

6

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B

A

Quectel Wireless Solutions

DRAWN BY Lorry.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET	1 OF 11	DATE 2017/8/25

6

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B

A

D

C

B

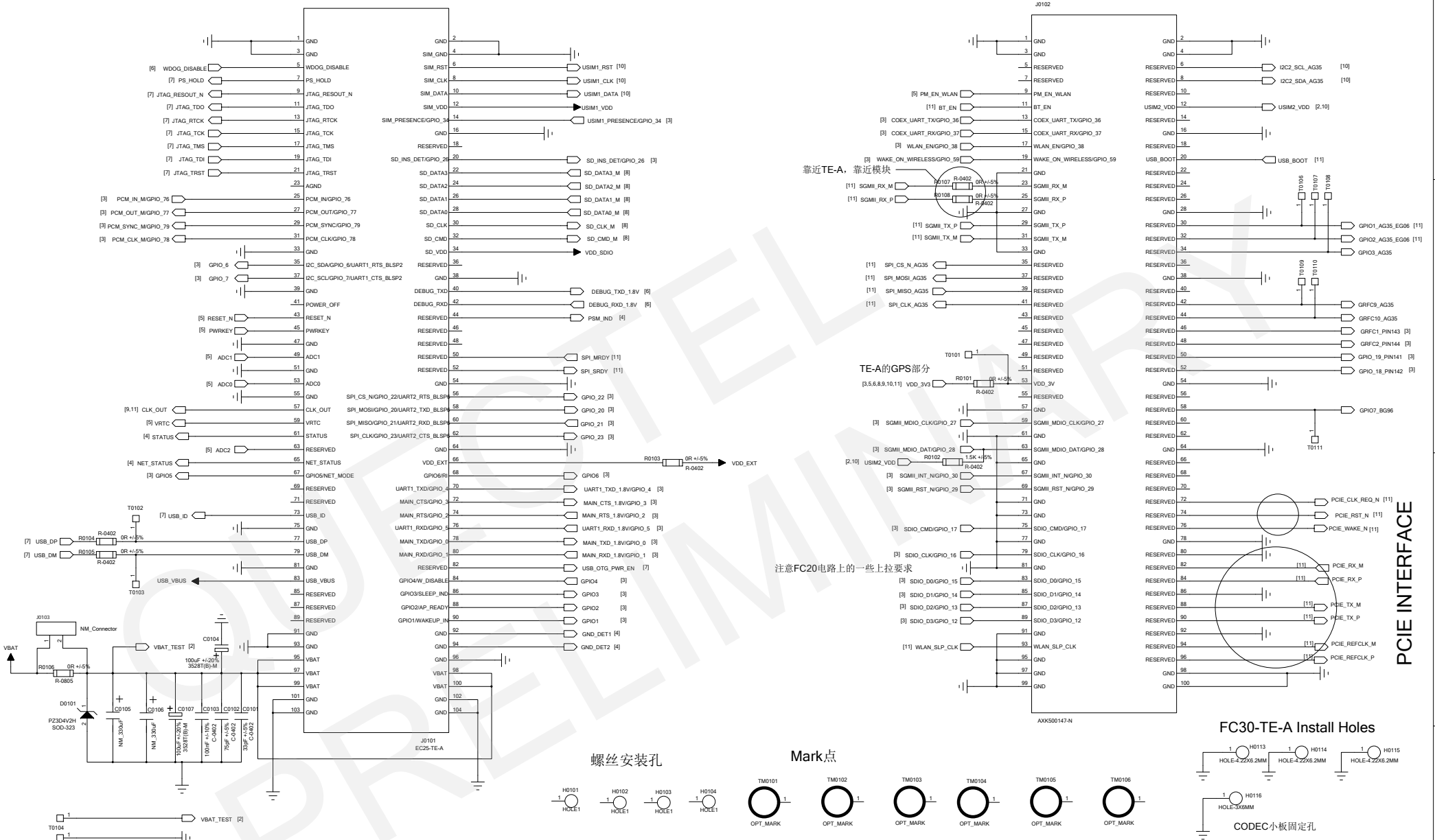
A

D

C

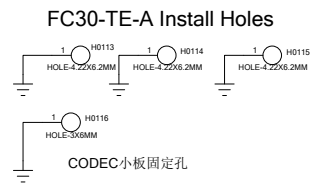
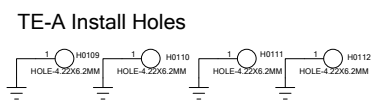
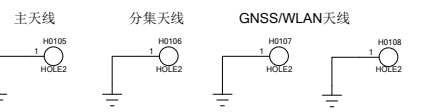
B

A



C0104靠近屏蔽罩摆件, TE-A防反起到干涉作用

射频天线安装孔

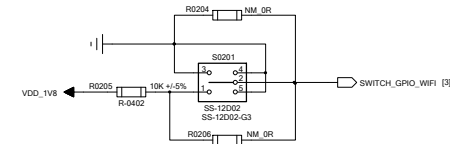


Quetcet Wireless Solutions

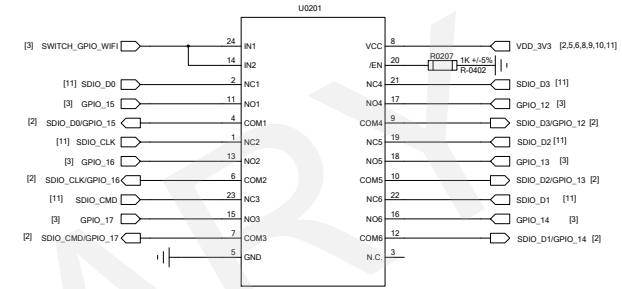
DRAWN BY Lorry.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET 2 OF 11	DATE 2017/8/25	

