

REVISION HISTORY

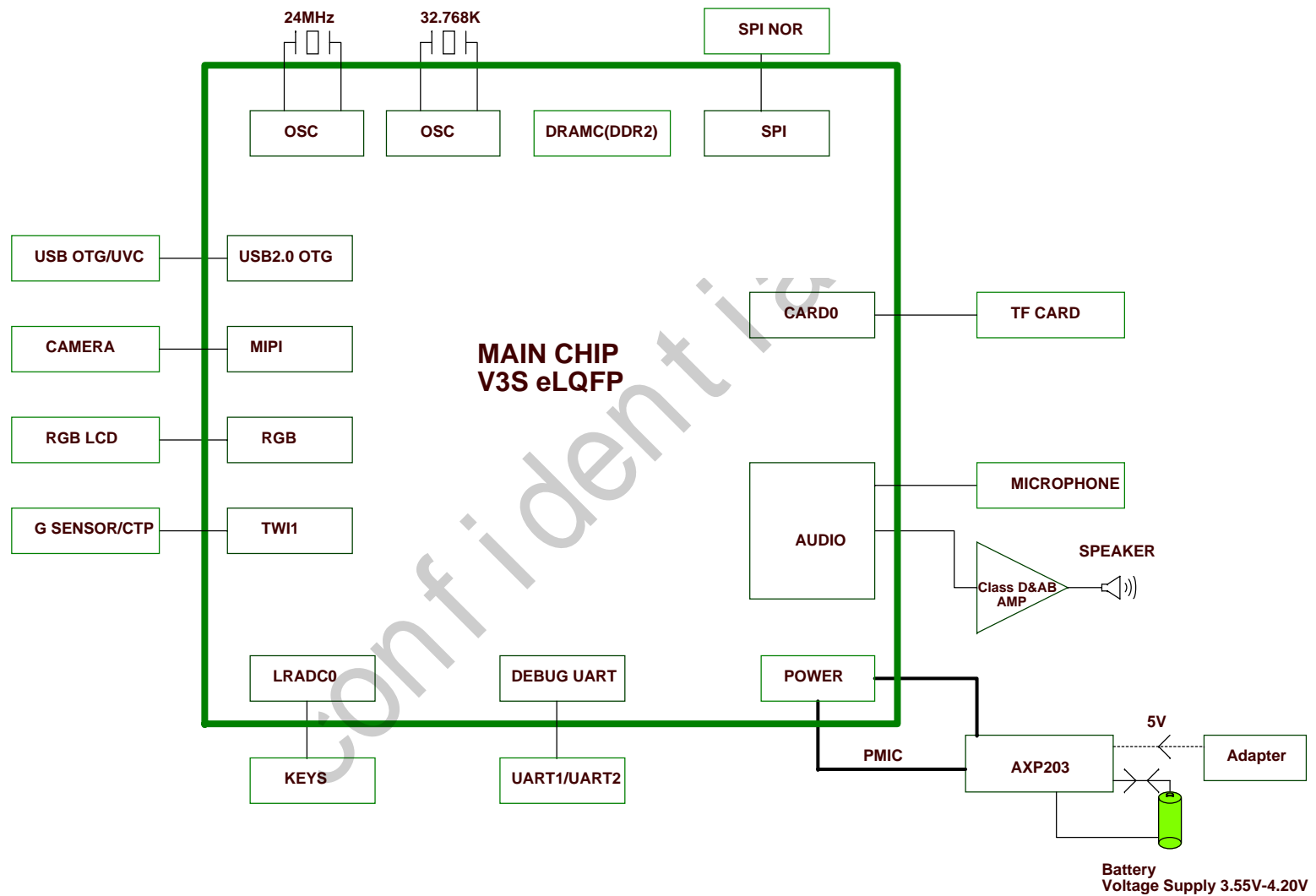
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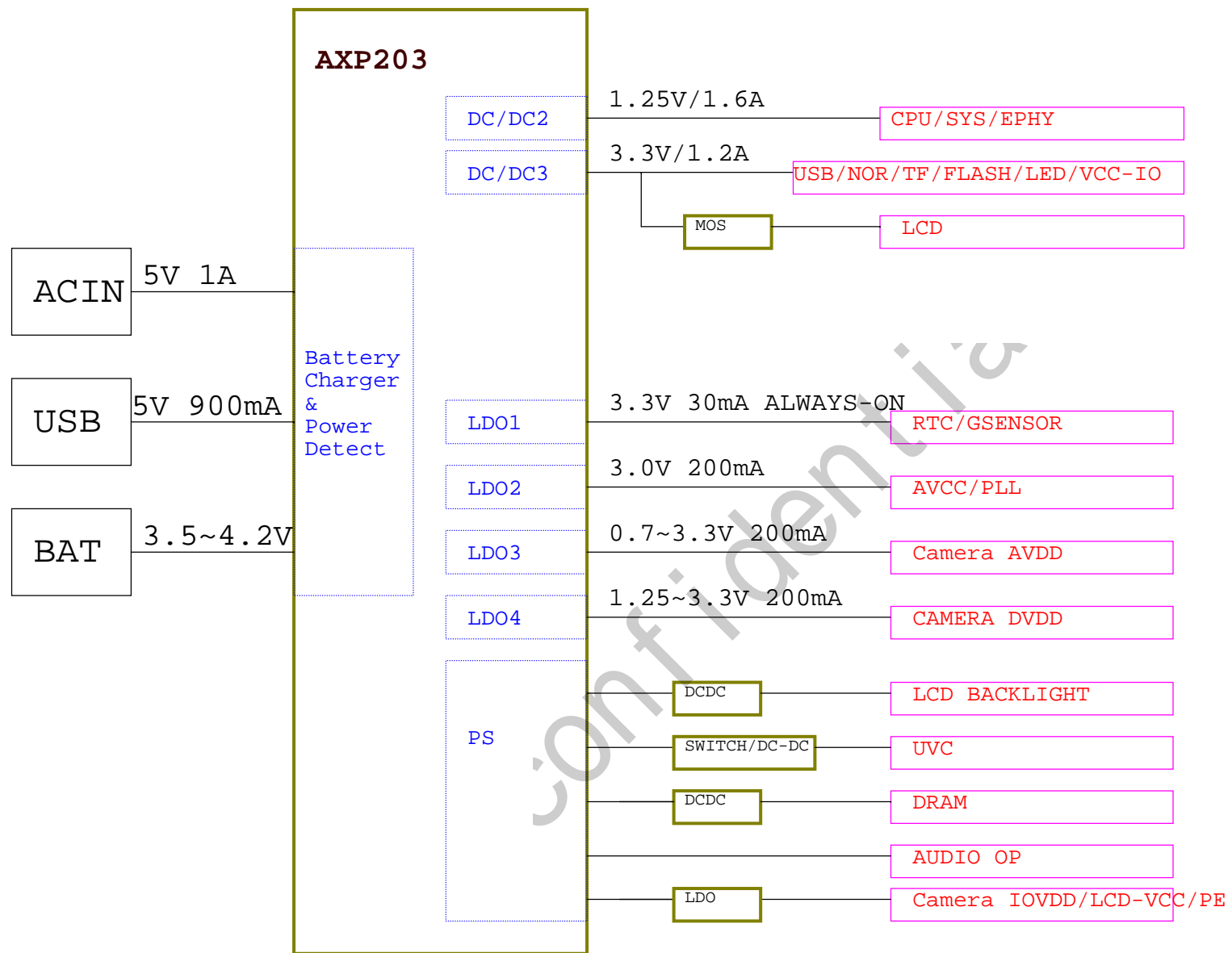
Revision	Description	Date	Drawn	Checked
Ver 0.1	Initial	2015-02-04	HW	
Ver 1.0	changelist.txt	2015-05-14	WJW	

