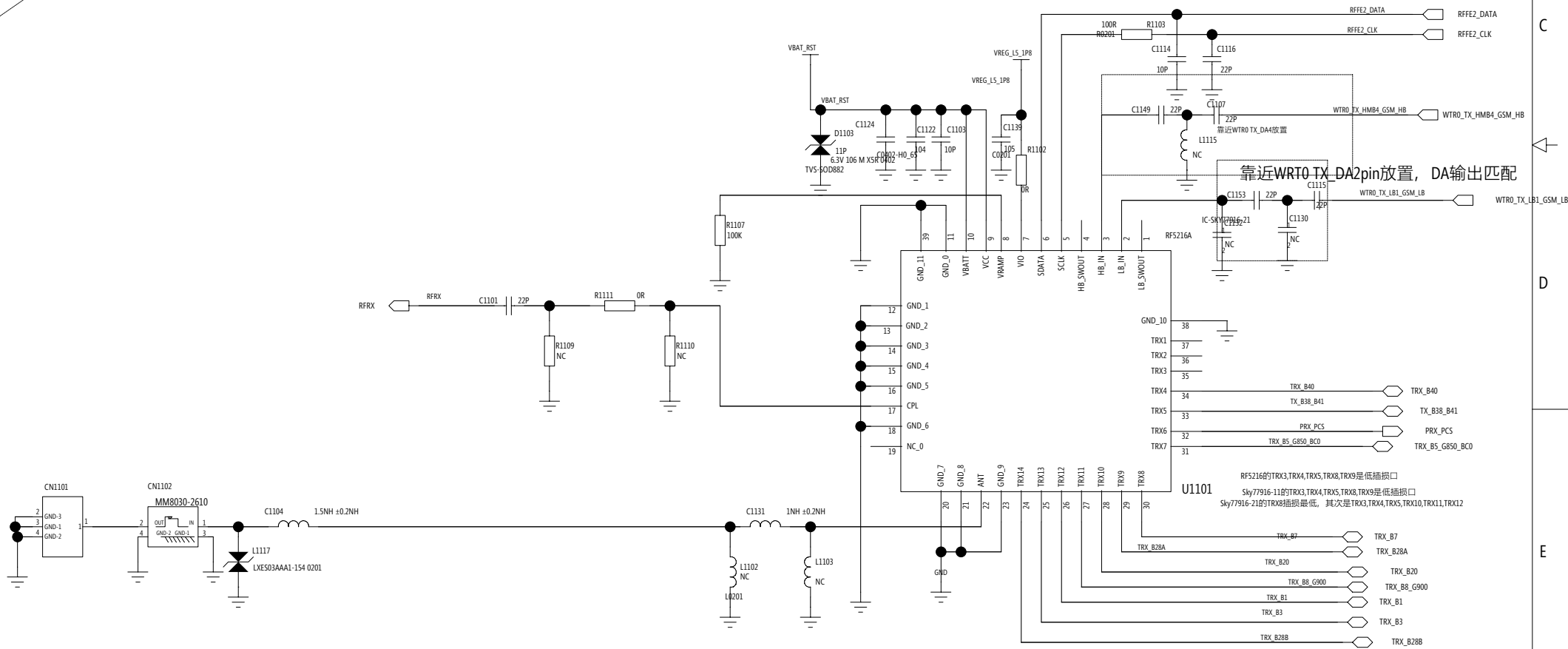


TOP面弹片: 3878806
BOT面弹片: 3878679



A

B

C

D

E

F

A

B

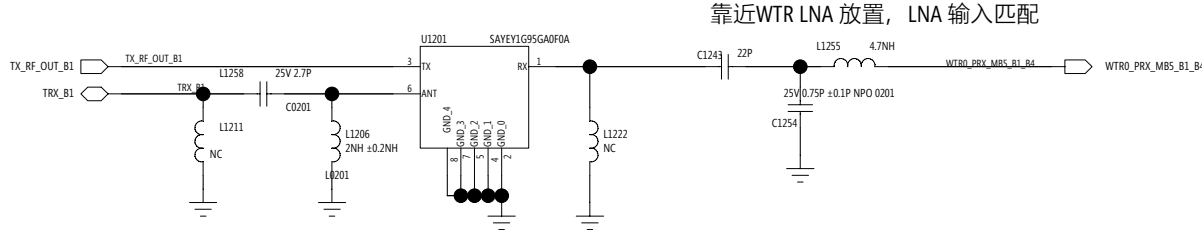
C

D

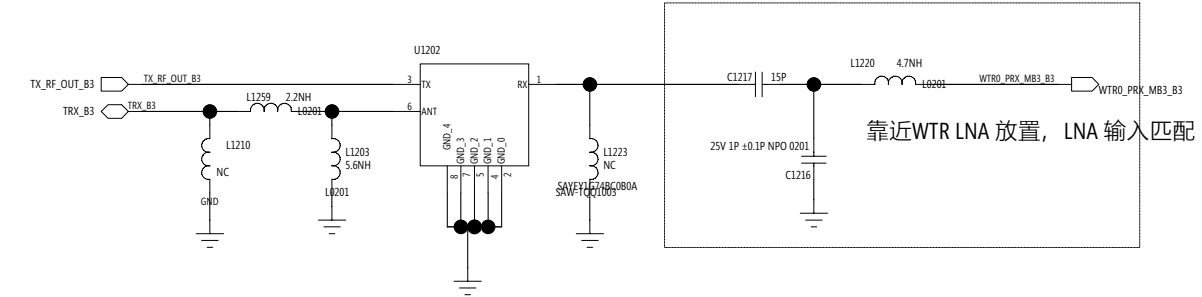
E

F

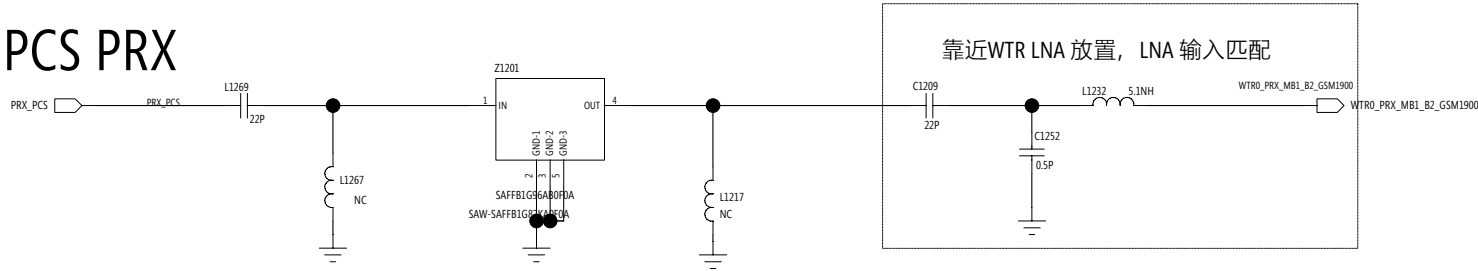
B1 TRX

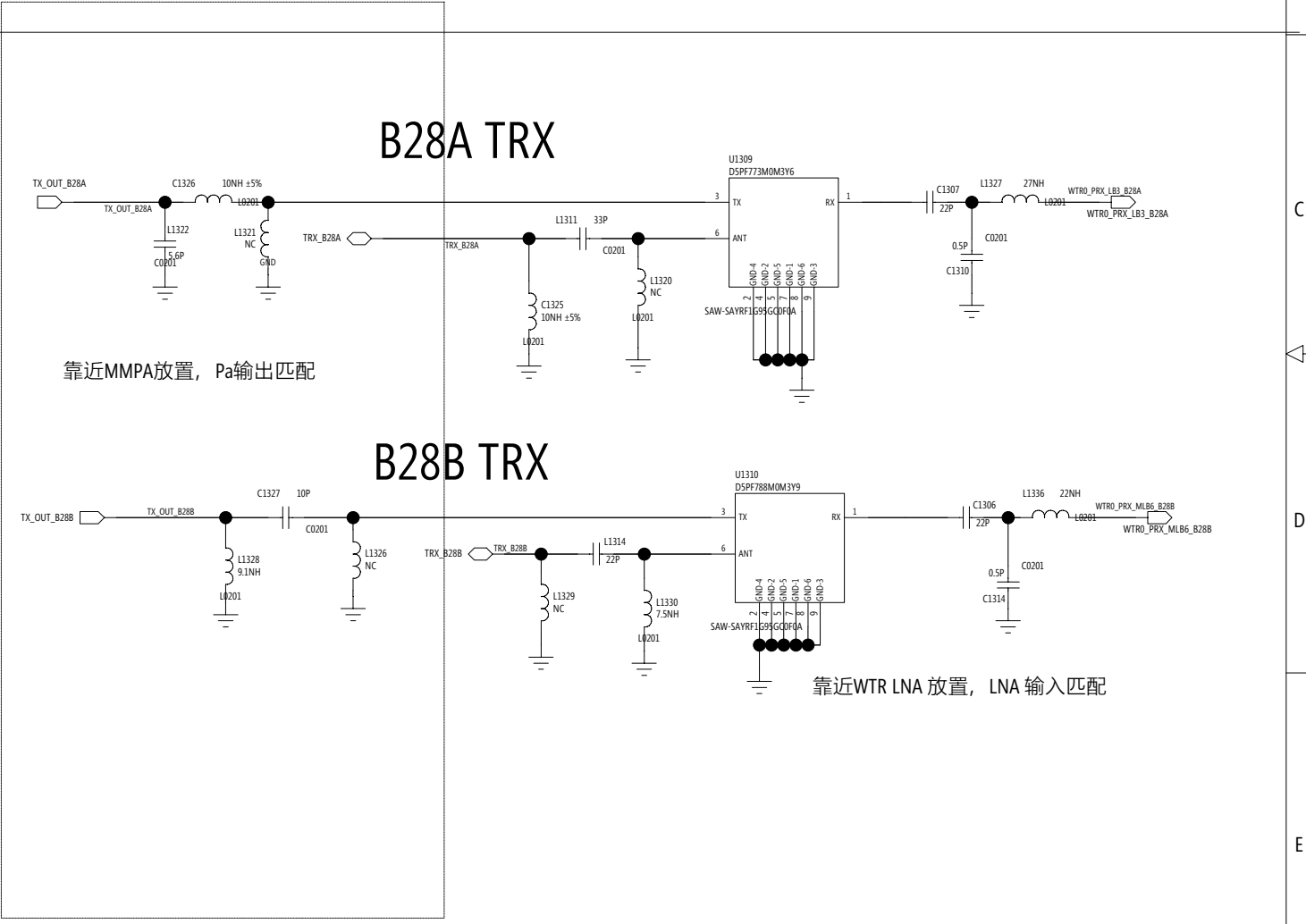
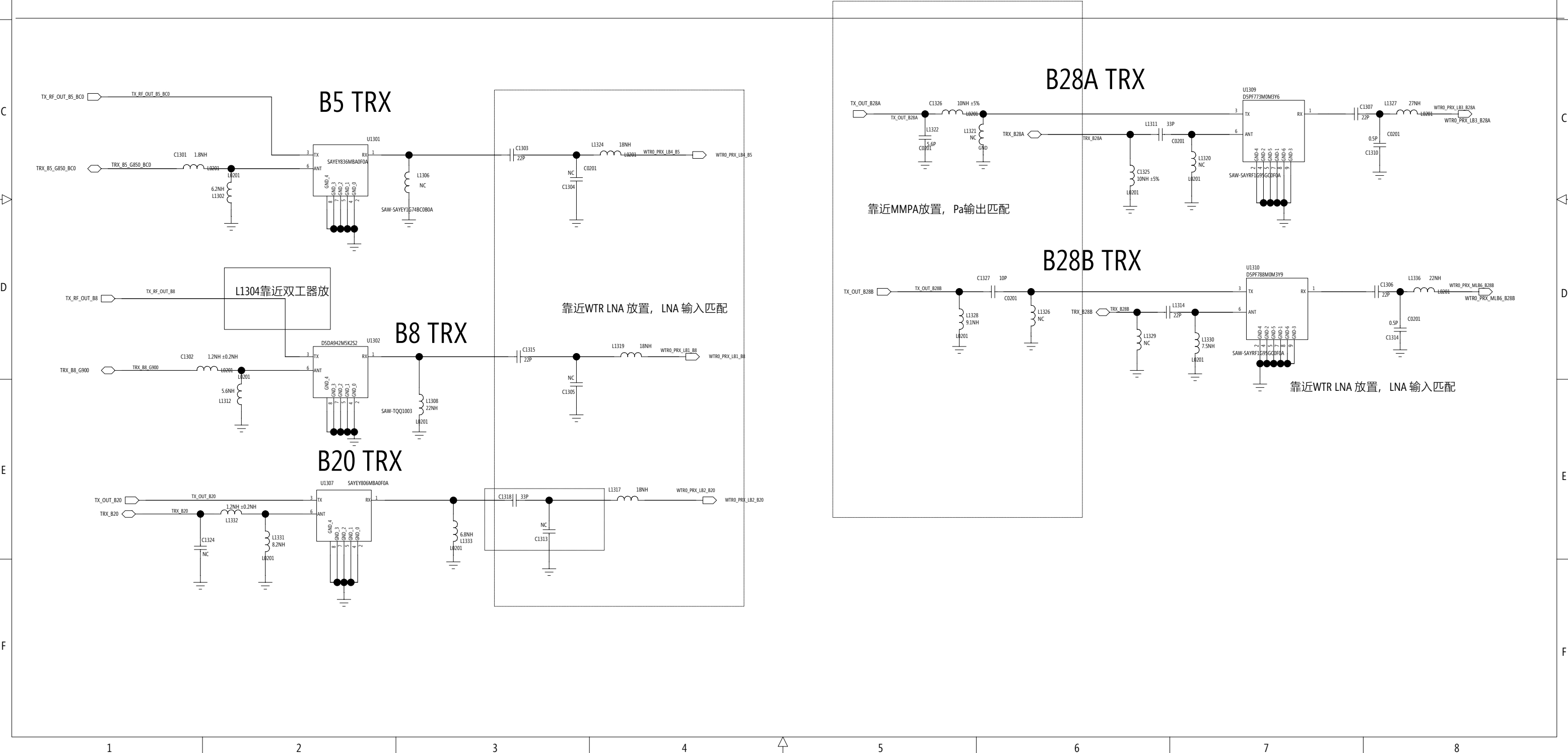
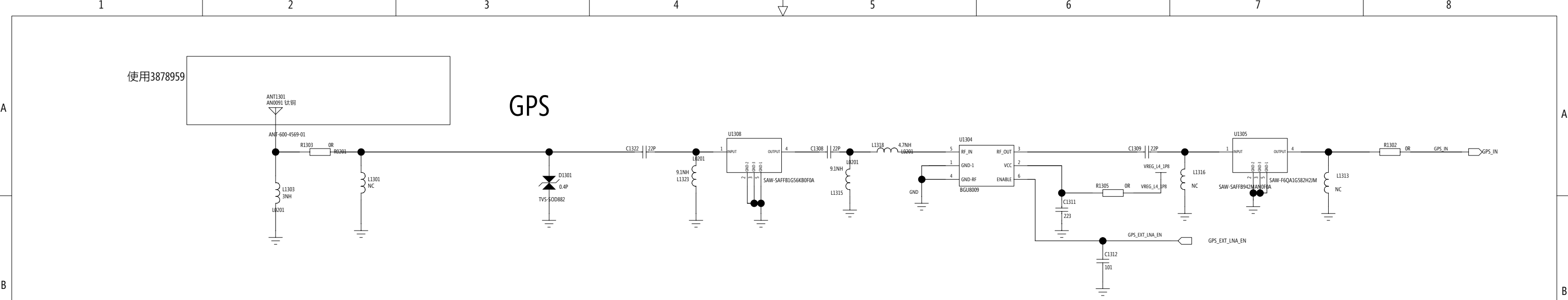