GPIO及复用功能

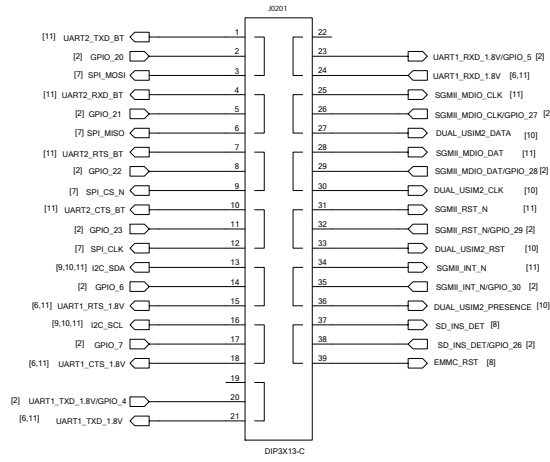
WIFI/GPIO切换



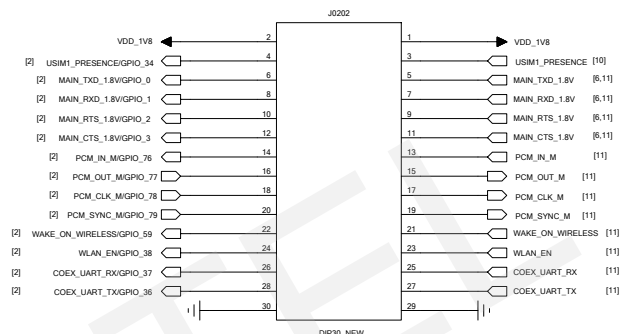
SWITCH_GPIO_WIFI默认接地,WIFI功能



IN1/IN2同时低电平, NC选通; 高电平, NO选通。

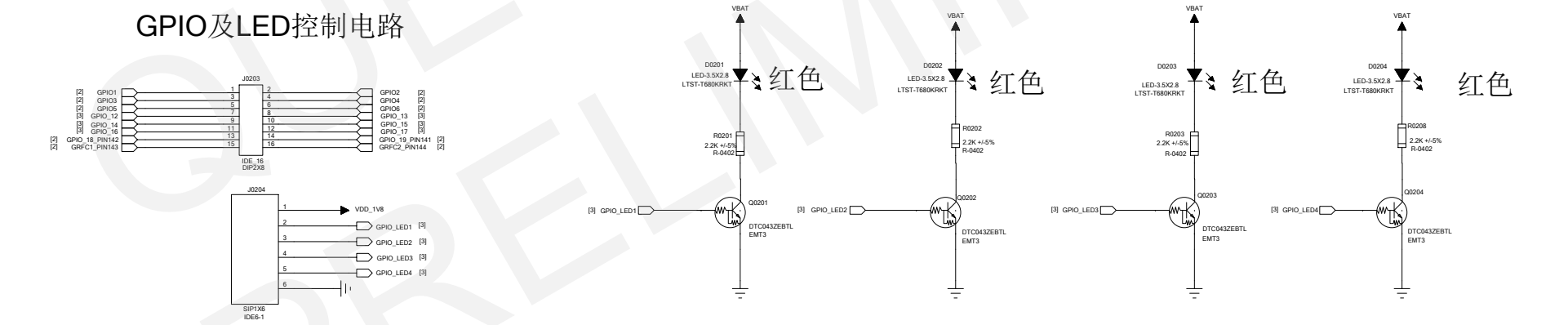


说明：
三排排针，不加跳线帽时GPIO功能，左右加跳线帽时复用功能。



说明：
双排针，不加跳线帽时GPIO功能，加跳线帽时复用功能。

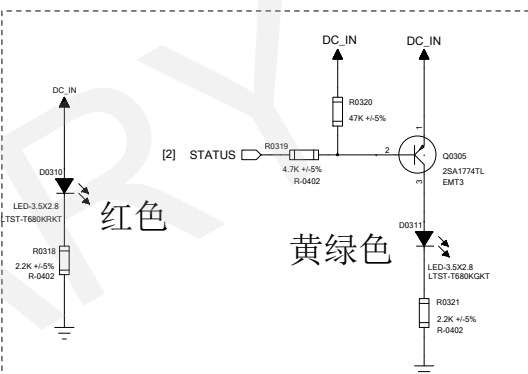
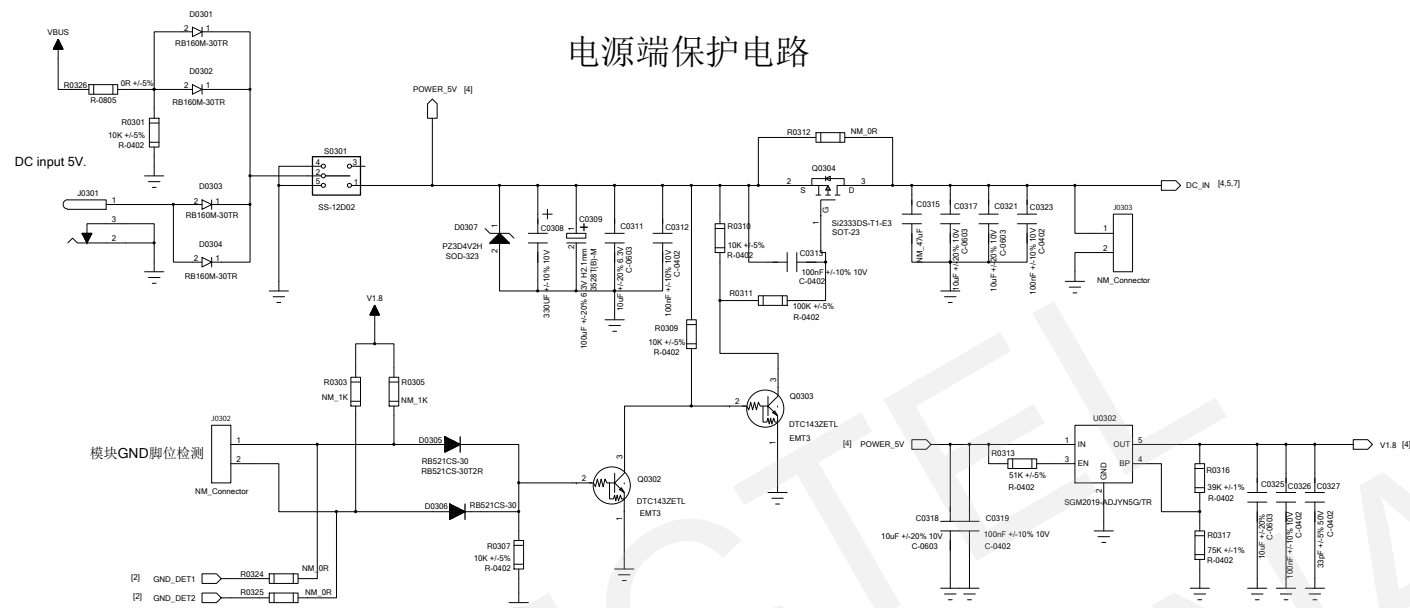
GPIO及LED控制电路



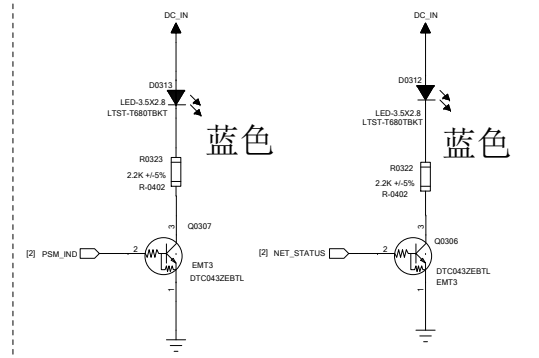
IN1	IN2	NC1~NC6 TO COM1~COM6	NO1~NO6 TO COM1~COM6
L	L	ON	OFF
H	H	OFF	ON

