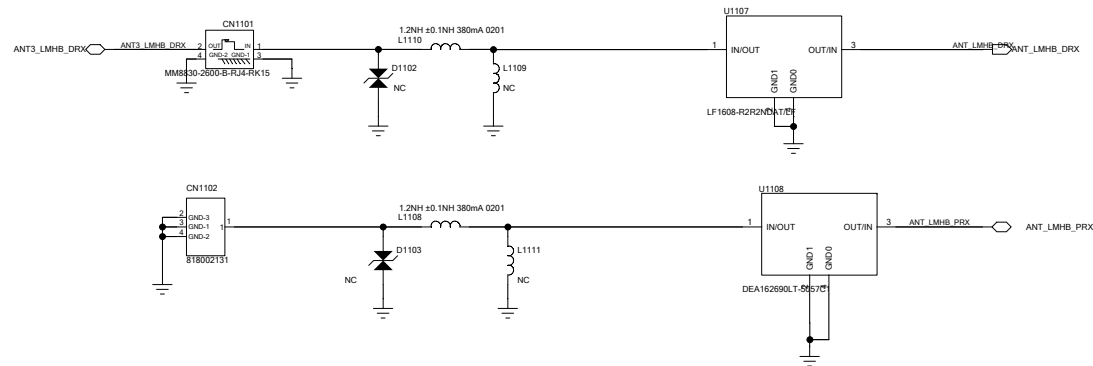
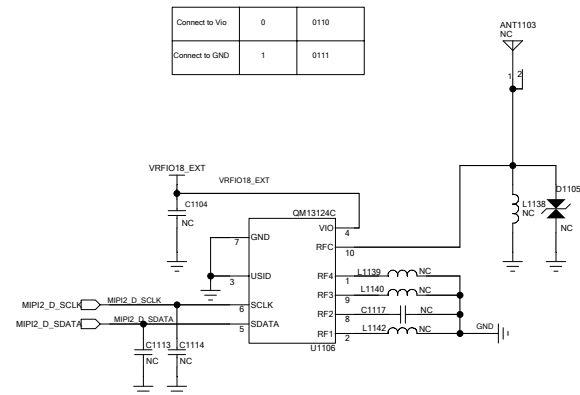
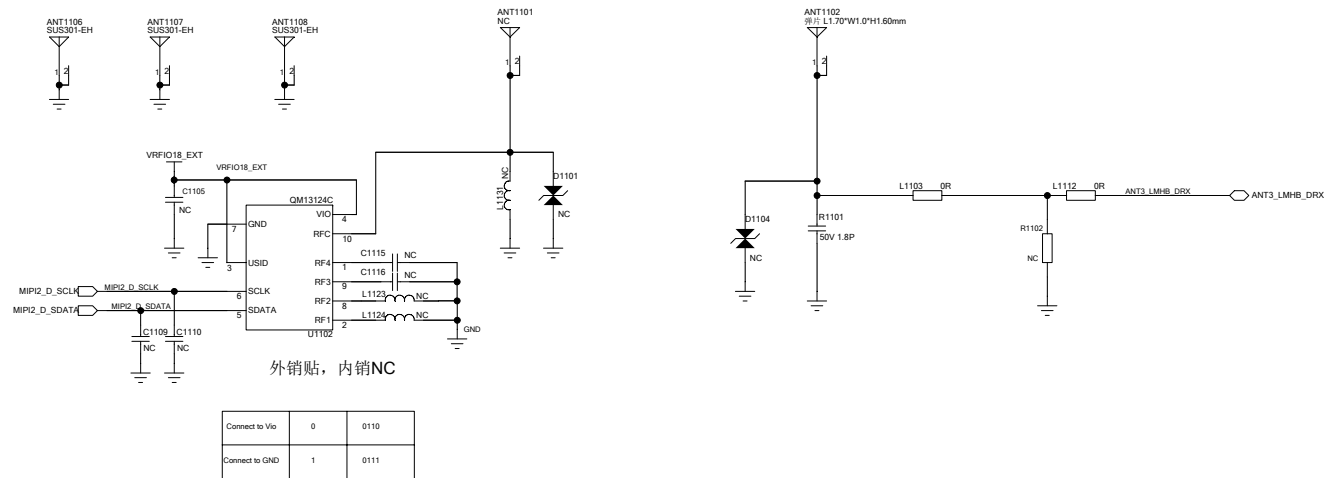
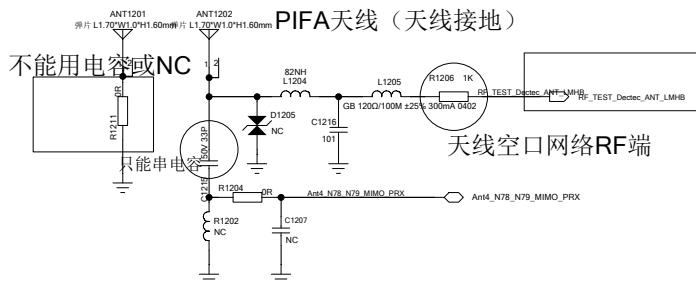


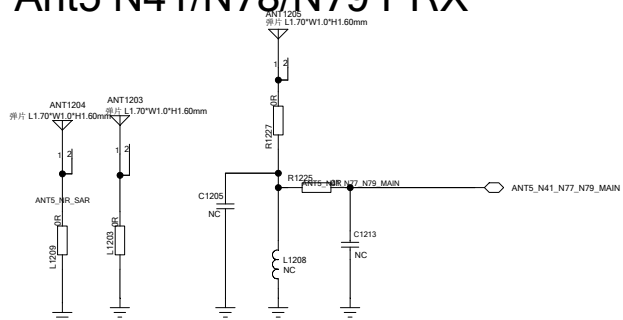
Ant3 LMHB DRX+N41 MIMO DRX 上天线 右侧



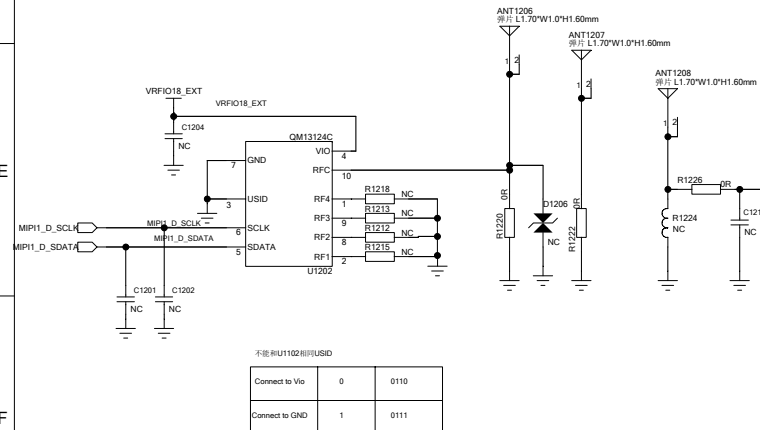
Ant4 N78/79 MIMO PRX



Ant5 N41/N78/N79 PRX

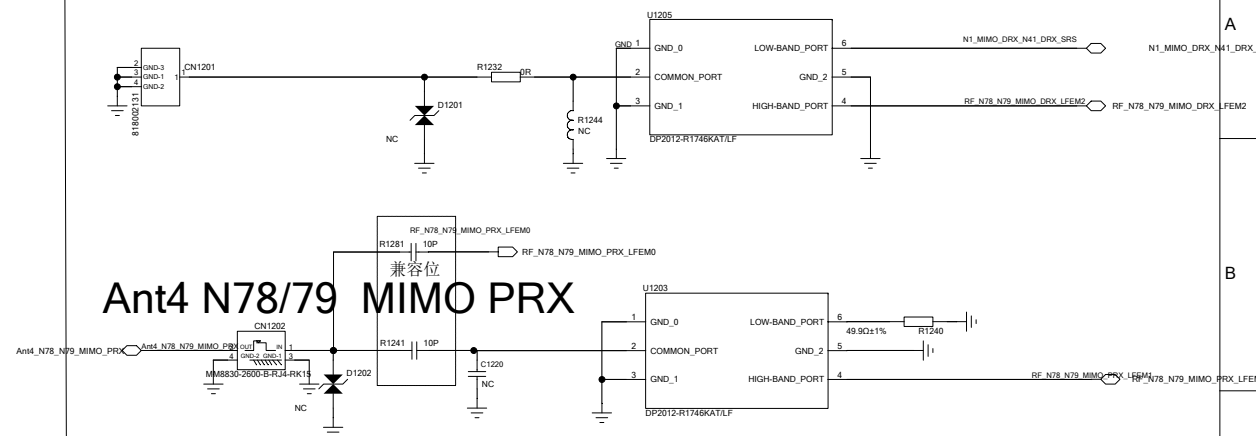


Ant6 MHB MIMO PRX+ N78/79 DRX

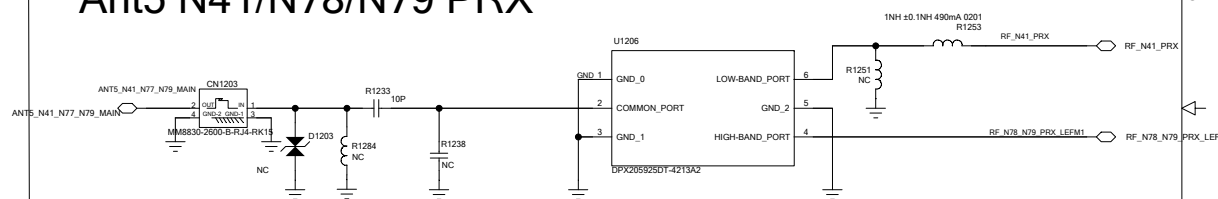


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| Connect to Vio | 0 | 0110 |
| Connect to GND | 1 | 0111 |

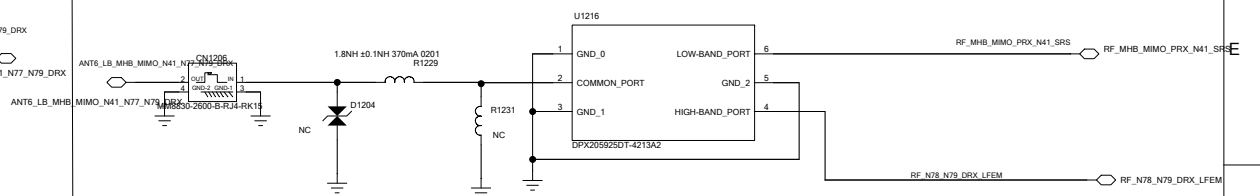
Ant2 MHB MIMO DRX+N41DRX+78/79 MIMO DRX




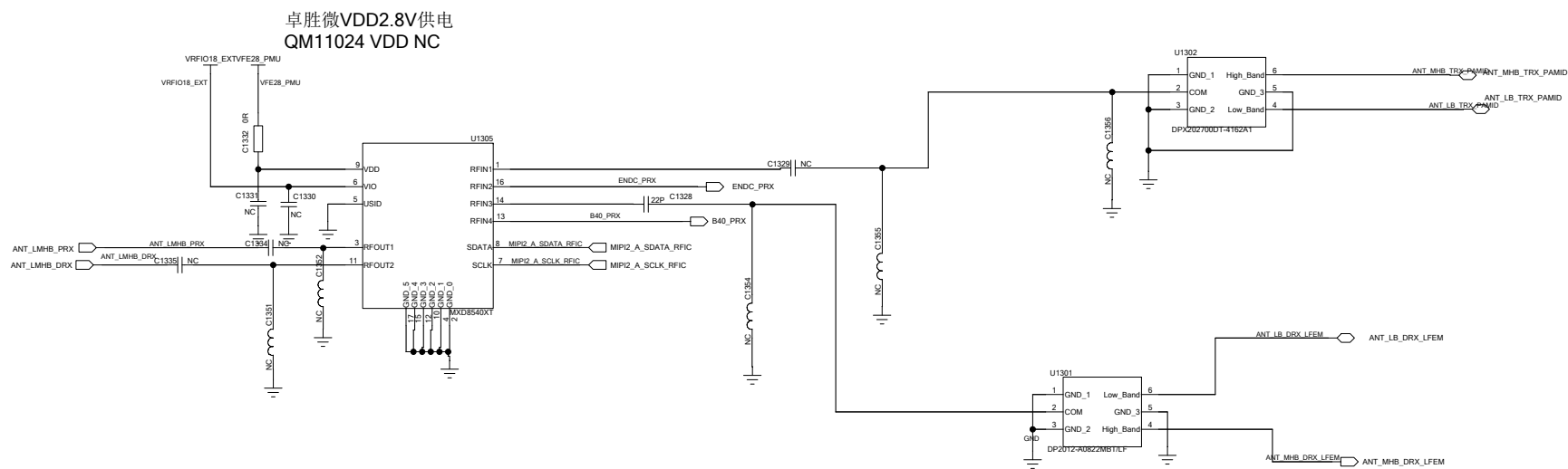
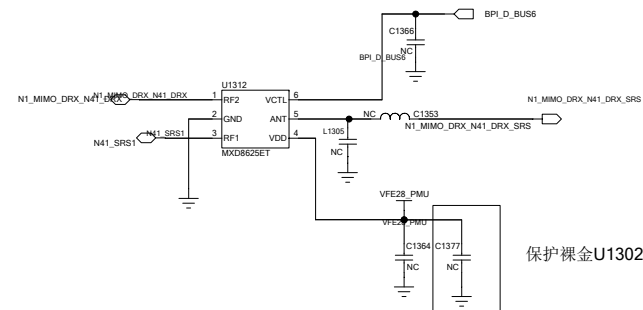
Ant5 N41/N78/N79 PRX