B3 TRX

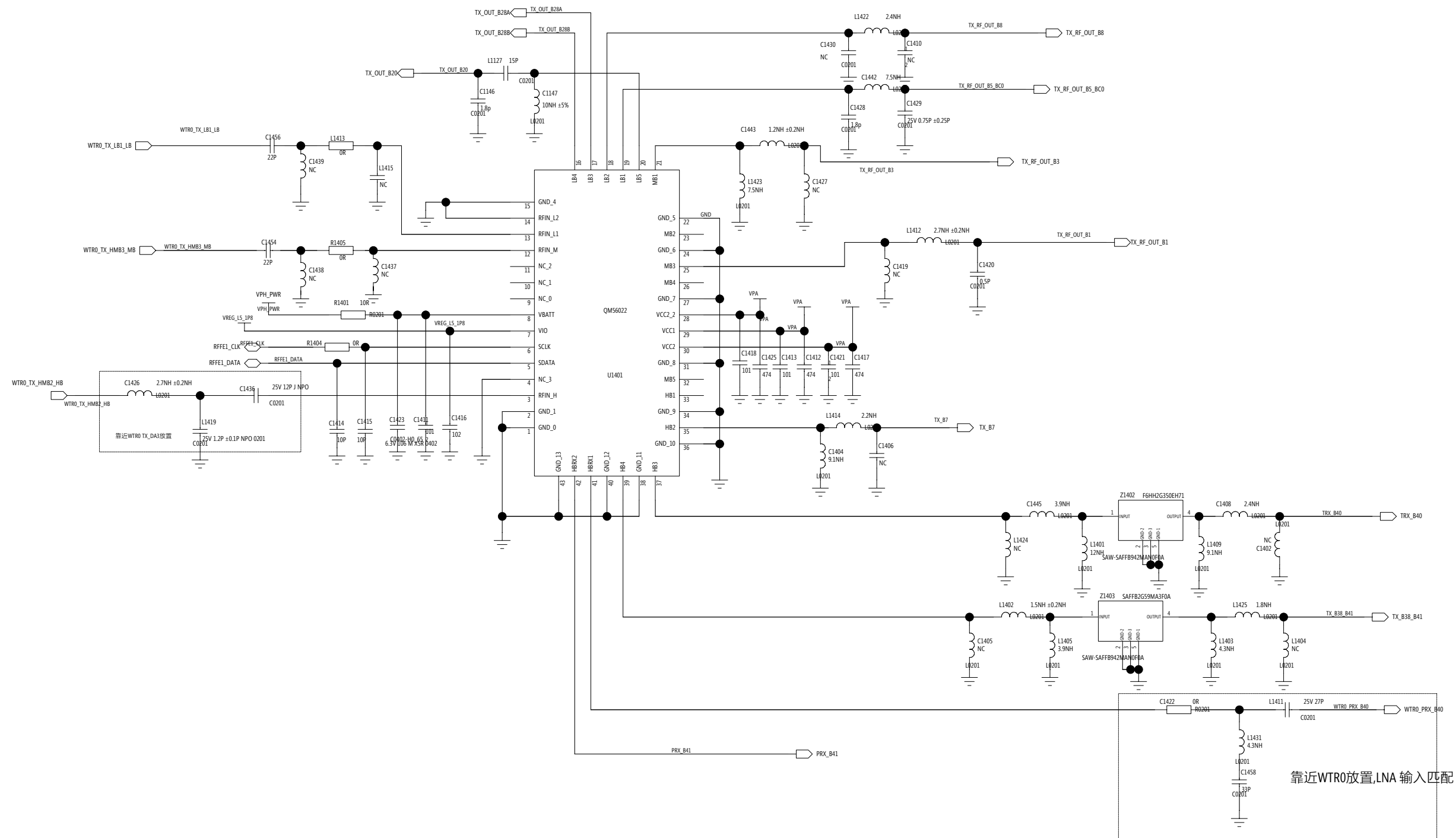


PCS PRX

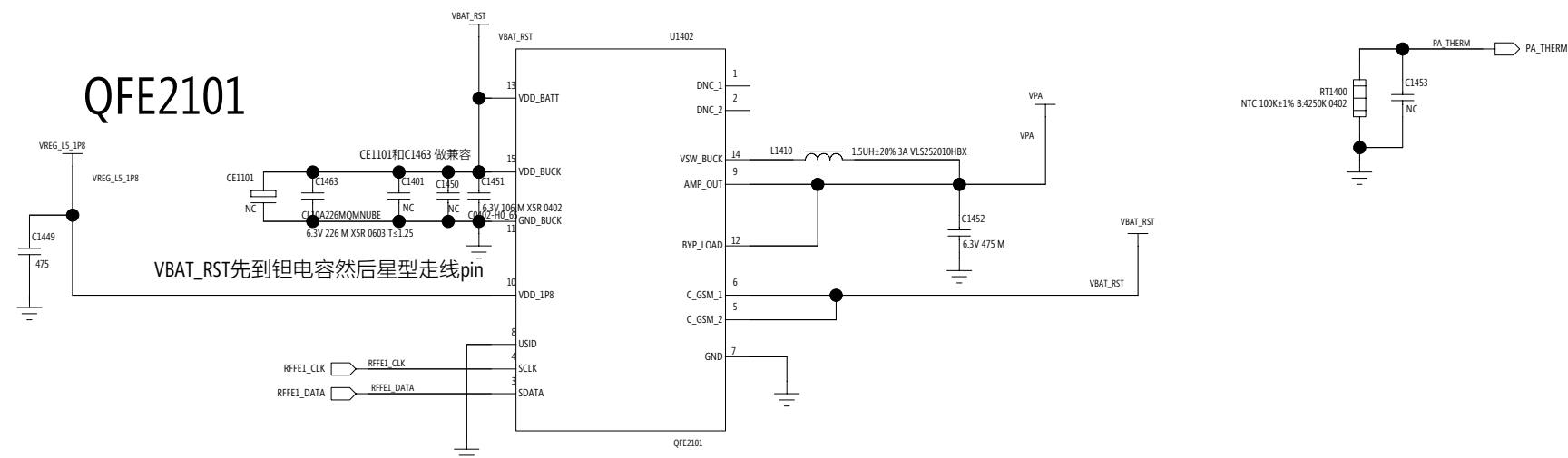




MMMPA

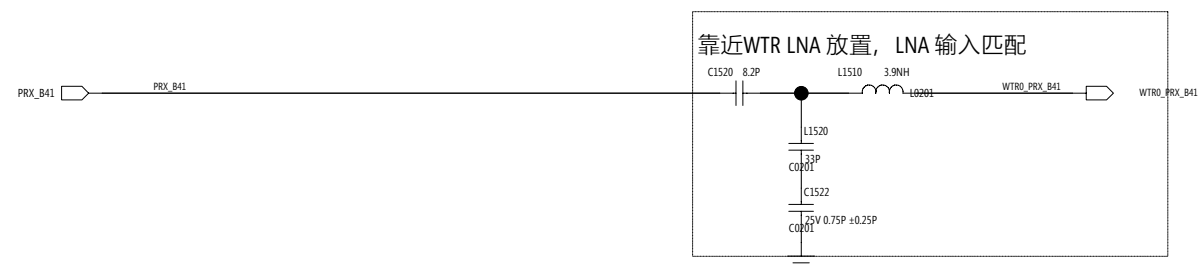
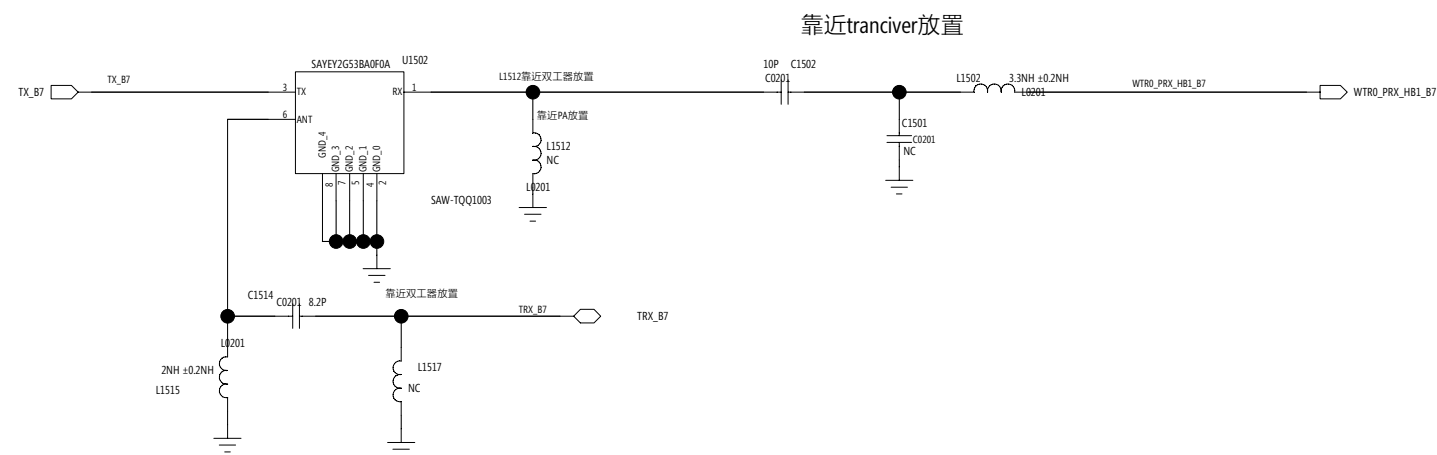


QFE2101



B7 双工器

B7与B41 PRX



A

B

C

D

E

F

A

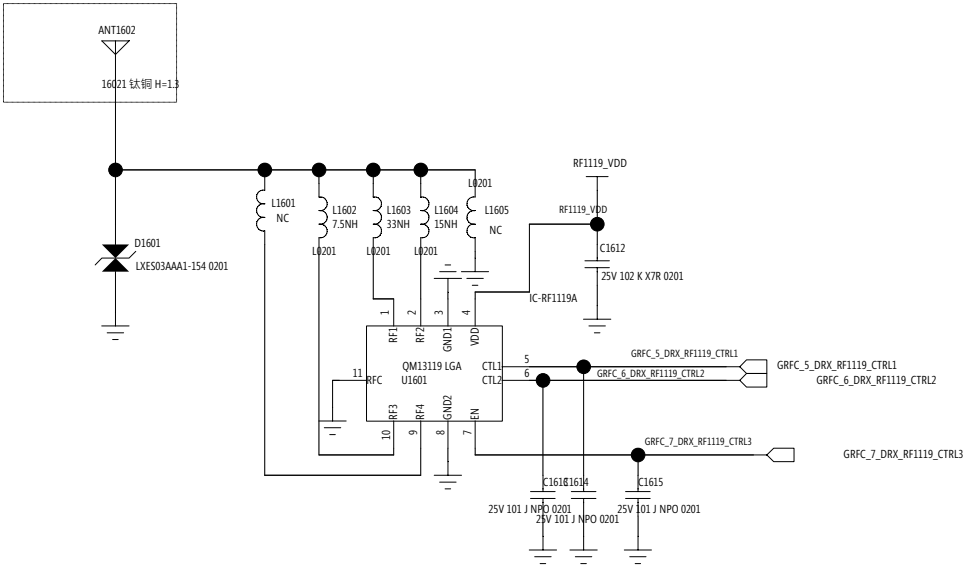
B

C

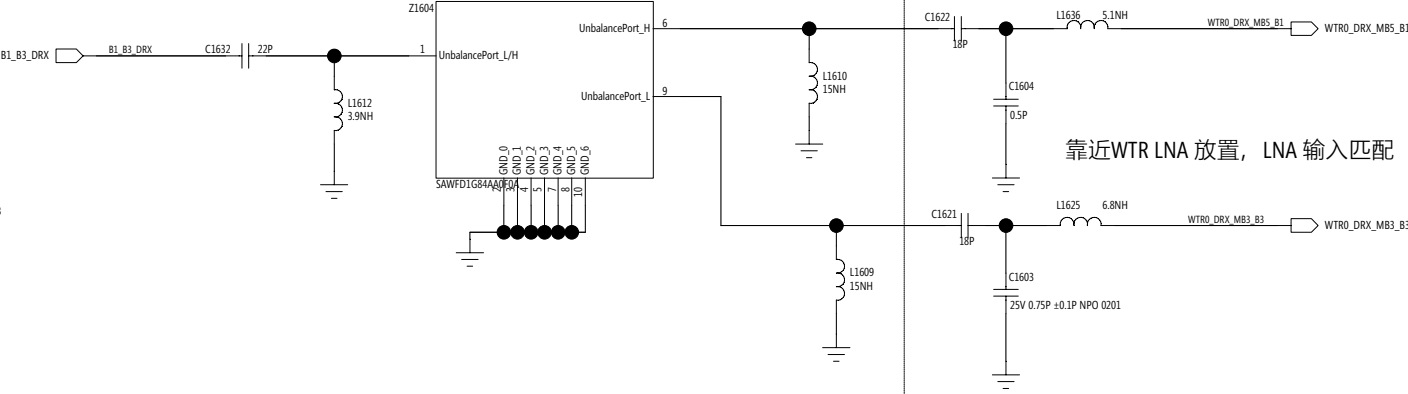
D

E

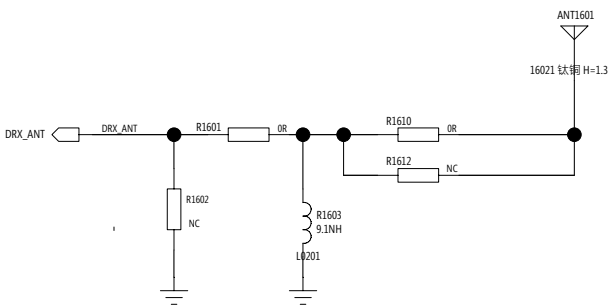
F



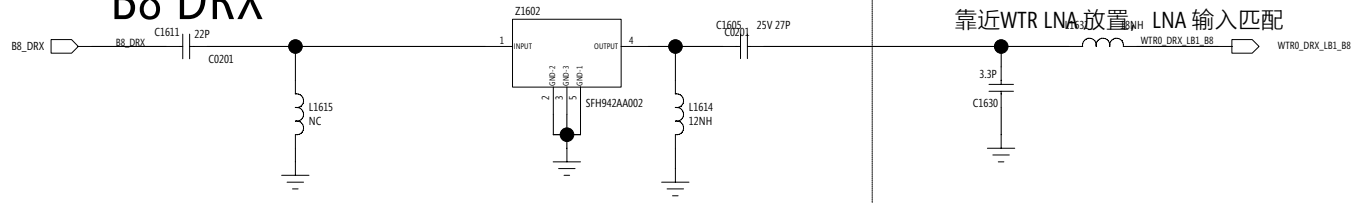
B1_B3 DRX



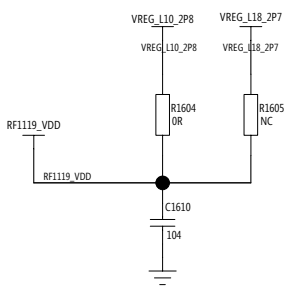
靠近WTR LNA 放置，LNA 输入匹配



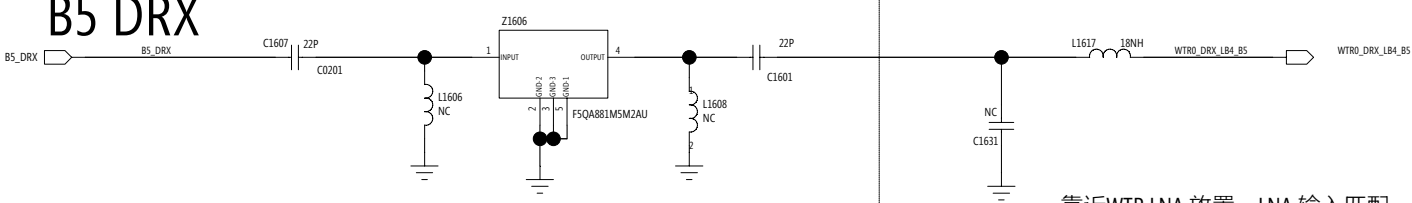
B8 DRX



靠近WTR LNA放置，LNA 输入匹配

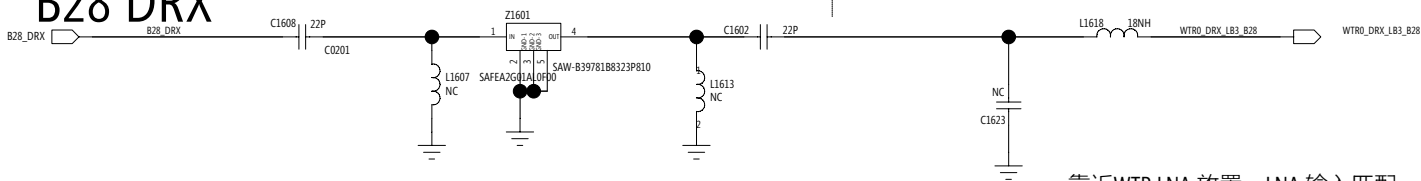


B5 DRX



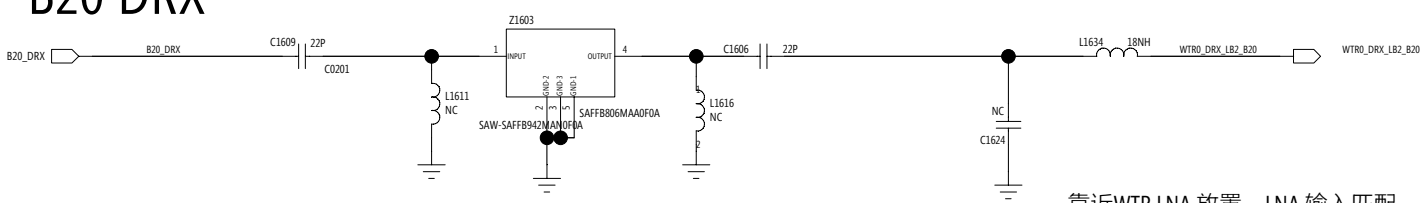
靠近WTR LNA 放置，LNA 输入匹配

B28 DRX



靠近WTR LNA 放置，LNA 输入匹配

B20 DRX



靠近WTR LNA 放置，LNA 输入匹配

A

B

C

D

E

F

A

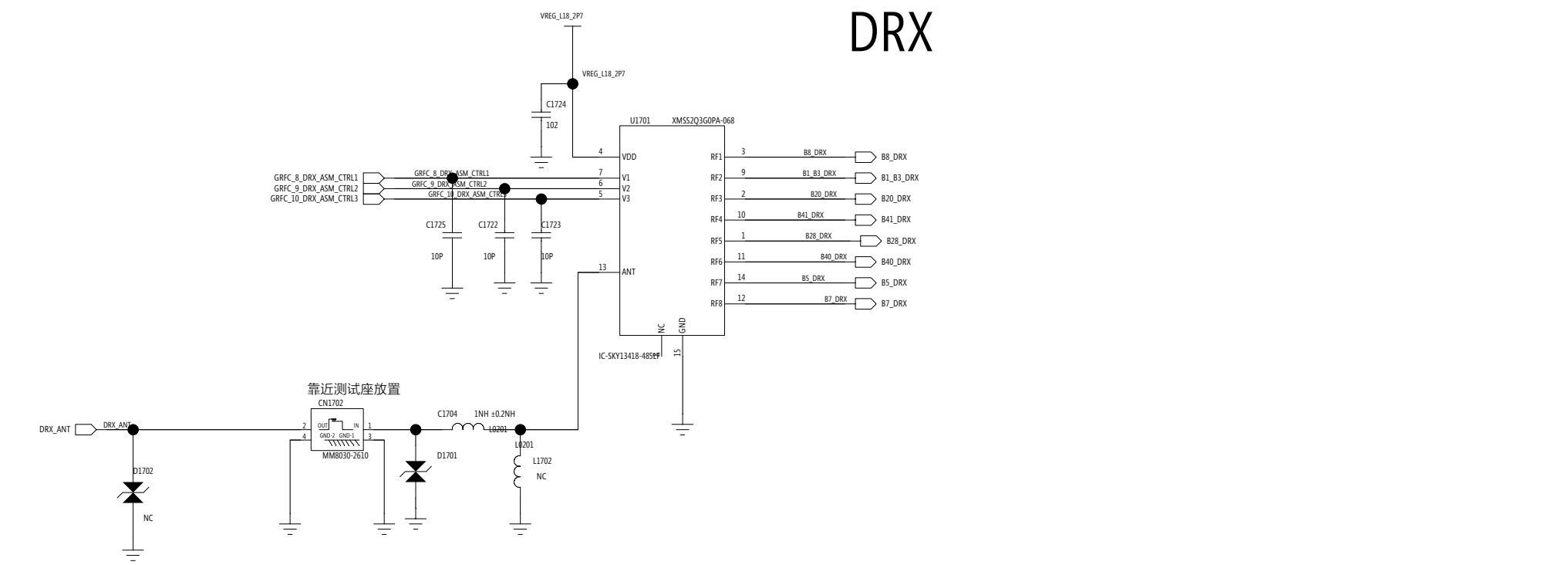
B

C

D

E

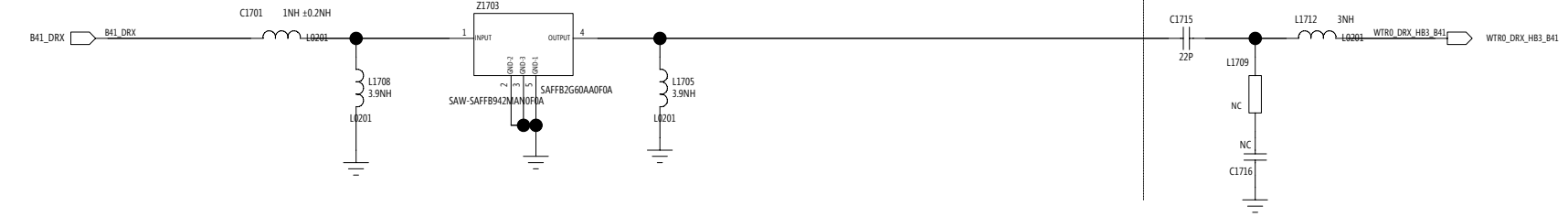
F



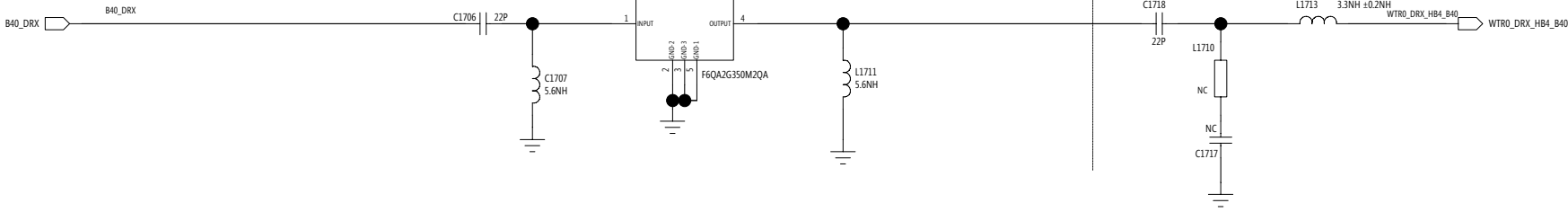
B7 DRX

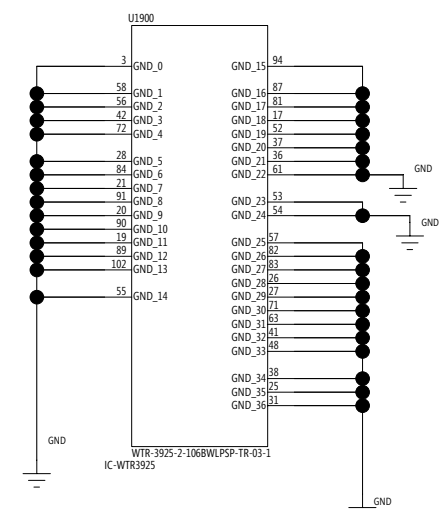
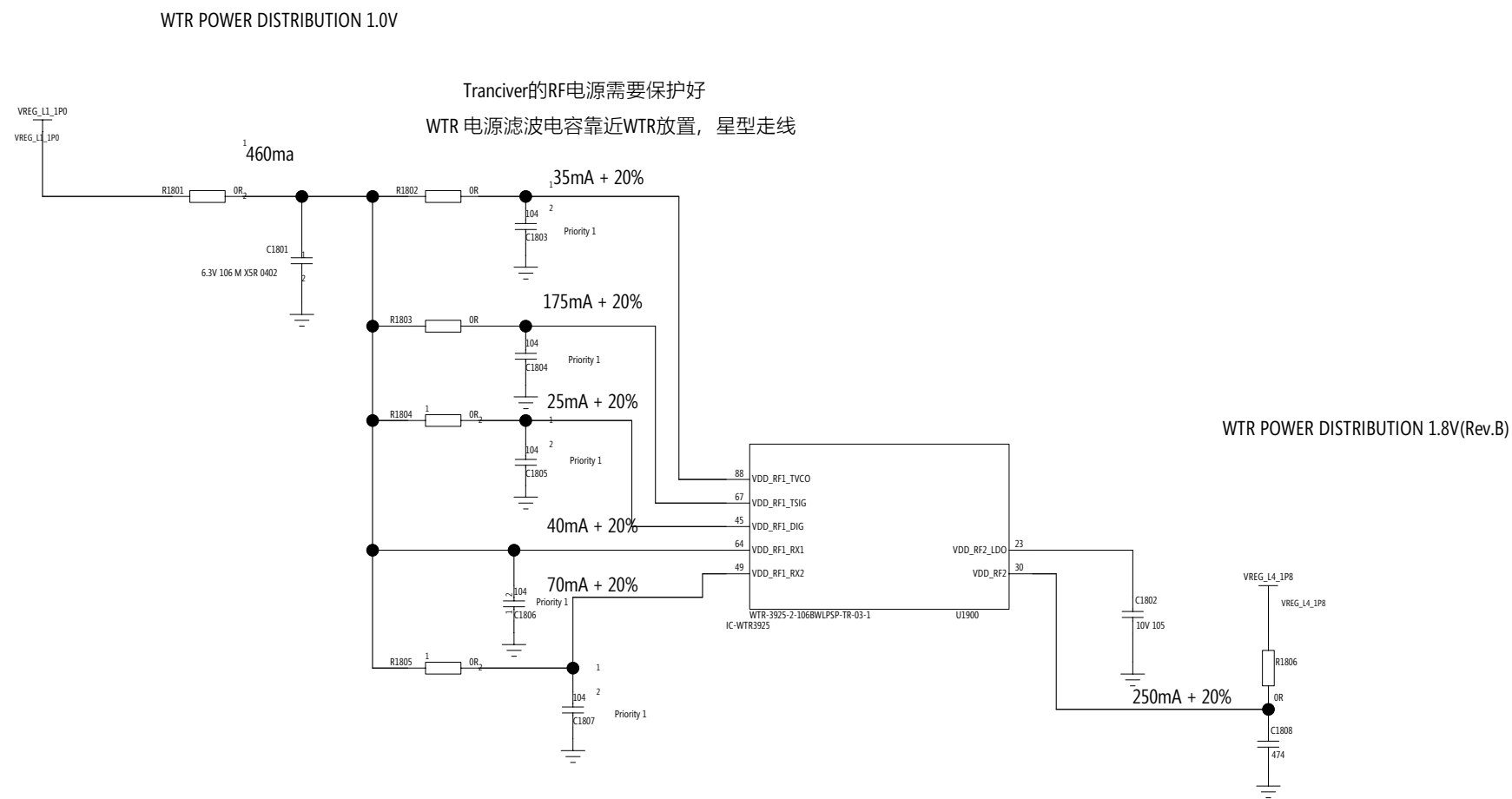