Quectel Wireless Solutions		
DRAWN BY	PROJECT	TITLE
Lony.Xu	LTE OPEN-EVB	
CHECKED BY	SIZE	VER
Woody.Wu	A2	V1.1
SHEET	3 OF 11	DATE 2017/8/25

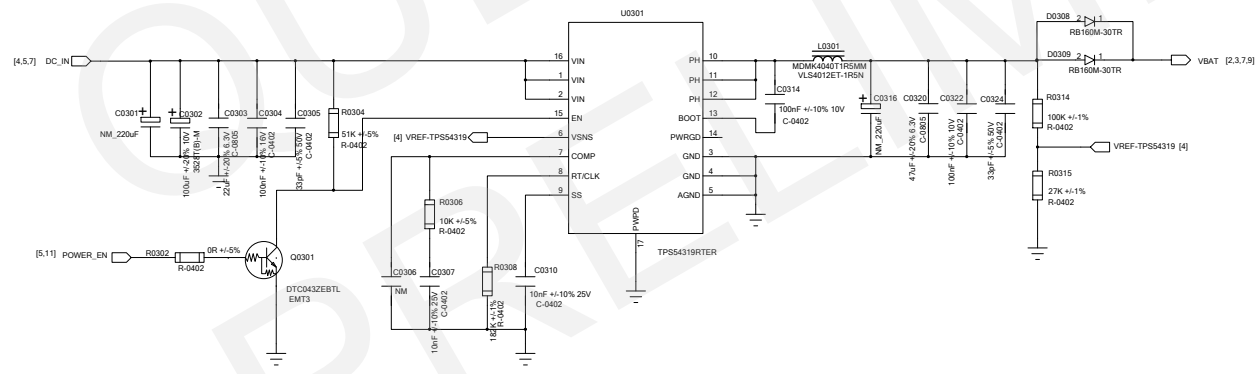
电源端保护电路



减小STATUS对客户端整机耗流的影响。



$V_{ref}=0.827V$ $V_{out}=(R_{203}/R_{204}+1)*0.827=3.89V$



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DRAWN BY Lony.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET 4 OF 11	DATE 2017/8/25	

6

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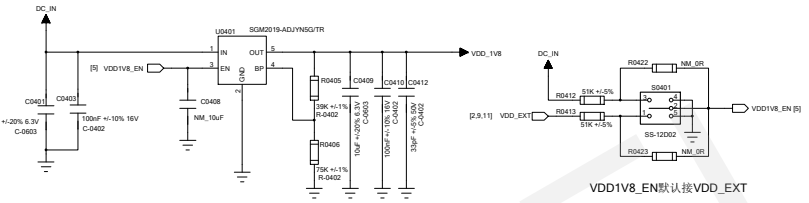
3

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D

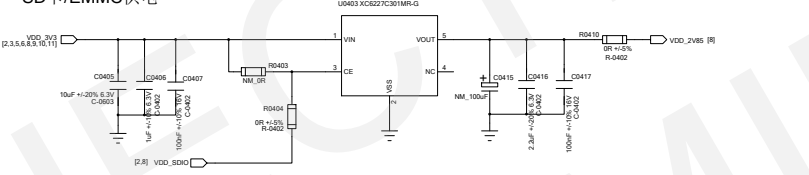
$$V_{out} = [(R0405 + R0406) / R0406] * 1.207 = 1.8V$$



VDD1V8_EN默认接VDD_EXT

C

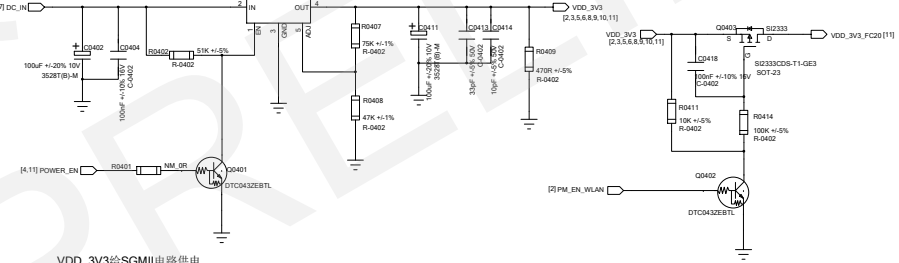
SD卡/EMMC供电



B

FC20, 网卡, 串口, TE-A的GPS有源天线供电-3A

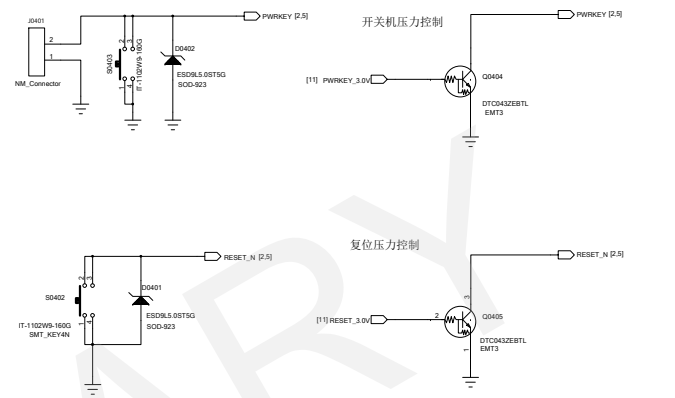
$$V_{out} = (1 + R0407 / R0408) * 1.24 = 3.3V$$