Ant6 MHB MIMO PRX+N41 MIMO PRX+ N78/79 DRX

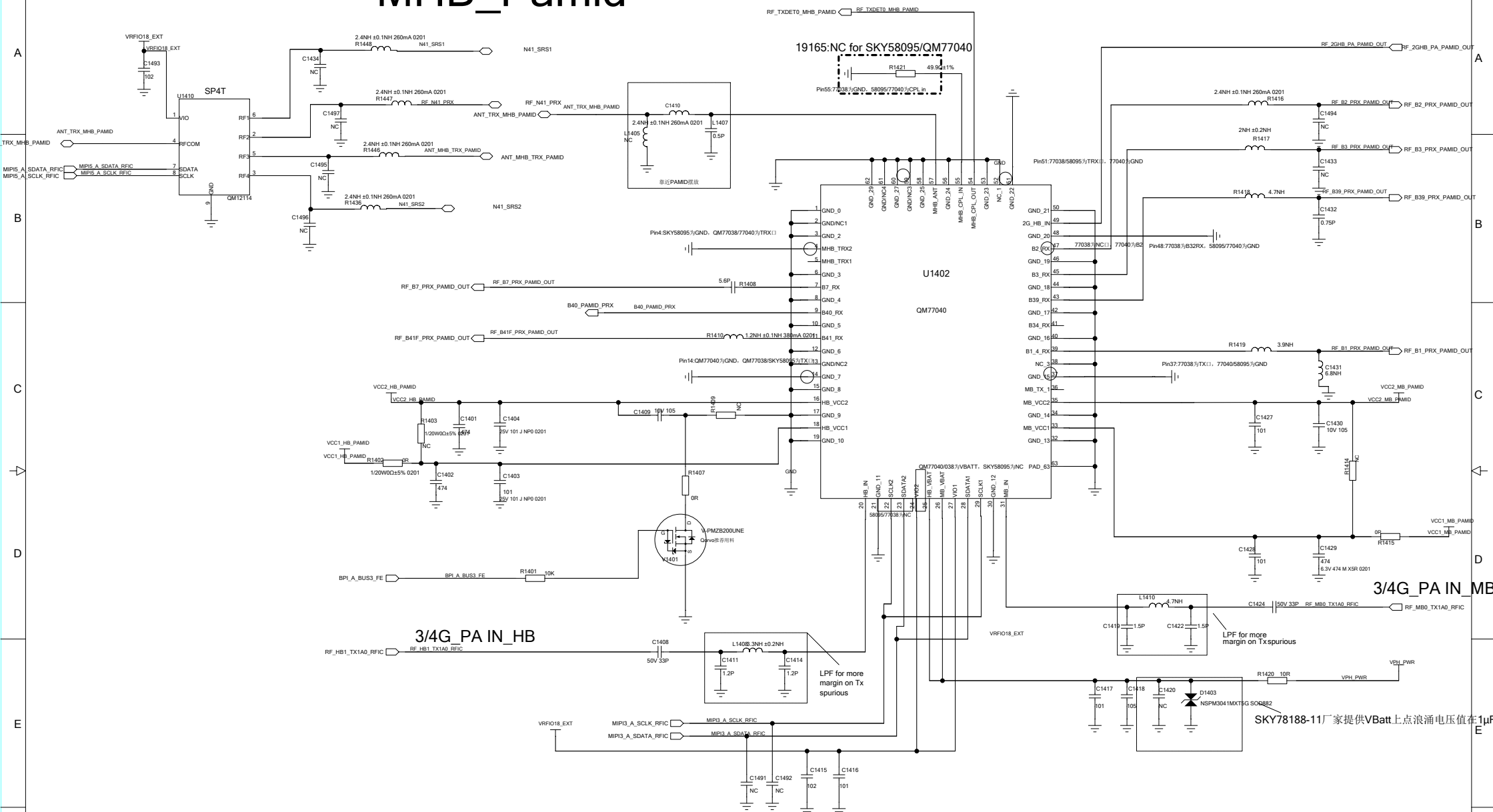



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| Approved By | | | | |



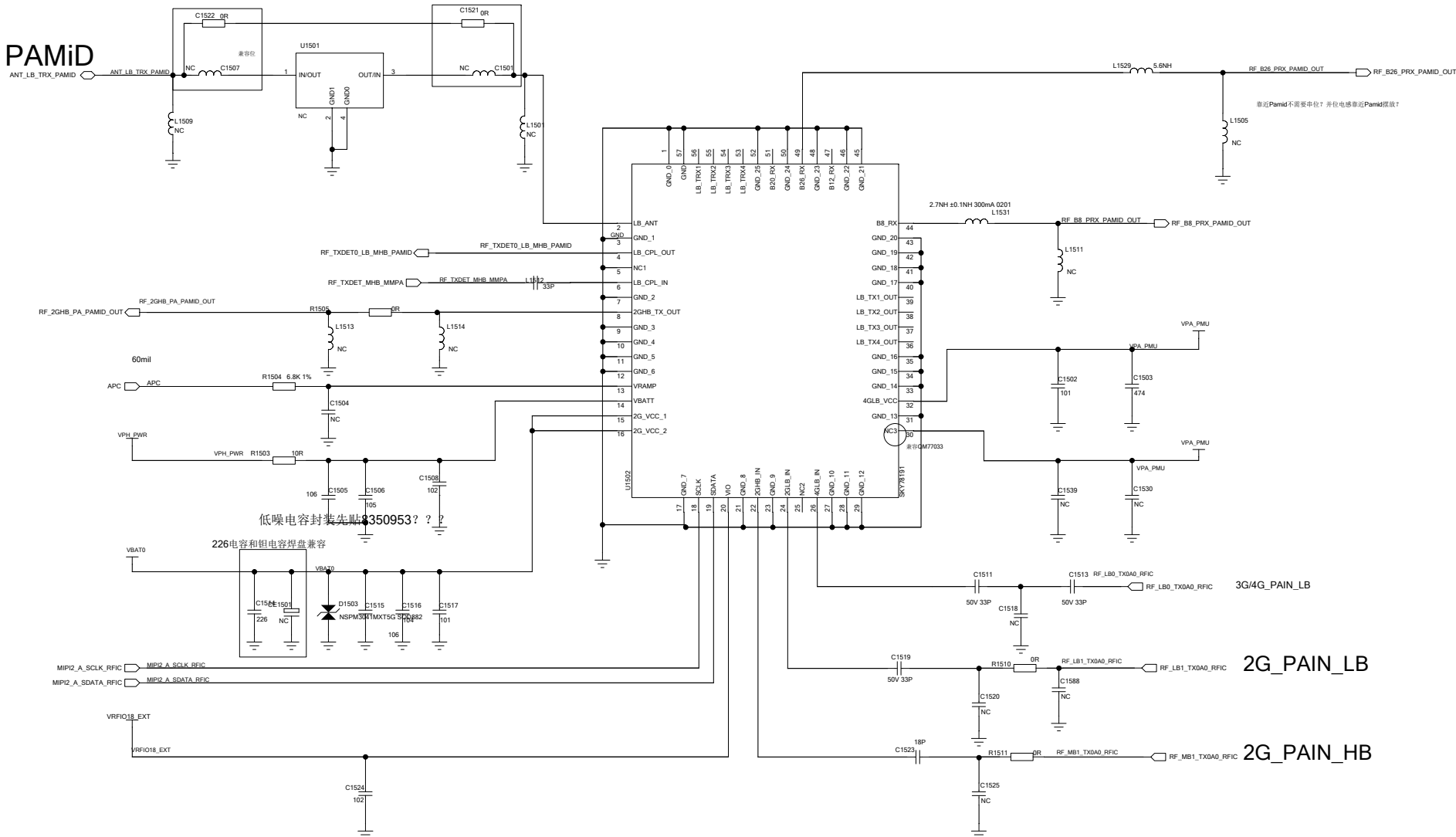
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MHB_Pamid

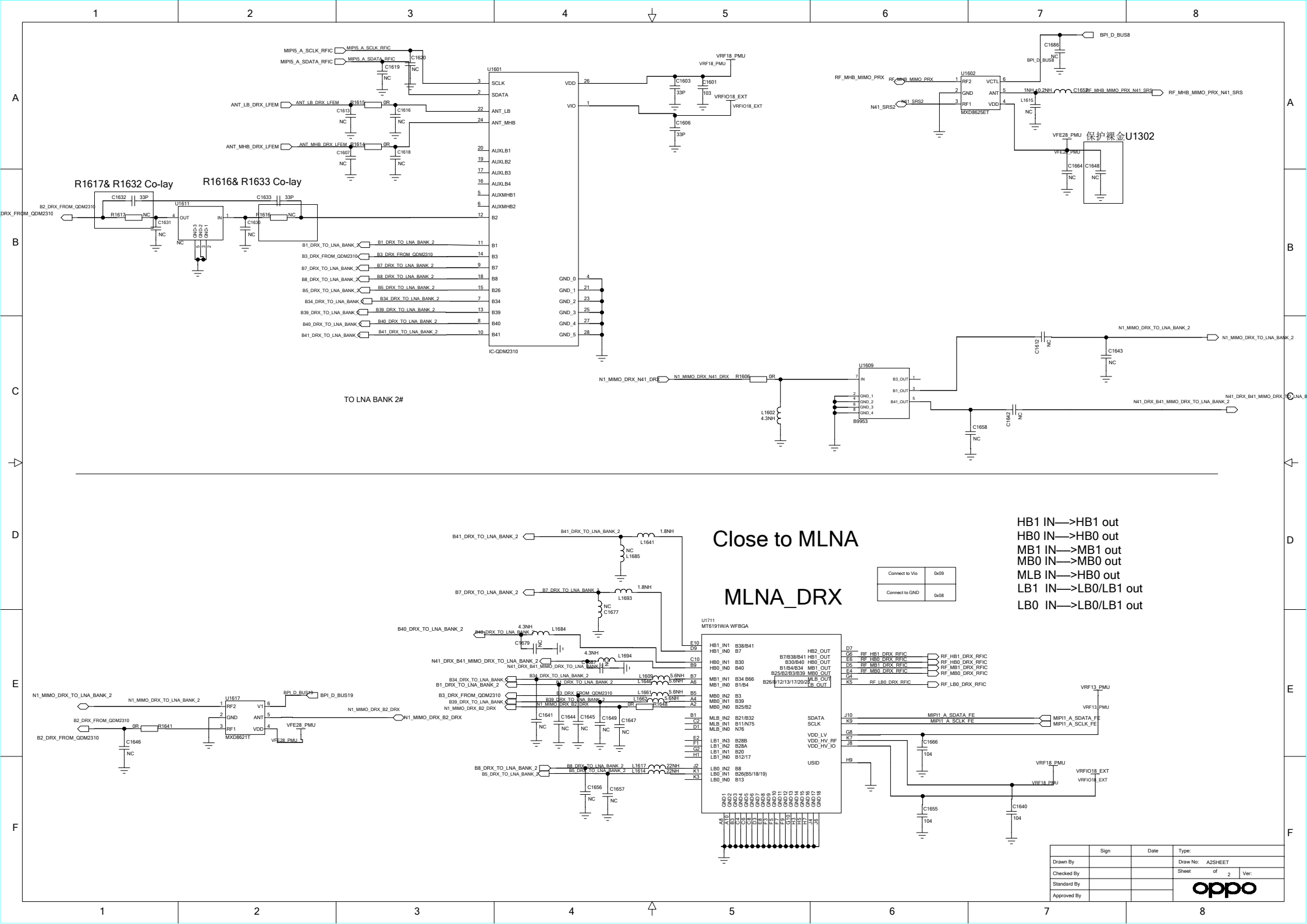


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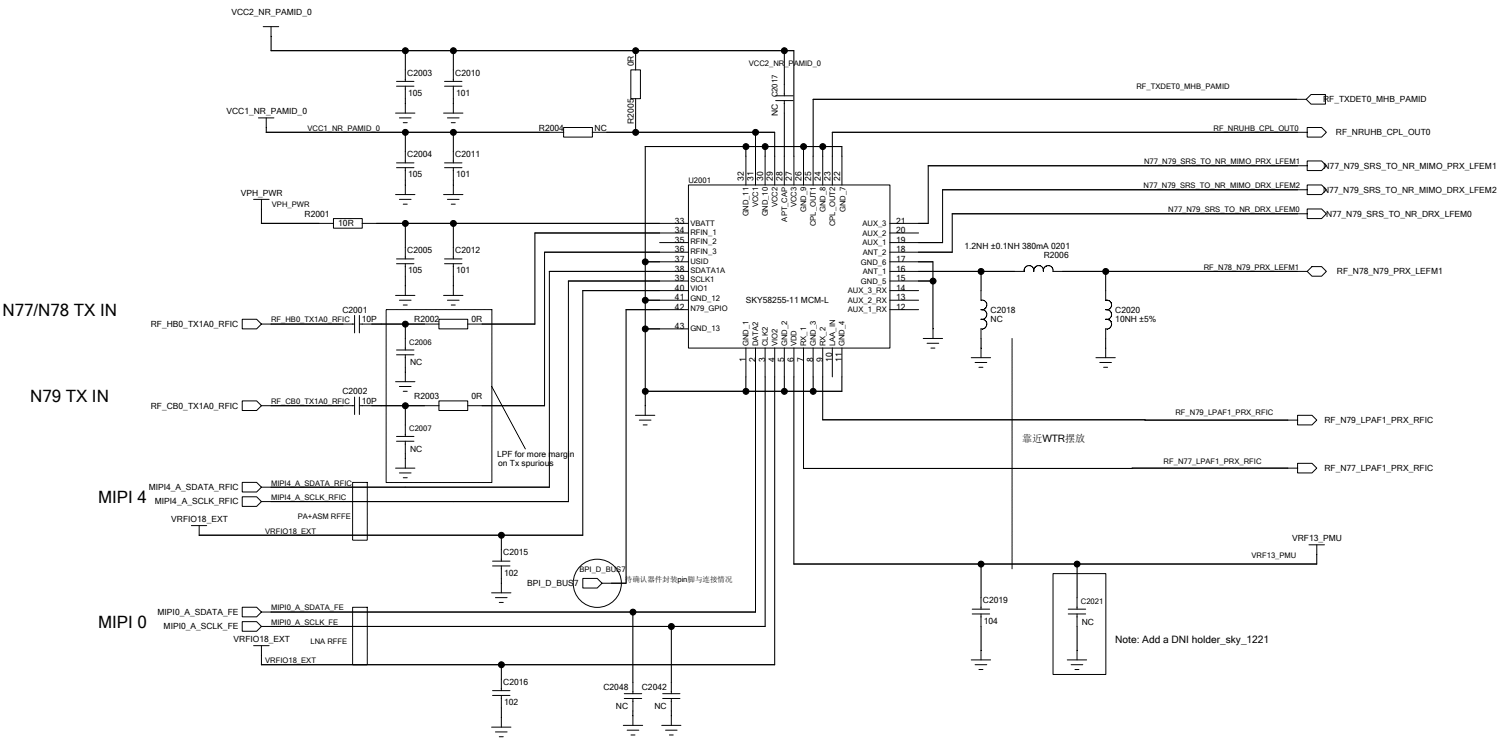
LB PAMiD



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| Checked By | | | Sheet | of 47 Ver: |
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NR PAMID 0(N77/79Main)



| Drawn By | Sign | Date | Type |
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| Checked By | | | Draw No: Schematic |
| Standard By | | | Sheet of 47 Ver: |
| Approved By | | | oppo |

RF_N77_N79_DRX_LFEM

R2101

C2101

C2103

1.5NHz ±0.1NHz 420mA Q201

N77_N79_SRS_TO_N79_DRX_LFEM

C2102

C2104

1.5NHz ±0.1NHz 420mA Q201

SKY53728-11

ANT_1/LNA_OUT1 For N77

ANT_2/LNA_OUT2 For N79

RF_N77_LFEM_DRX_RFIC


RF_N79_LFEM_DRX_RFIC

| ID1 | ID0 | USID |
|-----|-----|------------|
| GND | GND | Dx07 |
| GND | VIO | Dx08(MLNA) |
| VIO | GND | Dx09 |
| VIO | VIO | Dx0A |

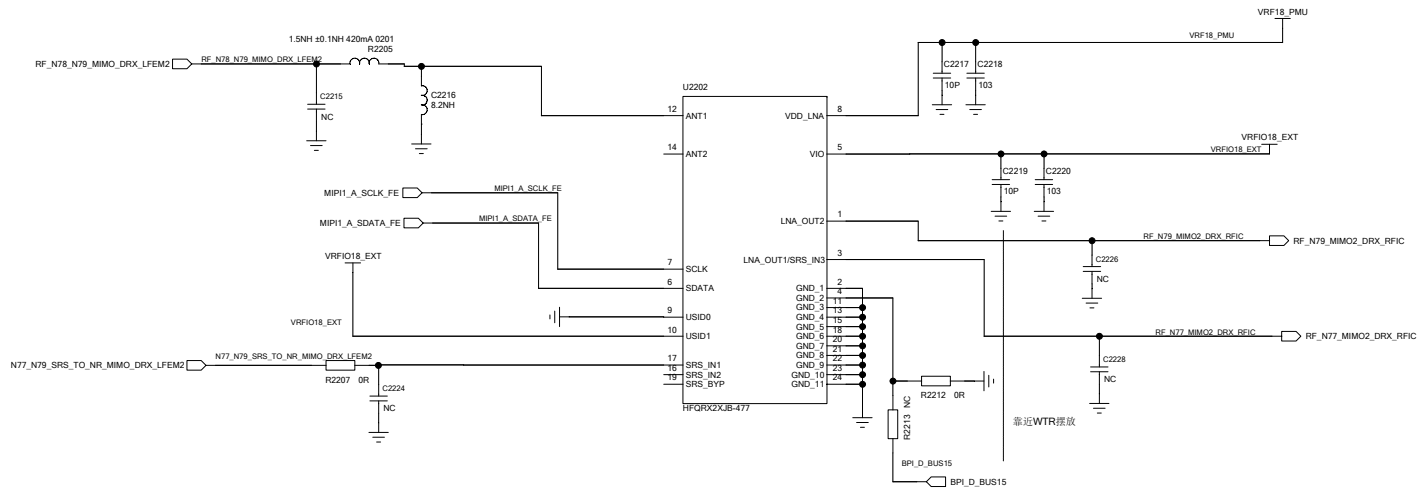
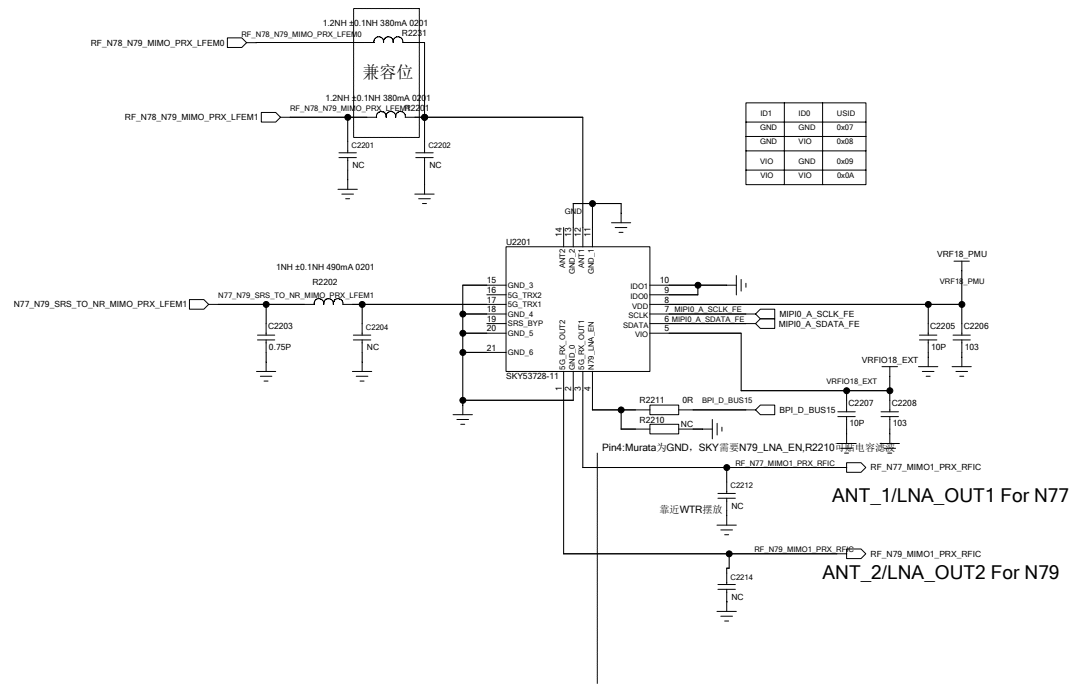
Note: 10pF+10nF fro VDD_sky_1221