confidential

BLOCK DIAGRAM



POWER TREE



GPIO ASSIGNMENT

PIN	Define	CFG	Function
PB0	CTP-WAKE	1	CTP
PB1	CTP-INT	0	
PB2	LCD-BL-EN1	1	LCD
PB3	LCD-PWR-EN1	1	
PB4	PWM0	2	
PB5	PA-SHDN	1	AUDIO
PB6	TWI0-SCK	2	PMU
PB7	TWI0-SDA	2	
PB8	TWI1_SCK	2	G-SENSOR
PB9	TWI1_SDA	2	

PIN	Define	CFG	Function
PC0	SPI0_MISO	3	NOR/ NAND
PC1	SPI0_CLK	3	
PC2	SPI0_CS	3	
PC3	SPI0_MOSI	3	

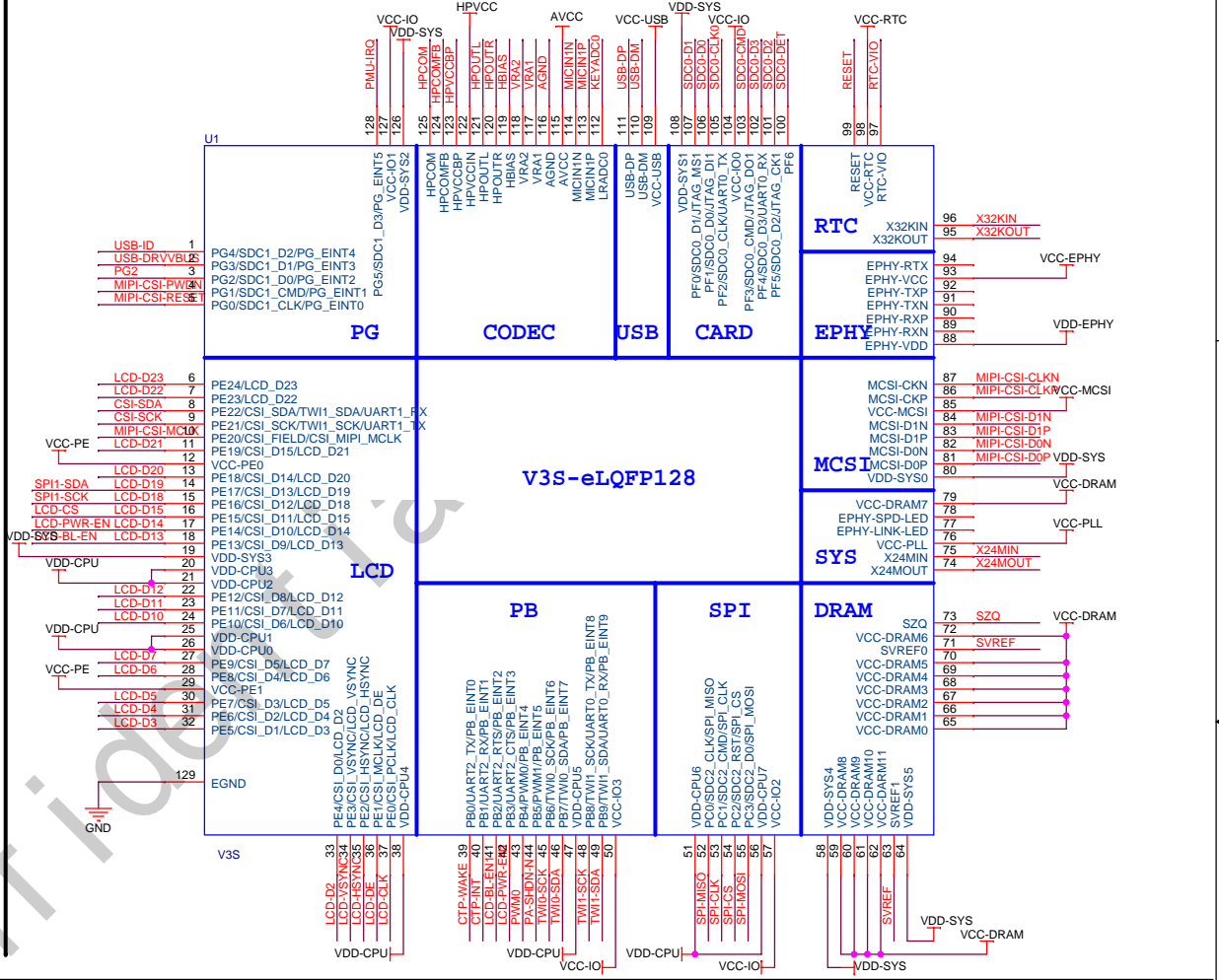
PIN	Define	CFG	Function
PE0	LCD_CLK	3	LCD
PE1	LCD_DE	3	
PE2	LCD_HSYNC	3	
PE3	LCD_VSYNC	3	
PE4	LCD_D2	3	
PE5	LCD_D3	3	
PE6	LCD_D4	3	
PE7	LCD_D5	3	
PE8	LCD_D6	3	
PE9	LCD_D7	3	
PE10	LCD_D8	3	
PE11	LCD_D11	3	
PE12	LCD_D12	3	
PE13	LCD_D13	3	
PE14	LCD_D14	3	
PE15	LCD_D15	3	
PE16	LCD_D18	3	
PE17	LCD_D19	3	
PE18	LCD_D20	3	
PE19	LCD_D21	3	
PE20	CSI-MIPI-MCLK3	3	MIPI
PE21	CSI-SDA	2	
PE22	CSI-SCK	2	LCD
PE23	LCD_D22	3	
PE24	LCD_D23	3	

