

VERSION HISTORY

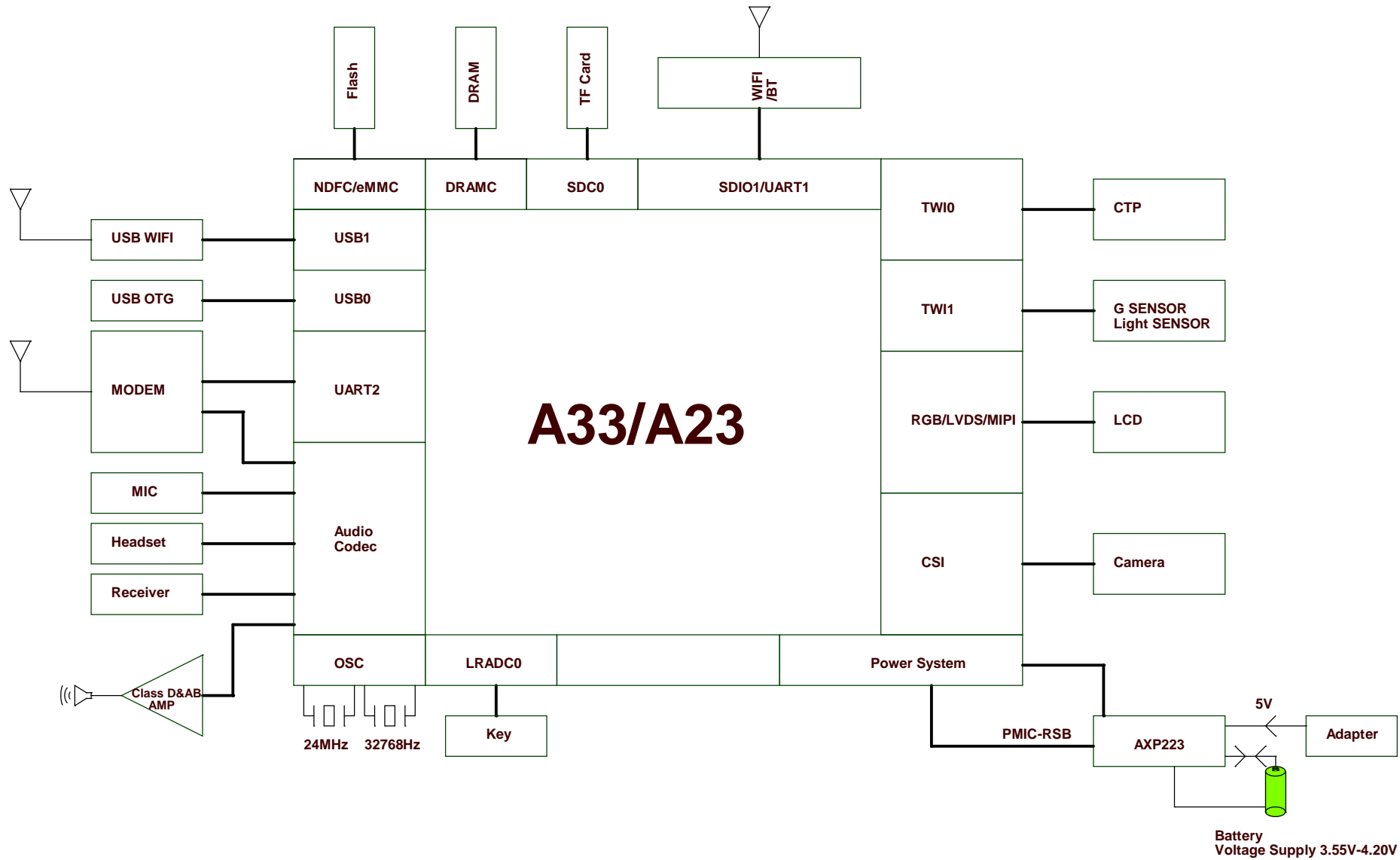
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- P12: T-CARD/USB/KEY/SENSOR
- P13: MODEM 2G
- P14: SDIO WIFI&BT
- P15: USB WIFI

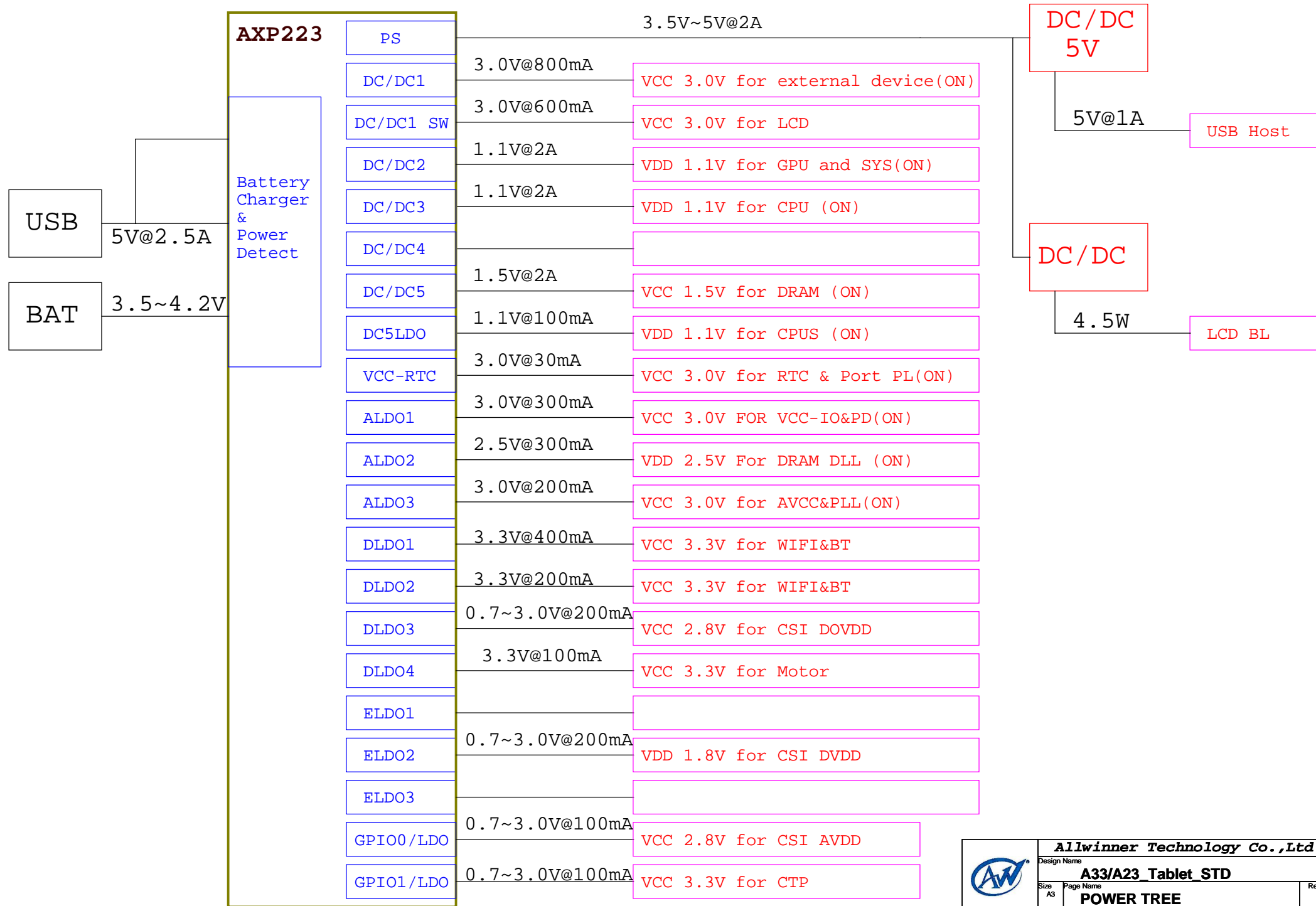
- OPTION:
- P16: AUDIO(AC couple)
 - P17: SDIO WIFI
 - P18: MODEM 3G

Revision	Description	Date
V1.0	Release	2014-04-14

BLOCK DIAGRAM



POWER TREE



GPIO ASSIGNMENT

4

3

2

1

PIN	Name	Function
PB0	AP-UART2-TX	MODEM
PB1	AP-UART2-RX	
PB2	AP-UART2-RTS	T CARD
PB3	AP-UART2-CTS	
PB4	T-CARD-DET	TP
PB5	TP-INT	G SENSOR
PB6	GS-INT	ALS
PB7	LS-INT	

PIN	Name	Function
PG0	WL-SDIO-CLK	WLAN
PG1	WL-SDIO-CMD	
PG2	WL-SDIO-D0	
PG3	WL-SDIO-D1	
PG4	WL-SDIO-D2	
PG5	WL-SDIO-D3	BT
PG6	AP-UART1-TX	
PG7	AP-UART1-RX	
PG8	AP-UART1-RTS	
PG9	AP-UART1-CTS	
PG10	AP-WAKE-BB	
PG11		
PG12		
PG13		

PIN	Name	Function
PH0	LCD-PWM	LCM
PH1	TP-RST	TP
PH2	TP-SCK	
PH3	TP-SDA	
PH4	SENSOR-SCK	SENSOR
PH5	SENSOR-SDA	
PH6	LCD-BL-EN	LCM
PH7	LCD-RST	
PH8	USB-ID	USB
PH9	PA-SHDN	AUDIO PA

