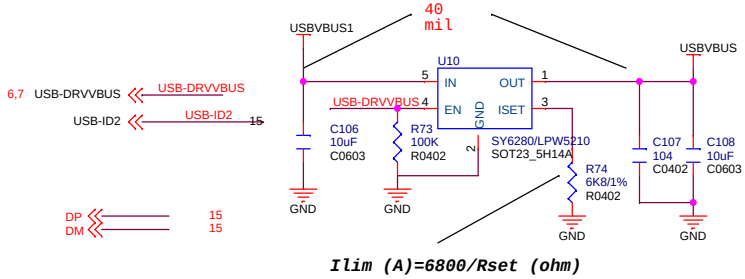
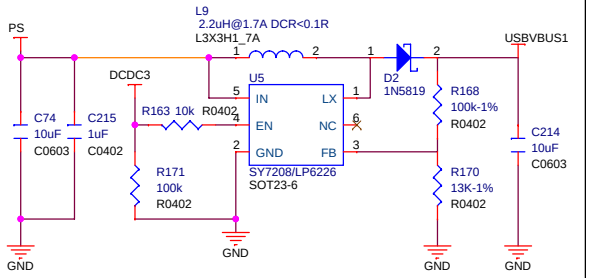
USB/WIFI/KEY/GSENSOR

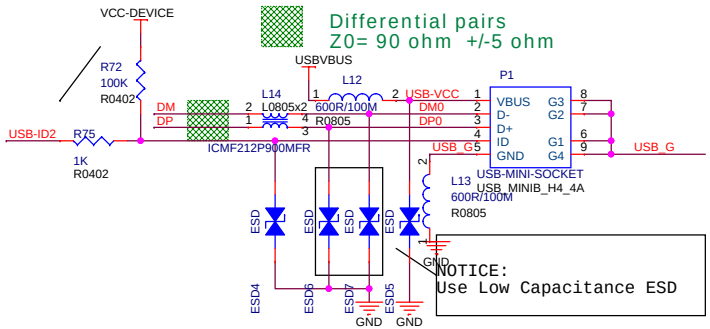
USB OTG/UVC



做成品机，有HDMI功能时，
PS部分要加开关控制

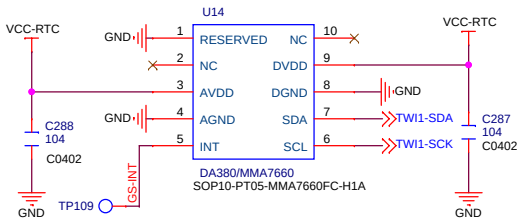


注：USB-ID用作OTG功能ID脚检测，用来区别HOST还是DEVICE接入；倒车检测功能需在USB摄像头上实现，通过USB上报。



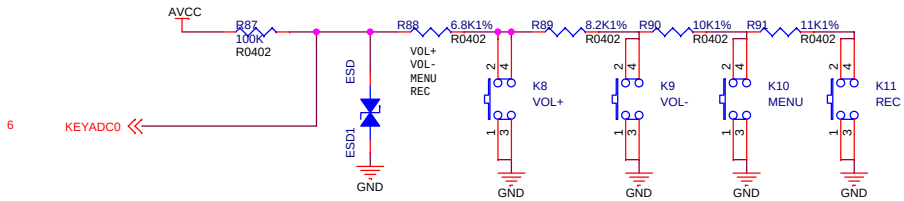
USB-WIFI

G-SENSOR供电，
如关机后还需起作用，
供电接VCC-RTC。
否则接DCDC3



KEY

注：每隔0.2V一个按键



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AUDIO

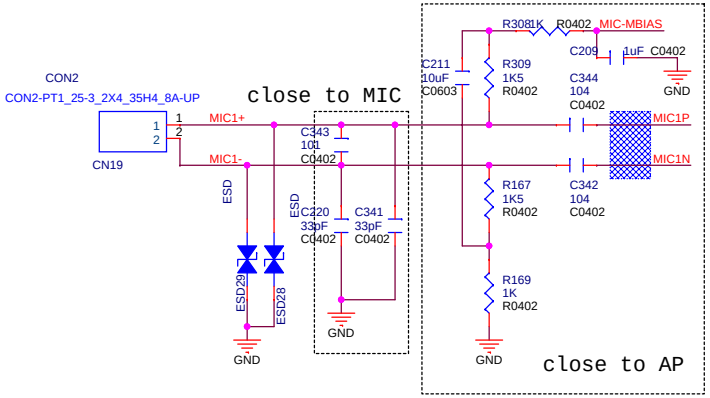
6 MIC-HBIAS → MIC-HBIAS
6 HPR → HPR
6 HPL → HPL
6 HPCOM → HPCOM
6 HPCOMFB → HPCOMFB

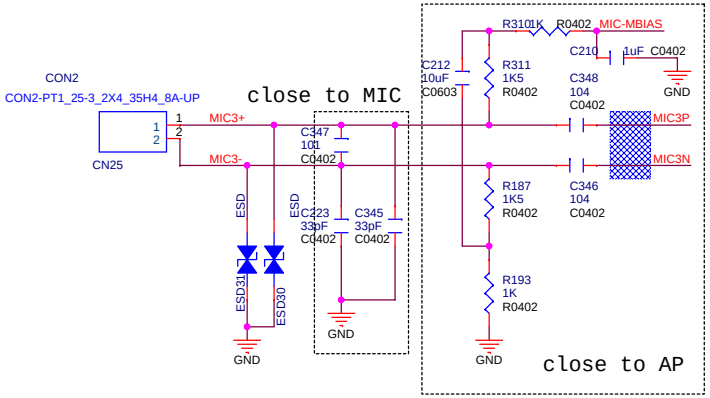
6 MIC-MBIAS → MIC-MBIAS
6 MIC1P → MIC1P
6 MIC1N → MIC1N
6 MIC3P → MIC3P
6 MIC3N → MIC3N

Analog Microphone (Main MIC)

