

# ATM7051H标案原理图

## Revision History

V1.0	Release	2016-01-13
V1.1	增加COB_8703BS	2016-01-28

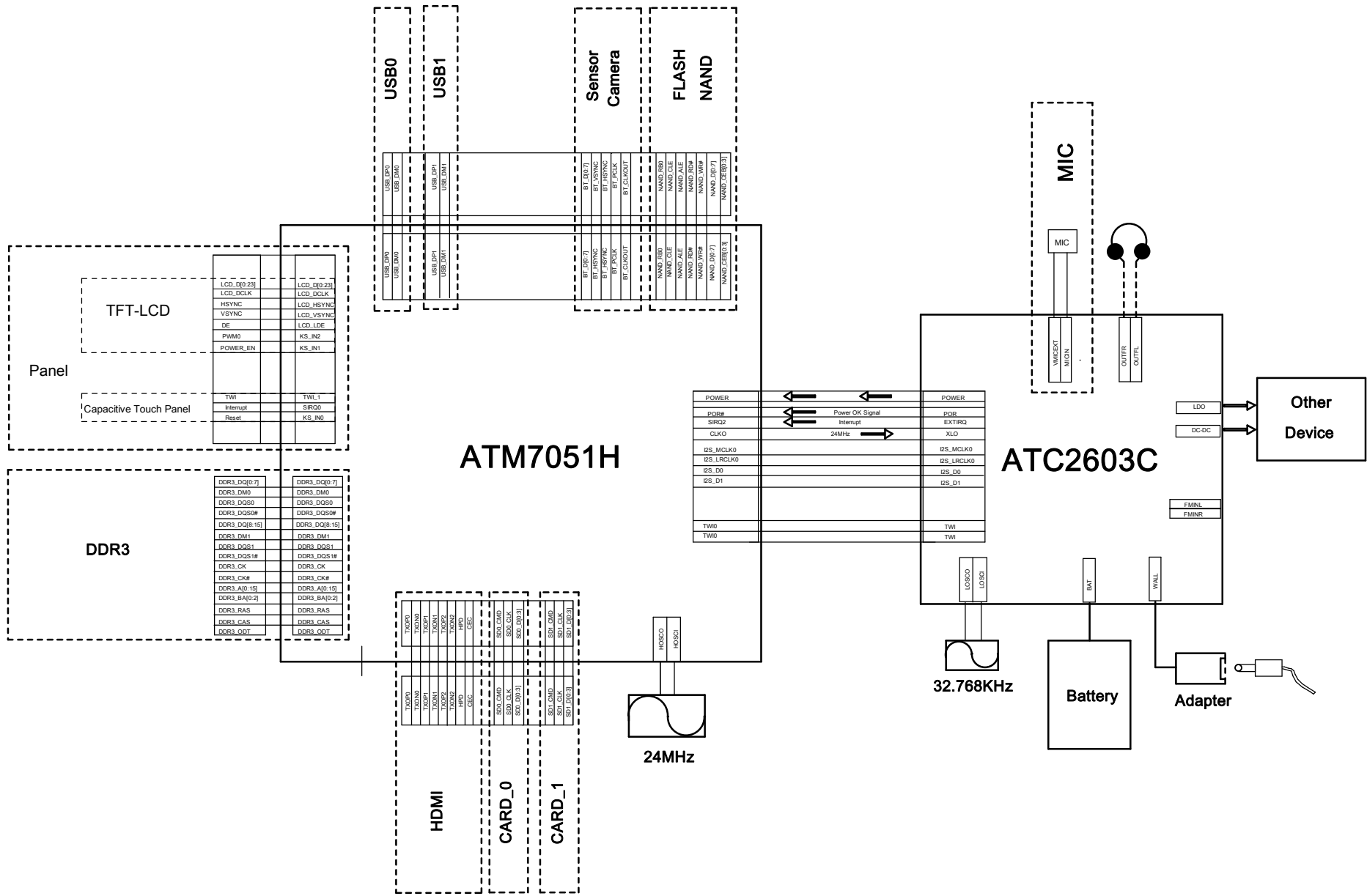
## GPIO Inital State

Pin Name	GPIO	Inital State
NAND_DQS	GPIOC28	Z
I2S_BCLK0	GPIOA28	Z
KS_IN0	GPIOB3	1*
KS_IN1	GPIOB4	1*
KS_IN2	GPIOB5	1*
KS_IN3	GPIOB6	Z
KS_OUT0	GPIOB7	Z
KS_OUT1	GPIOB8	1*
OEP	GPIOB10	Z
OEN	GPIOB11	Z
ODP	GPIOB12	Z
ODN	GPIOB13	Z
OCP	GPIOB14	Z
OCN	GPIOB15	Z
OBP	GPIOB16	Z
OBN	GPIOB17	Z
OAP	GPIOB18	Z
OAN	GPIOB19	Z
P_LCD0_VSYNC0	GPIOB12	Z
P_LCD0_HSYNC0	GPIOB19	Z

