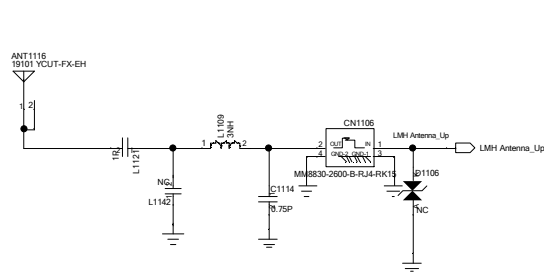
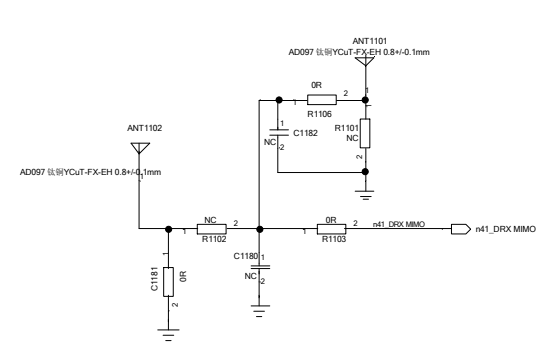


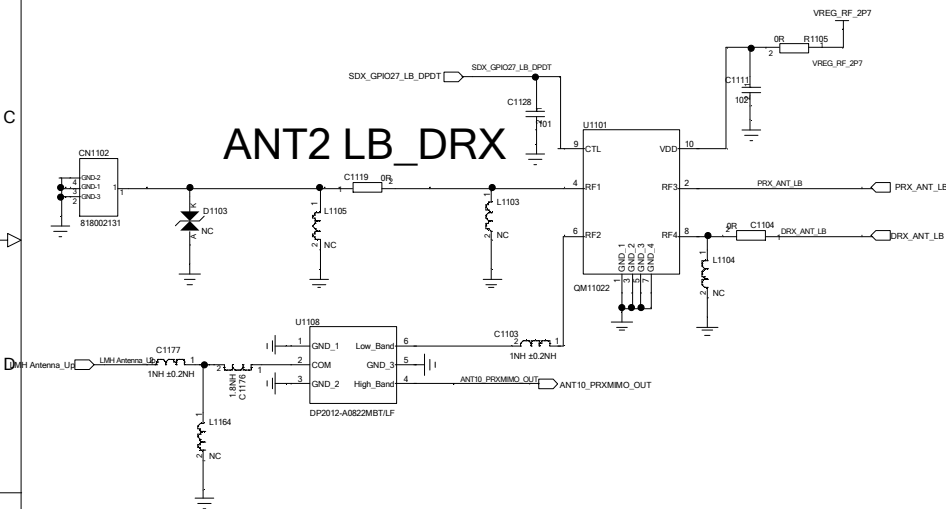
Ant10 LB DRX+MHB PRX MIMO



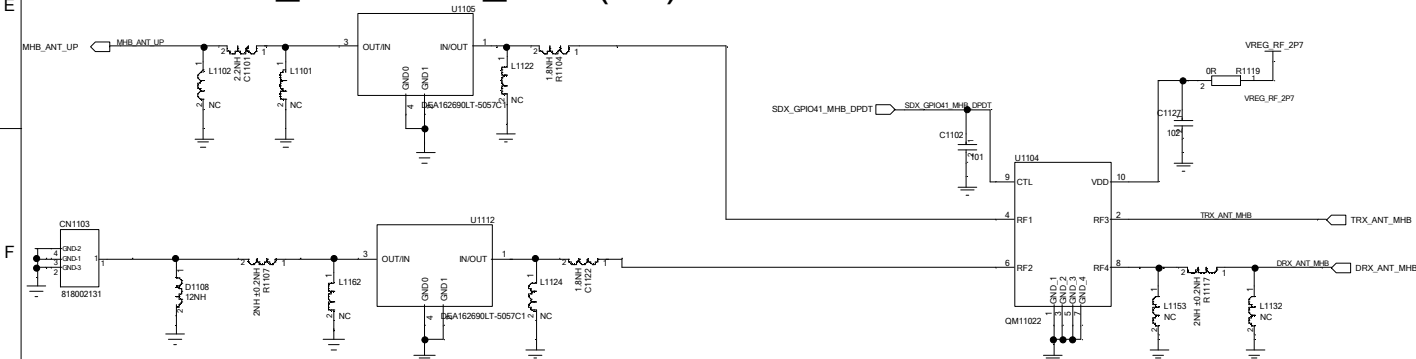
ANT4 n41_DRX MIMO



ANT2 LB_DRX



ANT3 MHB_DRX+n41_DRX(SA)



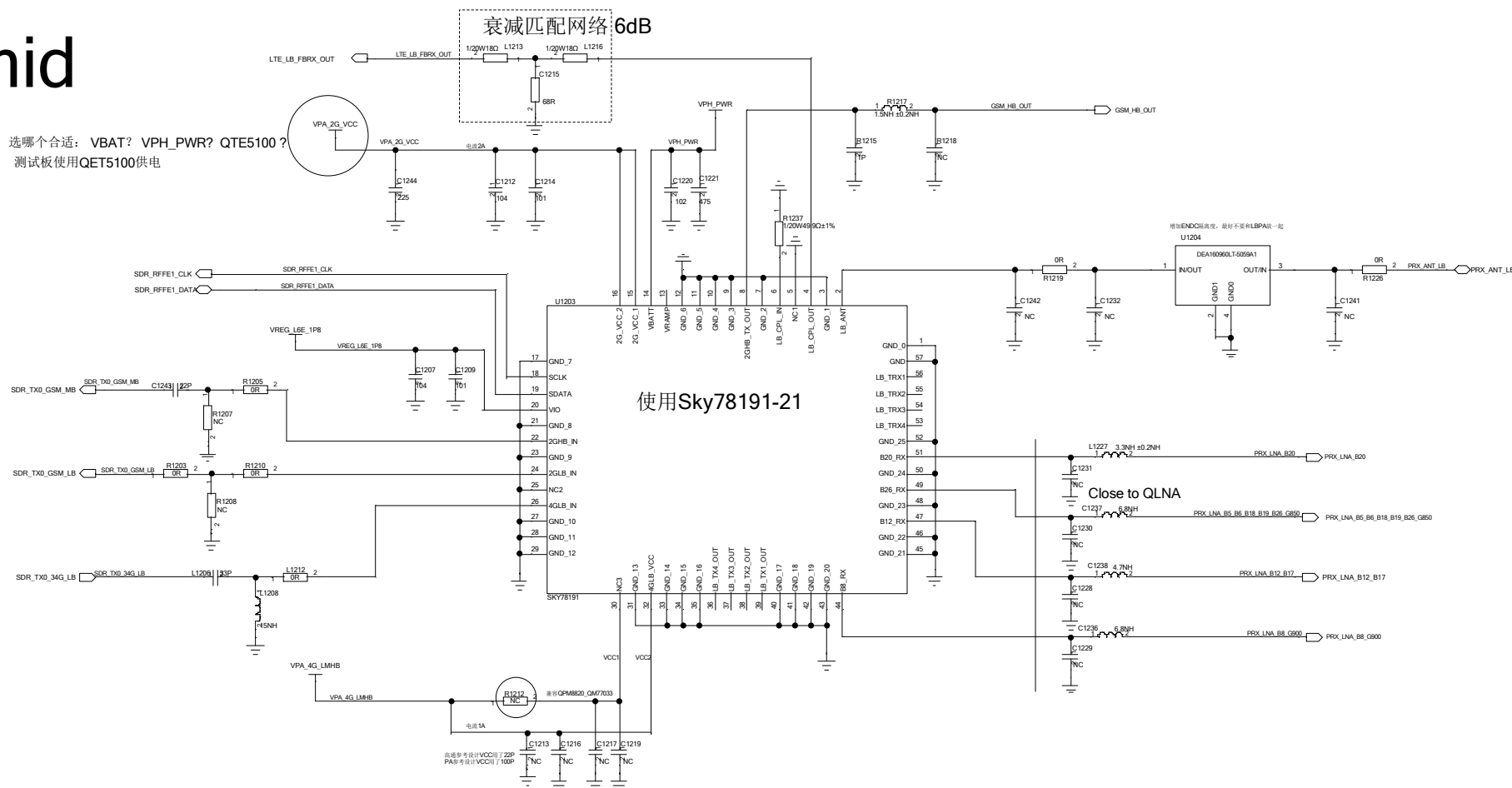
空口检测

Sign	Date	Type
Drawn By		Draw No: Schematic
Checked By		Sheet of 74 Ver:
Standard By		
Approved By		

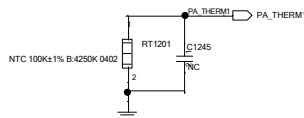
realme

LB Pamid

选哪个合适: VBAT? VPH_PWR? QTE5100?
测试板使用QET5100供电



Put Thermistor close to 2G PA



	Sign	Date	Type
Drawn By		17	Draw No: Schematic
Checked By		17	Sheet of 74 Ver:
Standard By			
Approved By			

realme

F

V1302靠近PA, 单点下地



realme

A




5030 摆放

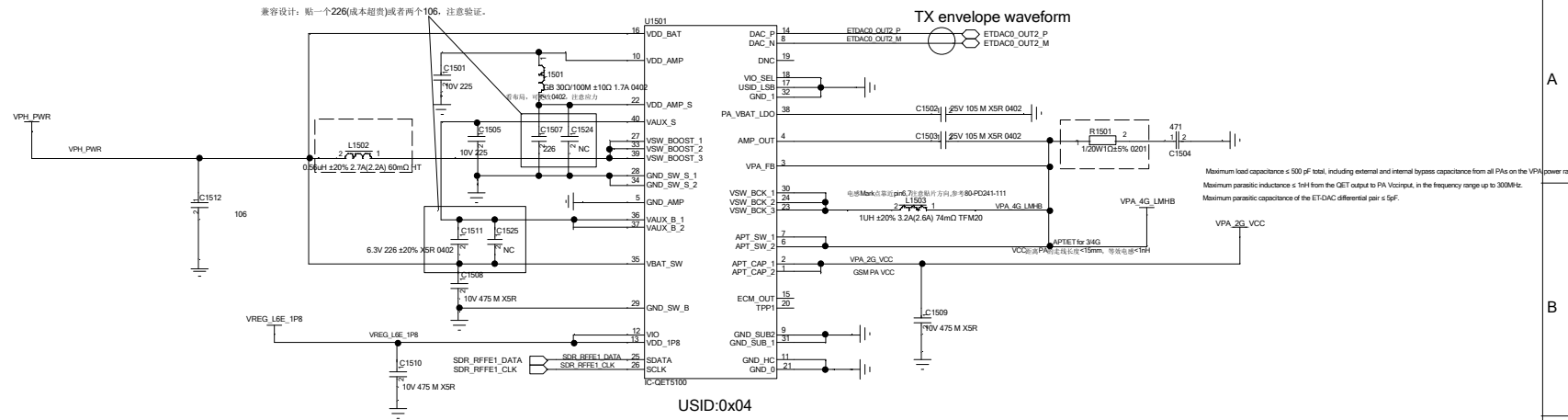
B34/39 PRX

7 B34/39/40 PRX MIMO

靠近QLN5030摆放

	Sign	Date	Type:
Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

QET5100 #0 for 4G



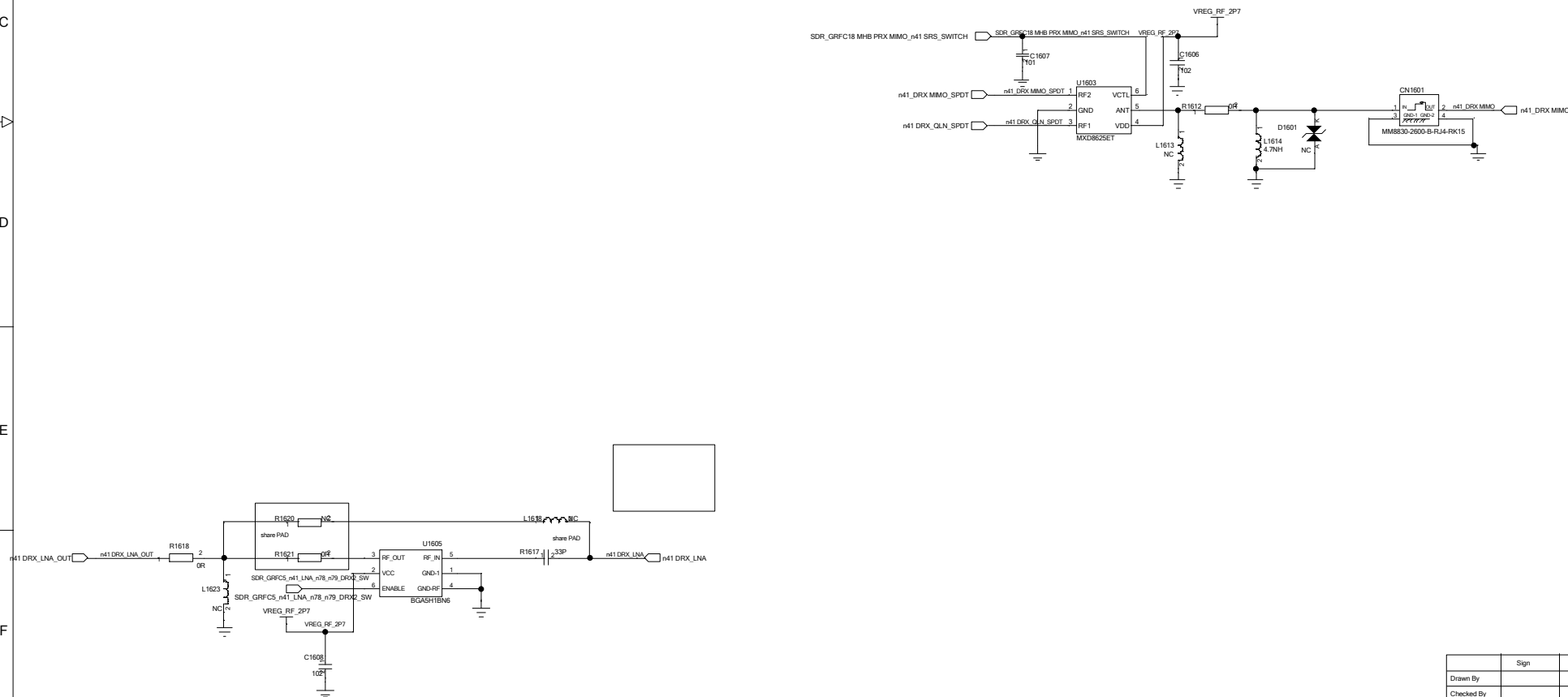
QET6100 for 5G

QET5100 #1 for 4G(外销)

Drawn By	Sign	Date	Type
Checked By			Draw No: Schematic
Standard By			Sheet of 74 Ver:
Approved By			

realme

DRX/DRX MIMO QLN5030

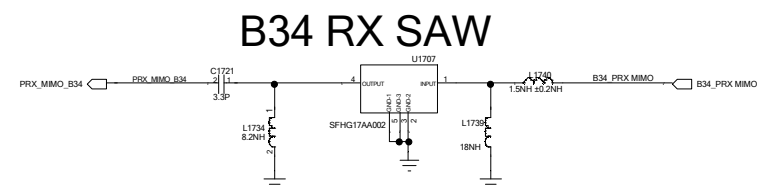
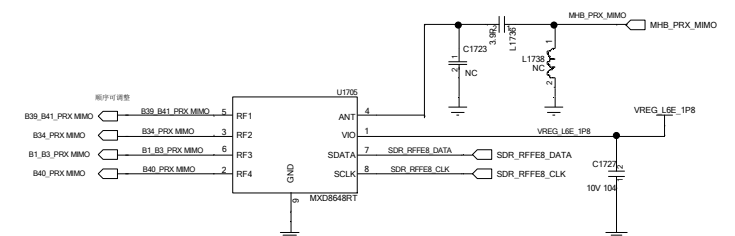
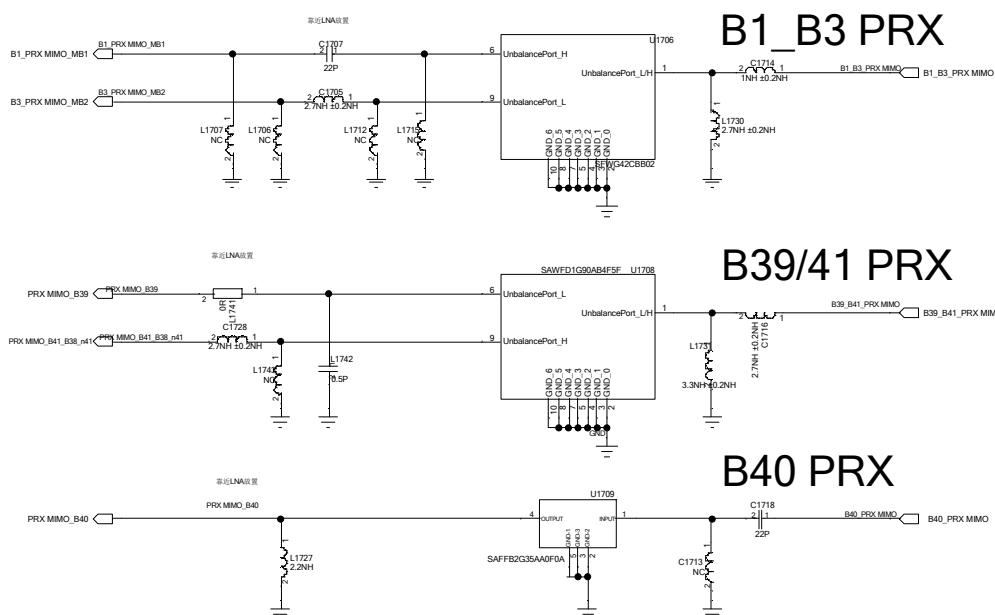


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Standard By			Sheet of 74 Ver:
Approved By			

realme

DRX MIMO

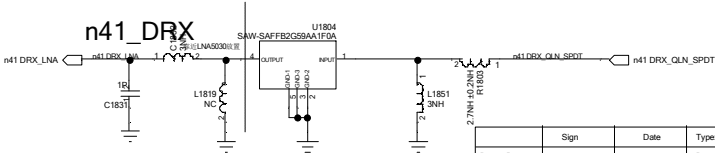
PRX MIMO



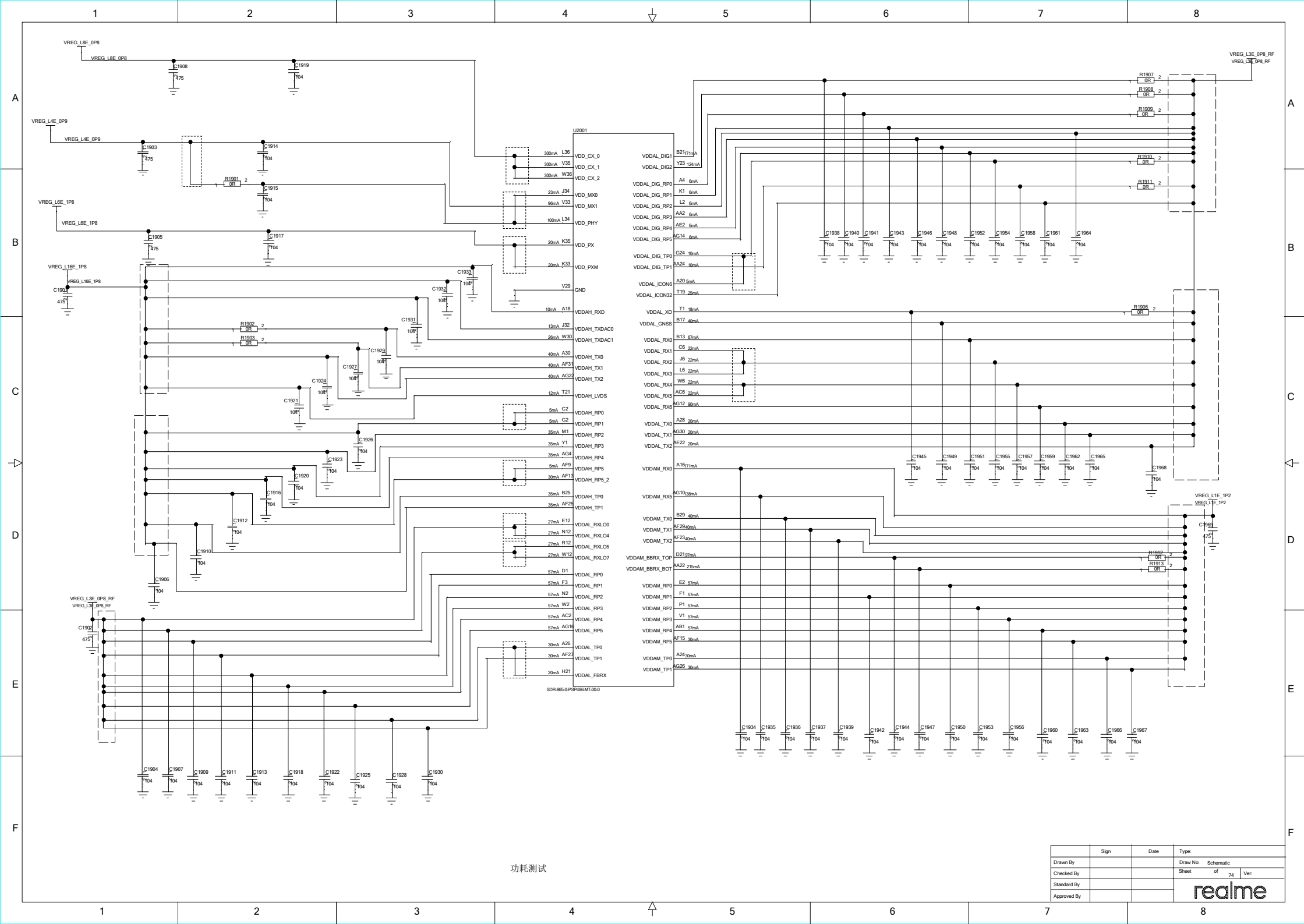
	Sign	Date	Type:
Drawn By			Draw No: Schematic
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Standard By			
Approved By			

realme

DRX Module



		Sign	Date	Type:	
Drawn By				Draw No:	Schematic
Checked By				Sheet of	74 Ver:
Standard By				realme	
Approved By					

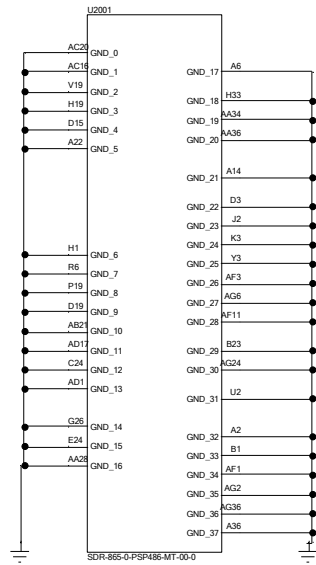
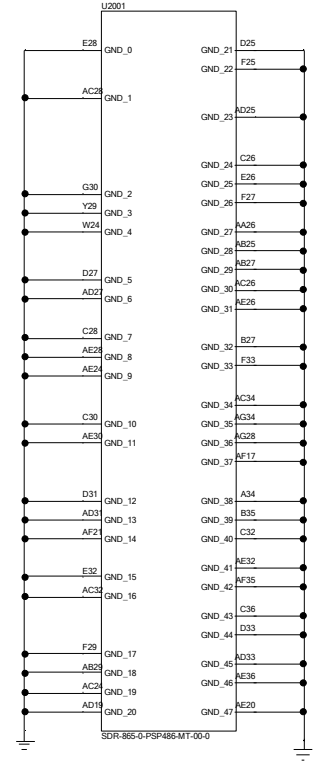
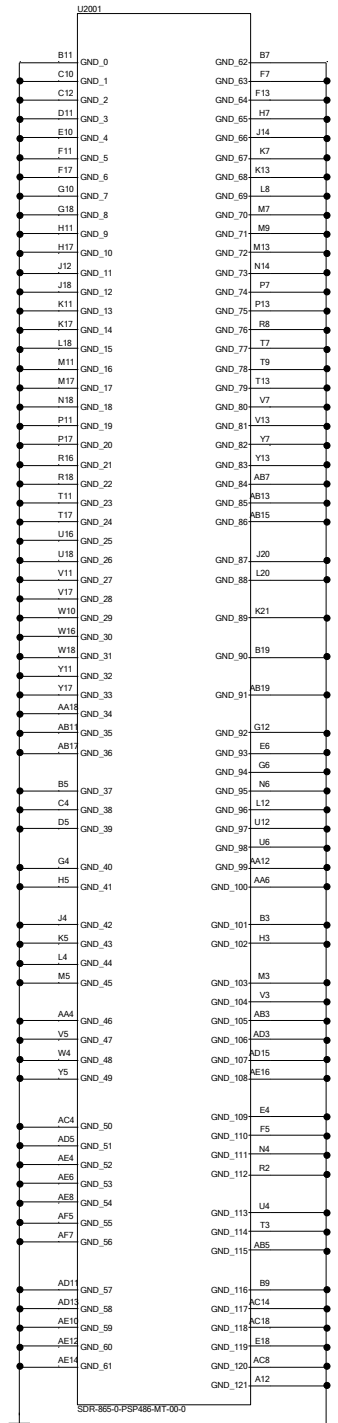
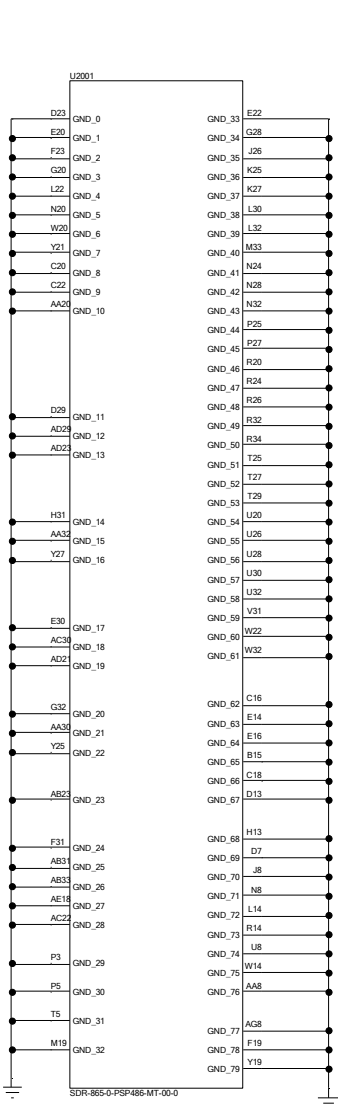