RF_N77_LFEM_TX_RFIC

RF_N79_LFEM_TX_RFIC

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| | Sign | Date | Type: | |
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NR_LFEM_1



NR_LFEM_2

| | Sign | Date | Type: |
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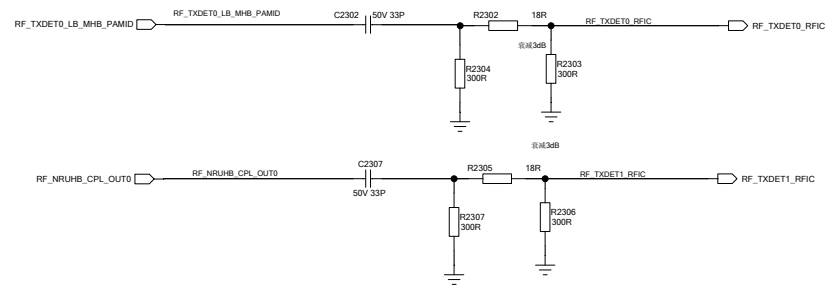
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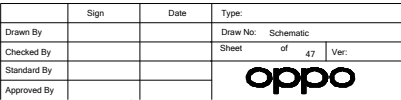
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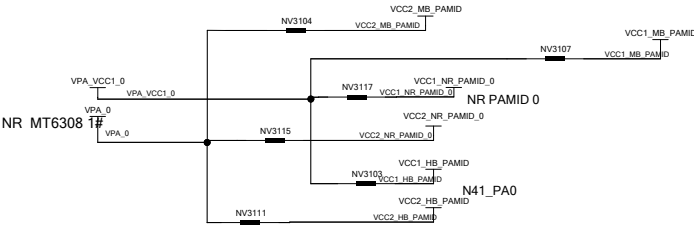
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MT6308 ET供电转接



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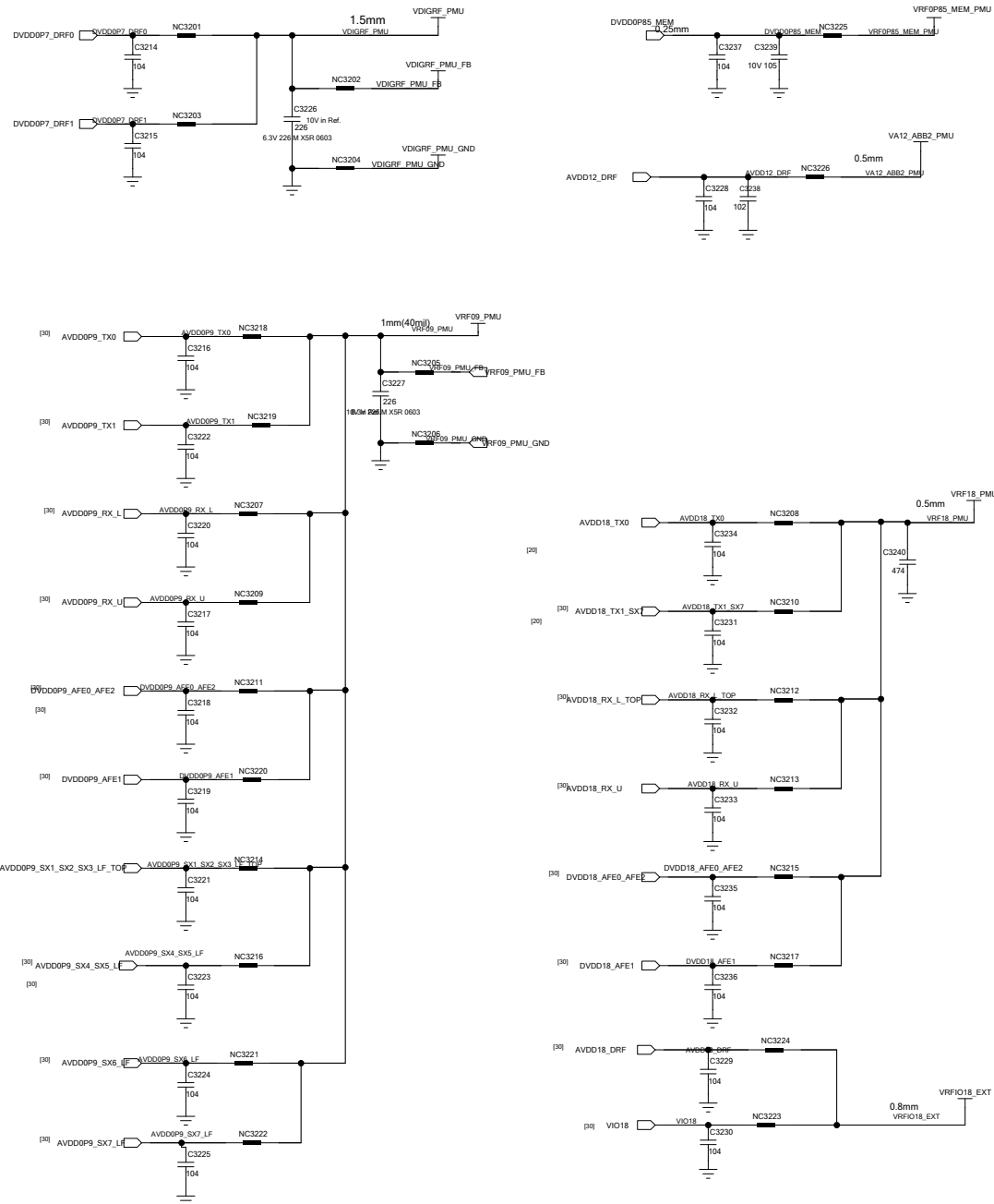
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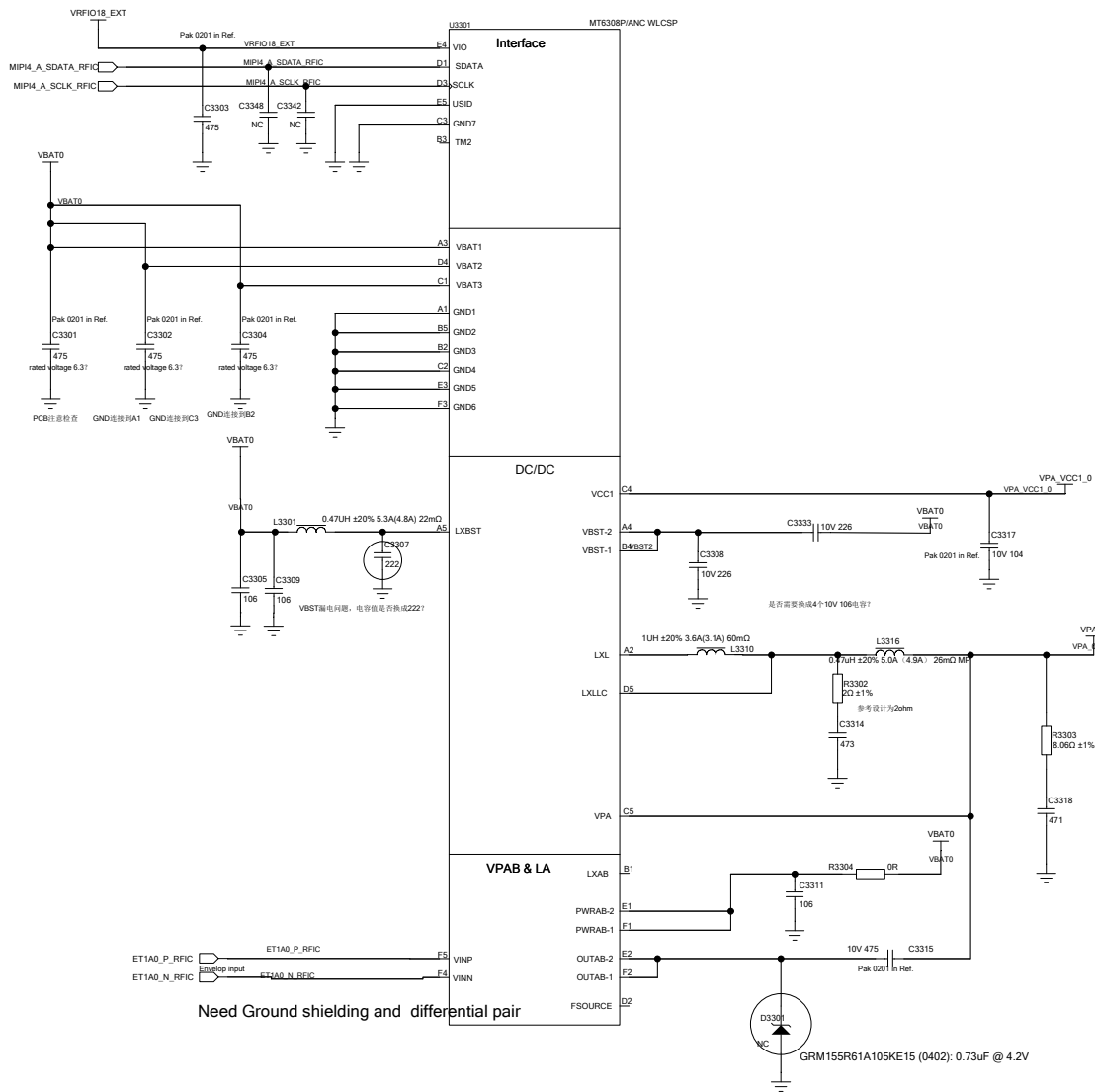
MT6190供电部分



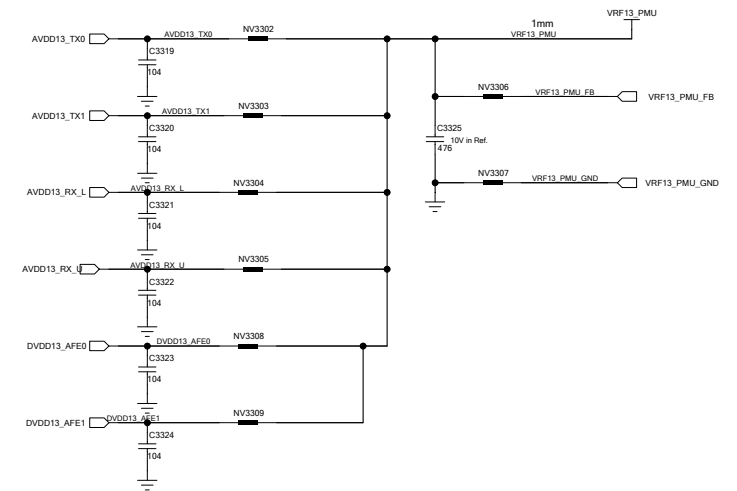
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NR_PAMID + N41 PAD /APT Ref Design

MT6308 1#



MT6190供电TX部分



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| Drawn By | | | Draw No: Schematic |
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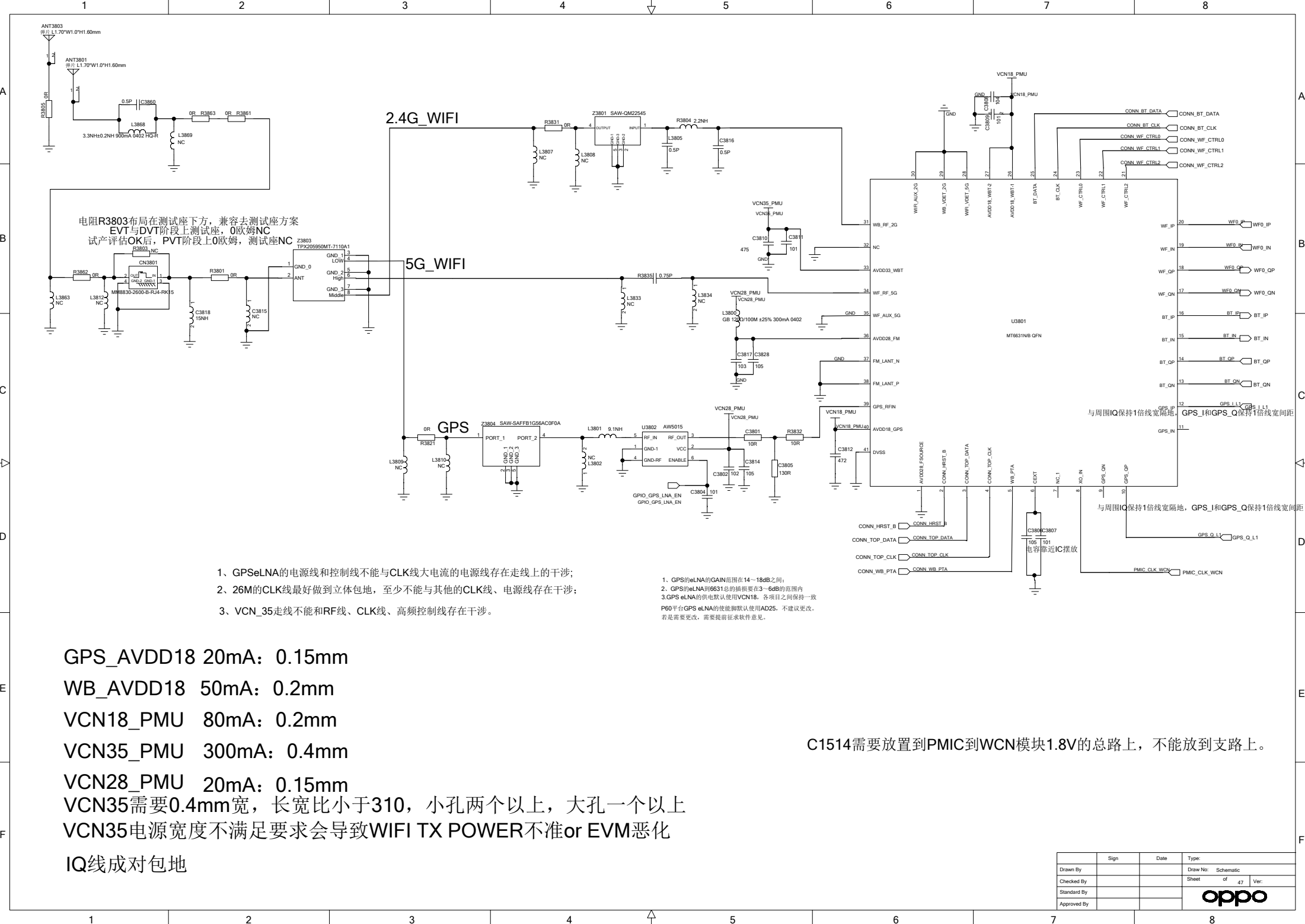
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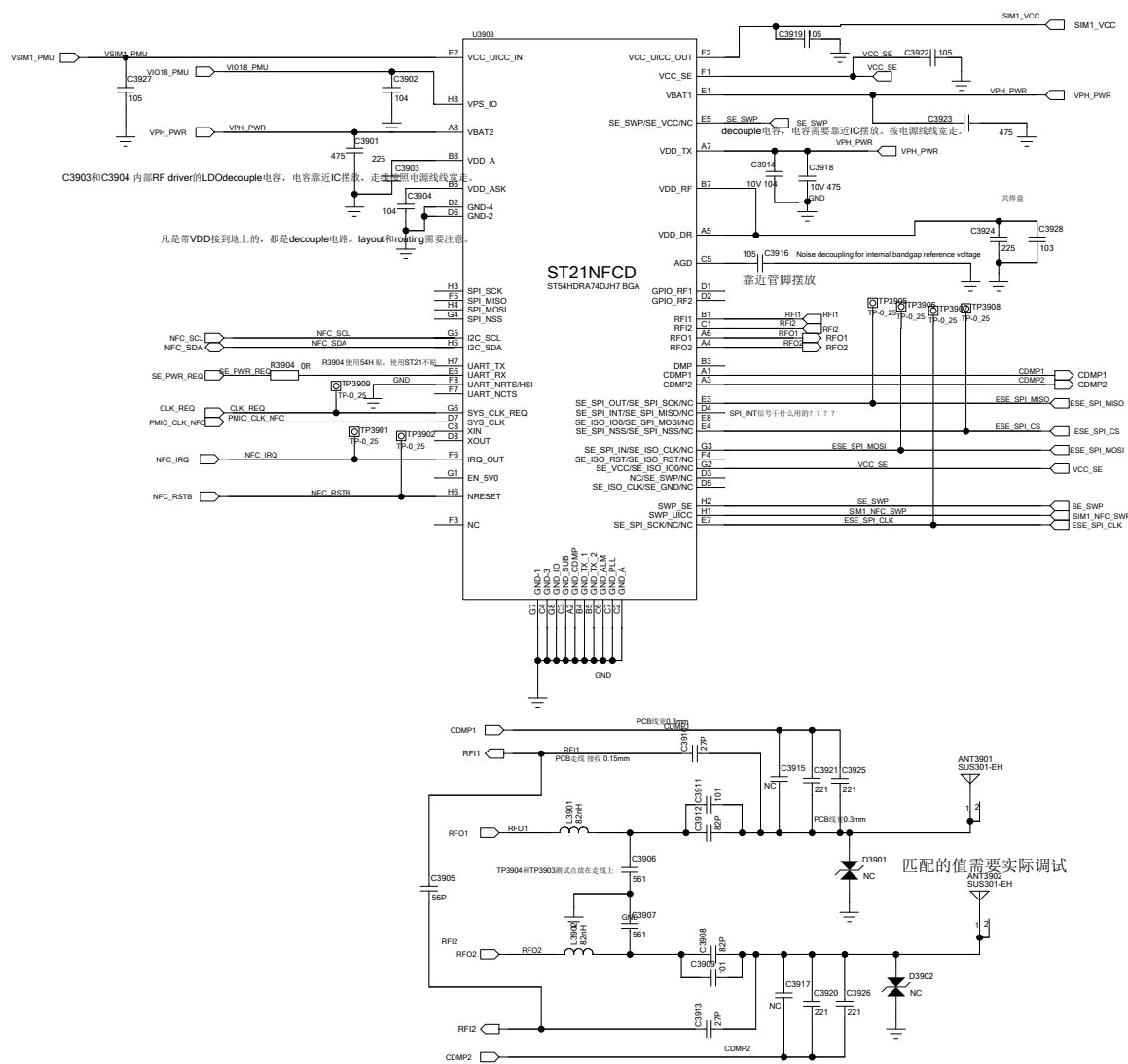
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C1514需要放置到PMIC到WCN模块1.8V的总路上, 不能放到支路上。

