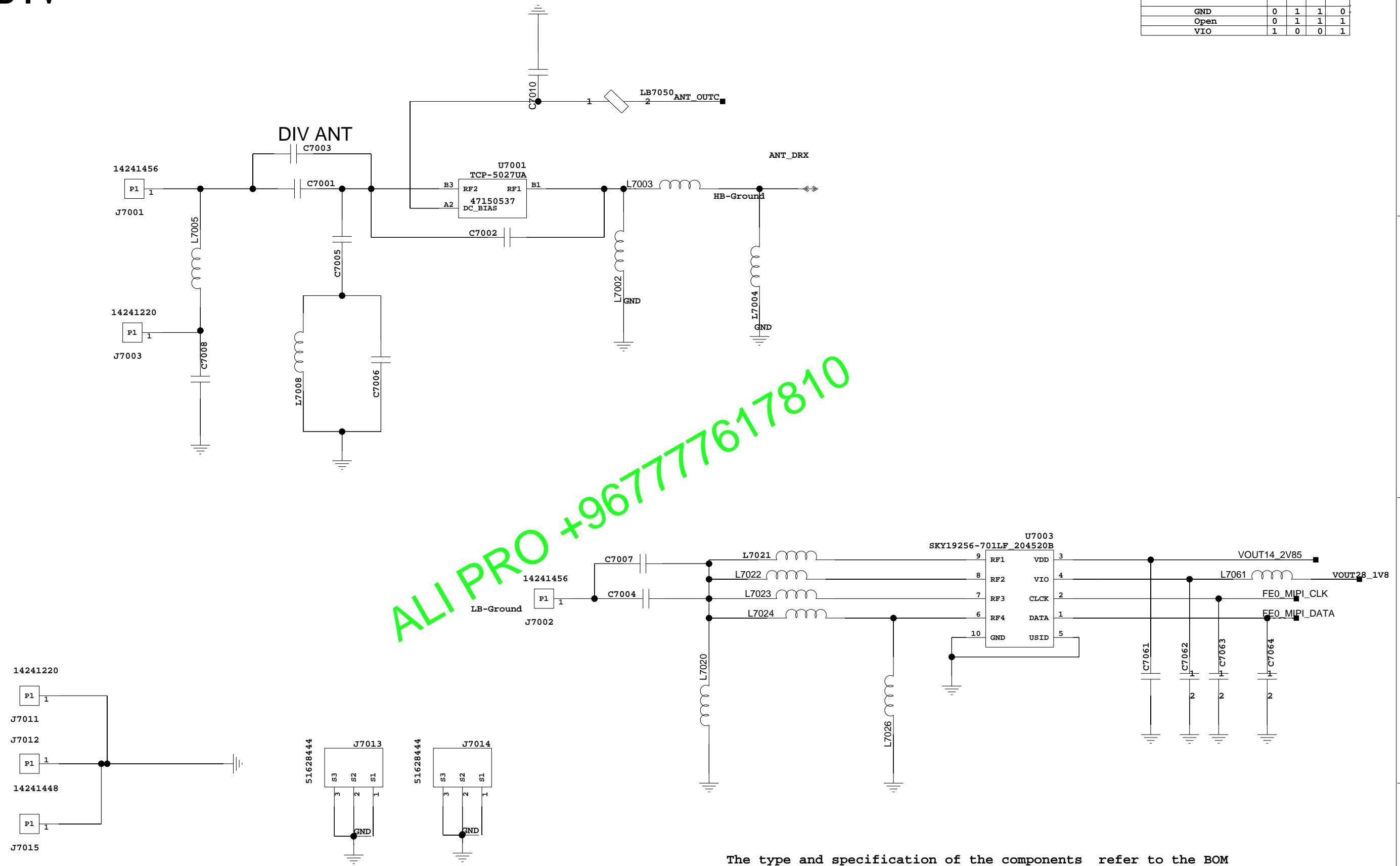
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H5