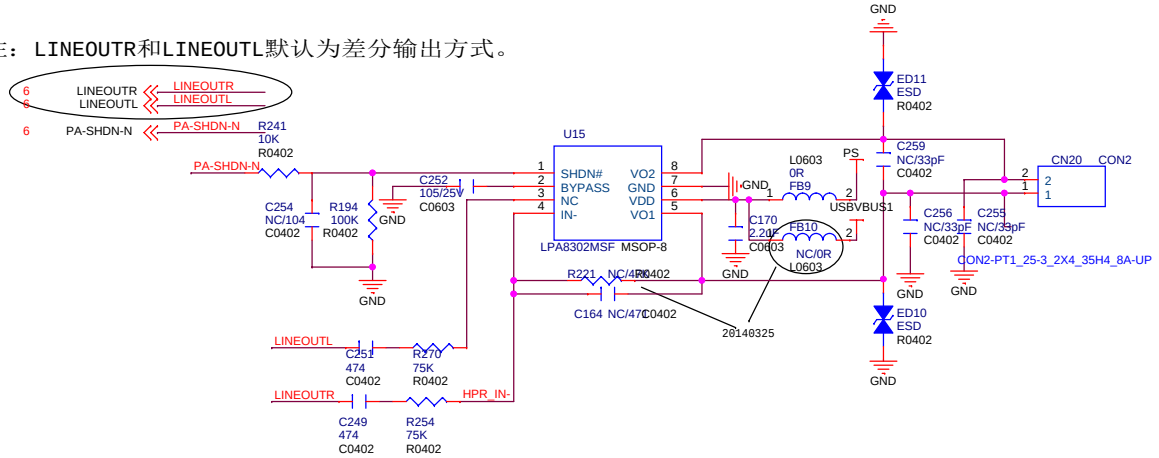
Differential pairs

MIC1

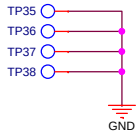




注：LINEOUTR和LINEOUTL默认为差分输出方式。



LED INDICATOR



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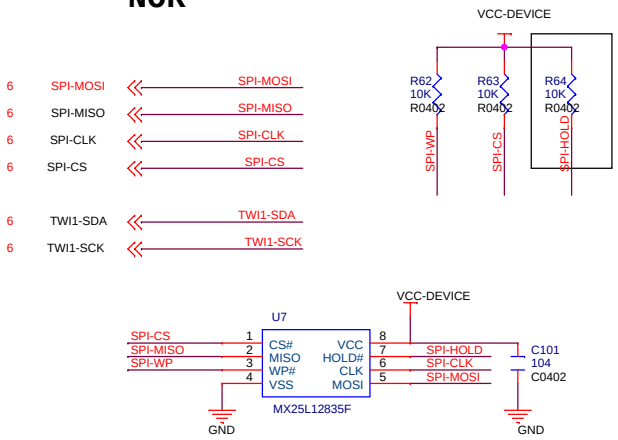
Flash

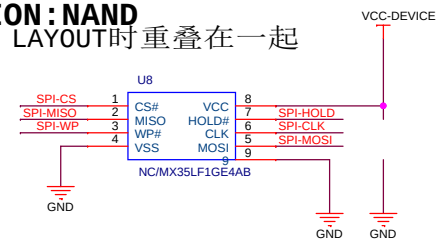
NOR

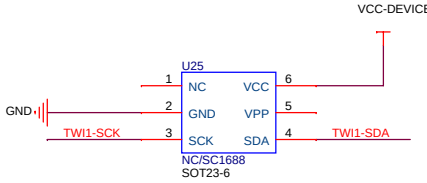


U7 Mount MX25L12835F

OPTION:NAND

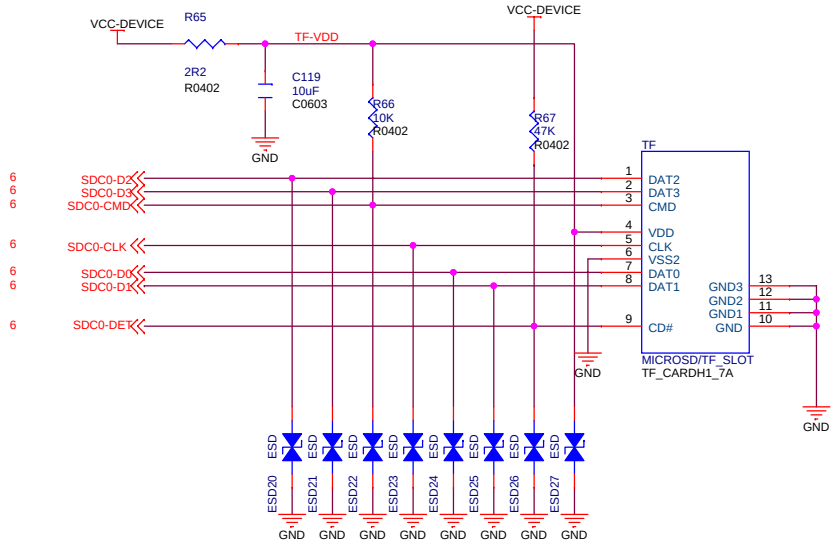
U7/U8 LAYOUT时重叠在一起



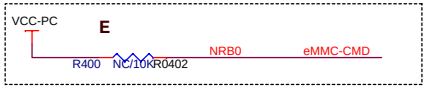


SD CARD

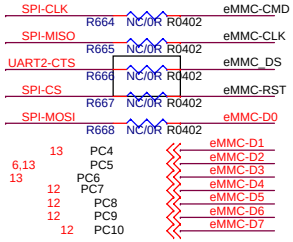
CARD0



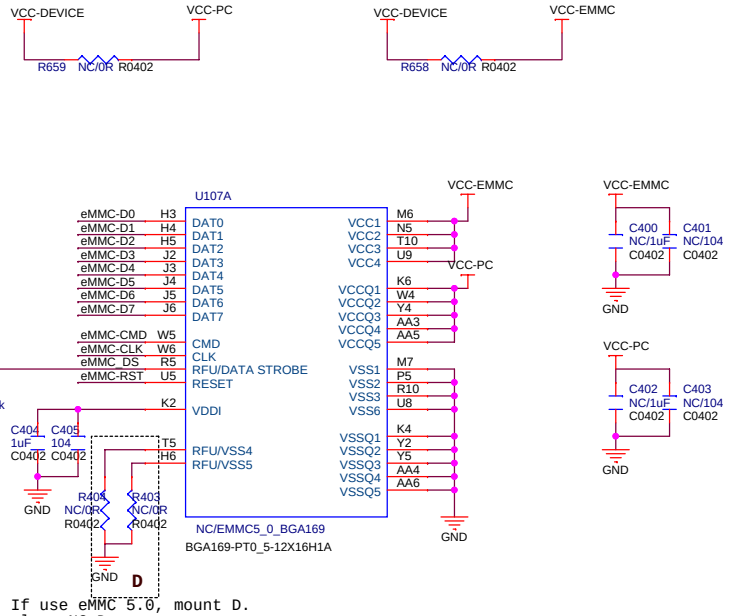
eMMC



If use NAND, mount E.



贴EMMC时再贴框内元件



If use eMMC 5.0, mount D.
else, NC D.

Or if use Flash NC D.