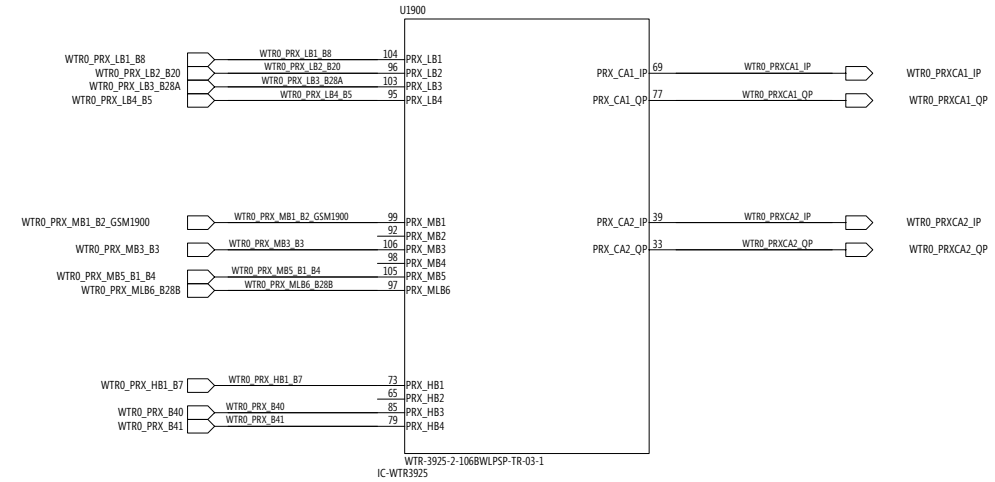
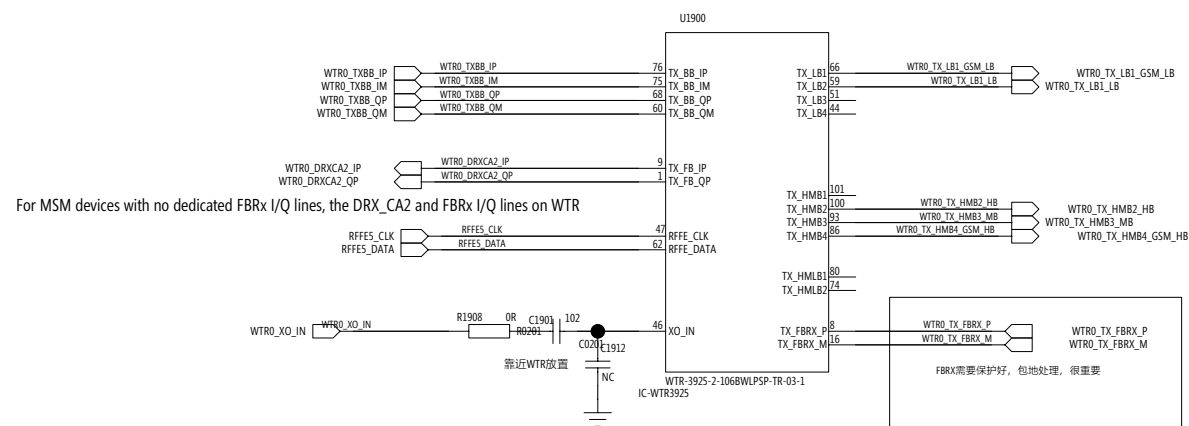
B41 DRX



B40 DRX







I and Q line isolation :

Rx and Tx: 100 dB

PRx_CA1 and PRx_CA2: 100 dB

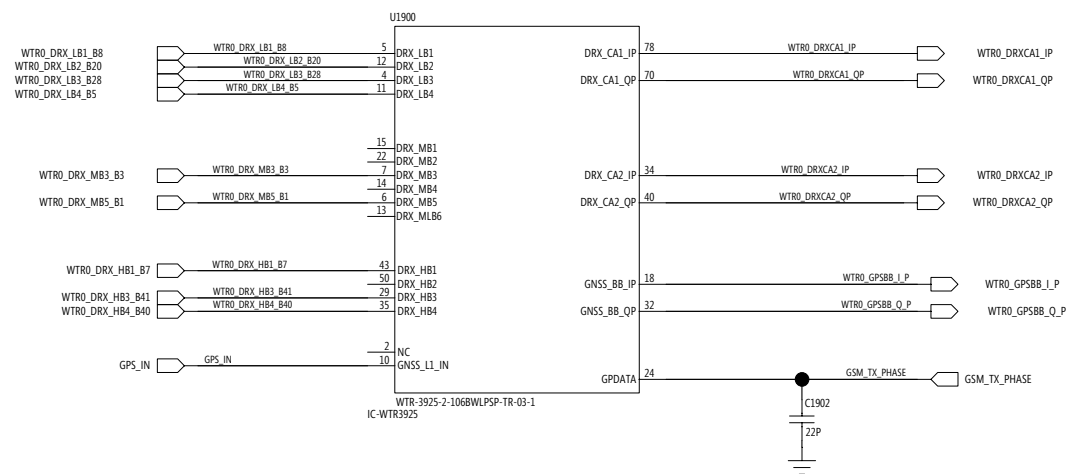
DRx_CA1 and DRx_CA2: 100 dB

PRx_CA1/2 and DRx_CA1/2: 60 dB

Between the same I and Q: 60 dB

Between I and Q and the RFFE: 100 dB

BBI to BBQ spacing should be at least three times the width of the trace



WIFI+BT

RF_Path

5G FEM

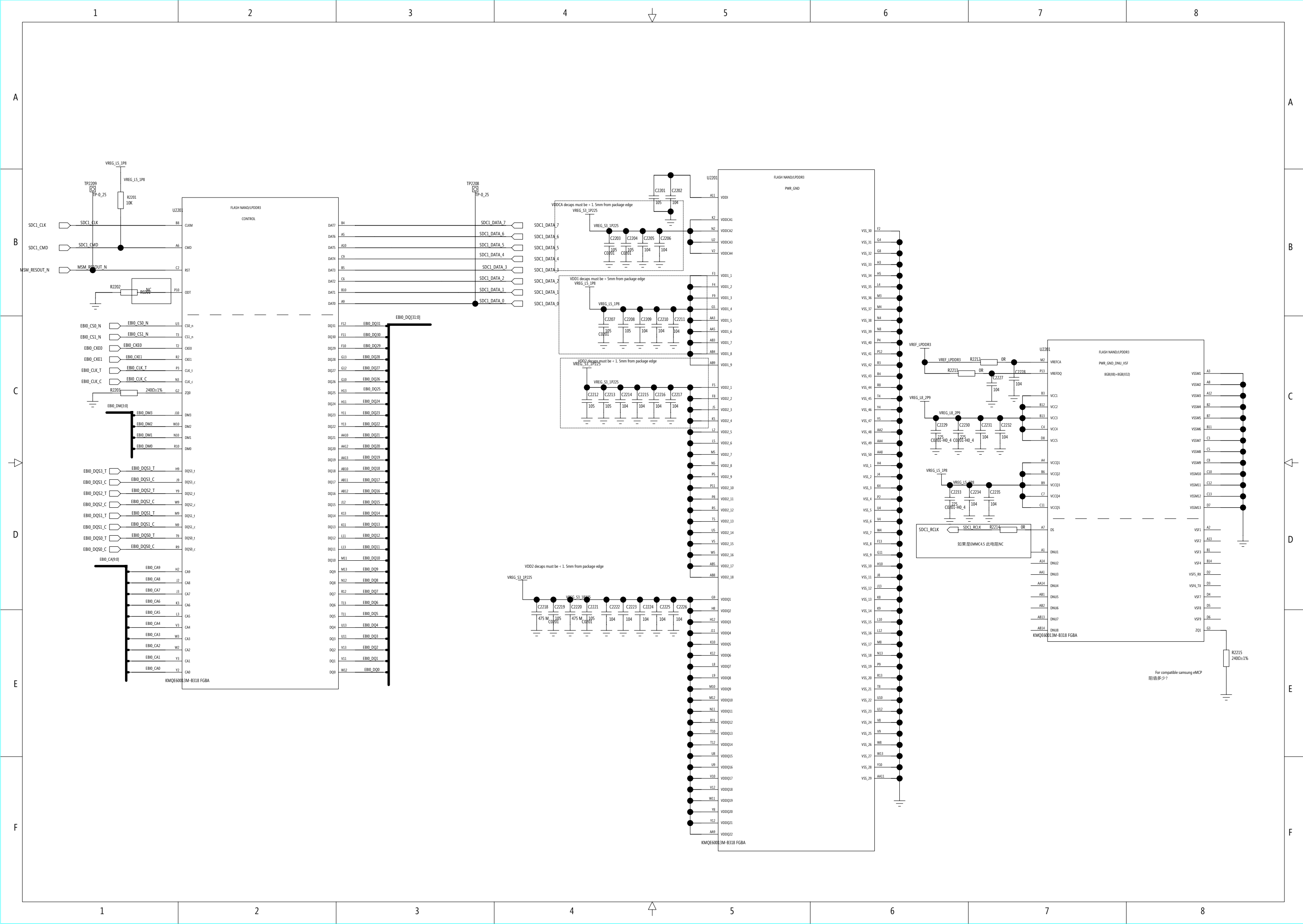
WIFI_HOST_PORT/TCXO

Power_Path_Width

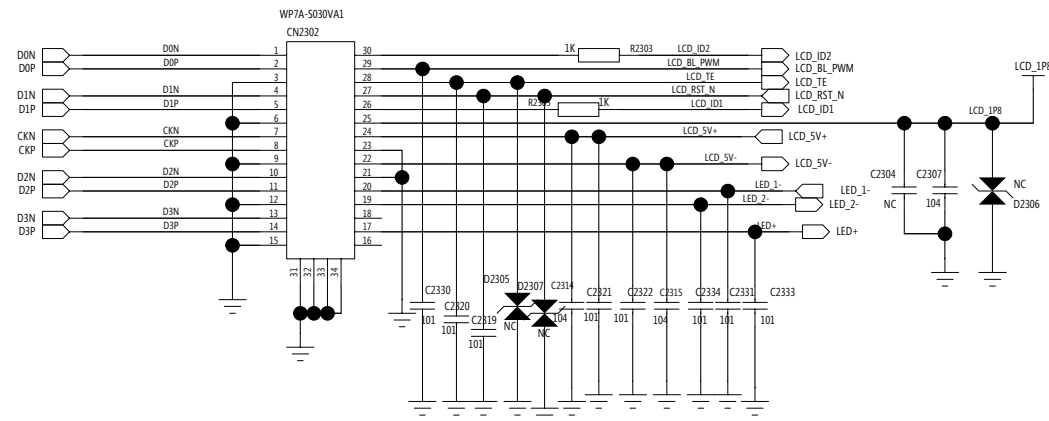
Power Trace name	Trace width
VDD_WCN_3P3	0.3 mm
VREG_L19_1P3	0.4 mm
VBATT to 5G PA	0.3 mm

L2001: Qualcomm use BLM03AX241SN1B
240Ohm@100MHz 0.35A DCR<0.38Ohm
R2015: For "B" version devices do not connect pin 49 to the 3.3V rail

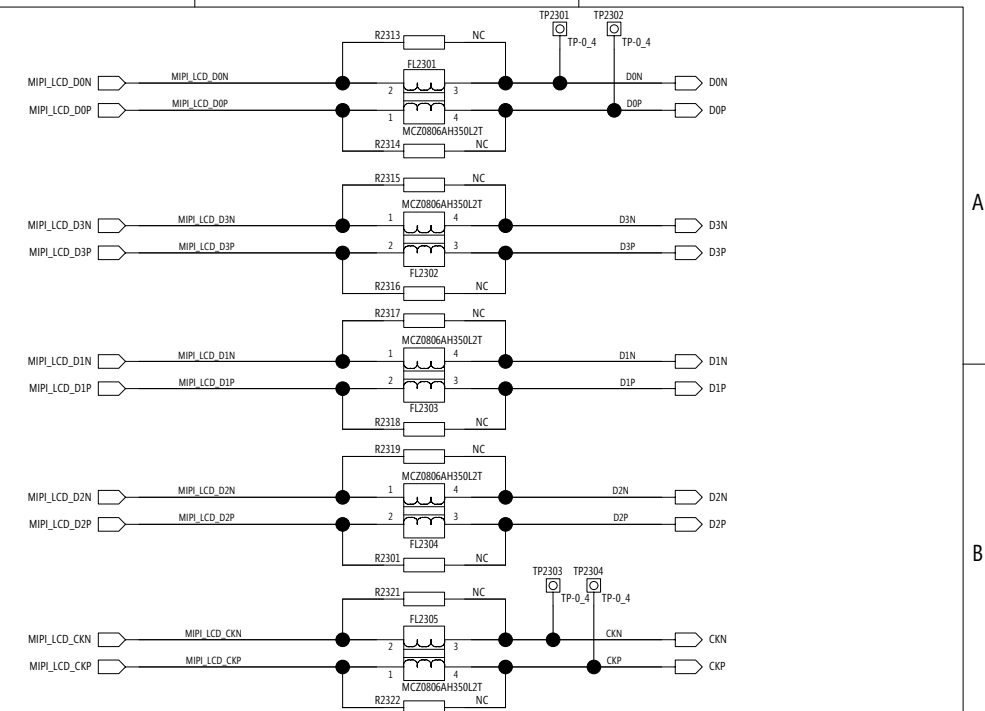
If 2.4 GHz WLAN spurs are observed around 2.6 to 2.7 GHz,
replace R2006 with 20 nH inductor.



