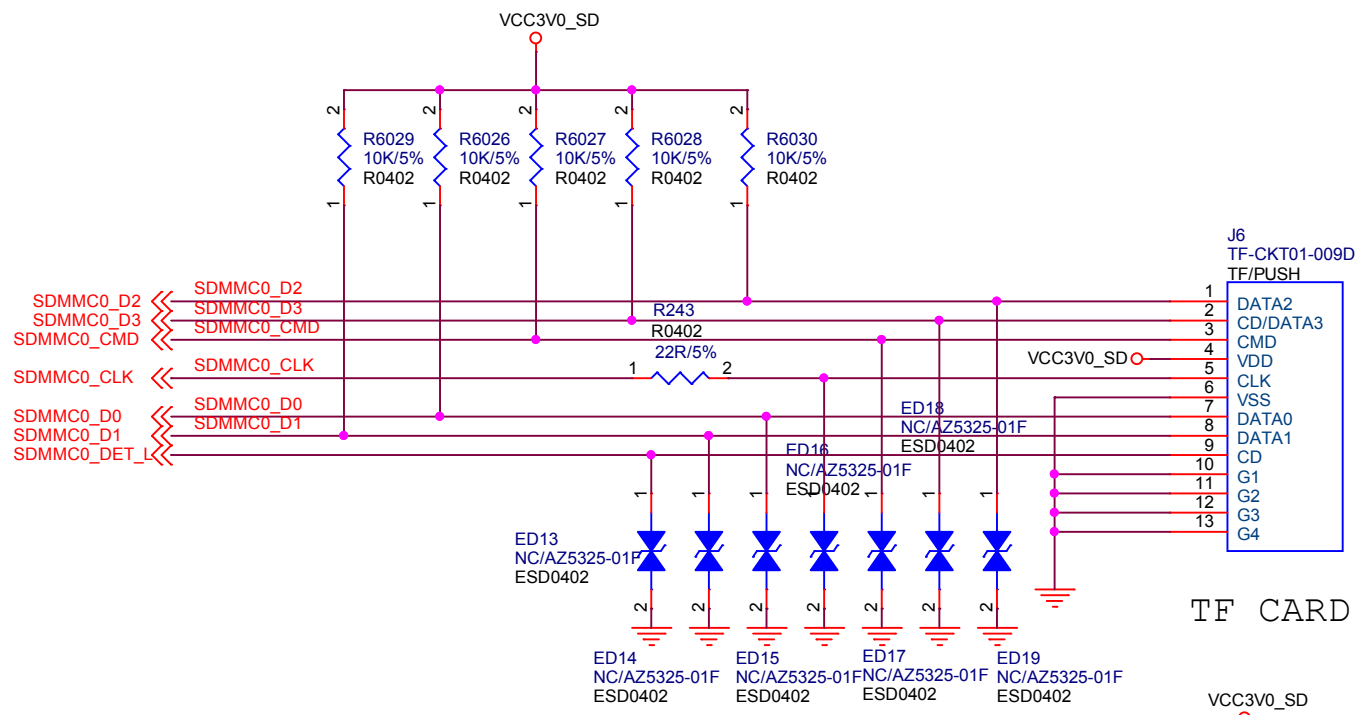
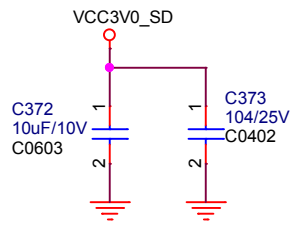


HDMI Port



TF CARD



D

C

B

A

D

C

B

A

5

4

3

2

1

5

4

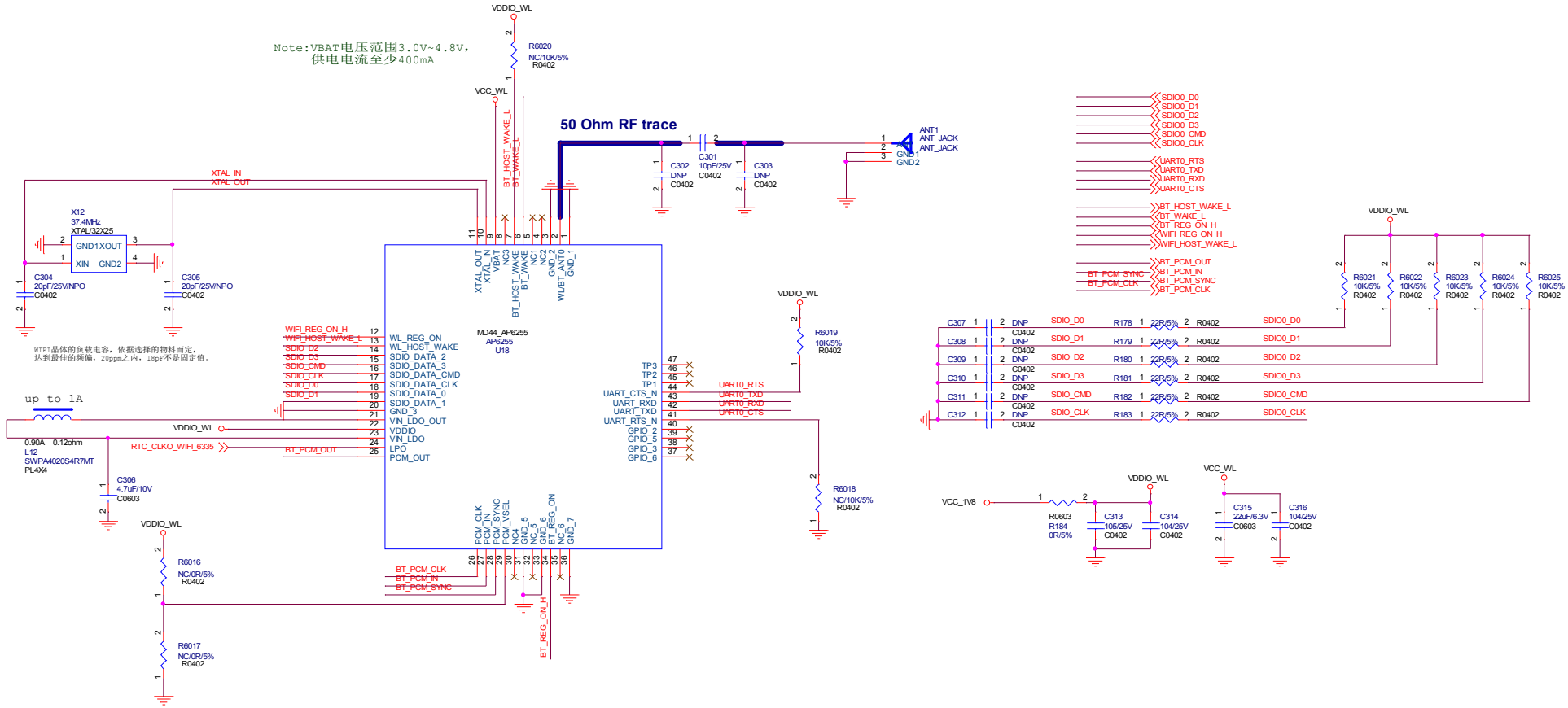
3

2

1

WIFI/BT MODULE

Note:VBAT电压范围3.0V~4.8V,
供电电流至少400mA



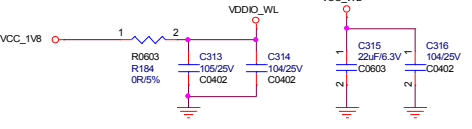
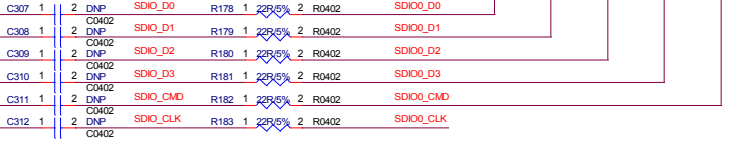
WIFI晶体的负载电容，依据选择的物料而定。
达到最佳的频偏，20ppm之内，18pF不是固定值。

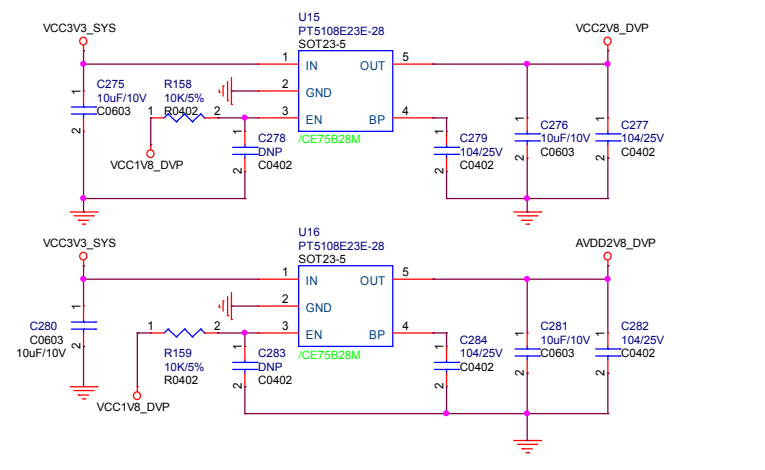
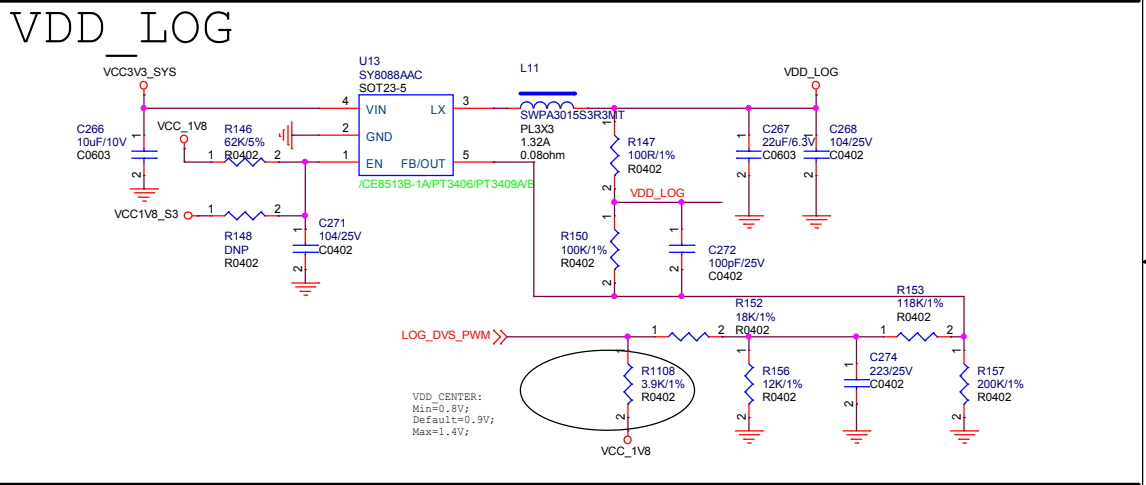
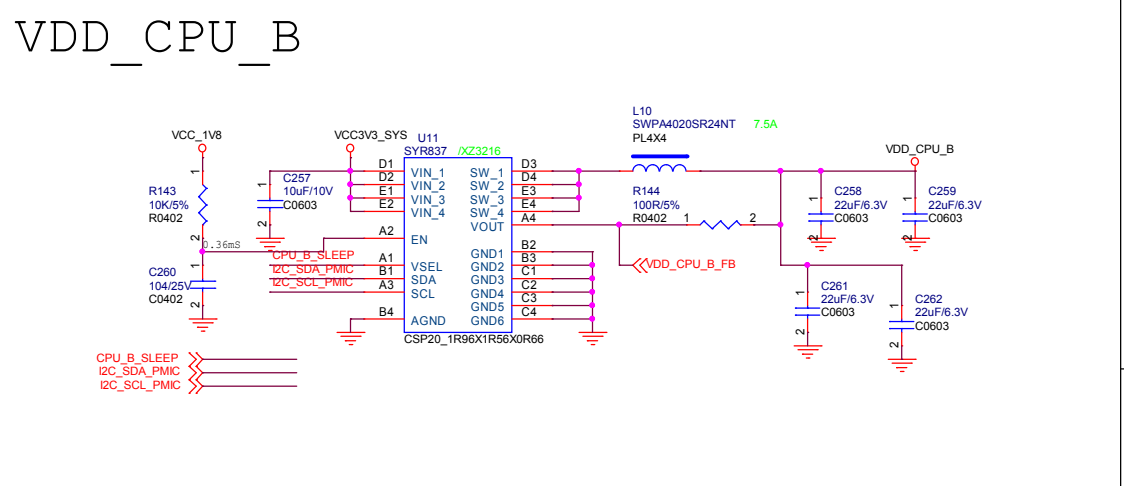
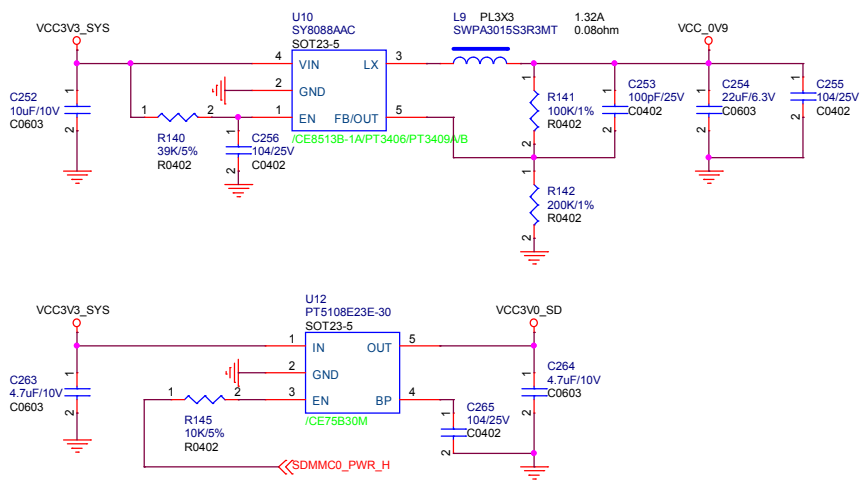
up to 1A