PIN	Define	CFG	Function
PF0	SDC0-D1	2	TF CARD
PF1	SDC0-D0	2	
PF2	SDC0-CLK	2	
PF3	SDC0-CMD	2	
PF4	SDC0-D3	2	
PF5	SDC0-D2	2	
PF6	SDC0-DET	0	

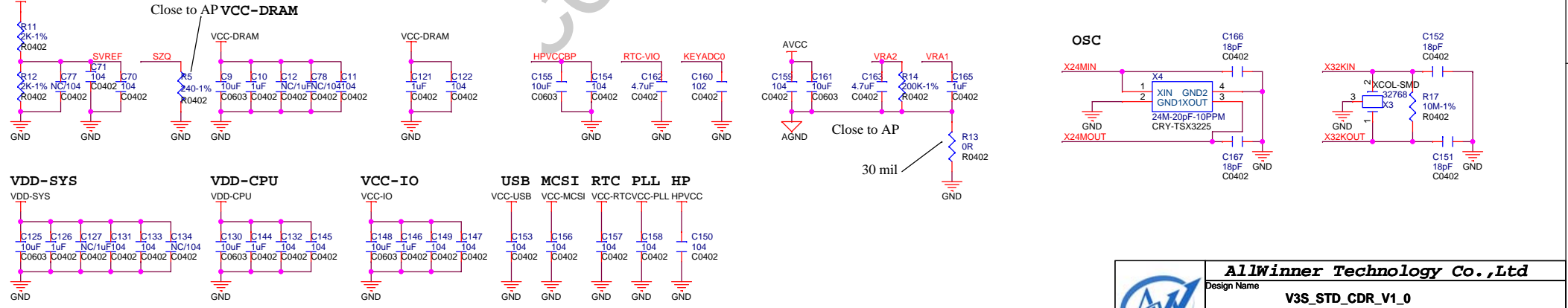
PIN	Define	CFG	Function
PG0	MIPI-CSI-RESET	1	GPIO
PG1	MIPI-CSI-PWDN	1	
PG2	GS-INT	0	
PG3	USB-DRVVBUS	1	
PG4	USB-ID	0	
PG5	PMU-IRQ	0	

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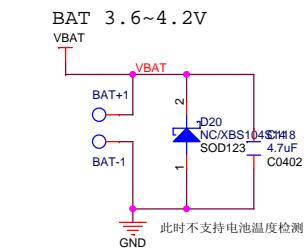
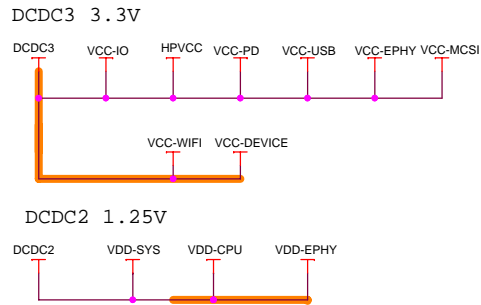
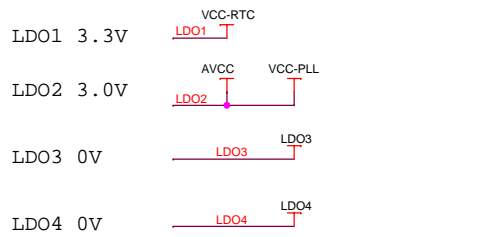
CPU