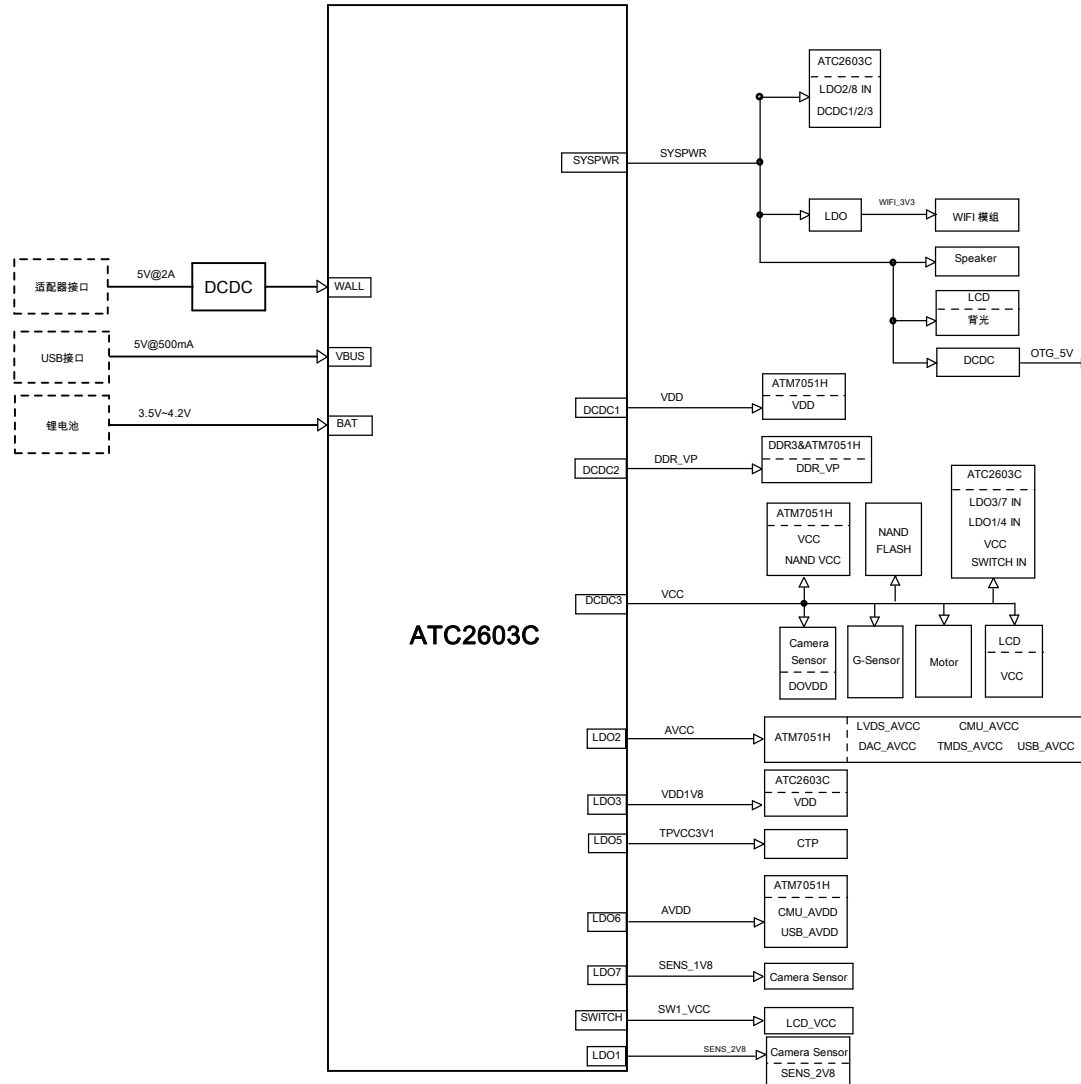
X: 状态不确定    Z: 高阻态

注1: 1\*表示IC内部弱上拉, 上拉电阻约为100K。

# ATM7051H标案原理图



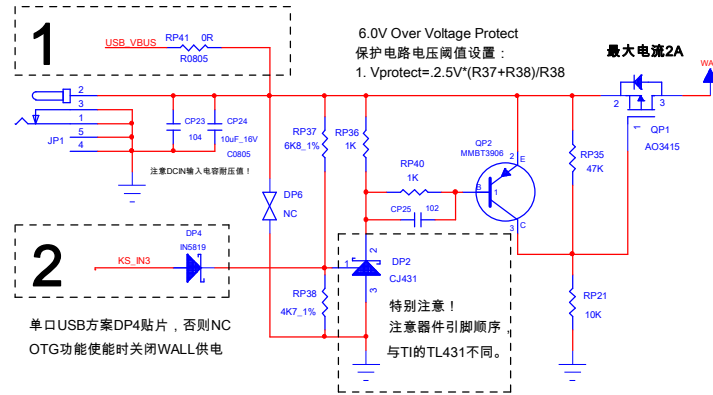
# ATM7051H POWER TREE



# POWER IN

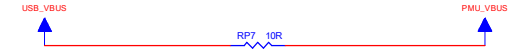
	1	2	3	4
双口方案	N	N	N	Y
单USB口方案	Y	Y	Y	N

## DC Adapter IN 保护电路



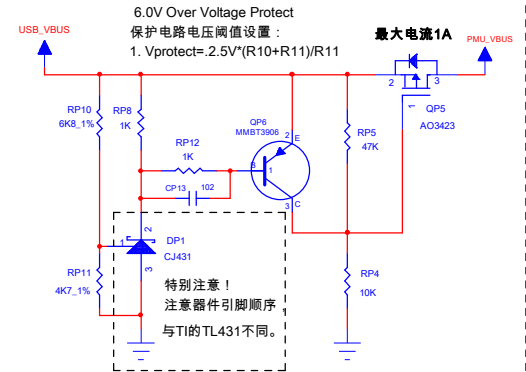
单口USB方案DP4贴片，否则NC  
OTG功能使能时关闭WALL供电

3



4

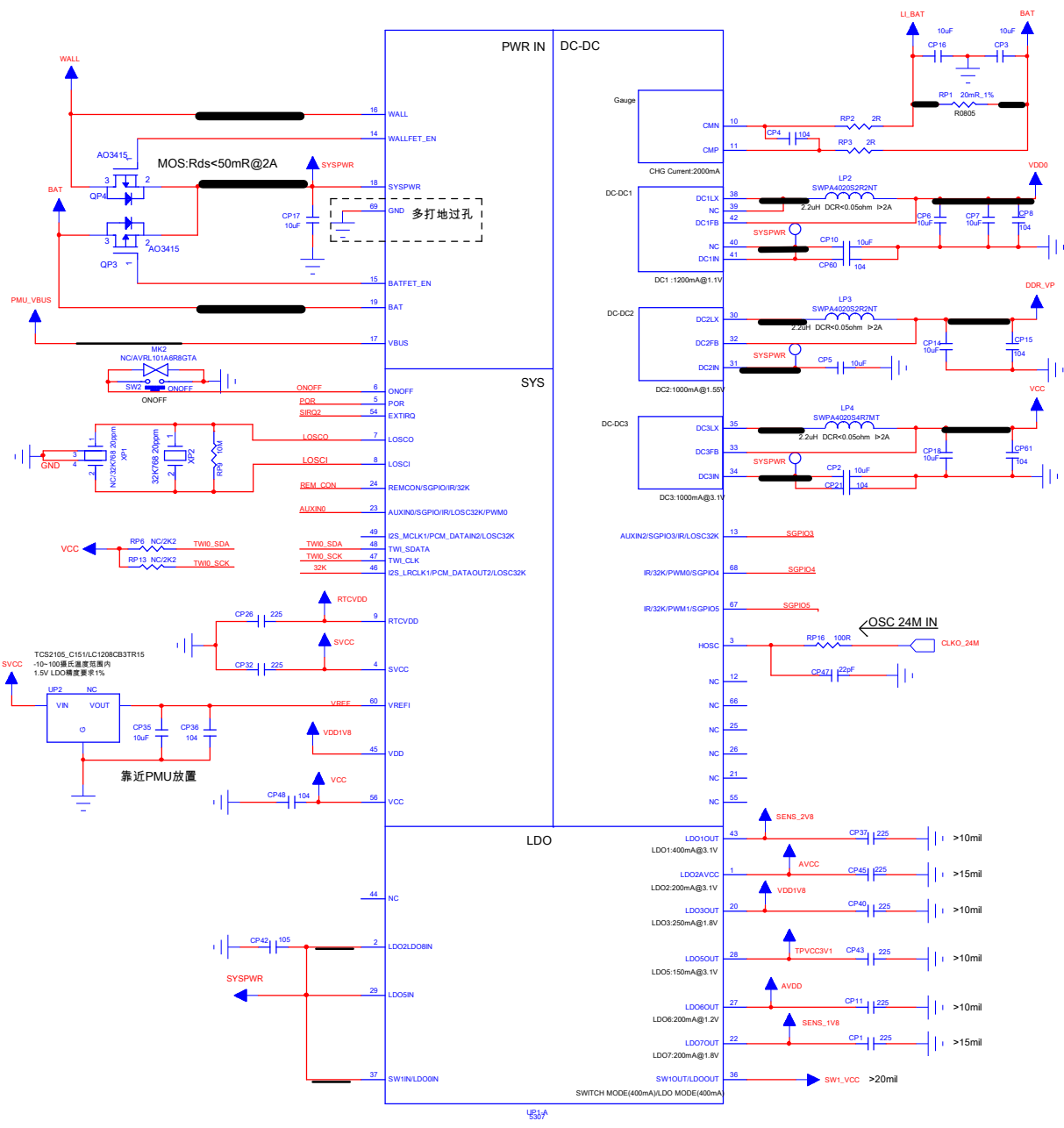
## USB IN 保护电路



## Battery PORT



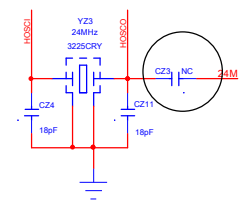
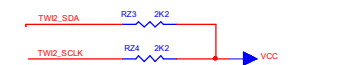
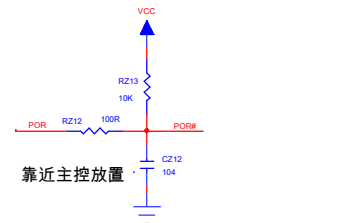
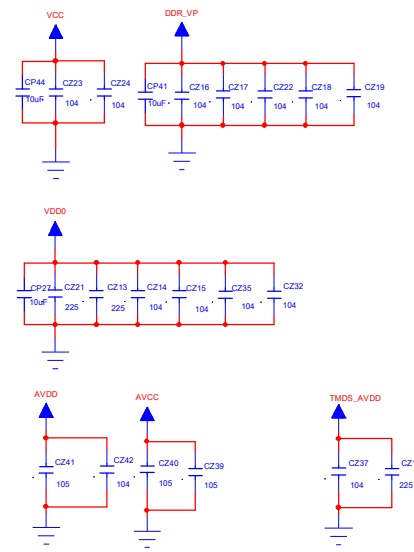
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Drawing No:	Version: V1.0
Drawn By:	Date: 2018/2/23
Checked By:	Date:
Approved By:	Date:
Size: A3	Sheet: 4 14