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POWER

LDO1 3.3V

LDO2 3.0V

LDO3 3.3V/2.8V
AR0330&OV4689:LDO3=2.8V
OV2710:LDO3=3.3V

LDO4 3V3 200mA

DCDC3 3.3V

DCDC2 1.25V

5V DC INPUT

BAT 3.6~4.2V

Vout = 0.6*(1+R1/R2)=1.5V

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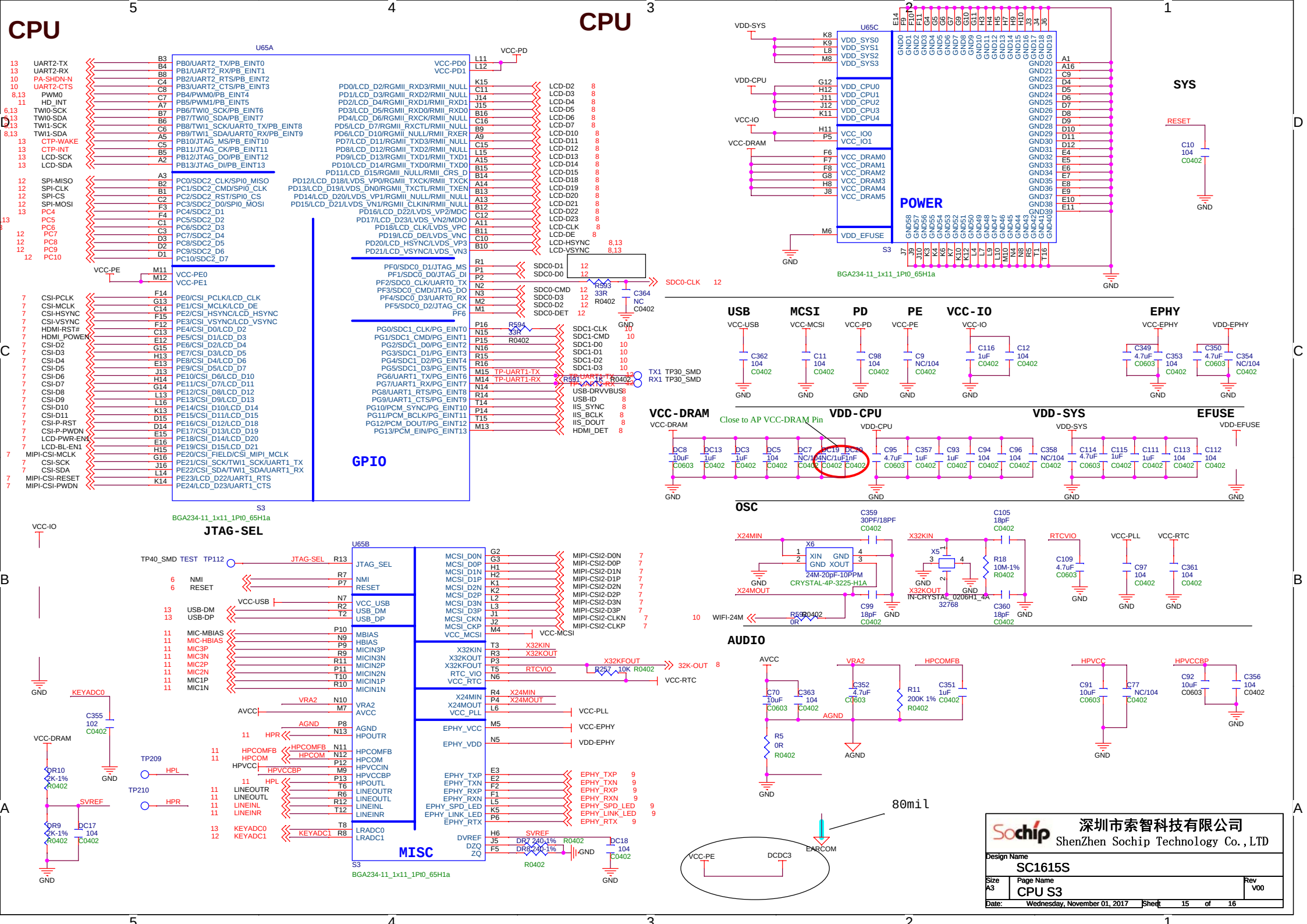
CPU
CPU
U65A
GPIO
S3
BGA234-11_1x11_1Pt0_65H1a
JTAG-SEL
U65B
MISC
S3
BGA234-11_1x11_1Pt0_65H1a
U65C
POWER
BGA234-11_1x11_1Pt0_65H1a
SYS
USB
MCSI
PD
PE
VCC-IO
EPHY
VCC-DRAM
Close to AP VCC-DRAM Pin
VDD-CPU
VDD-SYS
EFUSE
OSC
AUDIO
80mil
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GPIO ASSIGNMENT

注：PC[7：10]不能作为GPIO口使用。

PIN	Define	CFG	Function
PB0	UART2-TX		
PB1	UART2-RX		
PB2	WIFI-EN		WIFI
PB3	WIFI-RST		
PB4	PWM0		LCD
PB5	PA-SHDN		AUDIO
PB6	TWI0-SCK		PMU
PB7	TWI0-SDA		
PB8	TWI1_SCK		G-SENSOR /CTP
PB9	TWI1_SDA		
PB10	CTP-WAKE		CTP
PB11	CTP-INT		
PB12	LCD-PWR-EN1		LCD
PB13	LCD-BL-EN1		

PIN	Define	CFG	Function
PC0	SPI0_MISO		NOR/ NAND
PC1	SPI0_CLK		
PC2	SPI0_CS		
PC3	SPI0_MOSI		
PC4			NC
PC5			
PC6			
PC7			
PC8			
PC9			
PC10			

PIN	Define	CFG	Function
PD0	LCD_D2		LCD
PD1	LCD_D3		
PD2	LCD_D4		
PD3	LCD_D5		
PD4	LCD_D6		
PD5	LCD_D7		
PD6	LCD_D10		
PD7	LCD_D11		
PD8	LCD_D12		
PD9	LCD_D13		
PD10	LCD_D14		
PD11	LCD_D15		
PD12	LCD_D18		
PD13	LCD_D19		
PD14	LCD_D20		
PD15	LCD_D21		
PD16	LCD_D22		
PD17	LCD_D23		
PD18	LCD_CLK		
PD19	LCD_DE		
PD20	LCD_HSYNC		
PD21	LCD_VSYNC		

PIN	Define	CFG	Function
PE0	CSI_PCLK		CSI
PE1	CSI_MCLK		
PE2	CSI_HSYNC		
PE3	CSI_VSYNC		
PE4	CSI_D0		
PE5	CSI_D1		
PE6	CSI_D2		
PE7	CSI_D3		
PE8	CSI_D4		
PE9	CSI_D5		
PE10	CSI_D6		
PE11	CSI_D7		
PE12	CSI_D8		
PE13	CSI_D9		
PE14	CSI_D10		
PE15	CSI_D11		
PE16	CSI-P-RST		
PE17	CSI-P-PWDN		
PE18	MIPI-CSI-RESET		MIPI
PE19	MIPI-CSI-PWDN		
PE20	CSI-MIPI-MCLK		
PE21	CSI-SCK		
PE22	CSI-SDA		
PE23	Flashlight		FLASHING
PE24			

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

PIN	Define	CFG	Function
PG0	SDC1-CLK		WIFI
PG1	SDC1-CMD		
PG2	SDC1-D0		
PG3	SDC1-D1		
PG4	SDC1-D2		
PG5	SDC1-D3		
PG6	UART1-TX		DEBUG
PG7	UART1-RX		
PG8	GS-INT		NC
PG9	GPS-T		
PG10	AUTO-BACK		USB
PG11	USB-DRVVBUS		
PG12	WIFI-LED		LED
PG13	REC-LED		

AVDD 3.3V
IOVCC 3.3V
DVDD 1.5V

R147=150K R148=75K	AR0330: AVDD 2.8V (2.7V-2.9V) IOVCC 2.8V(1.8V/2.8V) DVDD 1.8V(1.7V-1.9V)
R147=150K R148=100K	OV2710: AVDD 3.3V (3.0V-3.6V) IOVCC 3.3V(1.7V-3.6V) DVDD 1.5V (1.425V-1.575V)
R147=150K R148=150K	OV4689: AVDD 2.8V (2.6V-3.0V) IOVCC 2.8V (1.7V-3.0V) DVDD 1.2V (1.1V-1.3V)