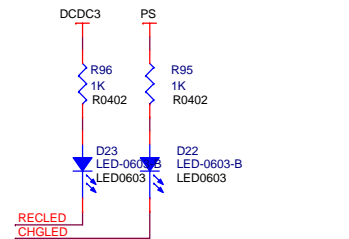
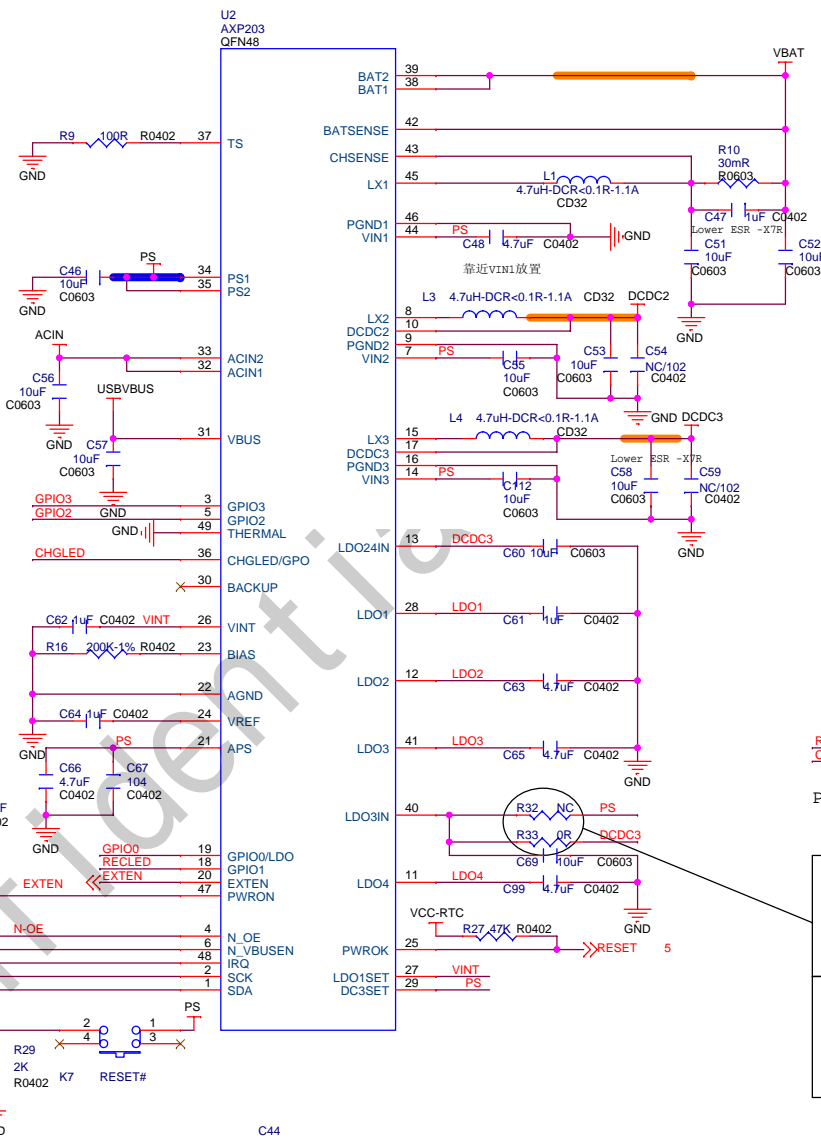
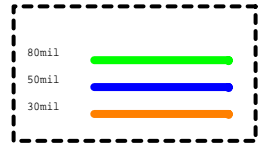
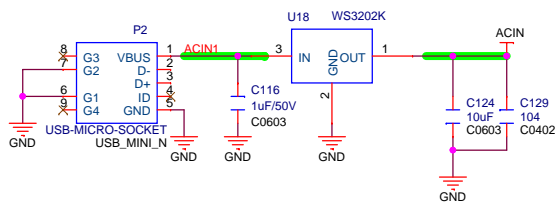
注: VCC-DRAM/VCC-SYS/VCC-CPU的电容均匀放置于主控的各引脚。



POWER



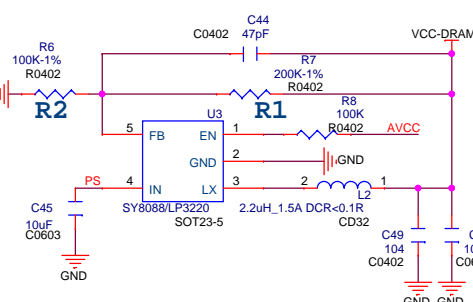
5V DC INPUT



PMU的GPIO0~GPIO3作为扩展I/O

AR0330/JX-H2
LDO3--AVDD 2.8V
R33贴上去; R32 NC

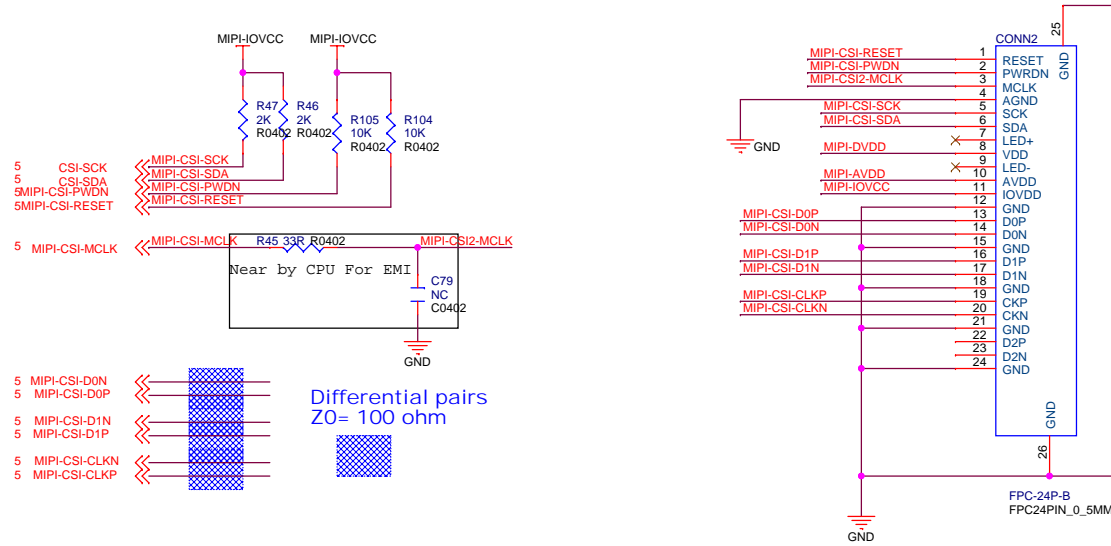
Ov2710/GC1004
LDO3--AVDD 3.3V
R32贴上去; R33 NC



$$V_{out} = 0.6 * (1 + R1/R2) = 1.8V$$

		AllWinner Technology Co., Ltd	
		Design Name V3S_STD_CDR_V1_0	
Size A3	Page Name POWER	Rev	
Date: Wednesday, May 13, 2015	Sheet 6	of 12	