PCB Layout Trace Width:

- 80Mil
- 50Mil
- 20Mil

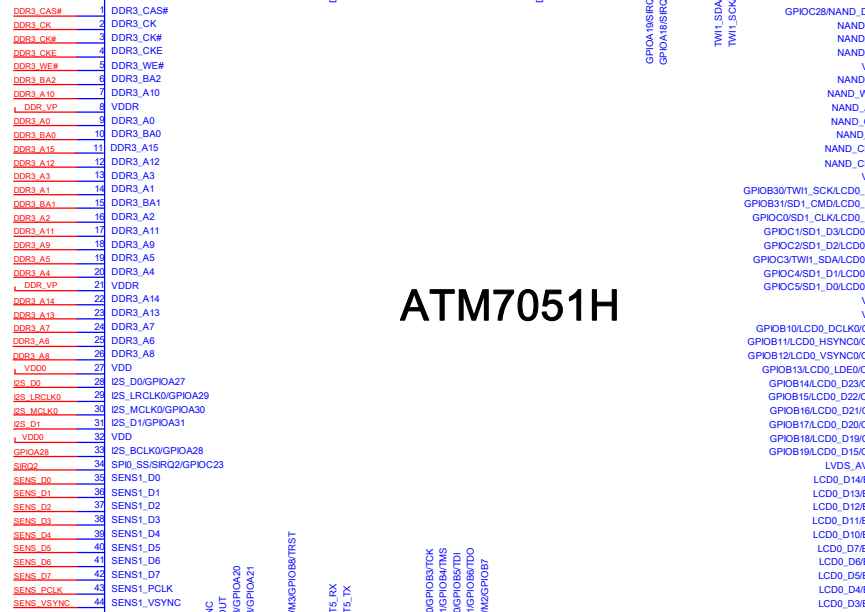
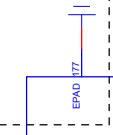
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Drawn By:	Date: 2016/2/23
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Size: A3	Sheet: 5 14



	R25	R26
RGB	0R	NC
LVDS	NC	0R

# ATM7051H

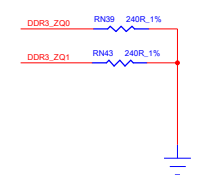
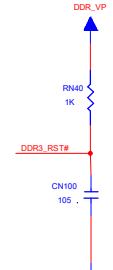
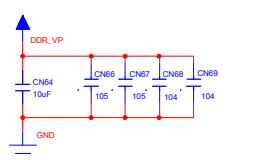
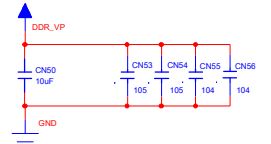
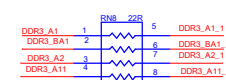
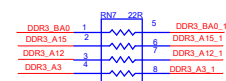
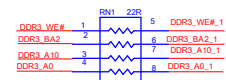
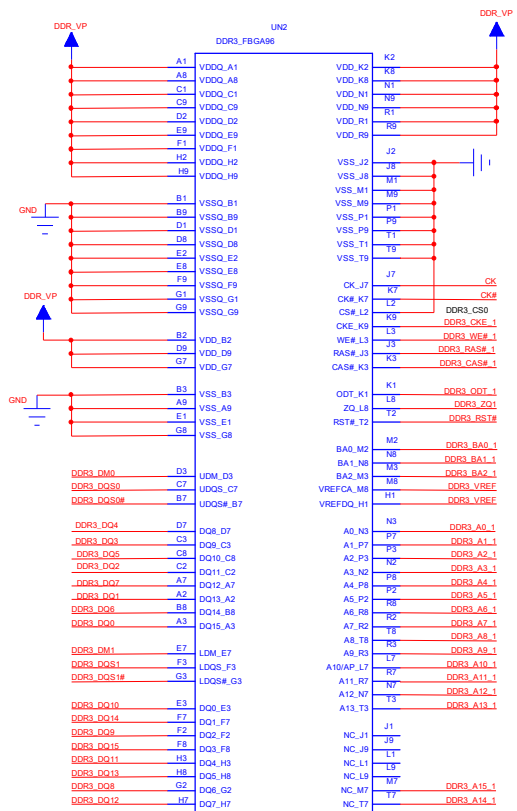
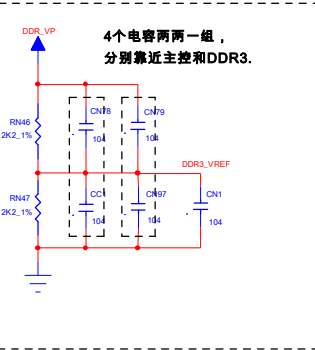
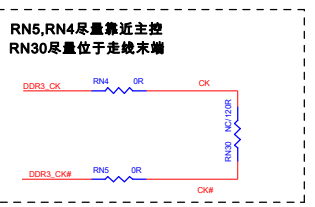
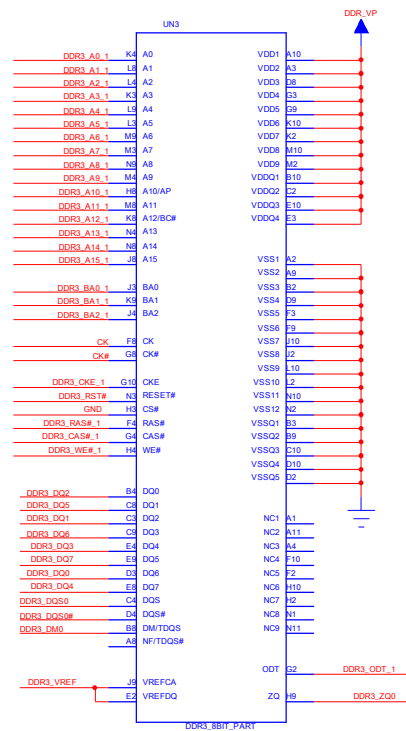
多打地孔