A
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PDN Guidelines for LPDDR4X				
	Tolerance		DC R	AC 2@20MHz
	(DC)	(AC+DC)		
VDDQ(0.6V)	±18mV	±30mV	<15mΩ	<38mΩ
VDDQ(1.1V)	±33mV	±55mV	<8mΩ	<38mΩ
VDD(1.1V)	±55mV	±90mV	<40mΩ	<125mΩ

De-cap. Combination

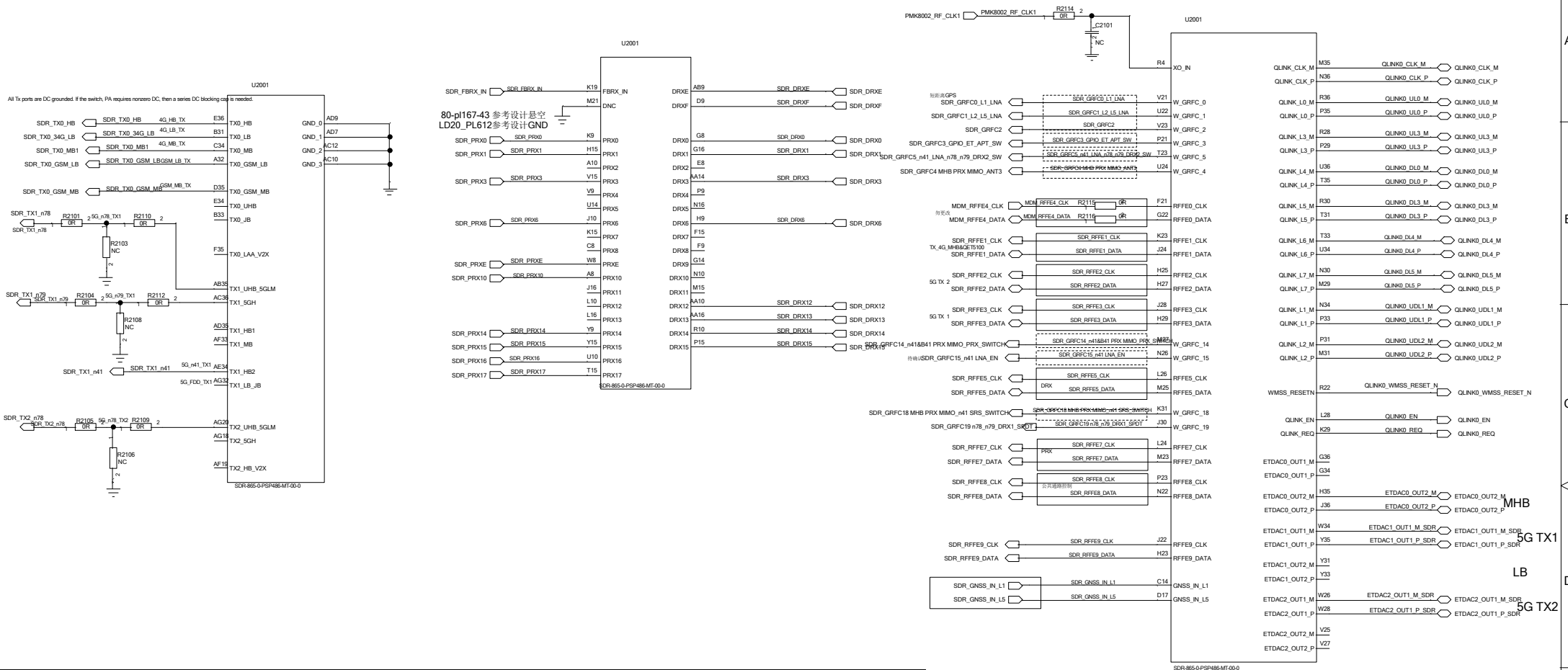
Ch. A: 3.3μF 1ea + 100nF 2ea
Ch. B: 3.3μF 1ea + 100nF 2ea
Ch. A: 4.7μF 1ea + 100nF 2ea
Ch. B: 4.7μF 1ea + 100nF 2ea
(2.2μF + 100nF) * 2



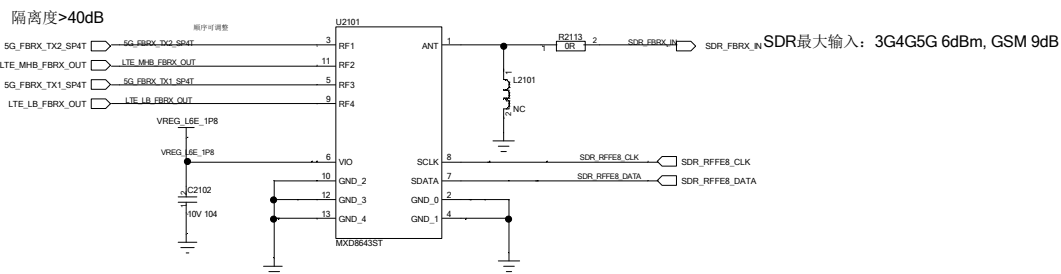
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Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			


realme

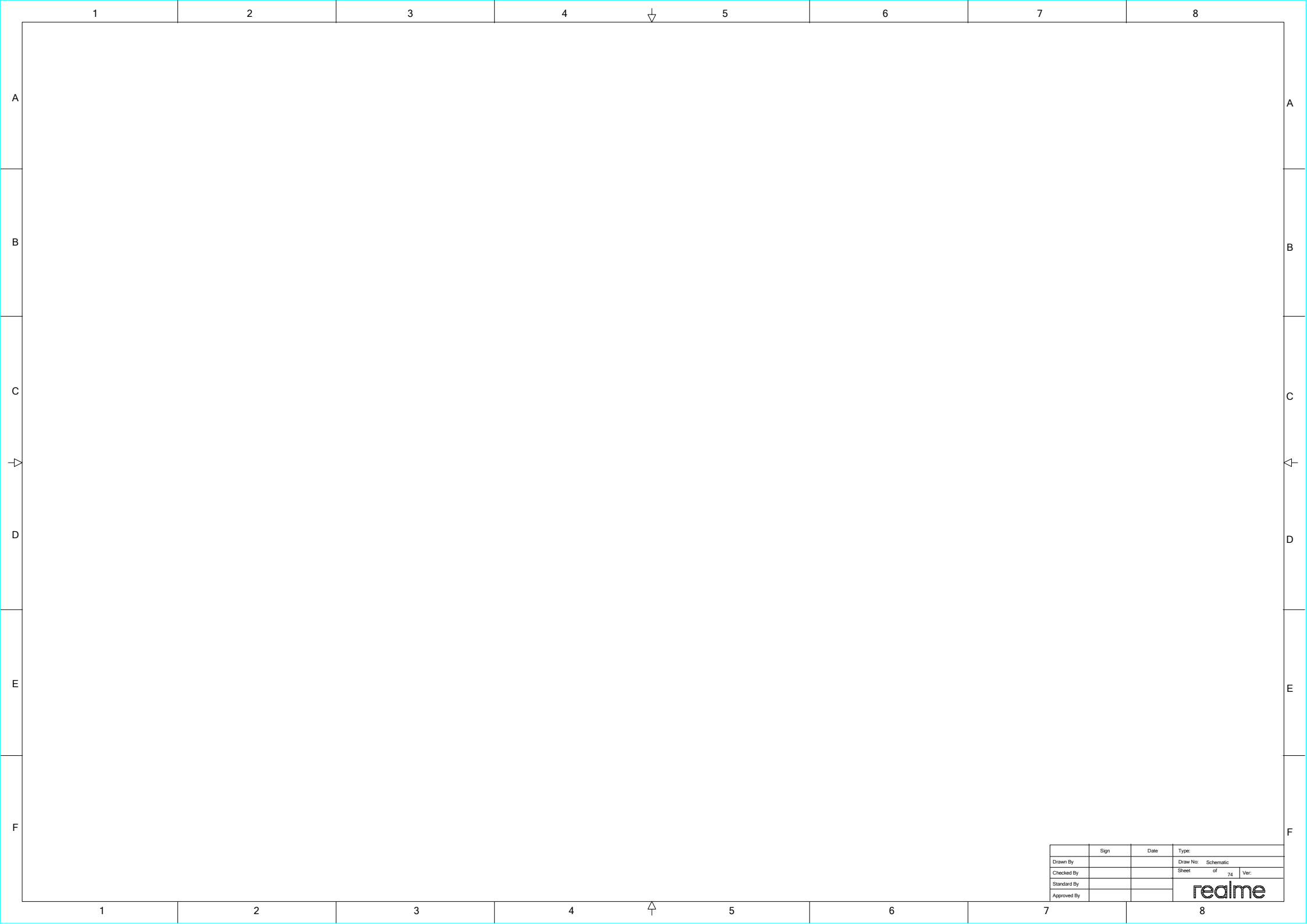
A
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FBRX Switch



	Sign	Date	Type:	
Drawn By	Elvis	2014/1/15	Draw No: Schematic	
Checked By			Sheet	of 74 Ver:
Standard By				
Approved By				



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A								
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	Sign	Date	Type
Drawn By			Draw No: A288EET
Checked By			Sheet of 2 Ver:
Standard By			
Approved By			



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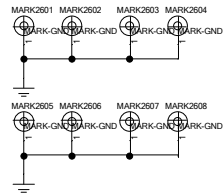
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Drawn By			Draw No: A2SHEET	
Checked By			Sheet	of 2 Ver:
Standard By			oppo	
Approved By				

MARK POINT

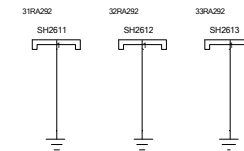
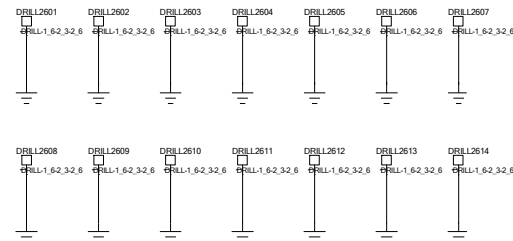
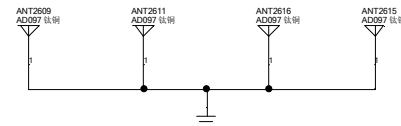
螺钉垫片

主板螺钉

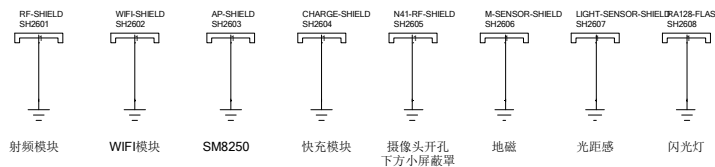
垫高板贴片位号



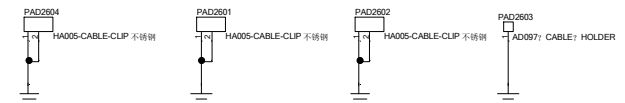
主板接地弹片



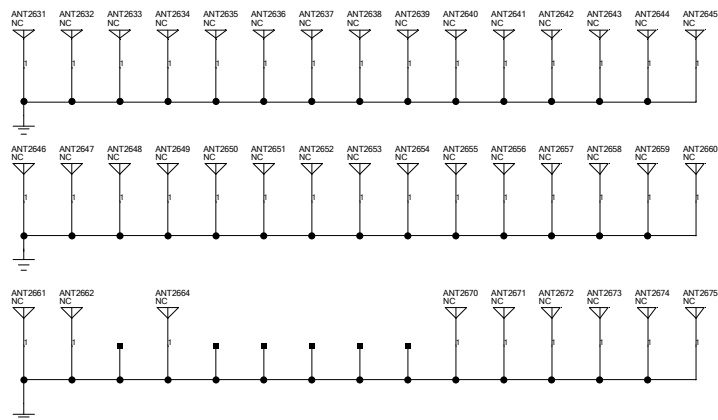
屏蔽支架



HA005-CABLE-CLIP 不锈钢

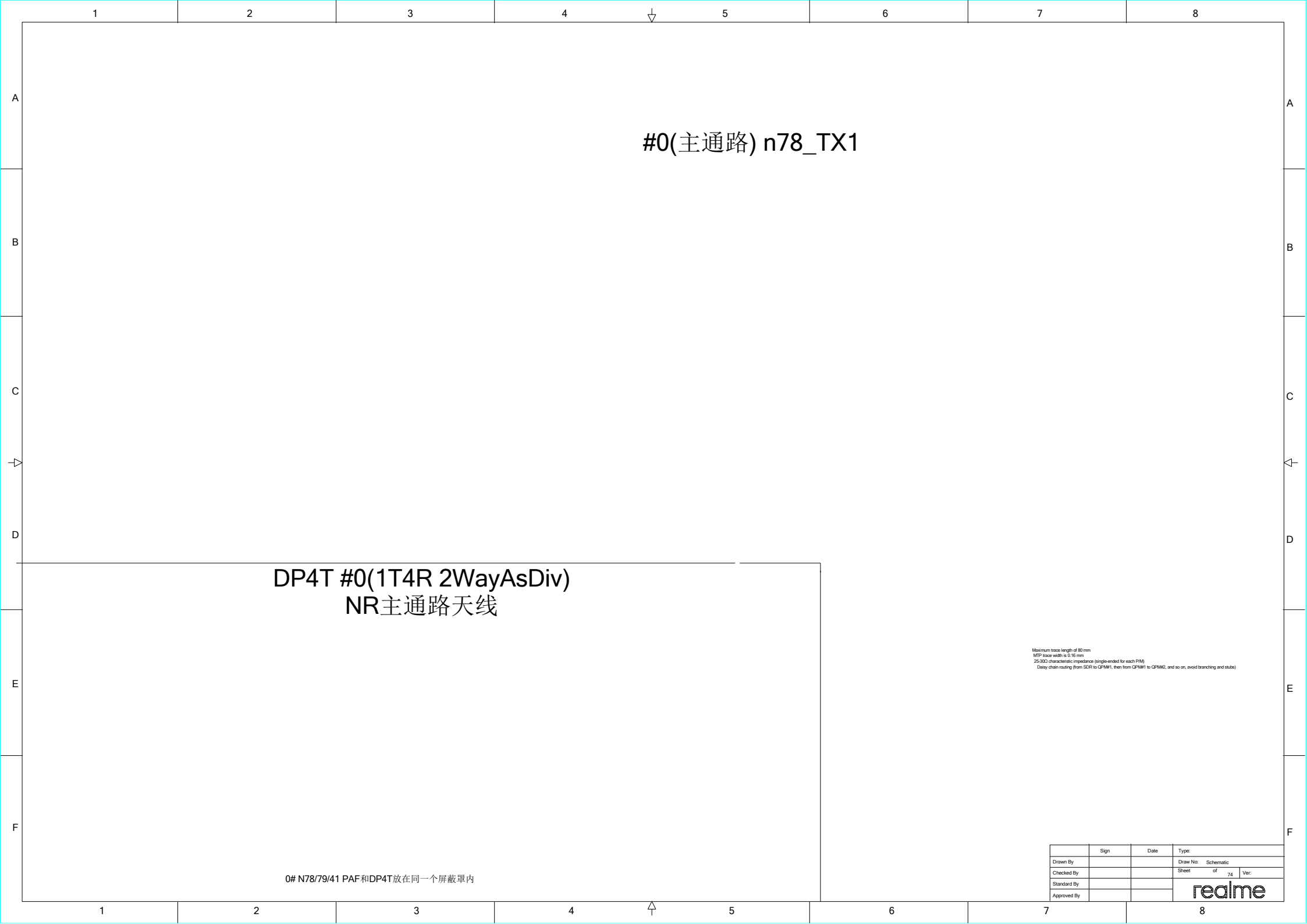


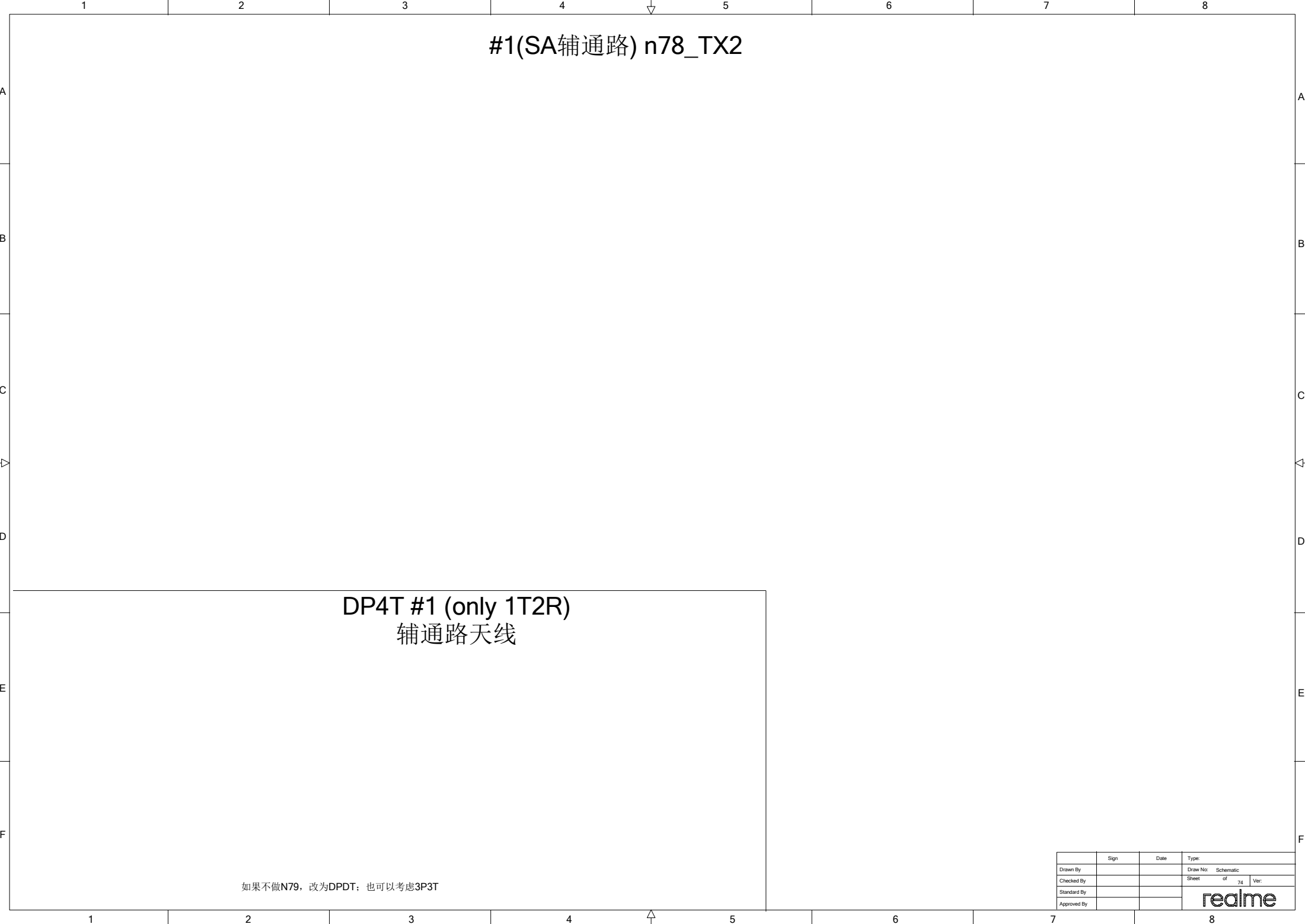
叠层板小垫片



Drawn By	Sign	Date	Type:
Checked By			Draw No: Schematic
Standard By			Sheet of 74 Ver:
Approved By			

realme



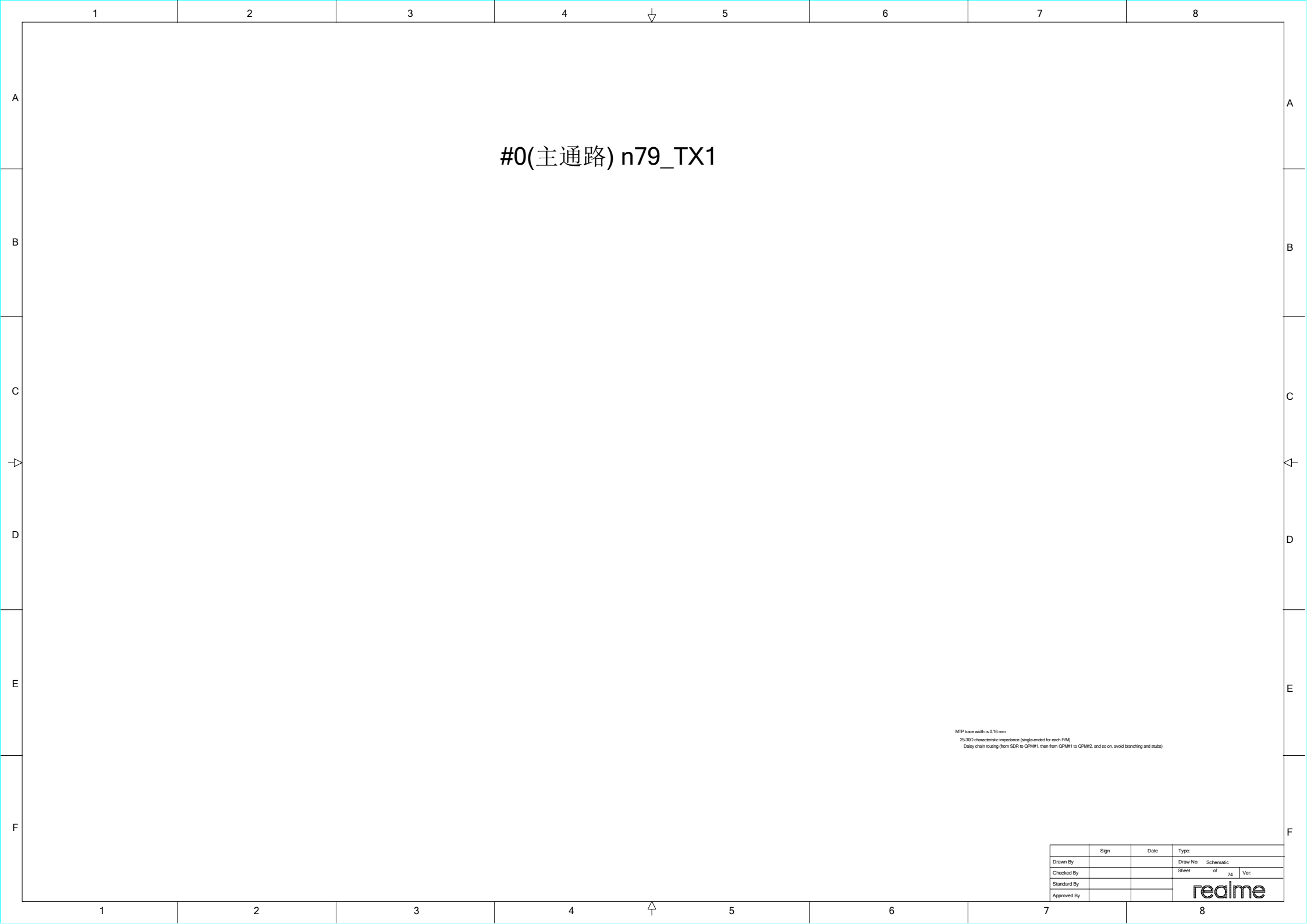


#1(SA辅通路) n78_TX2

DP4T #1 (only 1T2R)
辅通路天线

如果不做N79, 改为DPDT; 也可以考虑3P3T

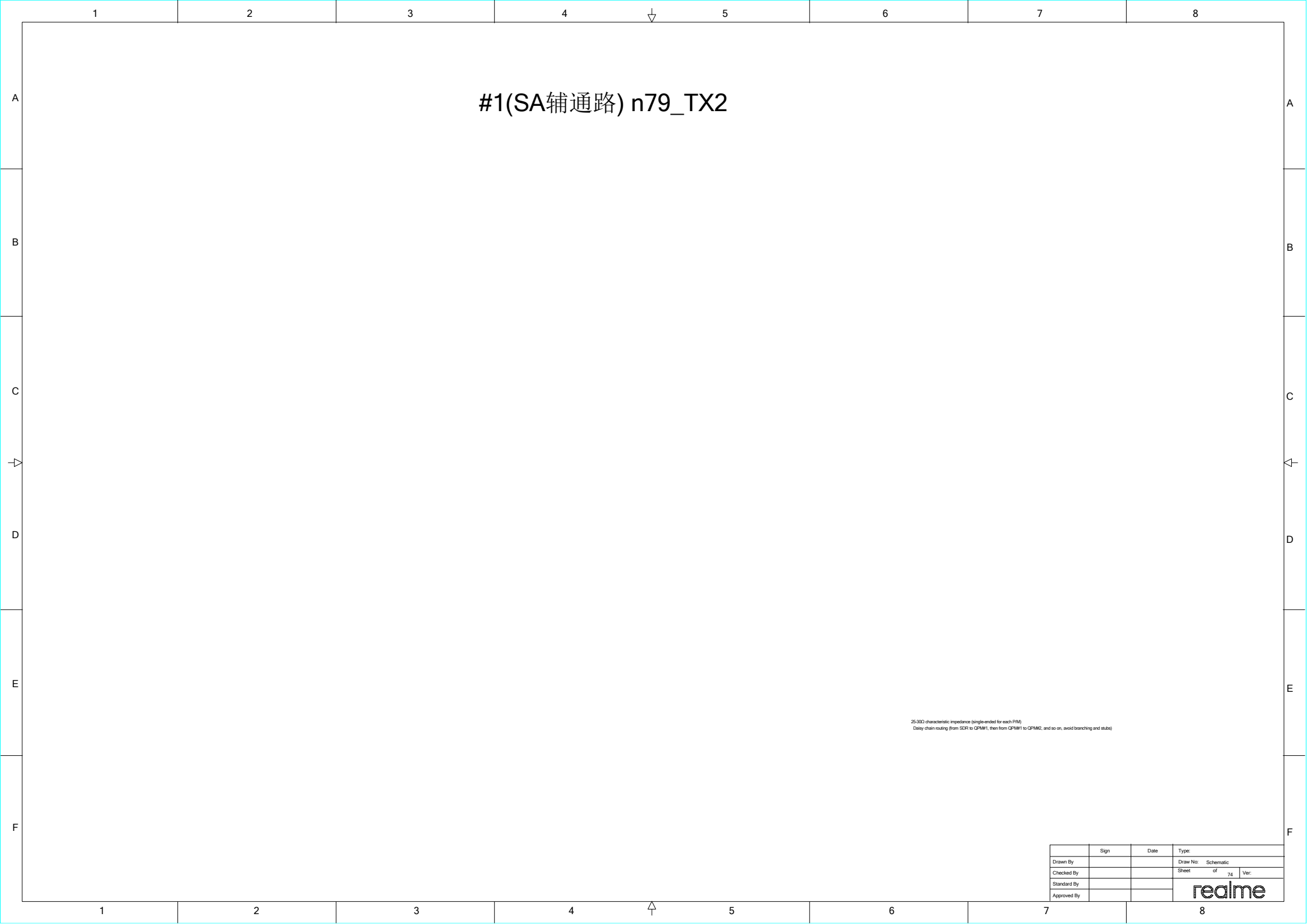
	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				