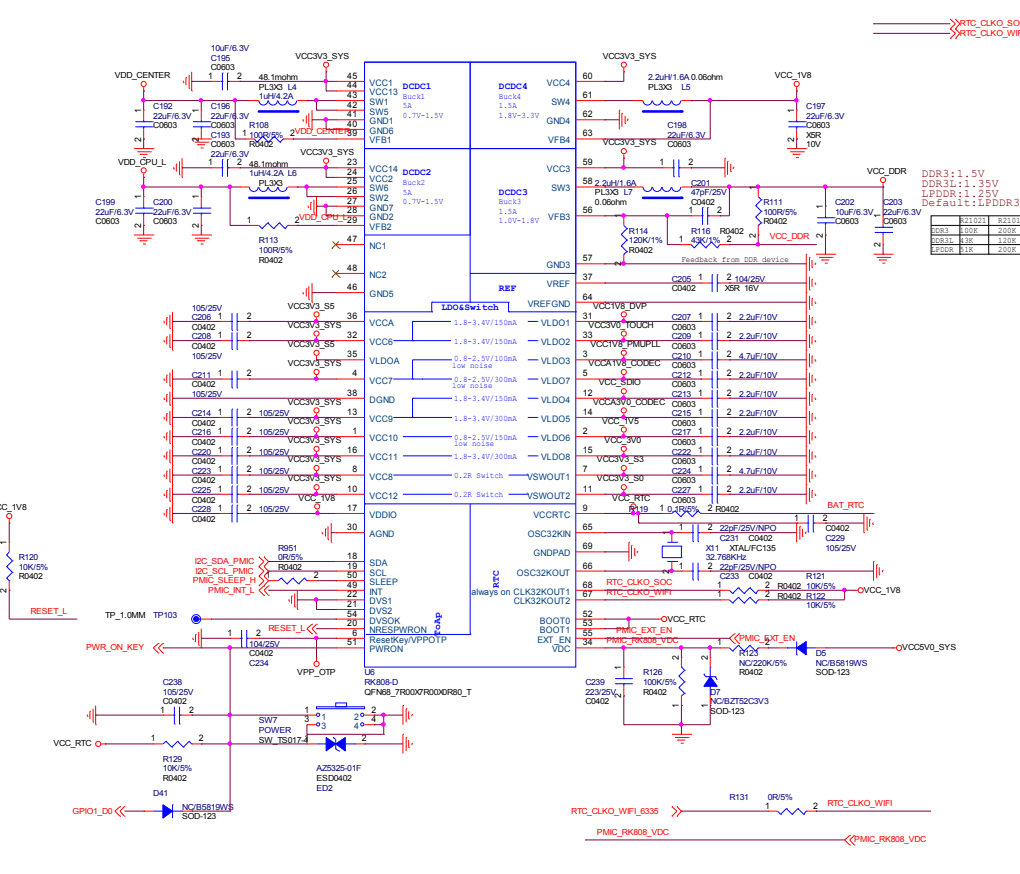
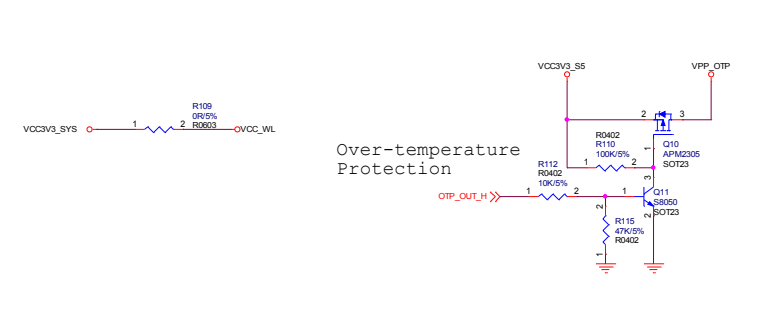
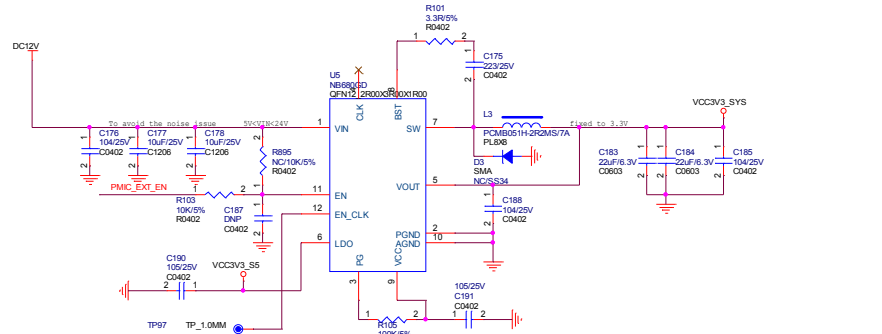
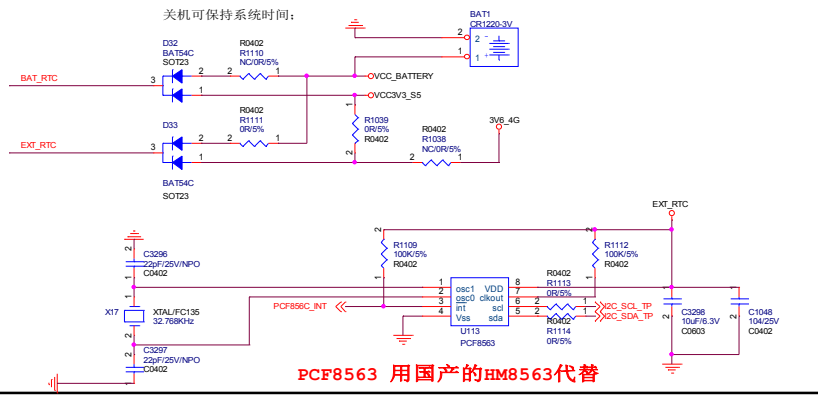
RTC_CLKO_WIFI_6335

50 Ohm RF trace

- SDIO_D0
- SDIO_D1
- SDIO_D2
- SDIO_D3
- SDIO_CMD
- SDIO_CLK
- UART0_RTS
- UART0_TXD
- UART0_RXD
- UART0_CTS
- BT_HOST_WAKE_L
- BT_WAKE_L
- BT_REG_ON_H
- WIFI_REG_ON_H
- WIFI_HOST_WAKE_L
- BT_PCM_OUT
- BT_PCM_IN
- BT_PCM_SYNC
- BT_PCM_CLK