LCM Connector

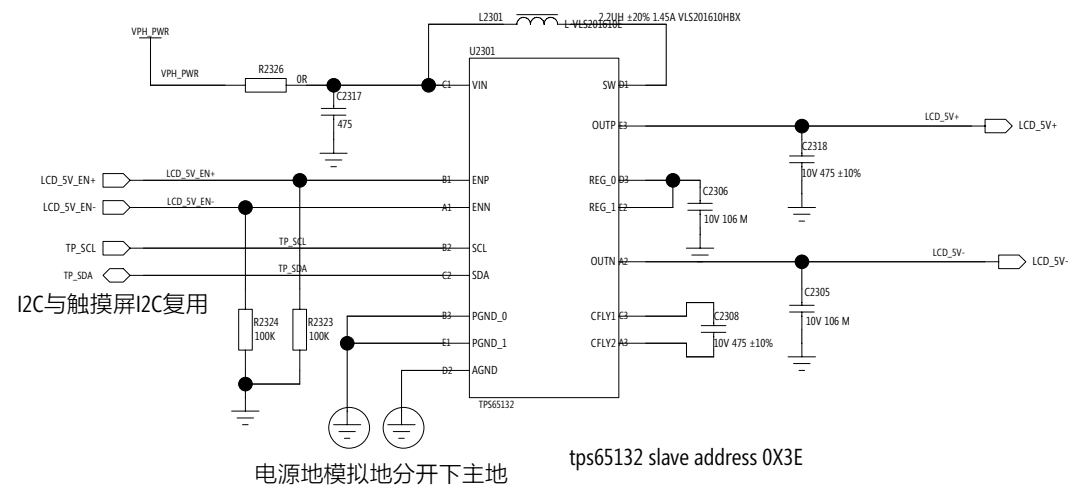


DSI CMF

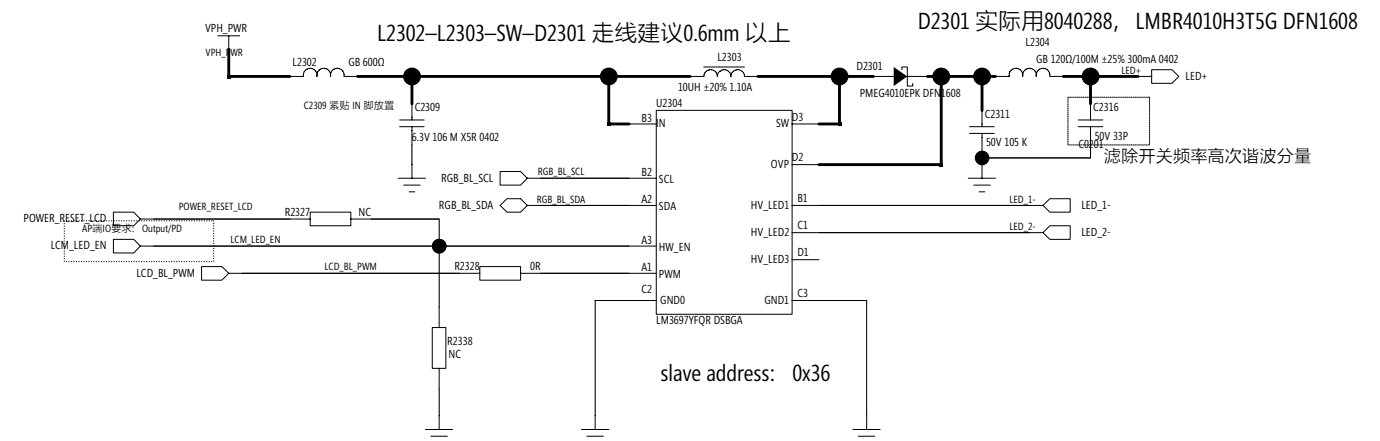


LCD $\pm 5V$ Driver

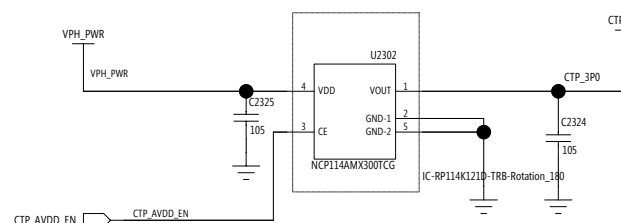
裸晶IC, 注意布局位置应力



LCD BL

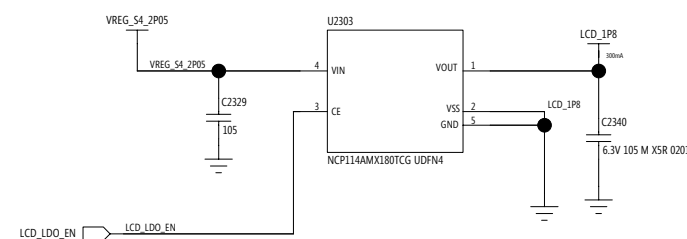


CTP AVDD 3.0V

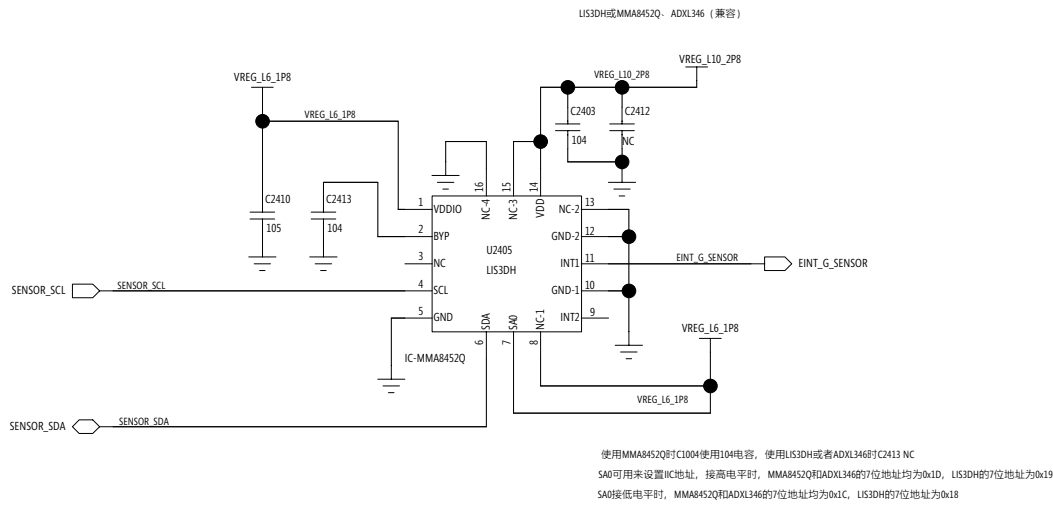


与BTB座的105挨比较近，共用输出电容

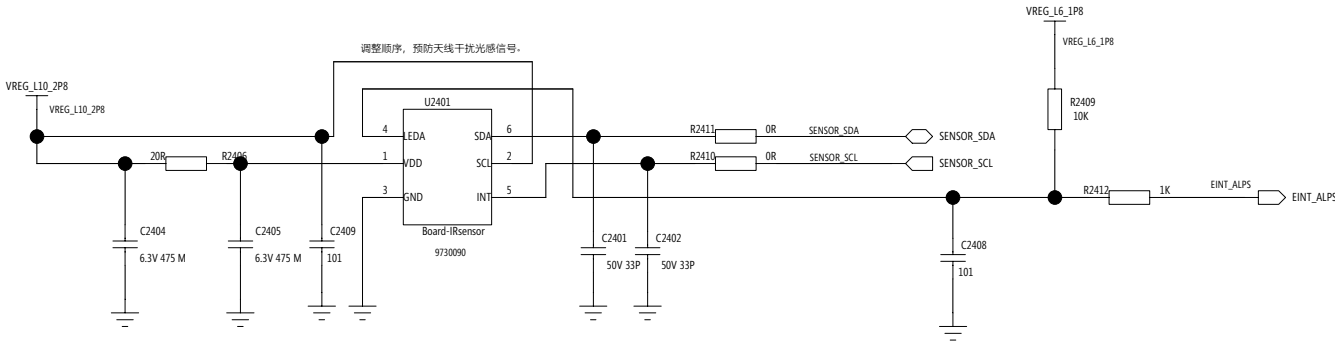
LCD/TP IO LDO



G Sensor

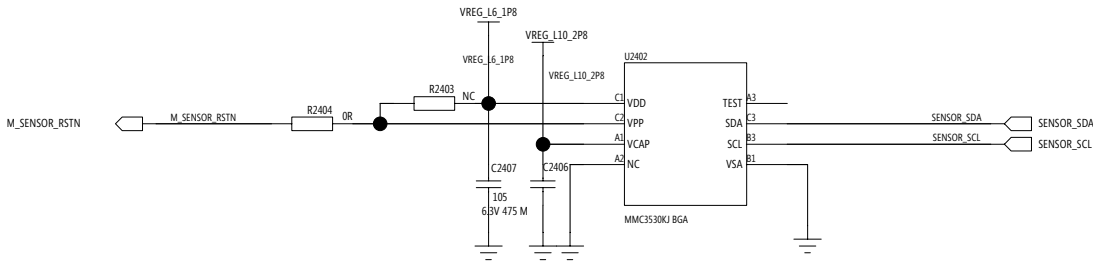


A.L.S.+P.S sensor module BTB

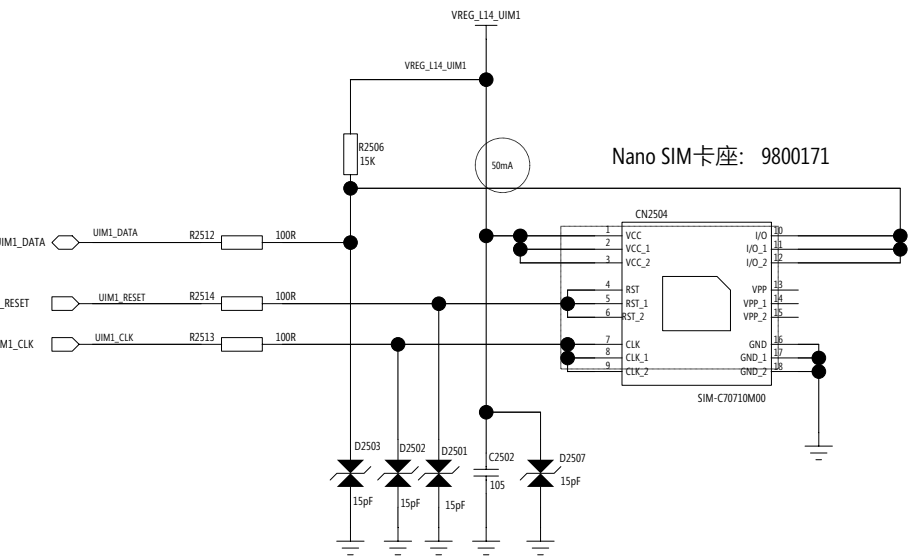


I2C地址, 读0xA7, 写0xA6
APDS-9922/9921

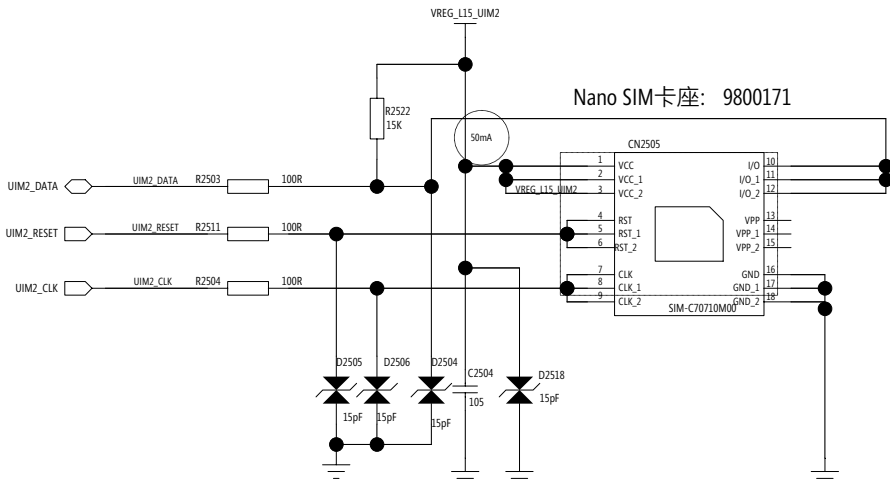
M Sensor



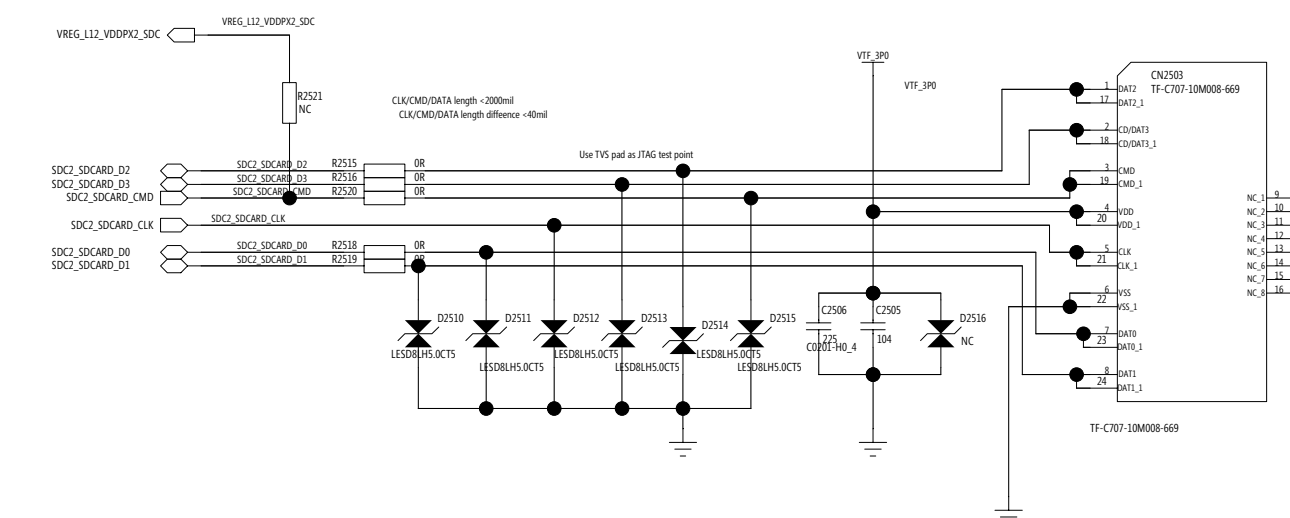
SIM1 Card



SIM2 Card

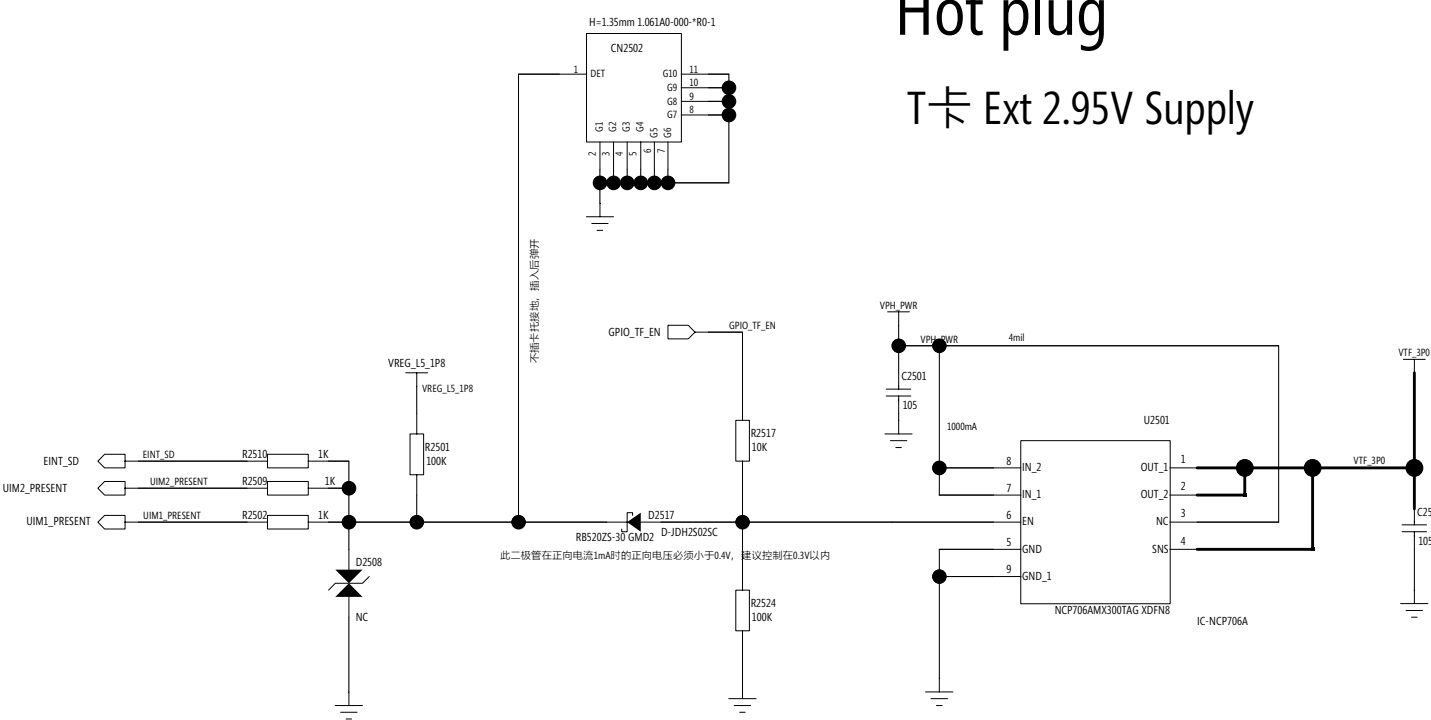


MicroSD_CARD

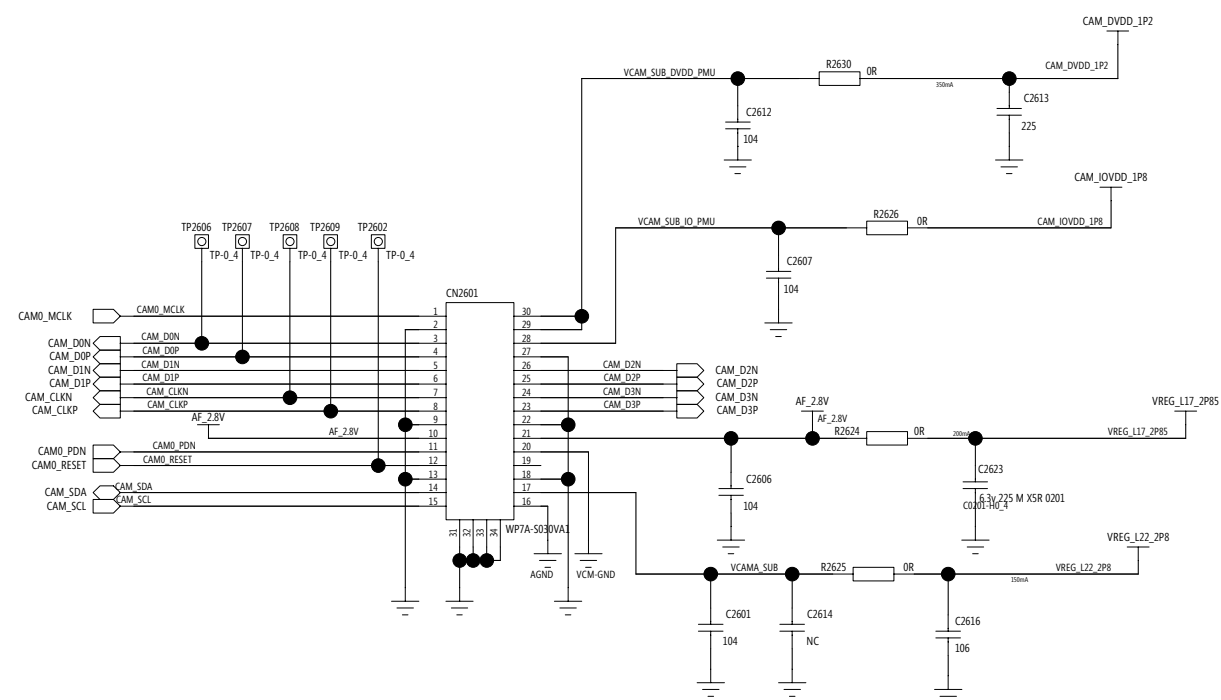


Hot plug

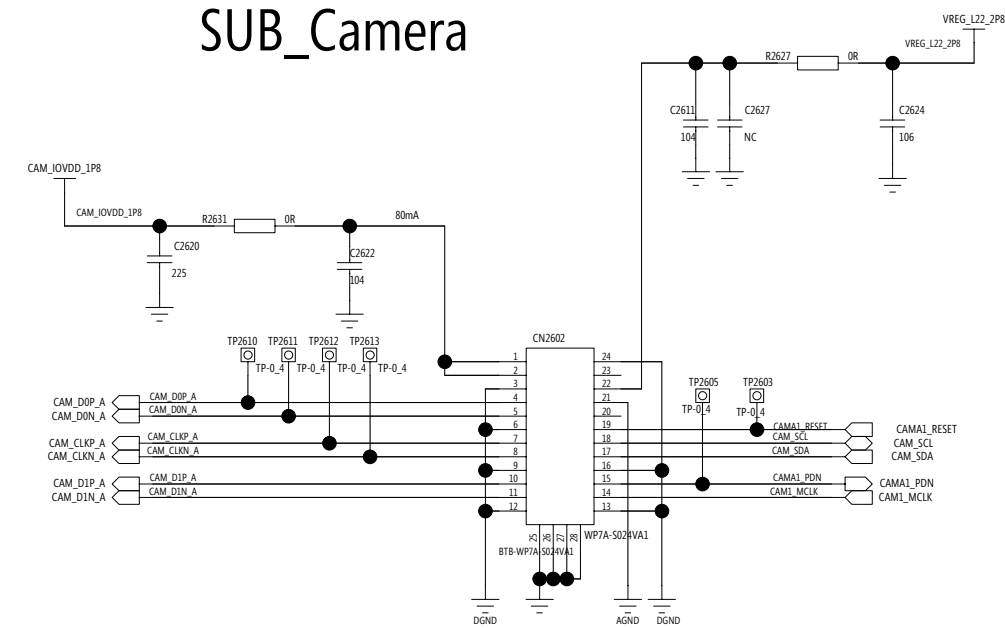
T卡 Ext 2.95V Supply



Main CAMERA

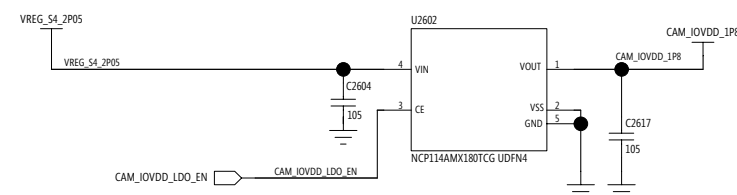


SUB_Camera



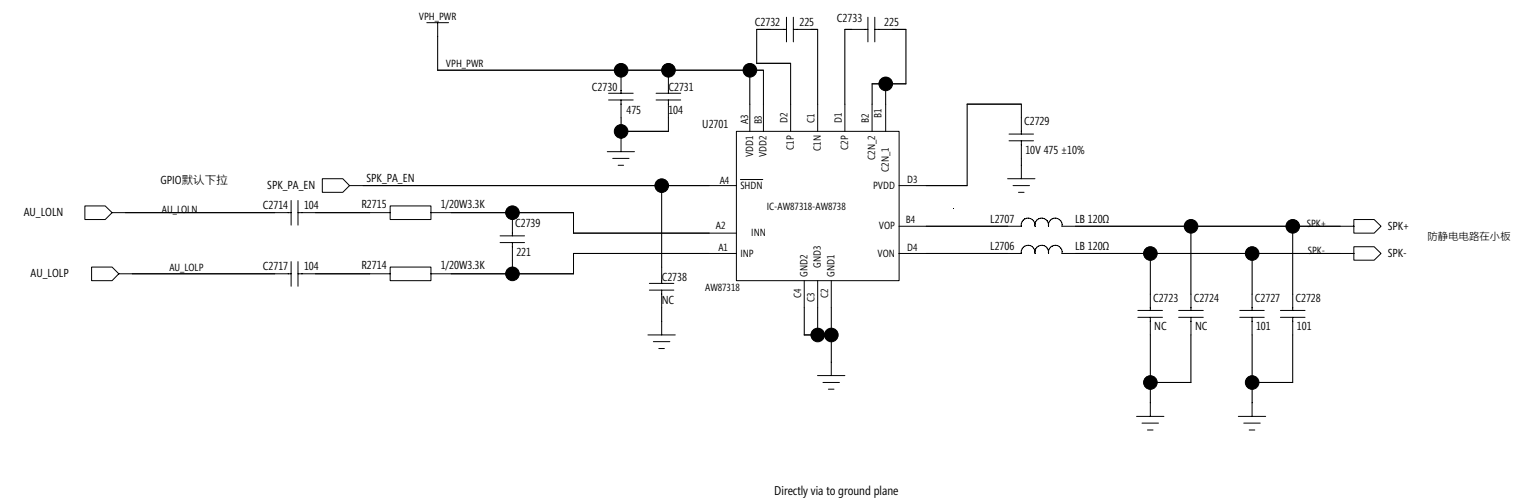
OV5695 slave address 0X36;SID=0

Main Camera IOVDD(1.8V)

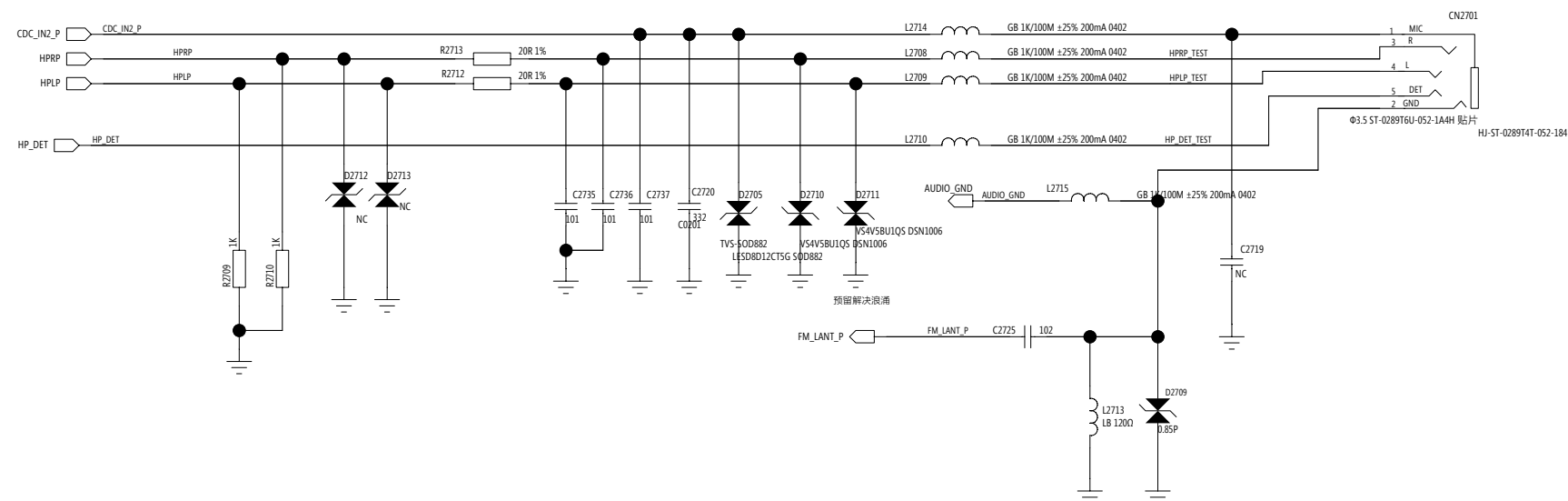
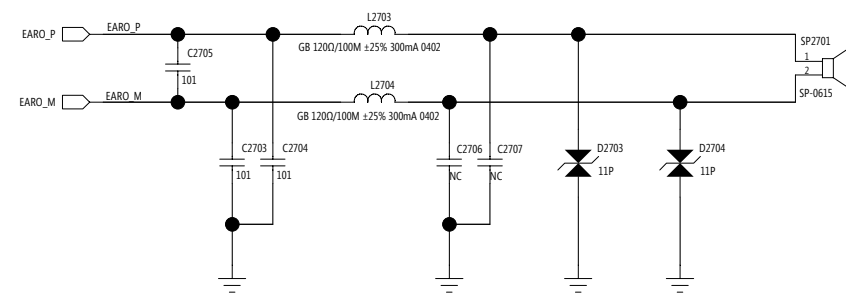