NFC



线宽要求:


- ### 1、VDD

NFC电源走线线宽要求:

- 1、到VDD_TX的VPH_PWR走线宽度要达到0.3mm以上；
- 2、VPH_PWR到VBAT1&VBAT2 要得到0.15mm，然后分到两个电源管脚分别为0.1mm。

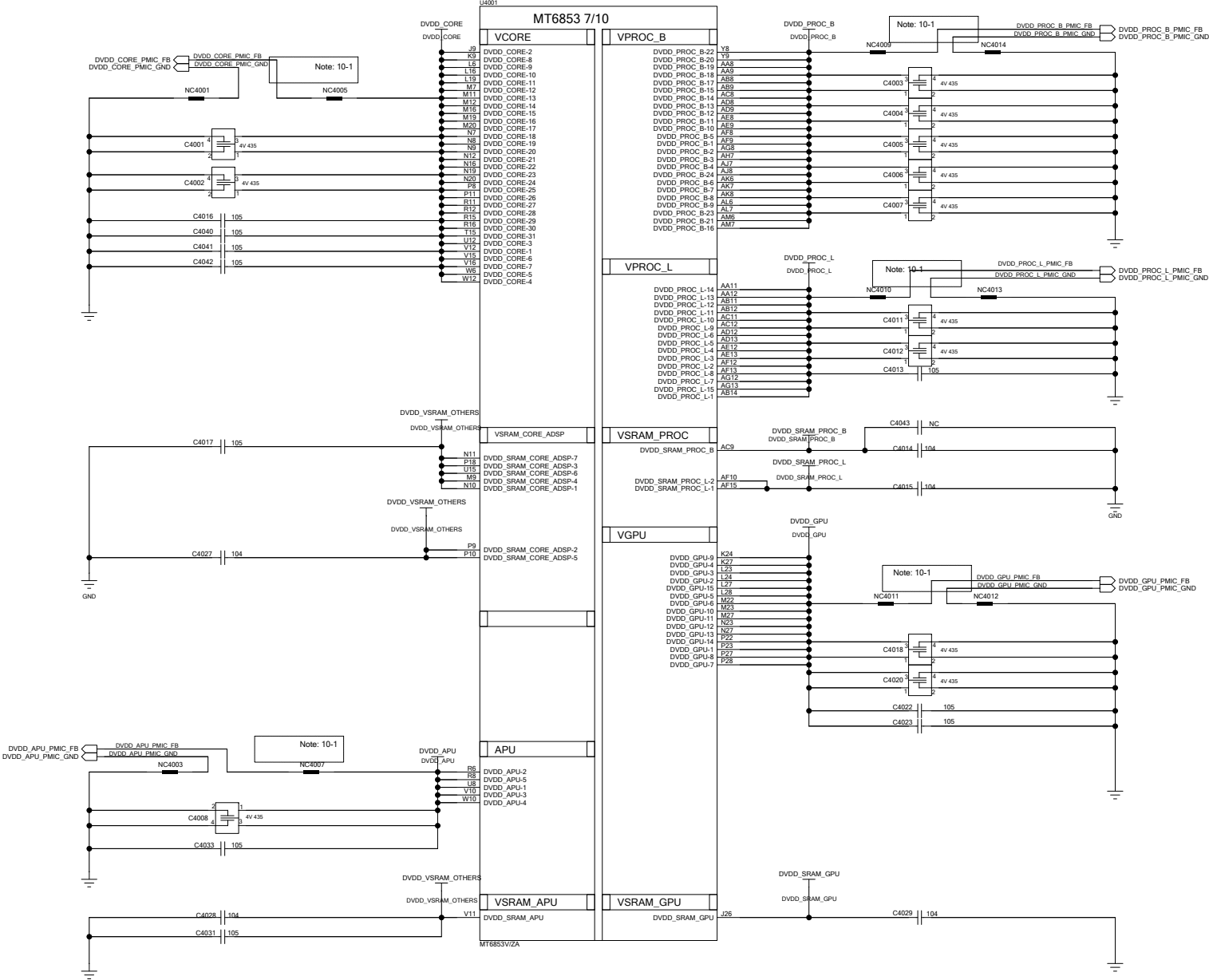
为确保BB IO口和NFC IC IO口上电的一时序的一致，VPS_IO需要接到系统BB的GPIO口电源上。

- 1、VBAT1+VBAT2 消耗最大200mA，VBAT2是给芯片内部（除了射频发射部分）的模拟电路供电，Vbat1给其它片上资源供电（如CPU, Flash, 逻辑电路）。考虑搭到浪涌的因素ST54H的VBat建议接到系统的VPH_PWR上面，不建议接到电池的VBAT上面。
- 2、eSE模块消耗最大30mA，正常工作情况下，实际消耗的电流根据当时eSE的工作状态大概在 100uA 20mA 之间。
- 3、VDD_RF，是载波的功率源。
- 4、VDD_ASK，调制的功率源，是调制信号的驱动。
- 5、VDD_A，给芯片内部的模拟电路供电，比如小信号处理，内部滤波器，运放等。
- 6、R4620建议先按照NC调试，若是调试结果需要使用电阻，一定要计算流过的电路，避免电流过大烧电阻
- | Drawn By | Sign |
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| | Sign | Date | Type: | |
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| Checked By | | | Sheet of 47 | Ver: |
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Schematic design notice of "10_BB_POWER_PDN" page.

Note 10-1: Differential pair of PMIC remote sense must be close to BB's ball.
Remote sense trace with GND shielding to PMIC (Differential)

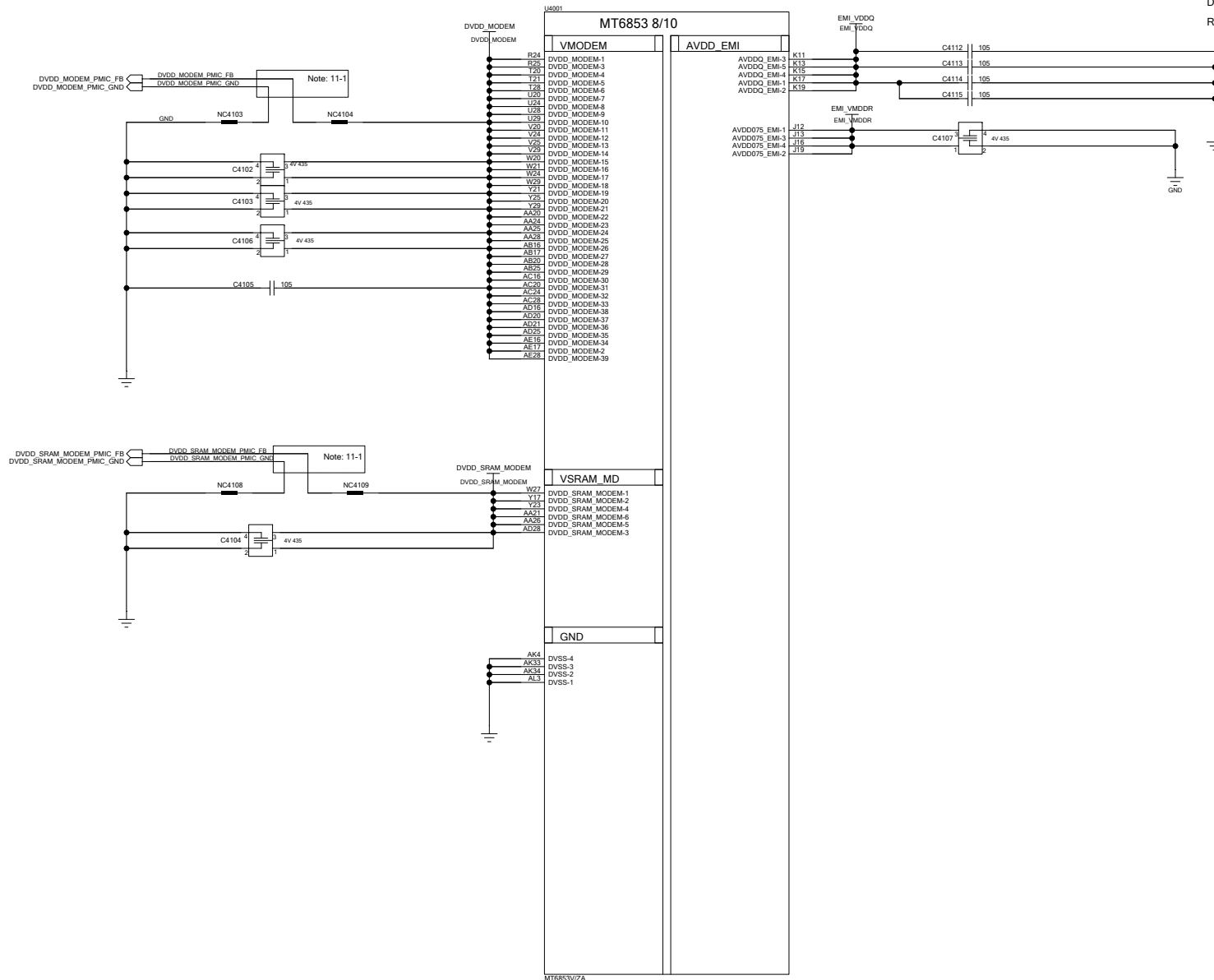


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| Drawn By | | | Draw No: Schematic |
| Checked By | | | Sheet of 47 Ver: |
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Schematic design notice of "11_BB_POWER_PDN" page.

Note 11-1:
Differential pair of PMIC remote sense must be close to BB's ball.
Remote sense trace with GND shielding to PMIC (Differential)



| Drawn By | Sign | Date | Type |
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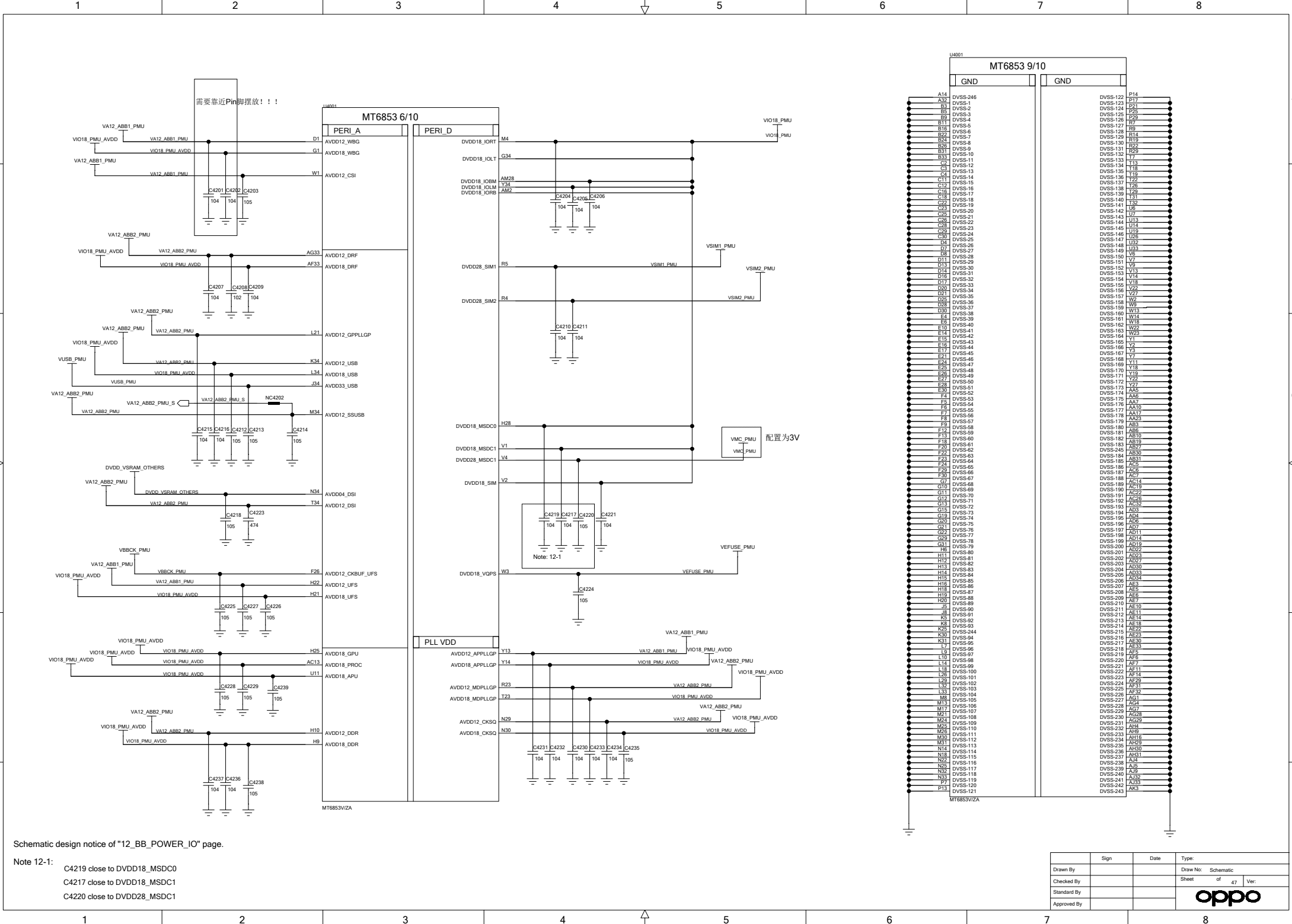
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Schematic design notice of "12_BB_POWER_IO" page.