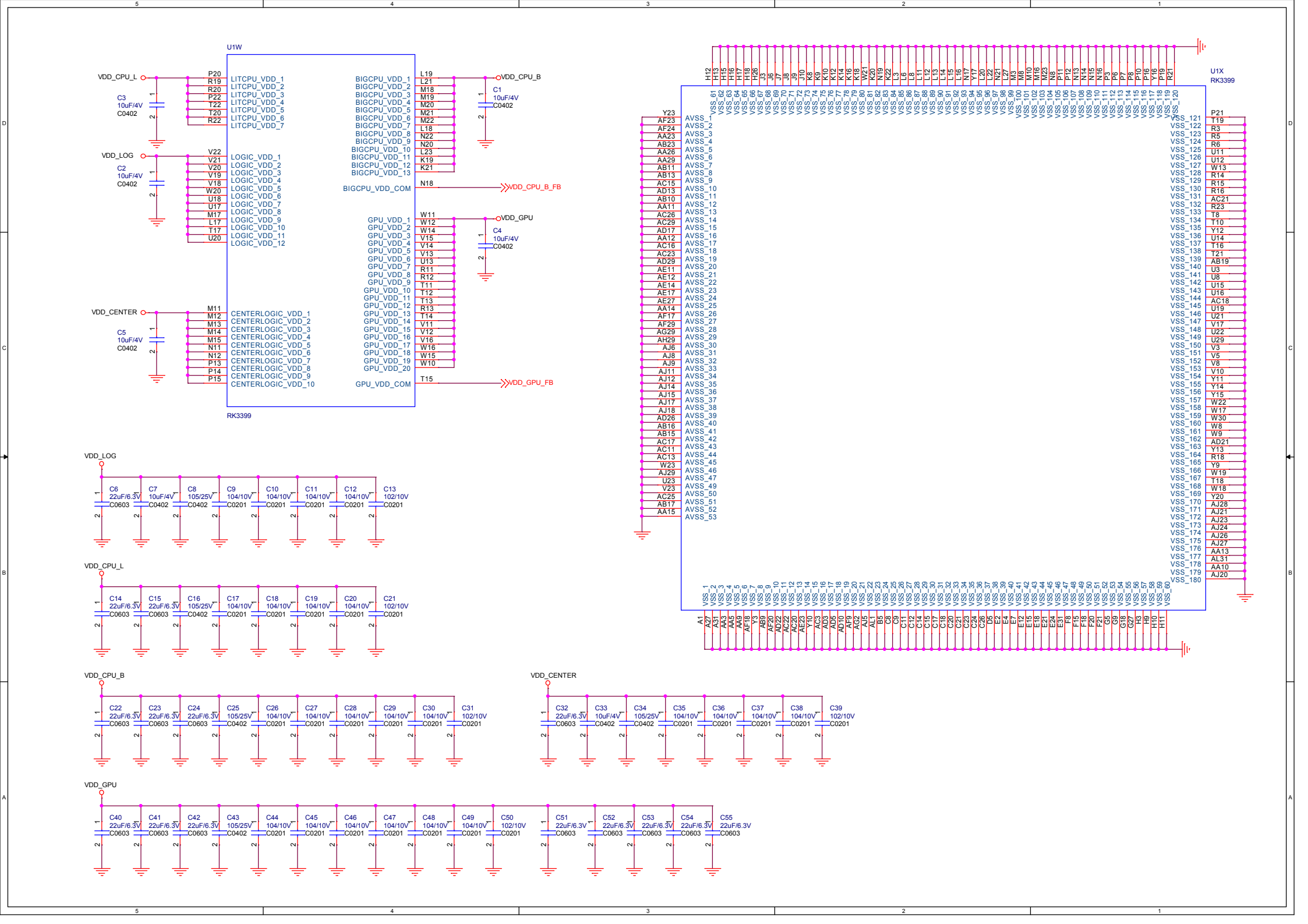


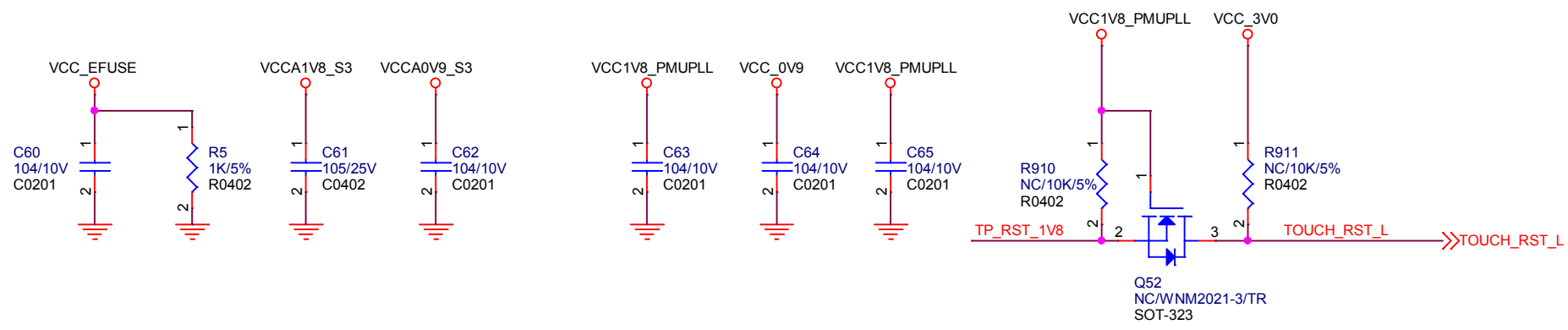
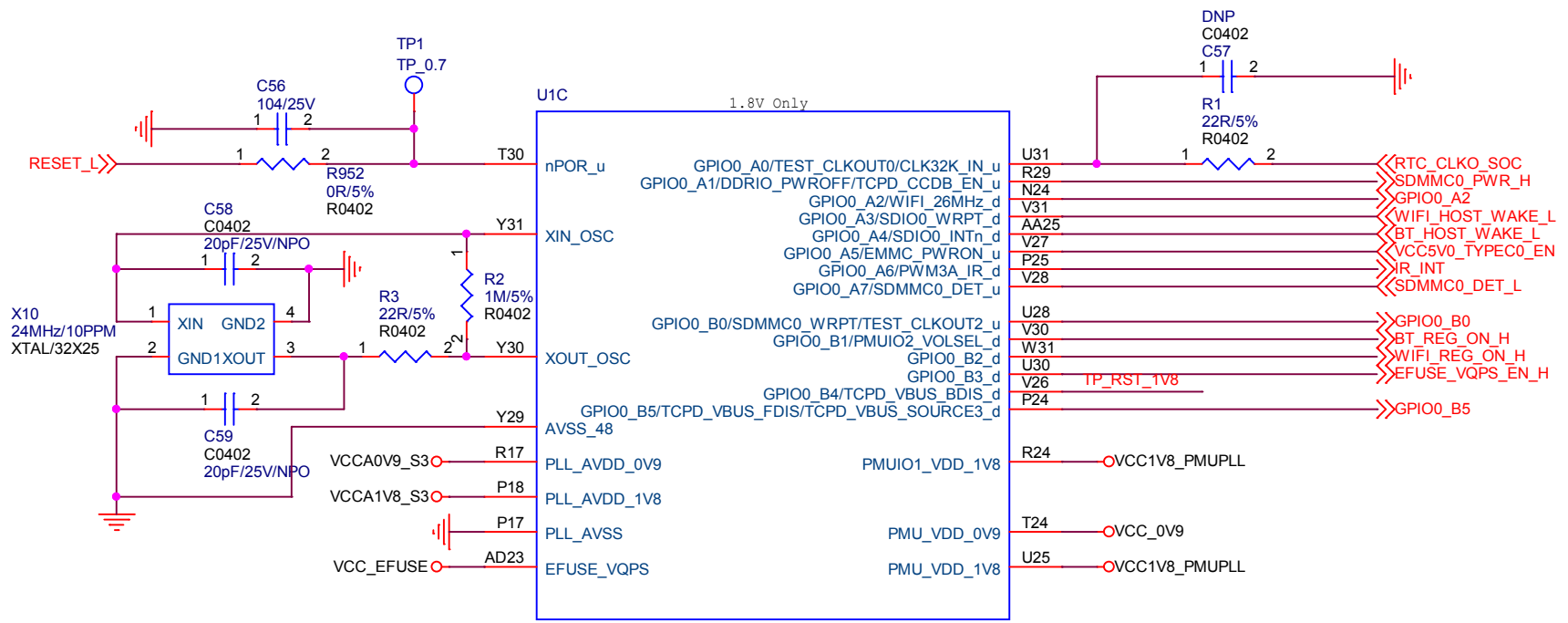
RK3399 Power Domain Map

Part Port	Domain	Pin name in datasheet	I/O type	Power supply	Power source
Part C	PMUI01	pmui01_gpio0ab	1.8V only	VCC1V8_PMU	RK808 VLDO3
Part E	PMUI02	pmu1830_gpio1abcd	1.8V (Default) 3.0V	VCC1V8_PMU	RK808 VLDO3
Part I	APIO1	gmac_gpio3abc	3.3V only	VCC1V8_IO VCC3V3_IO	RK808 Buck4 RK808 VSW2
Part L	APIO2	bt656_gpio2ab	1.8V (Default) 3.0V	VCC1V8_DVP	RK808 VLDO1
Part G	APIO3	wifi/bt_gpio2cd	1.8V only	VCC1V8_WIFI	RK808 Buck4
Part K	APIO4	gpio1830_gpio4cd	1.8V 3.0V (Default)	VCC_1V5 VCC3V0_IO	RK808 VLDO6 RK808 VLDO8
Part J	APIO5	audio_gpio3d_gpio4a	1.8V (Default) 3.0V	VCCA1V8_CODEC	RK808 VLDO7
Part F	SDMMC0	sdmmc_gpio4b	1.8V 3.0V (Default)	VCC_SDIO	RK808 VLDO4

RK3399 I2C MAP

Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Slave Addr (MS 7Bits)	Note	Slave Bus Capability
I2C0	GPIO1_B7/SPI3_RXD/I2C0_SDA GPIO1_C0/SPI3_TXD/I2C0_SCL	PMUIO2 VCC1V8_PMU	I2C_SDA_PMIC I2C_SCL_PMIC	VCC1V8_PMU	SYR838PKC&SYR837PKC	0x41&0x40	DC regulator	100kHz,400KHz,1MHz fast mode+ 3.4MHz high-speed mode
					PMIC:RK808-D	0x1b	PMIC	
					PMIC:RK818-3	0x1c	PMIC	
I2C1	GPIO4_A1/I2C1_SDA GPIO4_A2/I2C1_SCL	APIO5 VCC1V8_IO	I2C_SDA_AUDIO I2C_SCL_AUDIO	VCCA1V8_CODEC	Everest ES8316/ALC5651	0x20&0x34	Audio codec	
			I2C_SDA_CAM I2C_SCL_CAM	VCCA1V8_CODEC	Omnivision OV8858	0x6c,0x20	MIPI Camera	
			I2C_SDA_HDMIIN I2C_SCL_HDMIIN		TC358749XBG	0x0f	HDMI IN	
I2C2	GPIO2_A0/VOP_D0/CIF_D0/I2C2_SDA GPIO2_A1/VOP_D1/CIF_D1/I2C2_SCL	APIO2 VCC1V8_IO	Other pin function					
I2C3	GPIO4_C0/I2C3_SDA/UART2B_RX GPIO4_C1/I2C3_SCL/UART2B_TX	APIO4 VCC3V0_IO	I2C_SDA_HDMI I2C_SCL_HDMI	VCC3V0_IO				
I2C4	GPIO1_B3/I2C4_SDA GPIO1_B4/I2C4_SCL	PMUIO2 VCC1V8_IO	I2C_SDA_MEMS I2C_SCL_MEMS	VCC1V8_PMU	MPU6500	0x34	G-sensor	
			I2C_SDA_BAT I2C_SCL_BAT	VCC1V8_PMU	Fairchild FUSB302B	0x44	USB-TypeC Mux	100kHz,400KHz,1MHz fast mode+
					TI BQ25700	0x12	Charger	
I2C5	GPIO3_B2/MAC_RXER/I2C5_SDA GPIO3_B3/MAC_CLK/I2C5_SCL	APIO1	I2C_SCL_TOUCH I2C_SDA_TOUCH	VCC3V3_IO			Touch panel	
I2C6	GPIO2_B1/SPI2_RXD/CIF_HREF/I2C6_SDA GPIO2_B2/SPI2_TXD/CIF_CLKIN/I2C6_SCL	APIO2 VCC1V8_IO	Other pin function					
I2C7	GPIO2_A7/VOP_D7/CIF_D7/I2C7_SDA GPIO2_B0/VOP_CLK/CIF_VSYNC/I2C7_SCL	APIO2 VCC1V8_IO	Other pin function					