PIN	Name	Function
PL0	PMIC-SCK	PMIC
PL1	PMIC-SDA	
PL2	BB-WAKE-AP	MODEM
PL3	BB-PWREN	
PL4	BB-PWR-BAT	
PL5	BB-RST	WLAN/BT
PL6	WL-PMU-EN	
PL7	WL-WAKE-AP	
PL8	BT-RST-N	
PL9	BT-WAKE-AP	
PL10	AP-WAKE-BT	
PL11	WL-BT-ENABLE	

DRAM DDR3 8bitX2_16bitx1

4

3

2

1

D

D

C

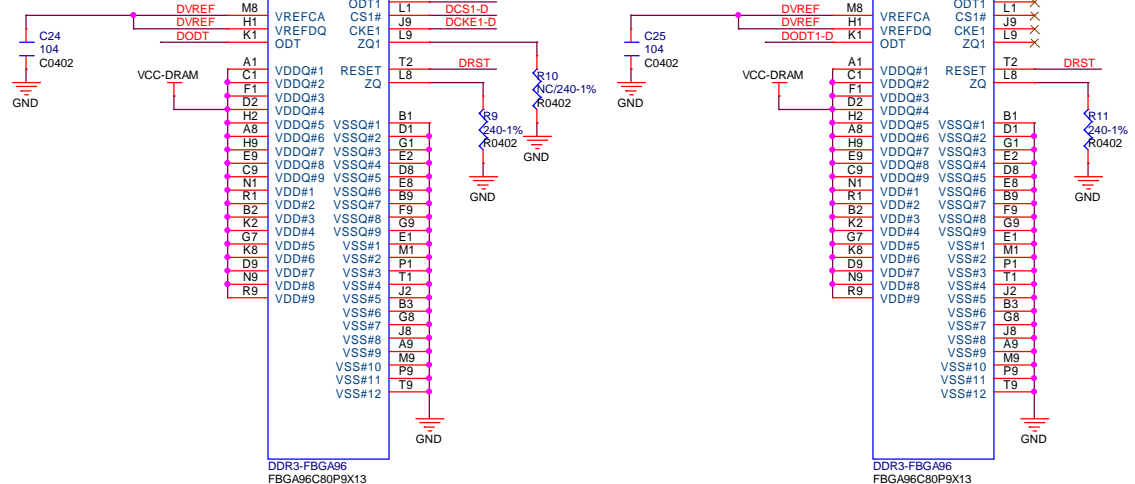
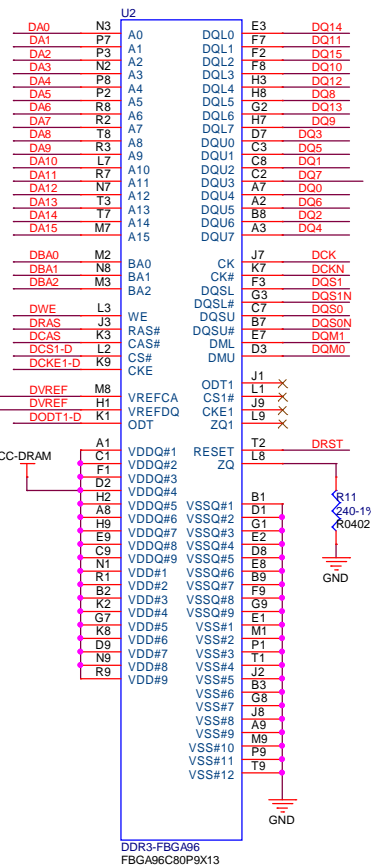
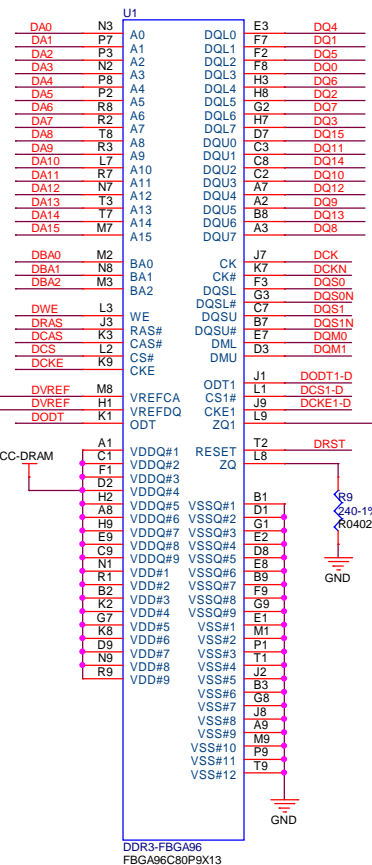
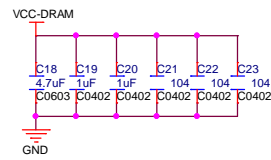
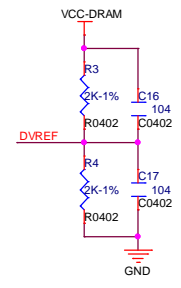
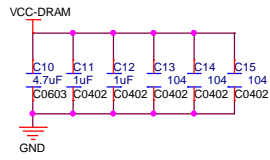
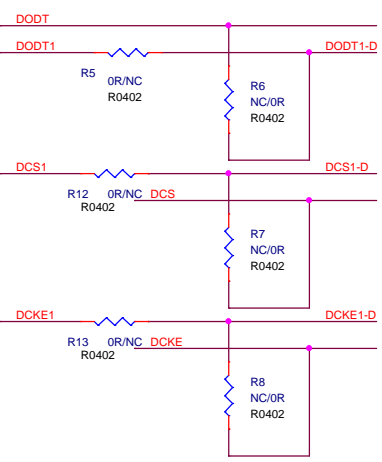
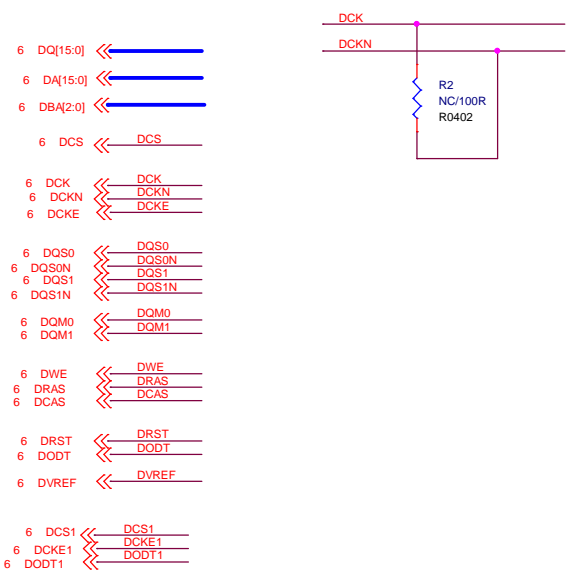
C