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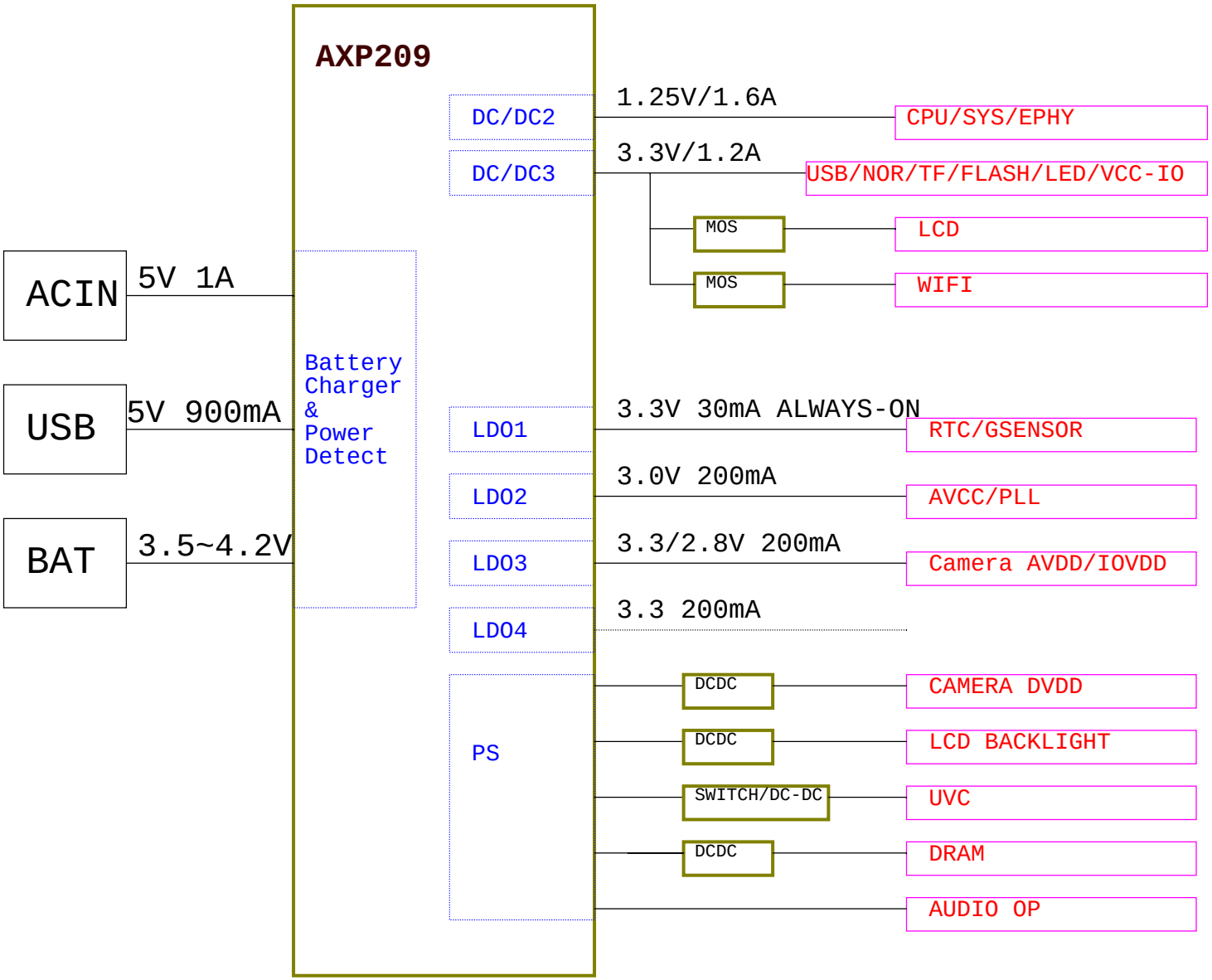
POWER TREE



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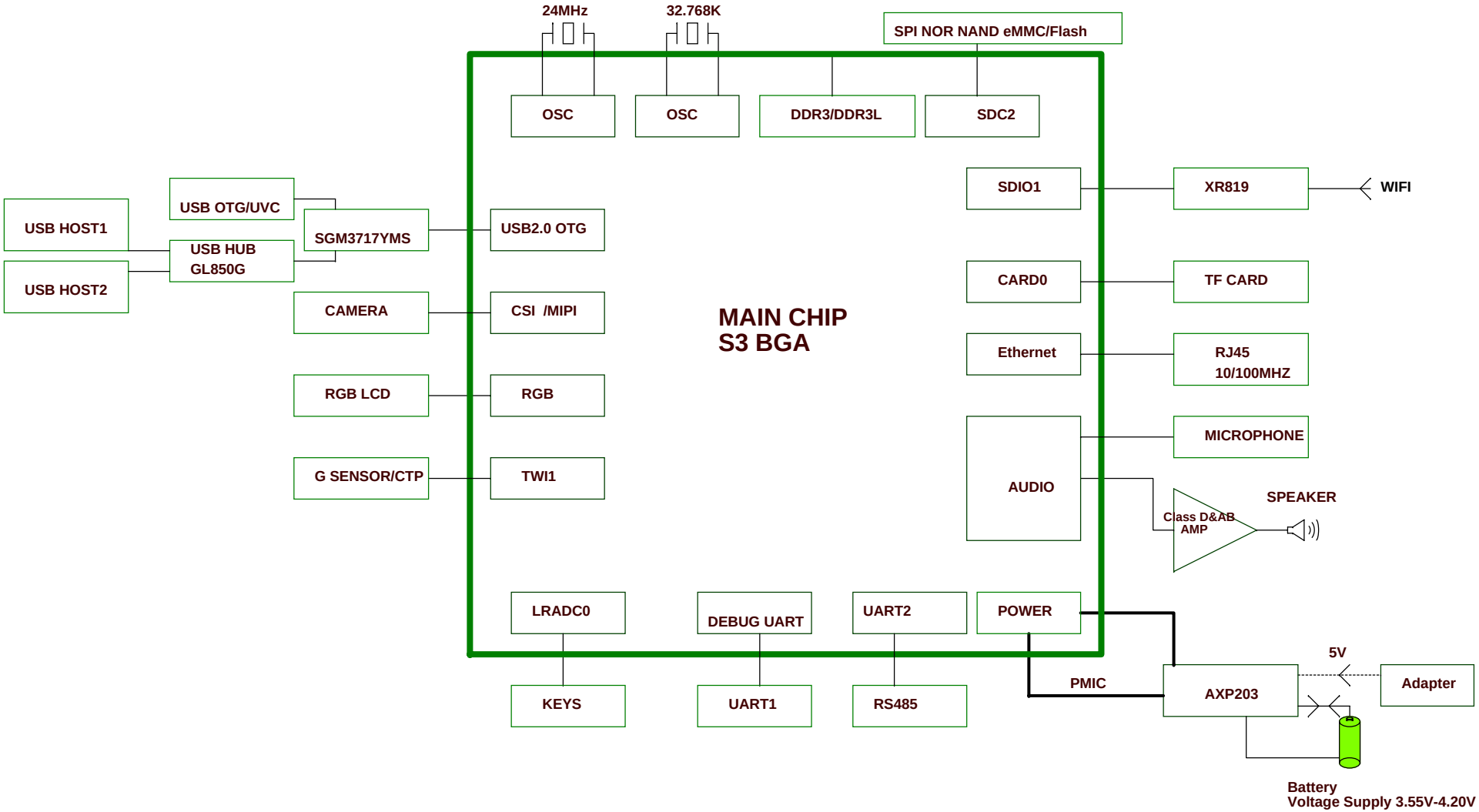
BLOCK DIAGRAM