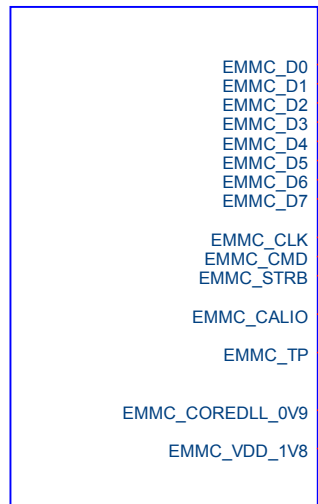




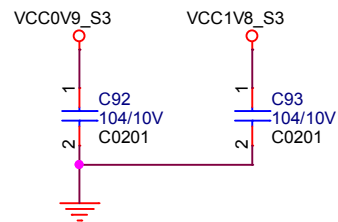
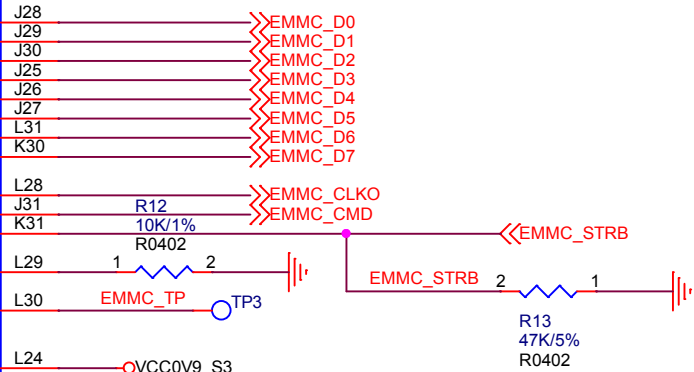
RK3399

Q52
NC/WNM2021-3/TR
SOT-323

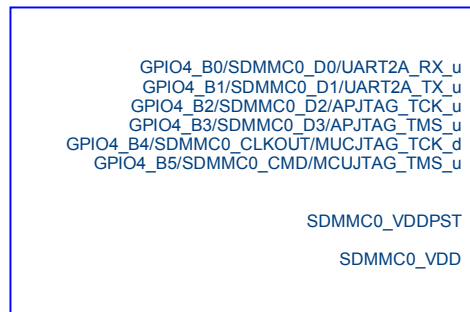
U1H



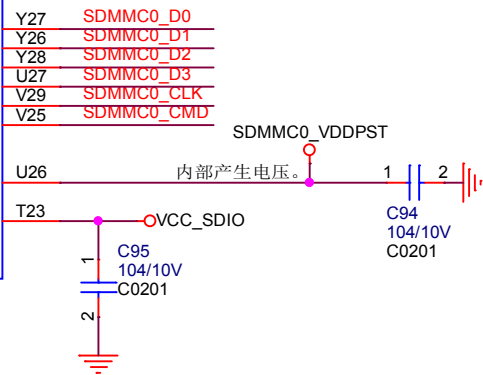
RK3399

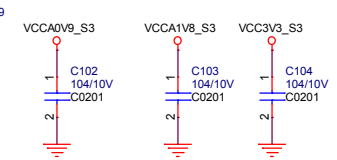
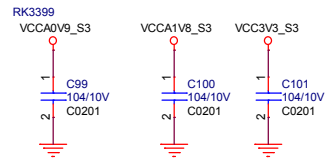
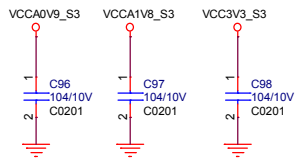
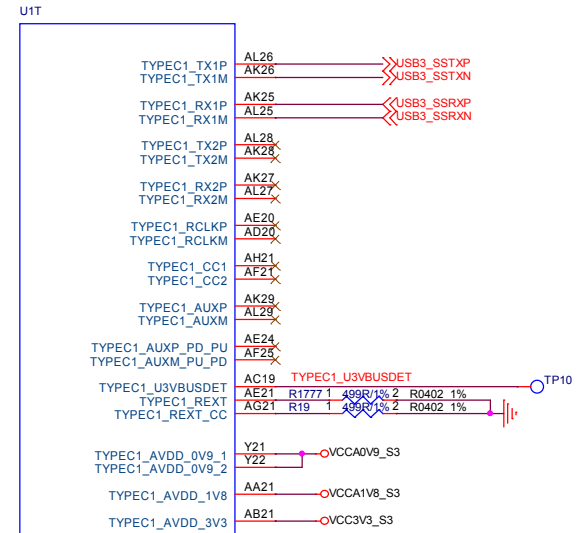
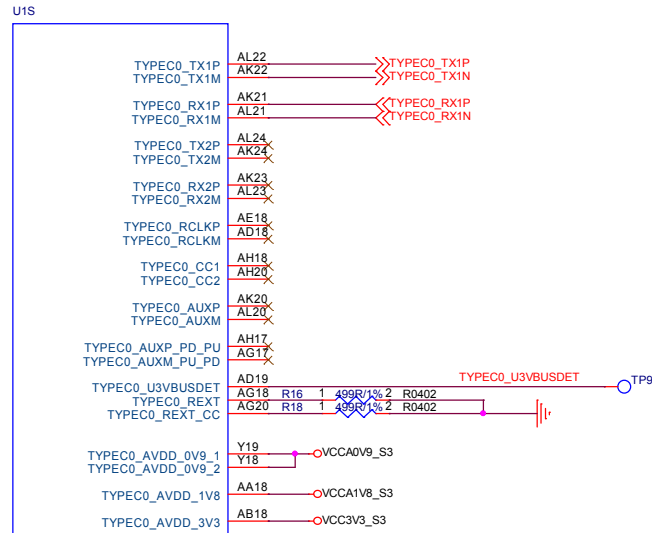
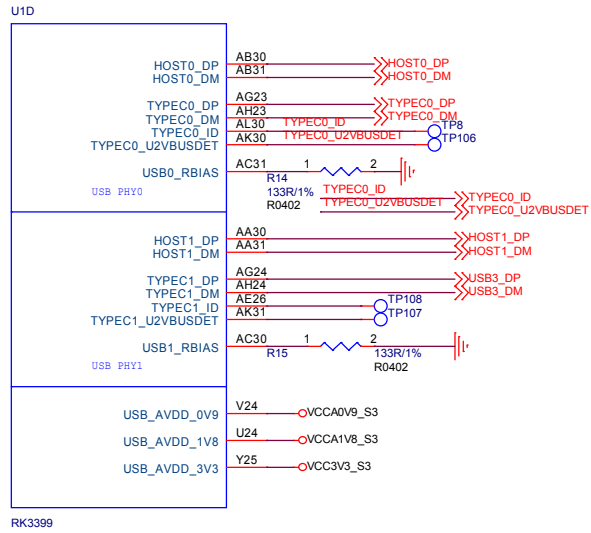
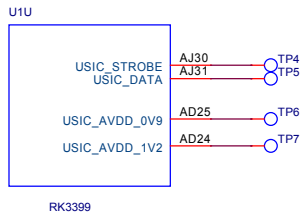


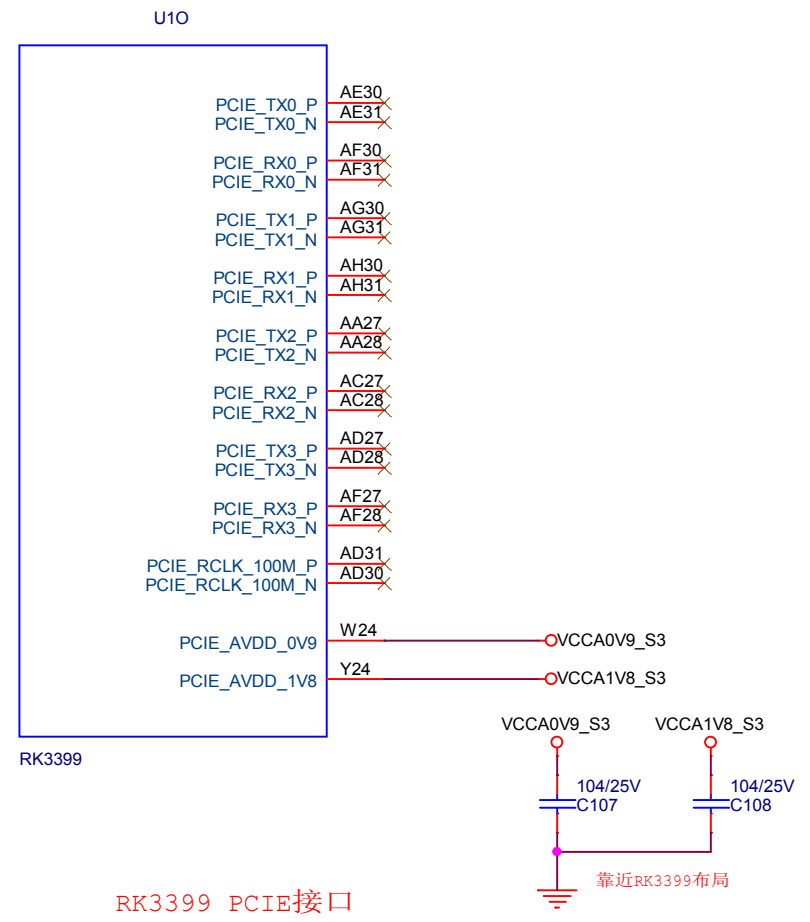
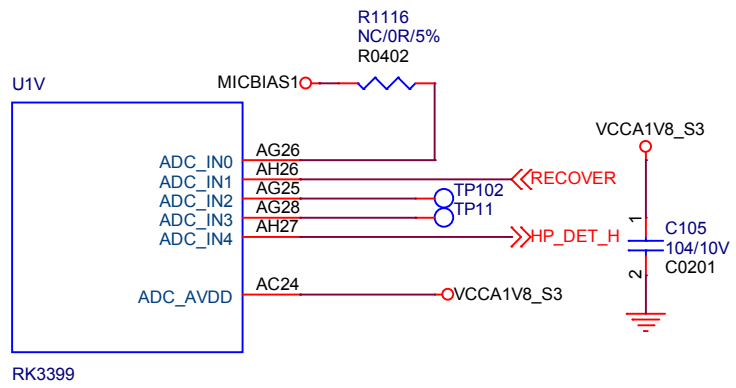
U1F