VDD_3V3给SGMII电路供电
VDD_FC20给FC20电路供电, 通过PM_EN_WLAN控制, 耗流可达1A

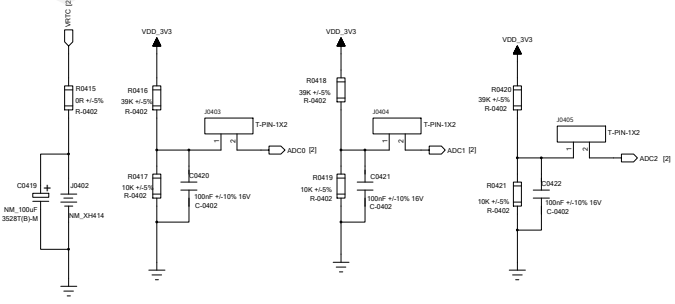
A

D



B

ADC



3

2

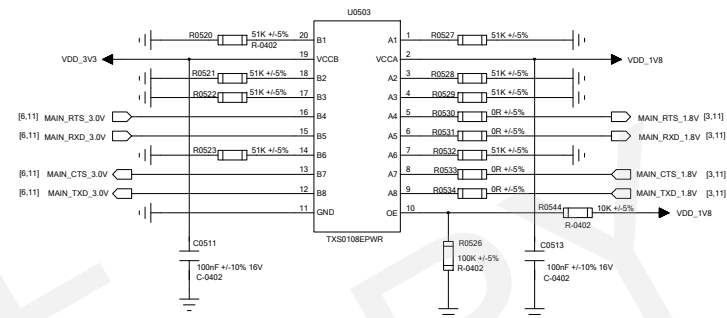
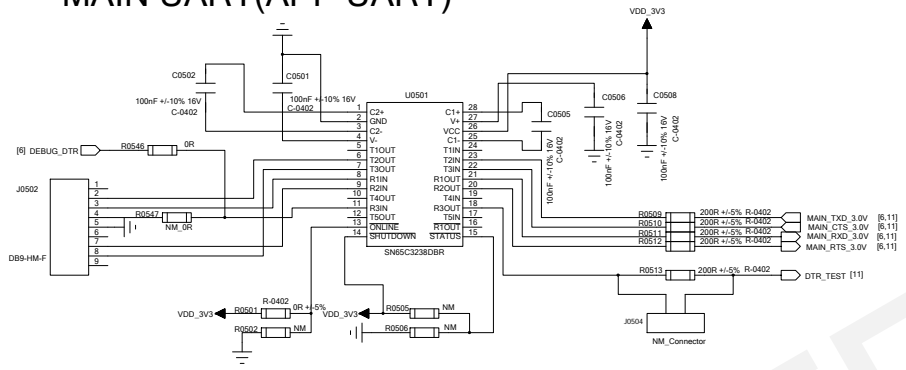
1

- VDD_1V8供电说明
- 1. 电平转换电路
- 2. 音频1.8V供电电路
- 3. 模拟开关供电
- 4. 上拉电路, 含FC20-TE-A
- 5. EMMC

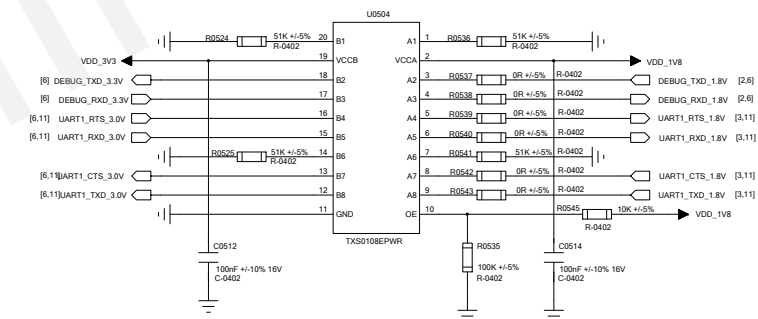
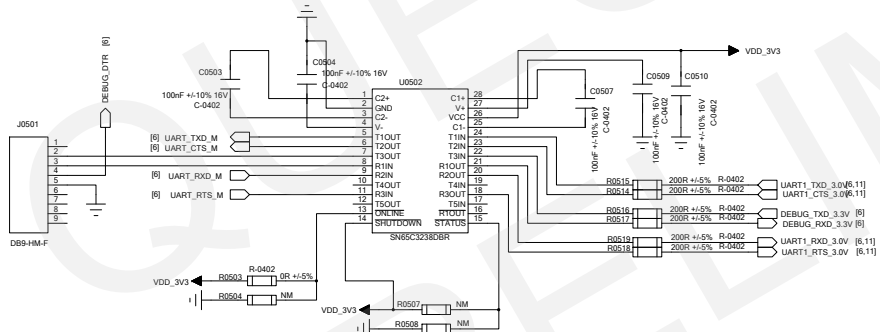
- VDD_3V3供电说明 (不支持EN控制)
- 1. 串口
- 2. SD卡
- 3. TE-A的GPS
- 4. 音频
- 5. ADC

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DRAWN BY Lorry.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
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MAIN UART(APP UART)