深圳市索智科技有限公司 ShenZhen Sochip Technology Co.,LTD		
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REVISION HISTORY

Revision	Description	Date	Drawn	Checked
V00	REALSE VERSION	2017-09-23	Jeffery	JASON CHEN

Schematics Index:

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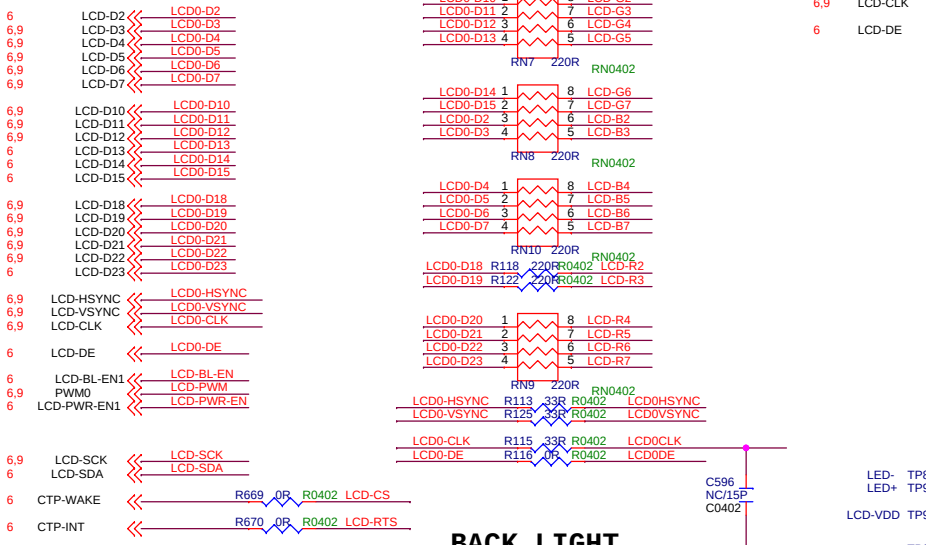
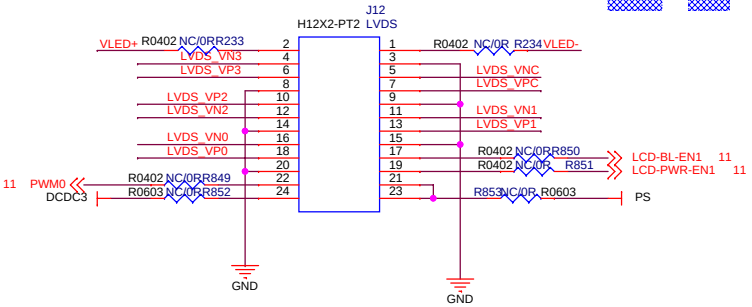
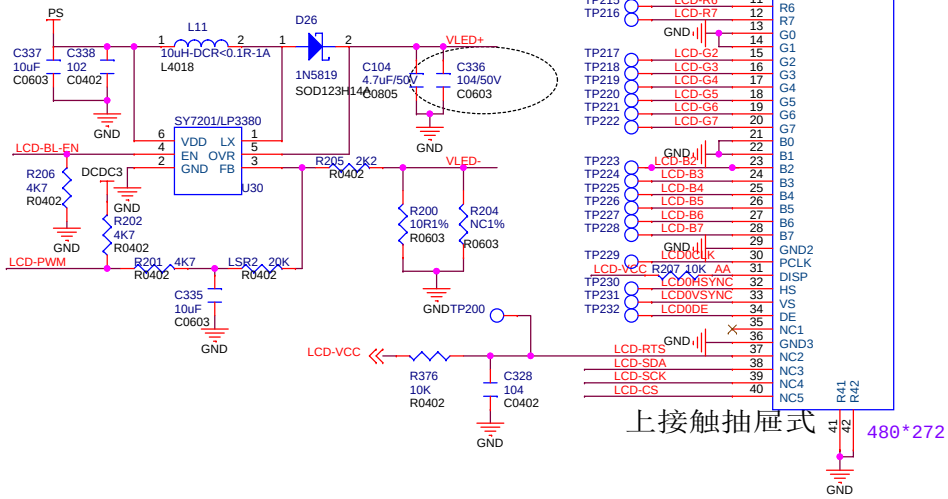
RGB LCD

4.3" 480*272

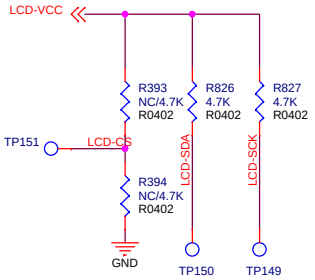


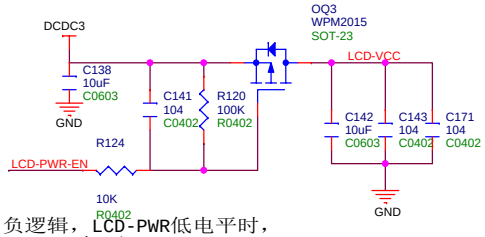


BACK LIGHT



上接触抽屉式 480*272





负逻辑，LCD-PWR低电平时，
LCD-VDD打开。

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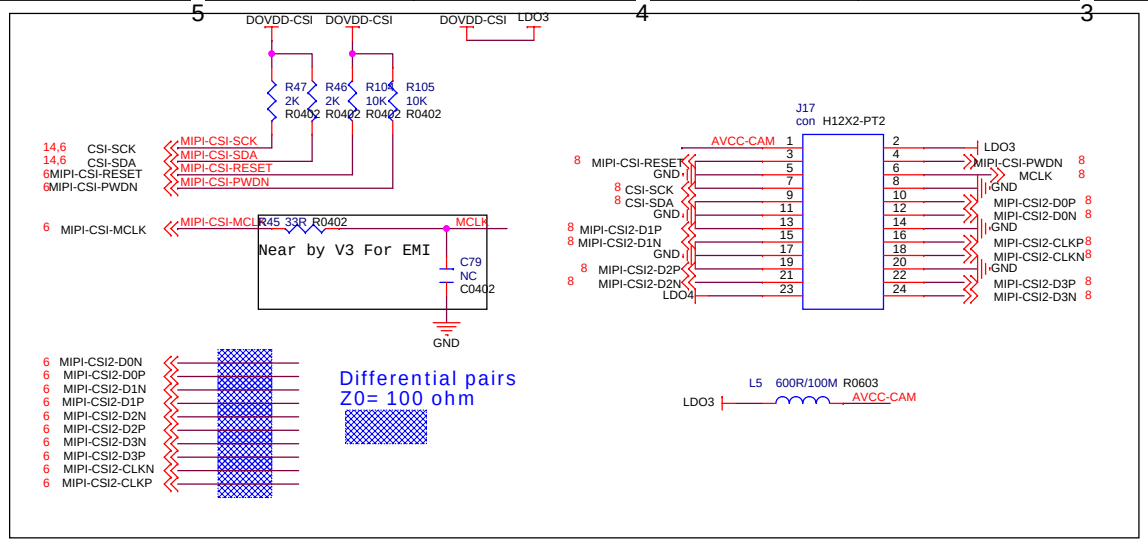