RK3399

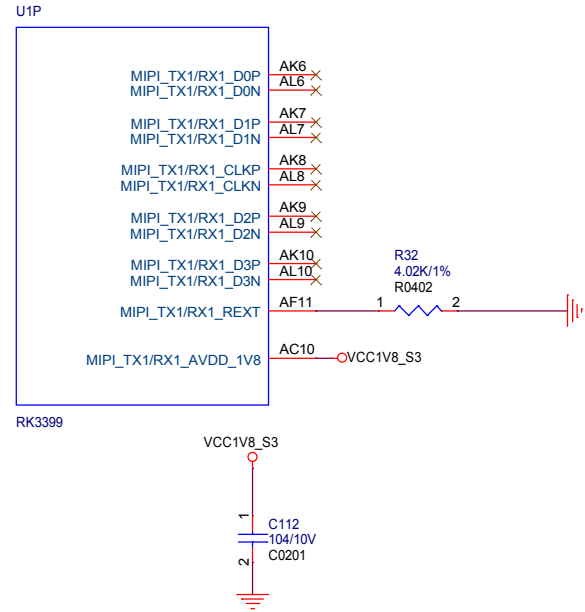
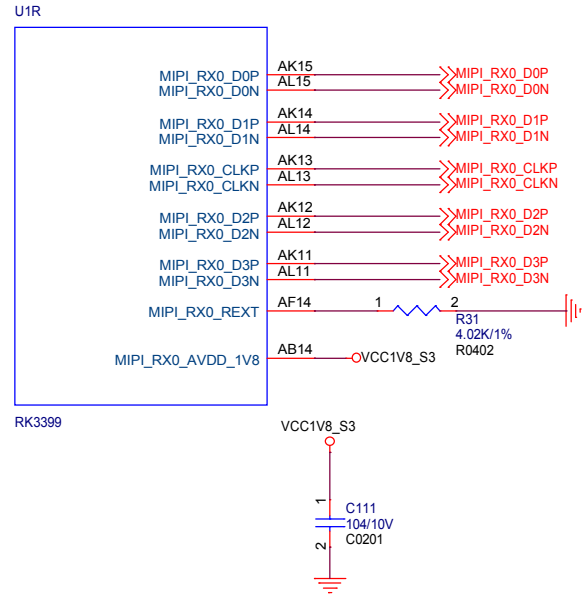
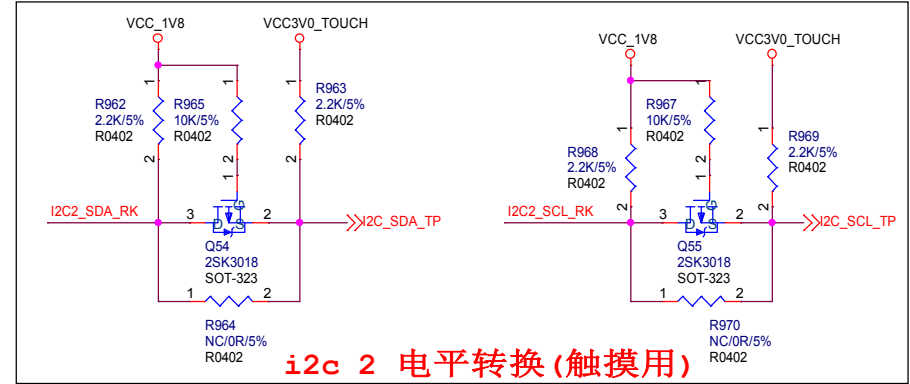
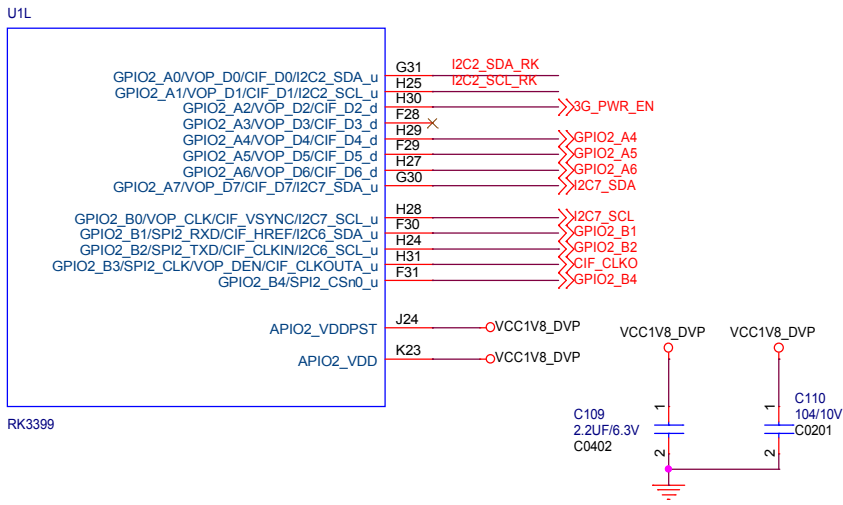


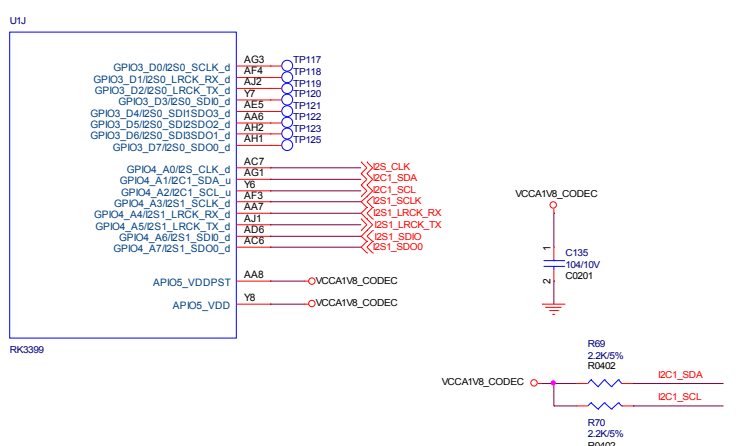
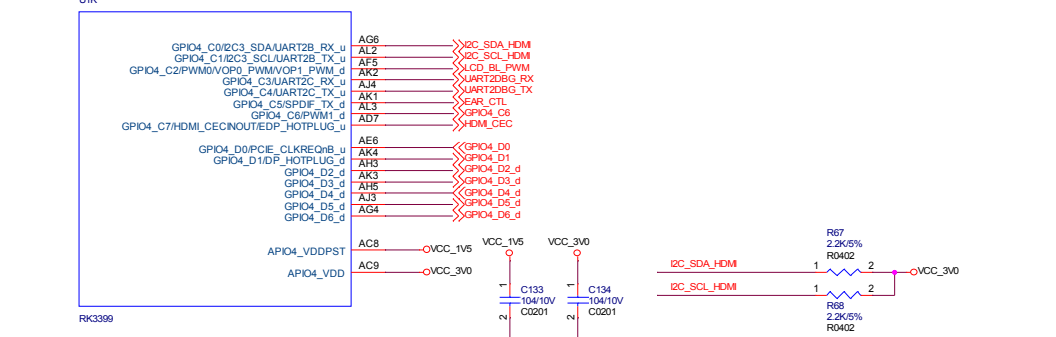
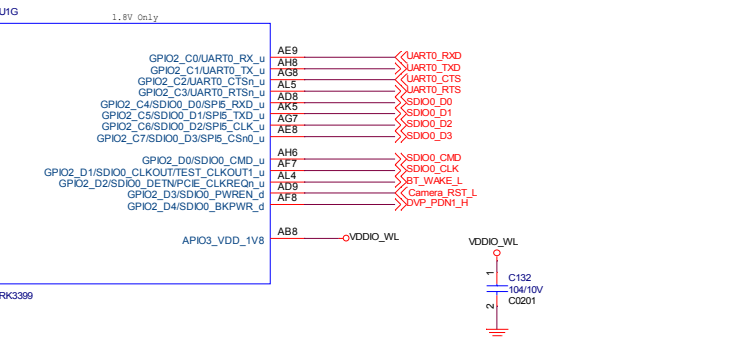
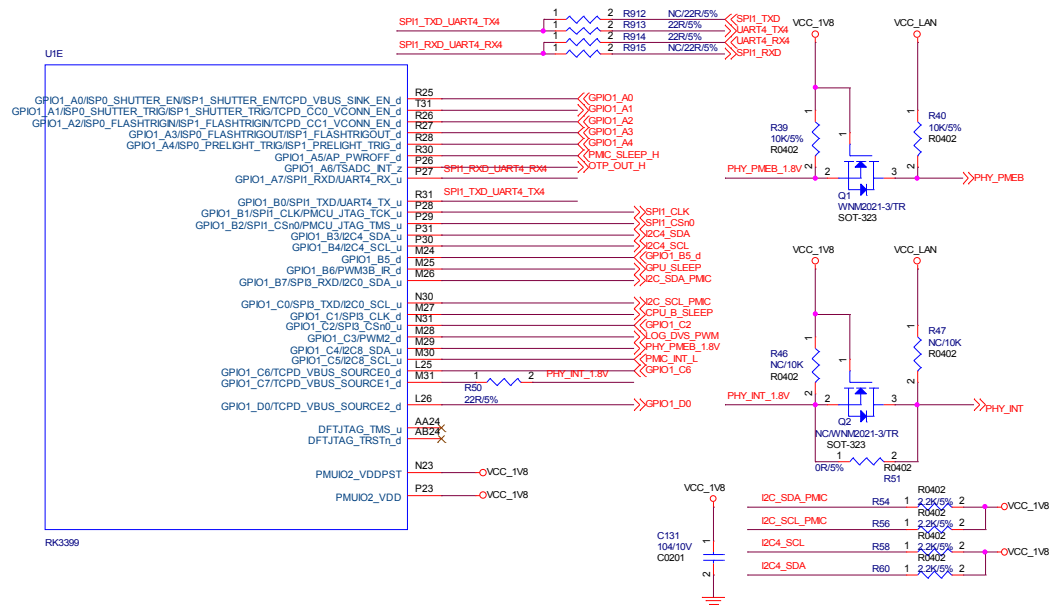
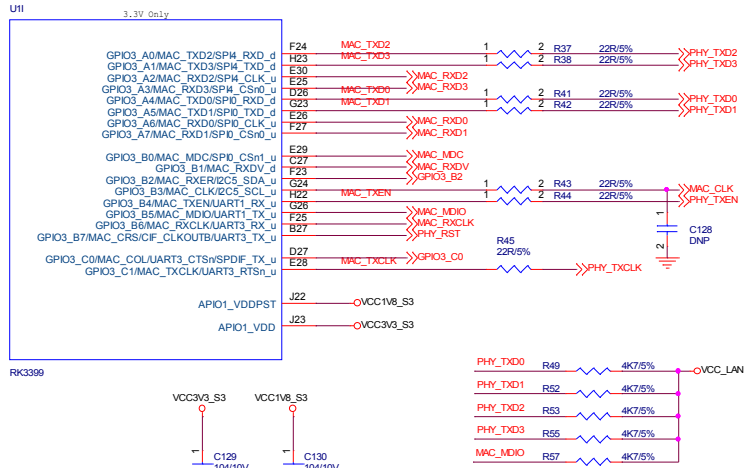