B

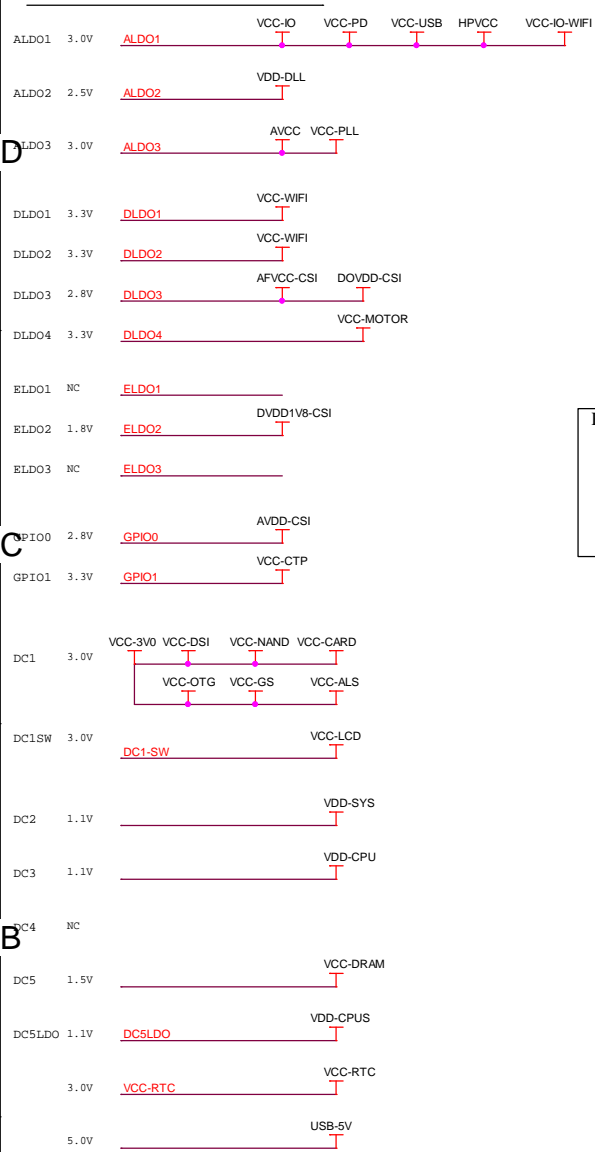
B

A

A



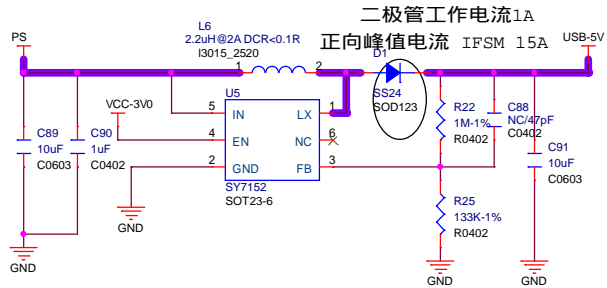
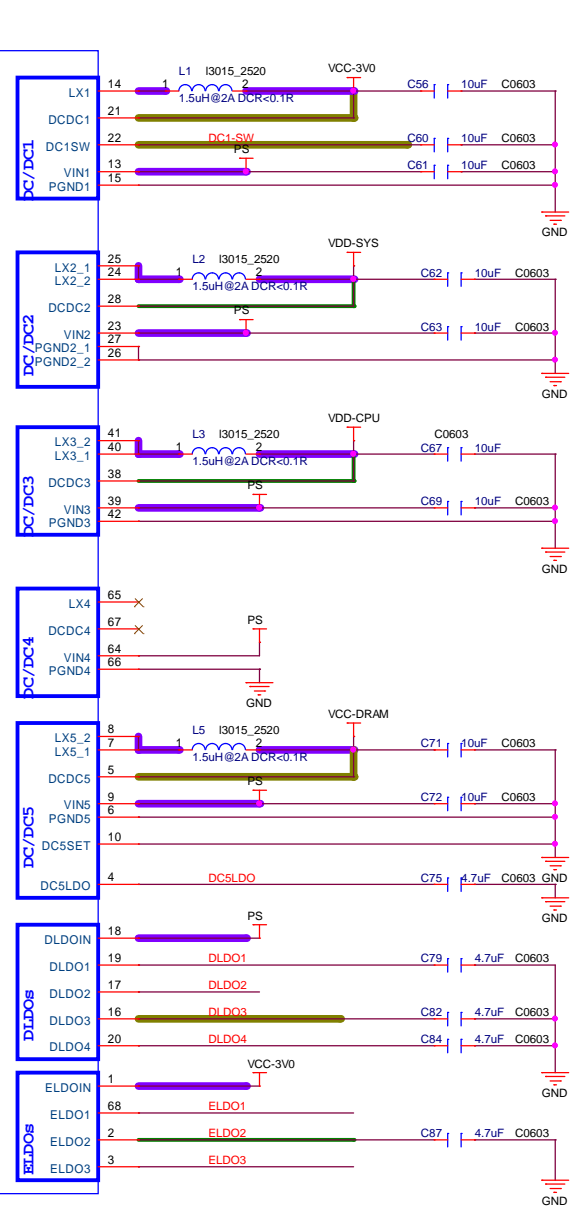
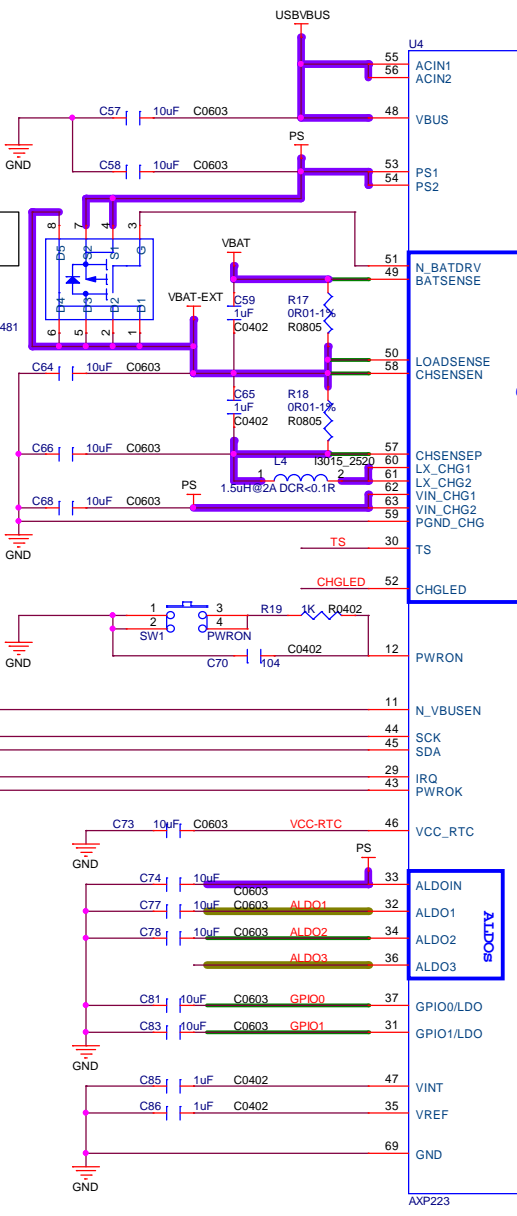
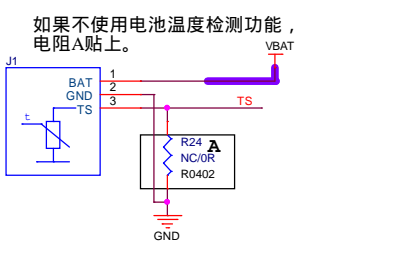
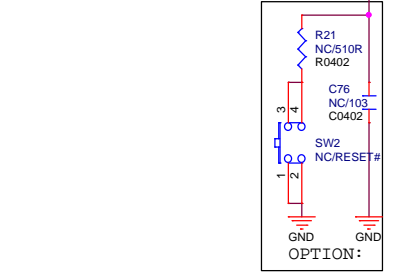
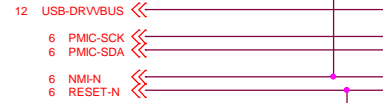
POWER



NOTE:
Q1 vth <1.5V & R <30mohm@vgs=4.5V

P-MOSFET Option:
1. WPM1481
2. ACE5801

Routing rules:
100mil
30mil
10mil

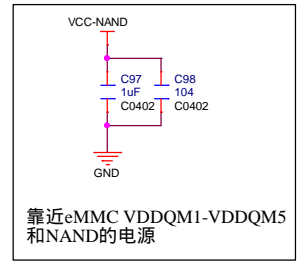
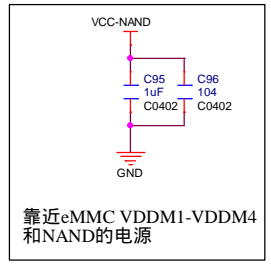
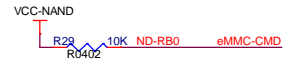
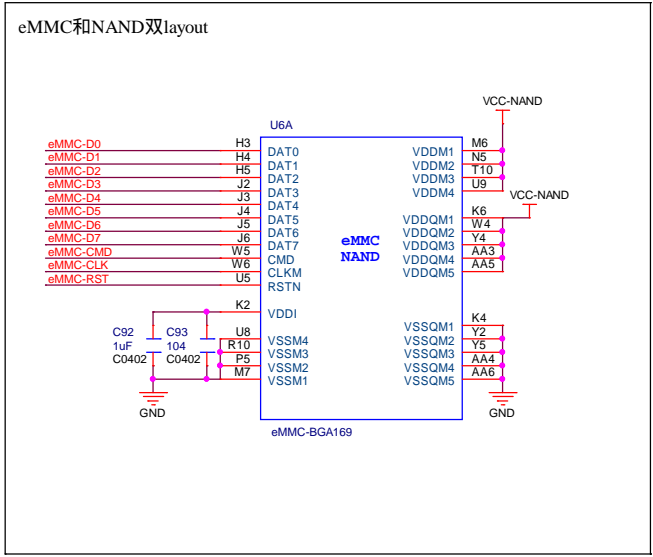


Option: 使用充电指示时贴R16、D11。
R23 NC/1K R0402 D2 CHGLED NC/LED

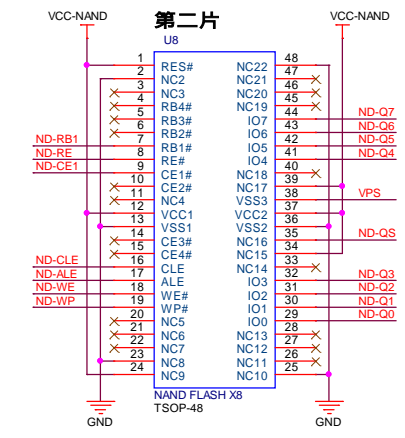
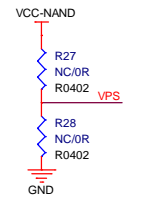
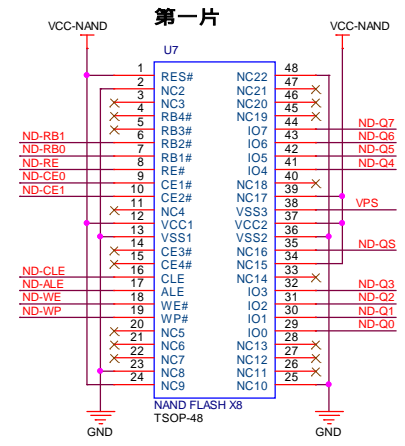
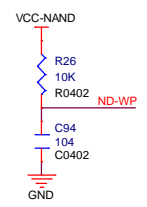
NAND