当使用3线UART时,  
UART\_CTSB需接地。

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Checked By:	Date:
Approved By:	Date:
Size	A3
Sheet:	

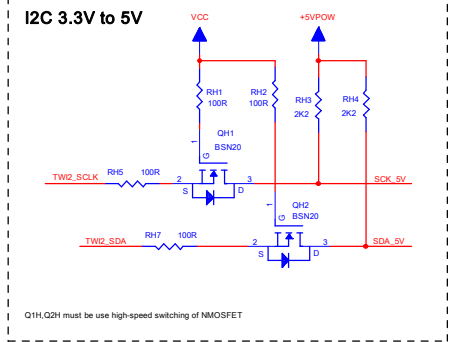
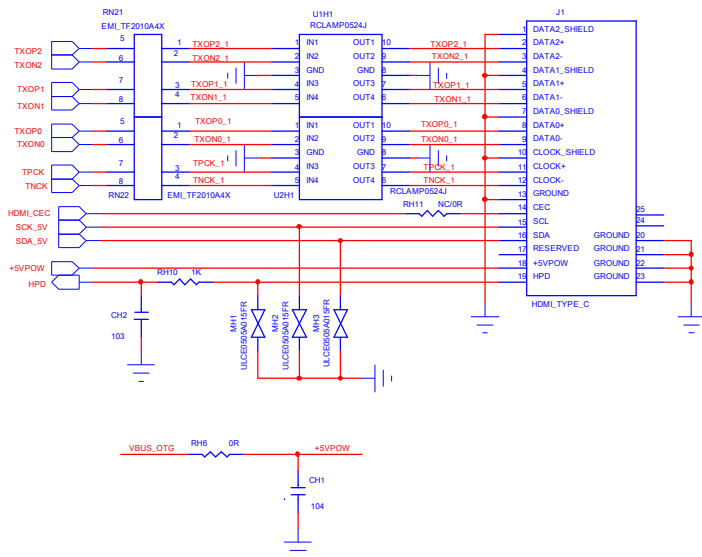
DDR3\_2 X 8BIT



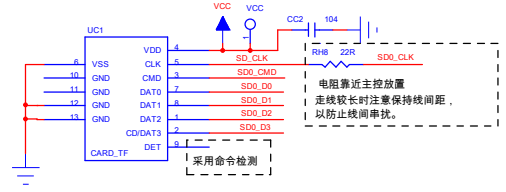
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# HDMI

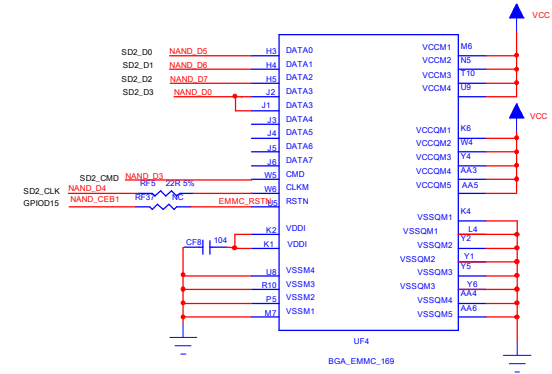
ESD/EMI器件根据实际情况删减



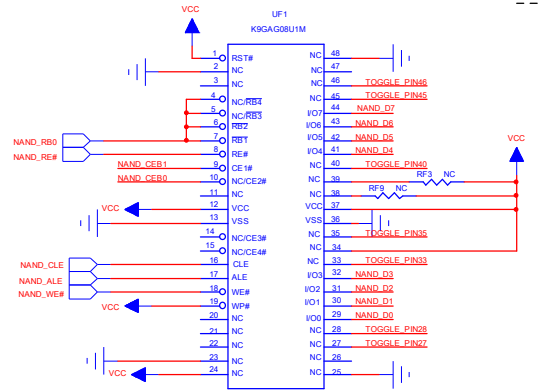
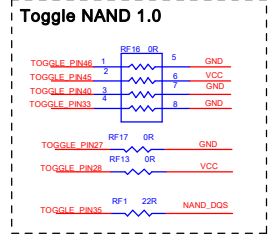
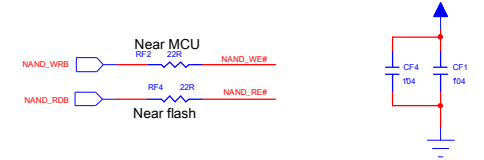
# TF CARD



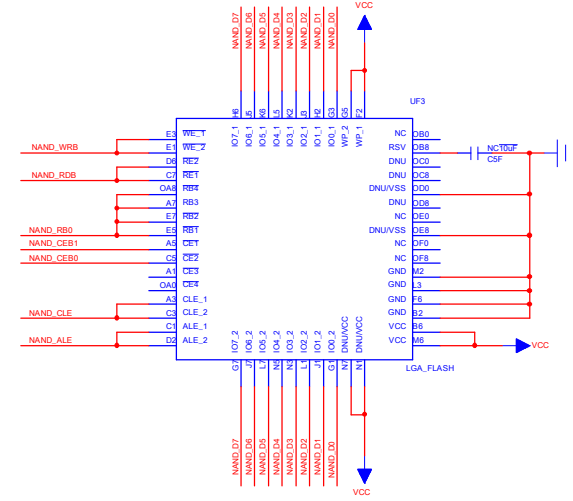
# eMMC



# NANDFLASH



# LGA FLASH

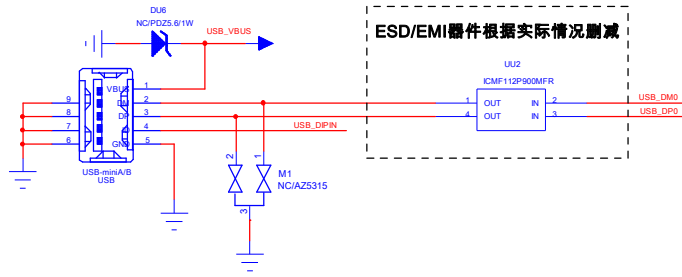


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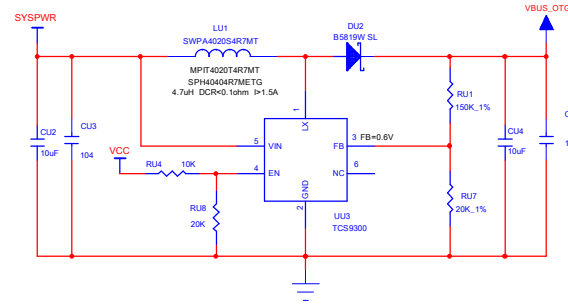