RK3399 PCIe接口

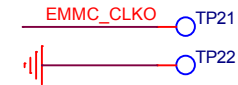
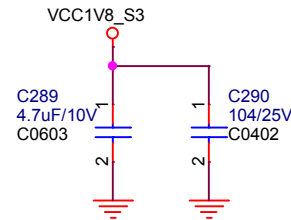
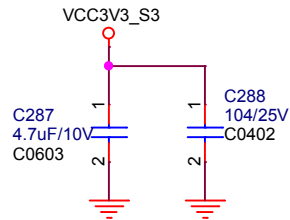
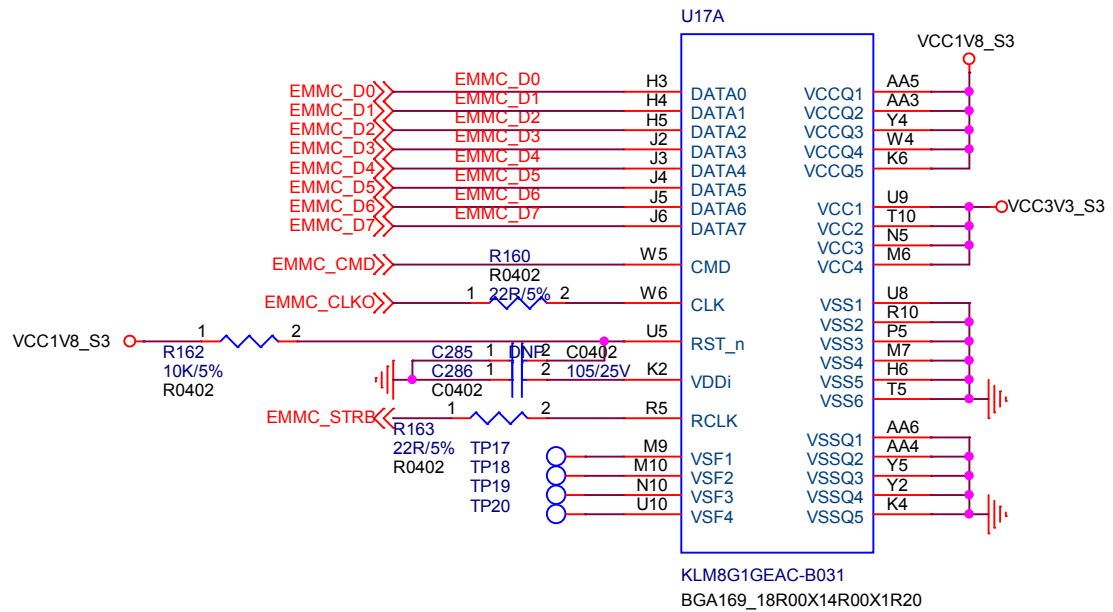
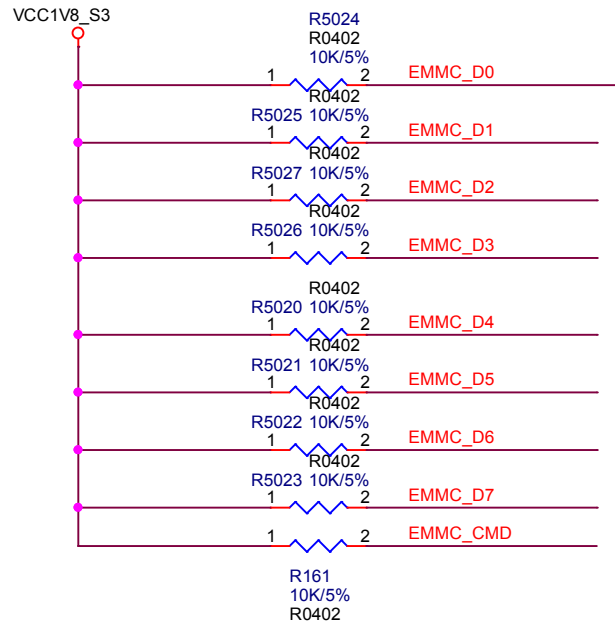
靠近RK3399布局



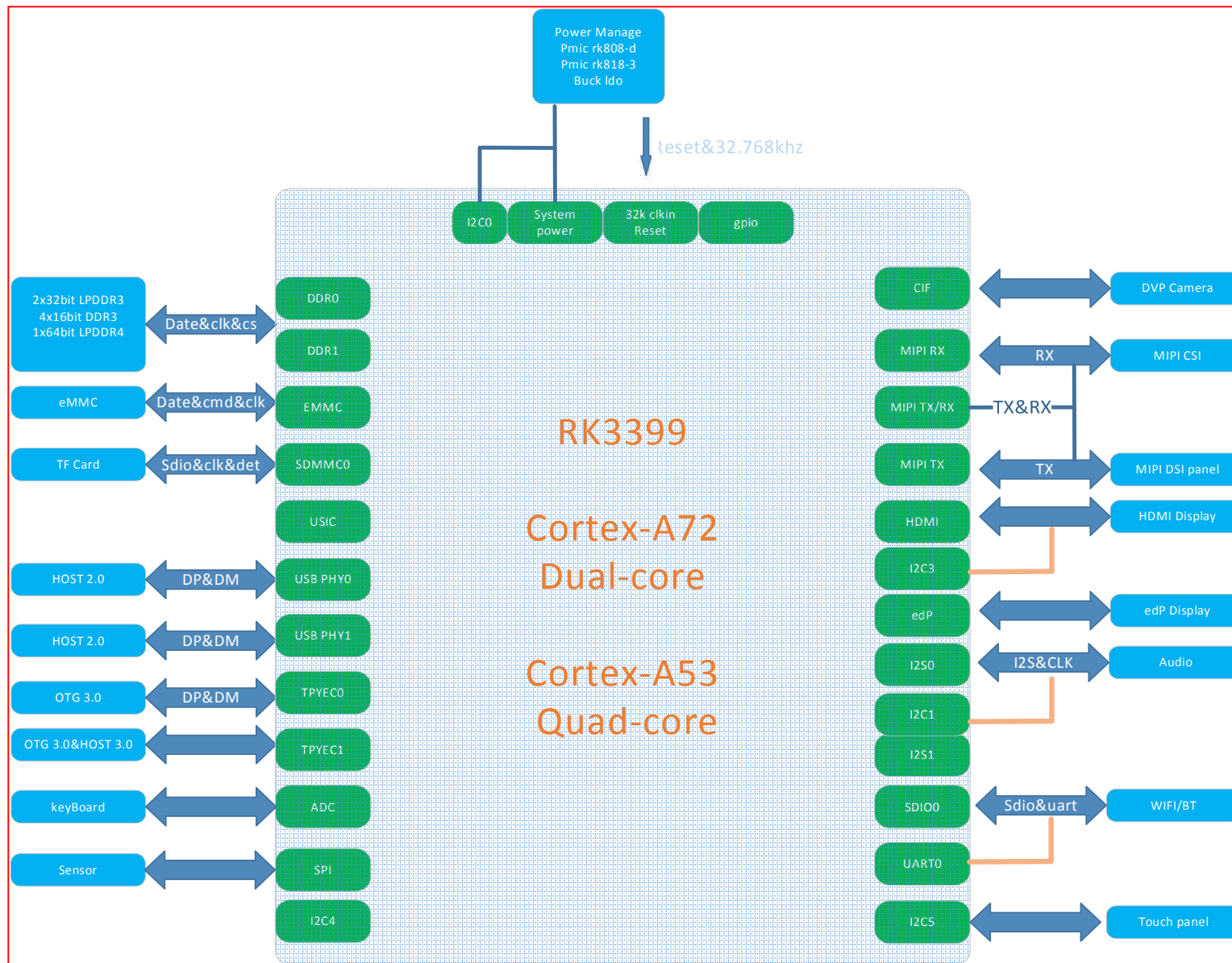


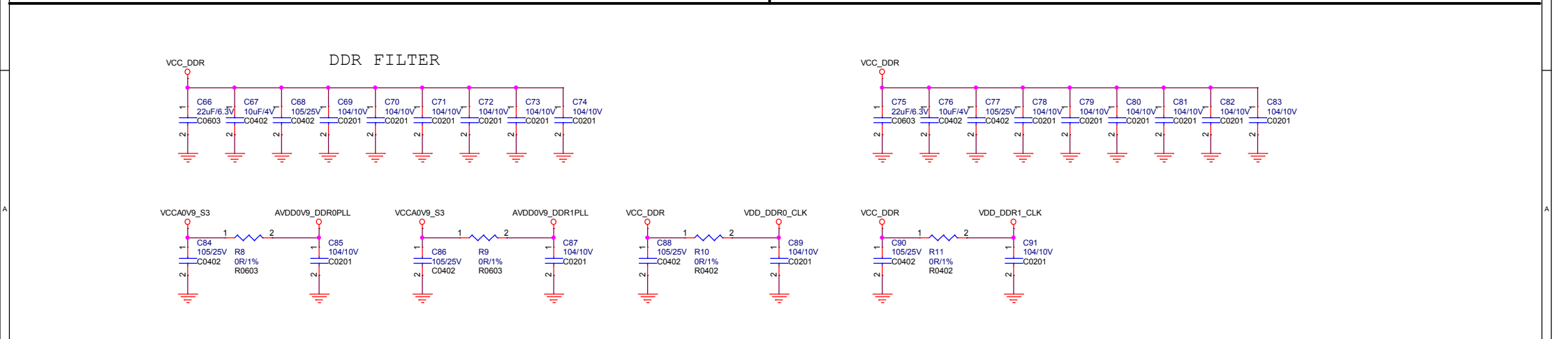
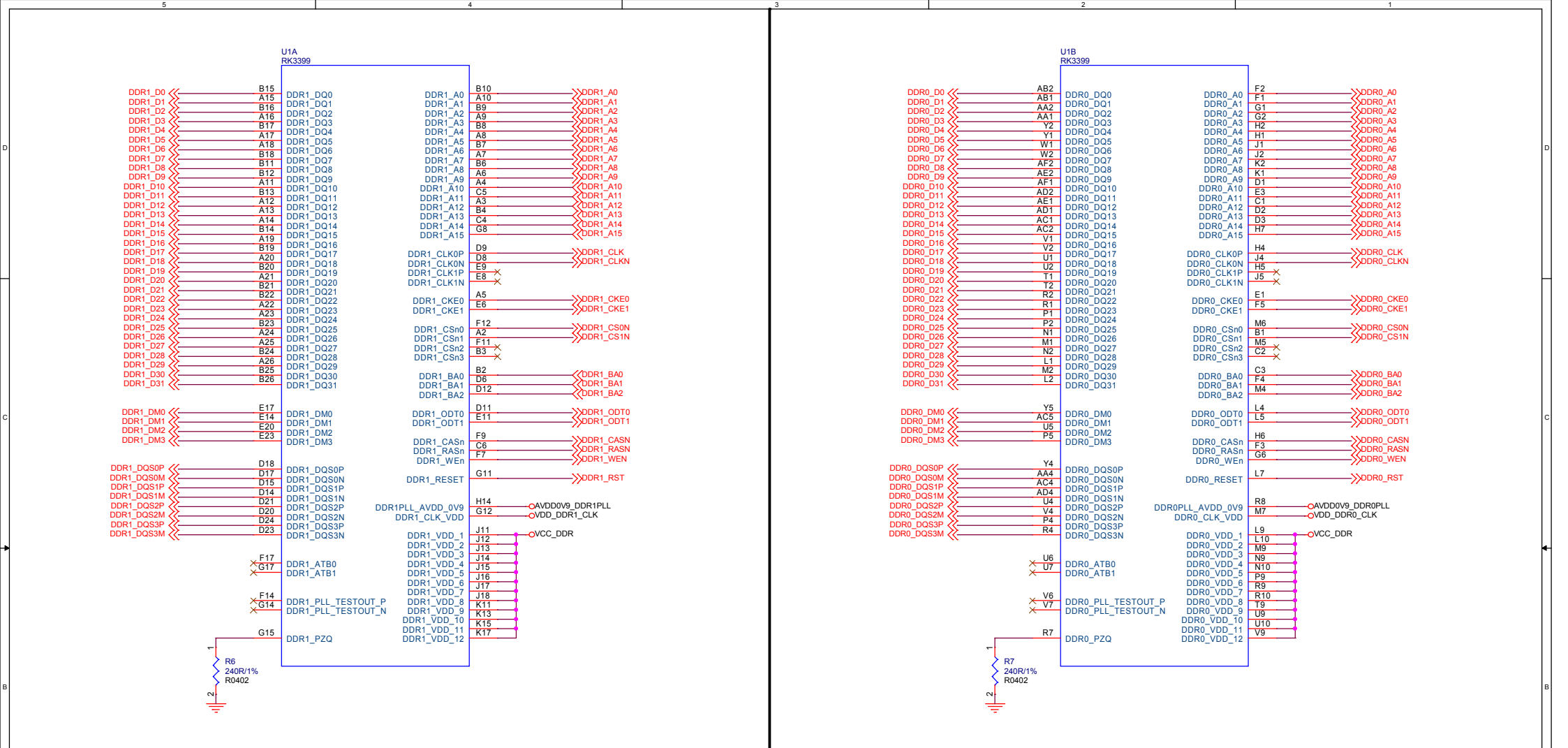
1.8V Only	VDDPST=VDDIO=1.8V
3.3V Only	VDDPST=1.8V, VDDIO=3.3V
other	1.0V mode: VDDPST=1.3V, VDDIO=1.0V 1.8V mode: VDDPST=1.8V, VDDIO=1.8V