CAMERA



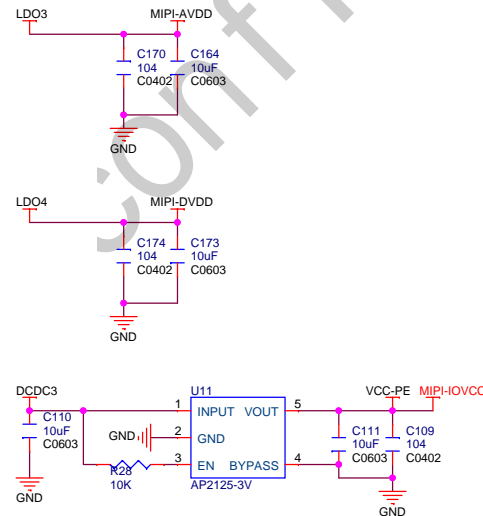
CAMERA POWER

AR0330:
AVDD 2.8V (2.7V-2.9V)
DVDD 1.8V (1.7V-1.9V)
IOVCC 3.0V (2.7V-3.1V)

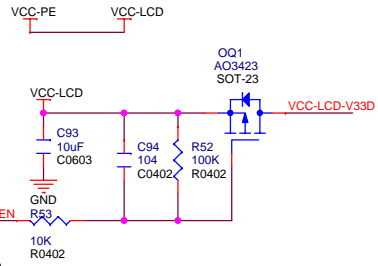
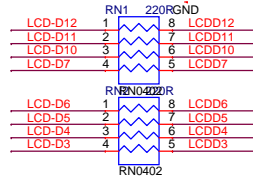
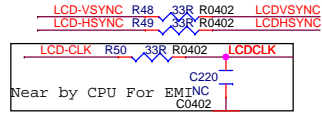
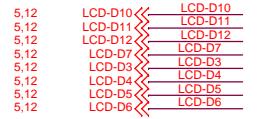
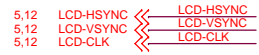
OV2710:
AVDD 3.3V (3.0V-3.6V)
DVDD 1.5V (1.425V-1.575V)
IOVCC 3.0V (1.7V-3.6V)

JX-H22
AVDD 2.8V (2.6V-3.0V)
DVDD 2.8V (2.6V-3.0V)
IOVCC 3.0V (1.7V-3.0V)

GC1004:
AVDD 3.3V (3.0V-3.6V)
DVDD 1.6V (1.5V-1.8V)
IOVCC 3.0V (1.7V-3.6V)

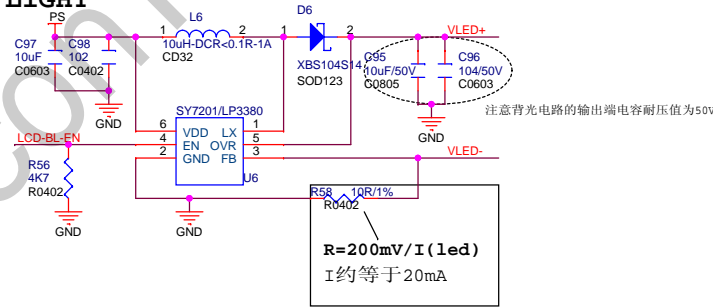


Serial RGB LCD

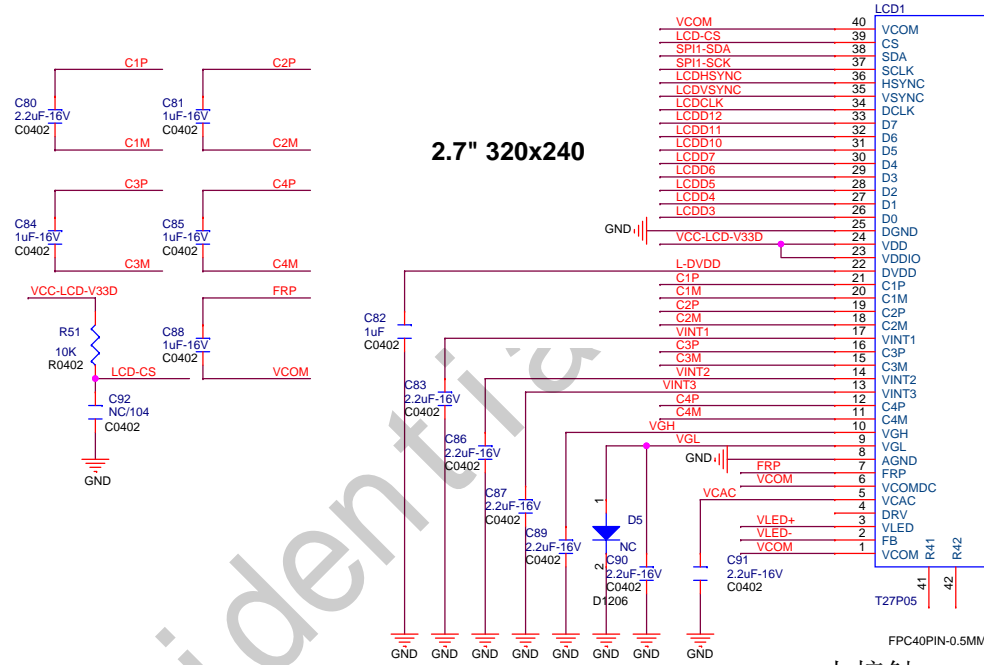


负逻辑，LCD-PWR低电平时，LCD-VDD打开。

BACK LIGHT

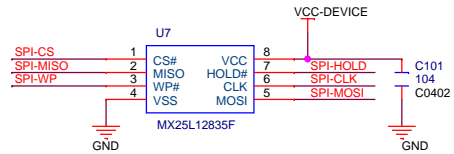
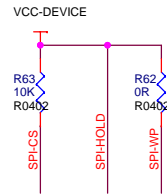