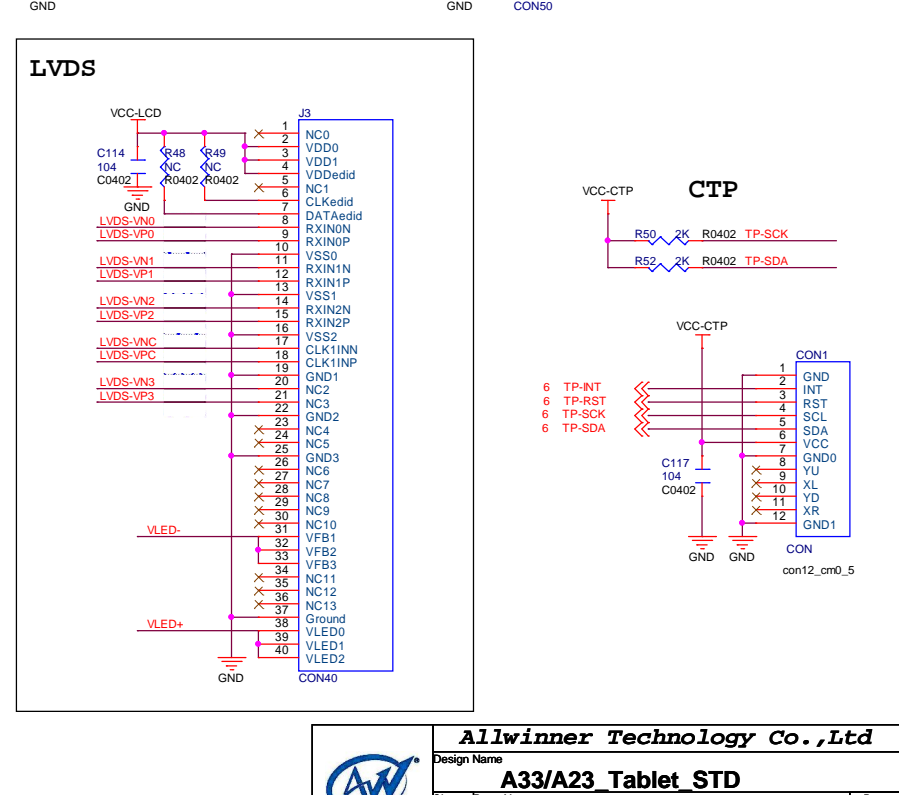
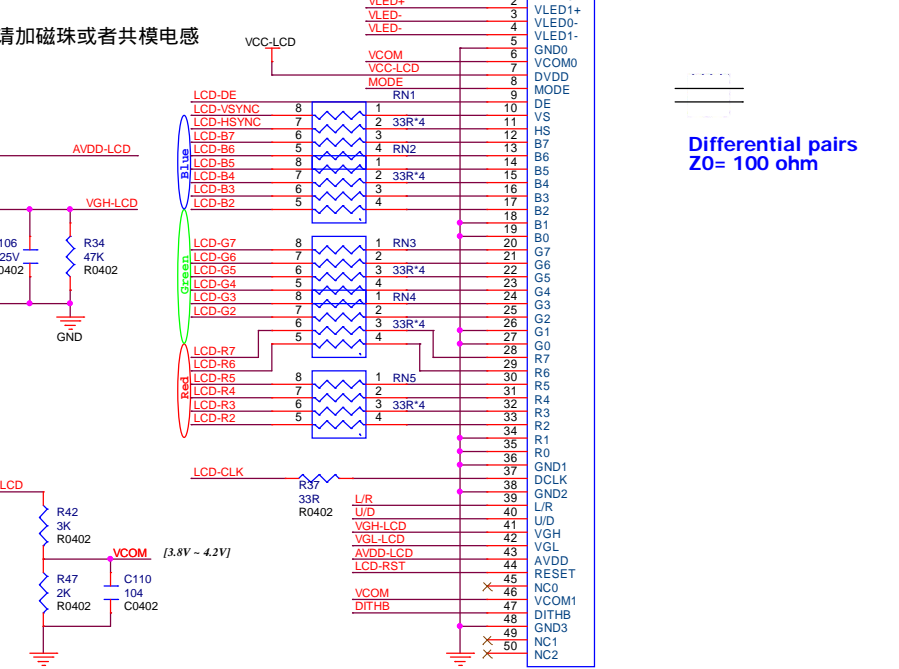
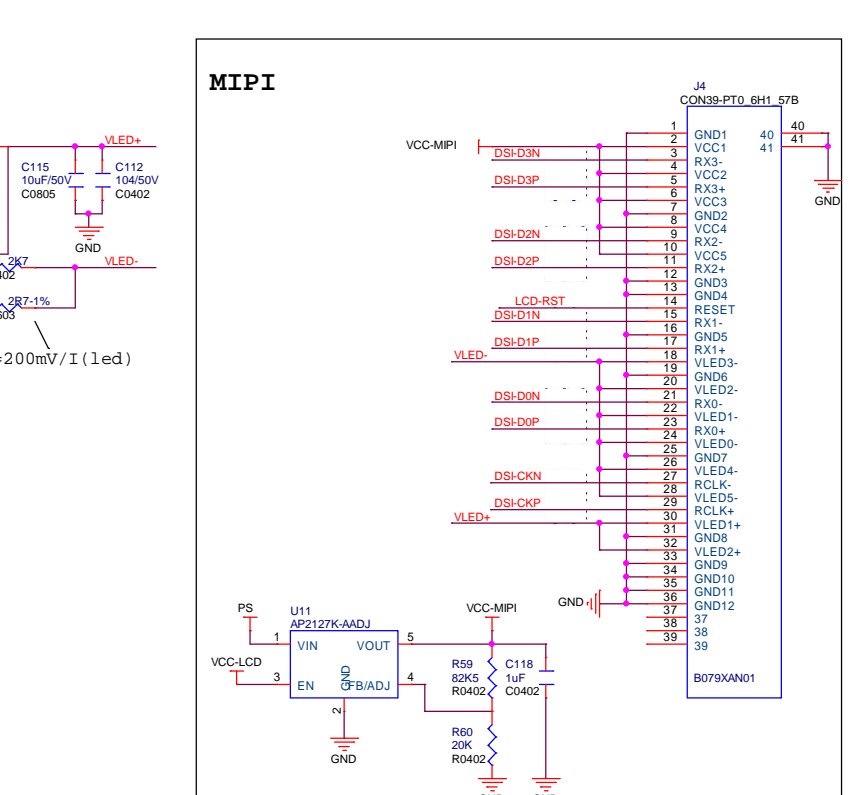
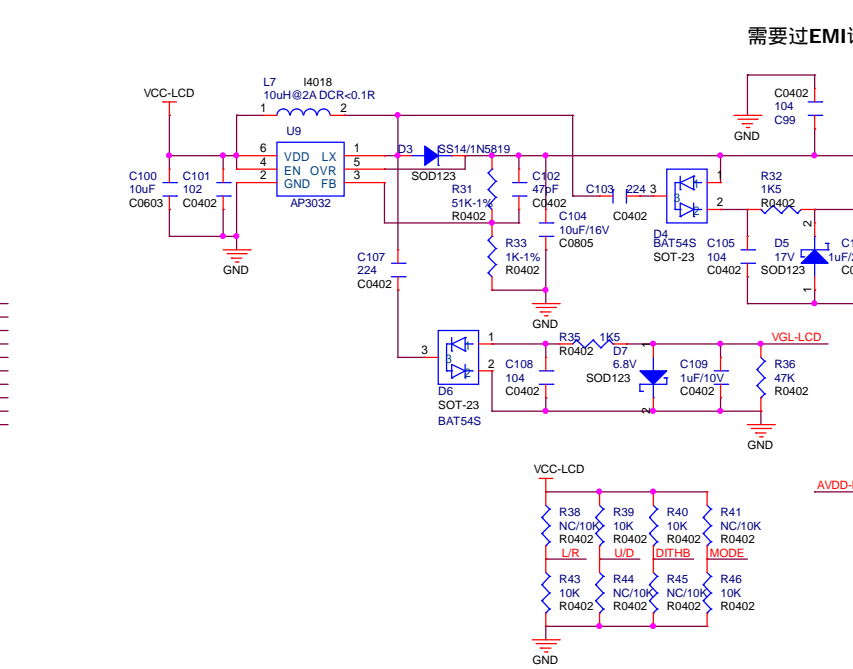
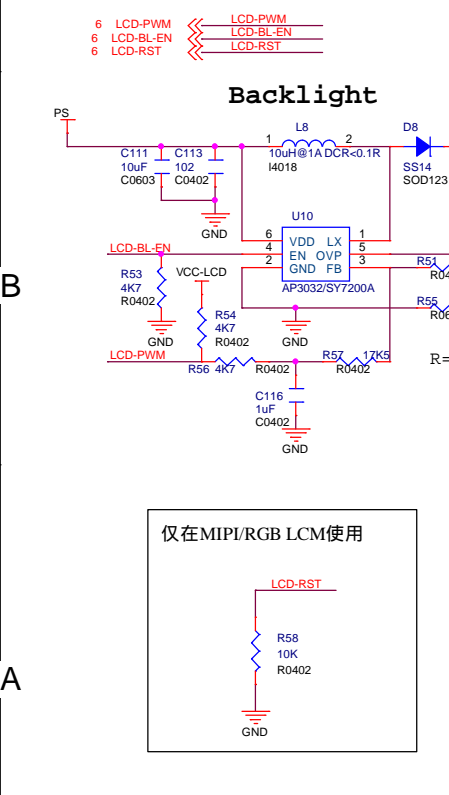
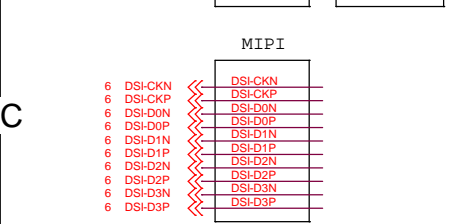
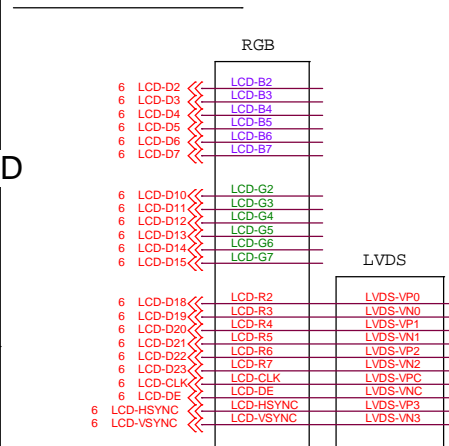
- 6 ND-DQ5 <-> ND-Q5 eMMC-RST
- 6 ND-DQ7 <-> ND-Q7 eMMC-D7
- 6 ND-DQ6 <-> ND-Q6 eMMC-D6
- 6 ND-DQ5 <-> ND-Q5 eMMC-D5
- 6 ND-DQ4 <-> ND-Q4 eMMC-D4
- 6 ND-DQ3 <-> ND-Q3 eMMC-D3
- 6 ND-DQ2 <-> ND-Q2 eMMC-D2
- 6 ND-DQ1 <-> ND-Q1 eMMC-D1
- 6 ND-DQ0 <-> ND-Q0 eMMC-D0