#0(主通路) n79_TX1

MTP trace width is 0.16 mm
25-30Ω characteristic impedance (single-ended for each PAM)
Daisy chain routing (from SDR to QPM#1, then from QPM#1 to QPM#2, and so on, avoid branching and stubs)

	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				



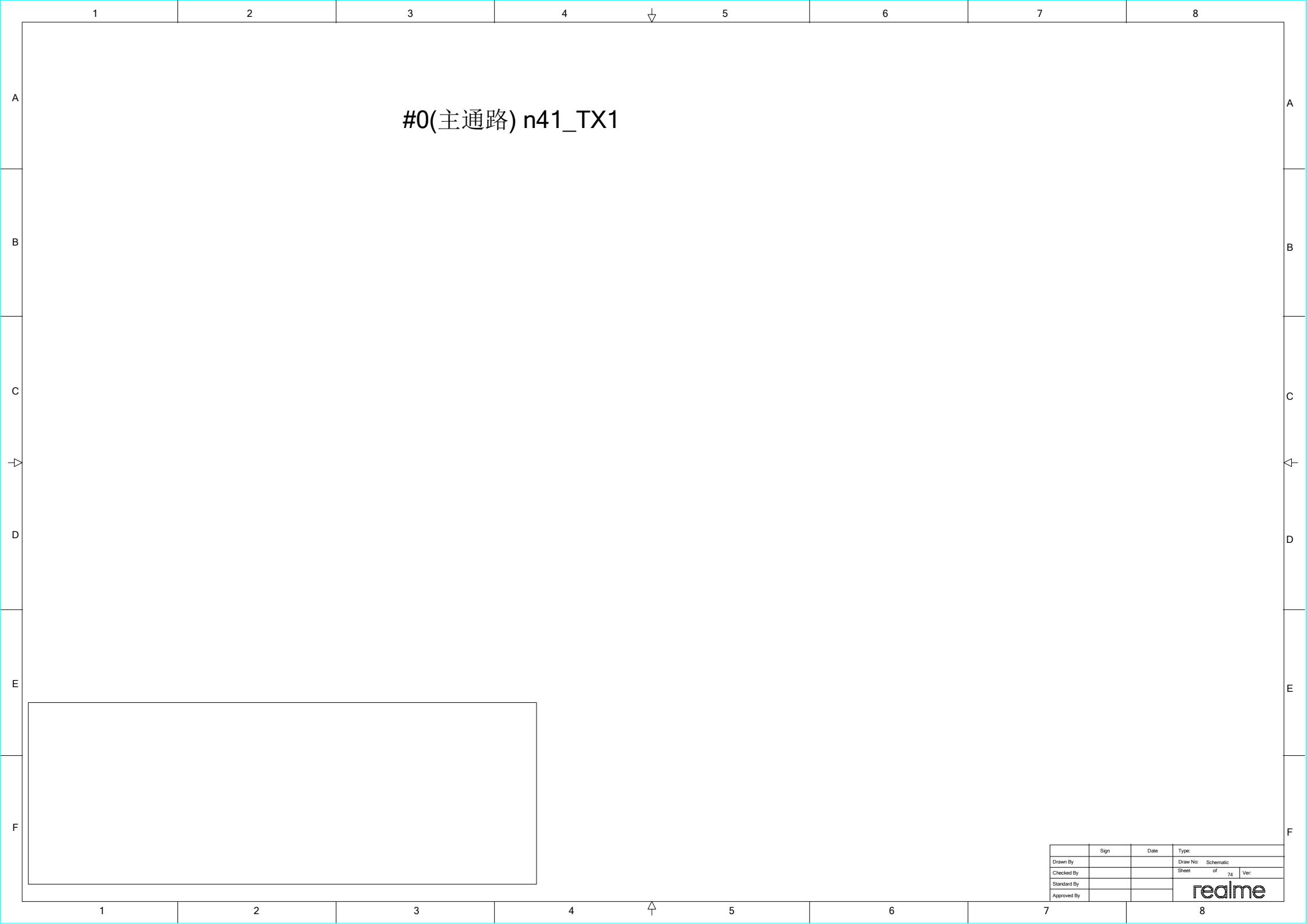
#1(SA辅通路) n79_TX2

25.5Ω characteristic impedance (single-ended for each PIM)
Daisy chain routing (from SDR to QPM#1, then from QPM#1 to QPM#2, and so on, avoid branching and stubs)

	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				



	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				



#0(主通路) n41_TX1

	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				

	1	2	3	4	5	6	7	8
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	1	2	3	4	5	6	7	8

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Drawn By			Draw No: A28HEET
Checked By			Sheet of 2 Ver:
Standard By			
Approved By			



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	Sign	Date	Type
Drawn By			Draw No: A28/SHEET
Checked By			Sheet of 2 Ver:
Standard By			
Approved By			

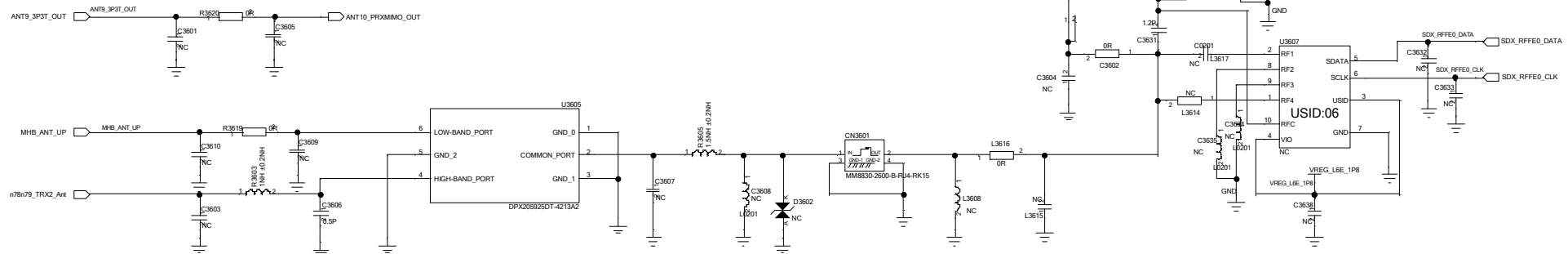


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	1	2	3	4	5	6	7	8

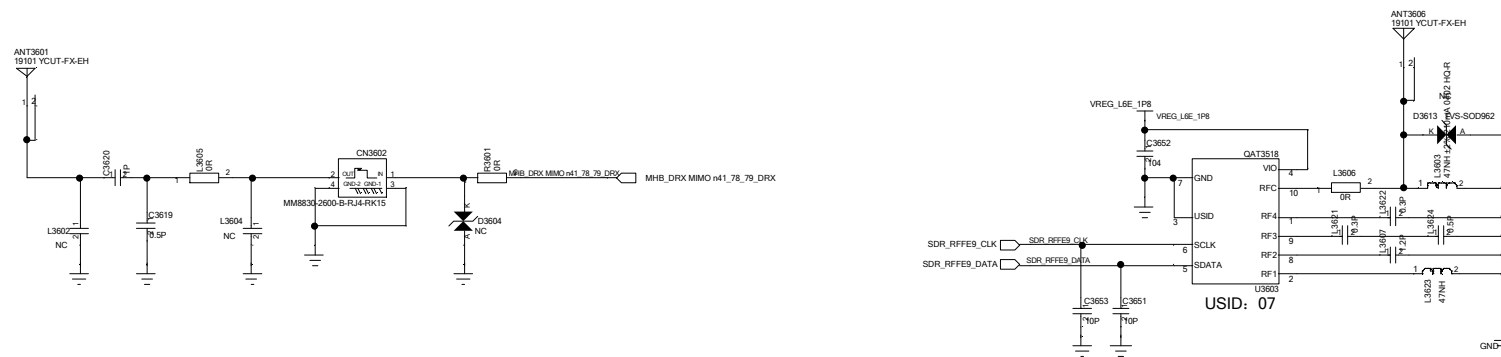
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Drawn By			Draw No: A28HEET
Checked By			Sheet of 2 Ver:
Standard By			
Approved By			



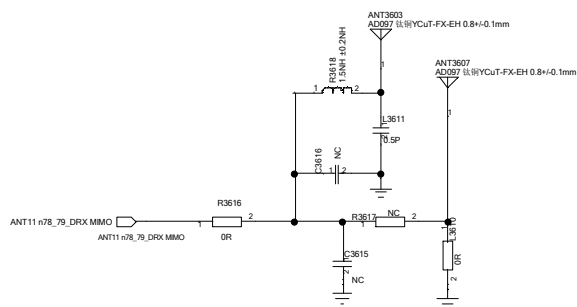
Ant9 n78/n79/n41 PRX MIMO+(MHB+n1+n41(SA)) DRX




ANT5 MHB_DRX MIMO+n41/78/79_DRX

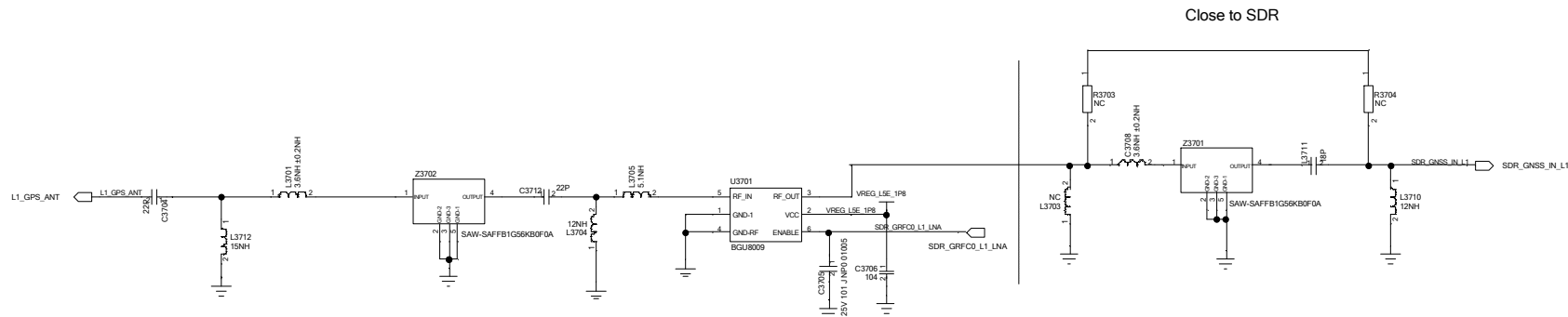


ANT11 n78/79_DRX MIMO

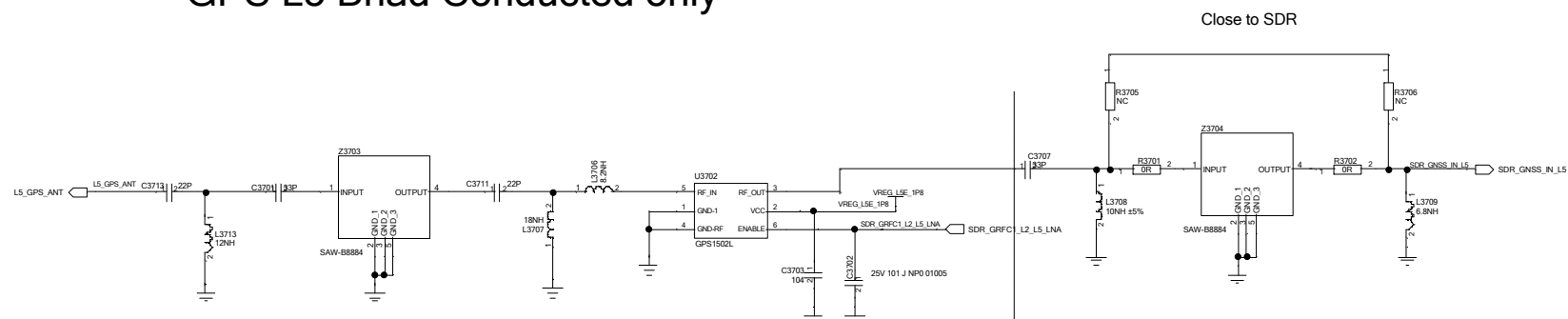



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Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

GPS L1 Band



GPS L5 Bnad Conducted only



	Sign	Date	Type:	
Drawn By			Draw No: Schematic	
Checked By			Sheet	of 74 Ver:
Standard By				
Approved By				

12345678

NFC

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C

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D

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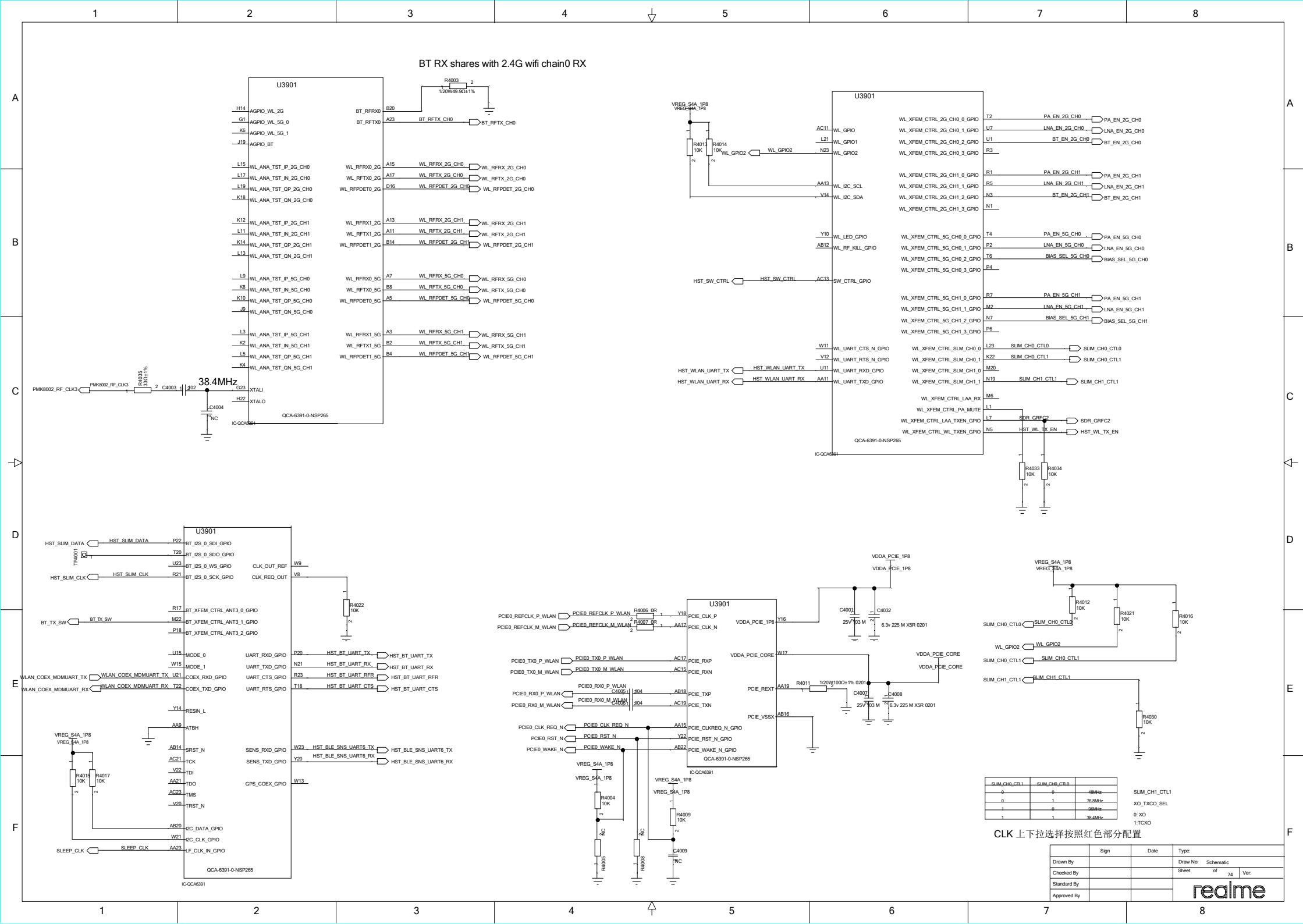
E

F

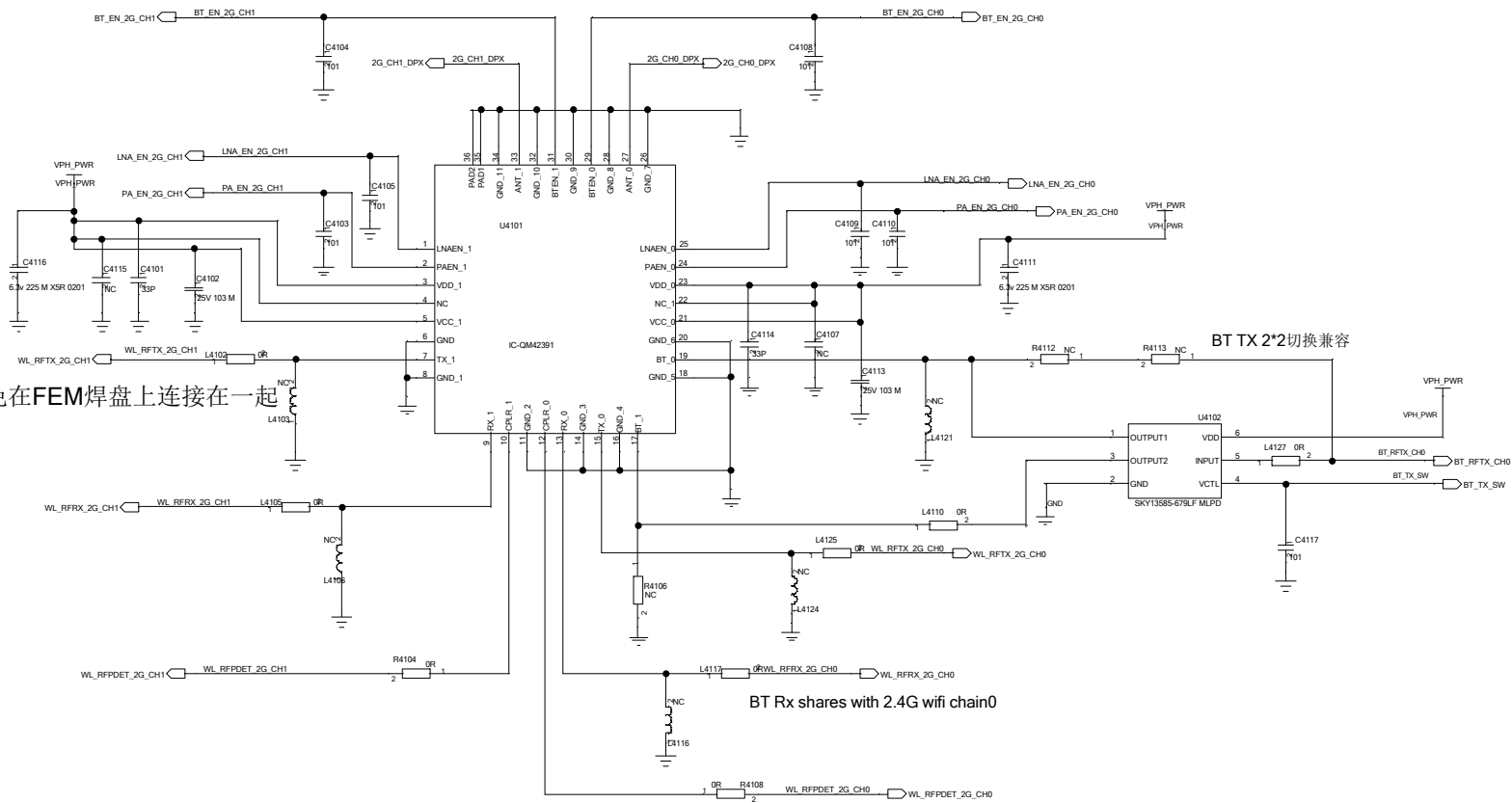
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	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				

12345678

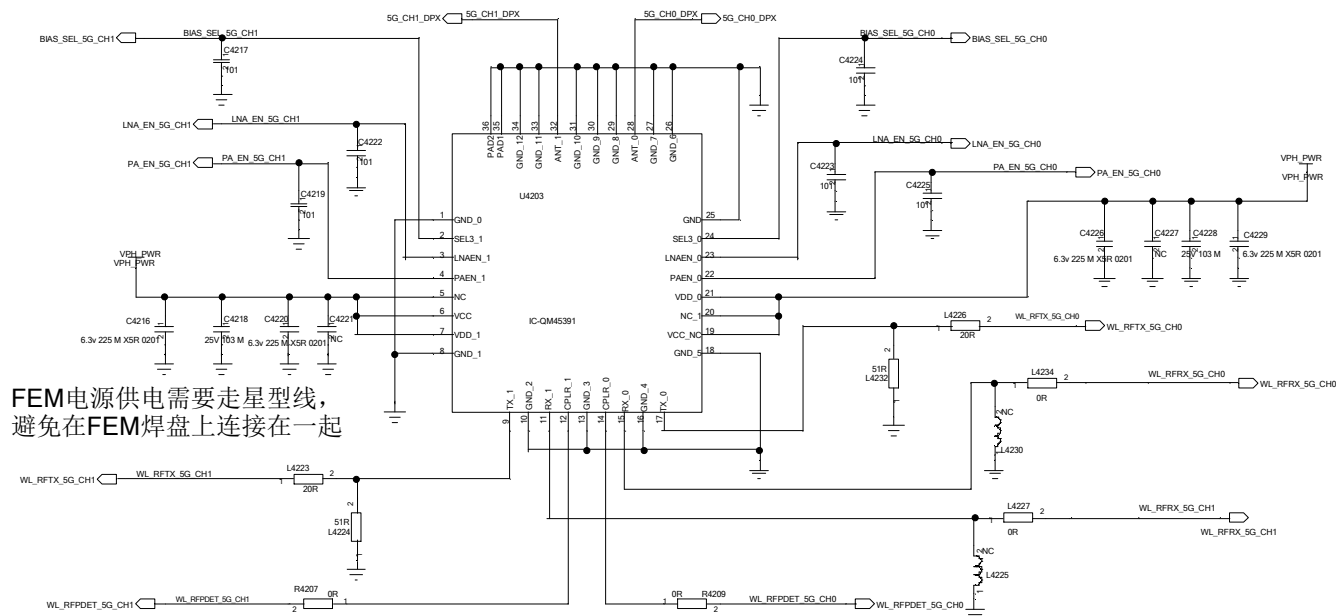


FEM电源供电需要走星型线，避免在FEM焊盘上连接在一起



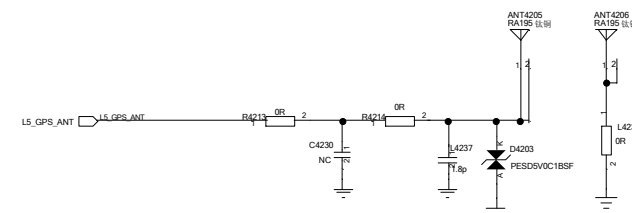
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Standard By			
Approved By			

realme

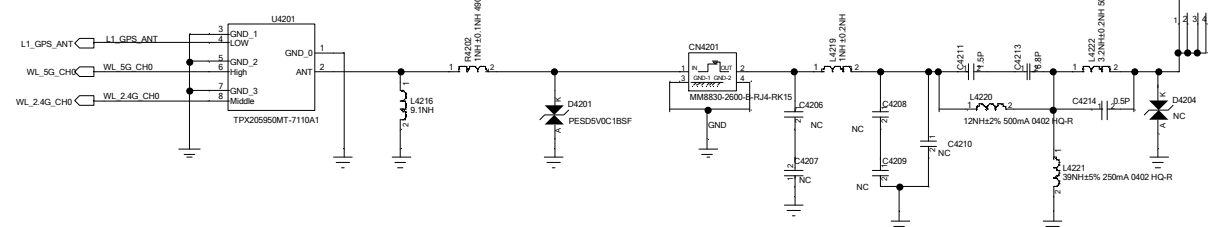
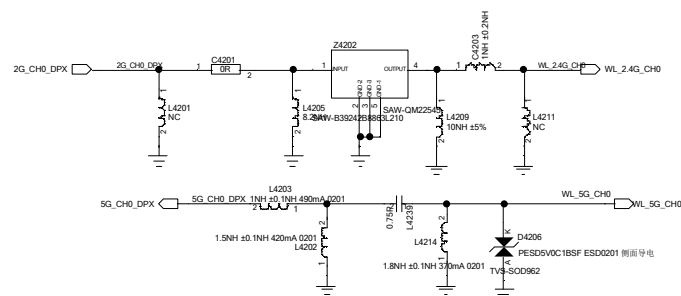


FEM电源供电需要走星型线，
避免在FEM焊盘上连接在一起

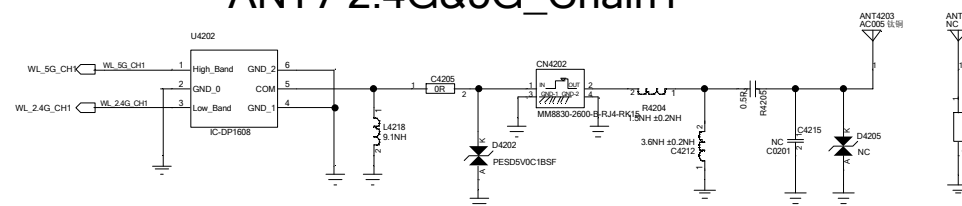
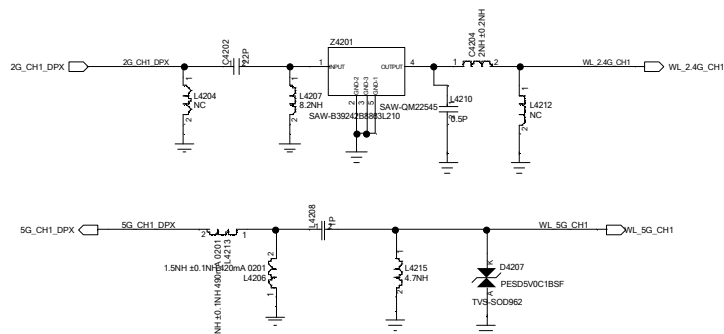
ANT8 GPS_L5