Note 12-1:
C4219 close to DVDD18_MSDC0
C4217 close to DVDD18_MSDC1
C4220 close to DVDD28_MSDC1

| | Sign | Date | Type: |
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| Drawn By | | | Draw No: Schematic |
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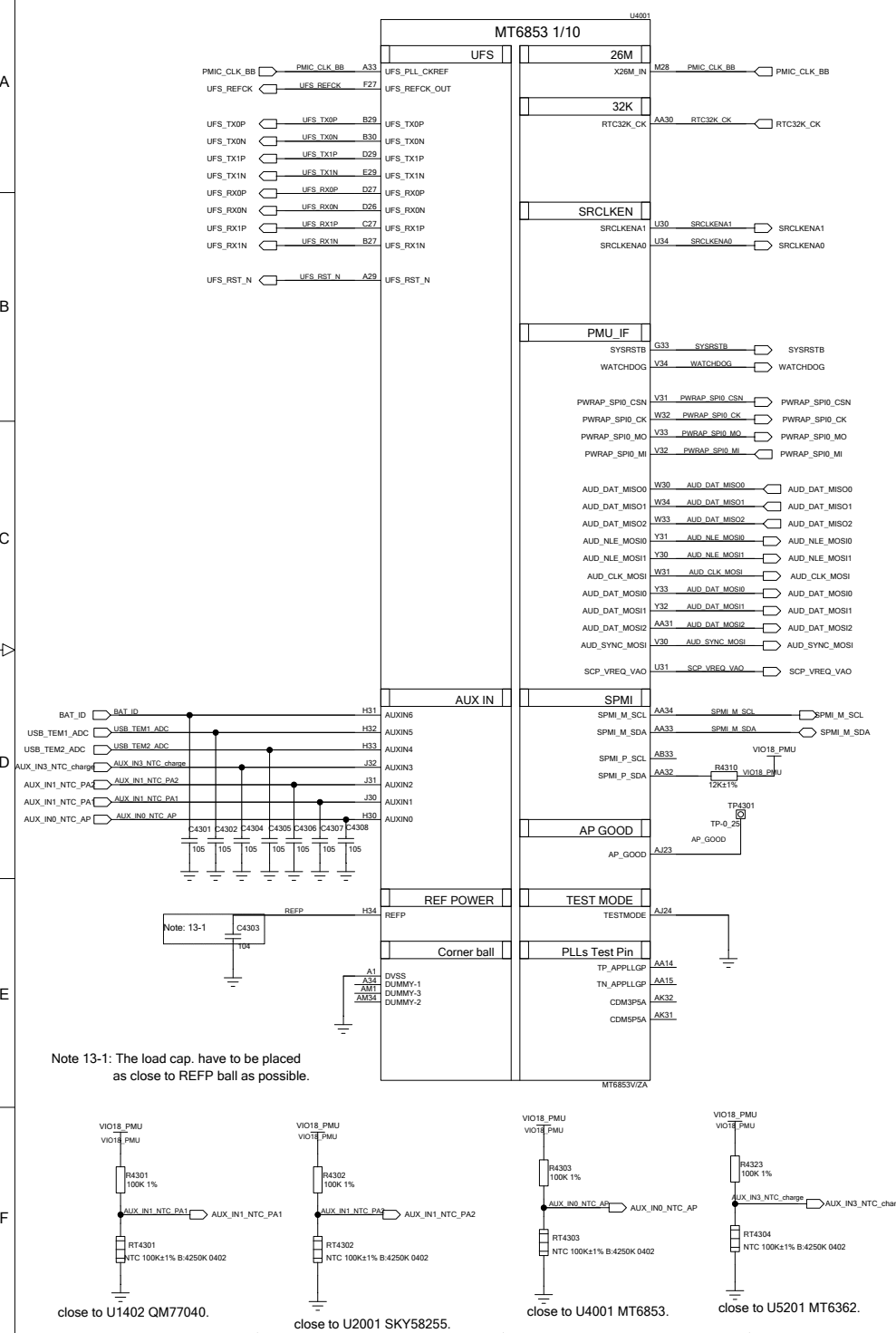
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Note 13-1: The load cap. have to be placed as close to REFP ball as possible.

close to U1402 QM77040.

close to U2001 SKY58255.

close to U4001 MT6853.

close to U5201 MT6362.

Note 13-2: "PWRAP_SPI0_CSN" and "AUD_DAT_MOS0" pin features in trapping pin to enable JTAG.

| PWRAP_SPI0_CSN | AUD_DAT_MOS0 | AP JTAG | IO JTAG |
|--------------------|--------------------|--|--|
| H (Default) | L (Default) | N/A | N/A |
| H | H (by external PU) | SPI0+EINT8 | N/A |
| L (by external PD) | L | SPI0+EINT8 | TDM_LRCK/TDM_BCK/TDM_MCK/ TDM_DATA0/TDM_DATA1/TDM_DATA2/TDM_DATA3 I2C7 |
| L (by external PD) | H (by external PU) | MSDC1_CLK, MSDC1_CMD, MSDC1_DAT0, MSDC1_DAT1, MSDC1_DAT2 | N/A |

| AUD_NLE_MOSI1 | USB JTAG |
|--------------------|-------------------|
| L (Default) | USB 2.0 |
| H (by external PU) | DP/DM output JTAG |

| AUD_SYNC_MOSI | AUD_NLE_MOSI0 | Storage Booting |
|--------------------|--------------------|--------------------|
| L (Default) | L (Default) | Only UFS boot |
| L | H (by external PU) | Only eMMC boot |
| H (by external PU) | L | Reserved MTK Debug |
| H (by external PU) | H (by external PU) | Reserved MTK Debug |

| AUD_DAT_MISO1 | VEMC Voltage |
|--------------------|----------------------|
| L (Default) | VEMC=3.0V for UFS2.1 |
| H (by external PU) | VEMC=2.5V for UFS3.0 |

| AUD_DAT_MOSI1 | AUD_DAT_MOSI2 | DDR |
|--------------------|--------------------|--------------------|
| L (Default) | L (Default) | LP4x-MCP |
| L | H (by external PU) | Reserved |
| H (by external PU) | L | Reserved MTK Debug |
| H (by external PU) | H (by external PU) | Reserved MTK Debug |

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| Drawn By | Sign | Date | Type: |
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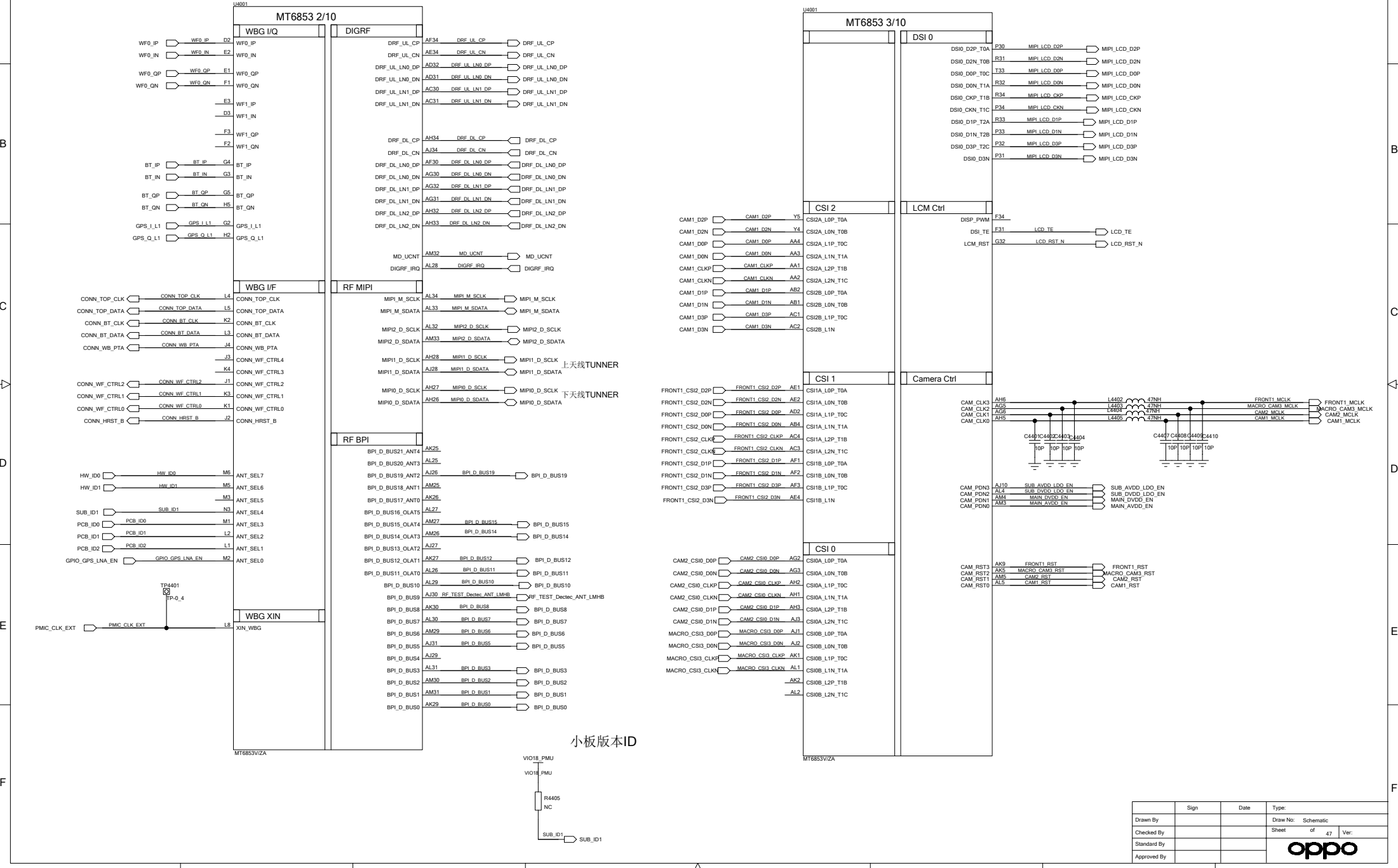
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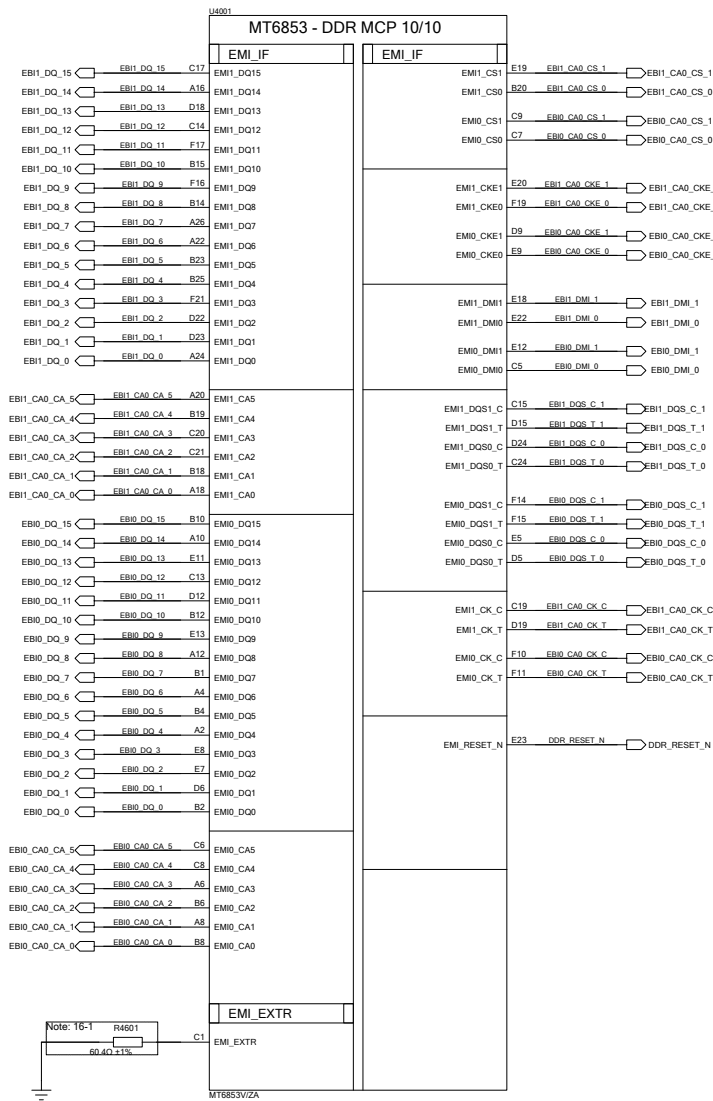
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Schematic design notice:

Note 16-1: R4601 please select 60.4 ohm (1%) resistor

| | Sign | Date | Type: | |
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| Approved By | | | | |

1. "Typical Cap" defined in design notice is the minimum cap. to LDO Cout.
2. NC cap can move to application, if (PCB L<20nH, PCB R<0.2mohm)
=> value and placement of Cap, please refer design notice