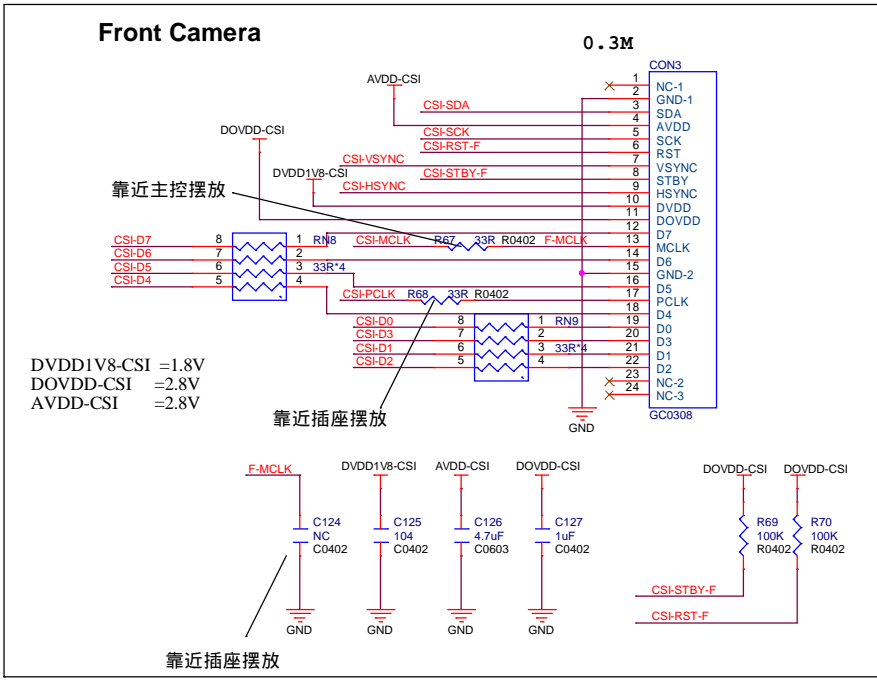
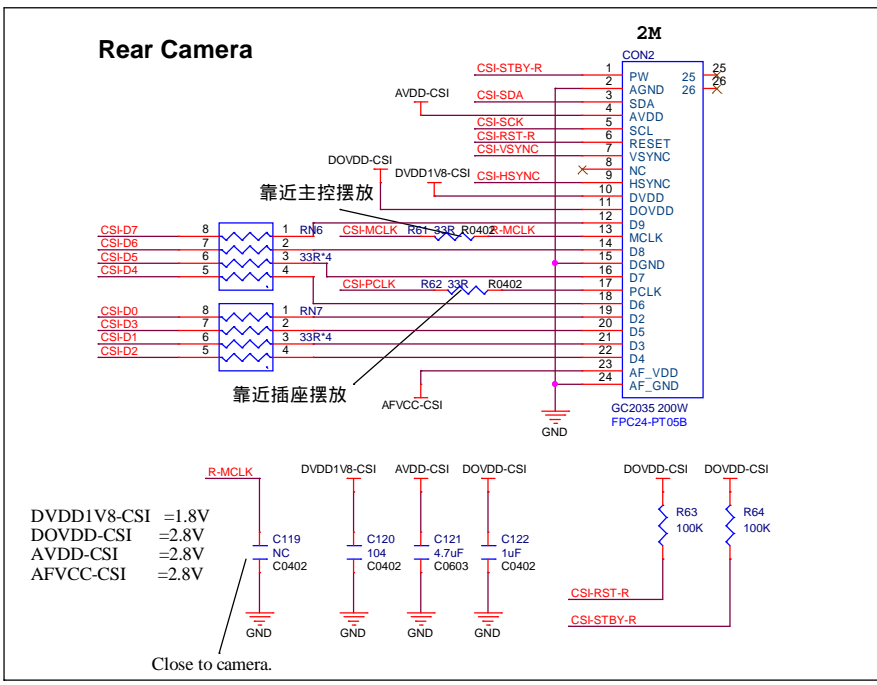
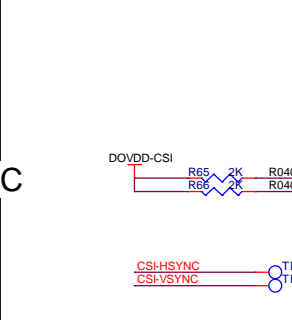
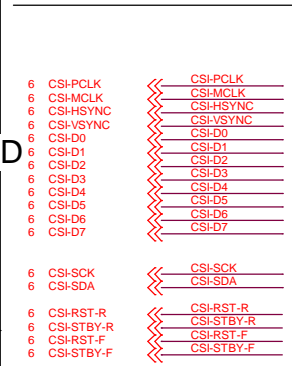
- 6 ND-RB0 <-> ND-RB0 eMMC-CMD
- 6 ND-RB1 <-> ND-RB1 eMMC-CLK
- 6 ND-RE <-> ND-RE eMMC-CE0
- 6 ND-CE0 <-> ND-CE0 eMMC-CE1
- 6 ND-CLE <-> ND-CLE eMMC-CE1
- 6 ND-ALE <-> ND-ALE eMMC-CE1
- 6 ND-WE <-> ND-WE eMMC-CE1



只贴一片NAND, 可以是1 CE或2 CE;
贴两片NAND, 两片都为1 CE

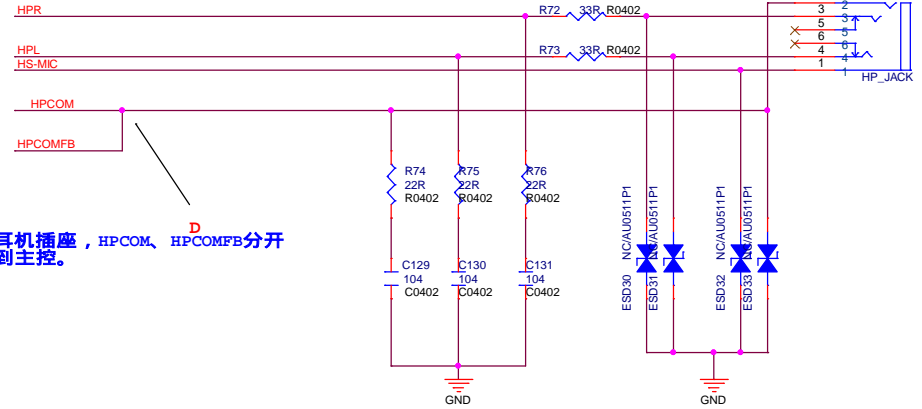
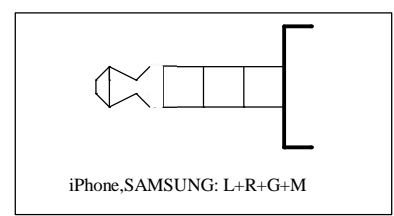
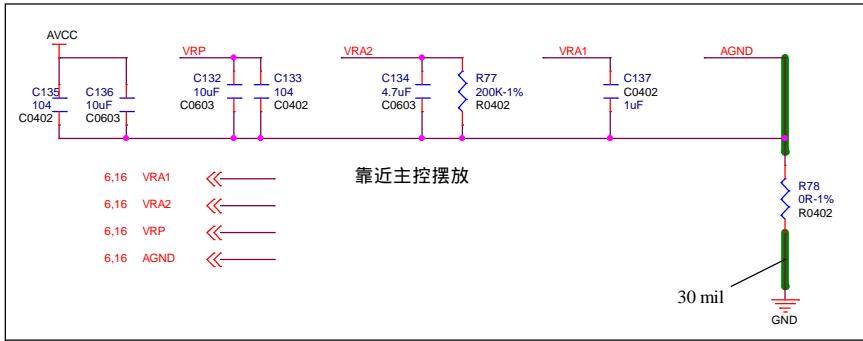
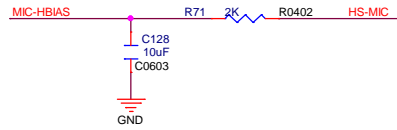
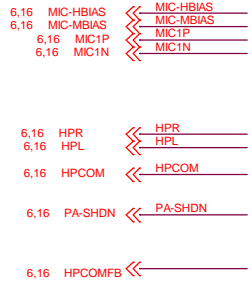