确认Chain0为2.4G 5G主路



ANT7 2.4G&5G Chain1



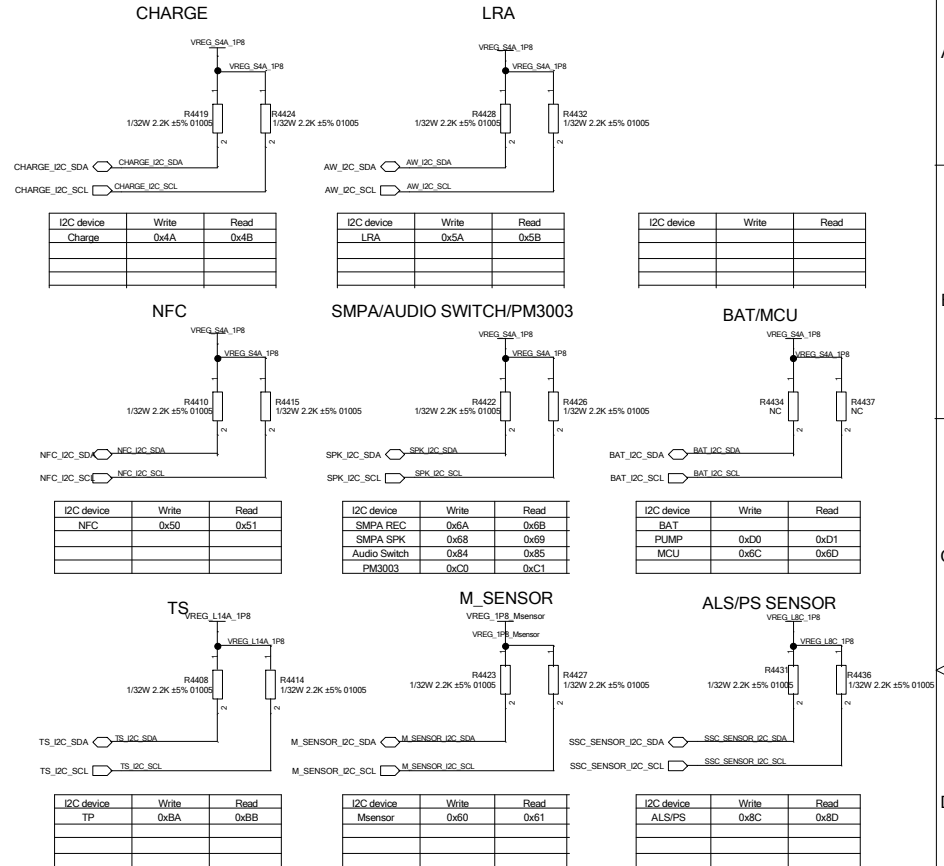
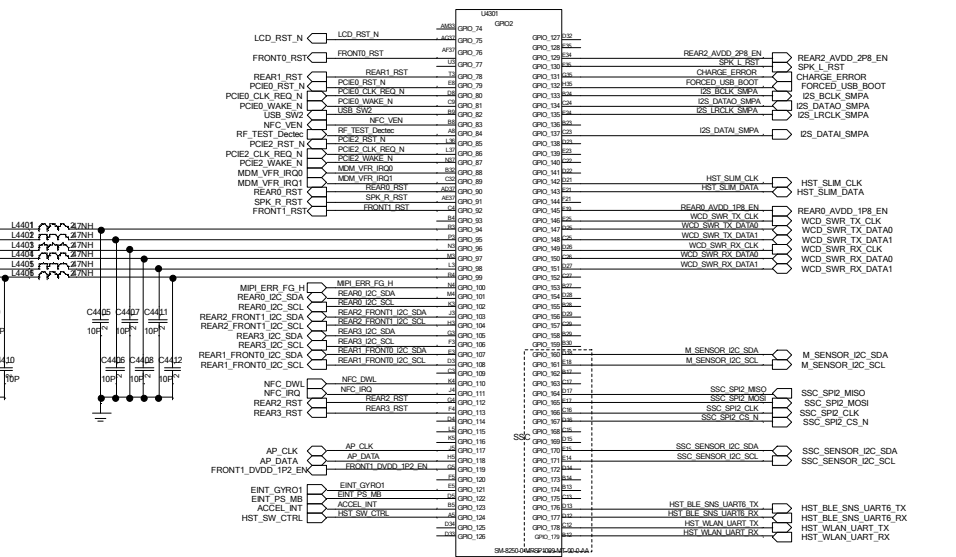
	Sign	Date	Type:	
Drawn By			Draw No: Schematic	
Checked By			Sheet	of 74 Ver:
Standard By				
Approved By				

regime

A

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F



REAR3 后置2M主摄

VREG_LV31A_1P8

R4409 1/32W 2.2K ±5% 01005

R4413 1/32W 2.2K ±5% 01005

REAR3_DC_SDA

REAR3_DC_SCL

REAR0 后置64M主摄

VREG_LV31A_1P8

R4421 1/32W 2.2K ±5% 01005

R4425 1/32W 2.2K ±5% 01005

REAR0_DC_SDA

REAR0_DC_SCL

REAR2 后置13M主摄

VREG_LV31A_1P8

R4435 1/32W 2.2K ±5% 01005

R4439 1/32W 2.2K ±5% 01005

REAR2_FRONT1_DC_SDA

REAR2_FRONT1_DC_SCL

REAR1 后置8M广角


VREG_LV31A_1P8

R4414 1/32W 2.2K ±5% 01005

R4420 1/32W 2.2K ±5% 01005

REAR1_FRONT0_DC_SDA

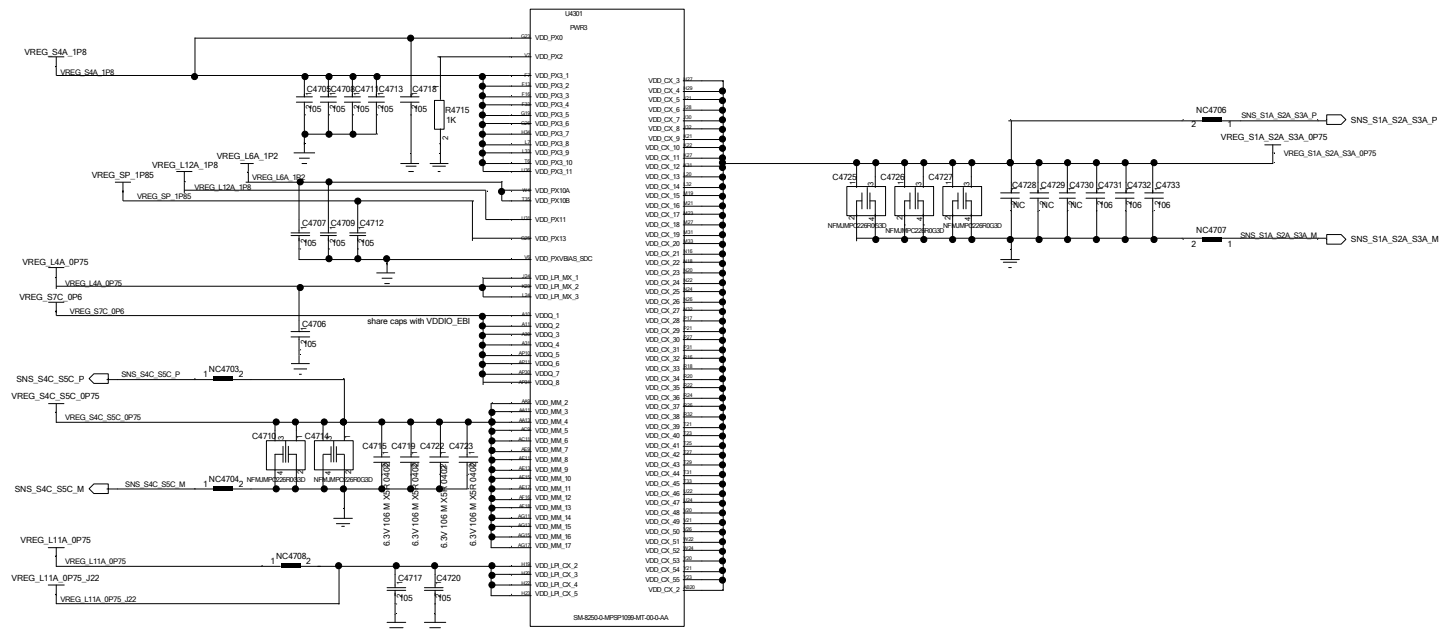
REAR1_FRONT0_DC_SCL

	Sign	Date	Type:	
Drawn By			Draw No: Schematic	
Checked By			Sheet of 74	Ver:
Standard By				
Approved By				

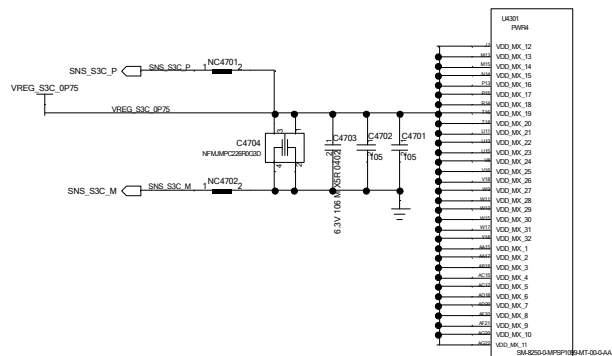
A

EF

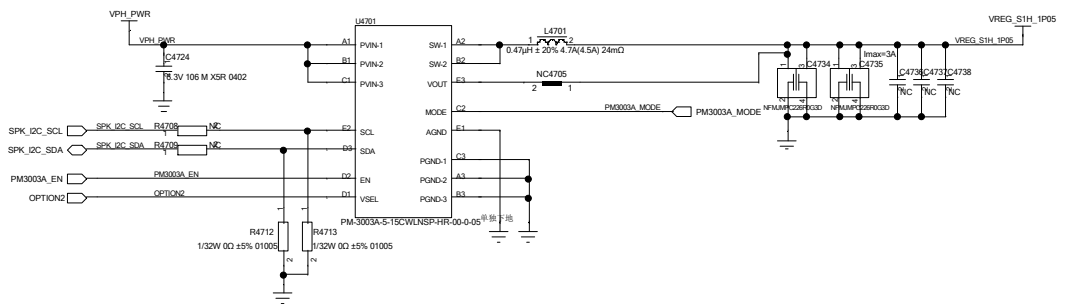
SM8250 PWR3




SM8250 PWR4

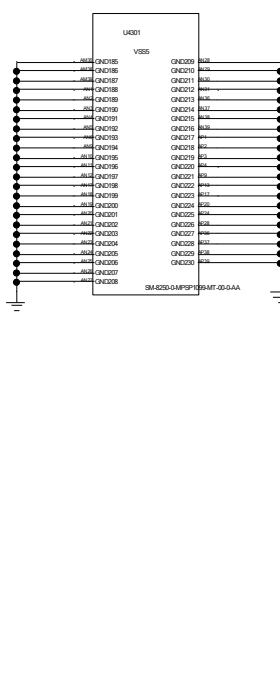
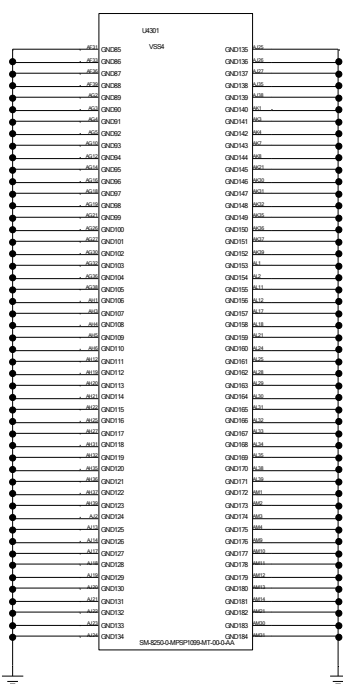
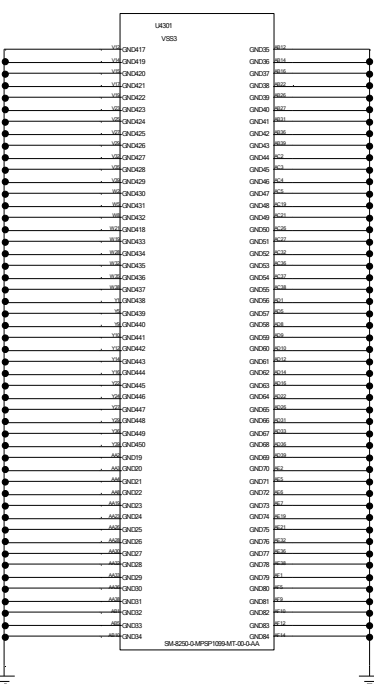
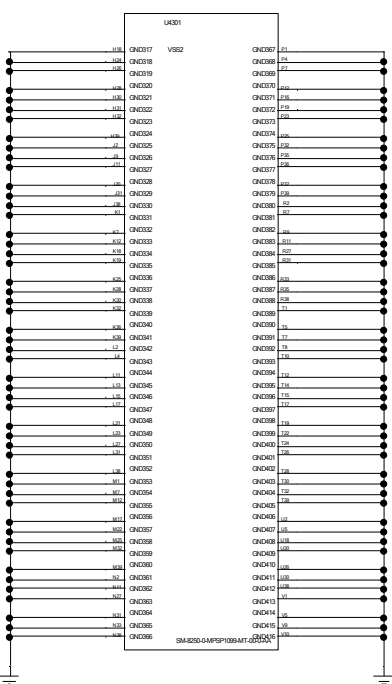
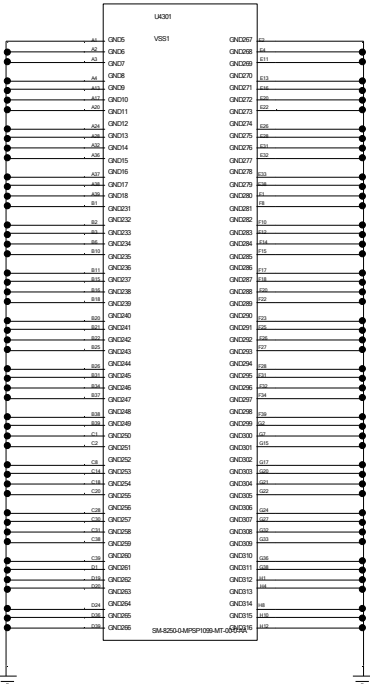


PM3003A



	Sign	Date	Type:
Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

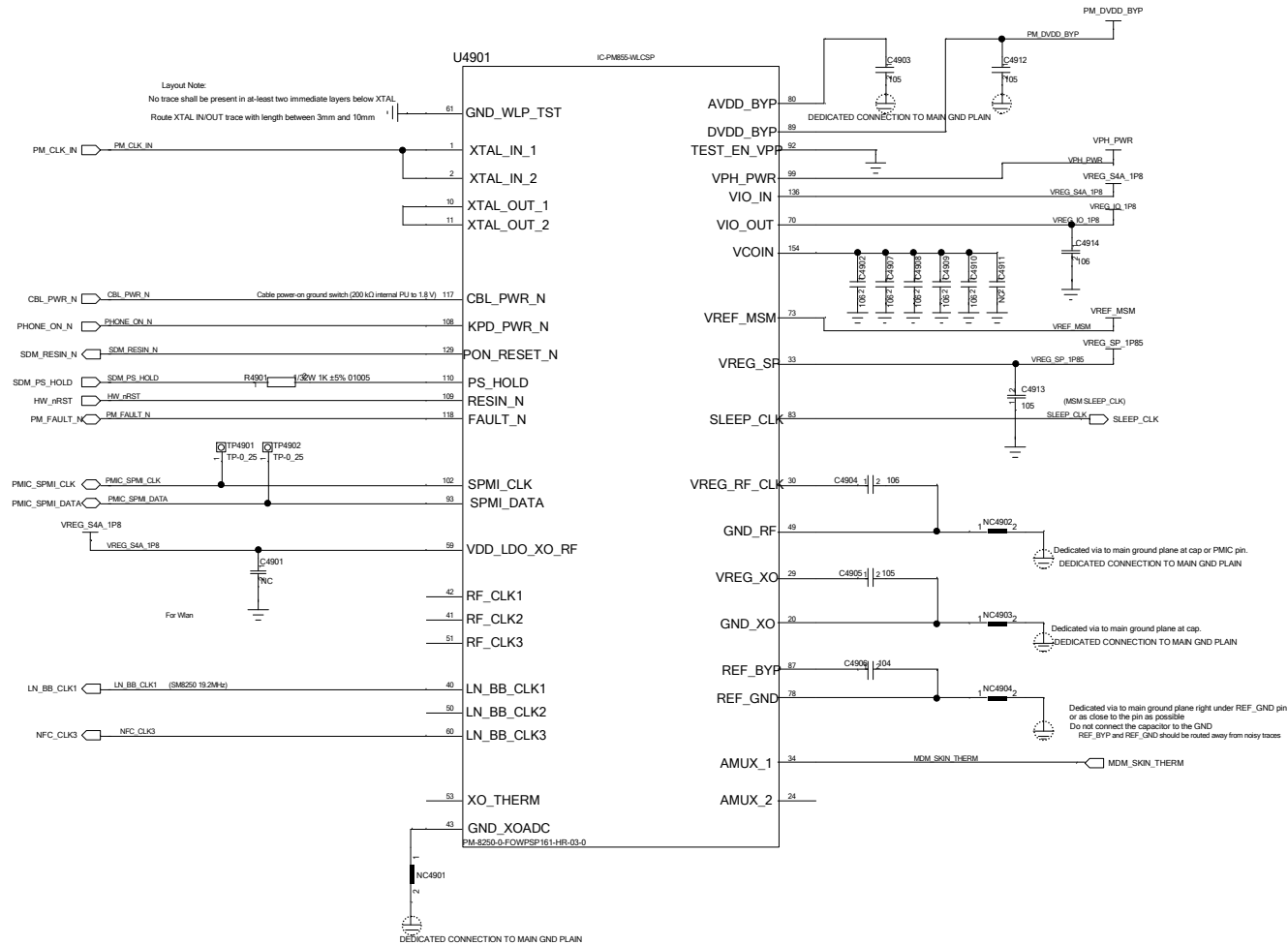
SM8250 GND/NC




	Sign	Date	Type
Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

realme

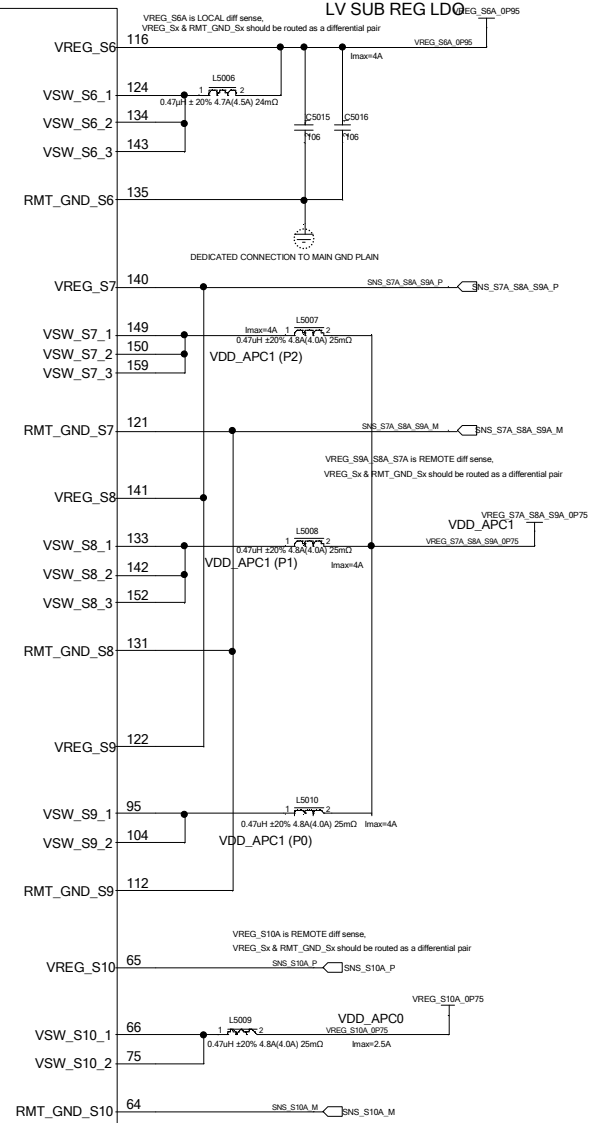
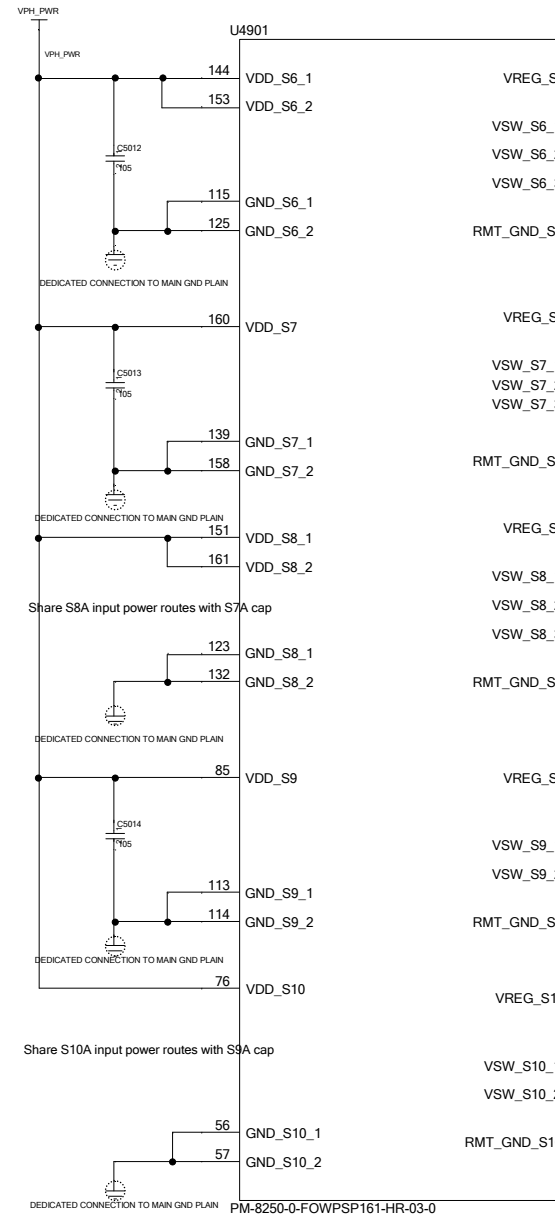
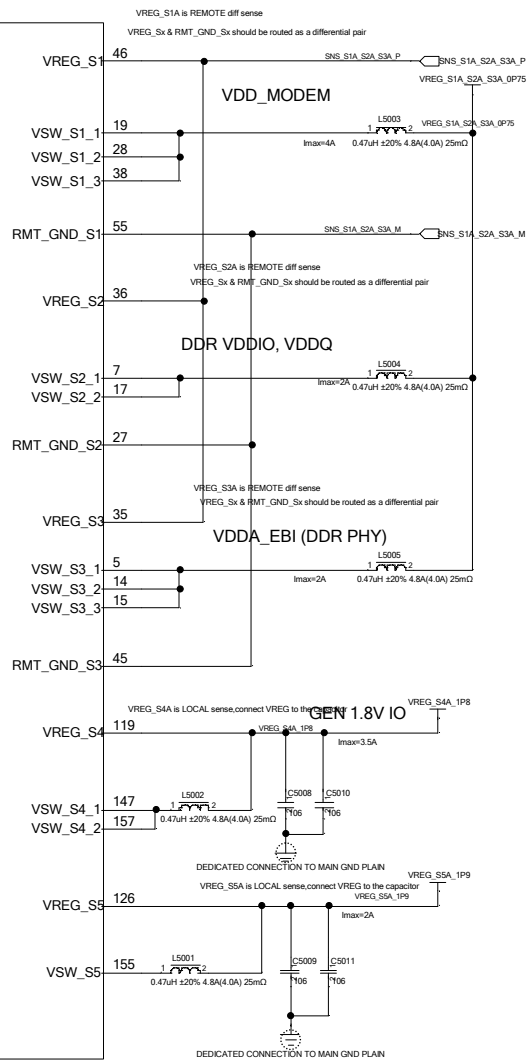
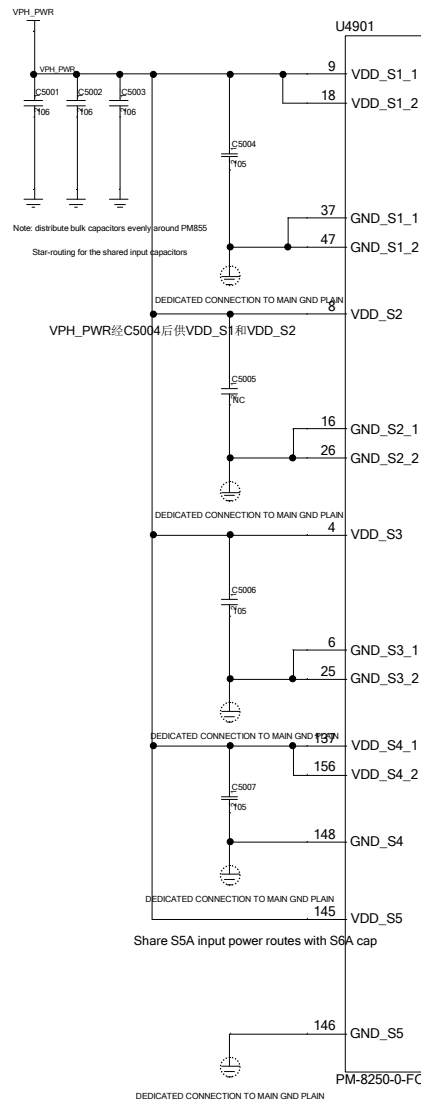
PM8250 CNTRL/AMUX