2.7" 320x240



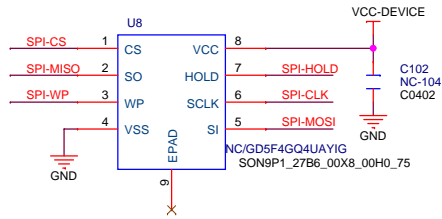
Flash

NOR



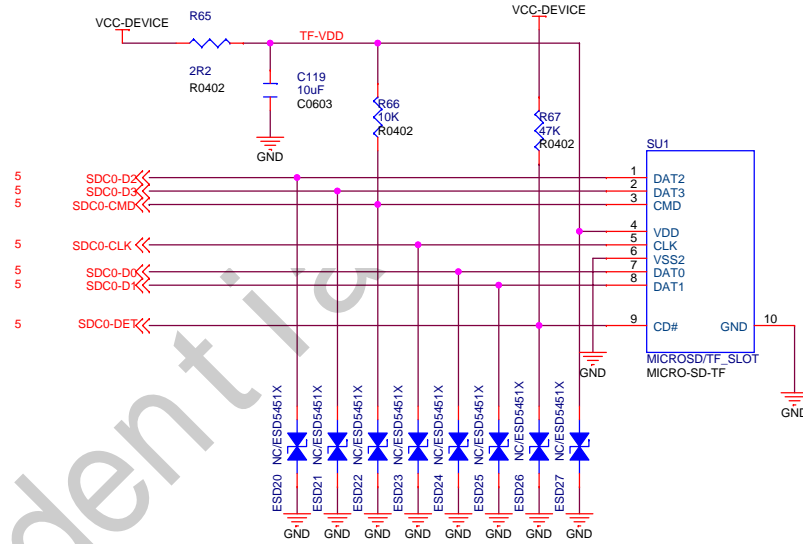
U7 Mount MX25L12835F

OPTION:NAND



SD CARD

CARD0

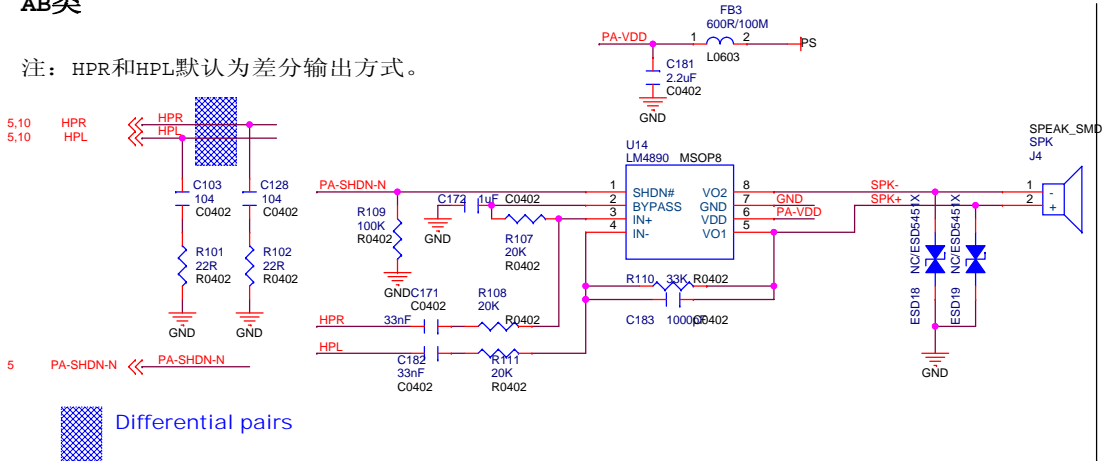


AUDIO

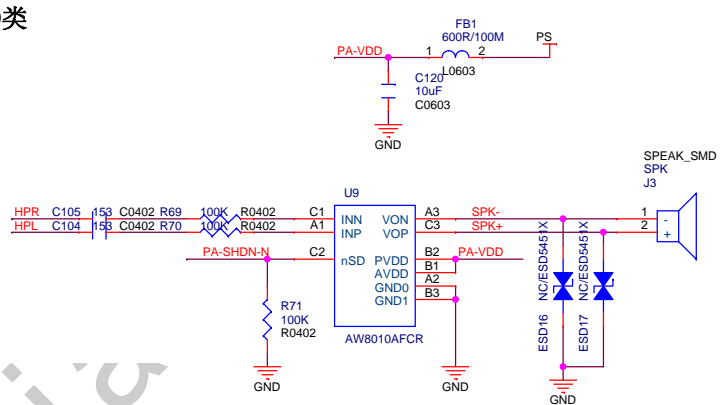
Speaker

AB类

注：HPR和HPL默认为差分输出方式。

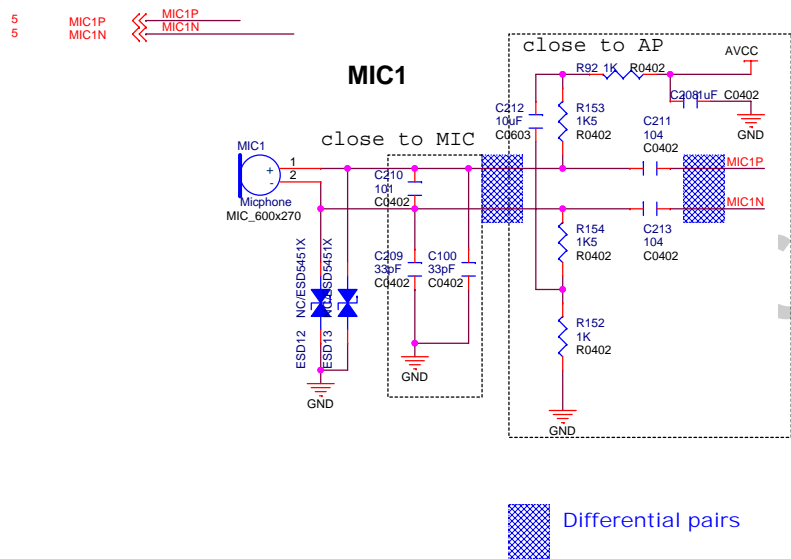


OPTION:D类

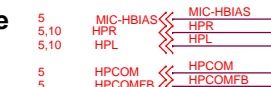


注：
1. HPR和HPL默认为差分输出方式。