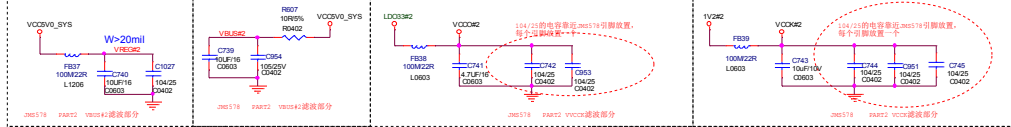
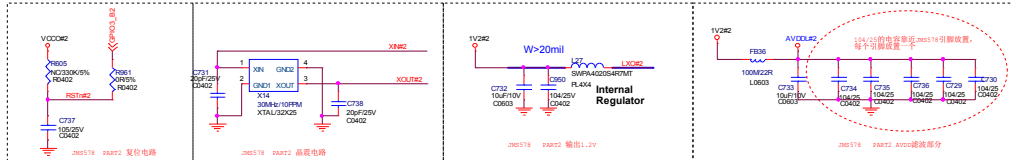
eMMC FLASH

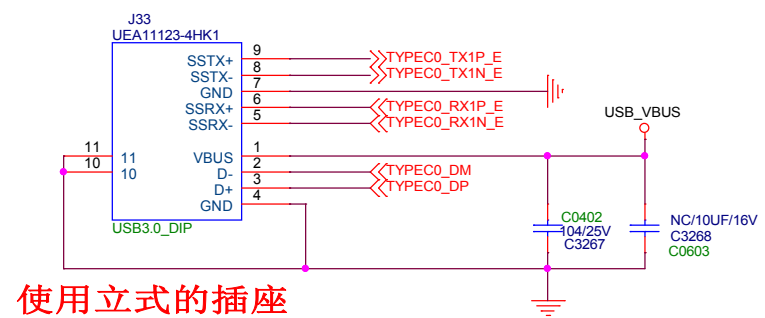
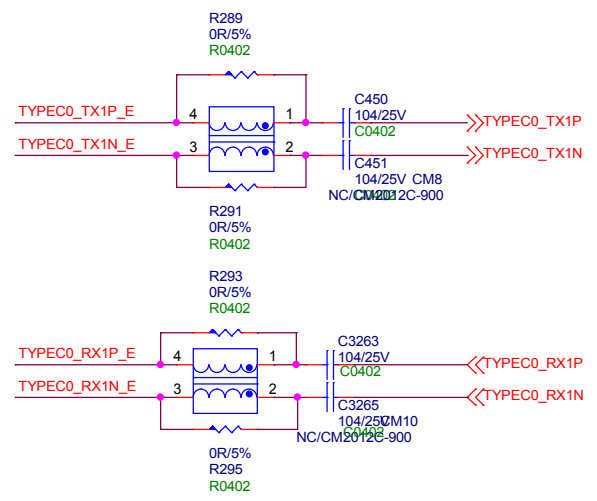
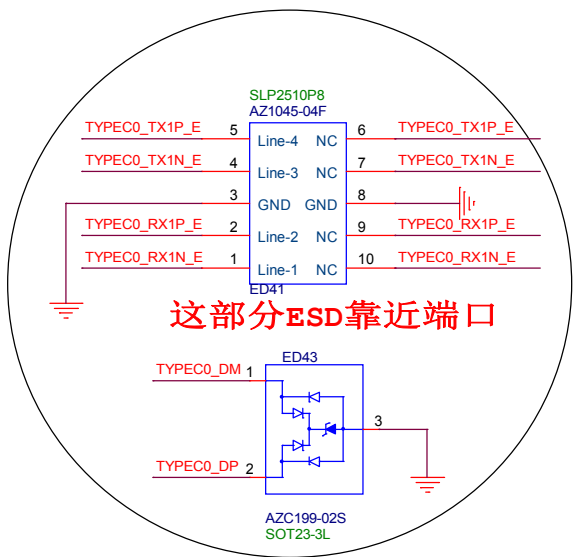


Note:
 Reserve PAD for Update.
 这个两个测试点靠近布局
 强制进入烧写模式使用

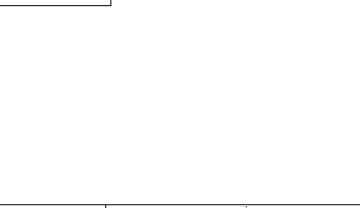
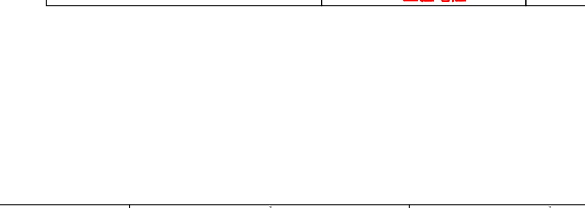
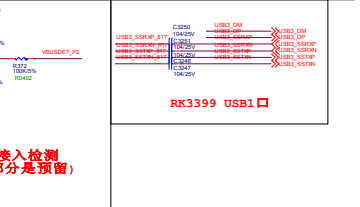
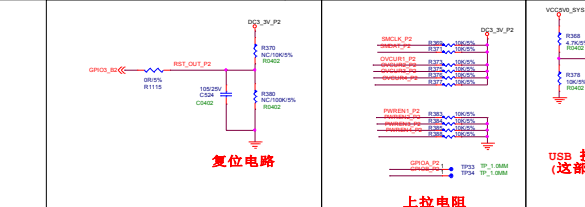
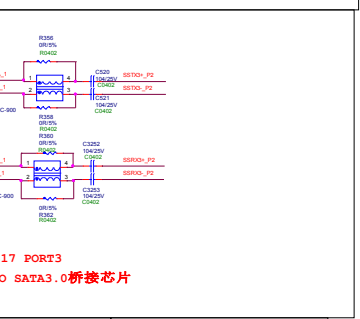
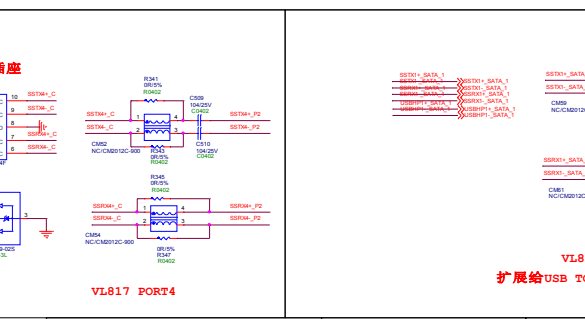
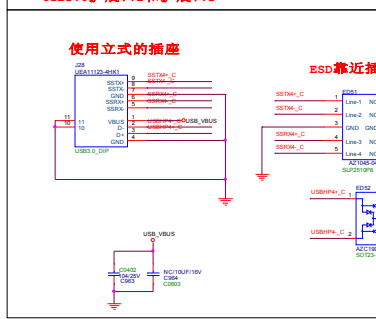
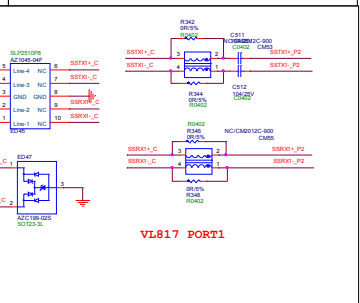
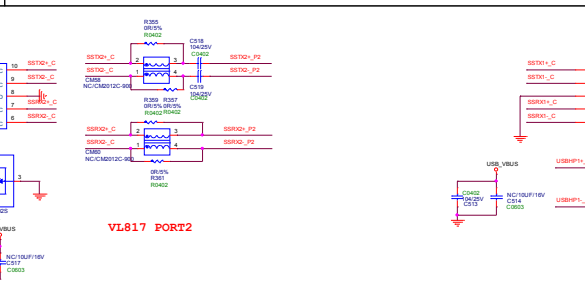
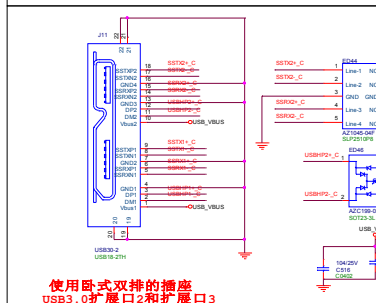
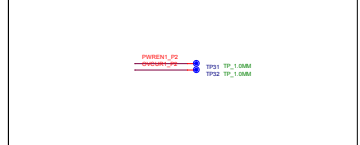
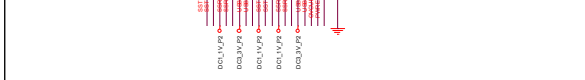
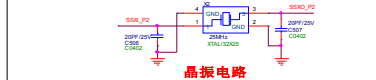
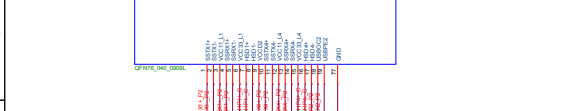
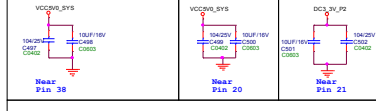
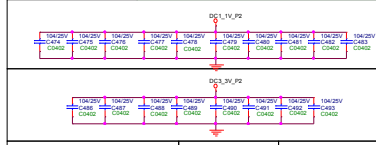
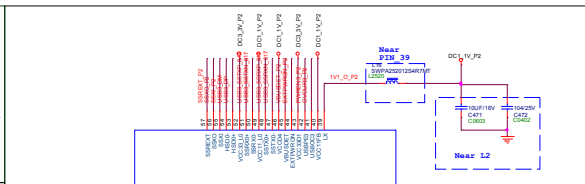
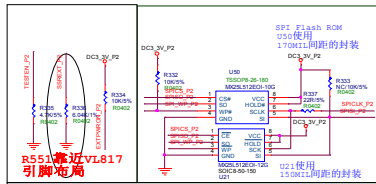