DEBUG UART

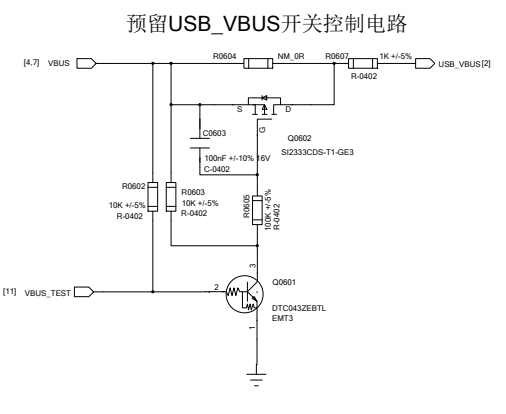
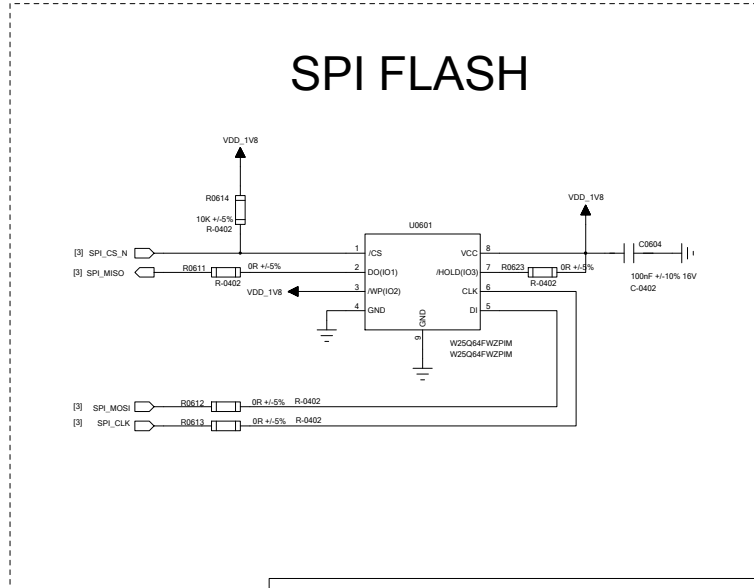
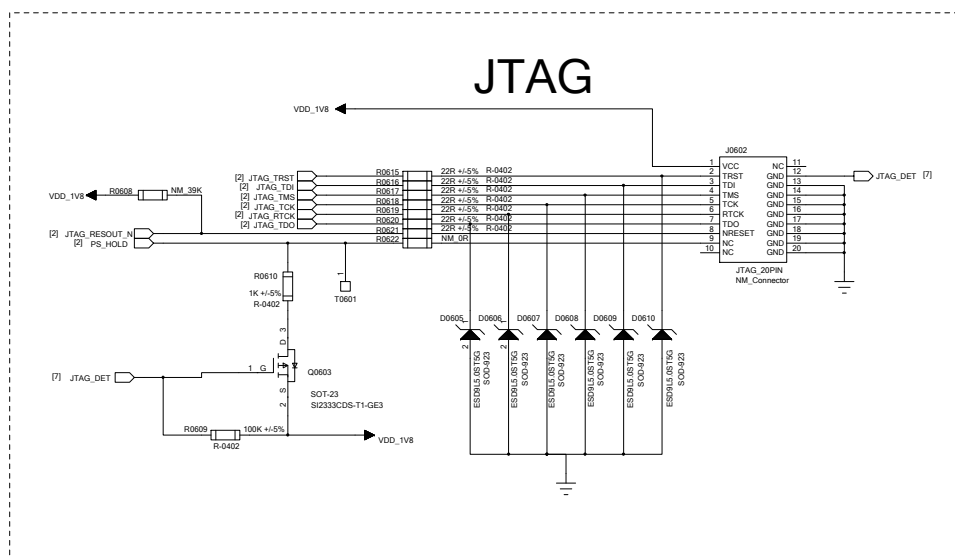
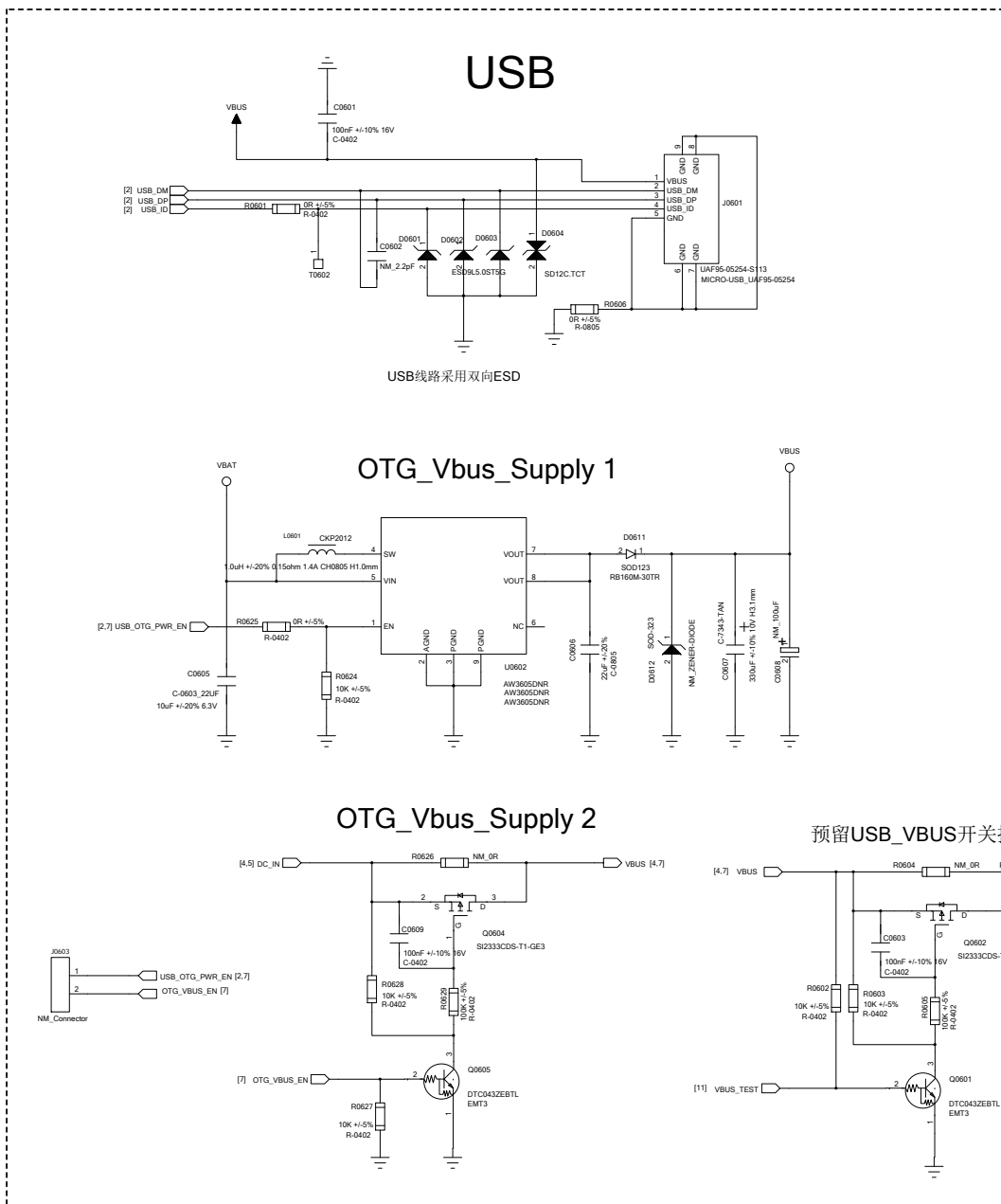


App UART1



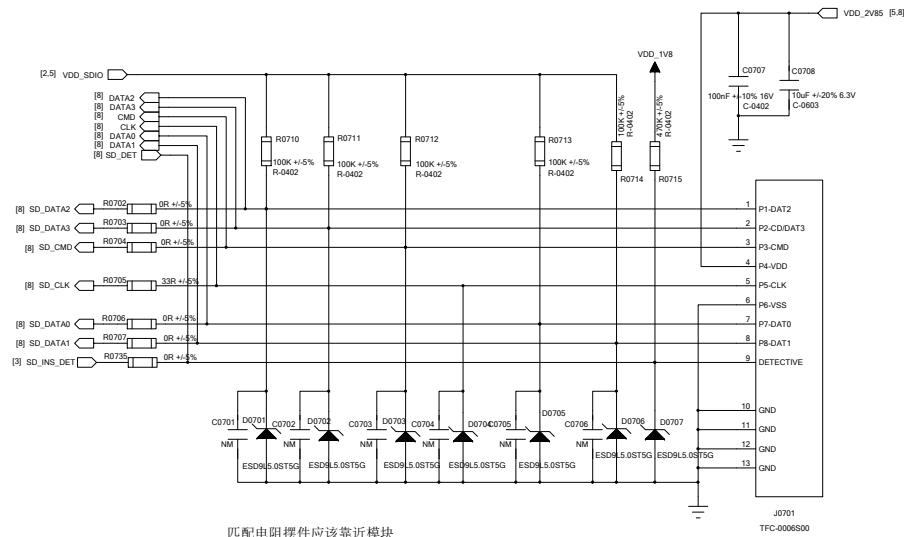
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CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET 6 OF 11		DATE 2017/8/25