Power source	Default	GPIO availability
VDD MSM I/O(VREG_L13A_1p8)	1.8V	GPIO 2, GPIO 3, GPIO 5, GPIO 6, GPIO 7, GPIO 10, GPIO 11, GPIO 12, GPIO 13
VPH PWR	3.6V	GPIO 1, GPIO 4, GPIO 8, GPIO 9

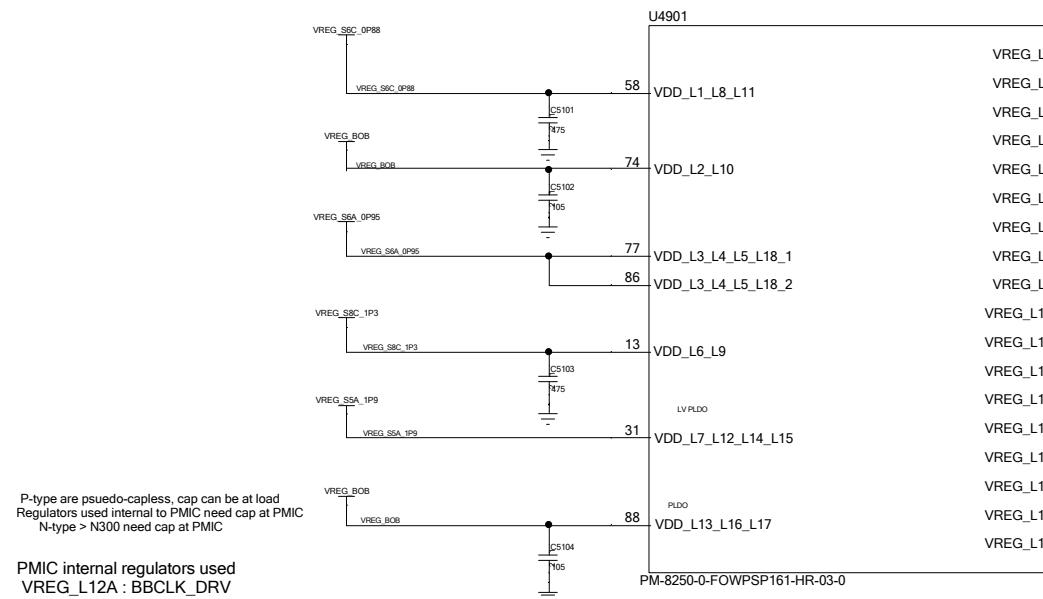
	Sign	Date	Type:
Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

PM8250 BUCK



	Sign	Date	Type:
Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

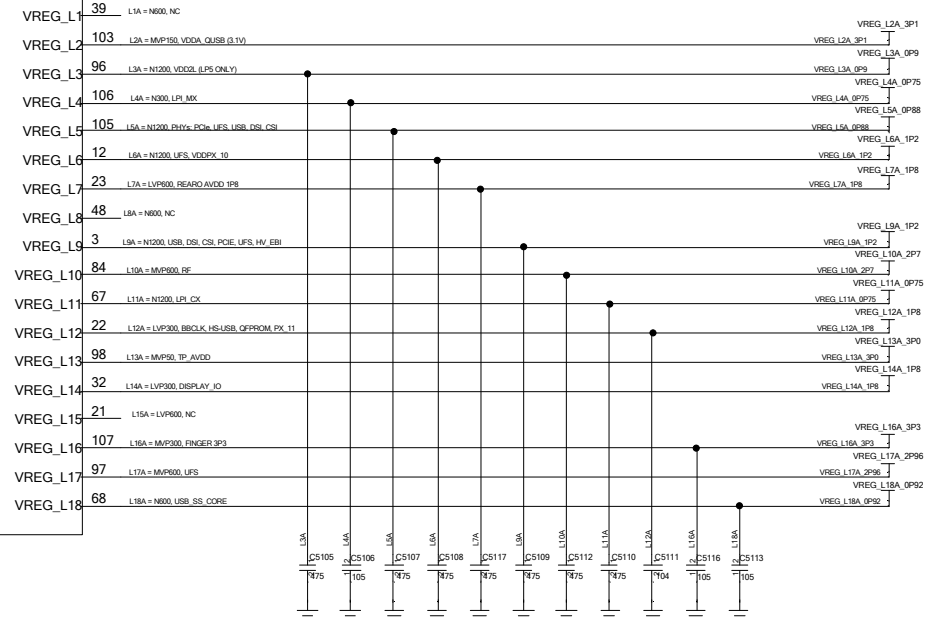
PM8250 LDOS/GPIO/GND



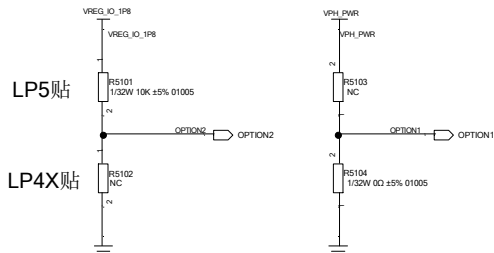
P-type are pseudo-capless, cap can be at load
Regulators used internal to PMIC need cap at PMIC
N-type > N300 need cap at PMIC

PMIC internal regulators used
VREG_L12A : BBCLK_DRV

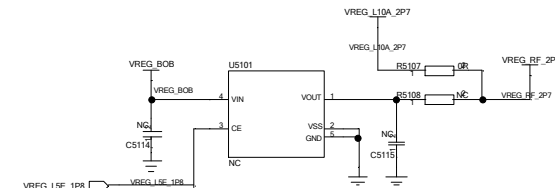
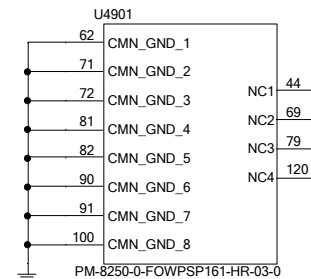
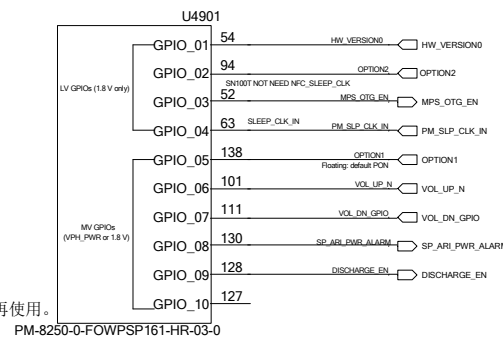
L2A, L4A, L7A, L10A, L12A, L13A, L14A, L15A, L16A and L17A are pseudo-capless
VREG_L12A requires 0.1 uF local and 1 uF at load
VREG_L3A, L5A, L6A, L9A, L11A are N1200 WITH LOCAL 10uF Caps
VREG_L1A and L8A are N600 with 1 cap local and 1 cap remote



	DDR5	DDR4
R4307	No	Yes
R4308	No	Yes
R4602	Yes	No
C4612	Yes	No
C4613	Yes	No
R5101	Yes	No
R5102	No	Yes



GPIO_05接地, L6C/L9C可不外挂电容, 但也不能再使用。

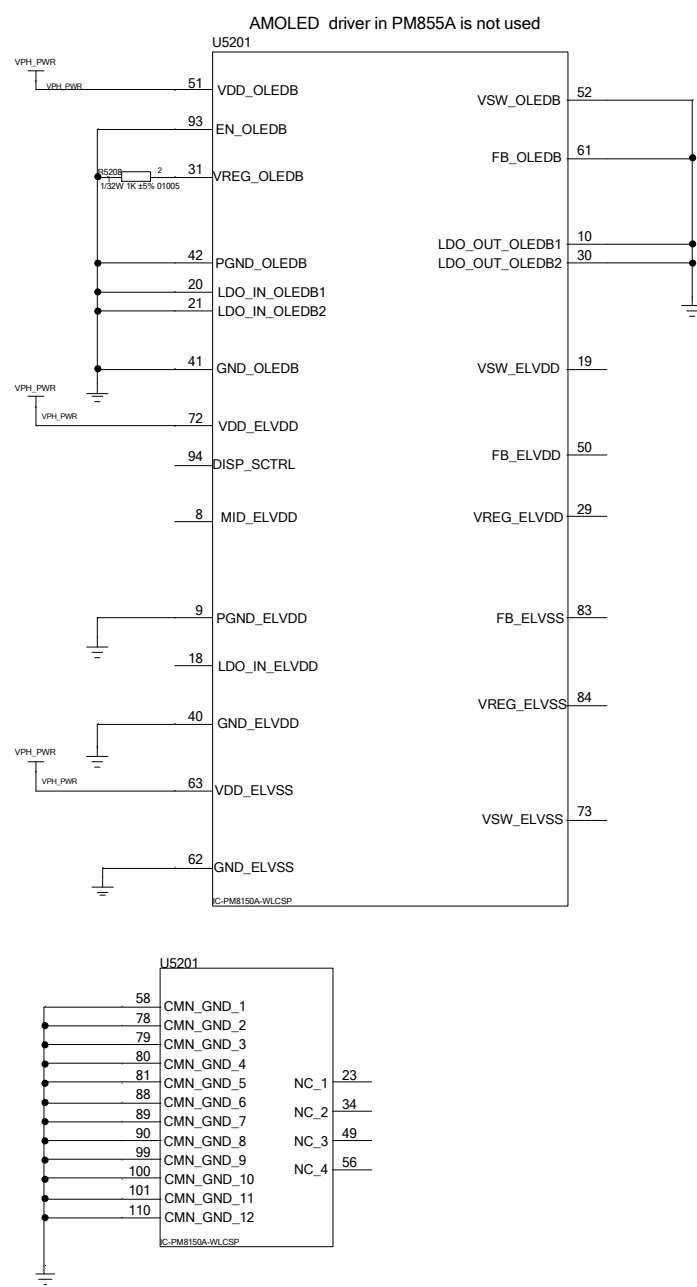
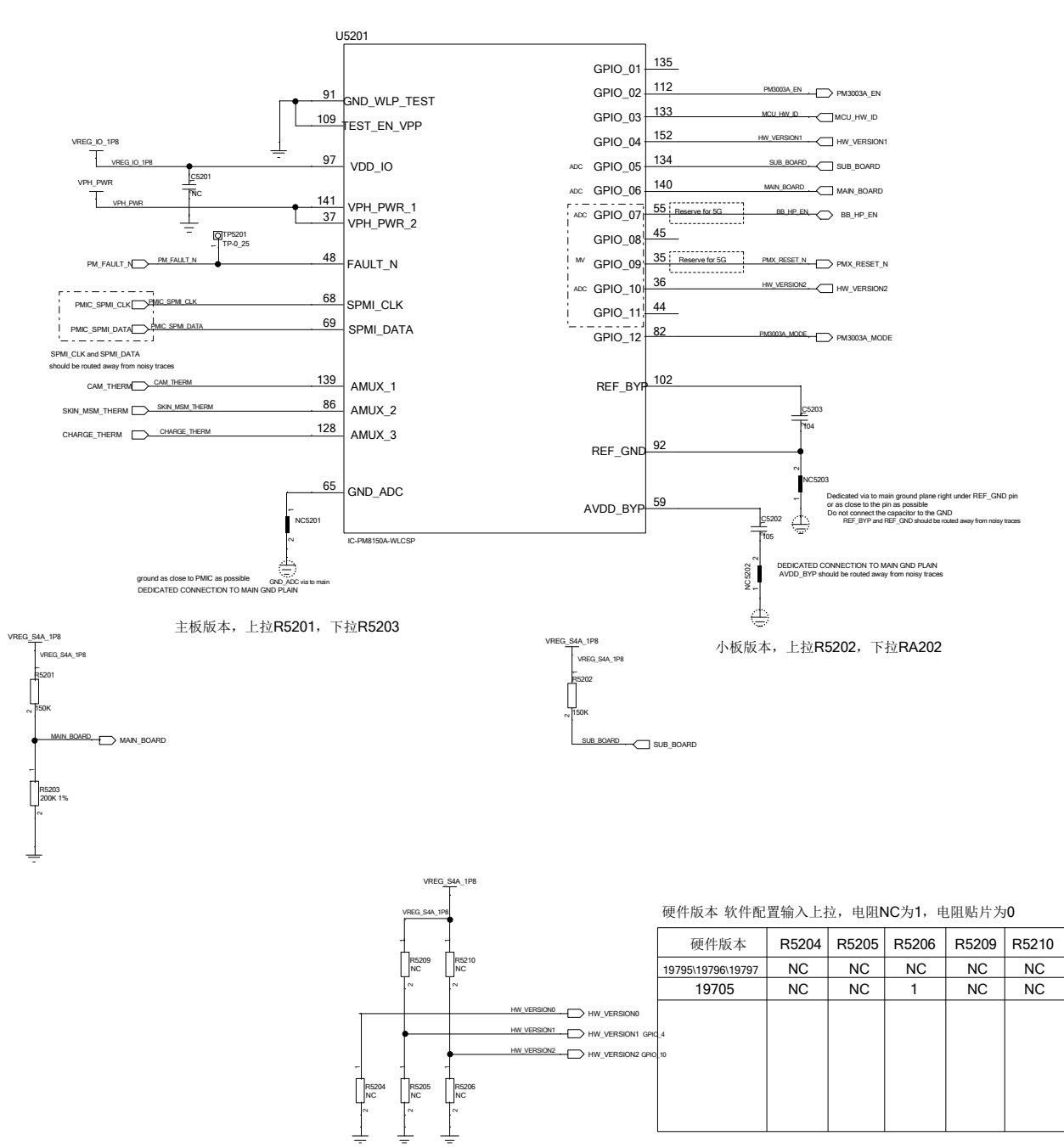


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Approved By		

realme

PM8150A CONTROL/GPIO

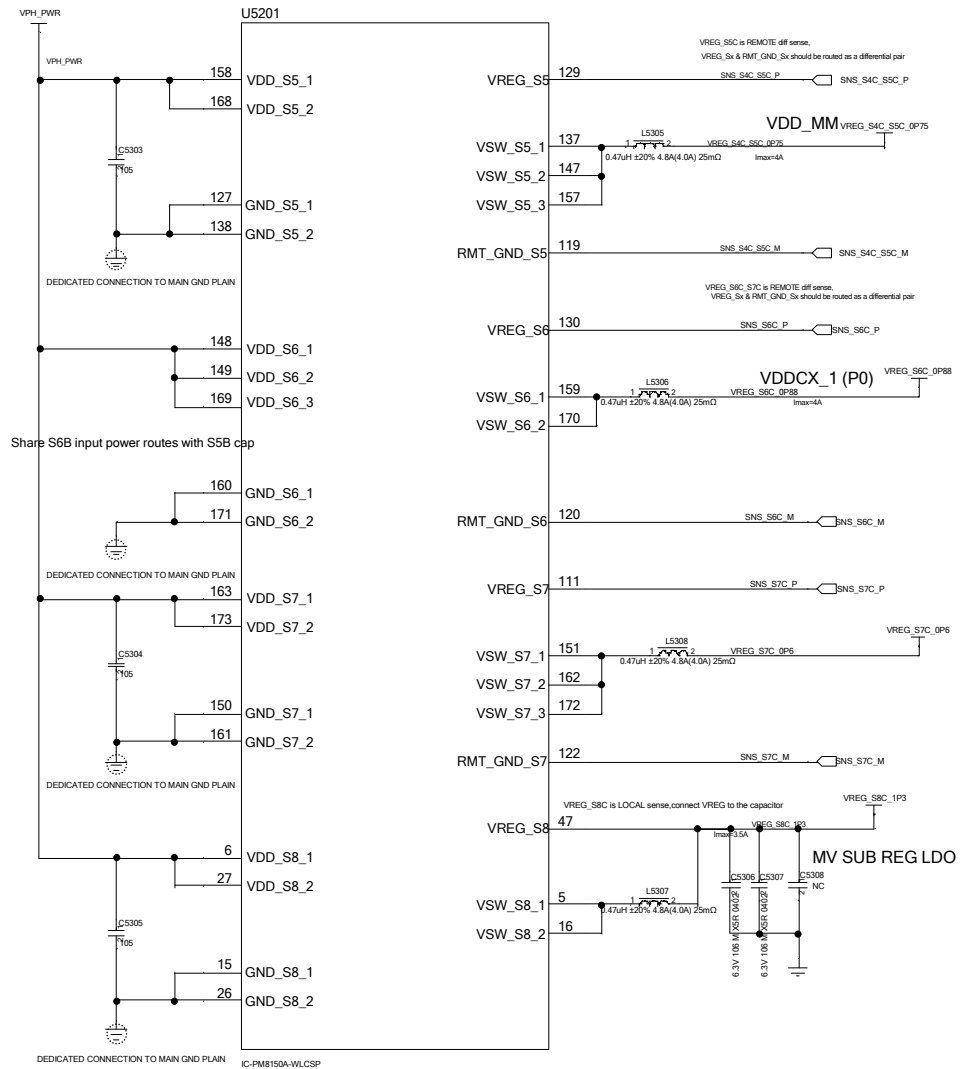
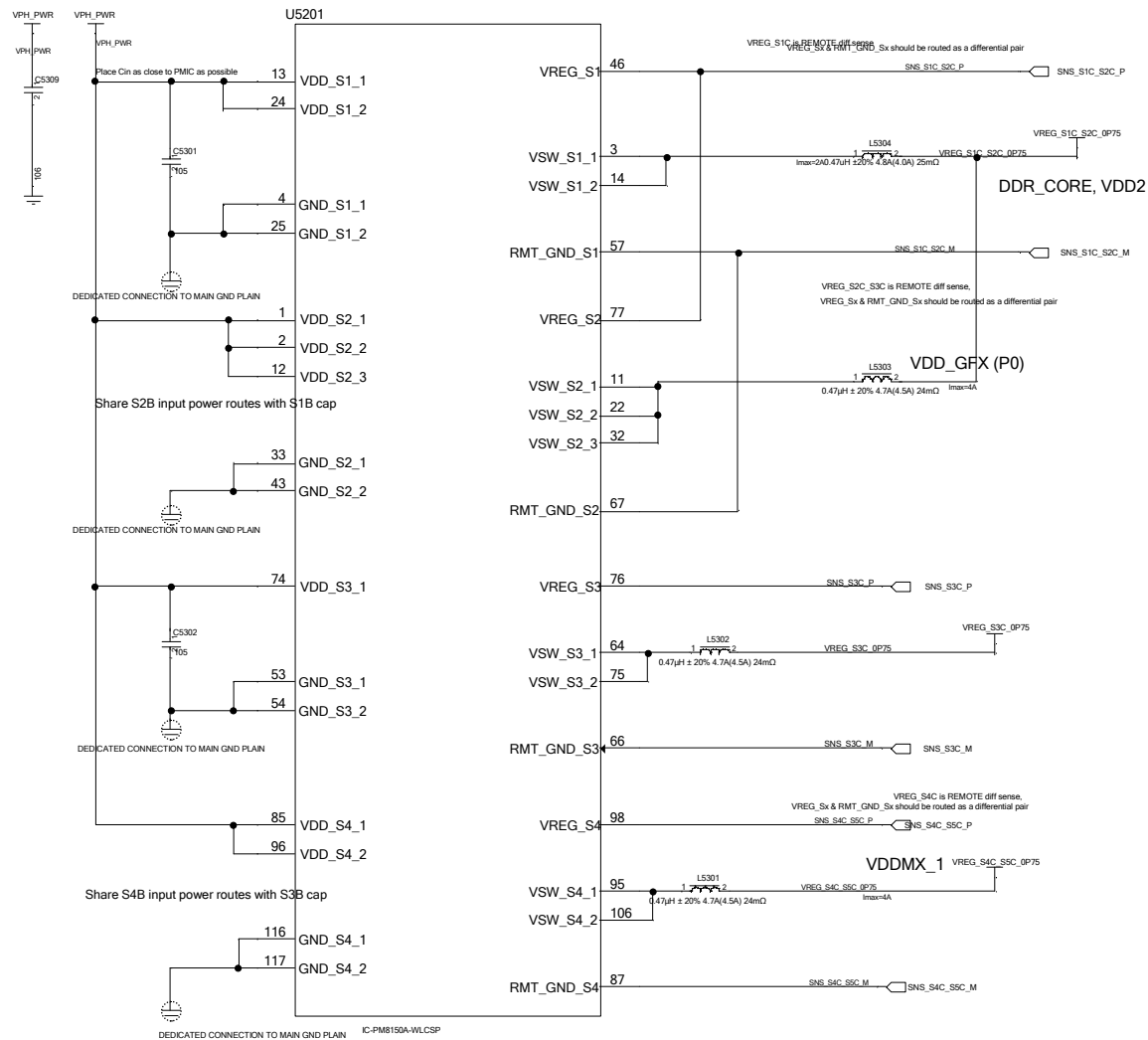
PM8150A OLEDB/AB/IBB/ELVDD/ELVSS




硬件版本 软件配置输入上拉, 电阻NC为1, 电阻贴片为0

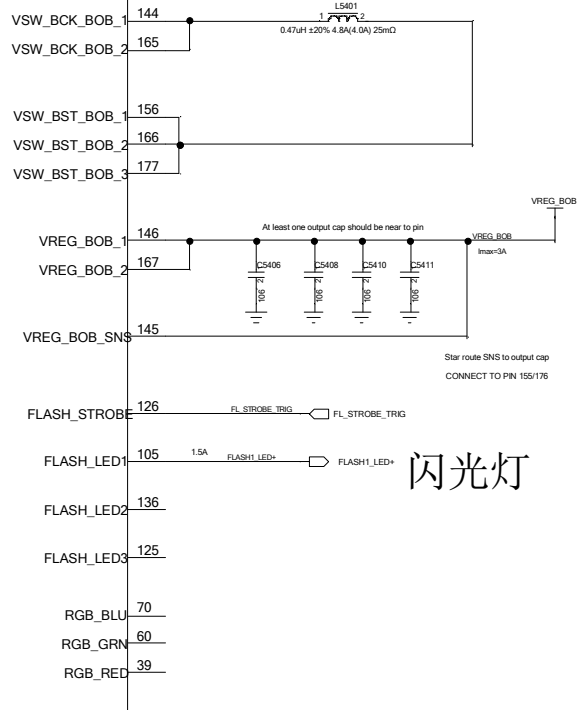
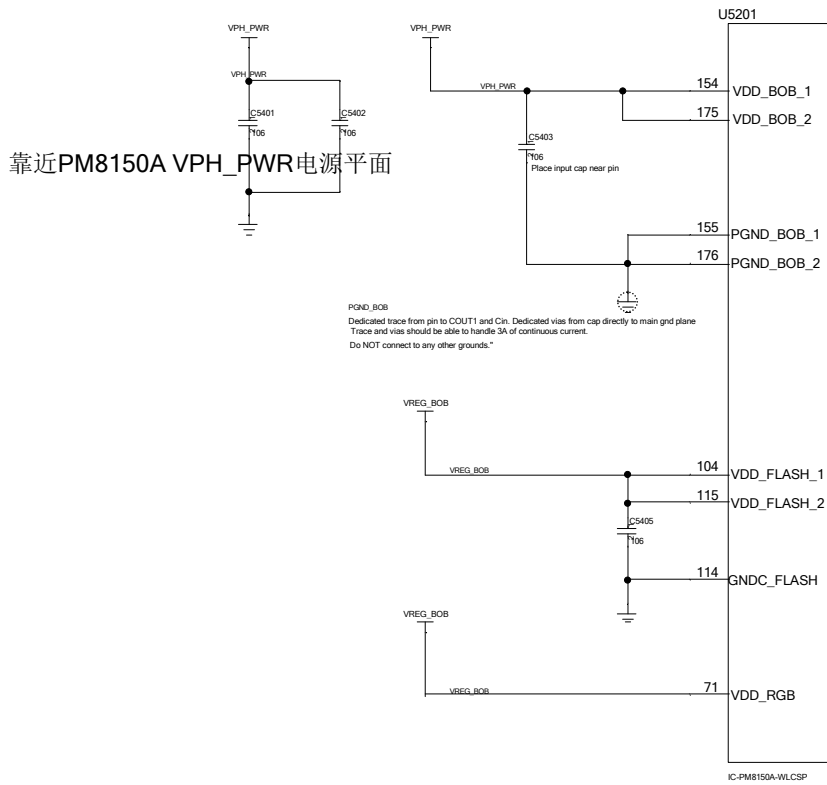
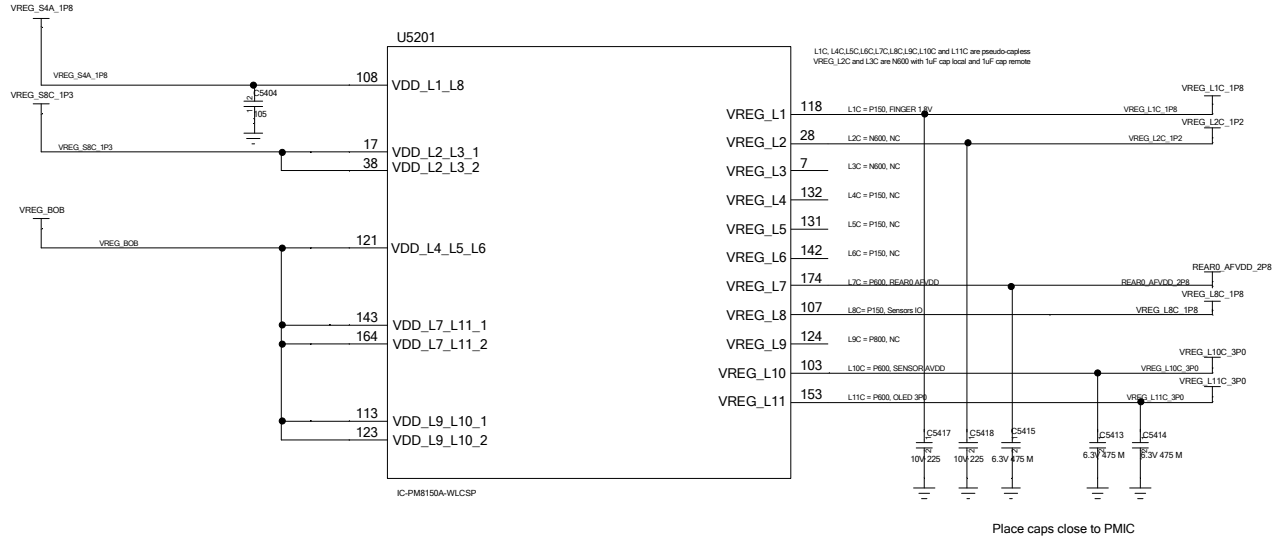
硬件版本	R5204	R5205	R5206	R5209	R5210
19795\19796\19797	NC	NC	NC	NC	NC
19705	NC	NC	1	NC	NC