# USB

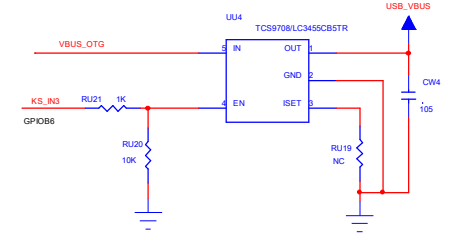
## USB2.0 microAB



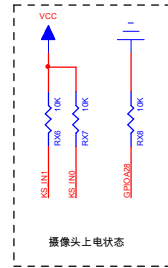
## USB OTG Power



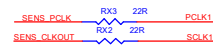
## USB Current Switch



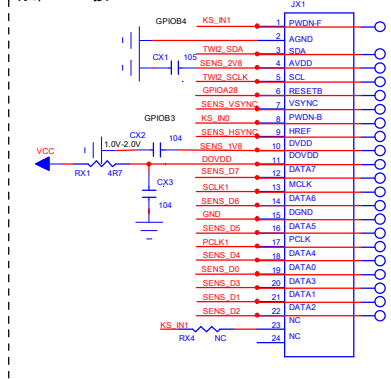
# CAMERA SENSOR



摄像头电状态



## 标准24Pin接口

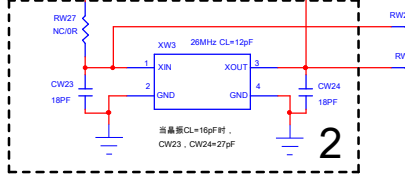
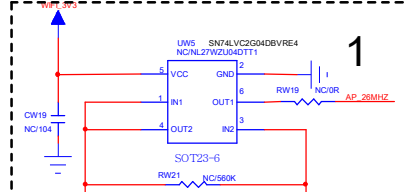
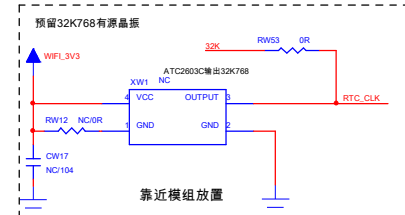


摄像头接口请根据其SPEC连接，制作PCB封装。

Actions Semiconductor Co.,Ltd	
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Approved By:	Date:
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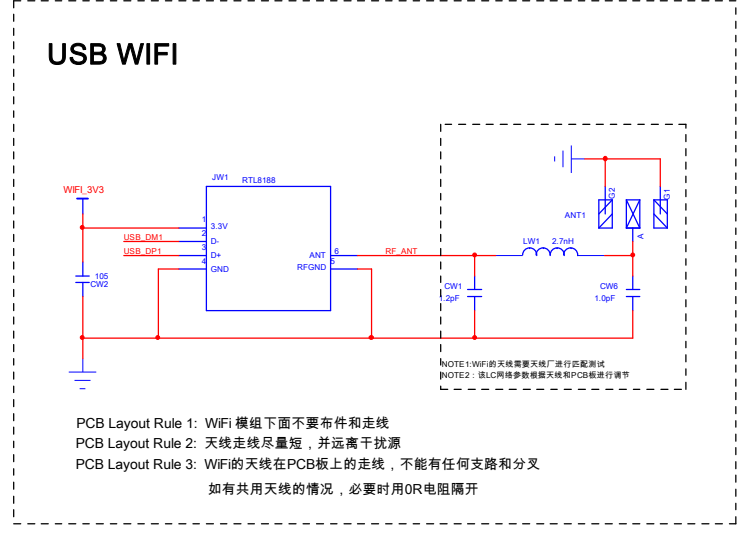
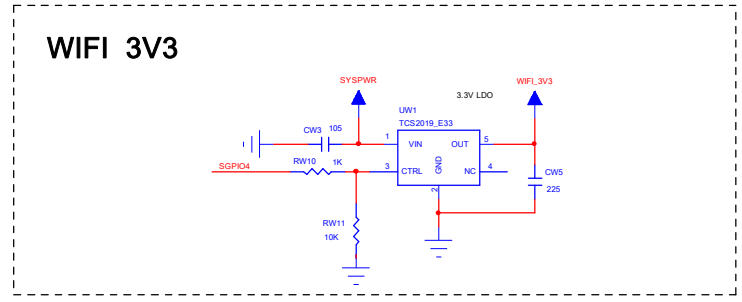
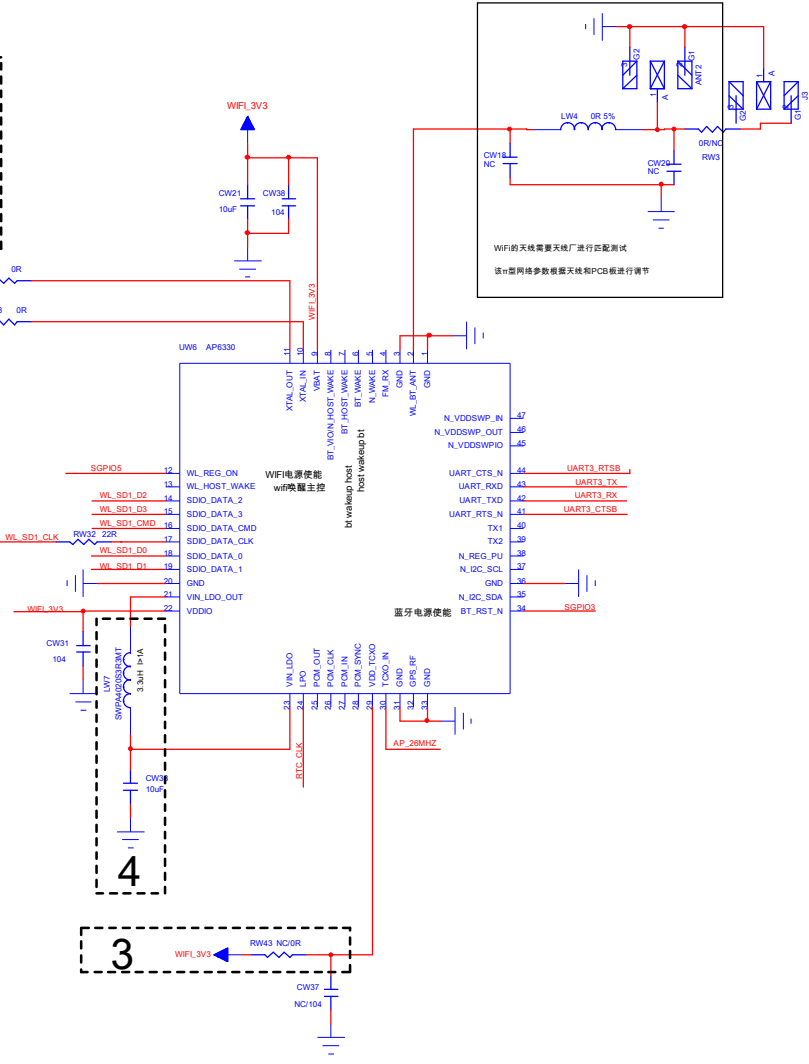
# WIFI&BT