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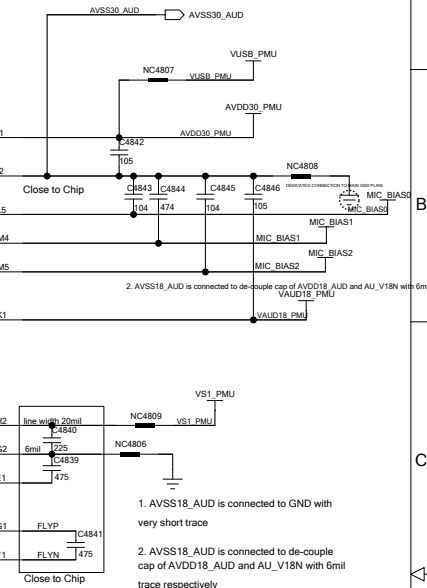
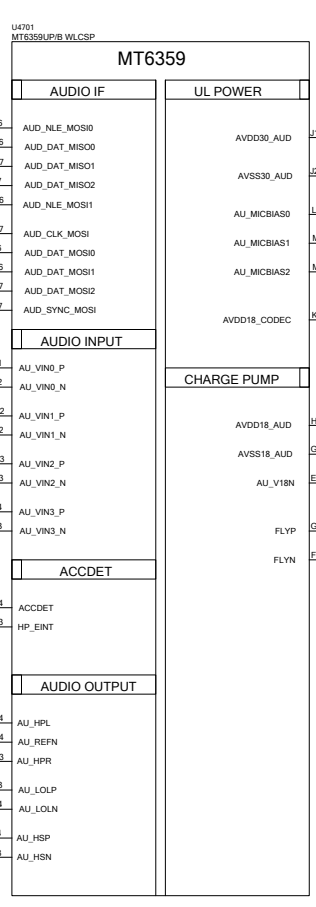
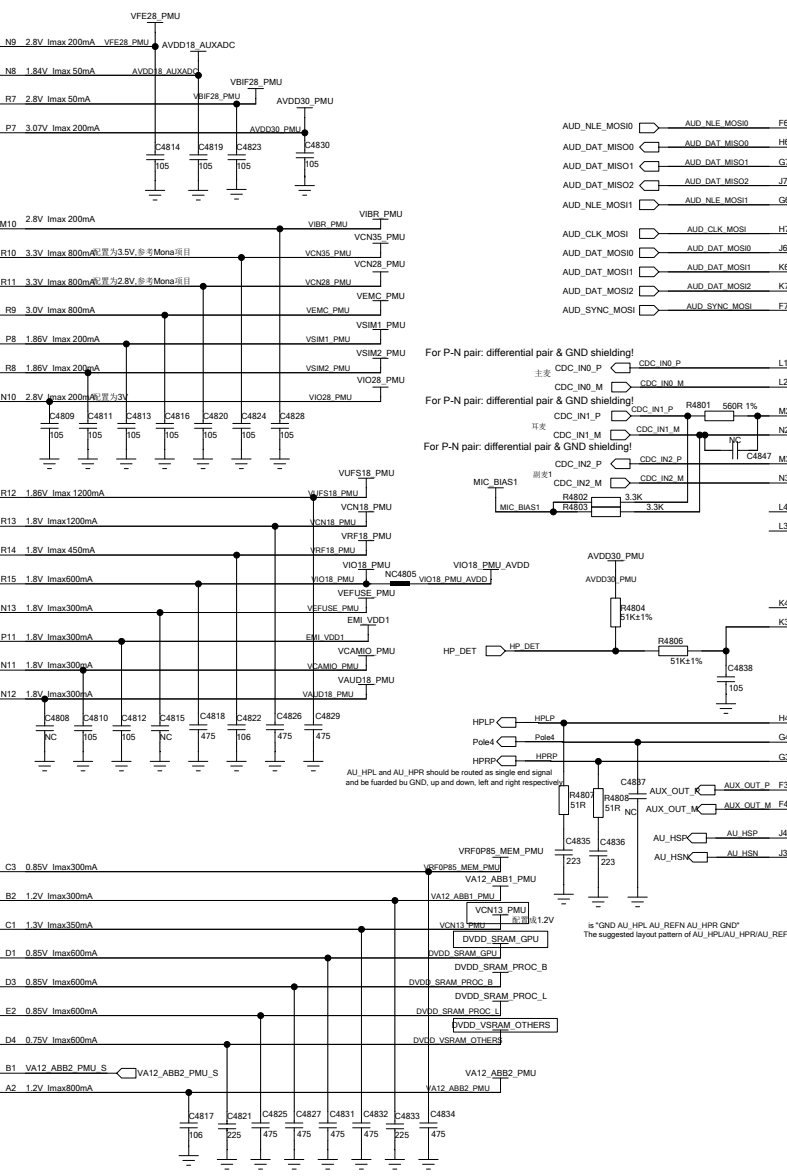
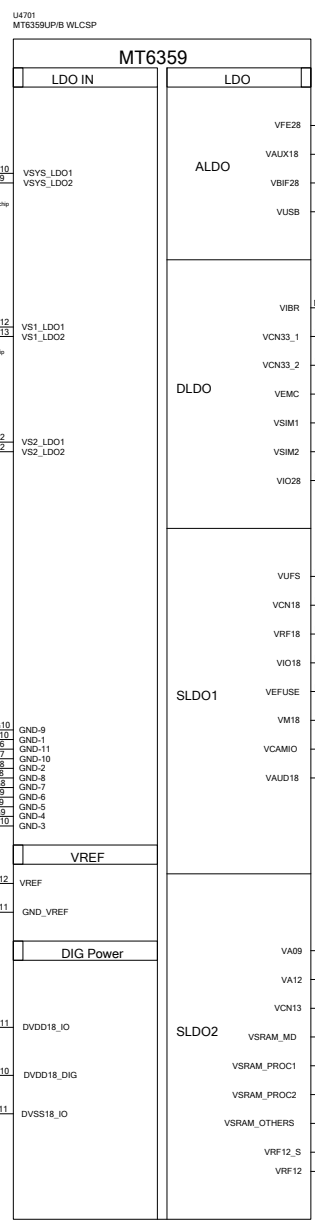
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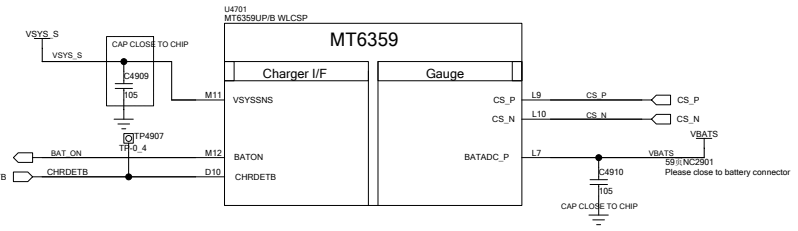
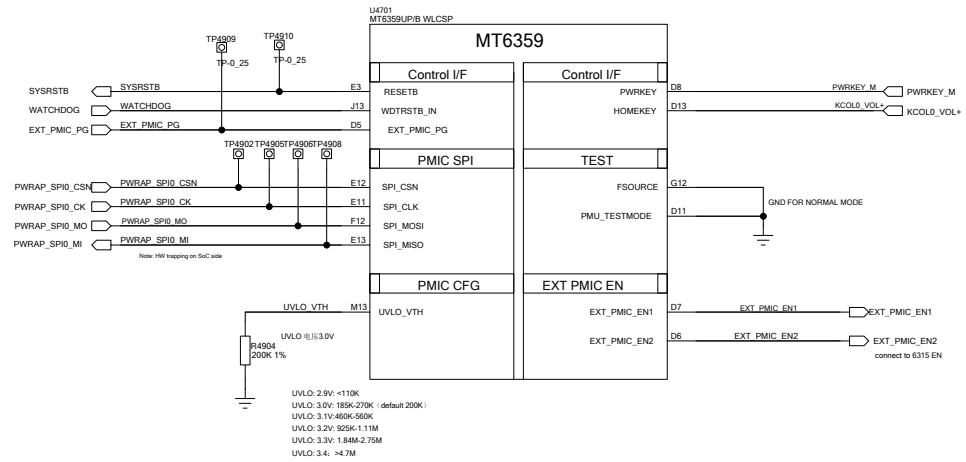
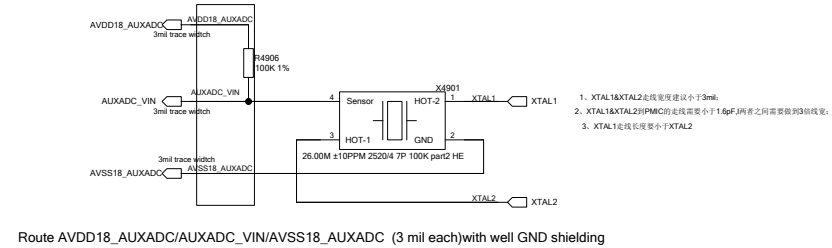
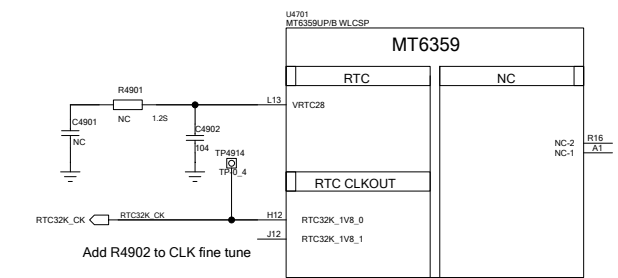
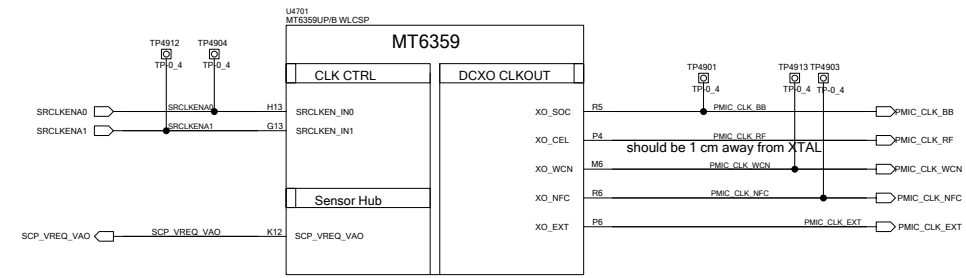
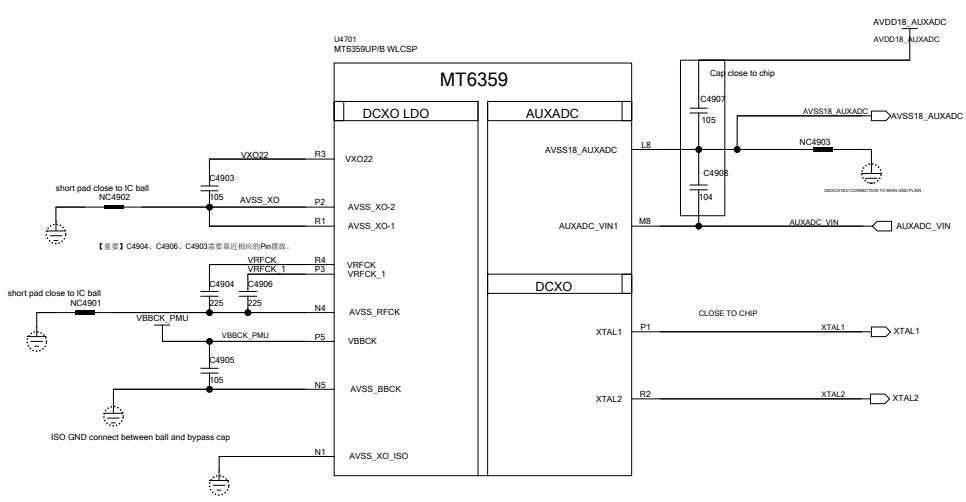
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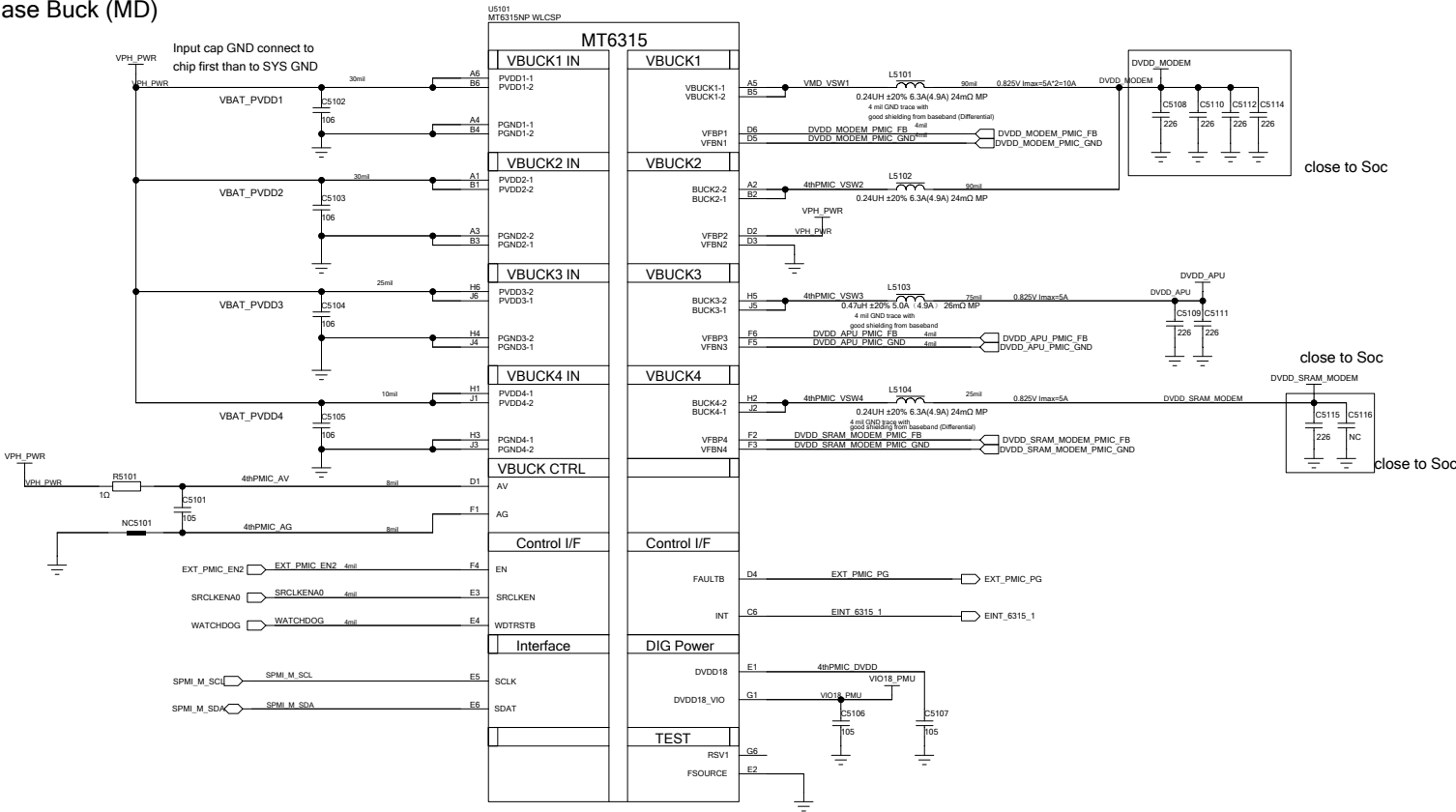


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MT6315 4-Phase Buck (MD)

使用MT6315TP/B, 需要申请新代码



close to Soc

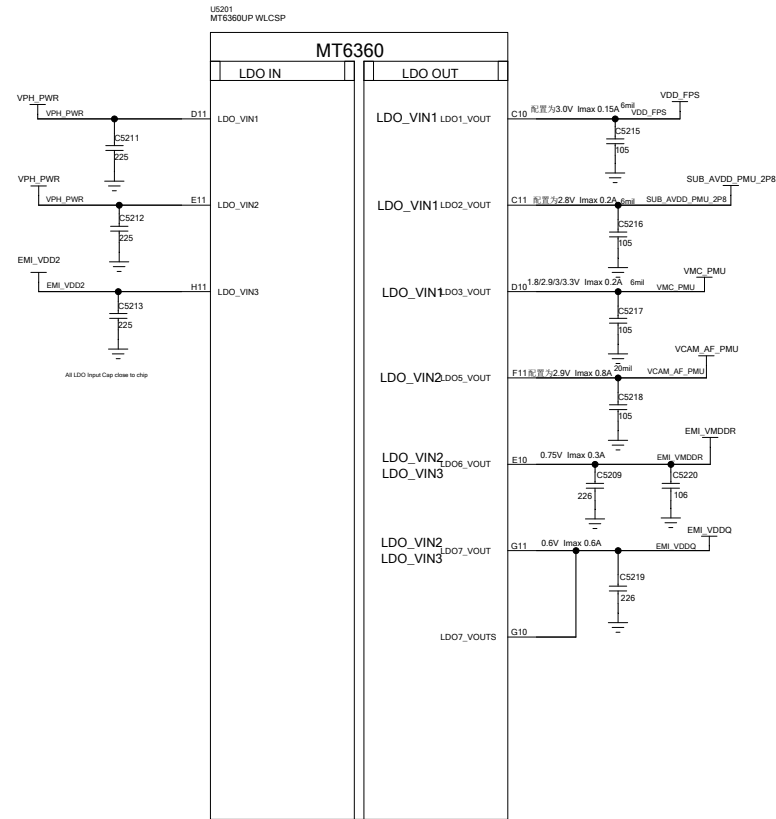
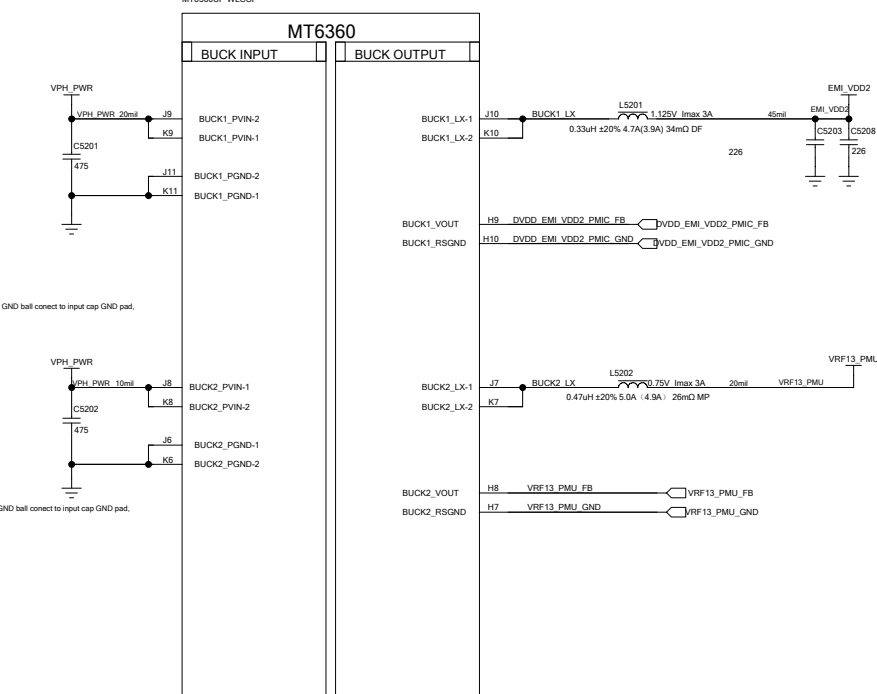
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close to Soc