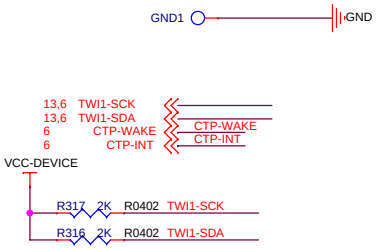

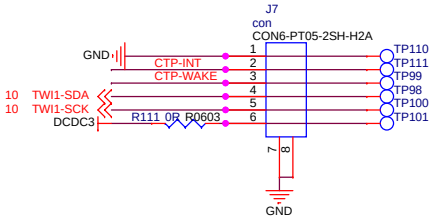

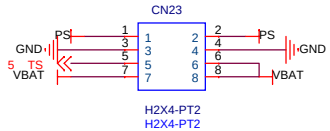

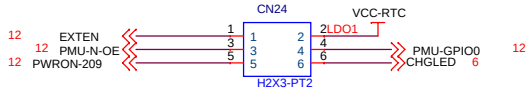

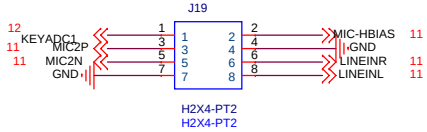

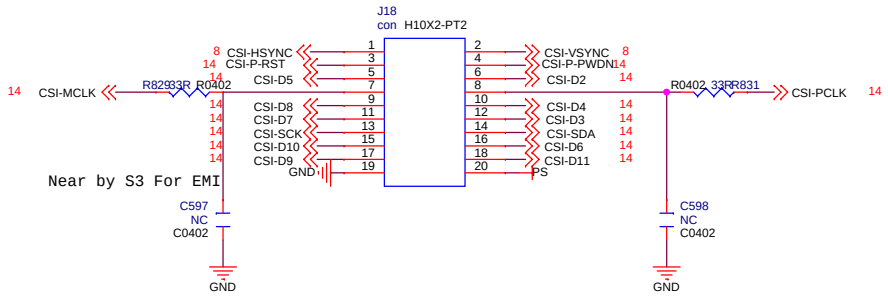

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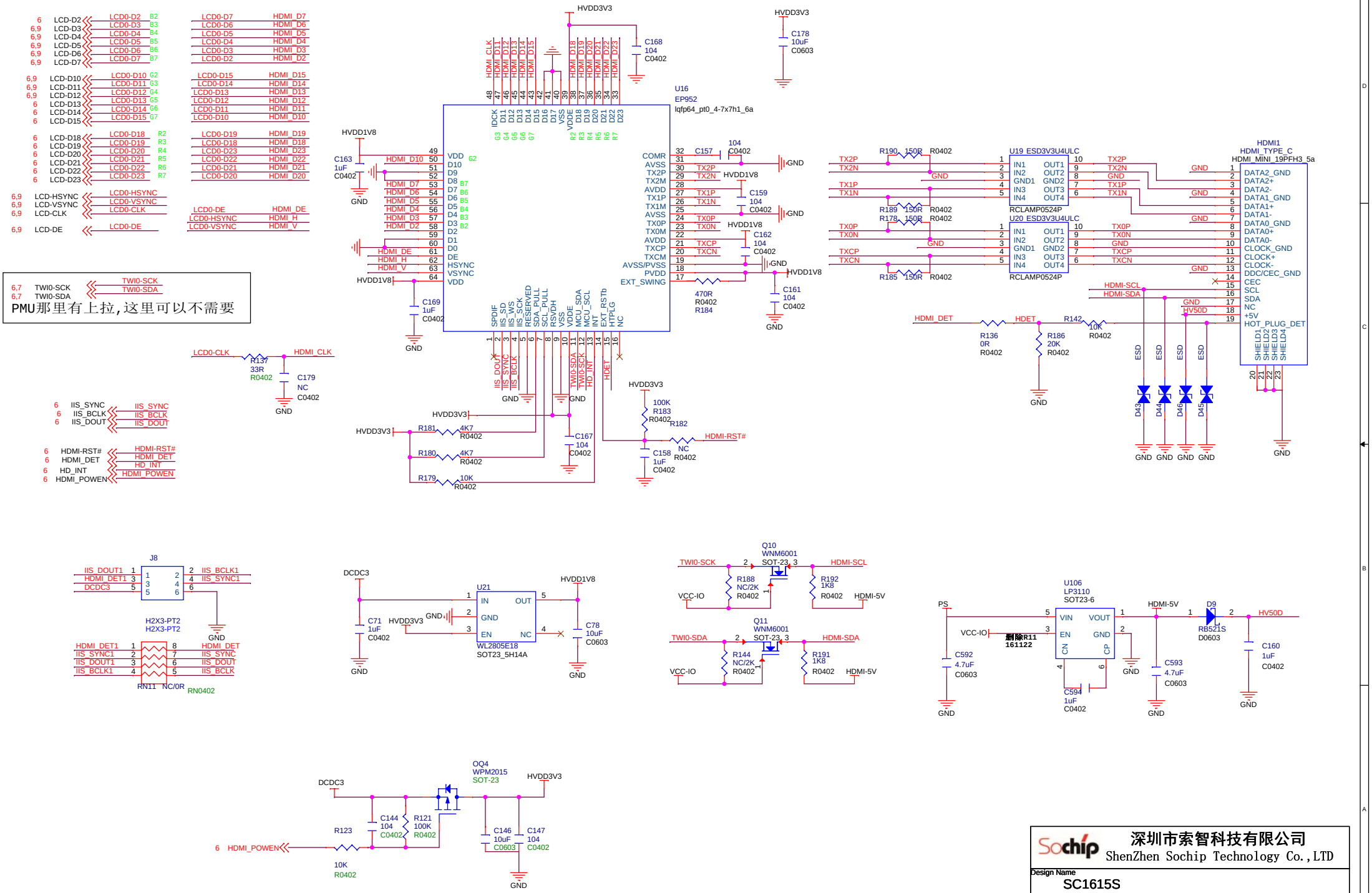
RGB TO HDMI