——原理图默认贴AP6212，其他模组注意根据表格修改参数



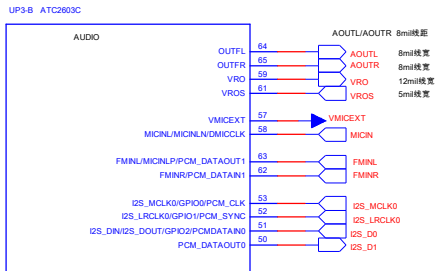
模组	电路	1	2	3	4
AP6181		N	Y	N	Y
AP6210		Y	Y	Y	Y
AP6212		N	Y	N	Y
AP6330		N	Y	N	Y
RTL8723BS		N	N	N	N

WIFI_EN	SGPIO5
BT_EN	SGPIO3
PWR_EN	SGPIO4
SDIO	SDIO1

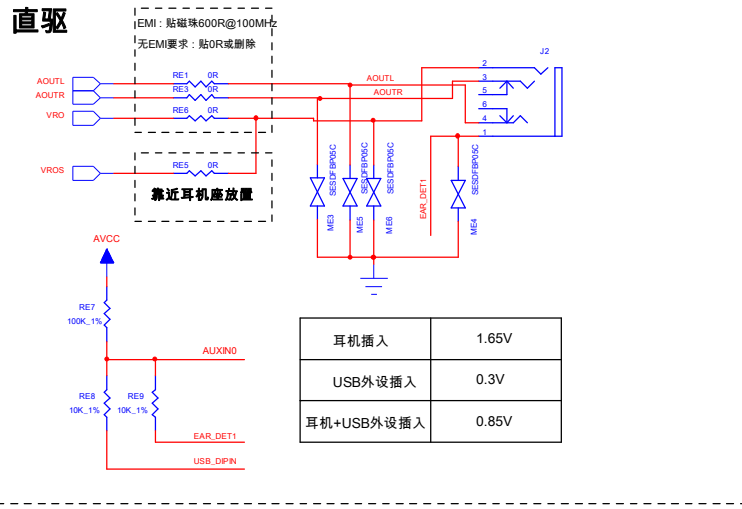


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Checked By:	Date:
Approved By:	Date:
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# Earphone