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使用MT6360MP/A, 需要申请新代码



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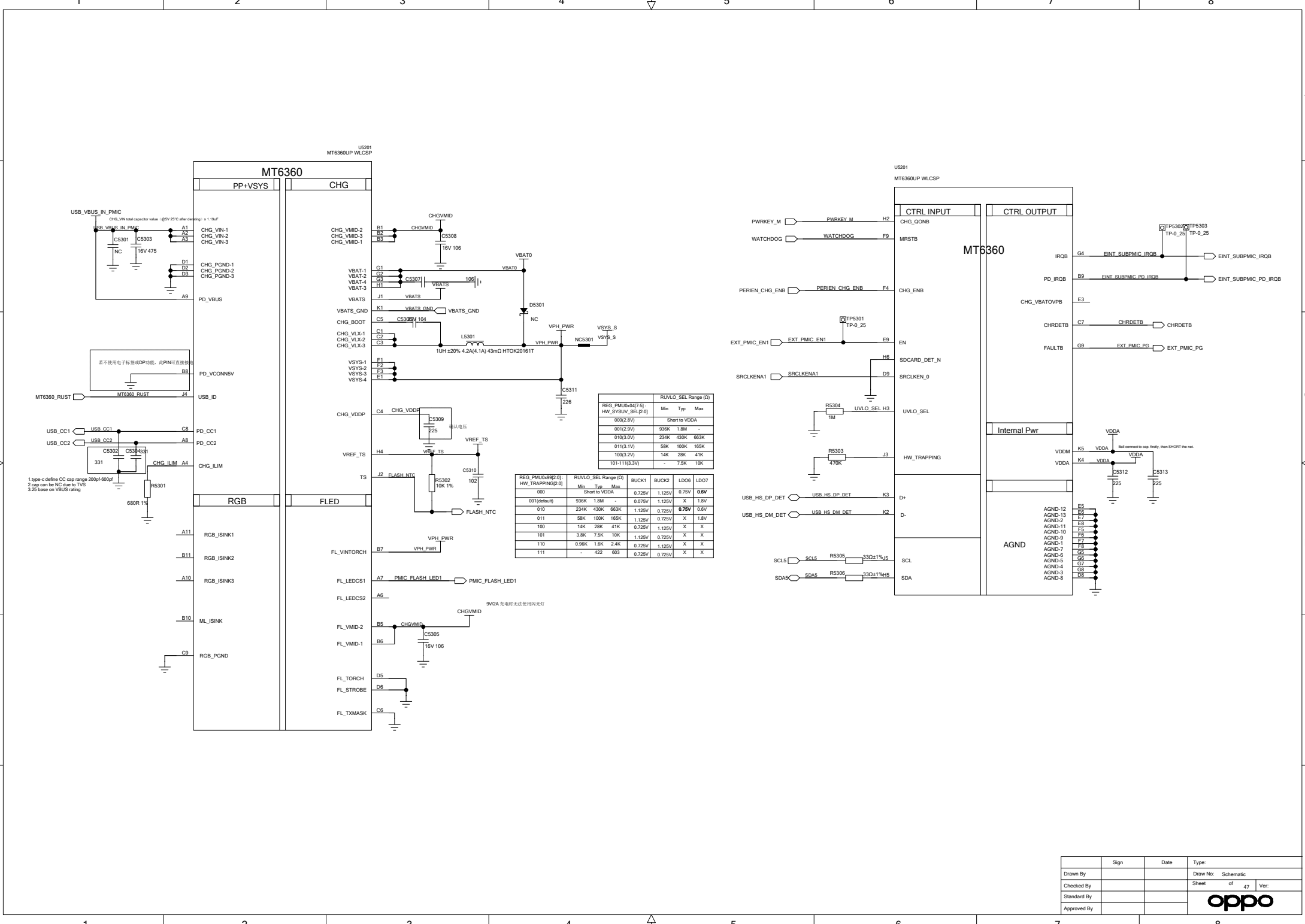
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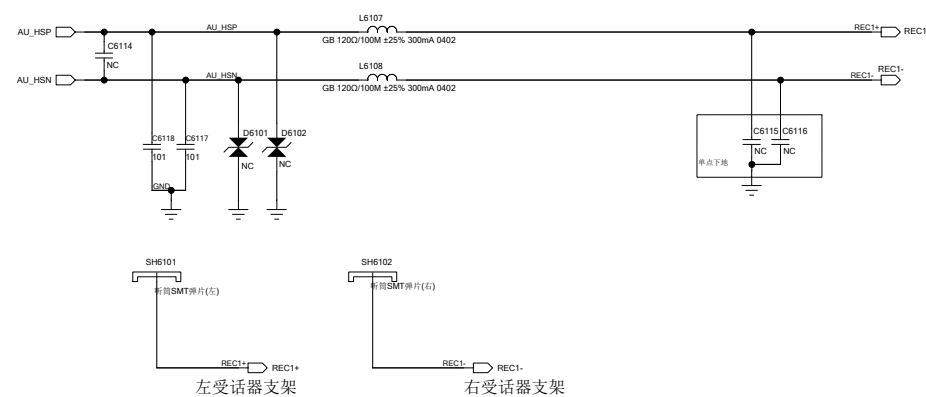
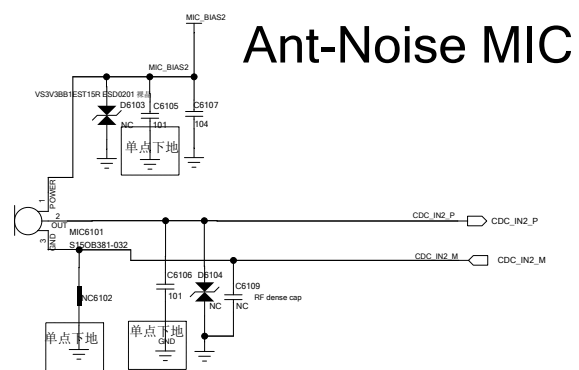
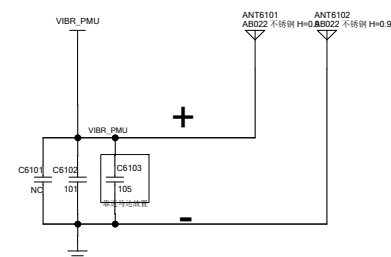
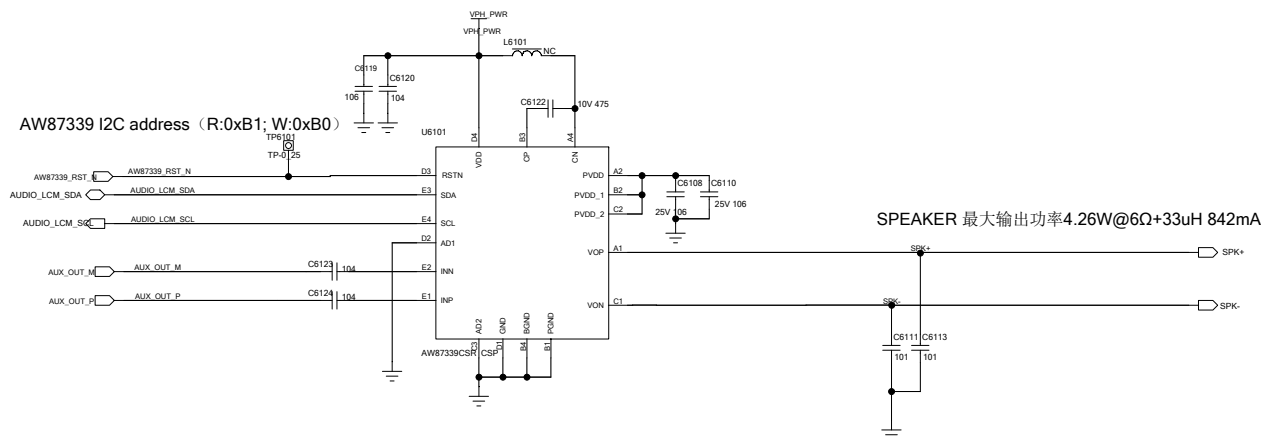
D


E

F



AUDIO PA



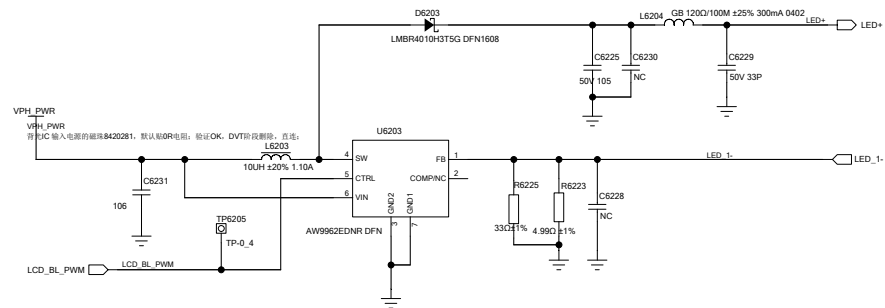
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| | Sign | Date | Type: | |
| Drawn By | | | Draw No: Schematic | |
| Checked By | | | Sheet | of 47 Ver: |
| Standard By | | |  | |
| Approved By | | | | |


DSI CMF



AW9962 I2C address (R:0x6D; W:0x6C)

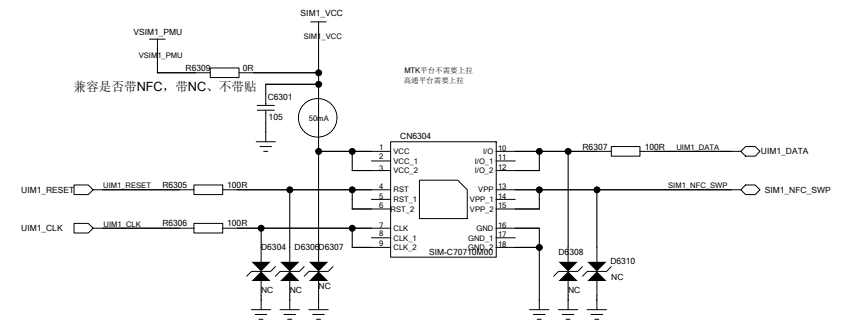
裸晶IC，注意布局位置应力

[illegible]

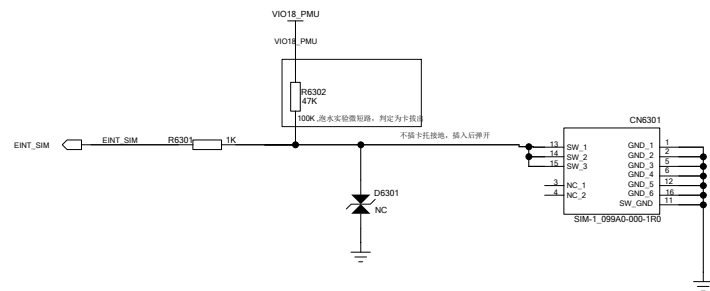
| | | | |
|-------------|------|------|---|
| | Sign | Date | Type: |
| Drawn By | | | Draw No: Schematic |
| Checked By | | | Sheet of 47 Ver: |
| Standard By | | |  |
| Approved By | | | |

SD Card

SIM1 Card

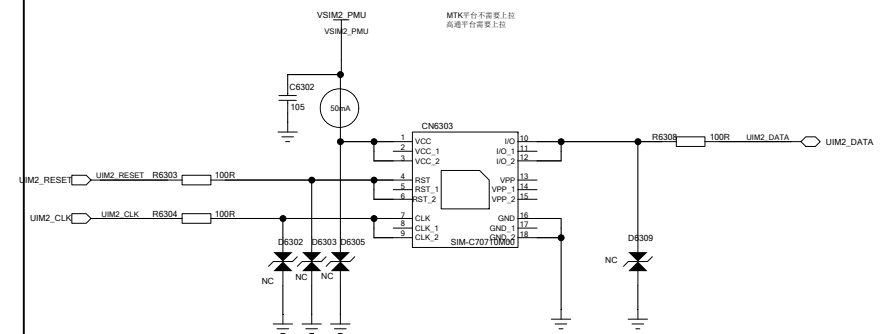


Hot plug




| |
|-----------|
| SIM2 Card |
|-----------|

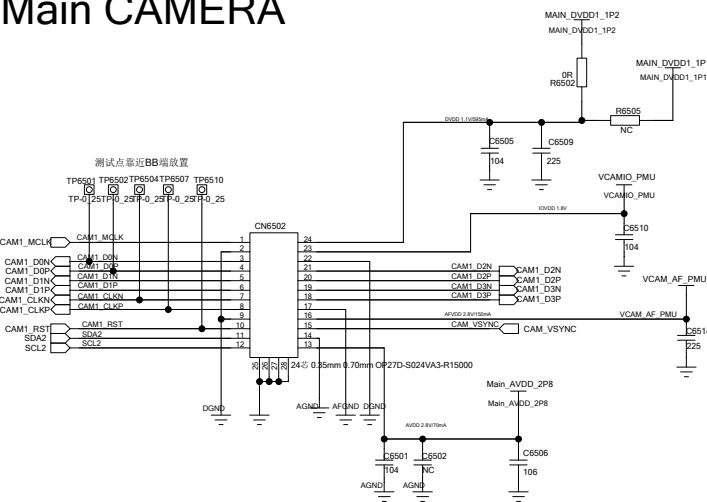
靠外侧SIM卡



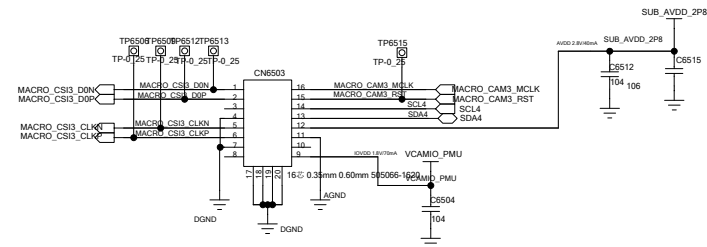
方案只支持单SIM卡 NFC

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|-------------|------|------|---|------|
| | Sign | Date | Type: | |
| Drawn By | | | Draw No: Schematic | |
| Checked By | | | Sheet 15 of 32 | Ver: |
| Standard By | | |  | |
| Approved By | | | | |

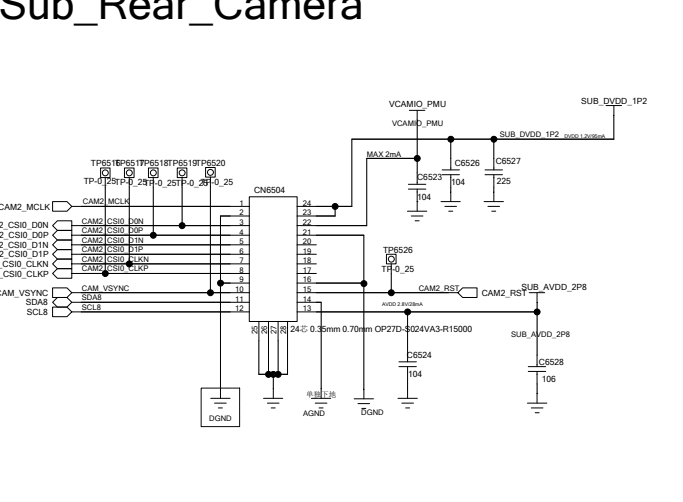
Main CAMERA



MACRO_Camera

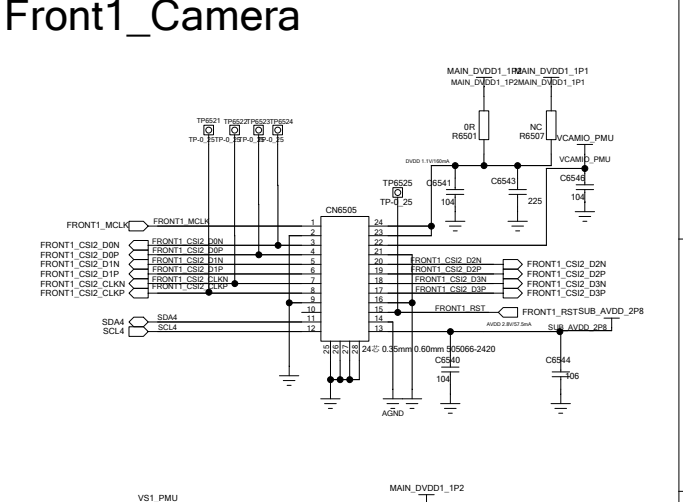


Sub_Rear_Camera

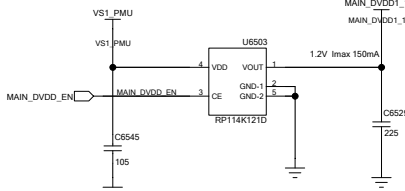


| BOM | 高配 | 低配 |
|-------|----|----|
| U6502 | 上件 | NC |
| C6535 | 上件 | NC |
| C6536 | 上件 | NC |
| C6539 | 上件 | NC |
| U6503 | NC | 上件 |
| C6545 | NC | 上件 |
| C6542 | NC | 上件 |
| C6529 | NC | 上件 |
| R6501 | NC | 上件 |
| R6502 | NC | 上件 |

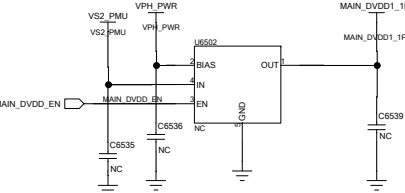
Front1_Camera



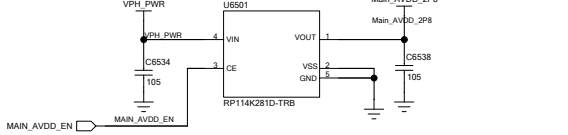
Main_Camera_DVDD(1.2V)



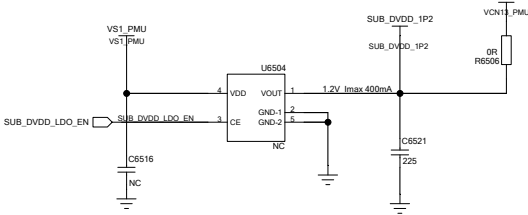
Main_Camera_DVDD(1.1V)