PM8150A BUCK



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Approved By			

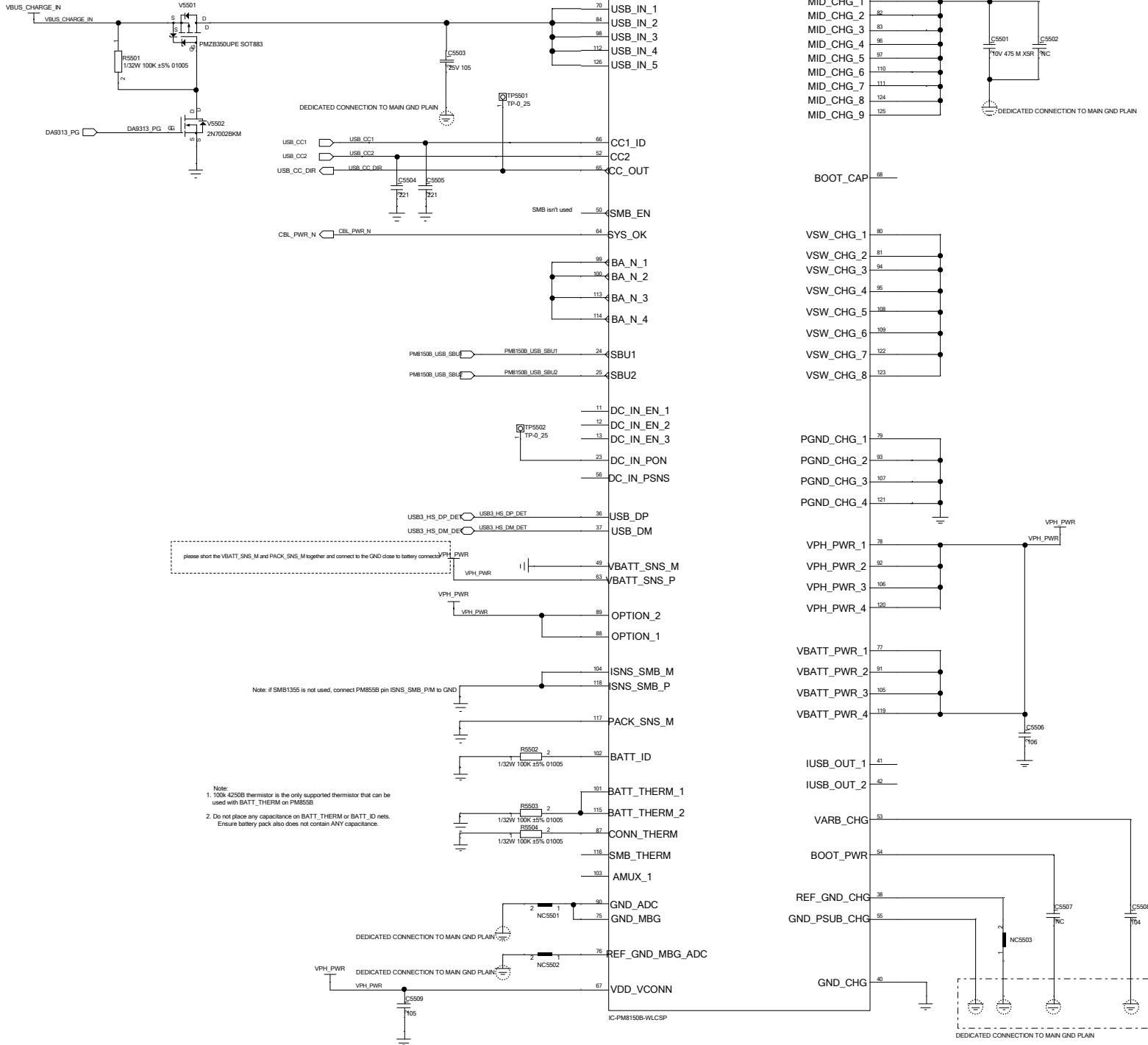
PM8150A LDOS/BOB/FLASH



	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
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Approved By				

PM8150B CHARGE/FG

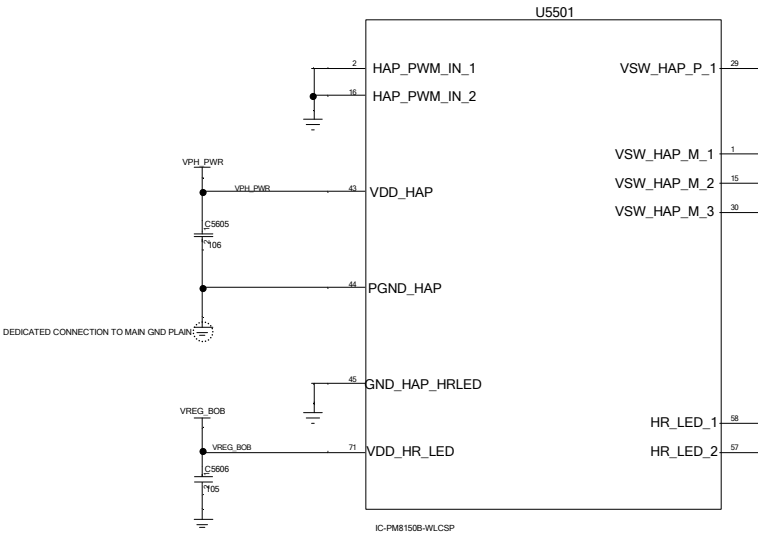
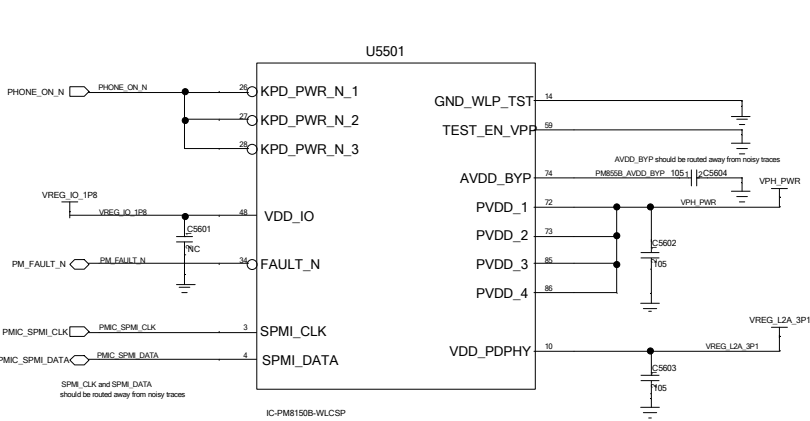
U5501



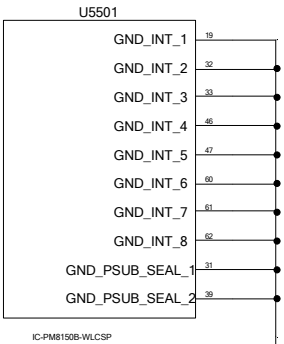
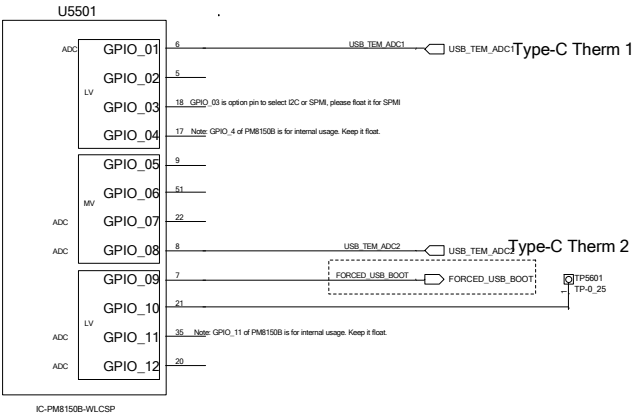
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Checked By			Draw No: Schematic
Standard By			Sheet of 74 Ver:
Approved By			

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PM8150B HK/GPIO



NOTE: in PM8150B ADC GPIO AMUX, only for the following pin had ADC mux channel: GPIO7, GPIO8, GPIO11, GPIO12, and GPIO11 is a option pin, please leave it float.



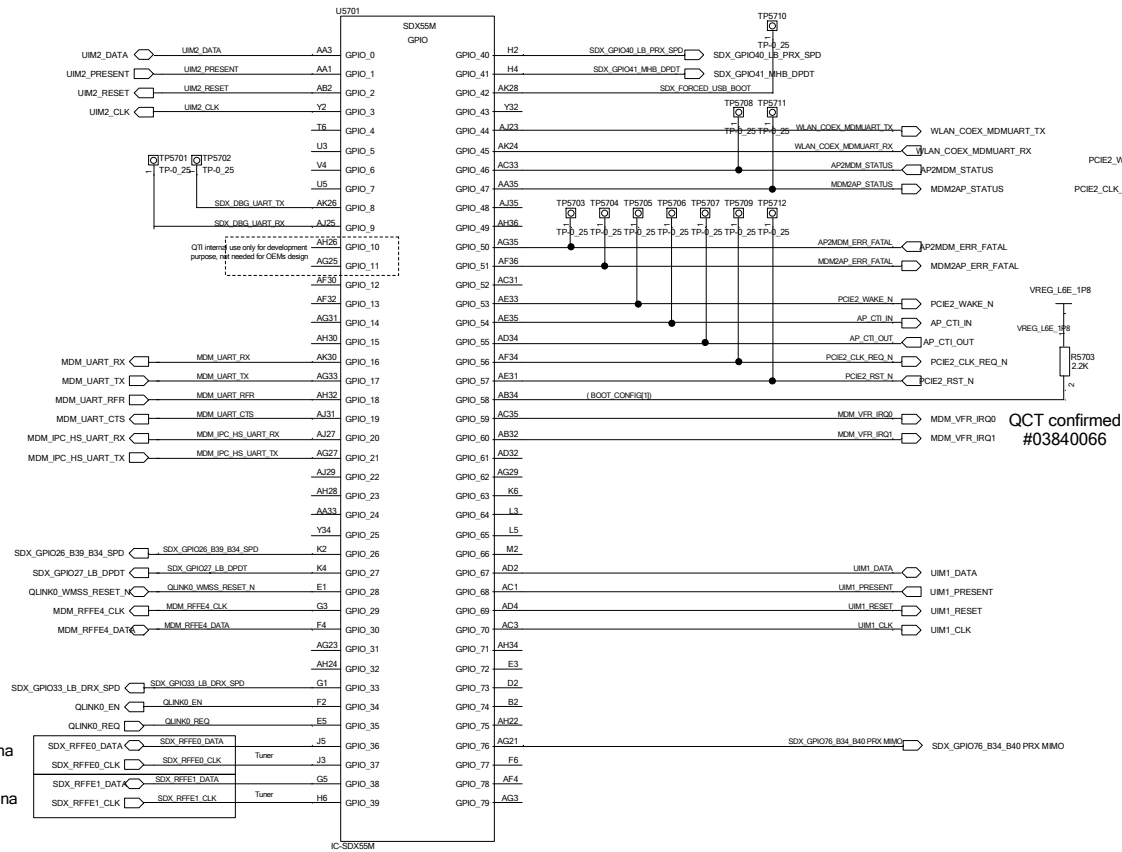
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Drawn By		Draw No: Schematic
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Approved By		

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SDX55M_GPIO

UP Antenna

Down Antenna

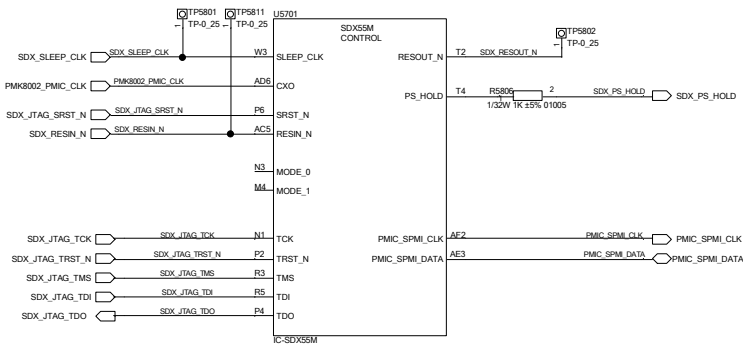
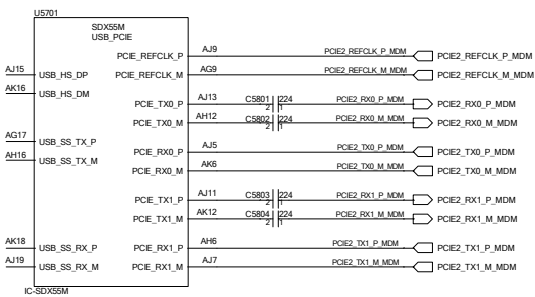


Note: Ensure that there are no unintentional external pull-ups on the following GPIOs and these GPIOs are NOT logic high unintentionally before SDX55M comes out of reset GPIO_24, 31, 42, 47, 48, 54, 55, 56, 63 and 75.

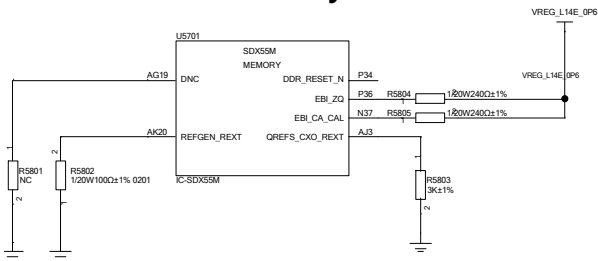
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Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

realme

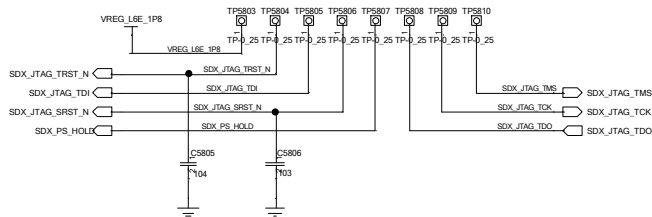
SDX55M - RFFE/ PCIE/ Control



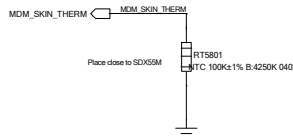
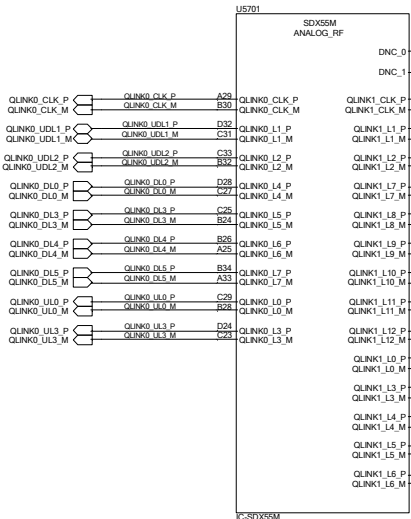
Memory



JTAG



SDX55M QLINK/ Memory



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Standard By			Sheet of 74 Ver:
Approved By			

realme

A

F

A

C

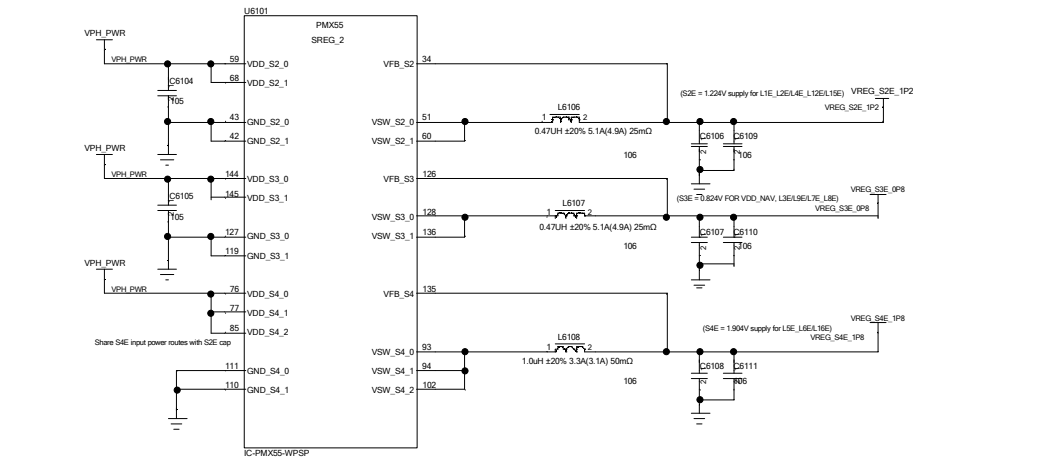
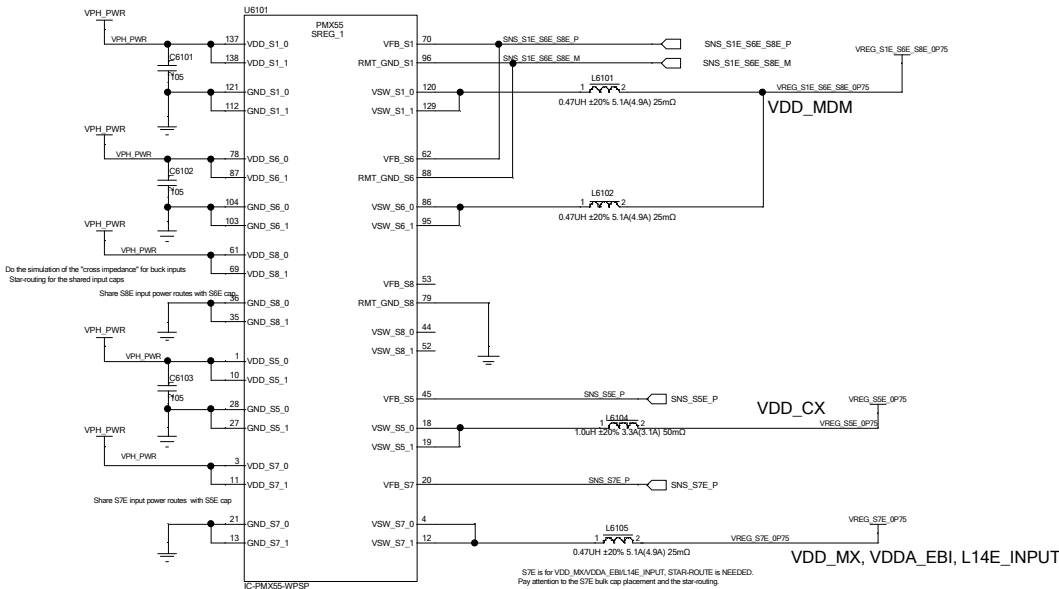
C

D

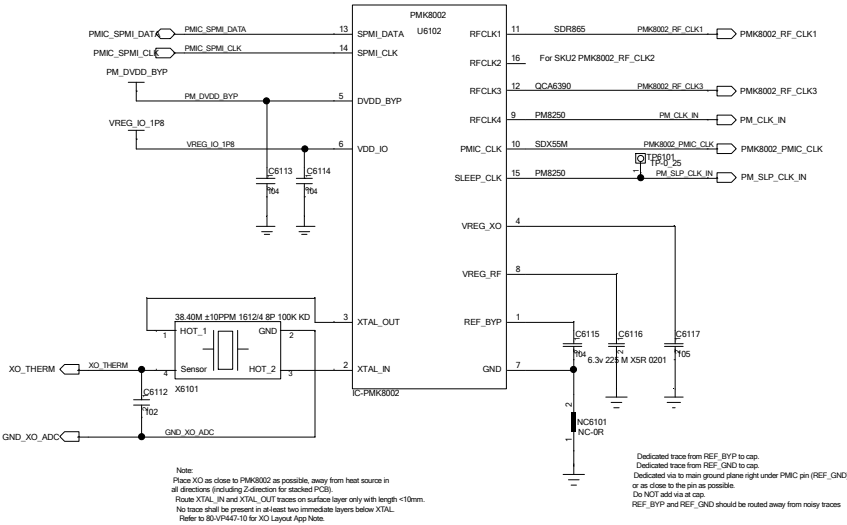
E

F

PMIC_PMX55_BUCKS



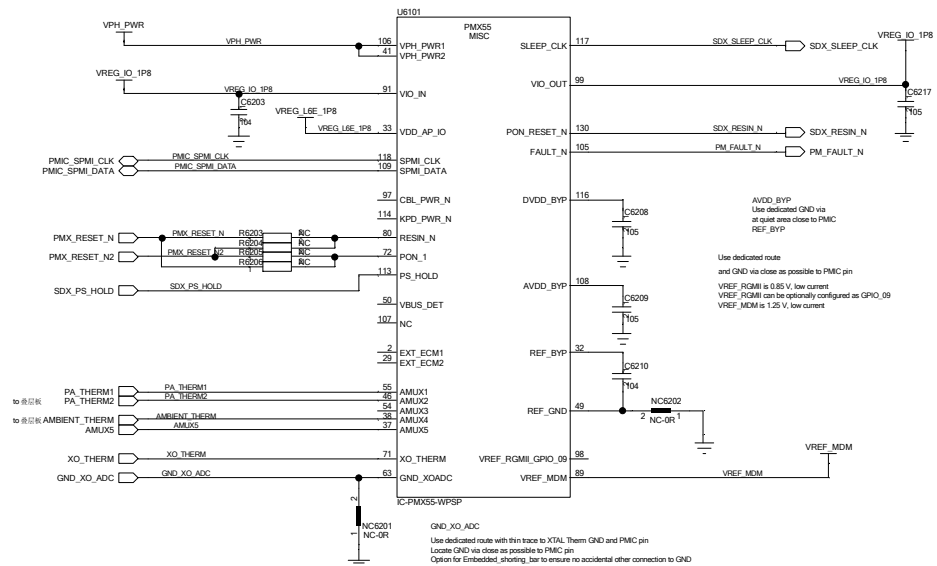
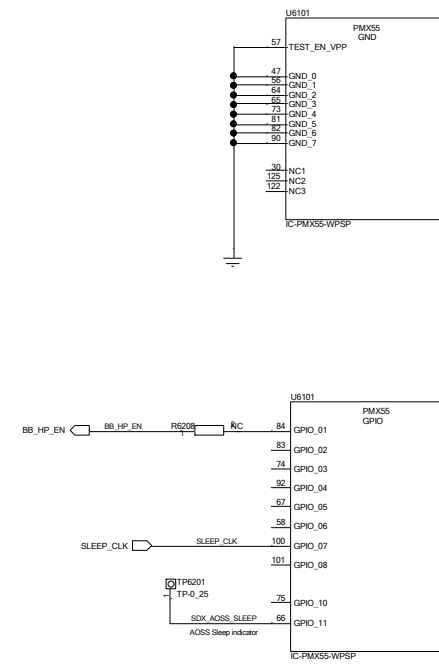
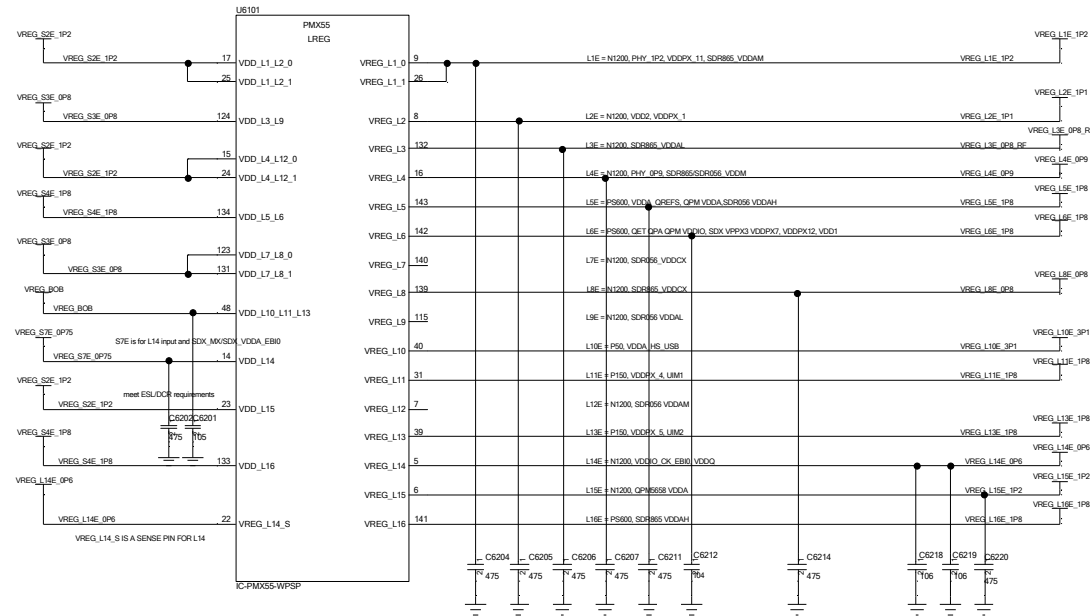
PMK8002



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Approved By		

realme

PMX55_LDOS



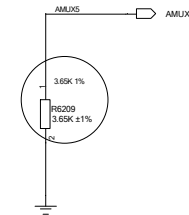
GND_XO_ADC


Use dedicated route with thin trace to XTAL. Therm GND and PMIC pin

Locate GND via close as possible to PMIC pin

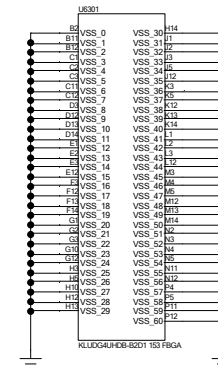
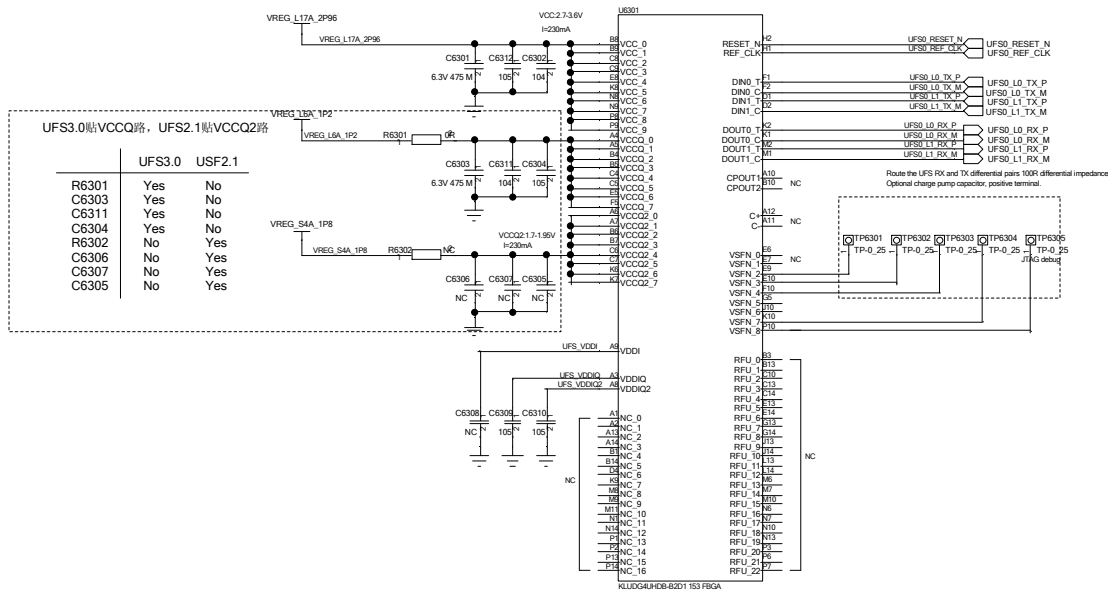
Option for Embedded_shorting_bar to ensure no accidental other connection to GND