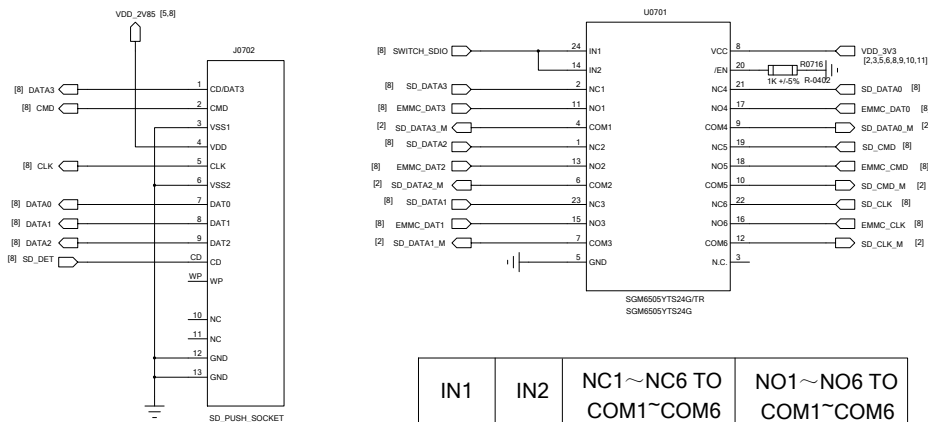


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CHECKED BY Woody.Wu	SIZE A2	VER V1.1
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TF card

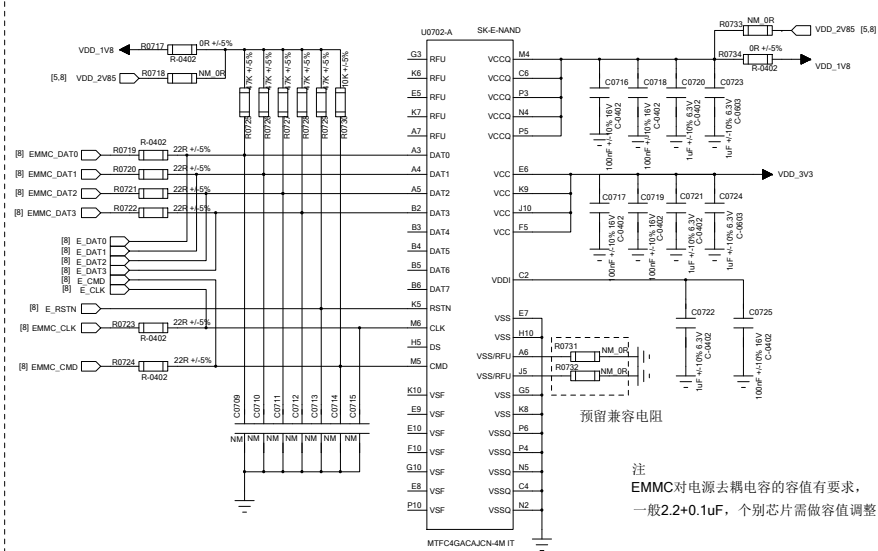


SD card

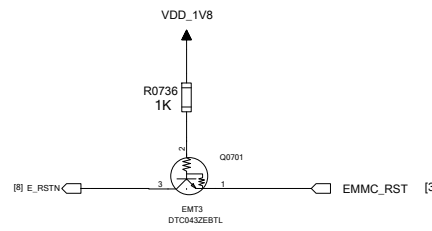


IN1	IN2	NC1~NC6 TO COM1~COM6	NO1~NO6 TO COM1~COM6
L	L	ON	OFF
H	H	OFF	ON

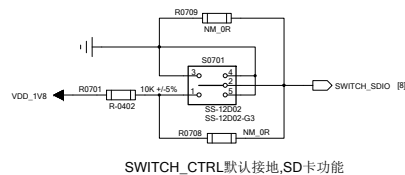
EMMC



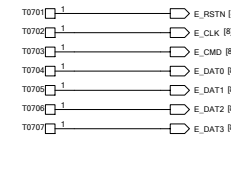
EMMC_RST电平转换



SDIO切换电路



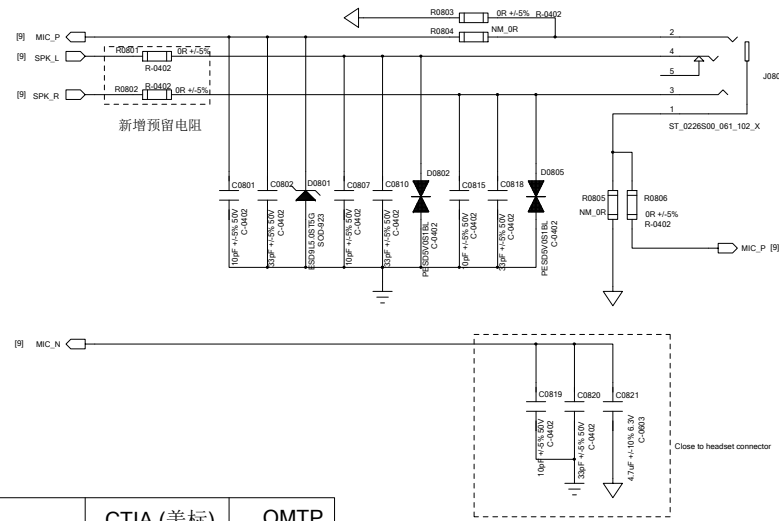
Testpoints



Quectel Wireless Solutions

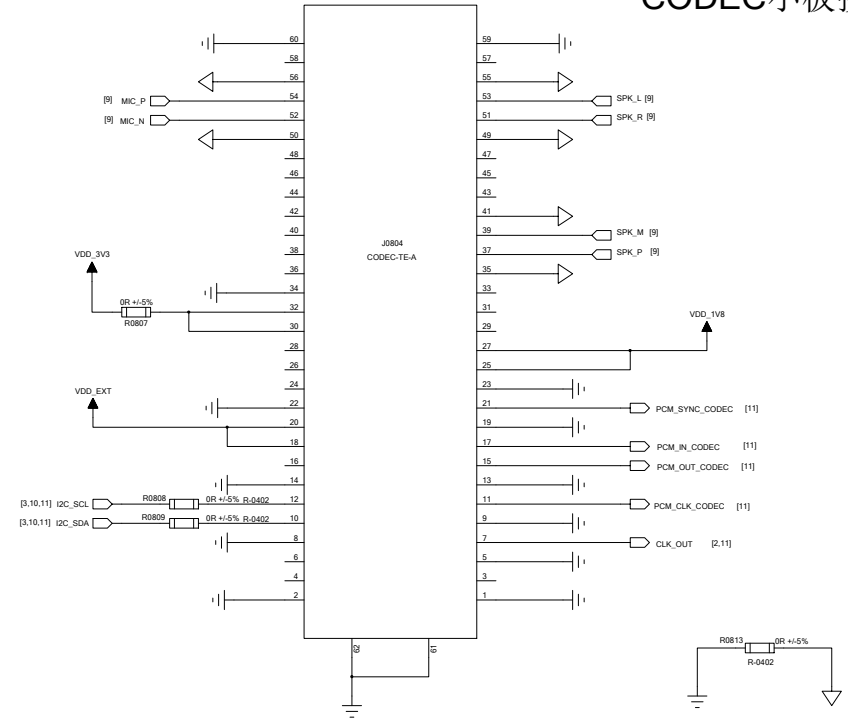
DRAWN BY Lony.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET 8 OF 11		DATE 2017/8/25