Audio Switch

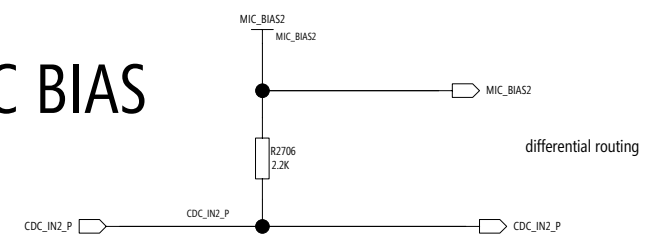
Speaker PA



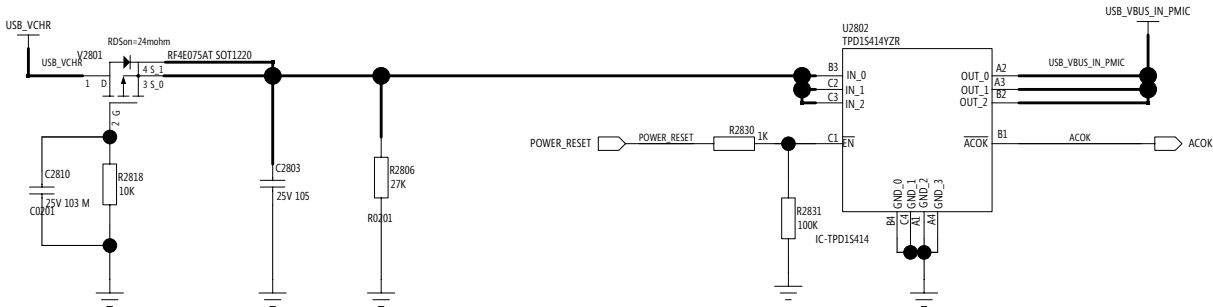
Receiver



HP MIC BIAS

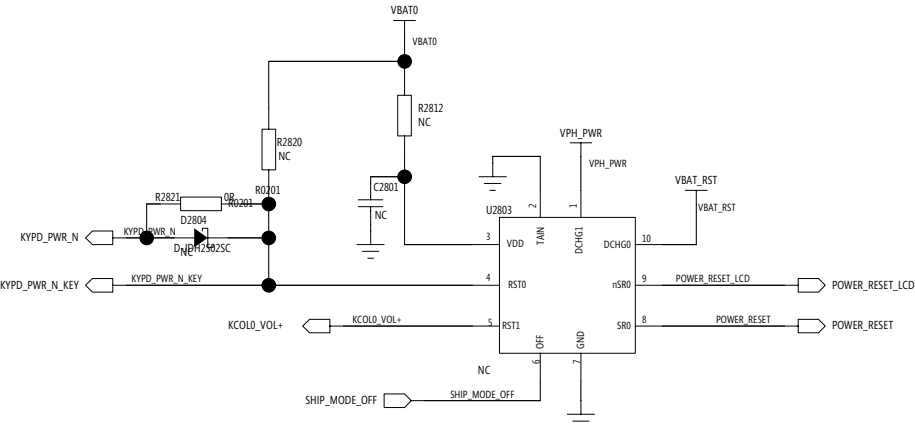


NVP&OVP



Note:

- 1) 5V电压充电: OVLO脚接地即可, 过压锁定值为6.8V;
- 2) 9V高压充电: R2826选择1.2M, R2825选择150K, 过压锁定值为10.98V

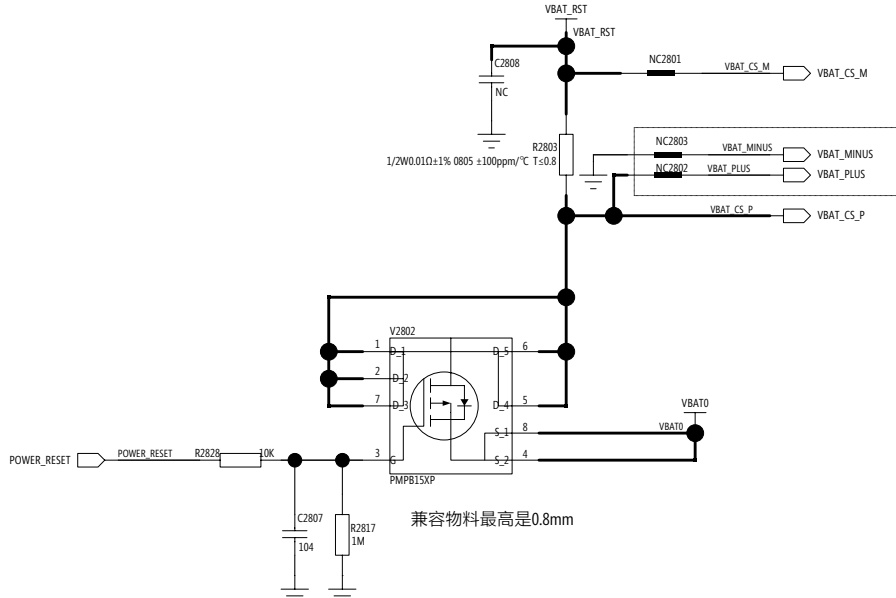
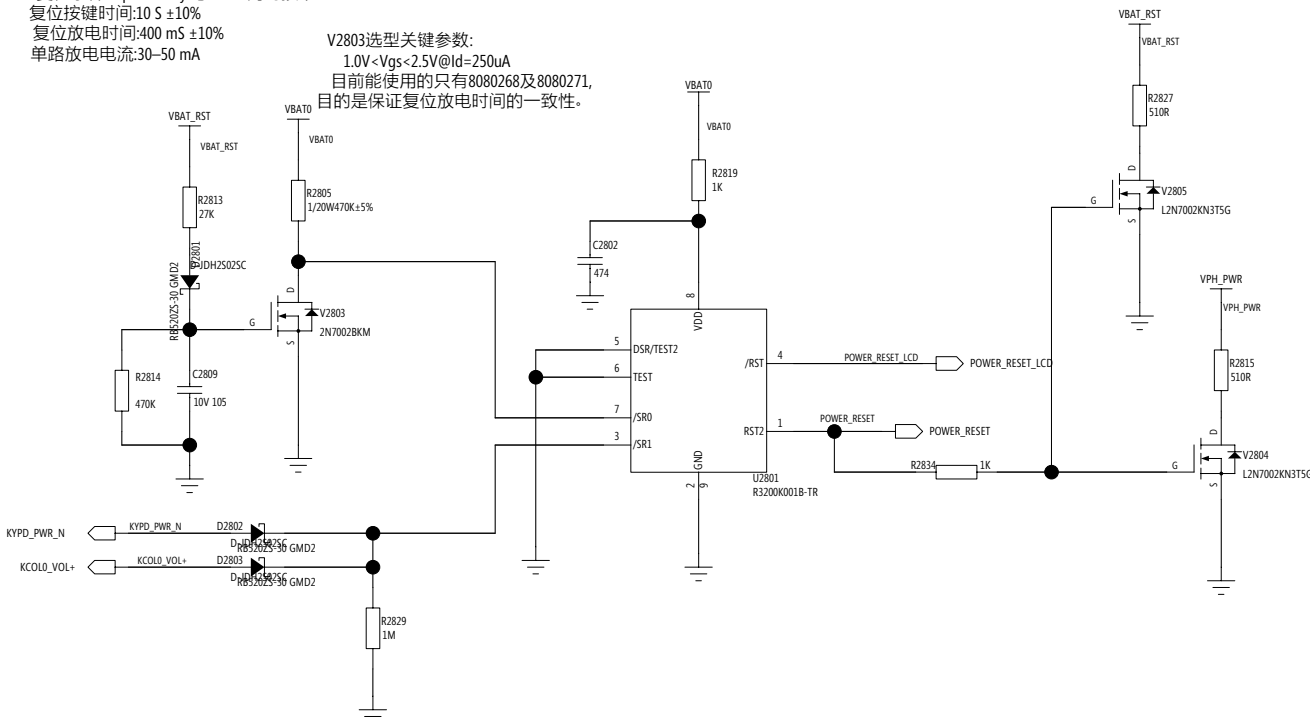


HW RESET

复位条件: power Key 与VOL+ 同时按下
复位按键时间:10 S \pm 10%
复位放电时间:400 mS \pm 10%
单路放电电流:30~50 mA

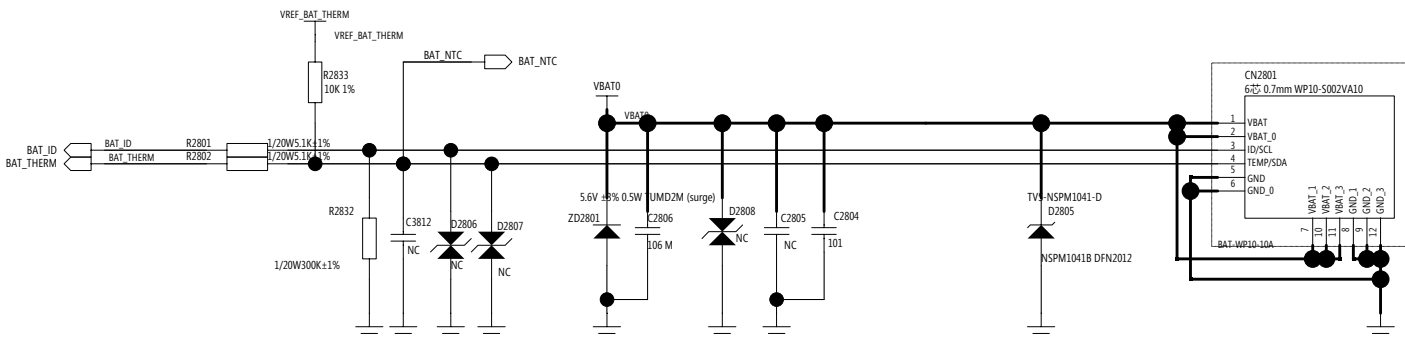
V2803选型关键参数:
 $1.0V < V_{gs} < 2.5V @ I_d = 250\mu A$
 目前能使用的只有8080268及8080271,
 目的是保证复位放电时间的一致性。

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



兼容物料最高是0.8mm

BAT

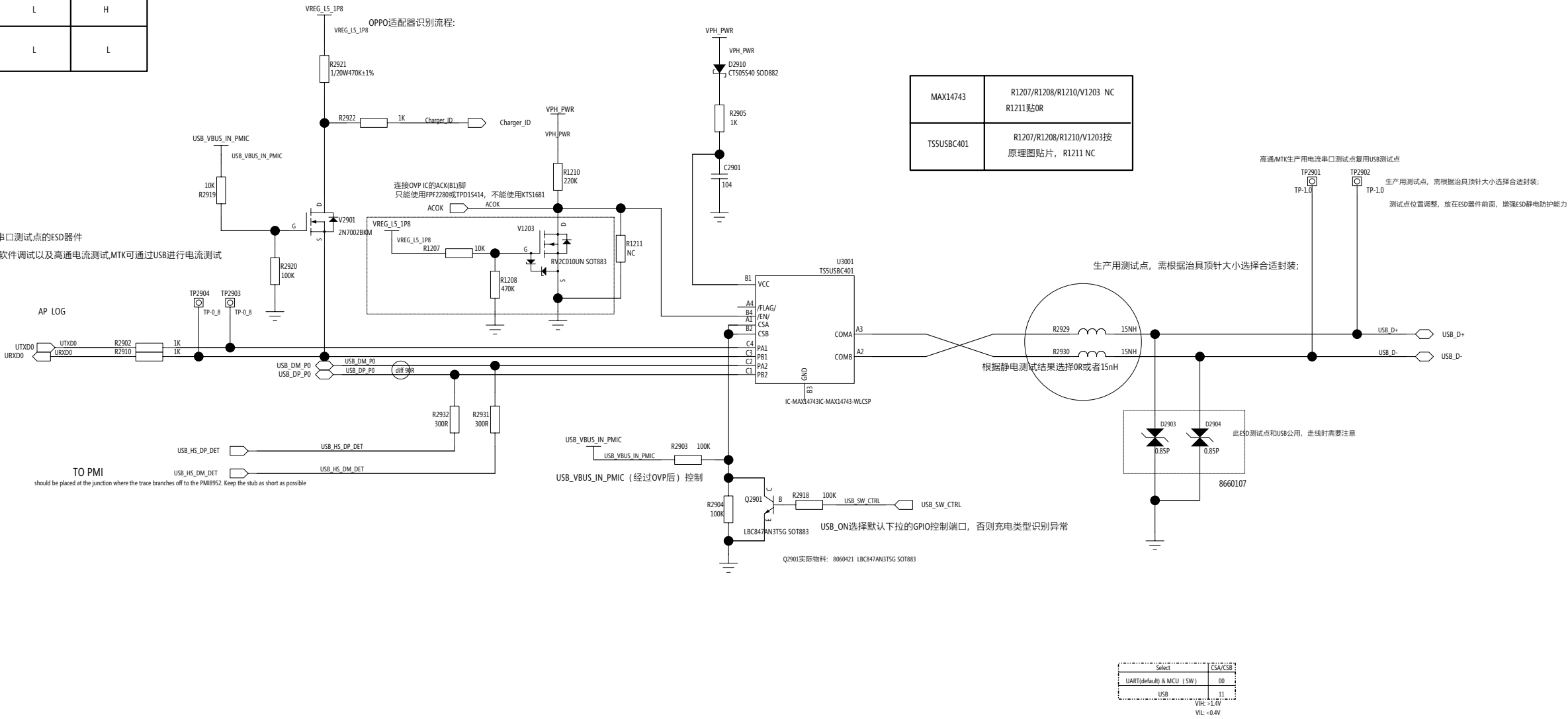


D2005靠近测试点摆放, D2804靠近电池连接器摆放
如果测试点离电池连接器比较近, 可以只用D2804来防静电
C2806靠近ZD2801摆放

USB开关

VBUS	ACOK	VREG_L5_1P8	EN
X	X	H	L
<Uuvlo or >Uuvlo	H	L	H
>Uuvlo and <Uuvlo	L	L	L

MTK可NC串口测试点的ESD器件
串口测试点用于软件调试以及高通电流测试,MTK可通过USB进行电流测试



A

B

C

D

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A

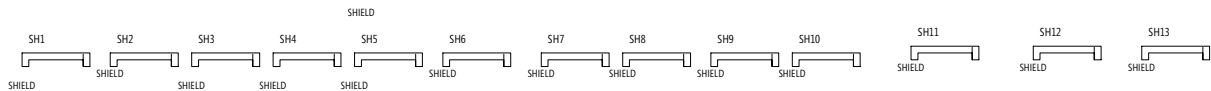
B

C

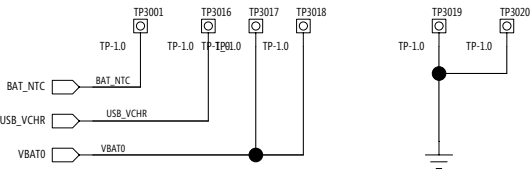
D

E

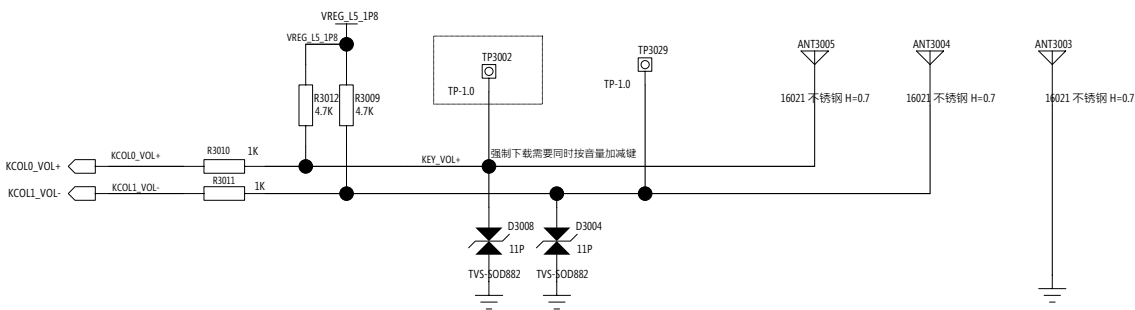
F



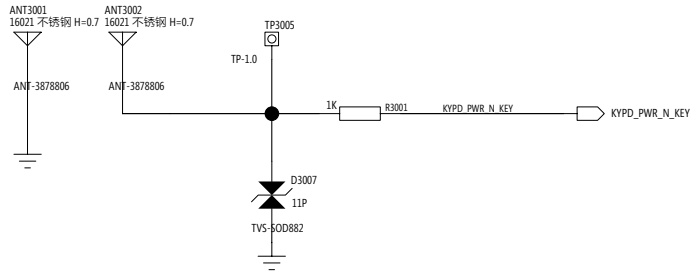
TEST POINT



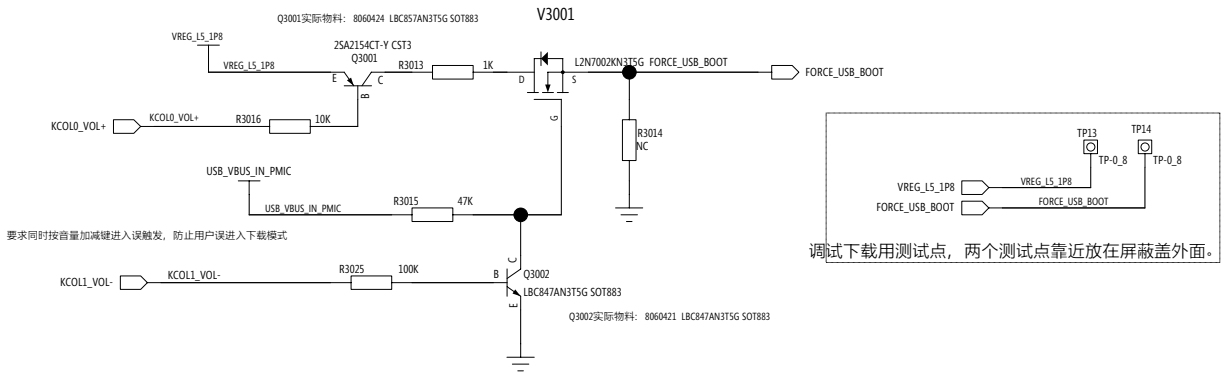
KEY PAD 对应V板



POWERKEY 对应P板



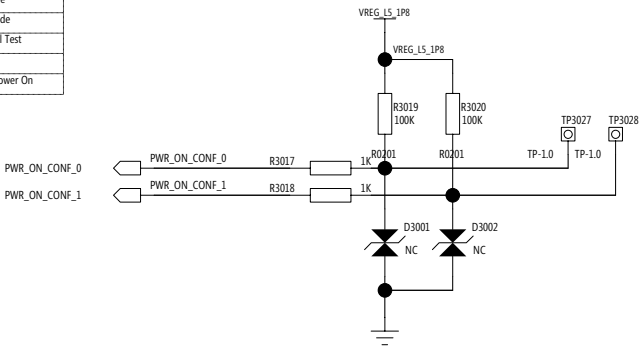
FORCED USB BOOT CTL



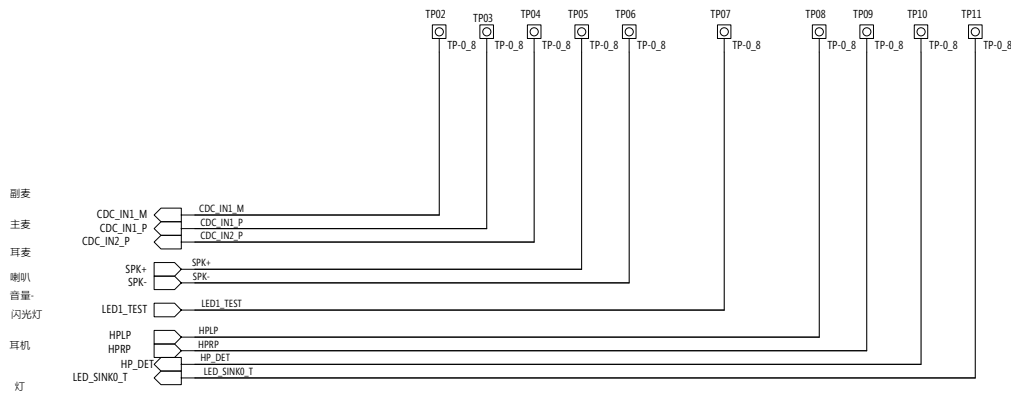
Test Confige

综测校准测试点
BOOT MODE

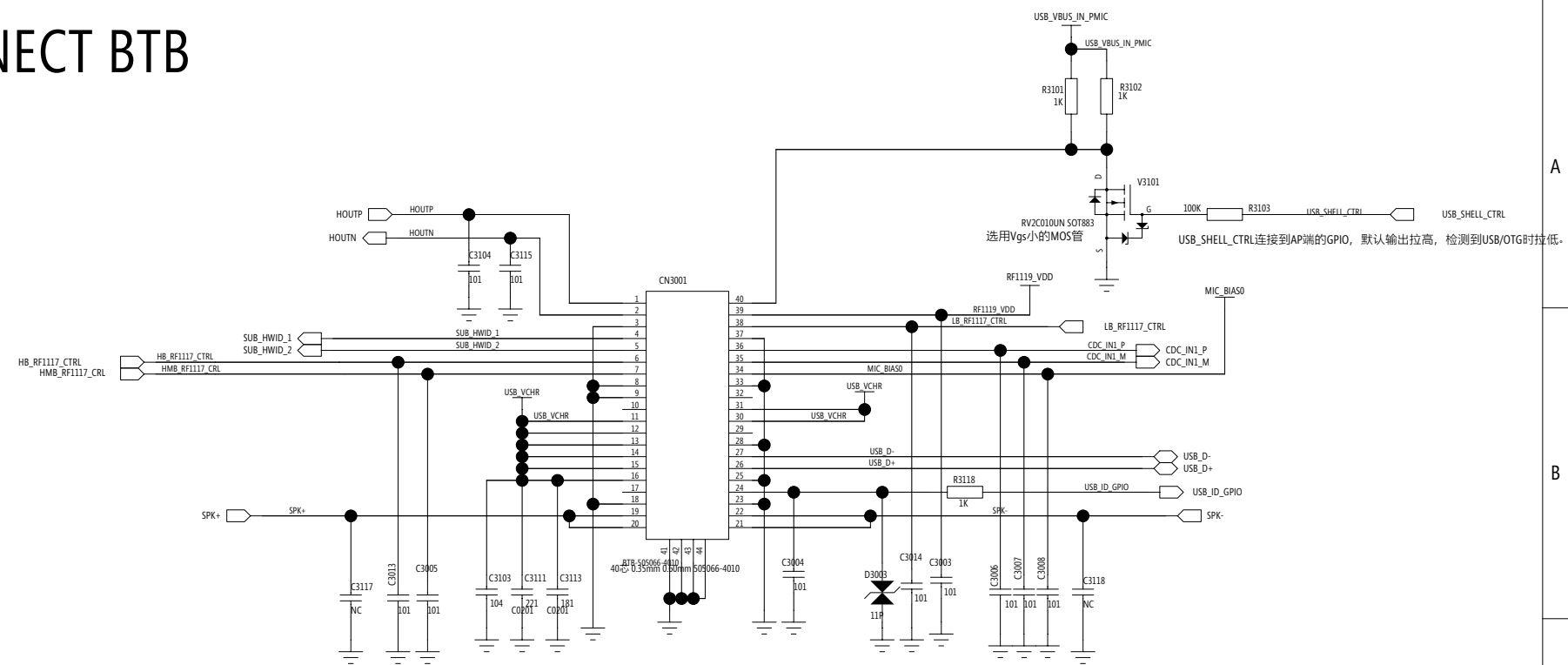
CONF_0	CONF_1	Mode
0	0	Factory Mode
0	1	WLAN Final Test
1	0	RF mode
1	1	Ordinary Power On