For PON decode



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Approved By			

UFS



POP LPDDR5/LPDDR4X

U6302

DDR
BB


K3LK2K20BM-BGCN FBG

LPDDR4X:

9120218	6GB	K3UH9H608M-AGCL	558FBGA
9120214	8GB	K3UH7H70AM-AGCL	558FBGA FBGA

LPDDR5:

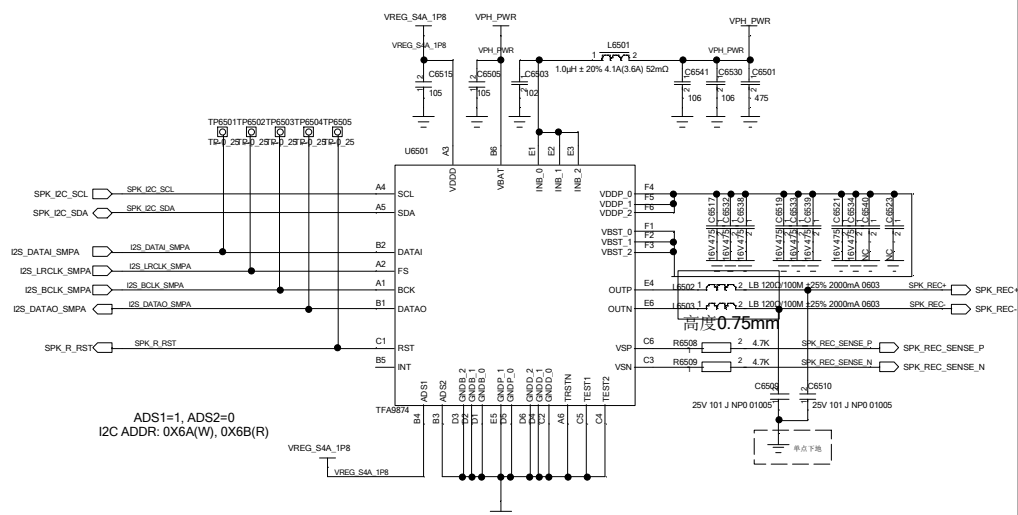
9120255	6GB	K3LK2K208M-BGCN	FBGA
9120266	8GB	K3LKG30EM-BGCN	FBGA
9120267	12GB	K3LK4K408M-BGCN	FBGA

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Drawn By			Draw No: Schematic	
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Standard By				
Approved By				

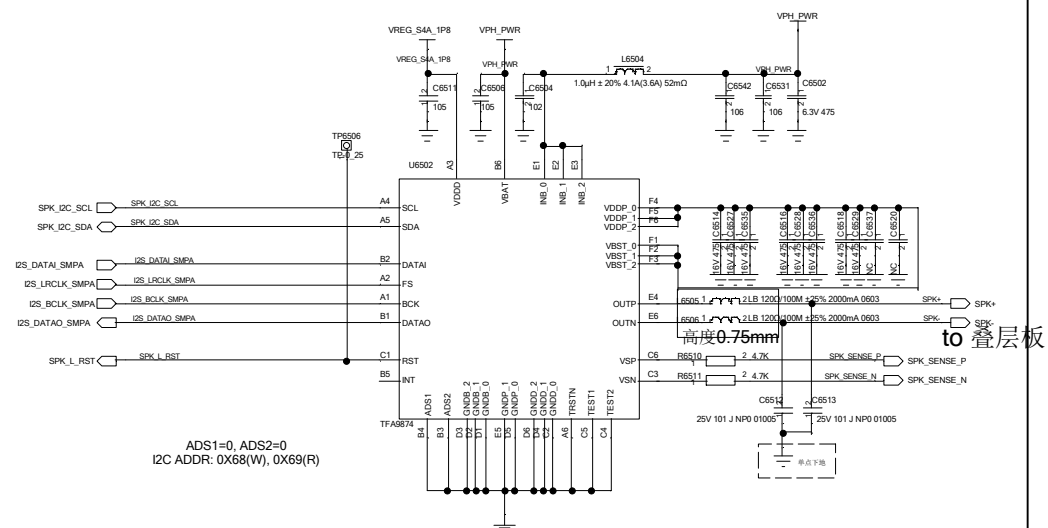
A

F

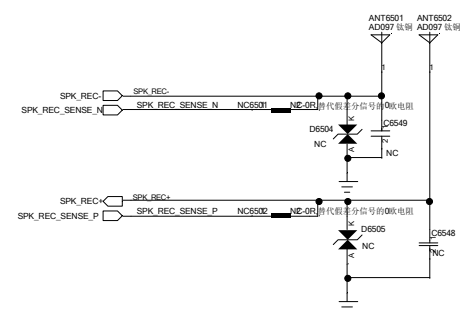
REC SMART PA



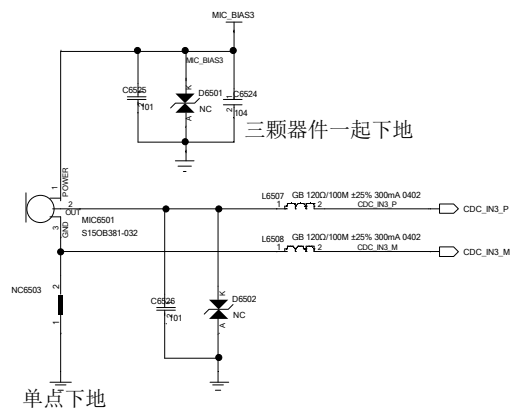
SPK SMART PA




REC



MIC



	Sign	Date	Type:	
Drawn By			Draw No: Schematic	
Checked By			Sheet	of 74 Ver:
Standard By				
Approved By				

OLED Driver

叠层板

TO_L_FPC

叠层板

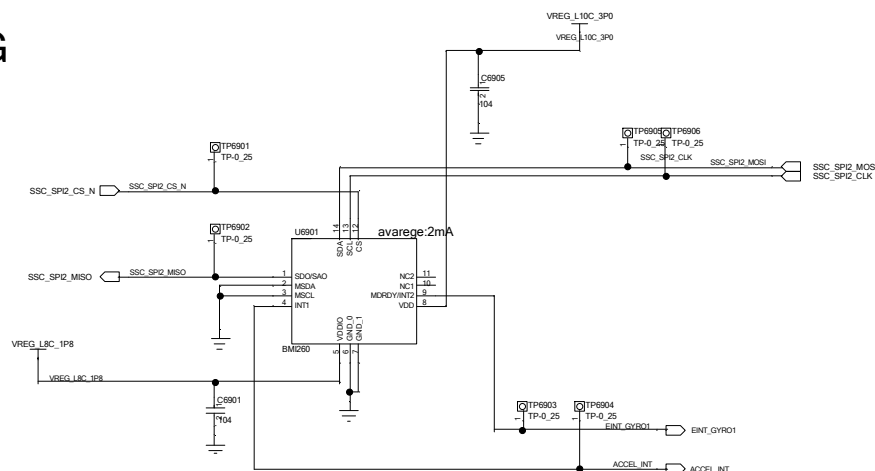
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Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				

OLED MIPI

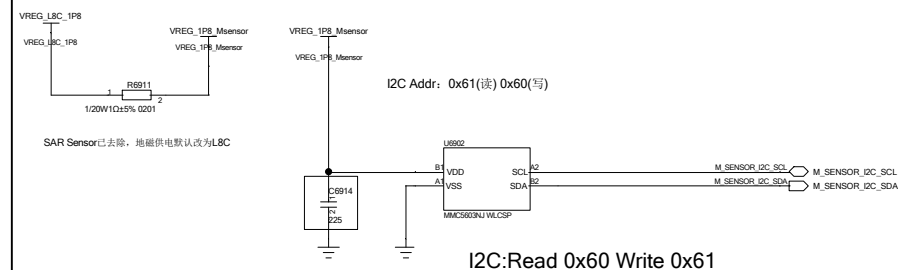
叠层板

	Sign	Date	Type:	
Drawn By			Draw No:	Schematic
Checked By			Sheet	of 74 Ver:
Standard By			realme	
Approved By				

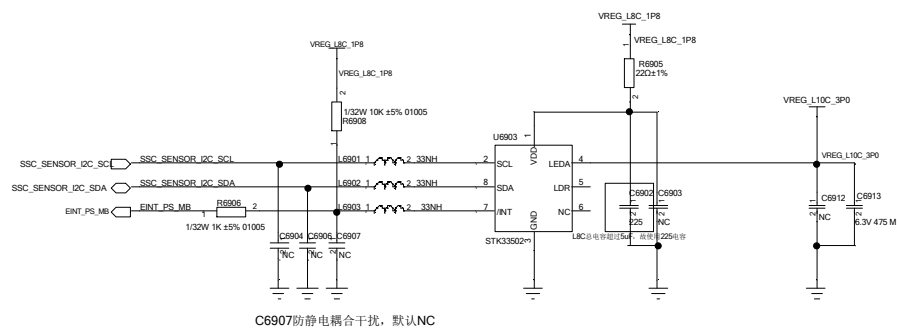
A+G




M-Sensor



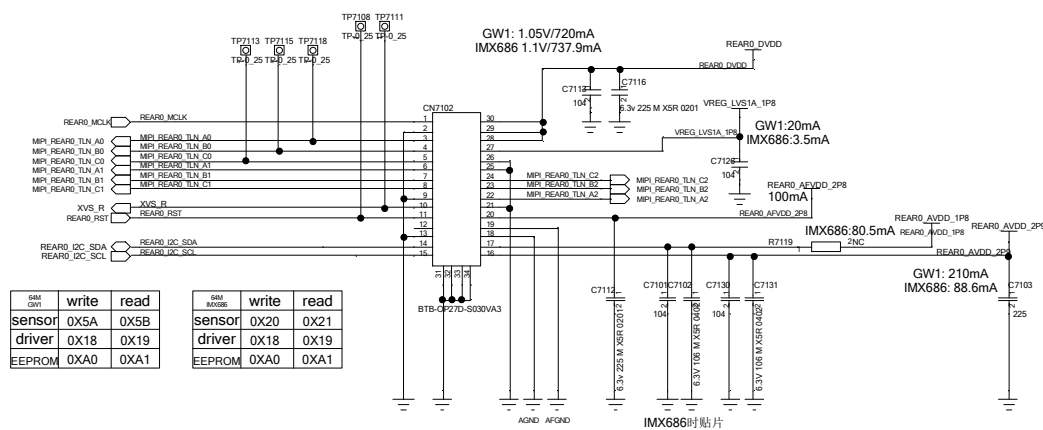
STK33502 ALS+PS Sensor



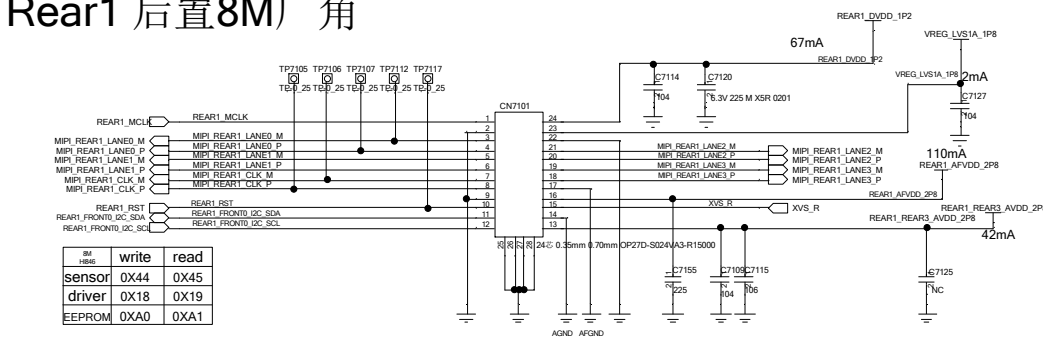
SAR Sensor

	Sign	Date	Type:
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Approved By			

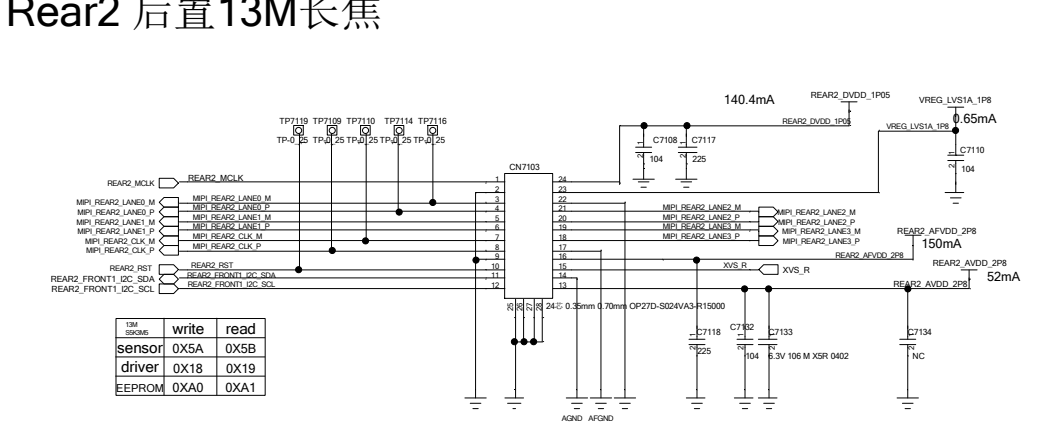
Rear0 后置64M主摄



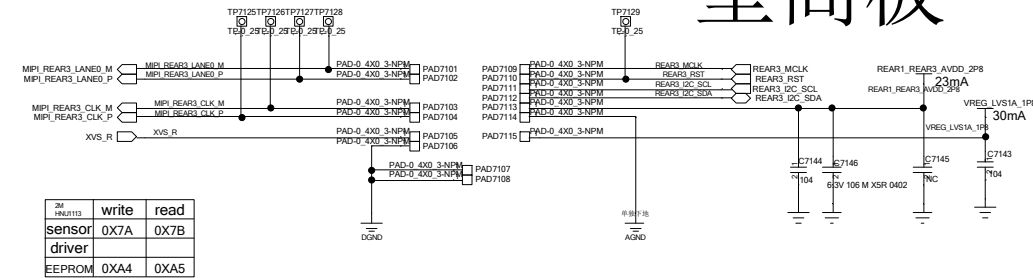
Rear1 后置8M广角



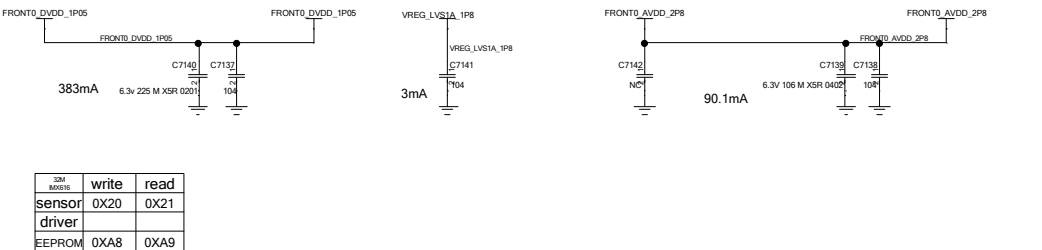
Rear2 后置13M长焦



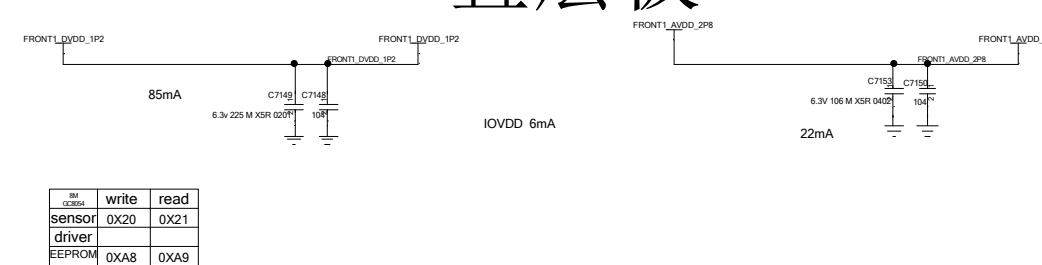
Rear3 后置2M虚化



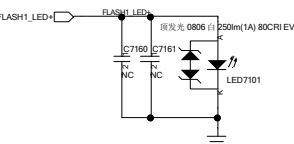
Front0 前置32M主摄



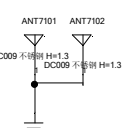
Front1 前置8M广角



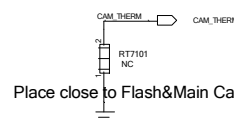
闪光灯



摄像头装饰圈接地弹片

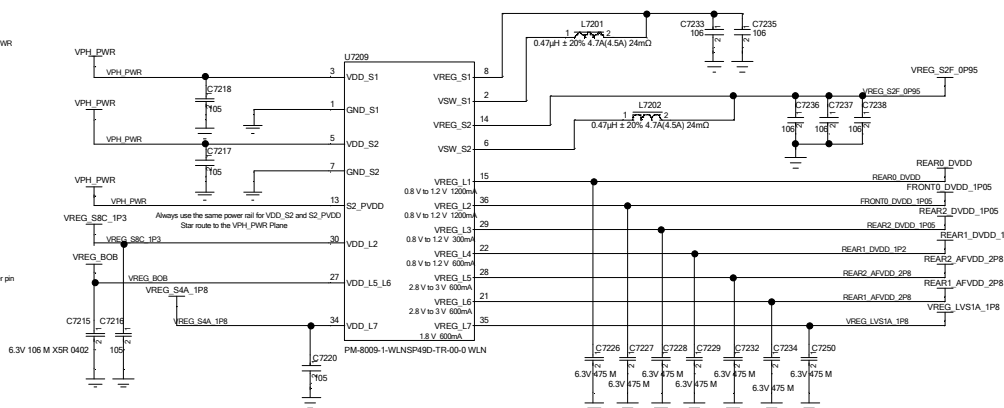
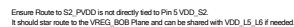
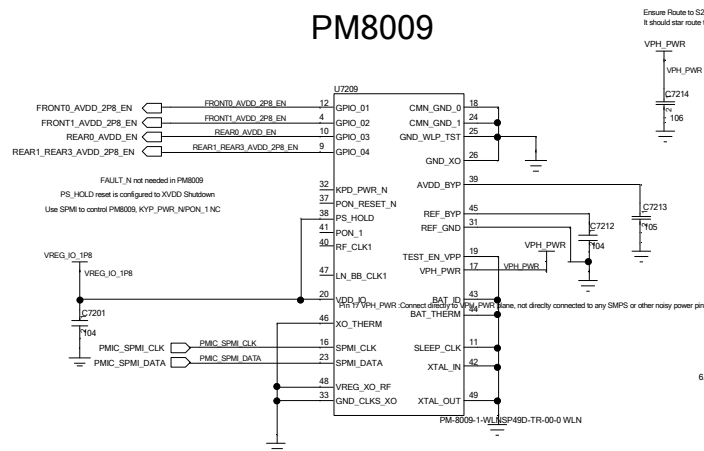
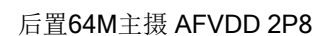
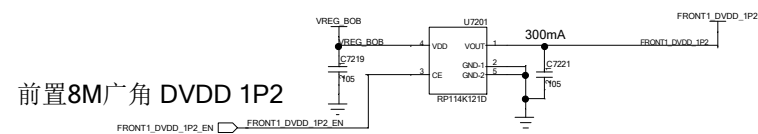
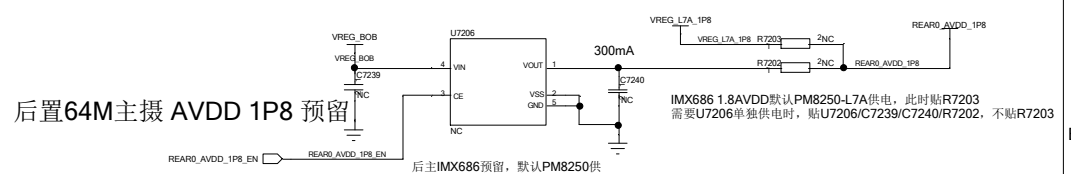
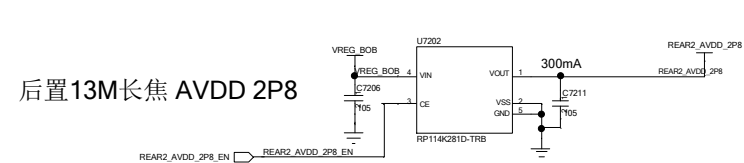
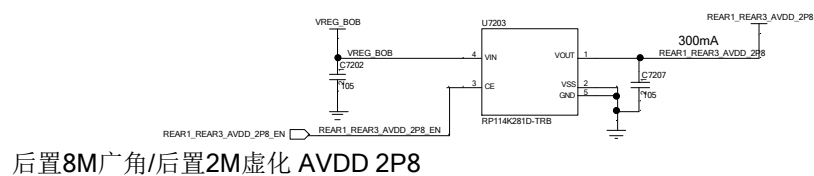
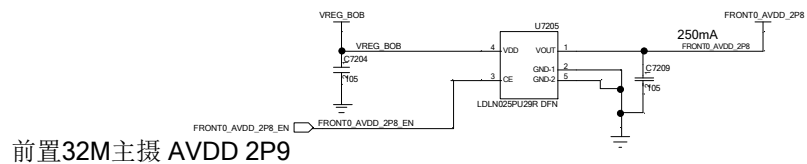
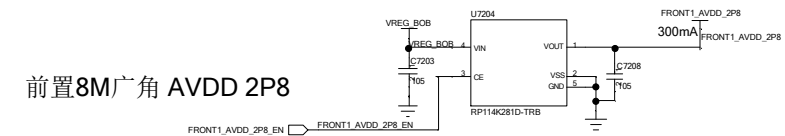
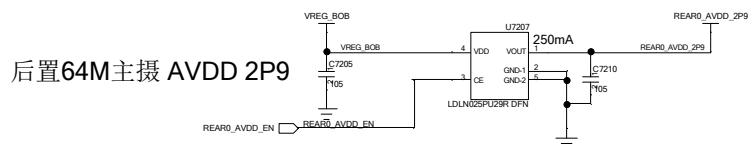


NTC




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Standard By		
Approved By		

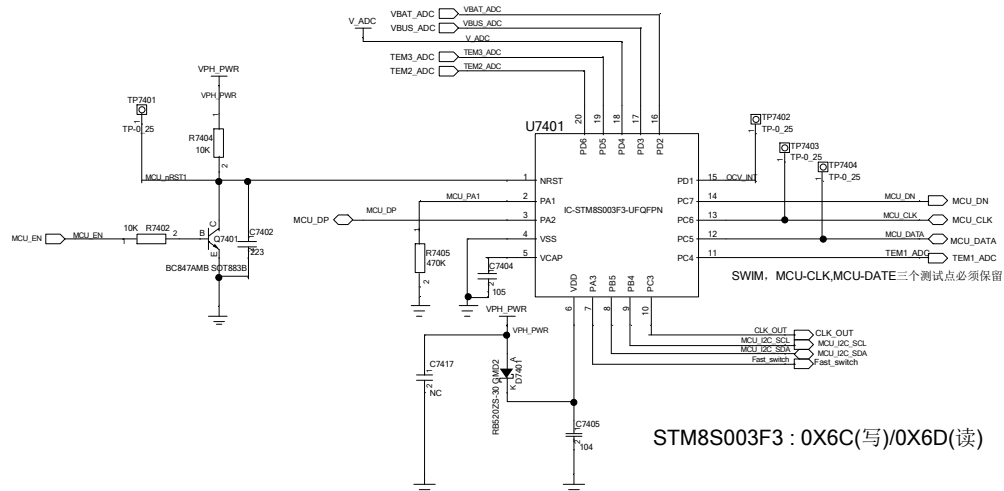
realme



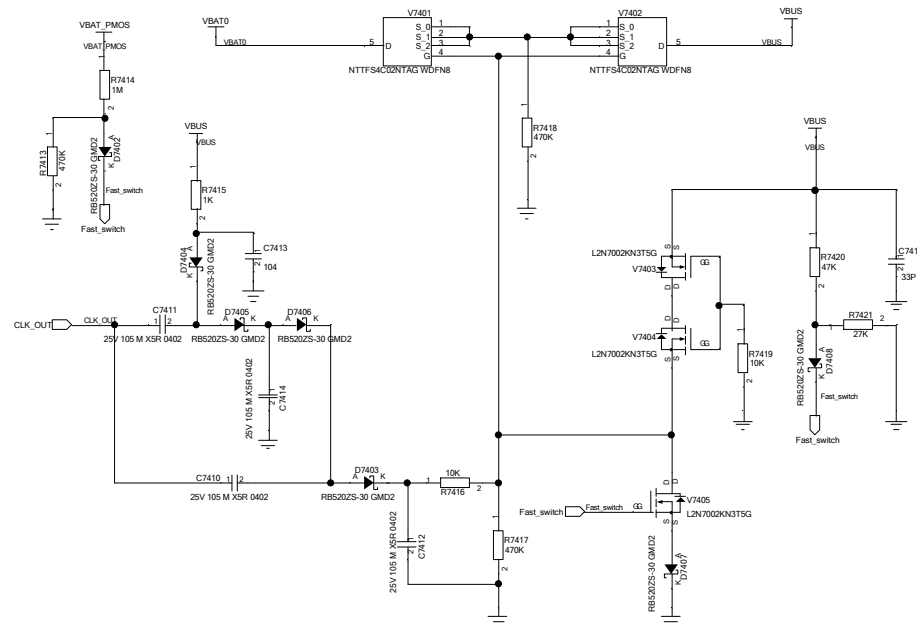
后置64M主摄 DVDD 1P05/1P1
前置44M主摄 DVDD 1P05
后置13M长焦 DVDD 1P05
后置8M广角 DVDD 1P2
后置13M长焦 AFVDD 2P8
后置8M广角 AFVDD 2P8
DOVDD, 所有模组共用 1P8