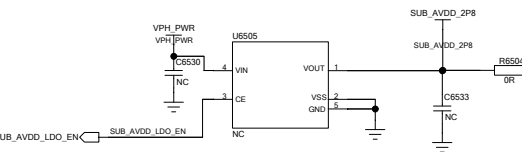
Main AVDD



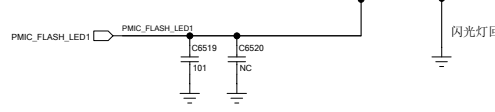
Sub_Camera_DVDD



Sub_Camera_AVDD

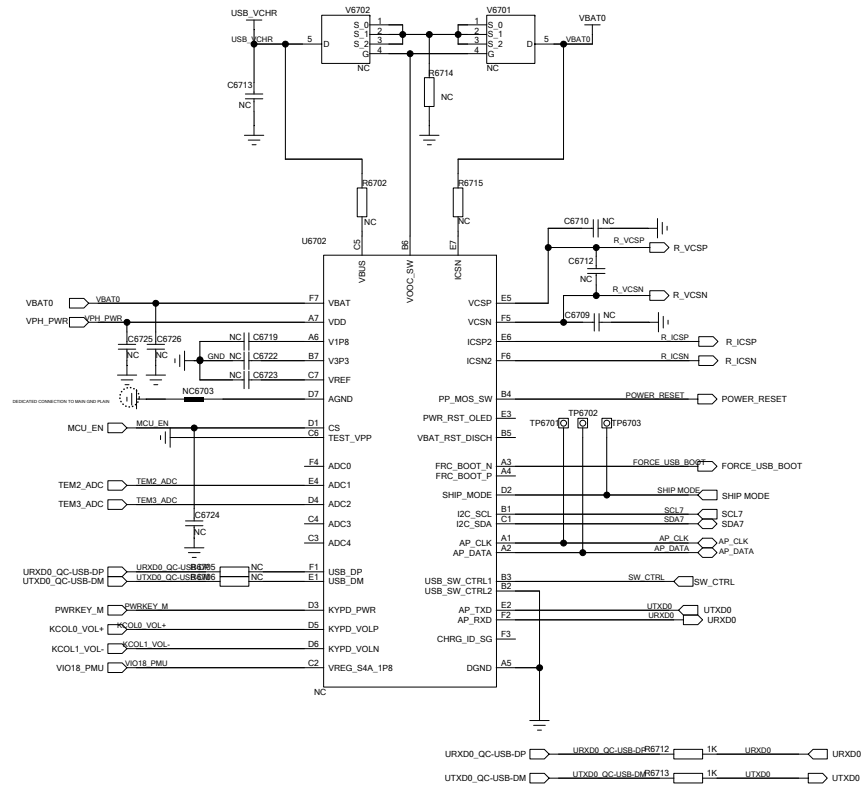


Flash LED

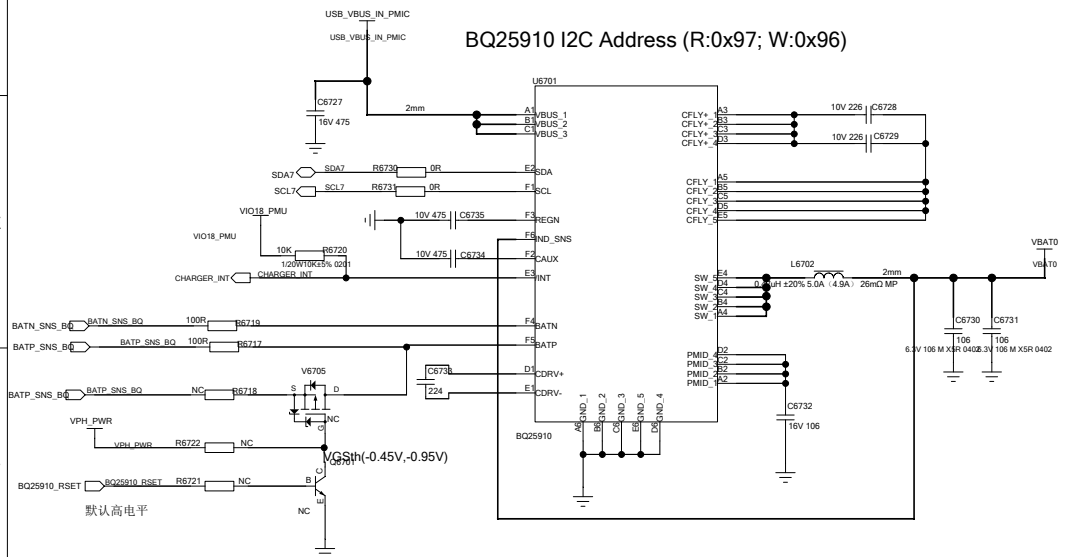


Fast Charge

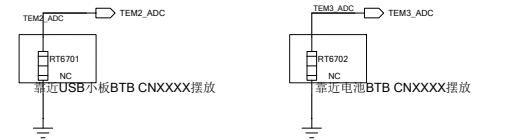
ASIC Fast Charge



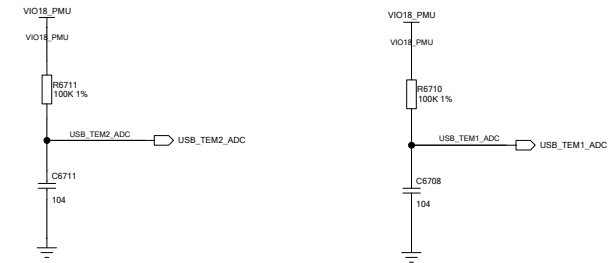
BQ25910 I2C Address (R:0x97; W:0x96)




Thermistor



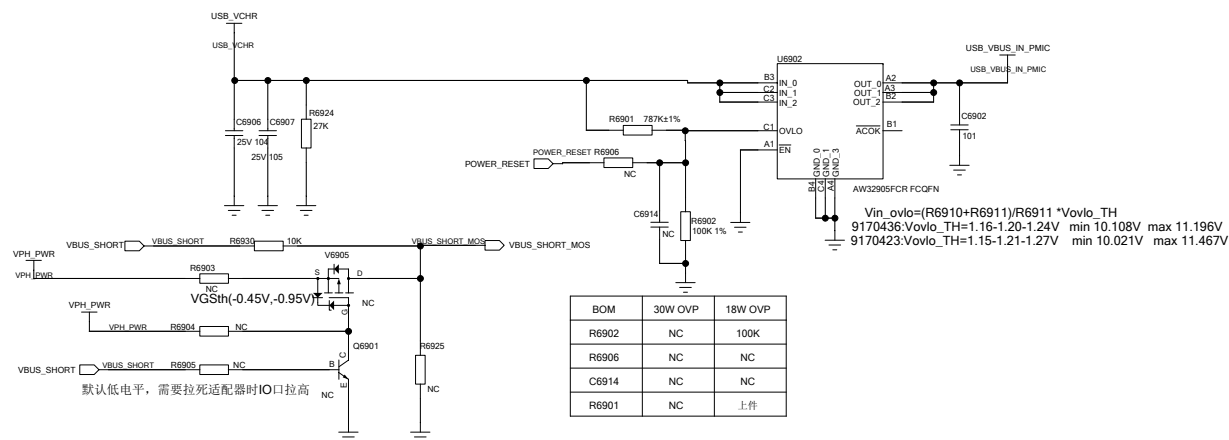
PS: 32页还有4个NTC



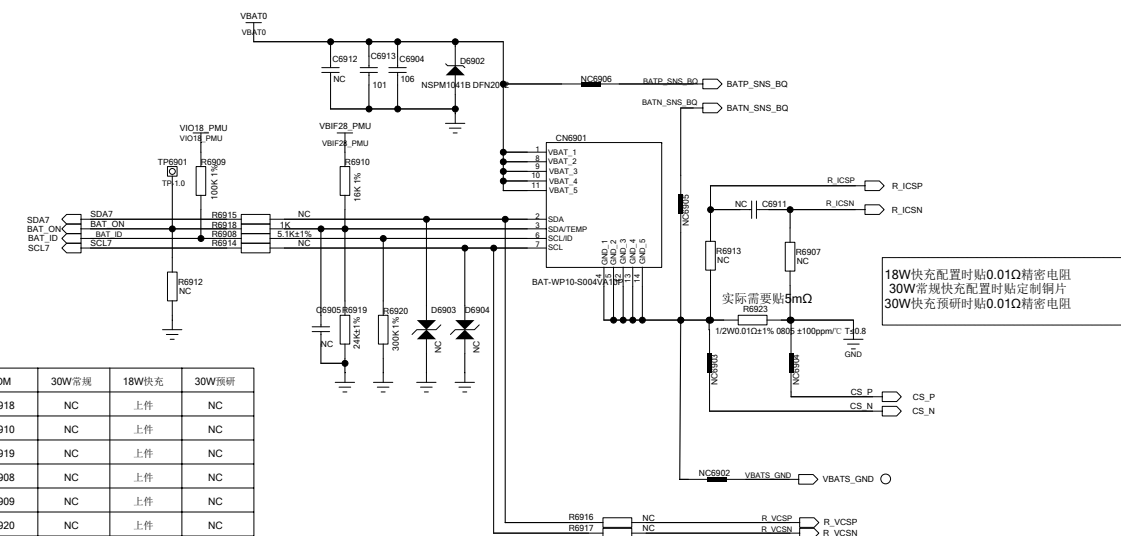
18W快充的时候贴BQ25910;快充ASIC、MOS以及NTC电阻 NC

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| | Sign | Date | Type: | |
| Drawn By | | | Draw No: Schematic | |
| Checked By | | | Sheet of 47 | Ver: |
| Standard By | | |  | |
| Approved By | | | | |

NVP&OVP



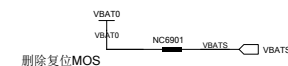
Battery Connector




| BOM | 30W常规 | 18W快充 | 30W预研 |
|--------|-------|-------|-------|
| R6918 | NC | 上件 | NC |
| R6910 | NC | 上件 | NC |
| R6919 | NC | 上件 | NC |
| R6908 | NC | 上件 | NC |
| R6909 | NC | 上件 | NC |
| R6920 | NC | 上件 | NC |
| R6912 | 上件 | NC | 上件 |
| R6914 | 上件 | NC | 上件 |
| R6915 | 上件 | NC | 上件 |
| R6916 | NC | NC | 上件 |
| R6917 | NC | NC | 上件 |
| R6913 | NC | NC | 上件 |
| R6907 | NC | NC | 上件 |
| R6923 | NC | 上件 | 上件 |
| SH6923 | 上件 | NC | NC |

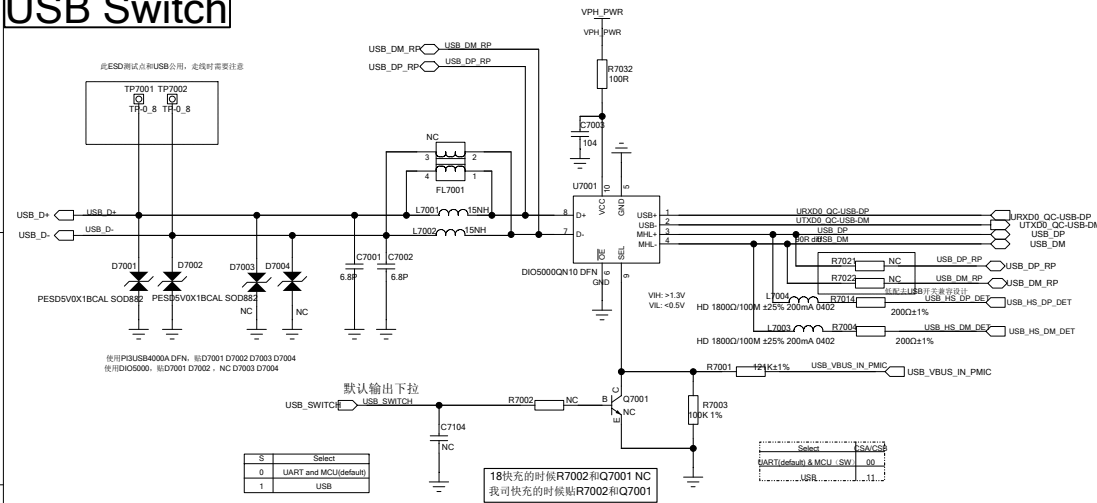
BAT_MOSFET

VPH_PWR是从充电IC的系统供电输出端取电
VBAT0是直接来自电池取电
VBAT_RST是从复位MOS管输出端取电

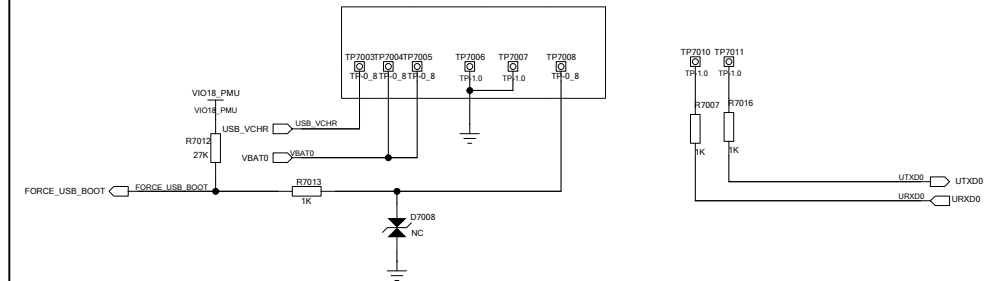


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| | Sign | Date | Type: | |
| Drawn By | | | Draw No: Schematic | |
| Checked By | | | Sheet | of 47 Ver: |
| Standard By | | |  | |
| Approved By | | | | |

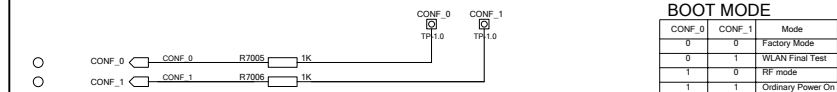
USB Switch



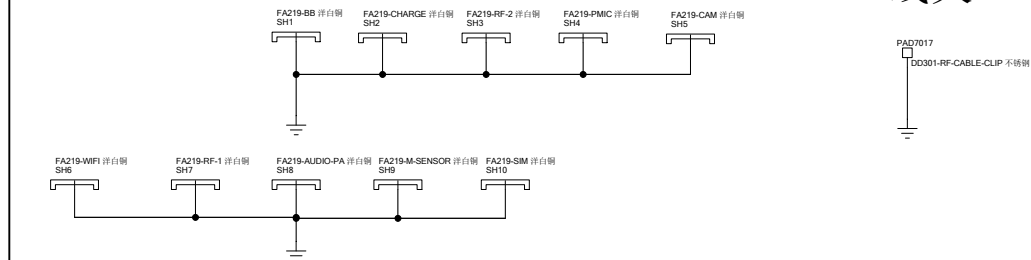
Test Point



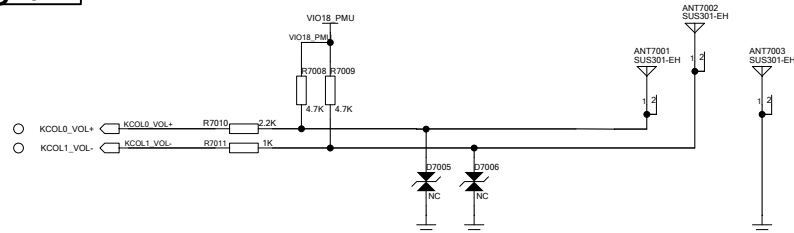
Test Config



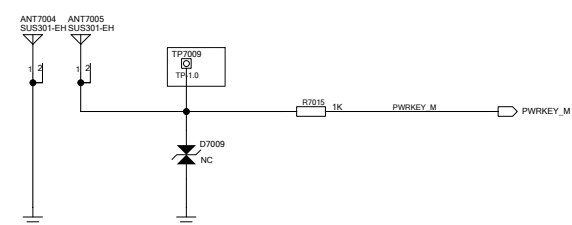
Screw Hole



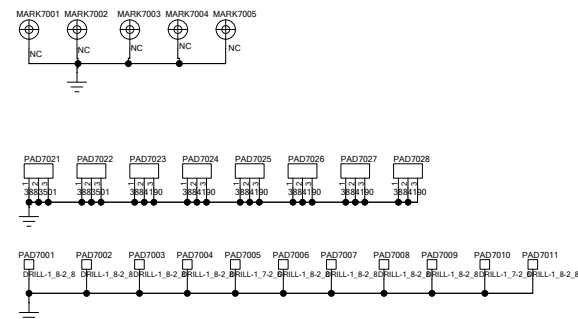
Key of Volume + -




Power Key

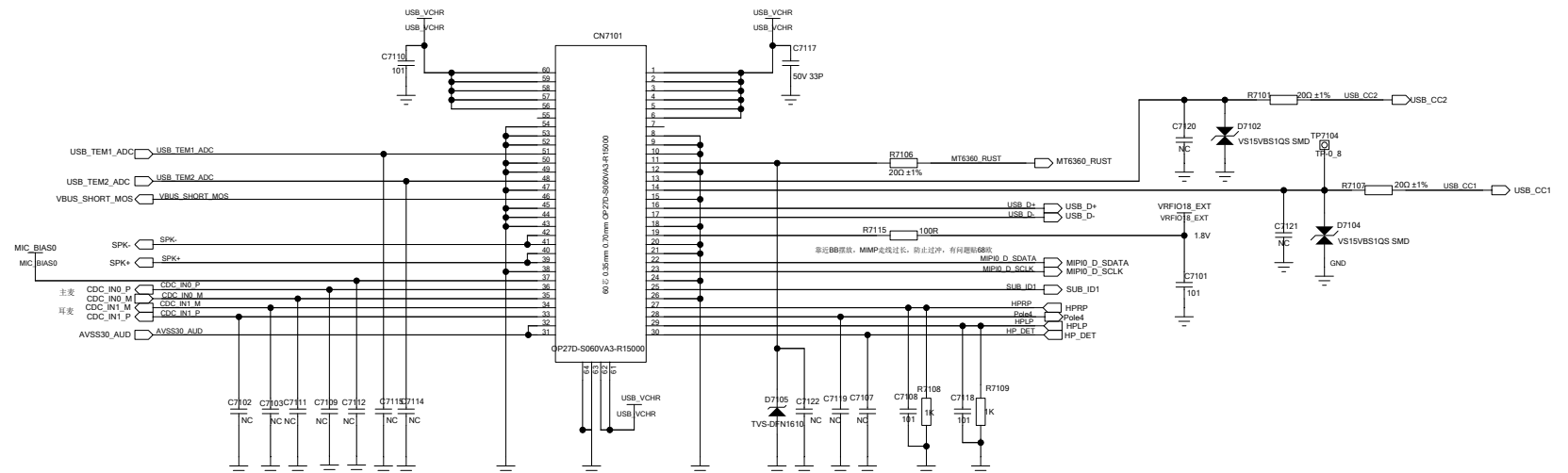


Mark Point DRILL




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| | Sign | Date | Type: |
| Drawn By | | | Draw No: Schematic |
| Checked By | | | Sheet of 47 Ver: |
| Standard By | | |  |
| Approved By | | | |

BTB TO ABoard



63/64靠近30/31 pin, 62/61靠近1/60 pin

| | | | | |
|-------------|------|------|---|------|
| | Sign | Date | Type: | |
| Drawn By | | | Draw No: Schematic | |
| Checked By | | | Sheet of 47 | Ver: |
| Standard By | | |  | |
| Approved By | | | | |