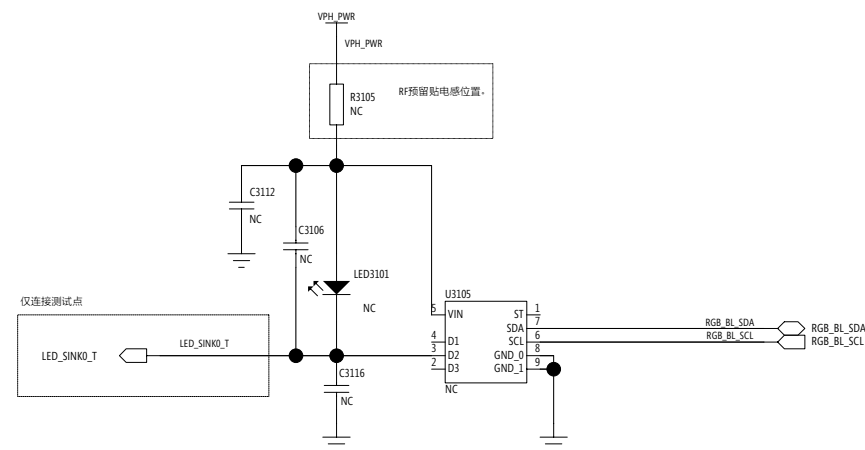
单板全功能测试测试点



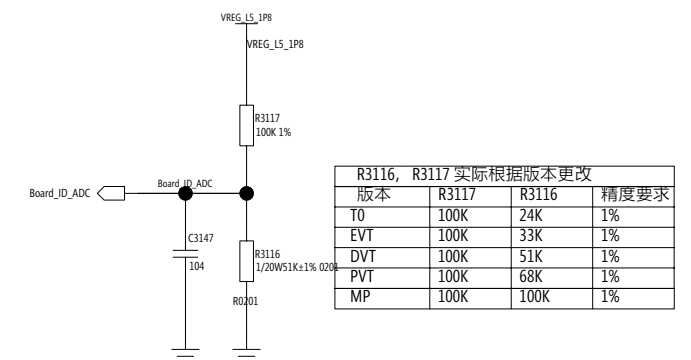
FPC CONNECT BTB



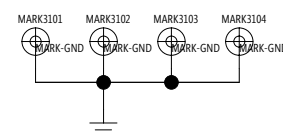
RGB LED DRIVER



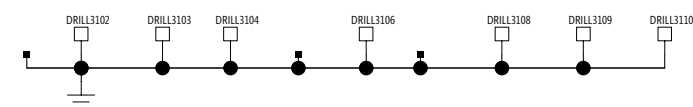
ADC FOR BOARD HW ID



MARK POINT



GND DRILL



MSM8953_RF interface

已重新整理03.09.17.16

A

B

C

D

E

F

A

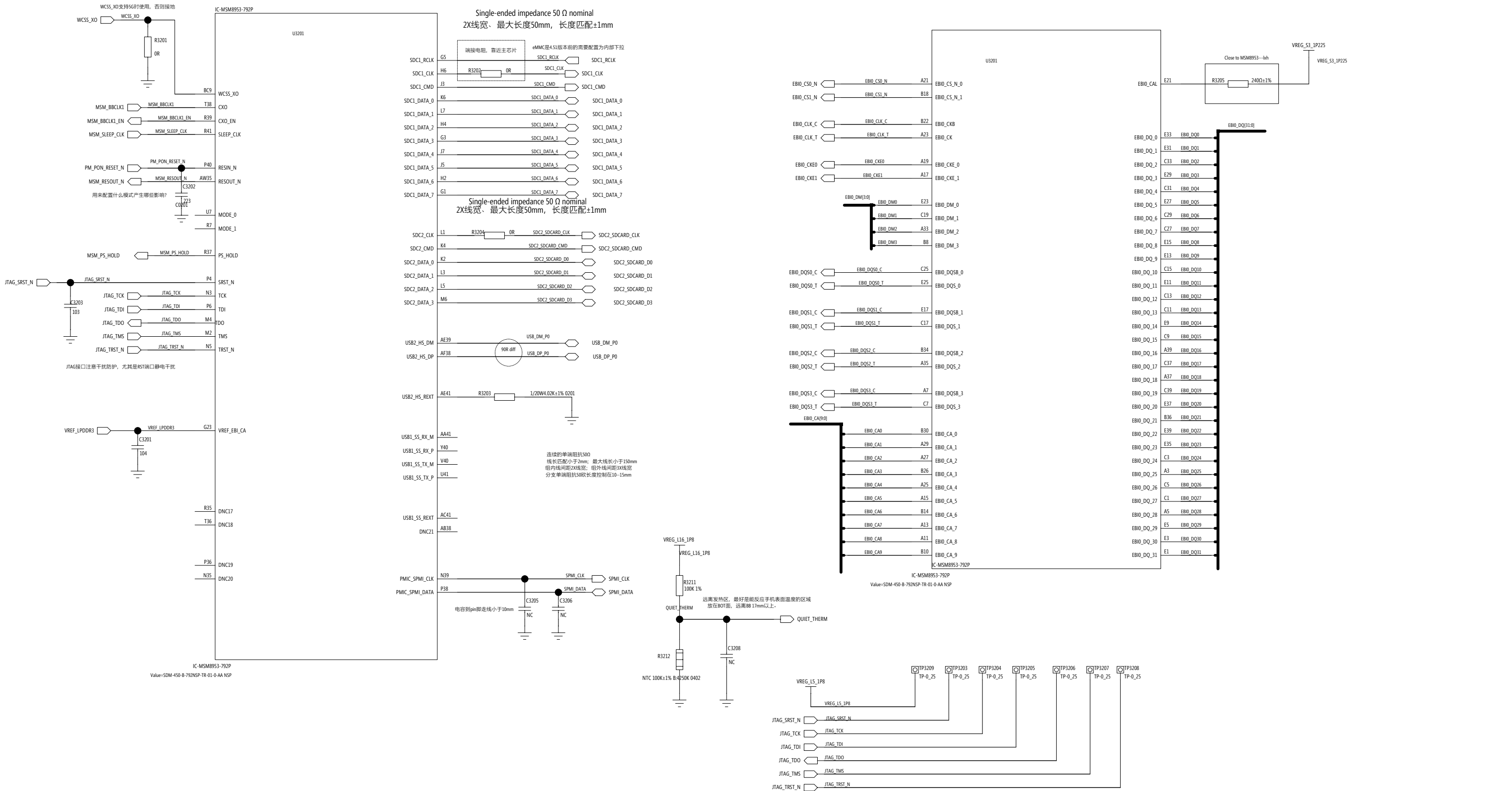
B

C

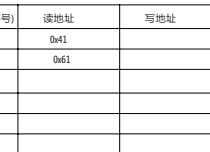
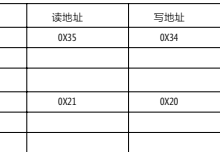
D

E

F



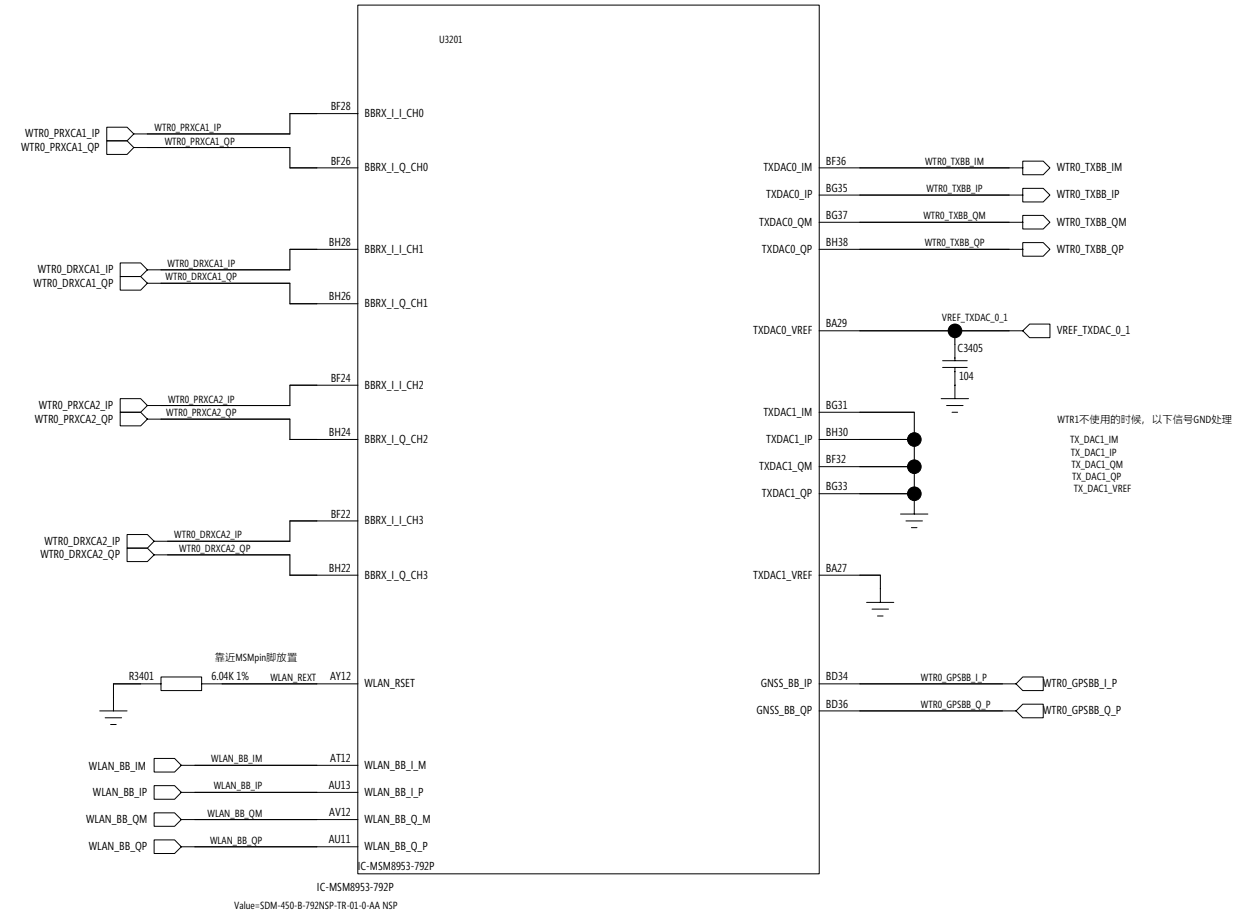
A

F

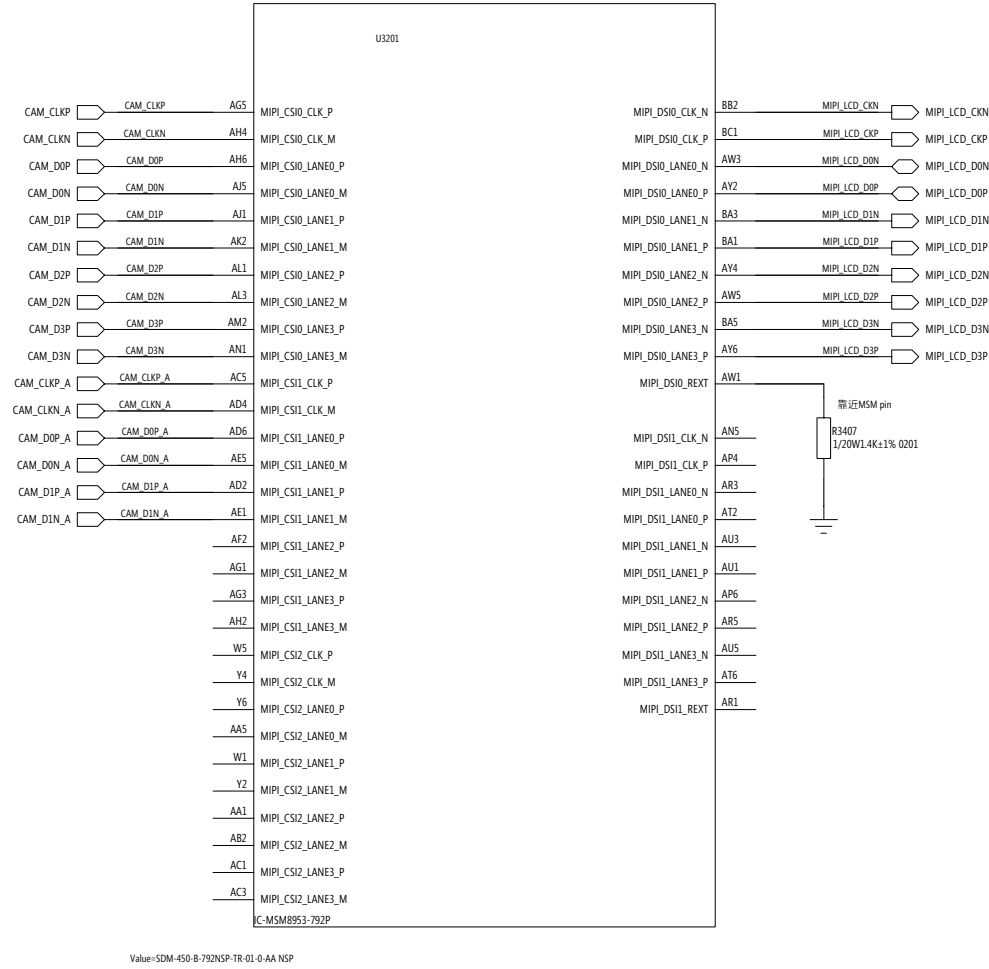
IC-MSM8953-792F
M-450-B-792NSP-TR-01-0-AA NS

1

MSM8953_RF interface



MSM8953_CSI&DSI

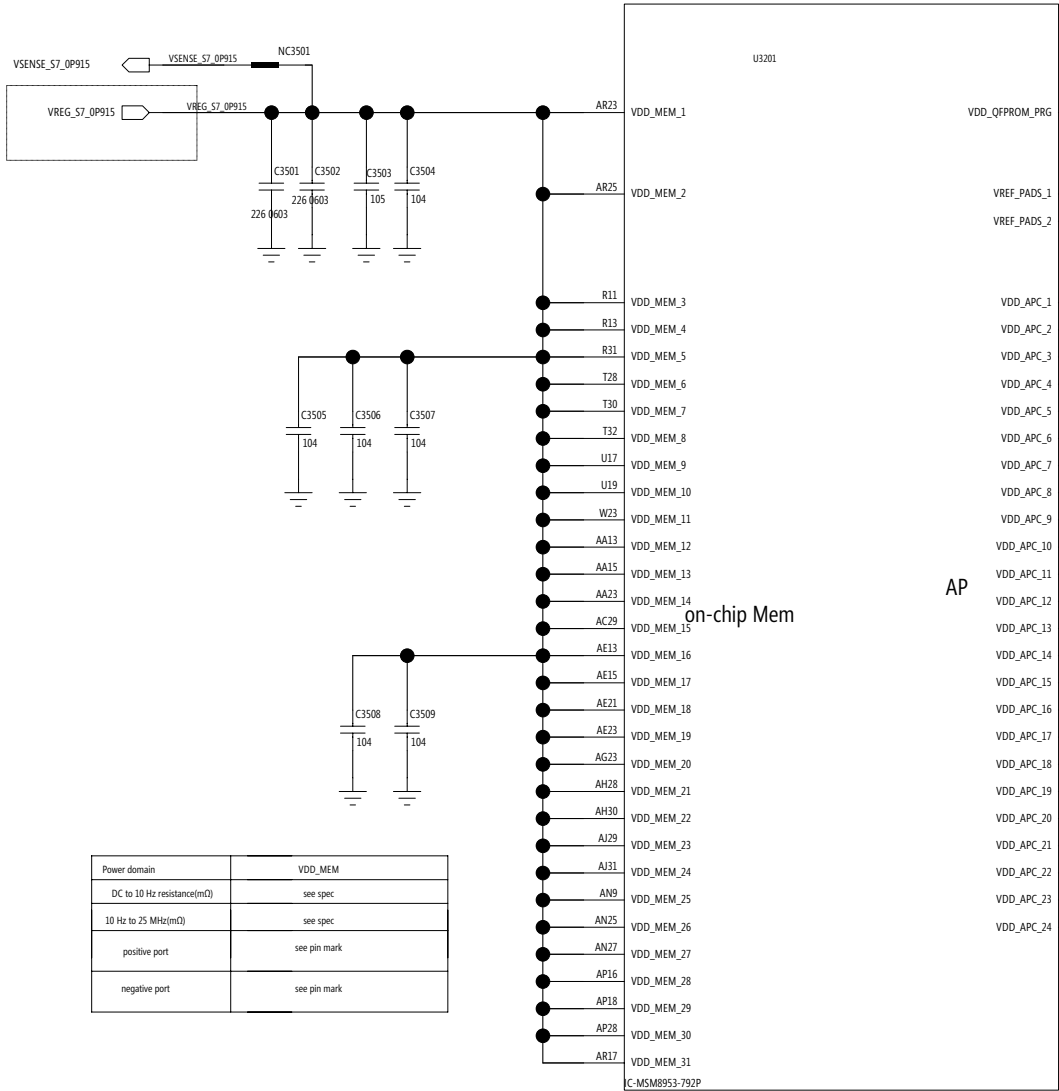


已更新03.10.10.22

MSM8953_PWR1

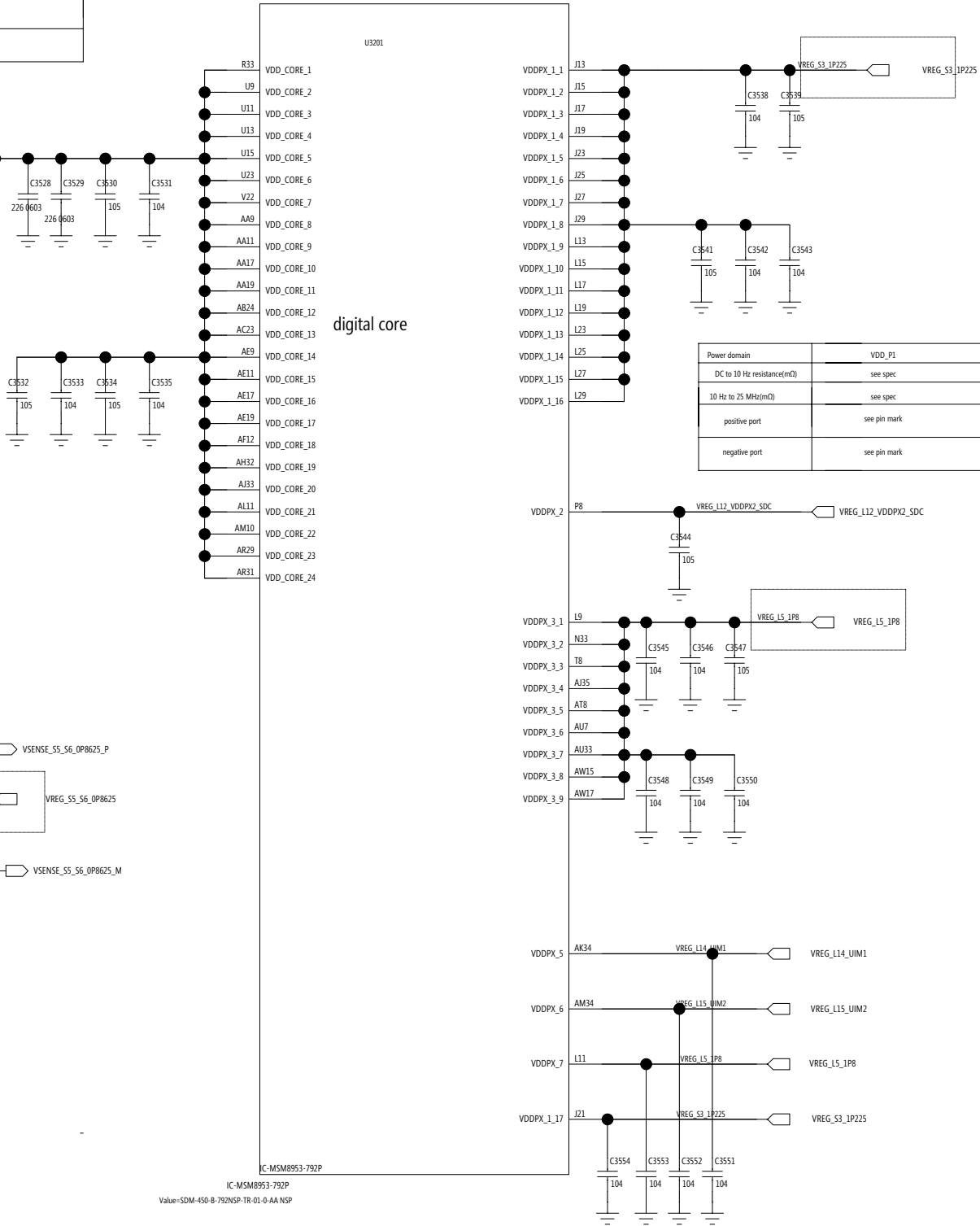
MSM8953_PWR2

Power domain	VDD_CORE
DC to 10 Hz resistance(mΩ)	see spec
10 Hz to 25 MHz(mΩ)	see spec
positive port	see pin mark
negative port	see pin mark