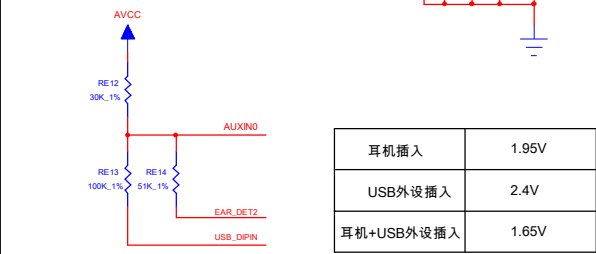


## 直驱

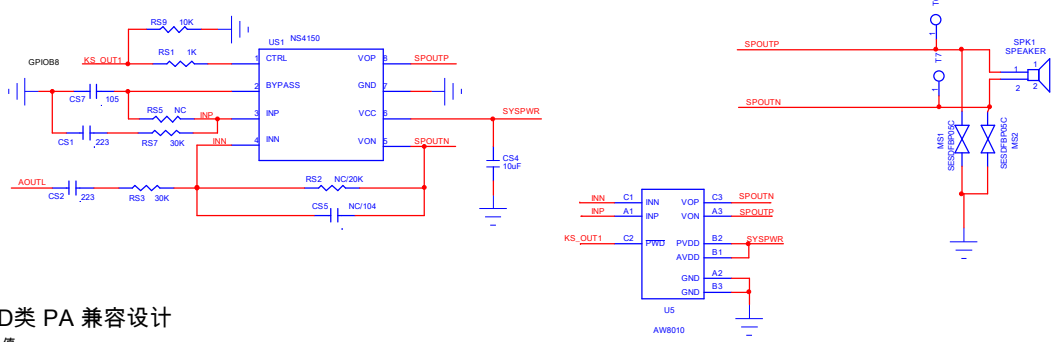


## 非直驱

金属外壳模具  
务必使用非直驱电路  
以免金属外壳对音频造成干扰



# PA



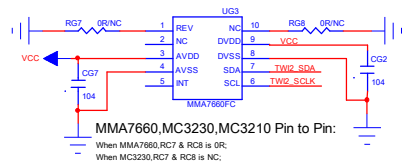
## AB类与D类PA兼容设计

D类：如上默认值  
AB类：CS1,RS7需要NC, RS5=0R, RS3=20K, RS2=27K

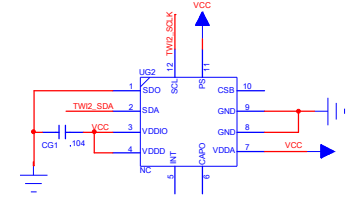
# G-Sensor

G-Sensor在PCB上的摆放方向：  
正对着样机看，G-Sensor的第1脚  
对着样机的左上角。

MMA7660 Slave Address:0x4c  
MC3230 Slave Address:1001100b

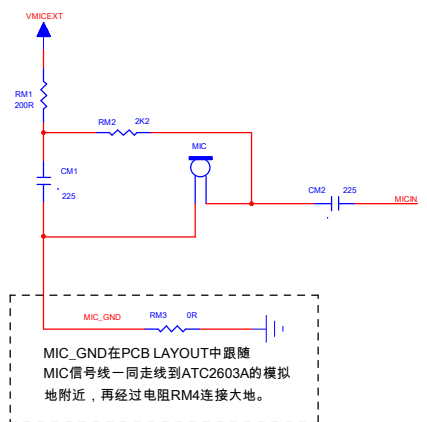


# BMA220/222/250



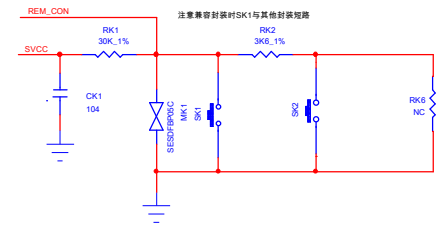
BMA Slave Address:0001000b

# MIC



# MMA8452Q

## Key

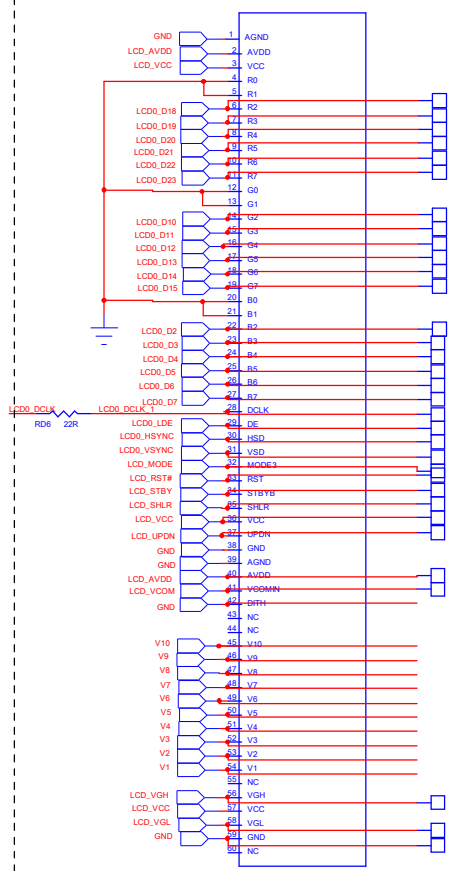


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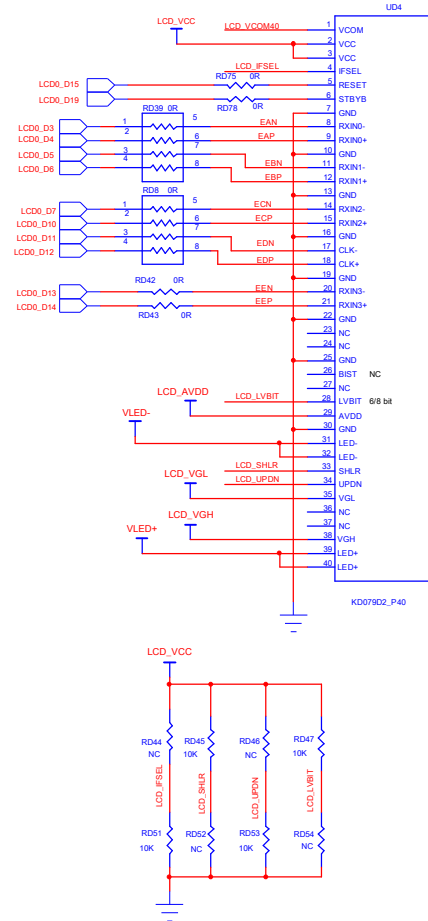
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Drawn By:	Date:
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# RGB

请注意PCB封装的第1脚顺序是否正确

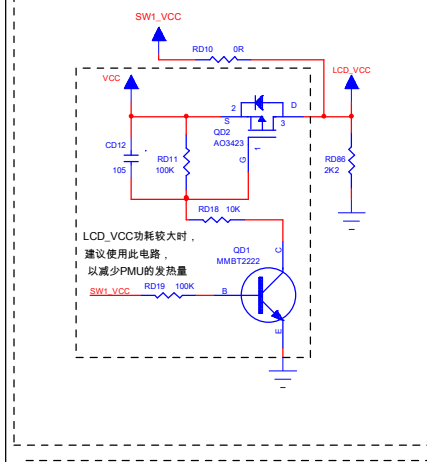


# LVDS

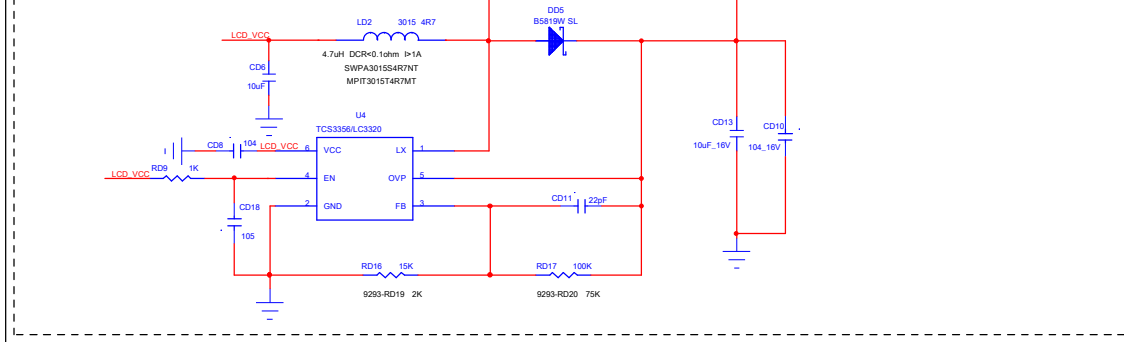
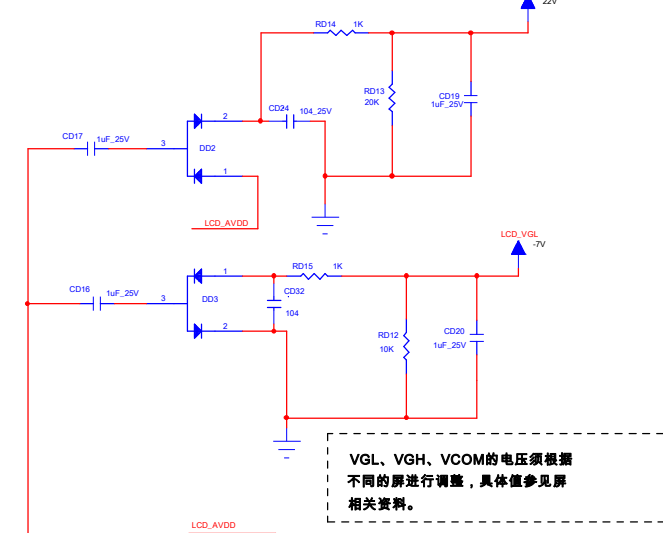