Earphone Application

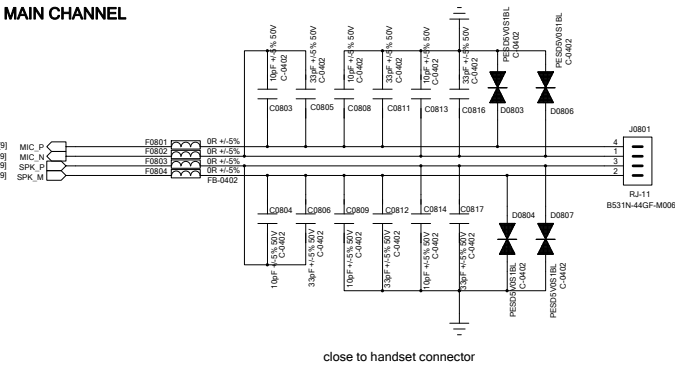


	CTIA (美标)	OMTP
R601/R606	NM	M
R602/R605	M	NM

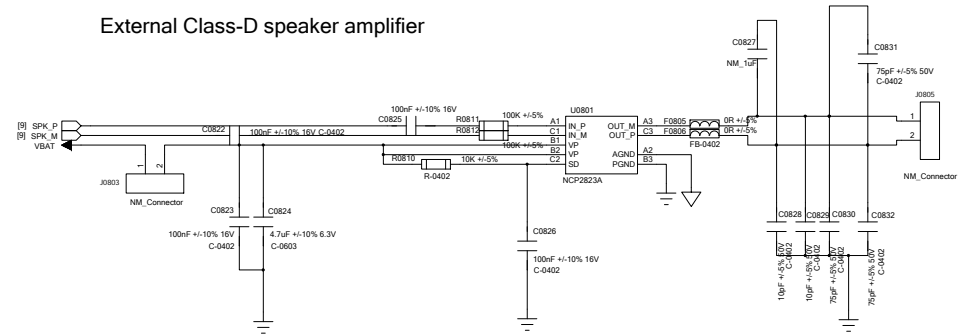
CODEC小板接口



AUDIO MAIN CHANNEL



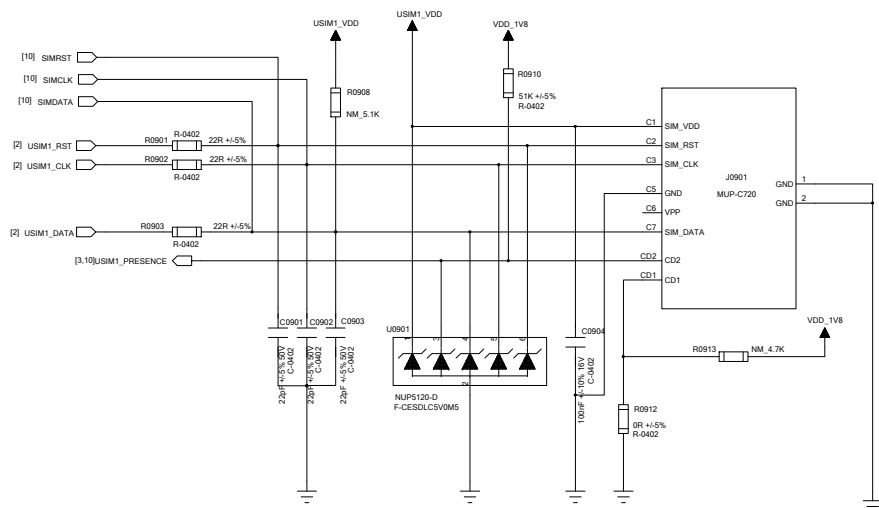
External Class-D speaker amplifier



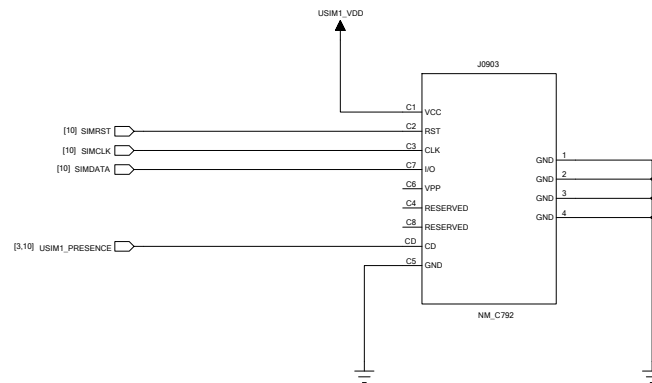
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DRAWN BY Lory.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
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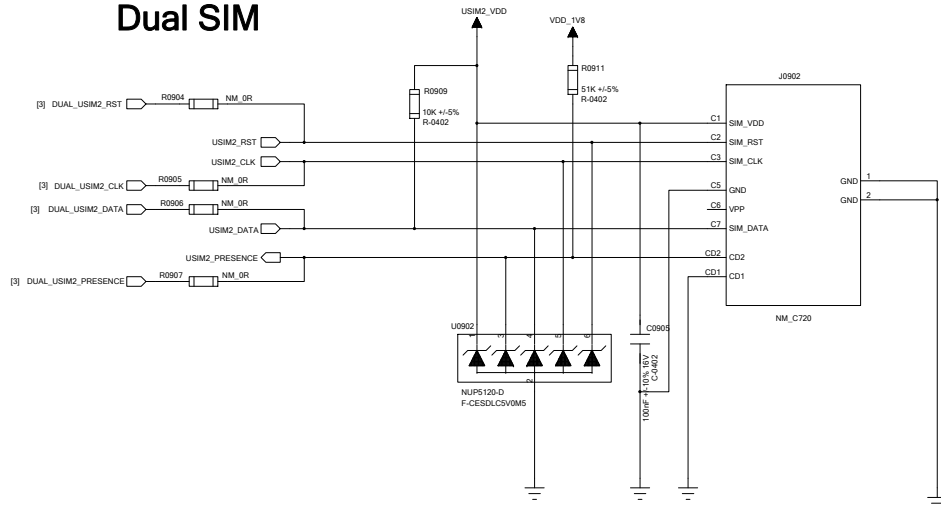
Main SIM