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Drawn By			Draw No: Schematic	
Checked By			Sheet of 74	Ver:
Standard By				
Approved By				

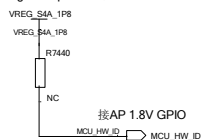
MCU



SWITCH MOS



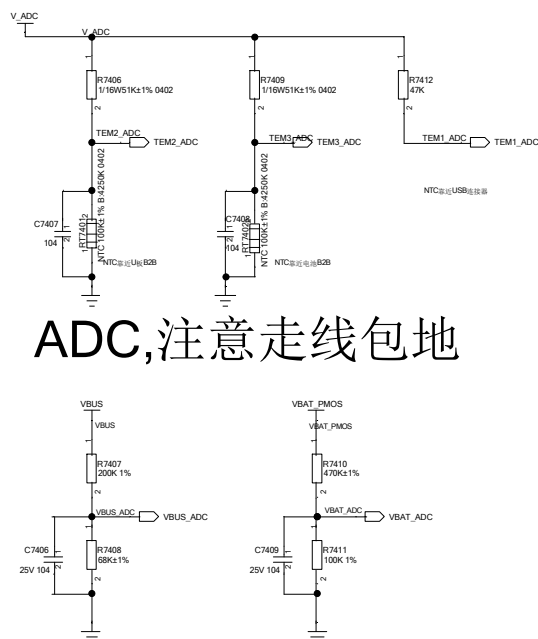
接AP 1.8V digital IO power可控电源



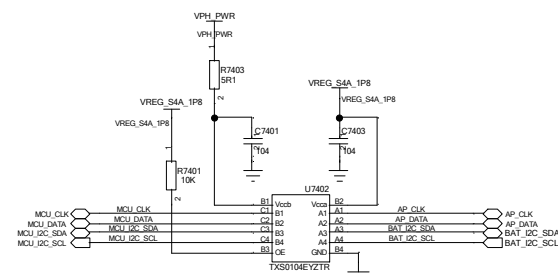
MCU-ST/新唐区分

MCU	物料	R7440
ST	9170179	NC
新唐	9170496	4.7K

ADC,注意走线包地



电平转换IC

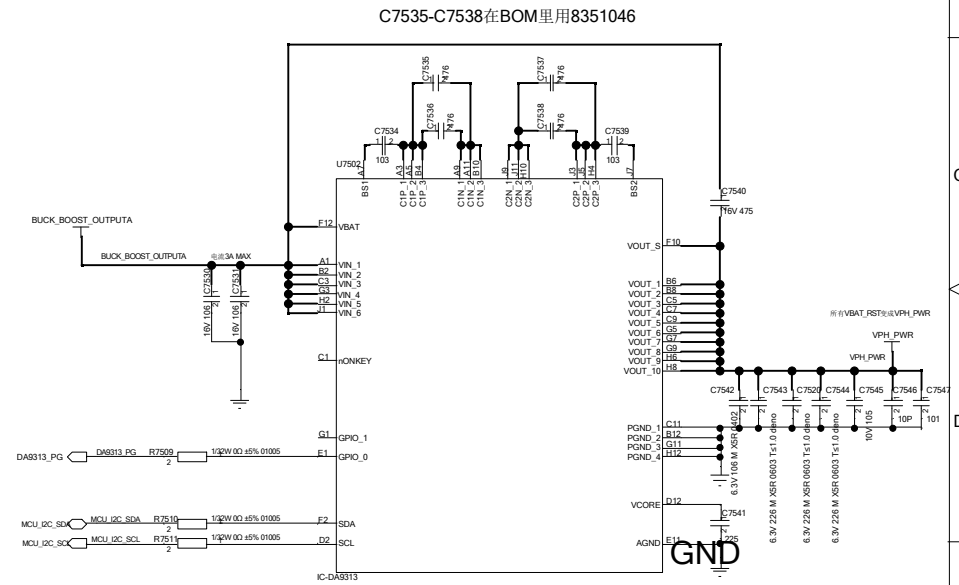



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Standard By		
Approved By		

realme

CHARGE PUMP

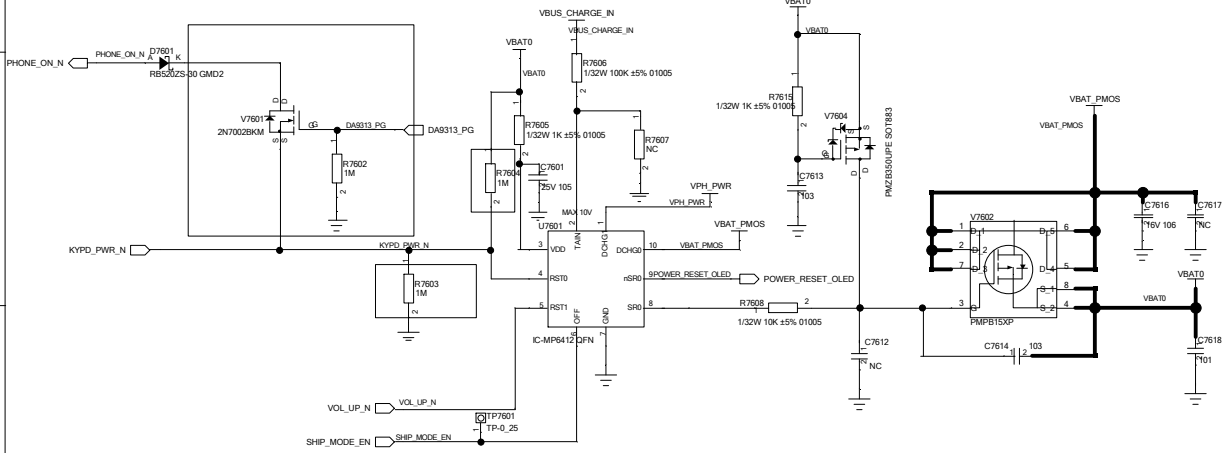
兼容单电芯时全部NC



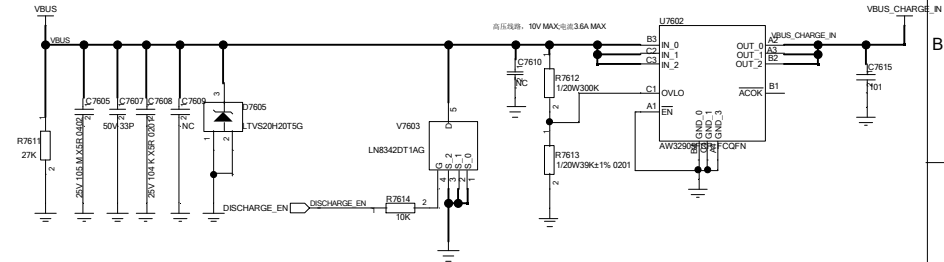
	Sign	Date	Type:	
Drawn By			Draw No: Schematic	
Checked By			Sheet of 74	Ver:
Standard By				
Approved By				

HW RESET

新 Reset IC(只能用MP6412, 耐压)

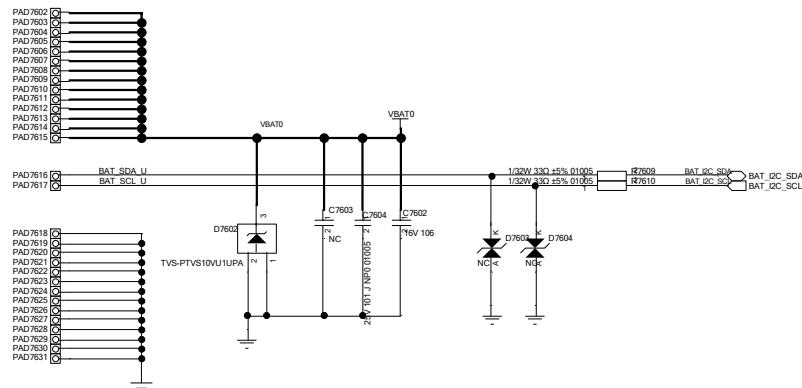



USB NVP &OVP



Battery Connector

Battery to 32RA292



	Sign	Date	Type:	
Drawn By			Draw No: Schematic	
Checked By			Sheet of 74	Ver:
Standard By				
Approved By				

POW_KEY

VOL_KEY

全功能测试点

Test Config

叠层板

UPDATE

叠层板

USB开关

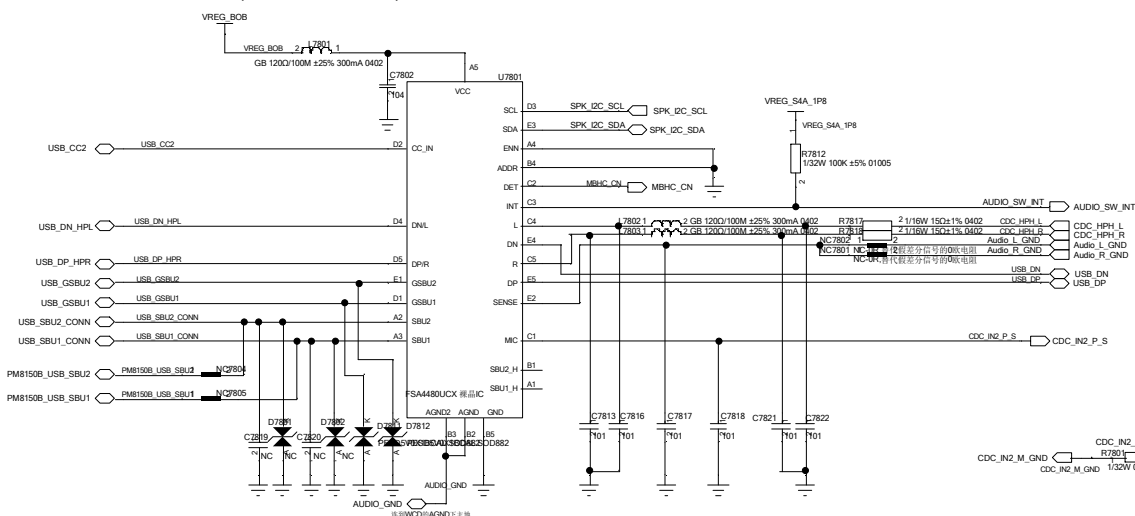
MCU&UART开关

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Drawn By		Draw No: Schematic
Checked By		Sheet of 74 Ver:
Standard By		
Approved By		

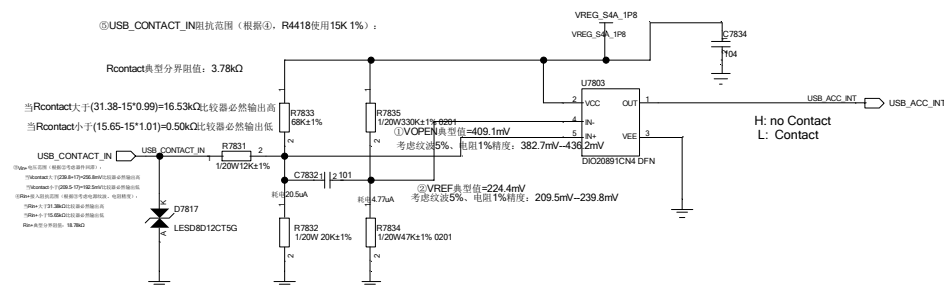
realme

USB Audio Switch

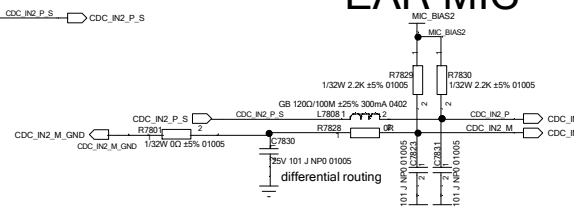
FSA4480UCX I2C Address (R:0x85; W:0x84)



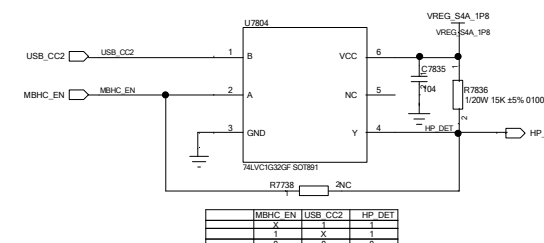
Contact detect



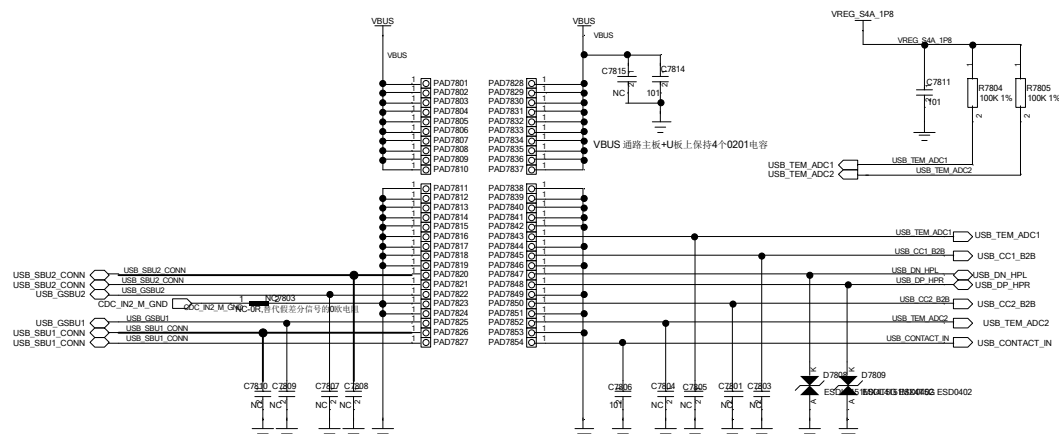
EAR MIC



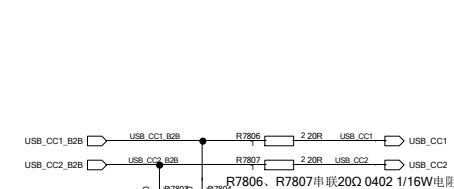
EAR DET




TO U FPC



CC Protect



	Sign	Date	Type:
Drawn By			Draw No: Schematic
Checked By			Sheet of 74 Ver:
Standard By			
Approved By			

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realme

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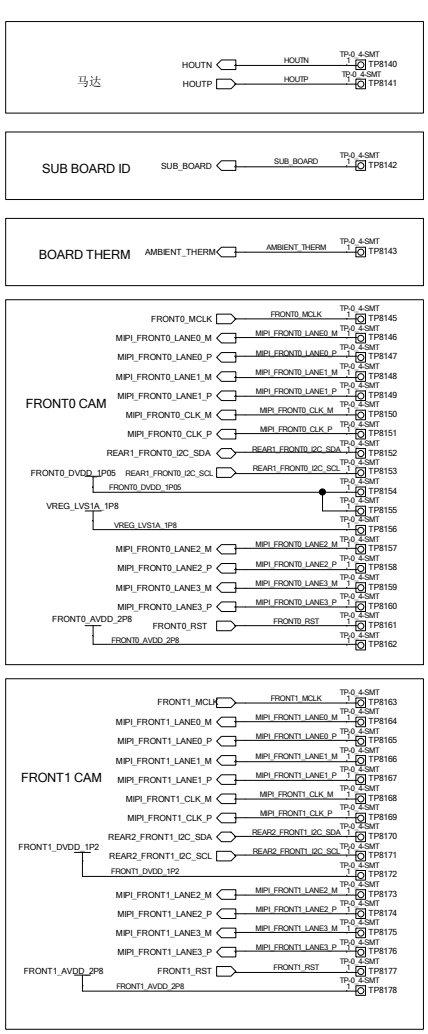
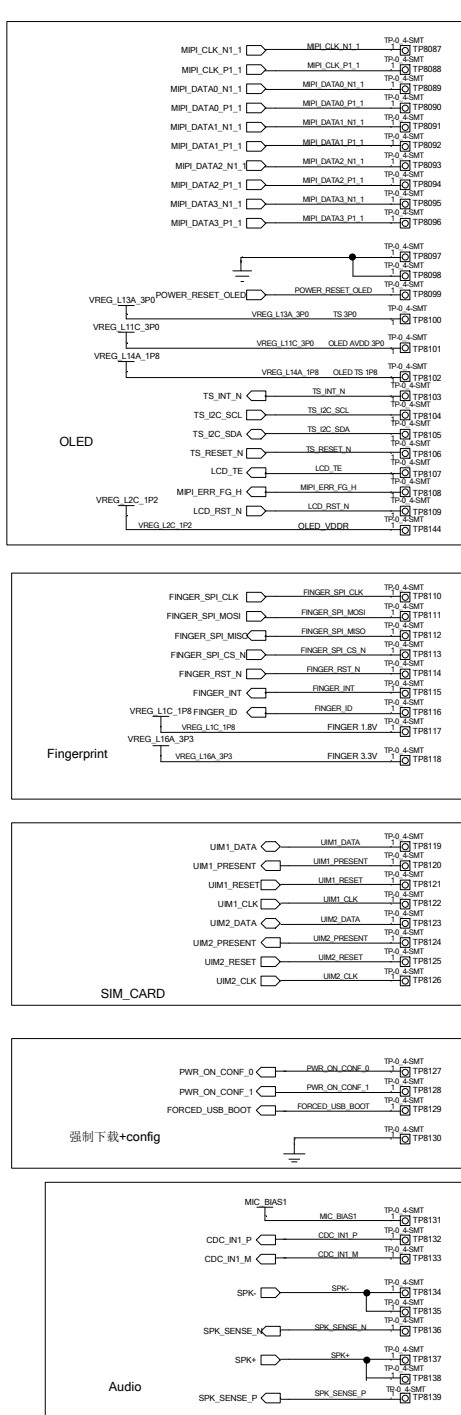
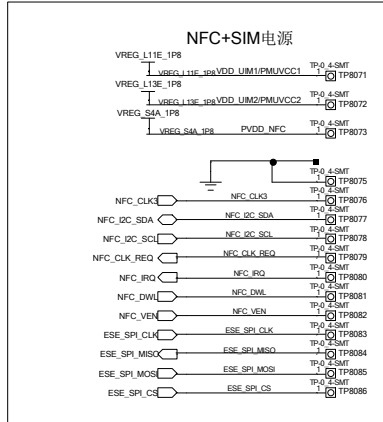
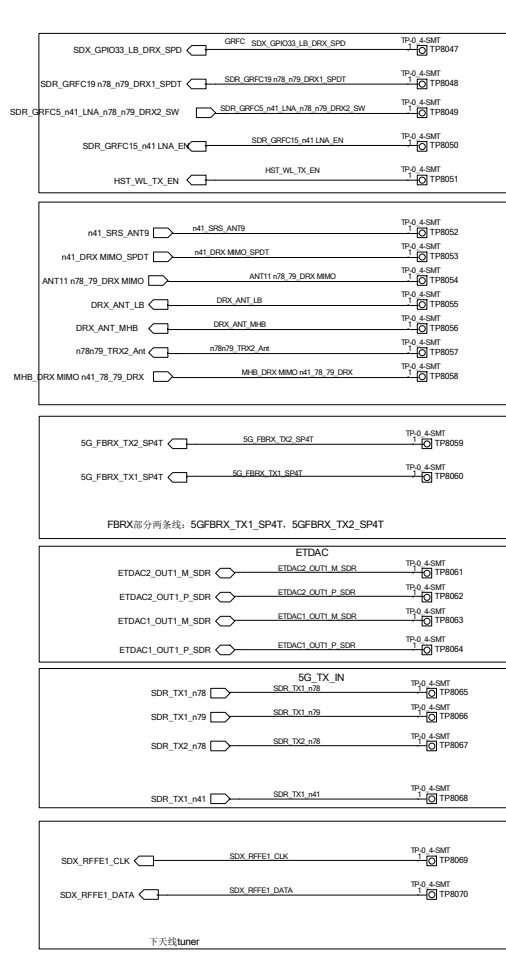
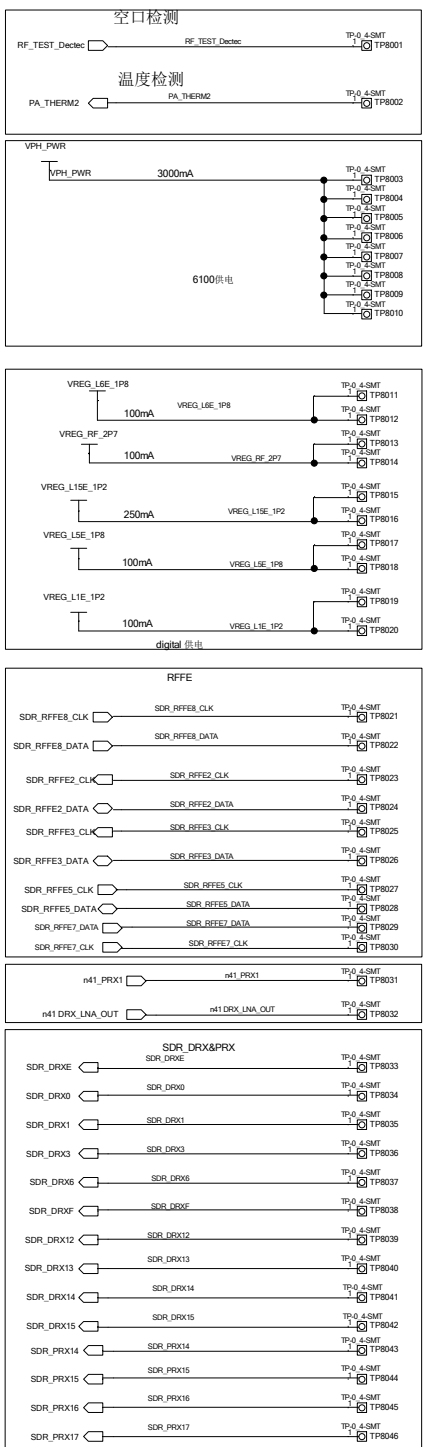
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	Sign	Date	Type:
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Checked By			Sheet of 75 Ver:
Standard By			
Approved By			

realme

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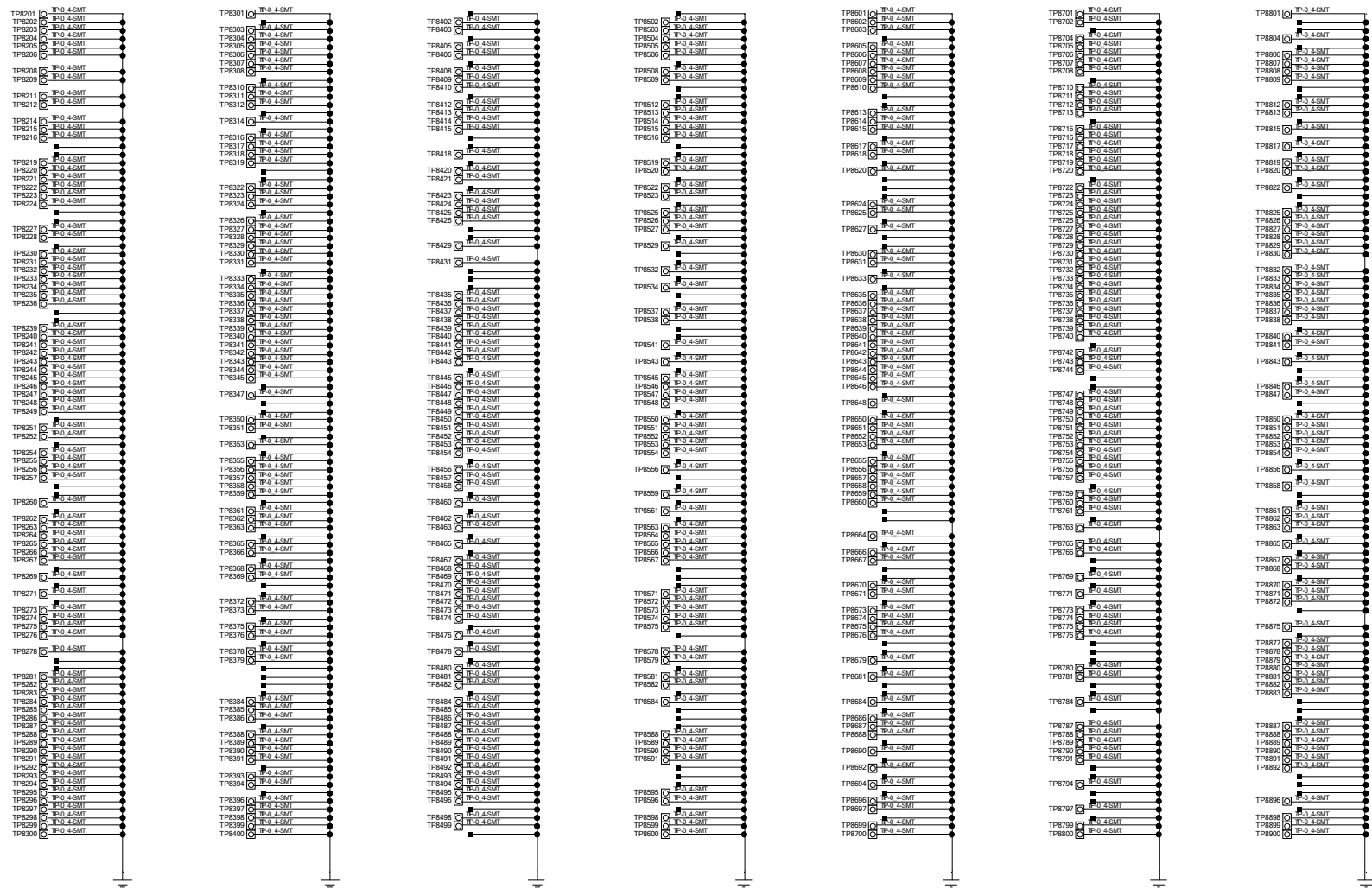
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此8个TP：2板和4板之间网络为电源，4板和31板之间网络为GND

	Sign	Date	Type
Drawn By			Draw No: Schematic
Checked By			Sheet of 75 Ver:
Standard By			
Approved By			

realme