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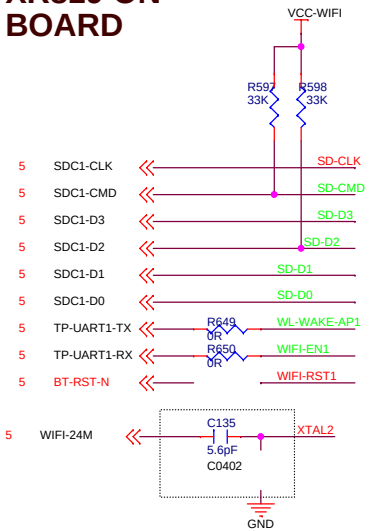
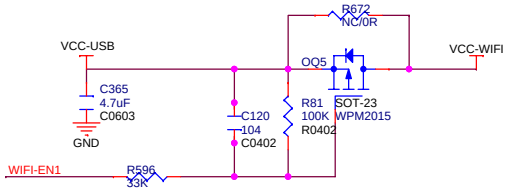
WIFI

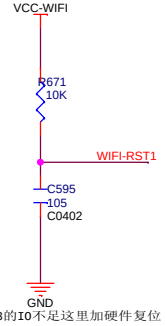
XR819 ON BOARD



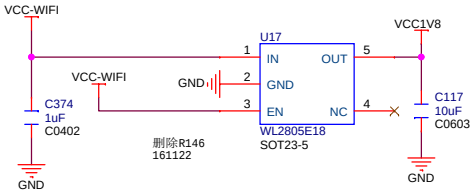
C135C95 靠近XR819

C95与C88 共用一个封装

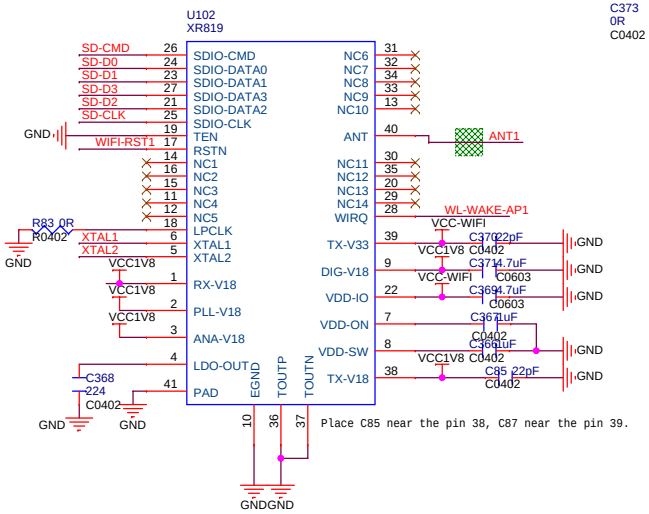


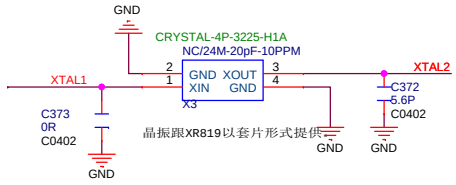


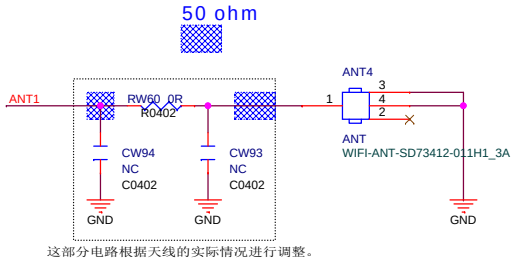
由于S3的IO不足这里加硬件复位



若对功耗温度要求不高，可更换为300mA LDO供电。







这部分电路根据天线的实际情况进行调整。

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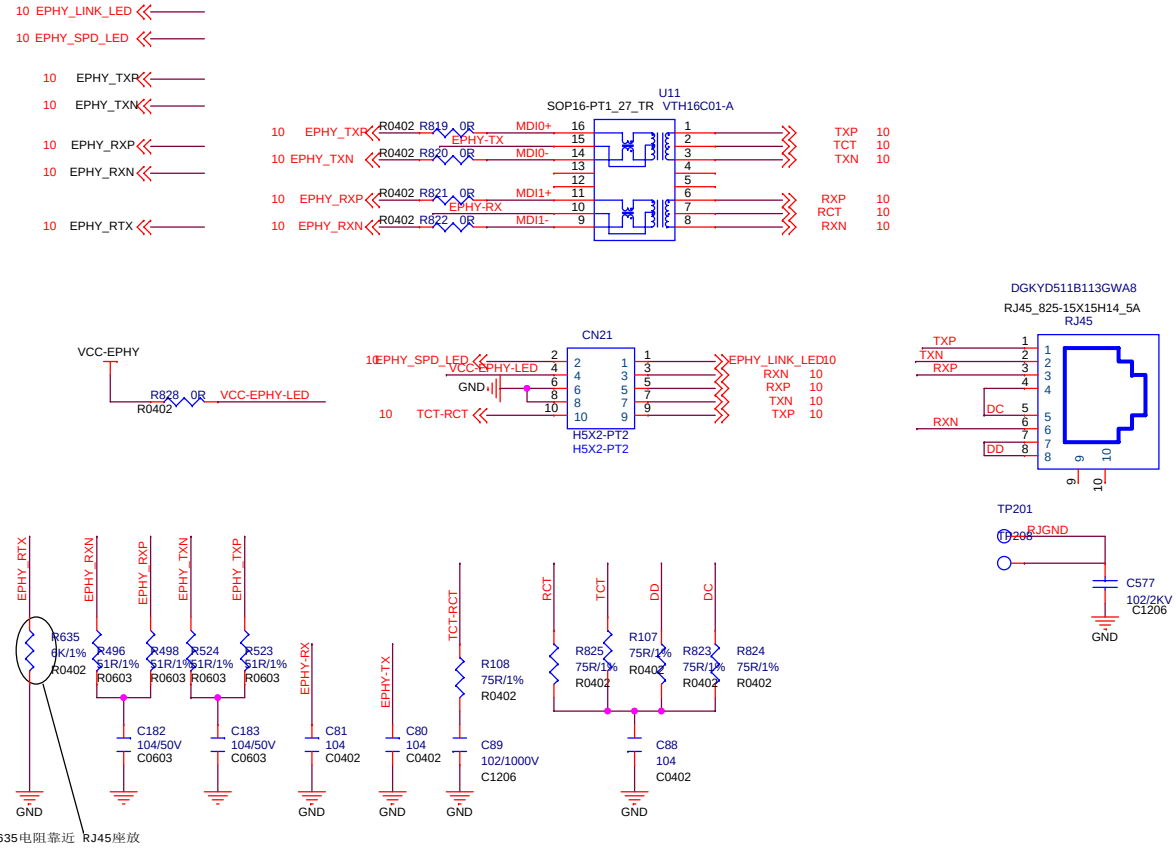