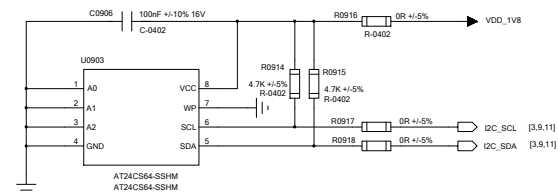
Micro SIM



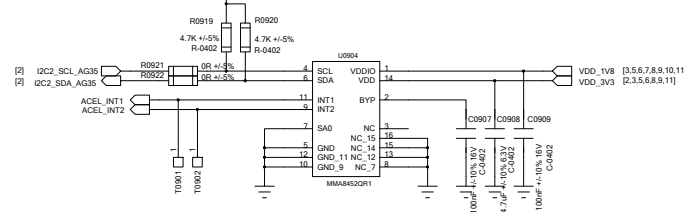
Dual SIM



E2PROM



SENSOR

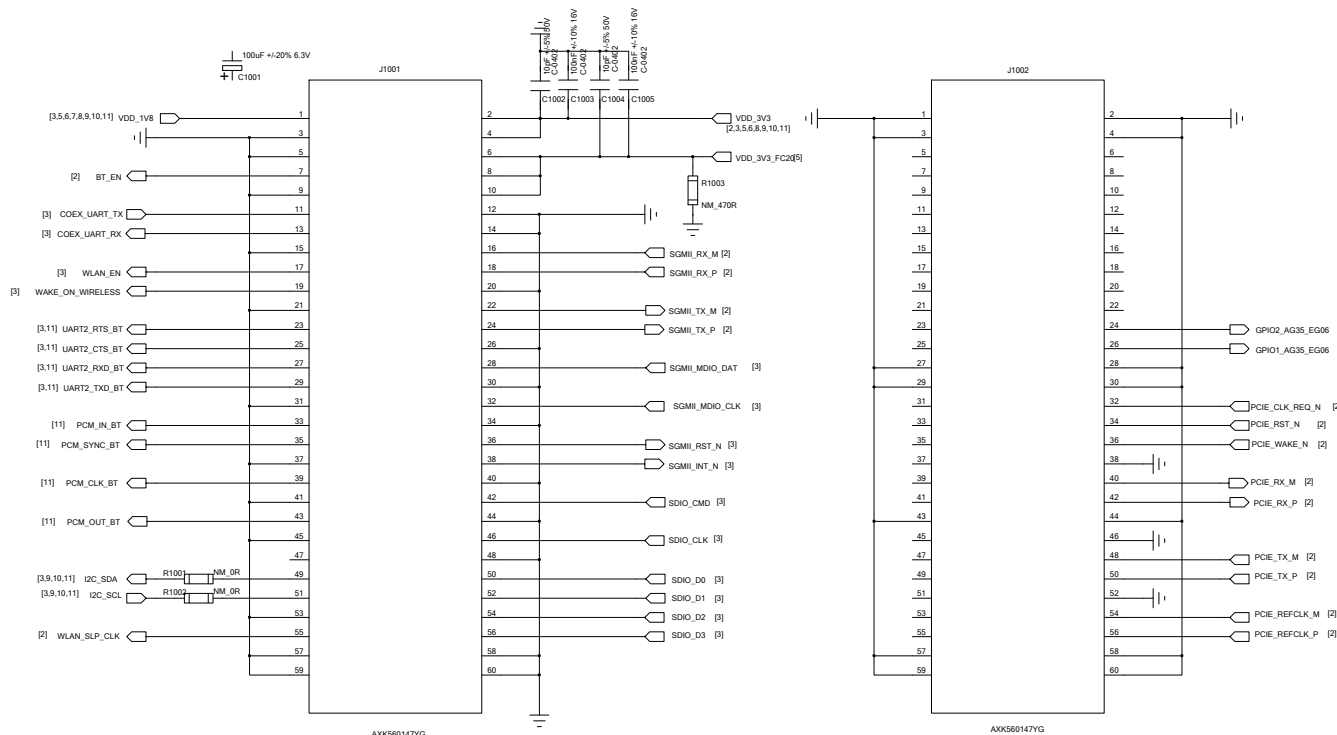


默认测试SGMII功能，对应相应TE-A；当测试USIM2时，SGMII-TE-A不贴，使用该0R电阻

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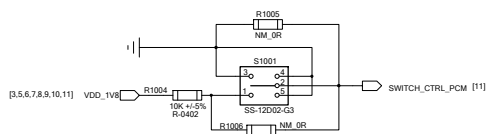
DRAWN BY Lony.Xu	PROJECT LTE OPEN-EVB	TITLE
CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET 10 OF 11	DATE 2017/8/25	

WLAN MODULE+ETHERNET连接器

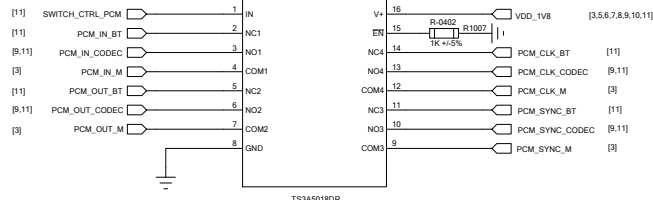


- T1001 1 UART2_RTS_BT [3,11]
- T1002 1 UART2_CTS_BT [3,11]
- T1003 1 UART2_RXD_BT [3,11]
- T1004 1 UART2_TXD_BT [3,11]
- T1005 1 PCM_IN_BT [11]
- T1006 1 PCM_SYNC_BT [11]
- T1007 1 PCM_CLK_BT [11]
- T1008 1 PCM_OUT_BT [11]

PCM接口切换

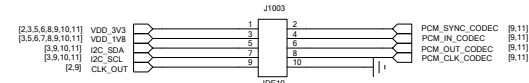


SWITCH_CTRL默认接地

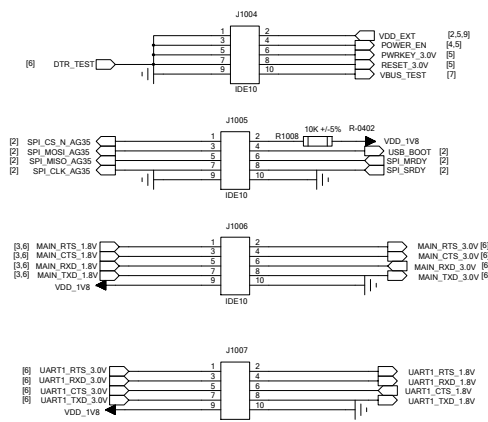


说明：
开关芯片EN为低使能
IN为高，对应NO通道，默认原来EVB的测试功能

MAX9860使用



Testpoints



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CHECKED BY Woody.Wu	SIZE A2	VER V1.1
SHEET 11 OF 11	DATE 2017/8/25	