AP

Power domain	VDD_APC
DC to 10 Hz resistance(mΩ)	5
10 Hz to 25 MHz(mΩ)	25
25MHz to 100MHz	100
positive port	
negative port	



digital core

IC-MSM8953-792P
Value=SDM-450-B-792NSP-TR-01-0-AA NSP

MSM8953_PWR3

此处的连接方式涉及到MIPI CSI DSI的连接方式

Note: Respective Camera pins can be left open if not used.
Float AC7 pin if CAM0 not used
Float AA7 pin if CAM1 not used
Float W7 pin if CAM2 not used

Note: Connect MSM pins (AG7, AH10 and AE7) to GND if DSI1 is not used
Note: Connect MSM pin number AU25 to GND if TXDAC1 is not used.

Graphics circuits

Power domain	VDD_MODEM
DC to 10 Hz resistance(mΩ)	
10 Hz to 25 MHz(mΩ)	
positive port	
negative port	

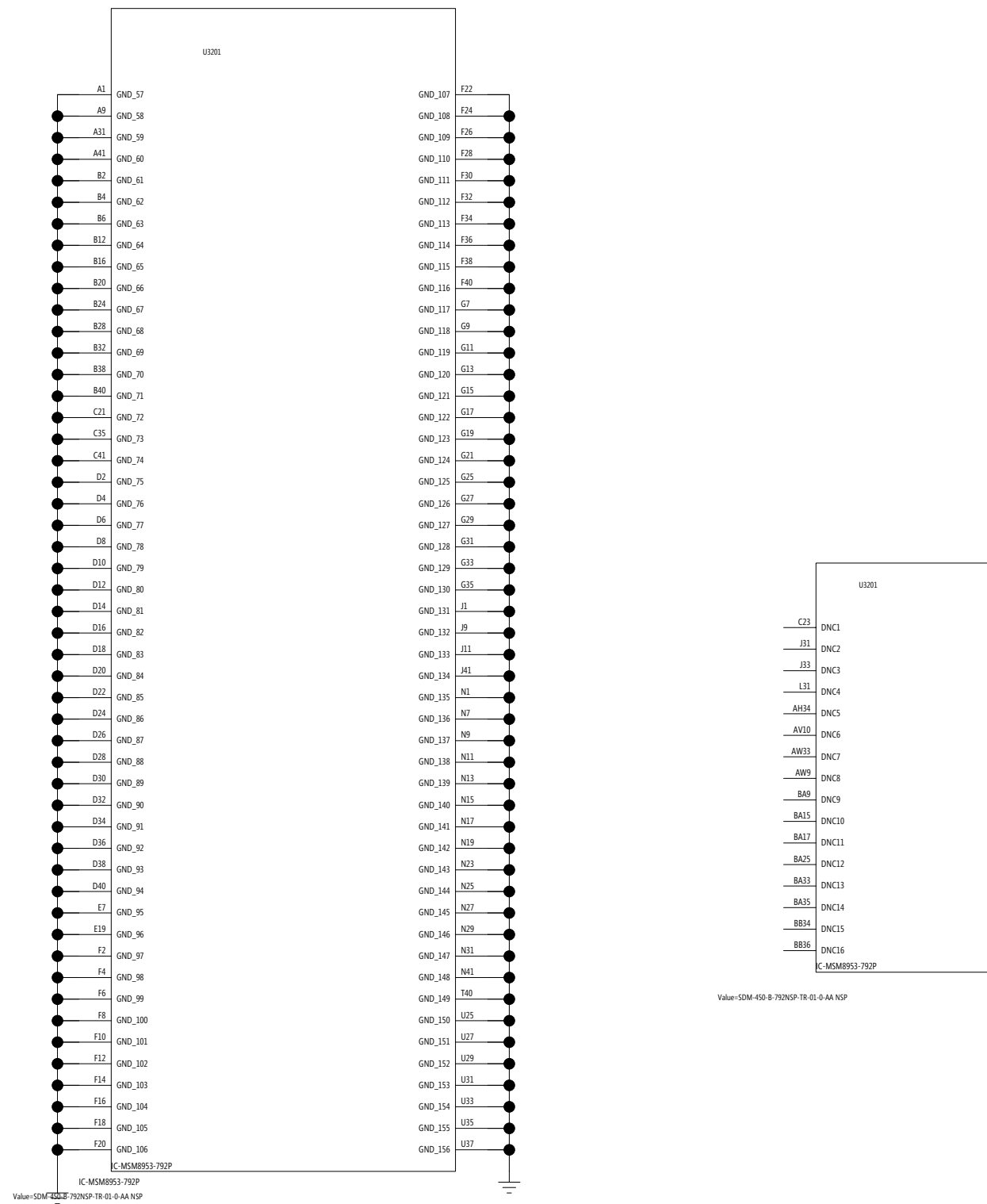
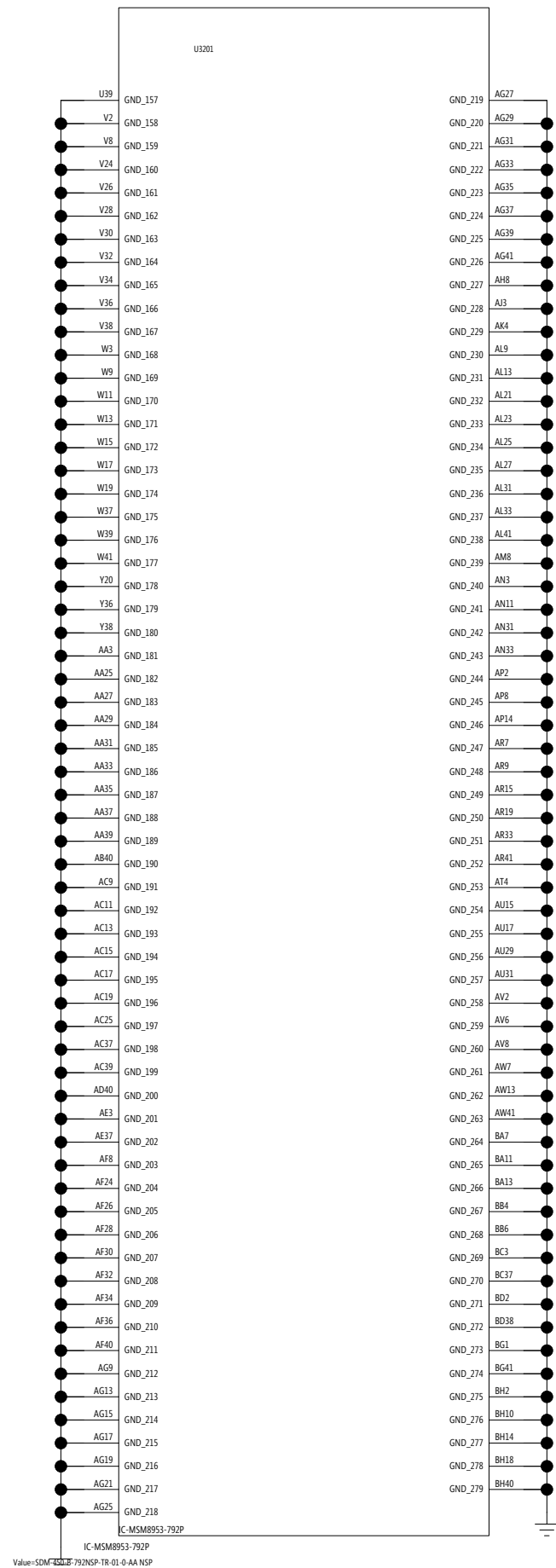
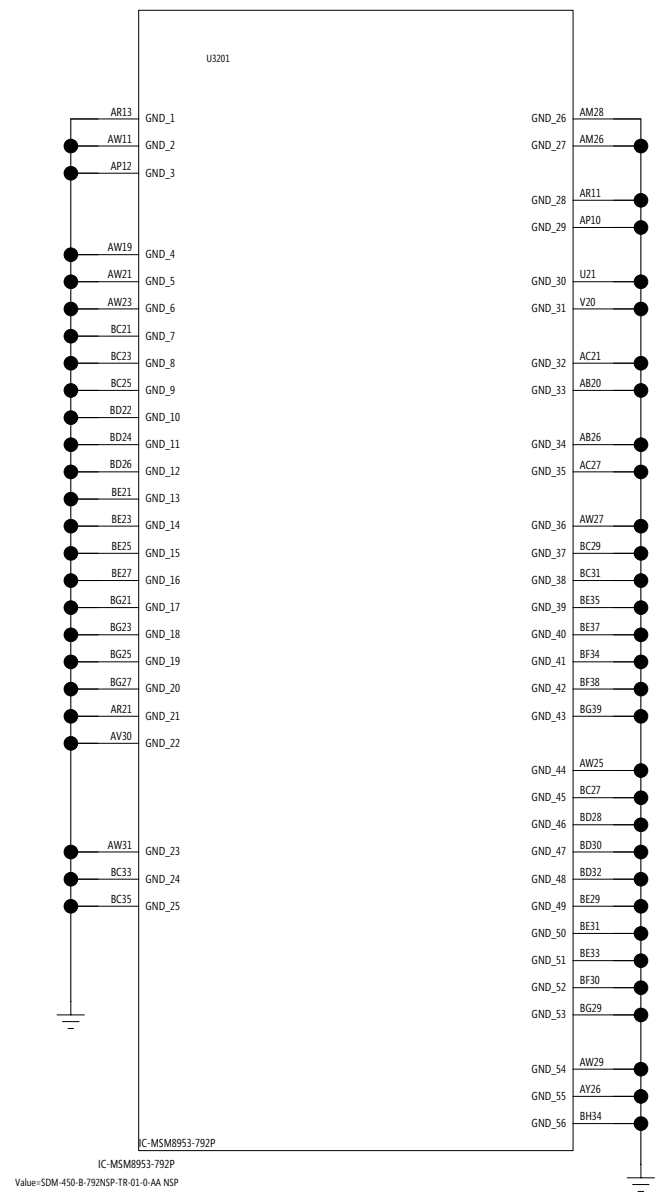
IC-MSM8953-792P
Value=S0M-450-B-792N5P-TR-01-Q-AA NSP

Note: Following MSM pins can be connected to GND if USB2_HS interface is not used
VDD_USB_HS1_1P8 (AD16) =GND
VDD_USB_HS1_3P1 (AD38)=GND
and MSM pin AC31 =GND

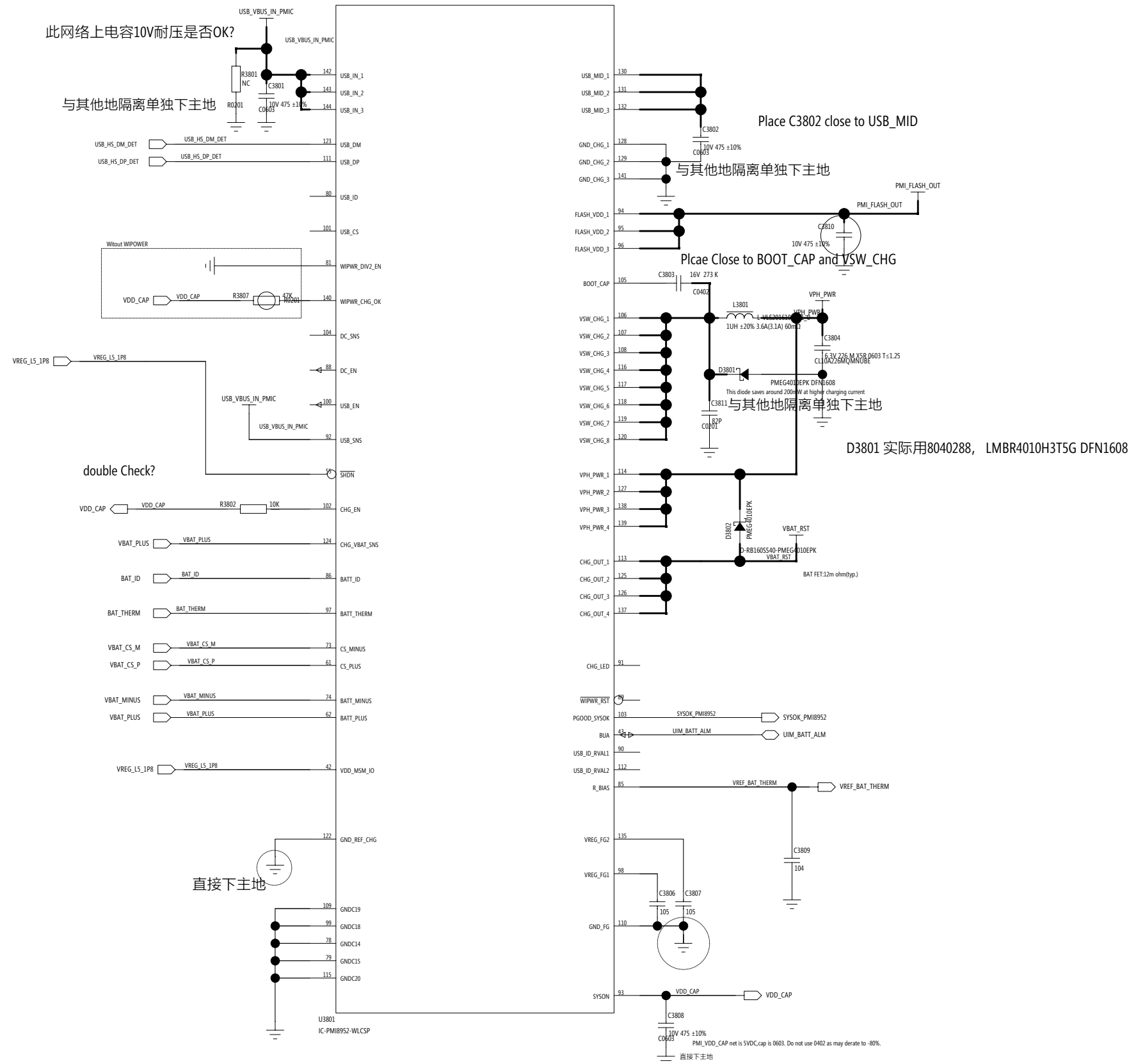
Power domain	VDD_EMI
DC to 10 Hz resistance(mΩ)	
10 Hz to 25 MHz(mΩ)	
positive port	
negative port	