70.ANT_DIV

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

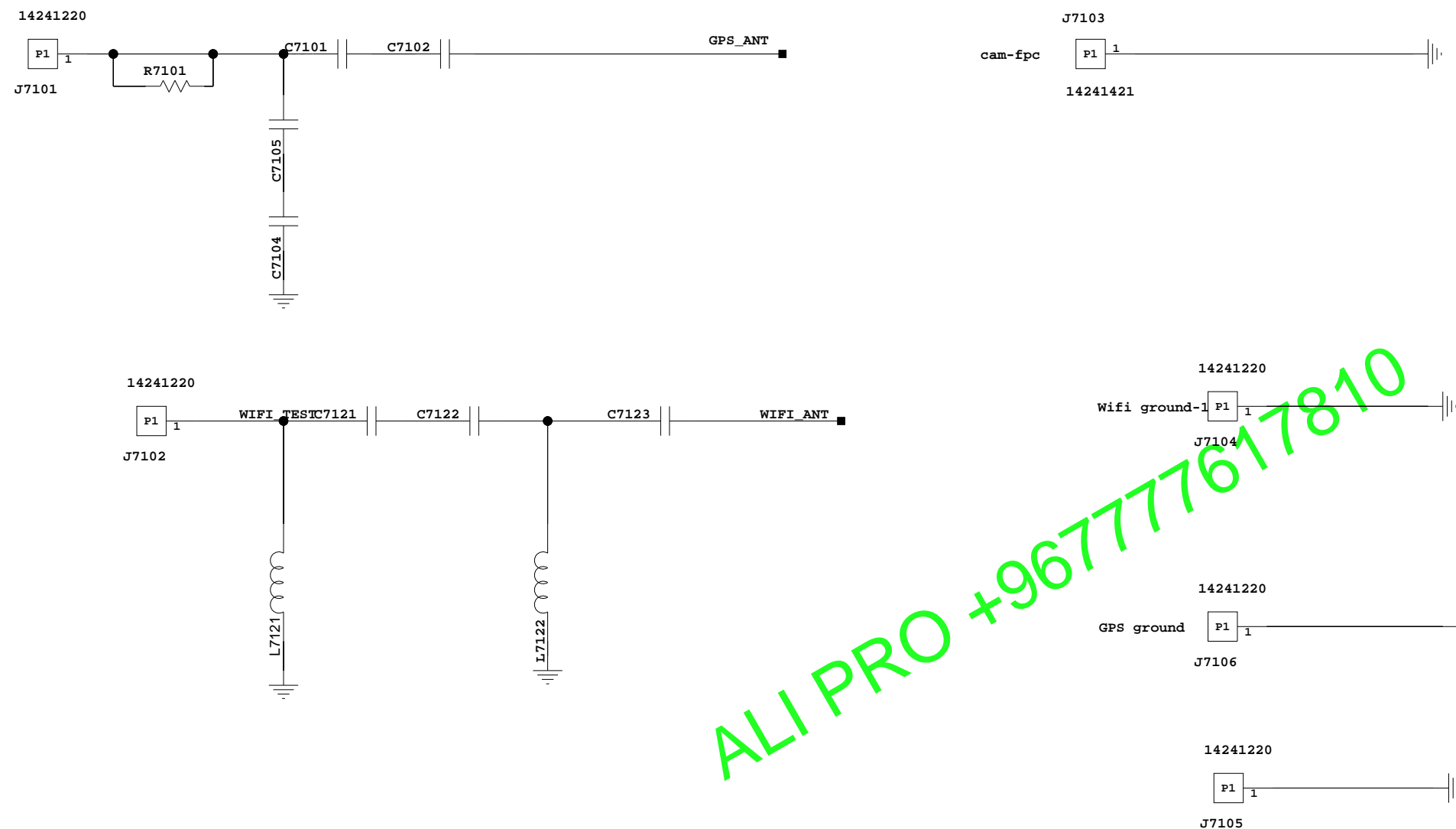
| USID PIN BIAS Condition | USID | | | |
|-------------------------|------|----|----|----|
| | D3 | D2 | D1 | D0 |
| GND | 0 | 1 | 1 | 0 |
| Open | 0 | 1 | 1 | 1 |
| VIO | 1 | 0 | 0 | 1 |



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The type and specification of the components refer to the BOM

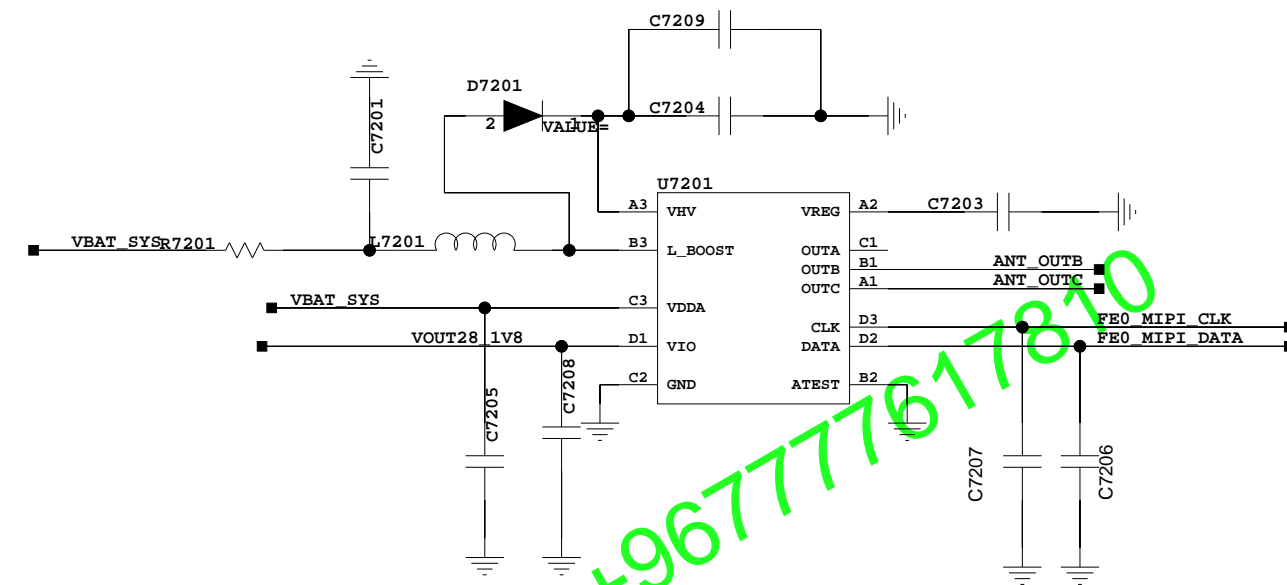
71 ANT_GPS_WIFI



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The type and specification of the components refer to the BOM

72.ANT_Tuner_Controller



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The type and specification of the components refer to the BOM