2. AB类功放的增益与D类功放增益不一致，使用D类功放时，软件增益倍数需降低。

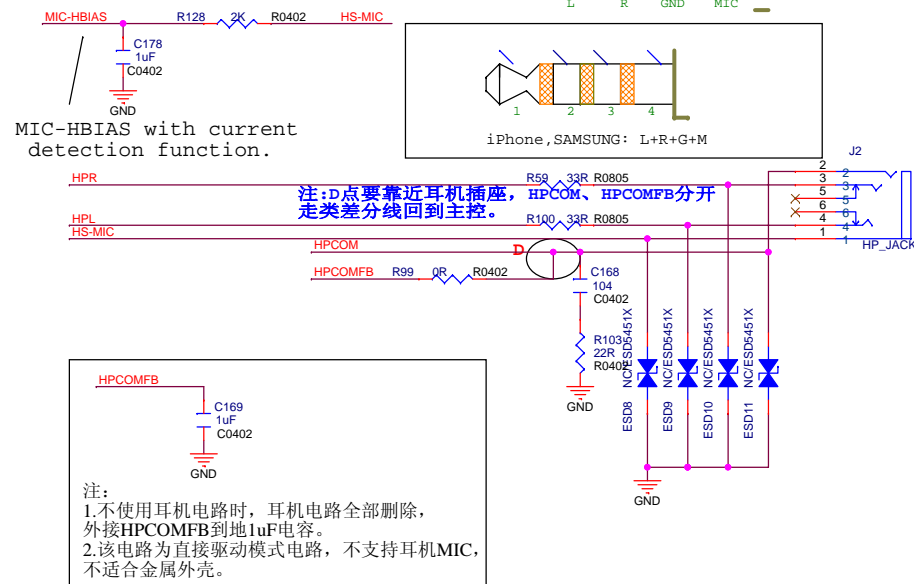
Analog Microphone (Main MIC)



OPTION:Head Phone



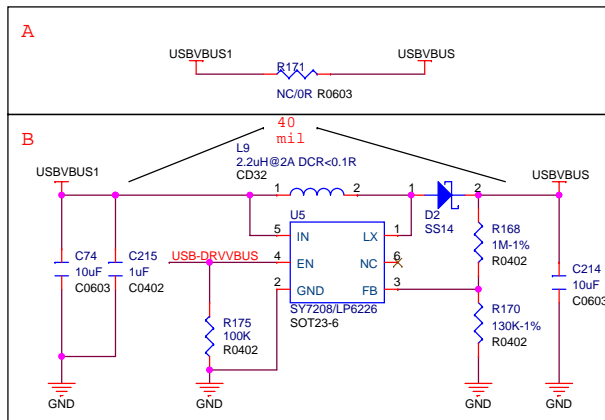
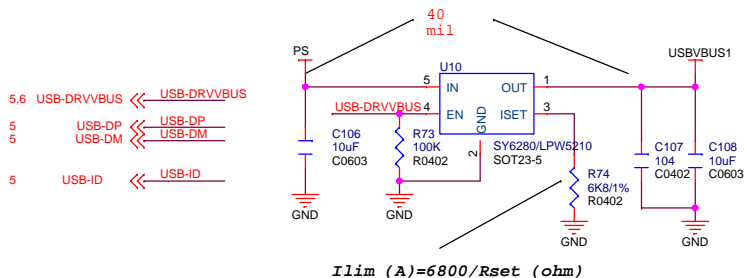
NOTE:
1. HPCOM/HPCOMFB should route together as balance line



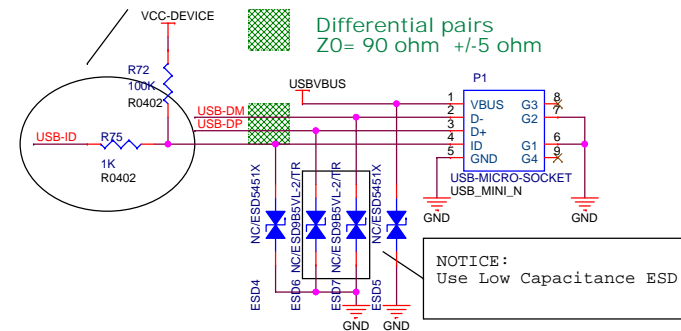
注：
1. 不使用耳机电路时，耳机电路全部删除，外接HPCOMFB到地1uF电容。
2. 该电路为直接驱动模式电路，不支持耳机MIC，不适合金属外壳。