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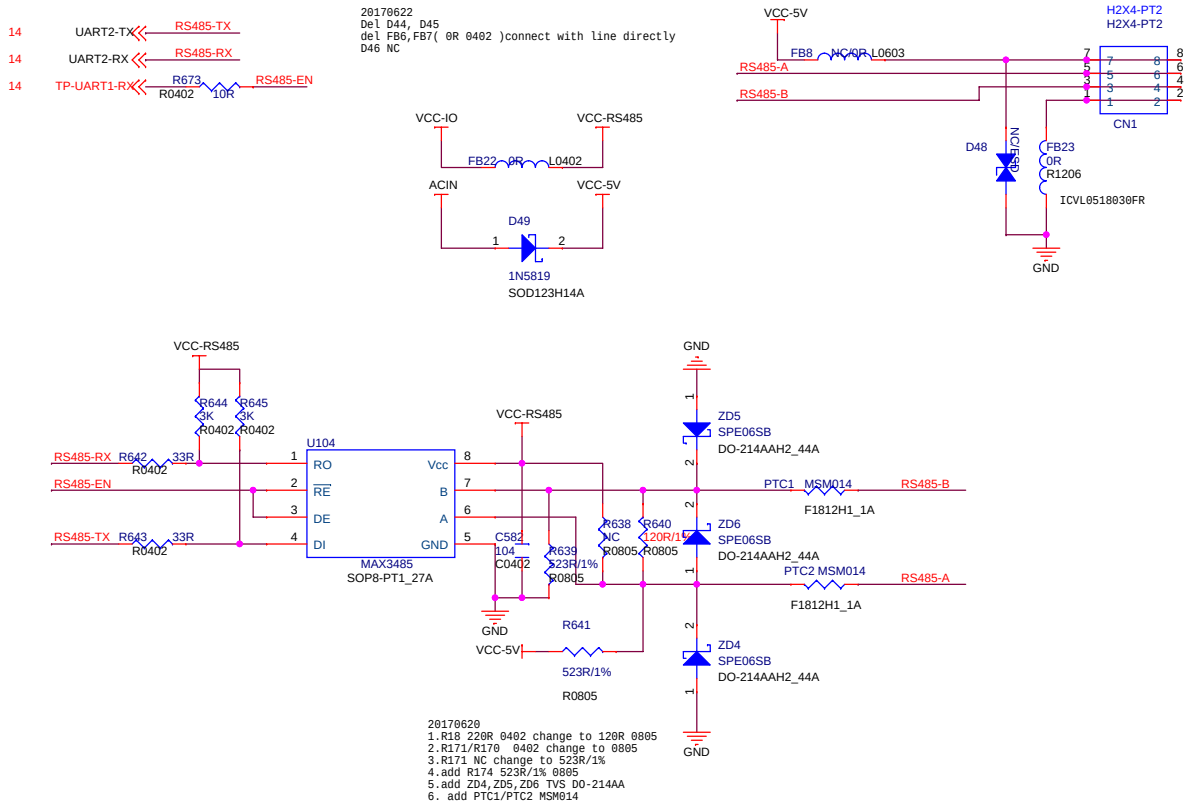

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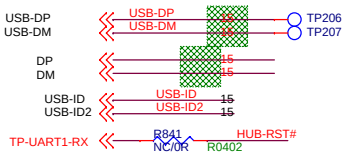
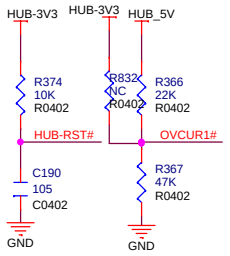
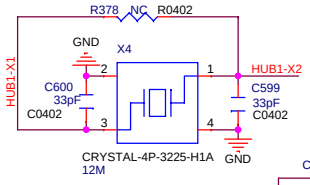
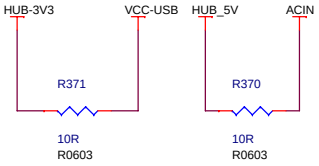
USB HUB

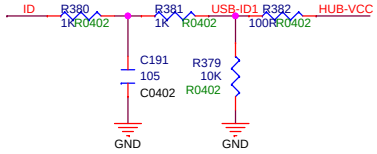


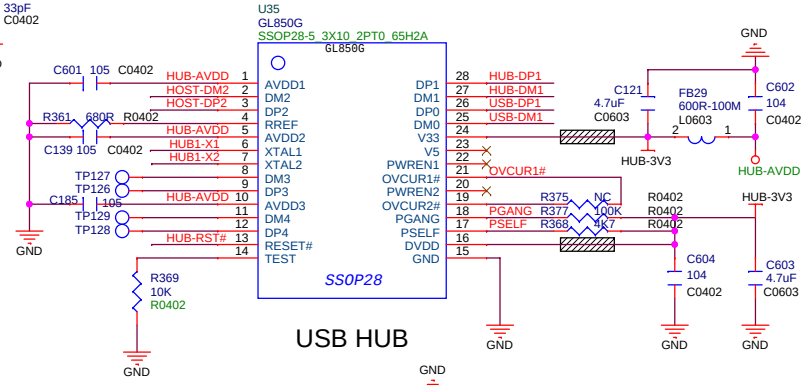






Differential pairs
Z0= 90 ohm +/-5 ohm





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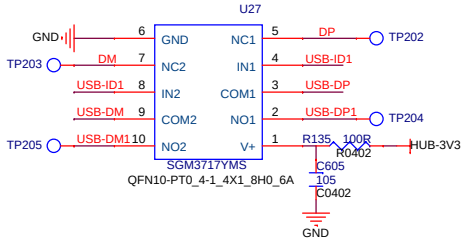

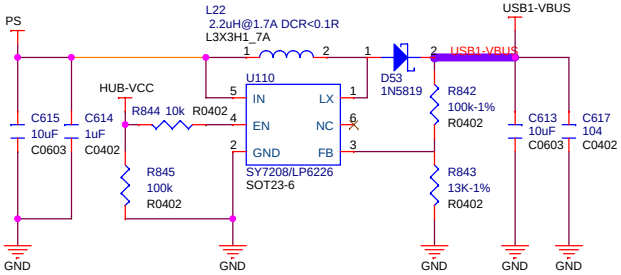

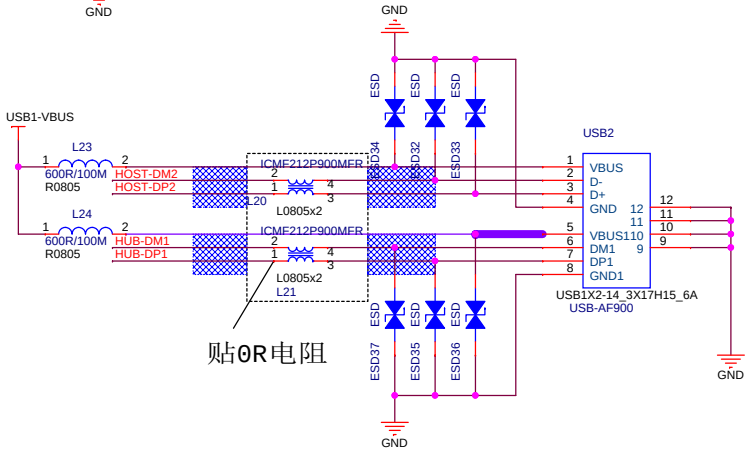

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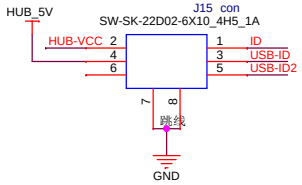

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