AUDIO(DC direct)

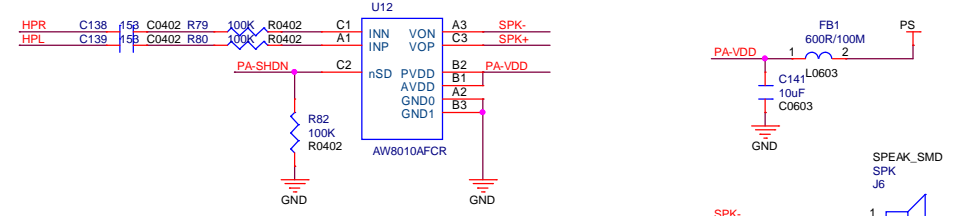
Head Phone



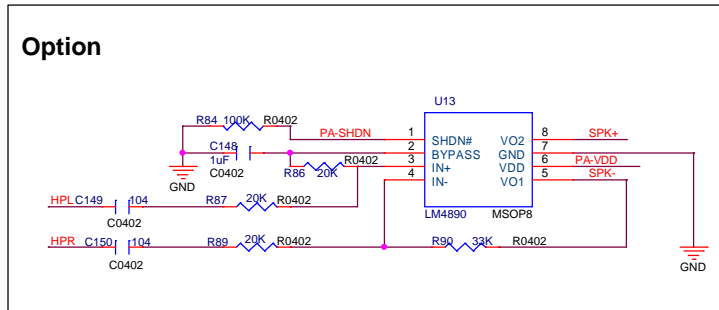
注:D点要靠近耳机插座, HPCOM、HPCOMFB分开走类差分线回到主控。

注:该电路为直接驱动模式电路,不支持耳机MIC,不适合金属外壳;如果要耳机MIC或外壳为金属,请参考Option:AUDIO(AC couple)部分的电路设计。

Speaker



Option



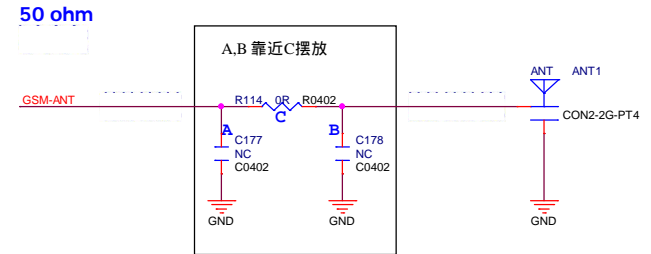
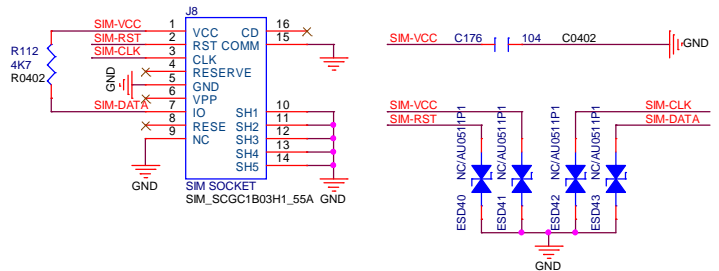
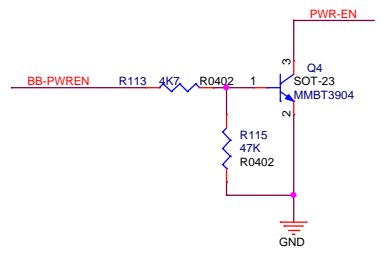
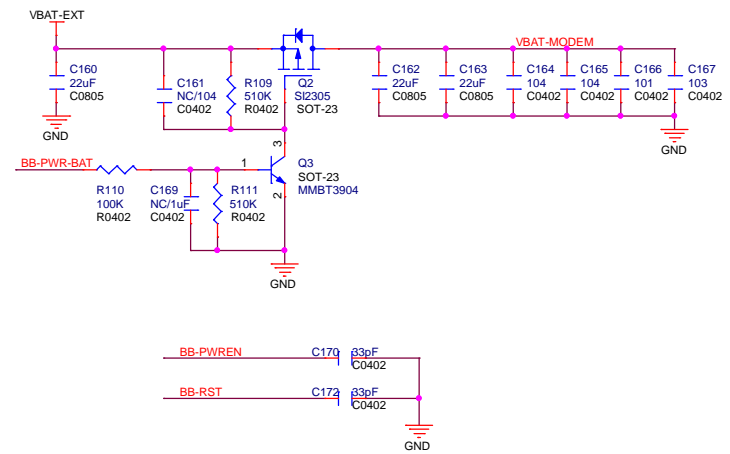
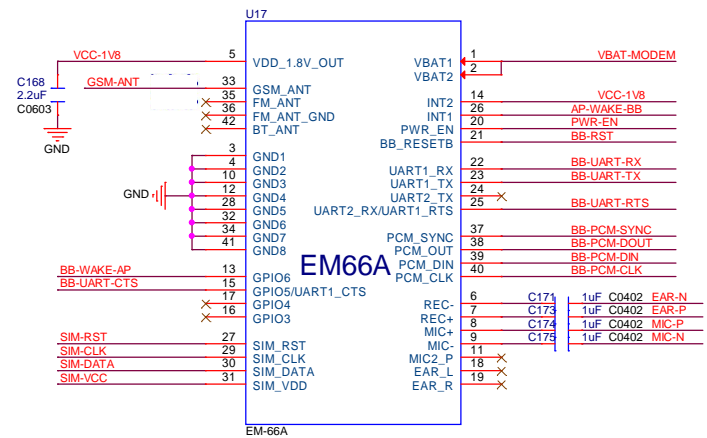
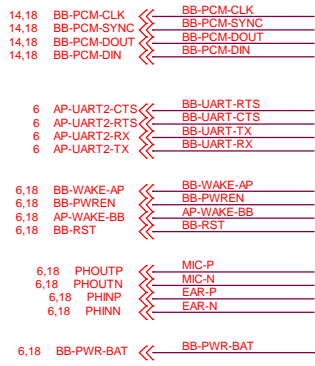
Allwinner Technology Co.,Ltd