# LCD POWER

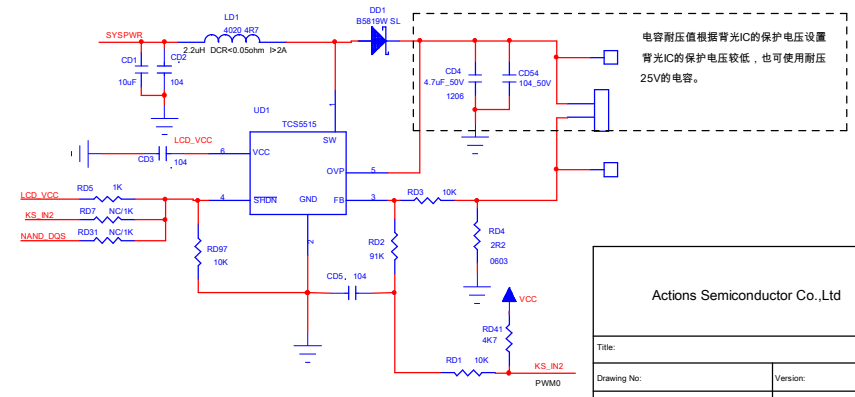
## LCD VCC



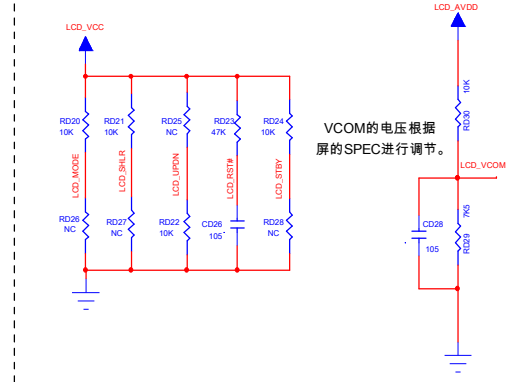
## VGL/VGH



## Back Light



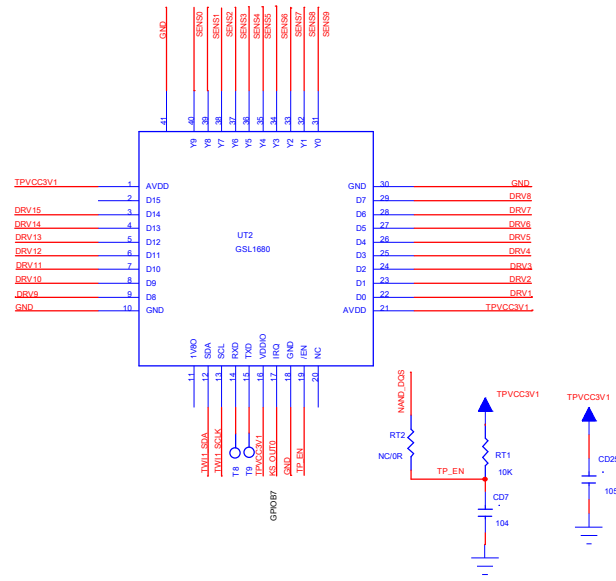
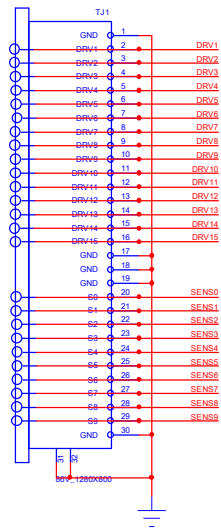
VCOM的电压根据屏的SPEC进行调节。



Actions Semiconductor Co., Ltd	
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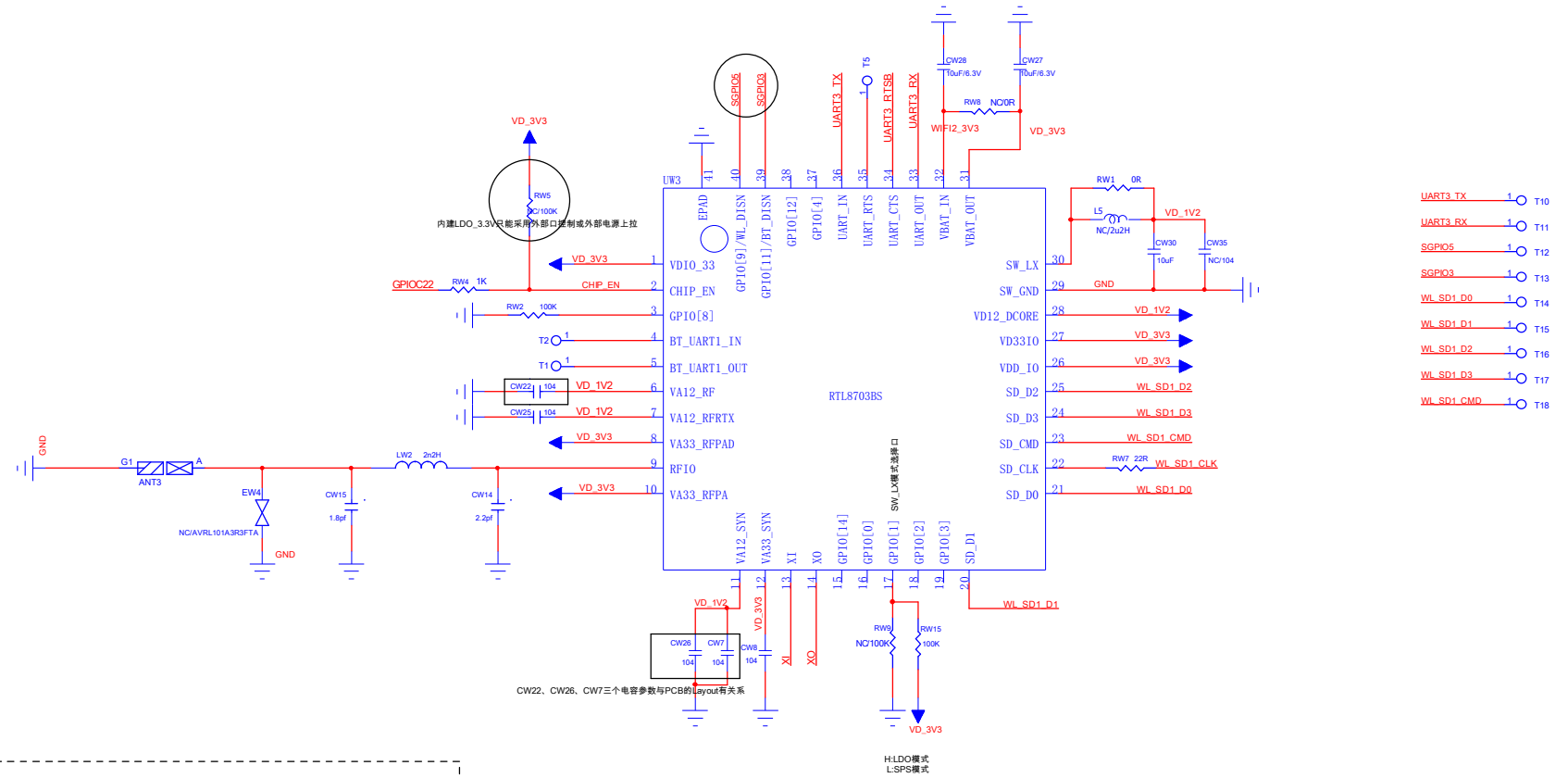
# CTP

# GSL1680

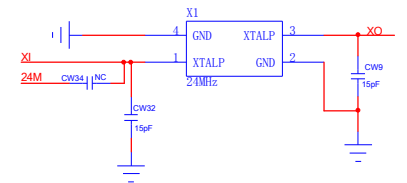
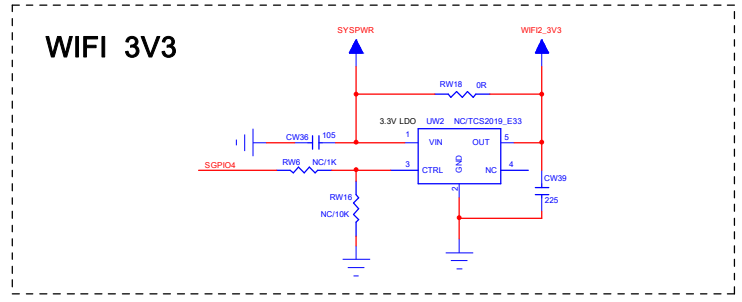


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Drawn By:	Date:
Checked By:	Date:
Approved By:	Date:
Size	Sheet:

# WIFI\_COB: RTL8703BS



- UART3\_TX 1 T10
- UART3\_RX 1 T11
- SGPIO5 1 T12
- SGPIO3 1 T13
- WL\_SD1\_D0 1 T14
- WL\_SD1\_D1 1 T15
- WL\_SD1\_D2 1 T16
- WL\_SD1\_D3 1 T17
- WL\_SD1\_CMD 1 T18



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Drawn By:	Date: 2018/2/23
Checked By:	Date:
Approved By:	Date:
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