USB/WIFI/KEY/GSENSOR

USB OTG/UVC

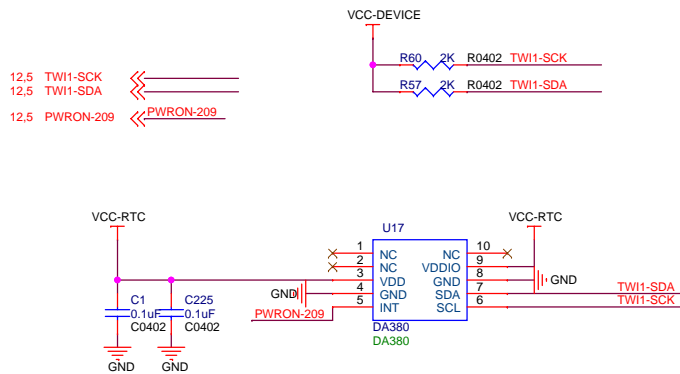


注：
USB-ID用作OTG功能ID脚检测，用来区别HOST还是DEVICE接入；倒车检测功能在USB摄像头上报，通过USB上报。



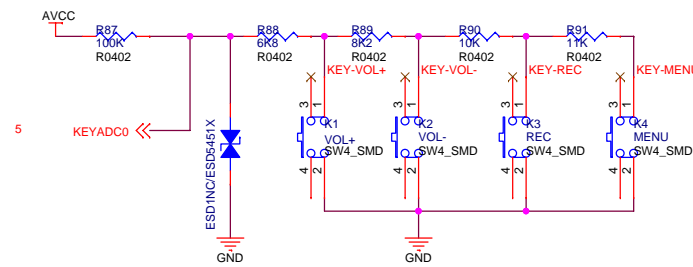
使用USB摄像头	使用A部分供电时， USBVVBUS电压为3.6V； 使用B部分供电时， USBVVBUS电压为5V； 默认贴B部分。
不使用USB摄像头	A,B部分可以都不贴或者直接删除。

Gsensor (DA380)



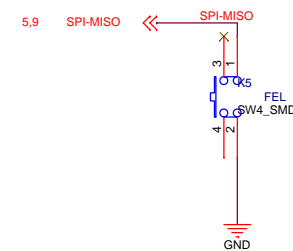
KEY

注：每隔0.2V一个按键



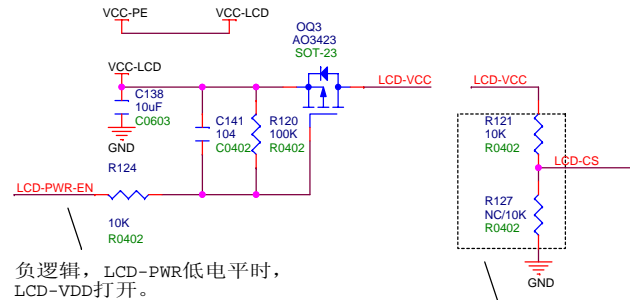
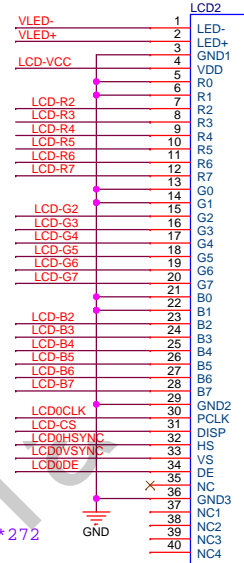
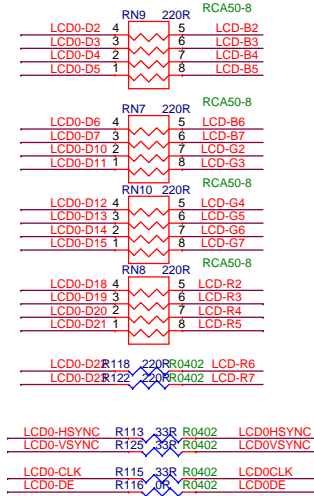
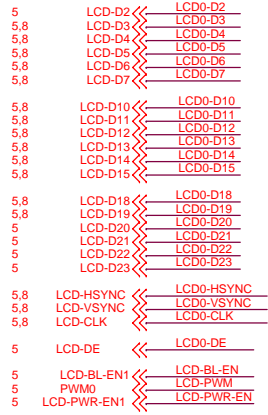
OPTION

注：预留作为PCBA烧录时使用，
整机不能有该按键；
整机升级需使用组合键。

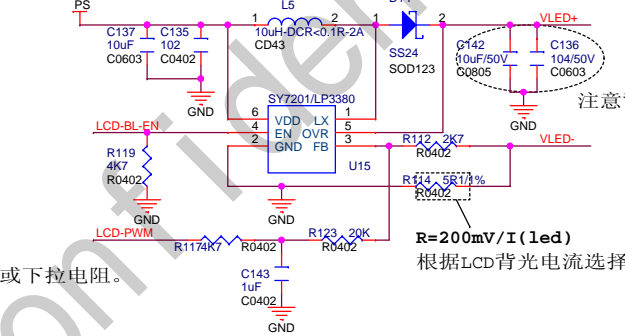


OPTION:RGB LCD

4.3" 480*272



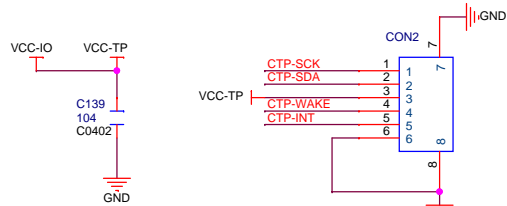
BACK LIGHT



注意背光电路的输出端电容耐压值为50V

$R = 200mV / I(\text{led})$
根据LCD背光电流选择

OPTION:CTP



Option CON
电容屏信号连接示意图

OPTION:GPS