Design Name: **A33/A23 Tablet STD**

Size: A3 Page Name: **AUDIO(DC direct)** Rev: _____

Date: Sunday, May 25, 2014 Sheet: 11 of 18

D
C
B
A

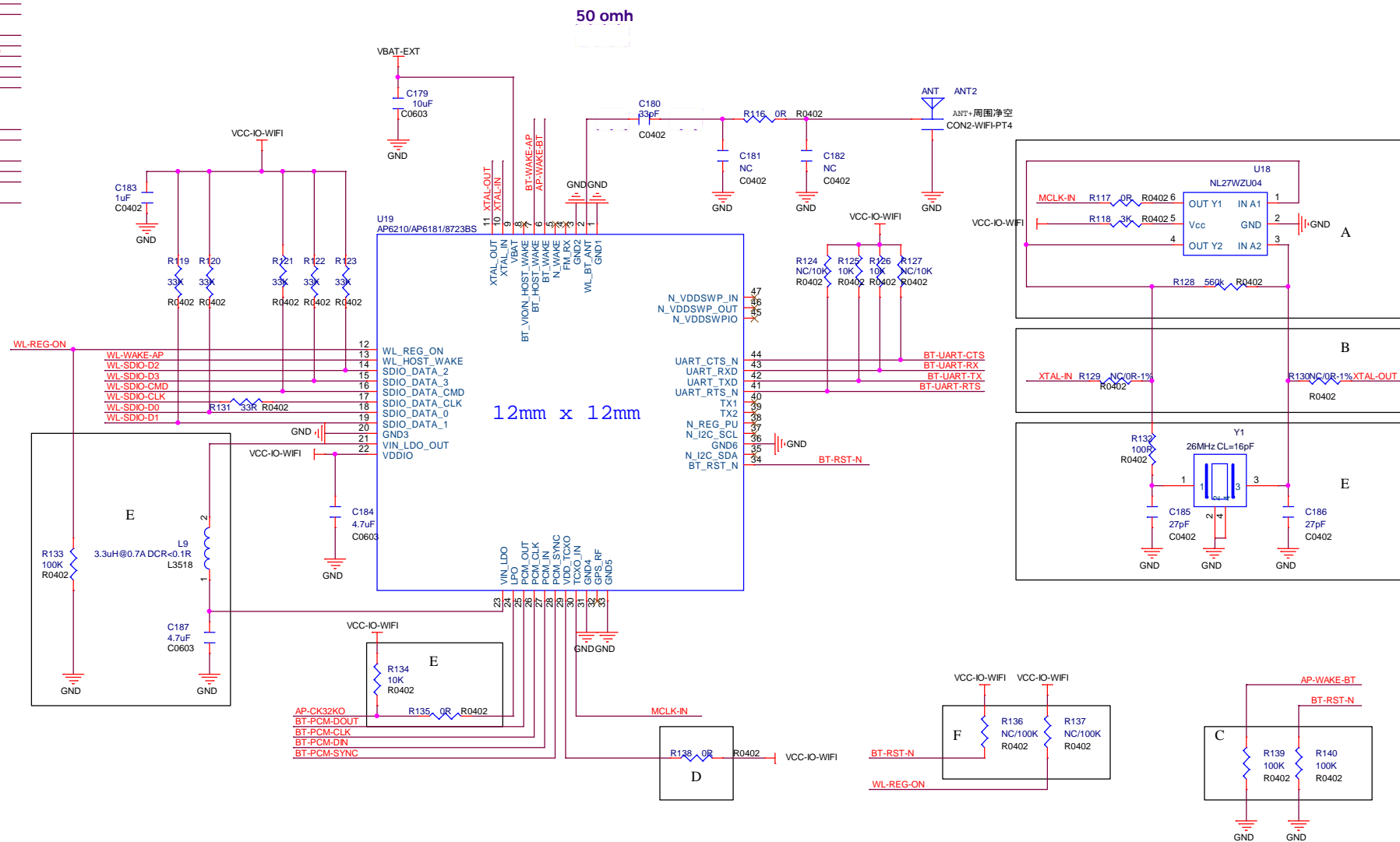


这部分电路根据天线的实际情况进行调整。

SDIO WIFI&BT

- 13,18 BB-PCM-CLK << BT-PCM-CLK
- 13,18 BB-PCM-SYNC << BT-PCM-SYNC
- 13,18 BB-PCM-DOUT << BT-PCM-DIN
- 13,18 BB-PCM-DIN << BT-PCM-DOUT
- 6 AP-UART1-CTS << BT-UART-RTS
- 6 AP-UART1-RTS << BT-UART-CTS
- 6,17 AP-UART1-RX << BT-UART-TX
- 6,17 AP-UART1-TX << BT-UART-RX
- 6,17 WL-SDIO-D2 << WL-SDIO-D2
- 6,17 WL-SDIO-D3 << WL-SDIO-D3
- 6,17 WL-SDIO-CMD << WL-SDIO-CMD
- 6,17 WL-SDIO-CLK << WL-SDIO-CLK
- 6,17 WL-SDIO-D0 << WL-SDIO-D0
- 6,17 WL-SDIO-D1 << WL-SDIO-D1
- 6,17 WL-PMU-EN << WL-REG-ON
- 6,17 WL-WAKE-AP << WL-WAKE-AP
- 6 BT-WAKE-AP << BT-WAKE-AP
- 6 BT-RST-N << BT-RST-N
- 6 AP-WAKE-BT << AP-WAKE-BT
- 6 AP-CK32KO << AP-CK32KO

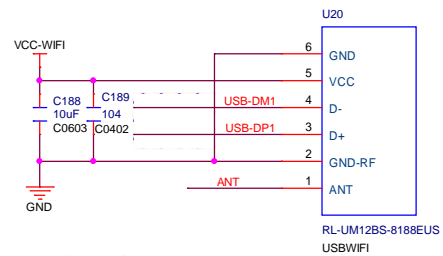
Note:
 AP6210, 貼 A+C+D+E, 不貼B+F
 AP6181, 貼 B+E, 不貼A+C+D+F
 8723BS, 貼F, 不貼A+B+C+D+E



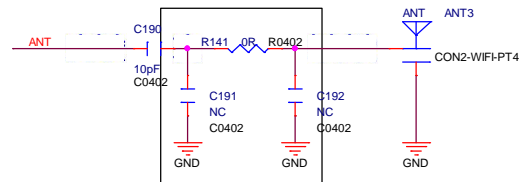
Allwinner Technology Co., Ltd			
		Design Name	
A33/A23 Tablet STD			
Size	Page Name	Rev	
A3	SDIO WIFI&BT		
Date:	Friday, May 23, 2014	Sheet	14 of 18

USB WIFI

当使用3G模组时，请使用SDIO接口WIFI模组，不要使用USB接口的WIFI模组。



特别注意wifi 模组的封装，脚位定义的正确性



这部分电路根据天线的实际情况进行调整。

AUDIO(AC couple)

注：该页为耦合驱动模式电路，如果使用耳机MIC或外壳为金属，请参考该部分的电路设计。

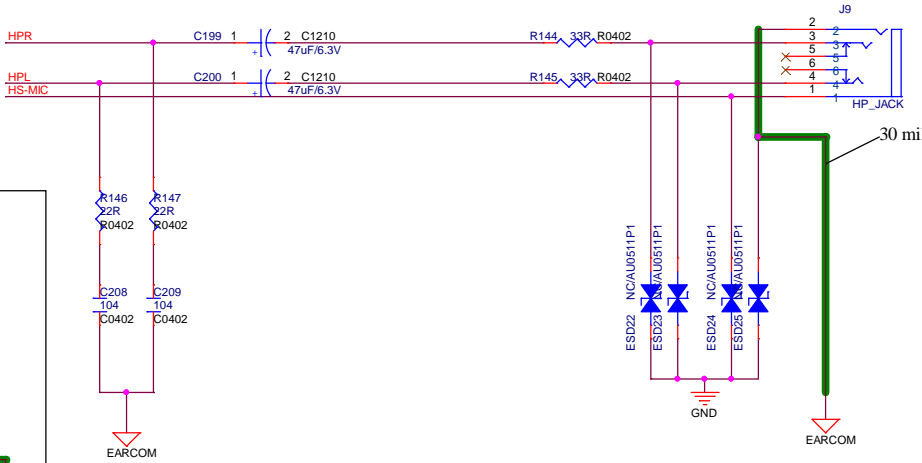
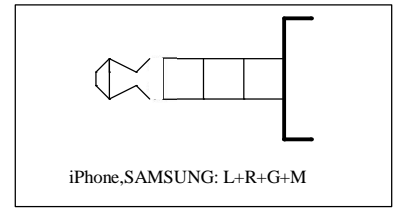
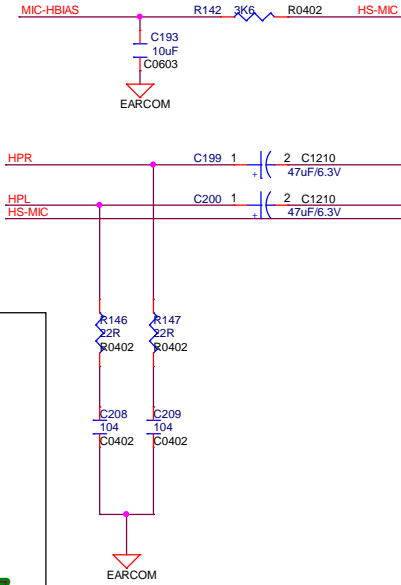
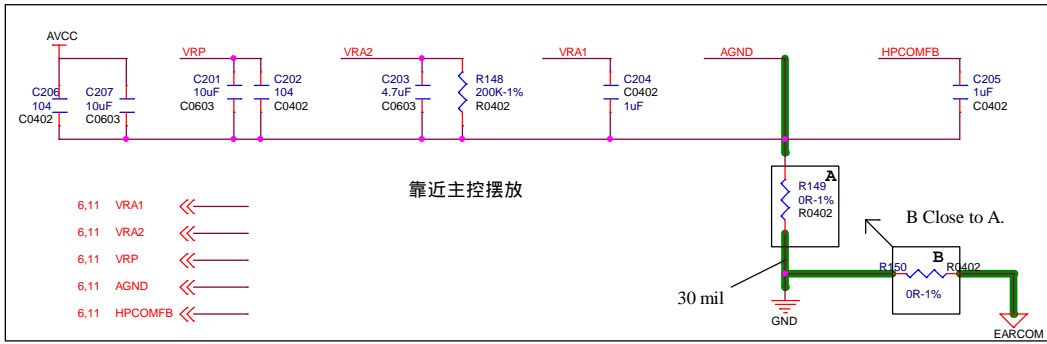
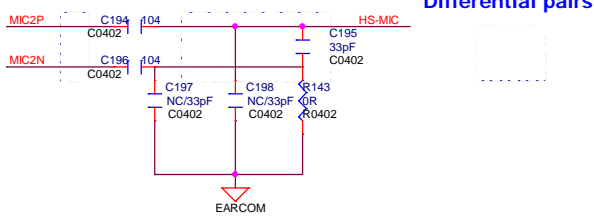
Head Phone

- 6,11 MIC-HBIAS << MIC-HBIAS
- 6,11 MIC-MBIAS << MIC-MBIAS
- 6,11 MIC1P << MIC1P
- 6,11 MIC1N << MIC1N
- 6 MIC2P << MIC2P
- 6 MIC2N << MIC2N