MSM8976-H

MSM8953_GND & DNC

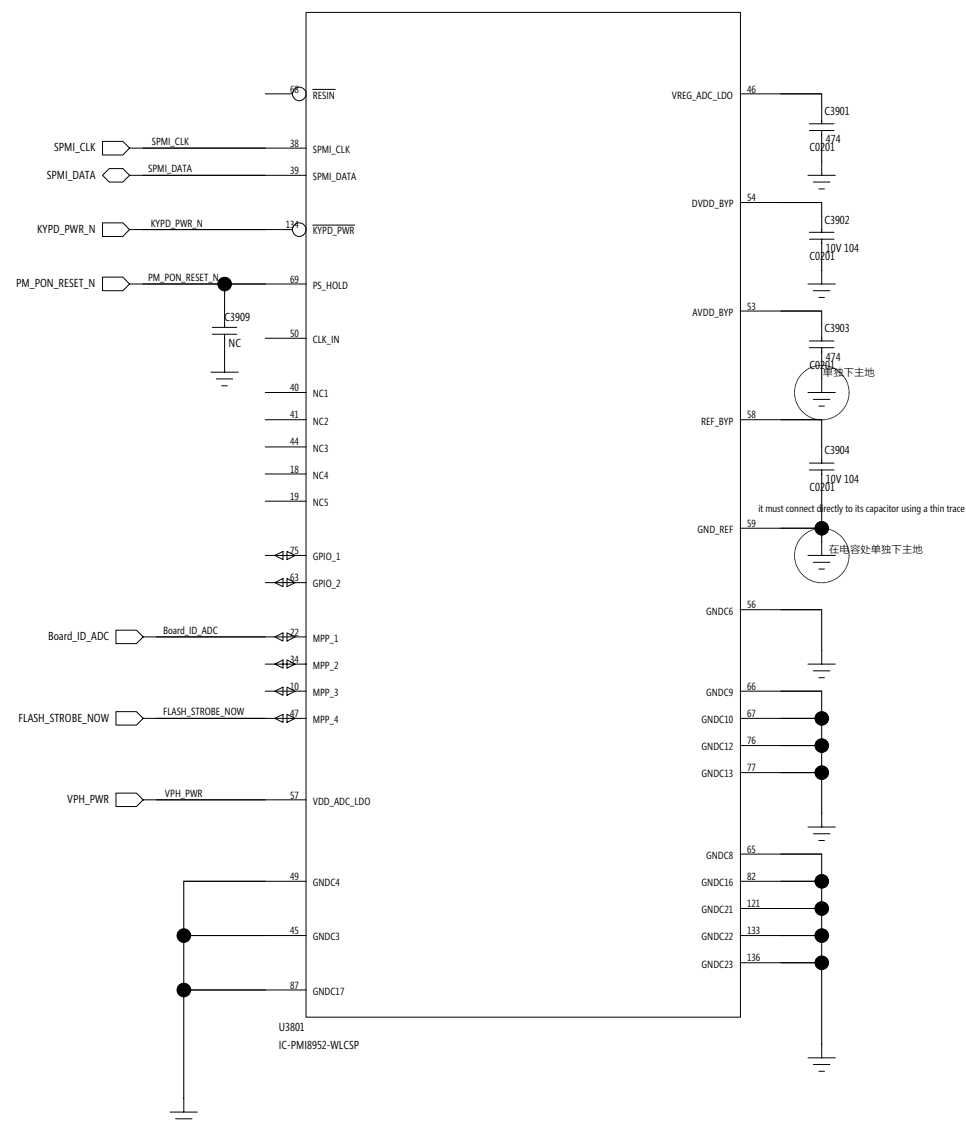


PMI8952-A

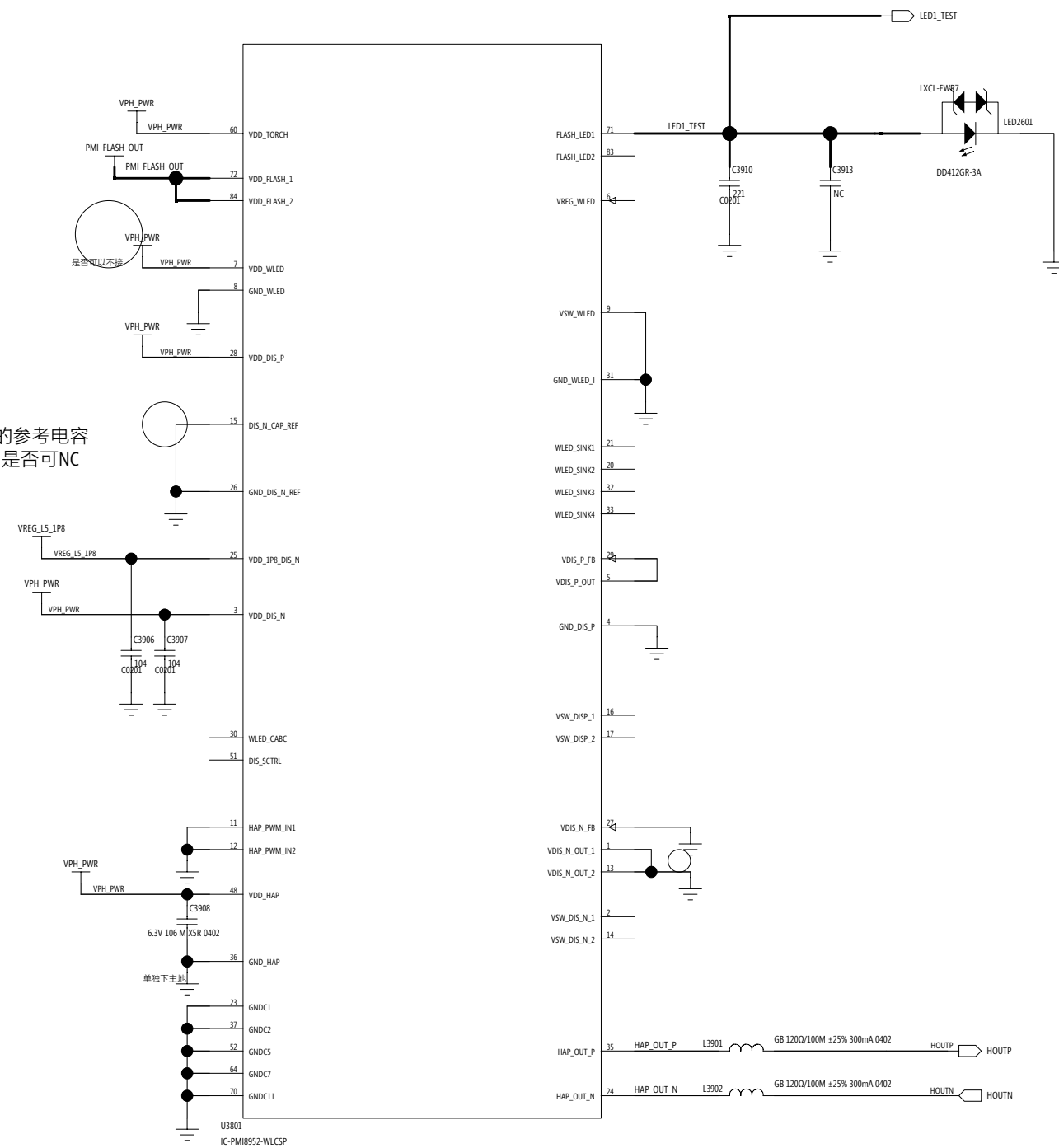


PMI8952-B

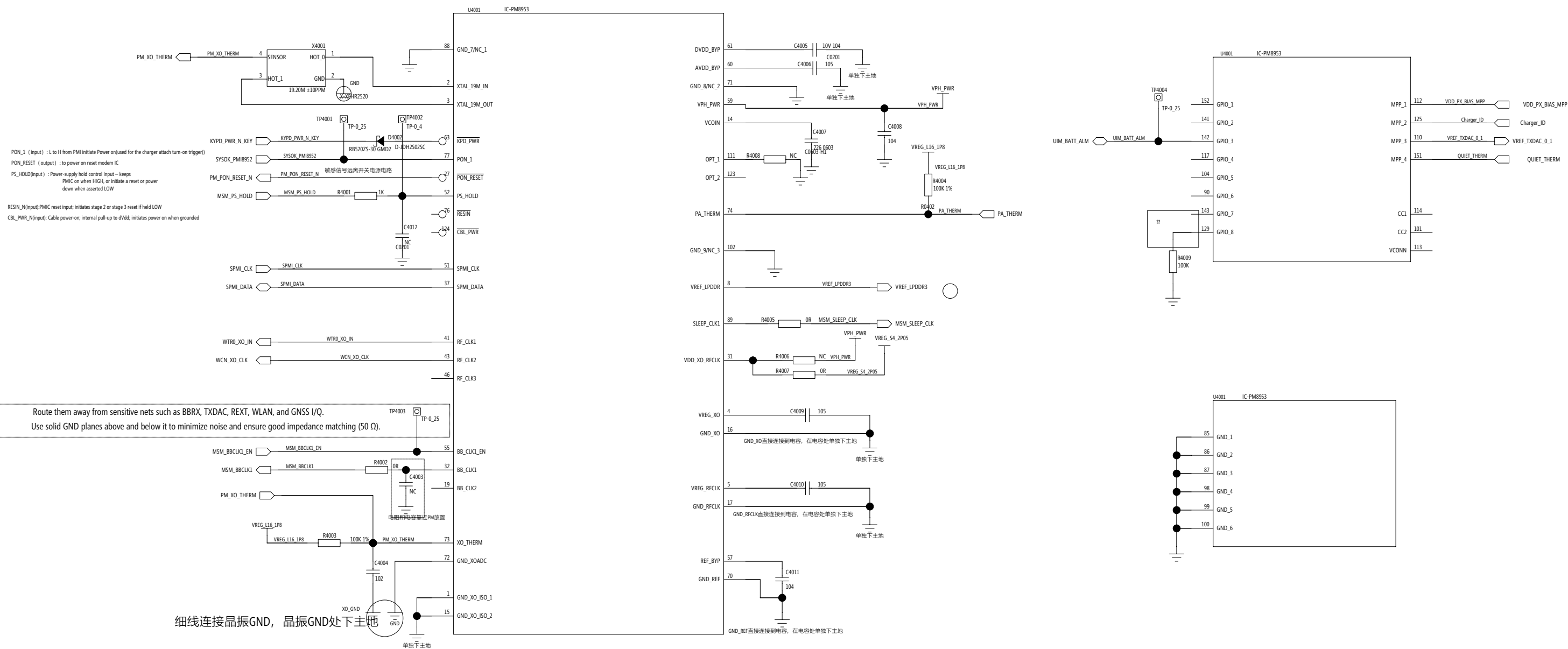
PMI8952-C



内部集成LCD/AMOLED DCDC的参考电容
LCD-472, AMOLED-151, 不用是否可NC

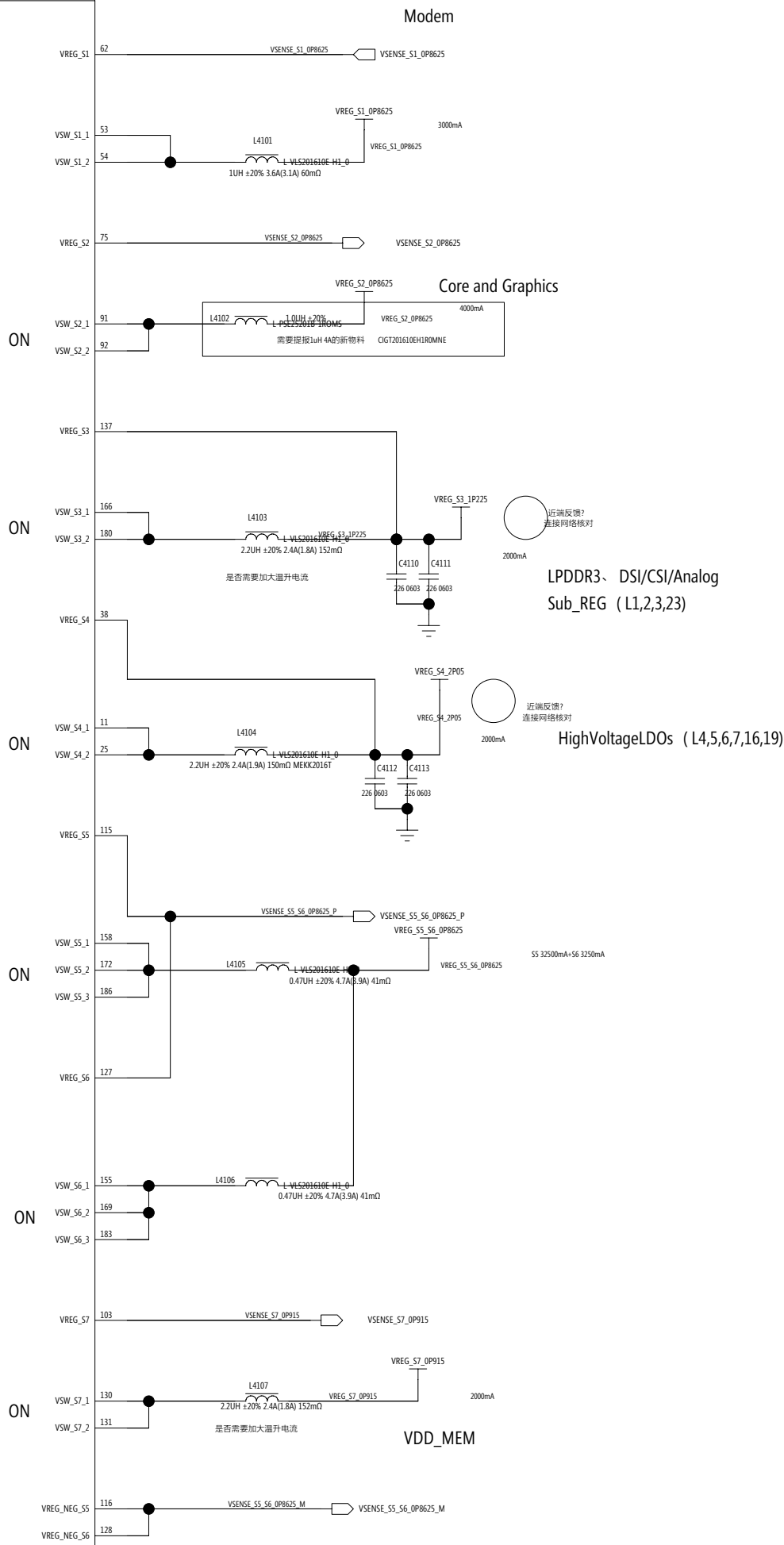
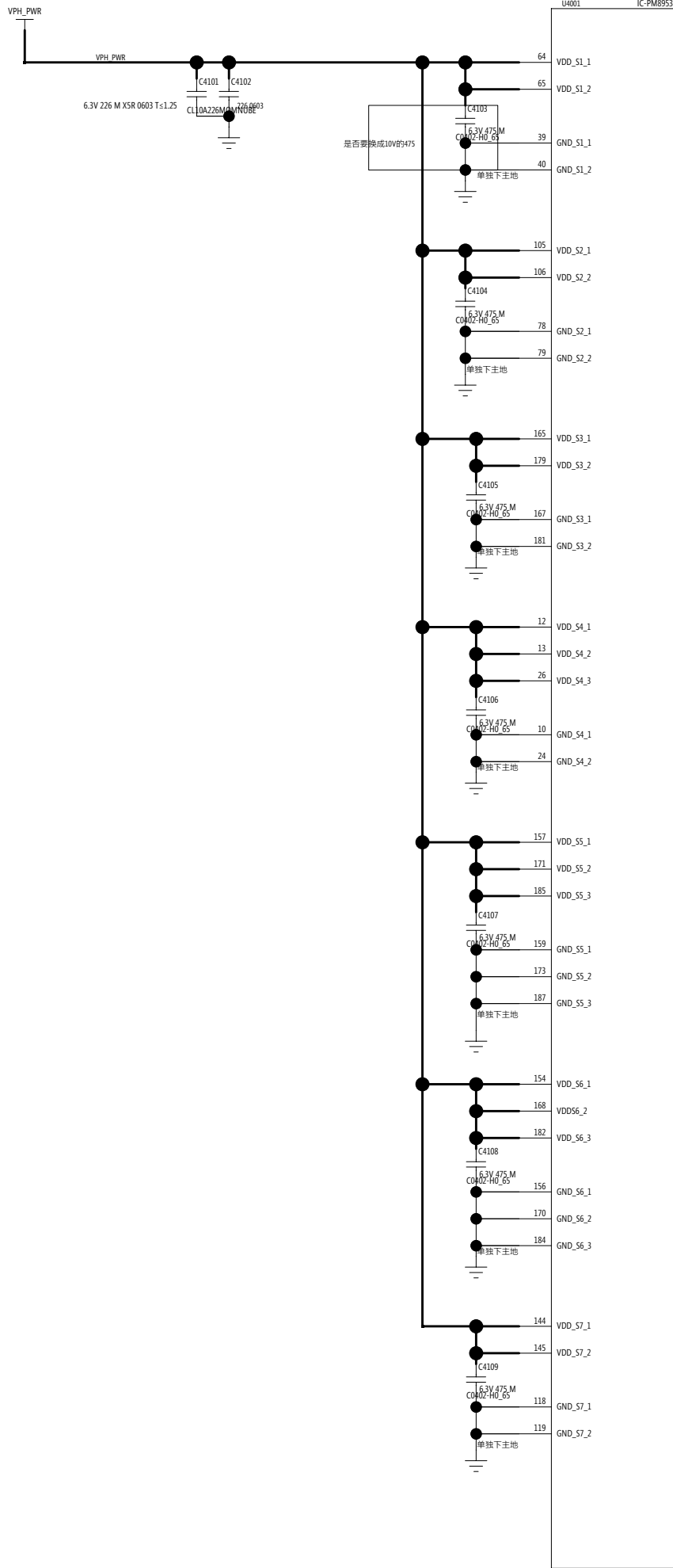


PM8953

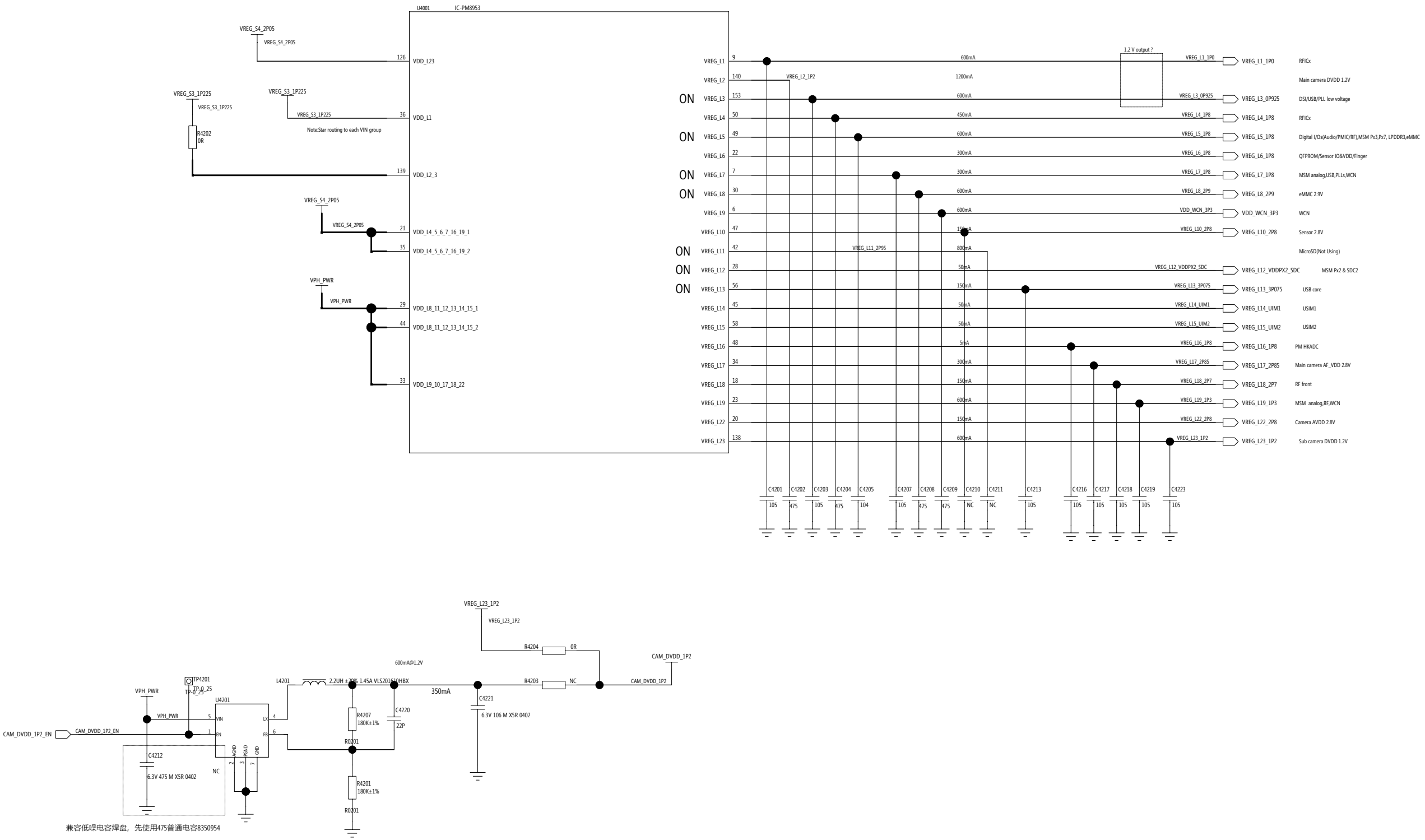


3000MA

PM8953



PM8953-LDO



A

B

C

D

E

F

A

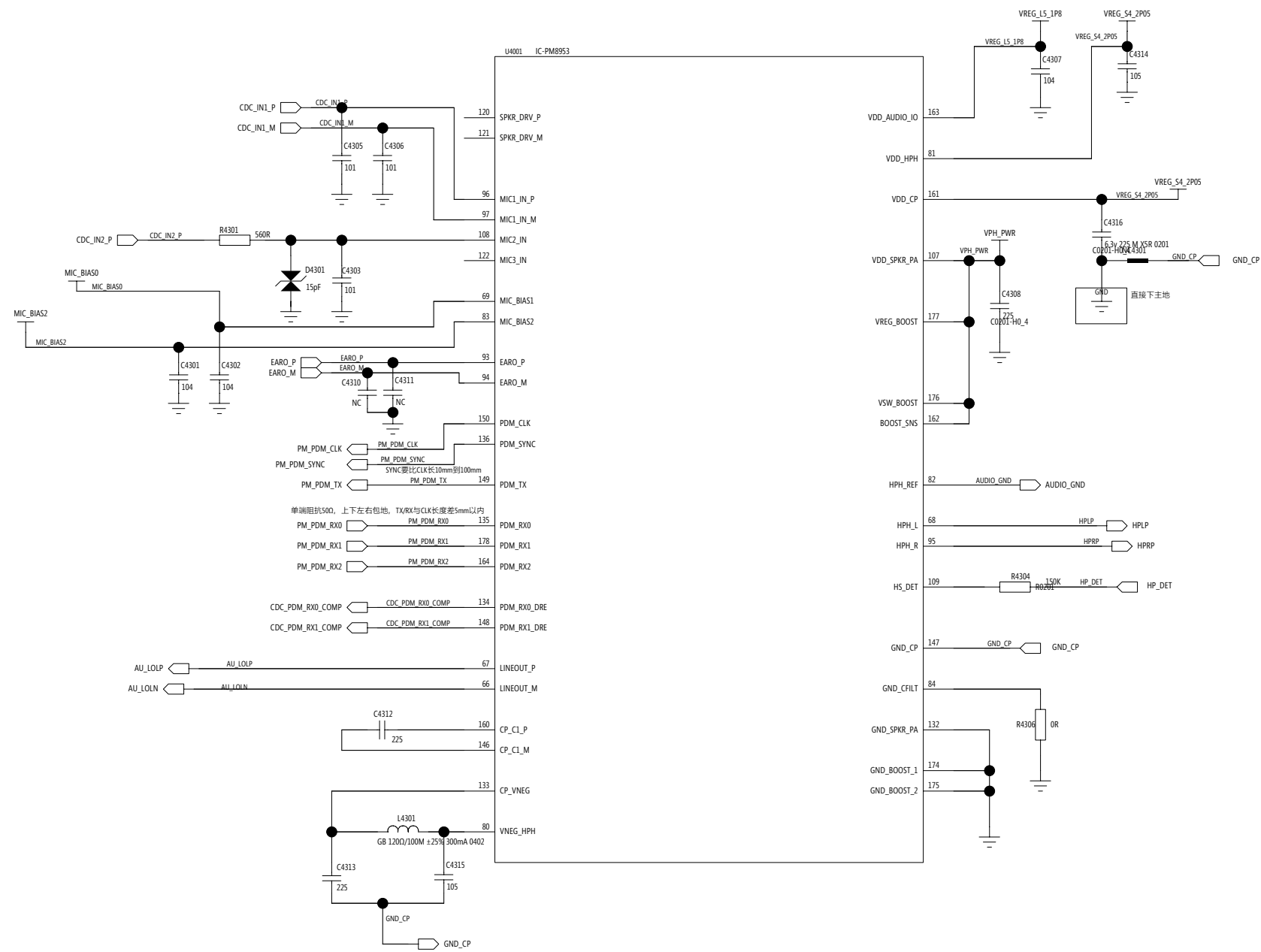
B

C

D

E

F



A



C



C

D

E

F