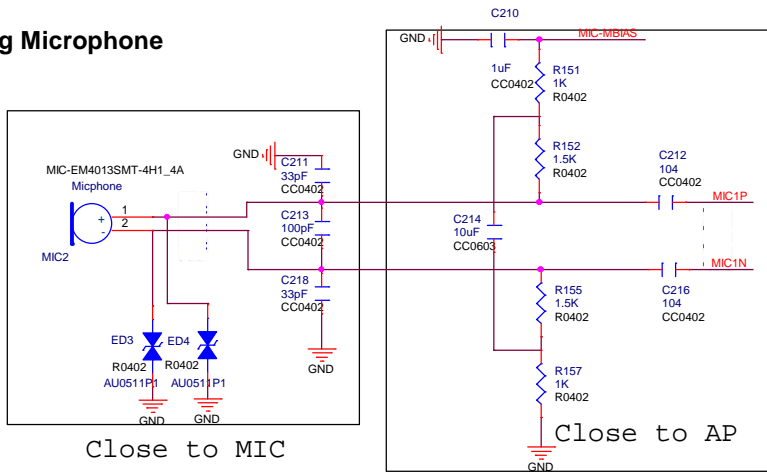
- 6,11 HPR << HPR
- 6,11 HPL << HPL

- 6,11 HPCOM << HPCOM

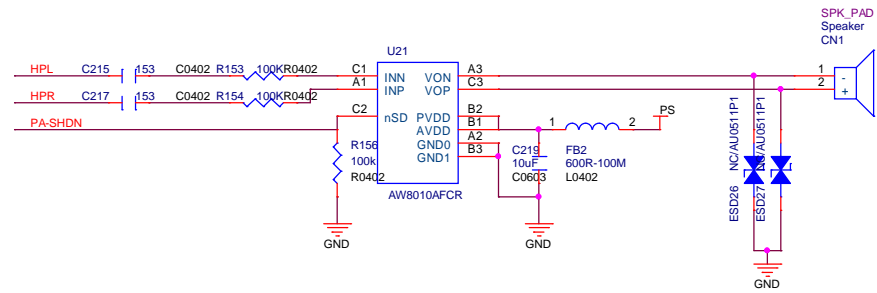
- 6,11 PA-SHDN << PA-SHDN



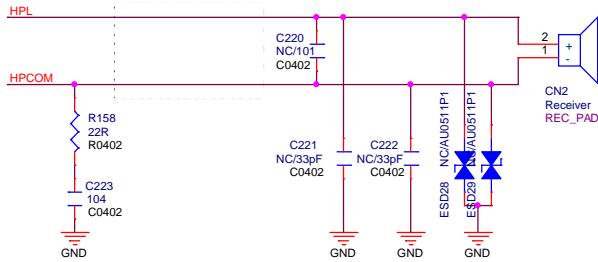
Analog Microphone



Speaker

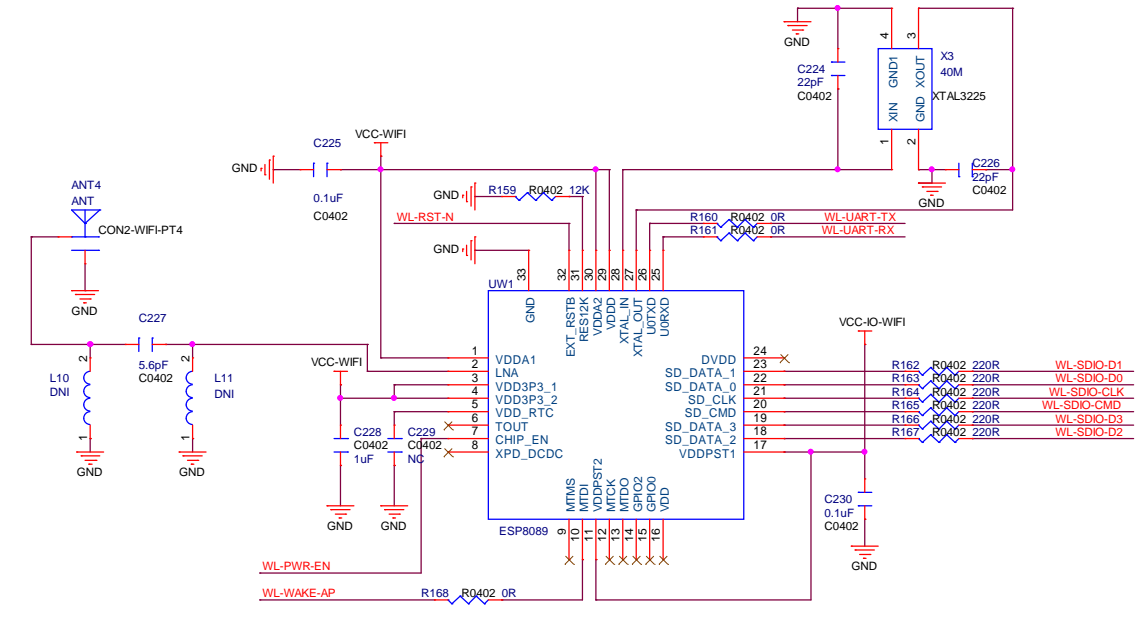


Receiver

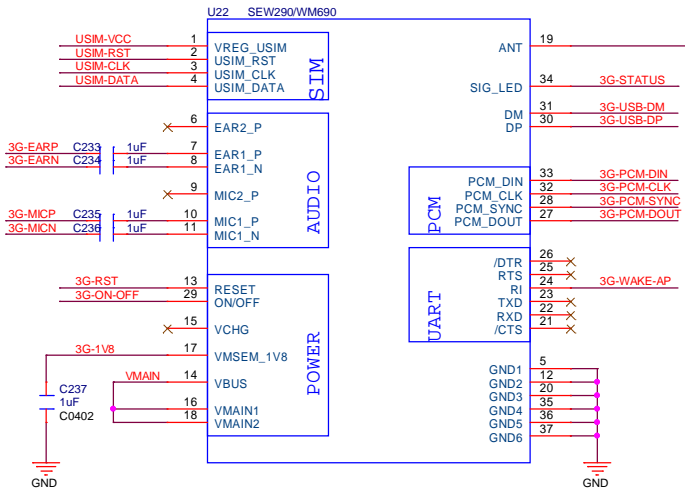
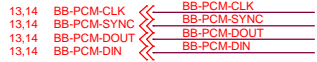


SDIO WIFI

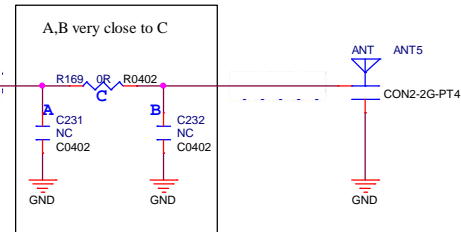
- 6,14 WL-SDIO-D2
- 6,14 WL-SDIO-D3
- 6,14 WL-SDIO-CMD
- 6,14 WL-SDIO-CLK
- 6,14 WL-SDIO-D0
- 6,14 WL-SDIO-D1
- 6,14 WL-UART-TX
- 6,14 WL-UART-RX
- 6,14 WL-RST-N
- 6 WL-RST-N
- 6,14 WL-PMU-EN
- 6,14 WL-WAKE-AP



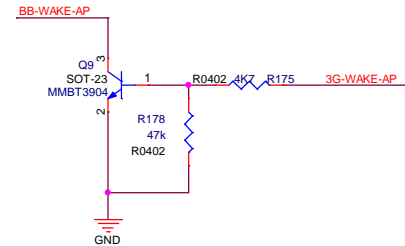
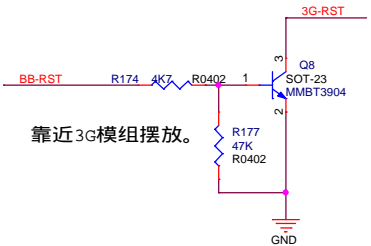
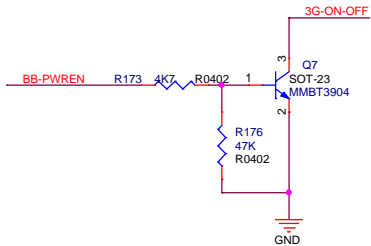
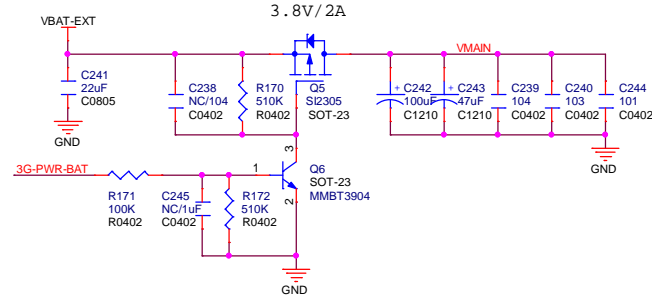
MODEM 3G



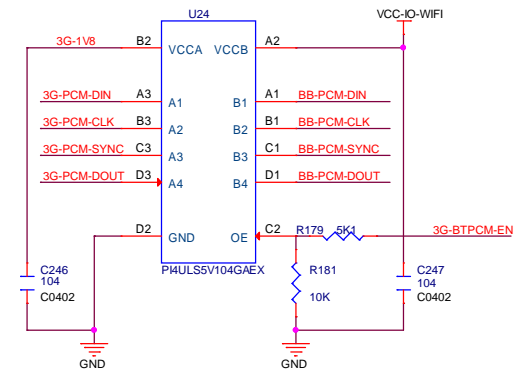
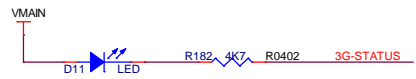
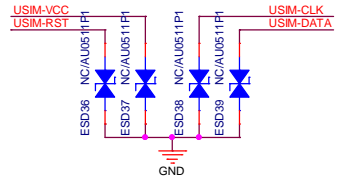
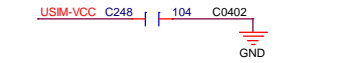
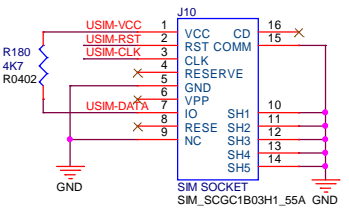
50 ohm



请根据天线实际情况调整匹配电路



注意：
需要电压VCCB>=VCCA。



VCCB电压与蓝牙的供电保持一致；