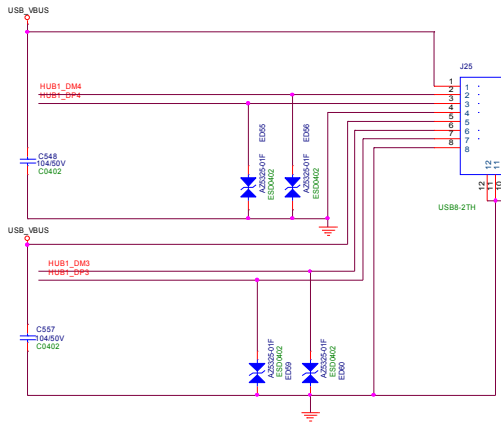




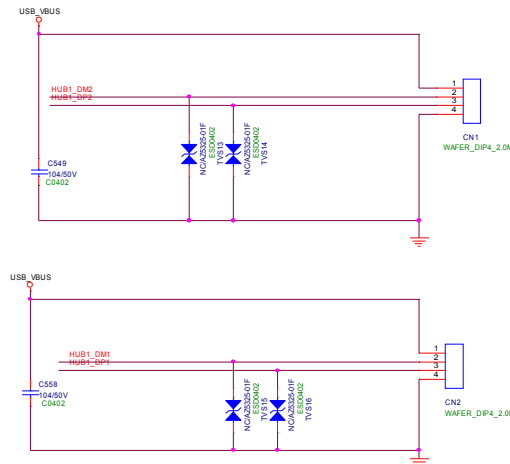


RK3399 USB0口
USB烧写调试也用这个口





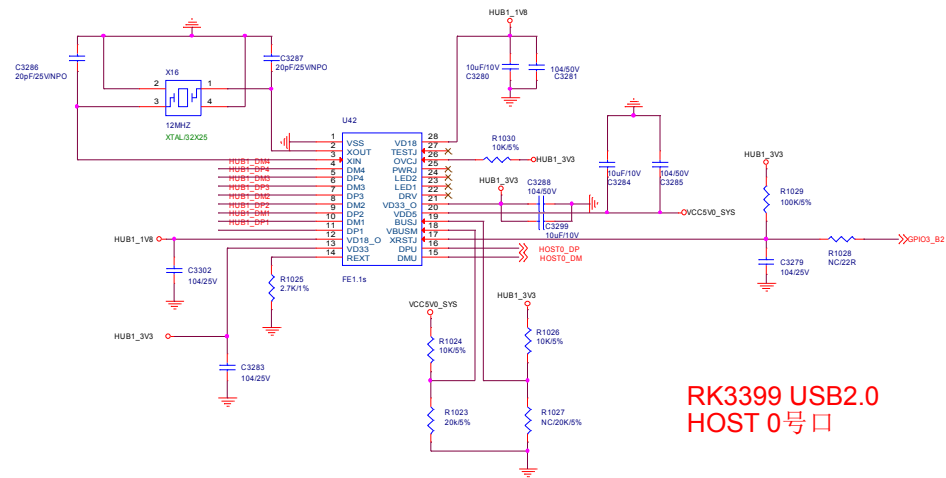
扩展USB2.0 给红外触摸用
引脚顺序和众云RK3288一致
双层A型
USB 2.0卧室插座



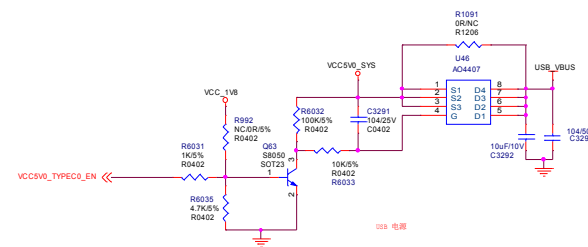
金属键盘用
引脚顺序和众云RK3288一致

扩展 USB 2.0
身份证识别
引脚顺序和
众云RK3288一致

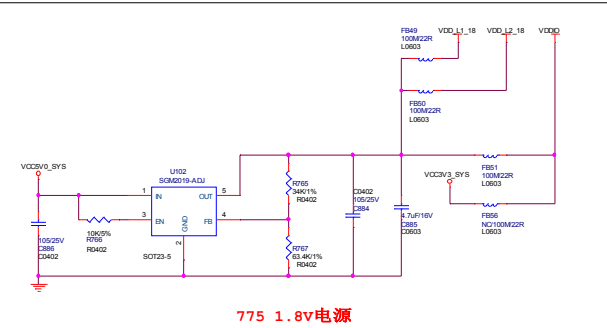
USB2.0 Port



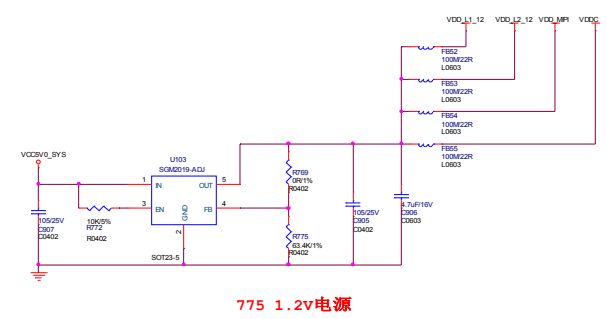
RK3399 USB2.0
HOST 0号口



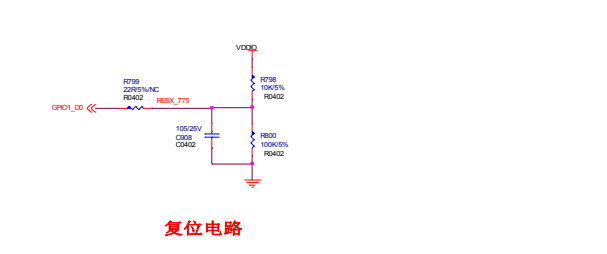
USB 电源



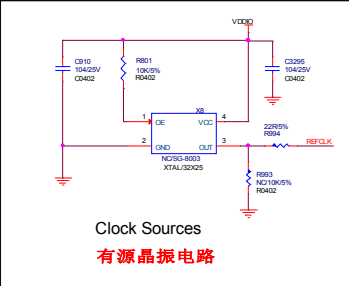
775 1.8V电源



775 1.2V电源



复位电路

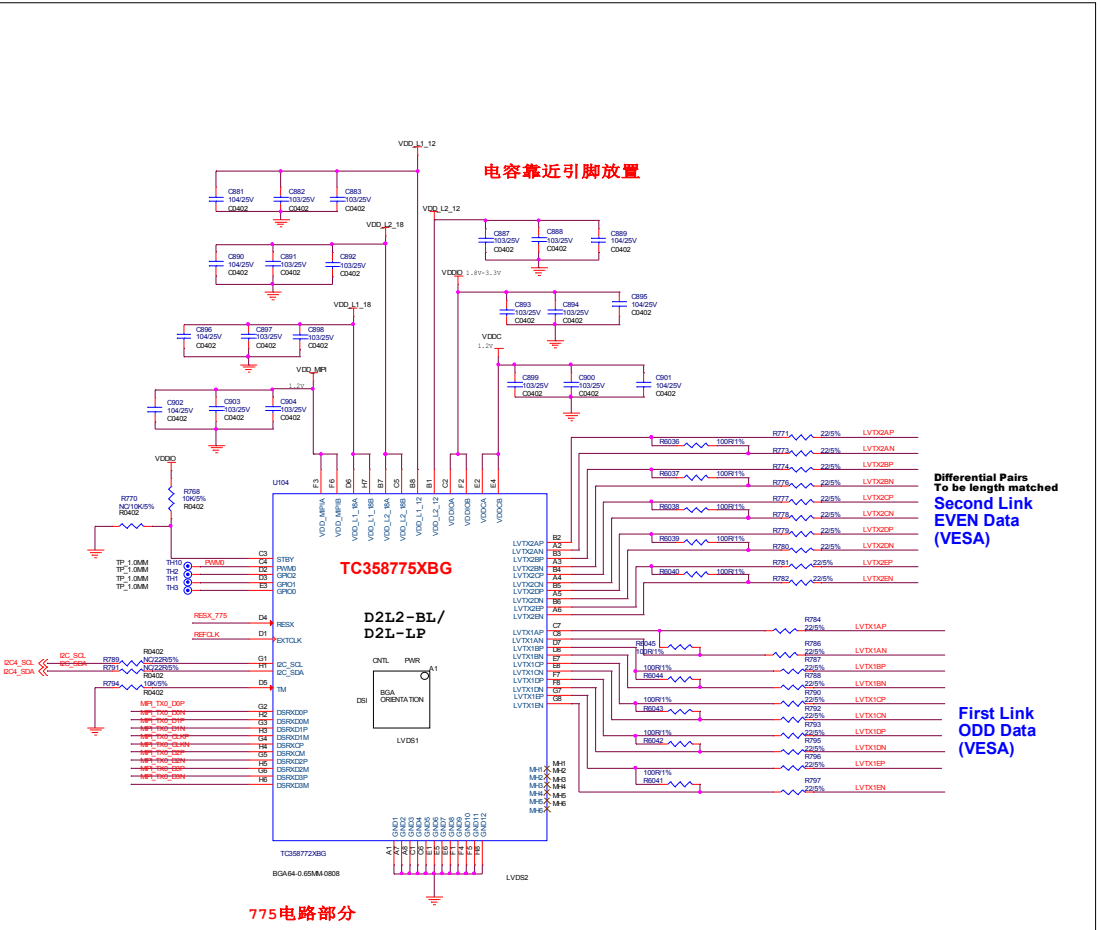


Clock Sources
有源晶振电路



Differential Pairs
To be length matched

RK3399 FROM MIPI0
100R阻抗



电容靠近引脚放置

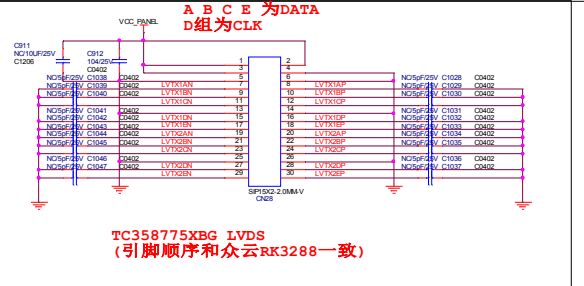
TC358775XBG

D2L2-BL/
D2L-LP

775电路部分

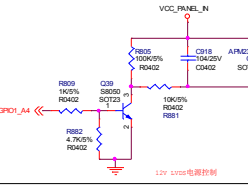
Differential Pairs
To be length matched
Second Link
Even Data
(VESA)

First Link
ODD Data
(VESA)

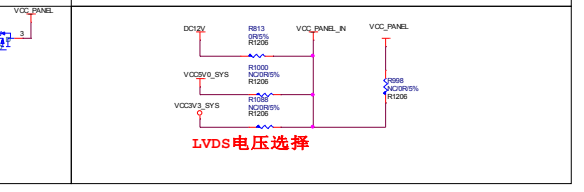


A B C E 为DATA
D组为CLK

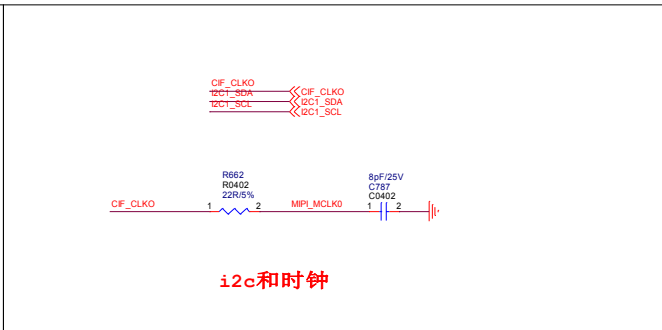
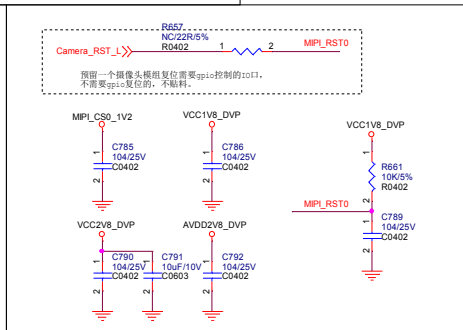
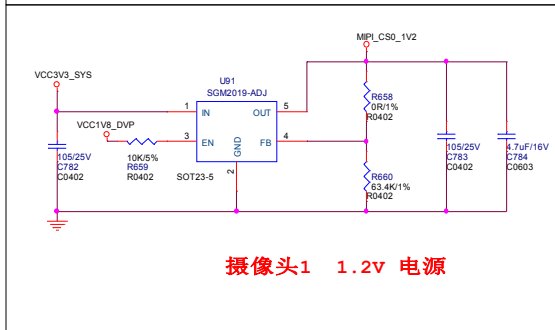
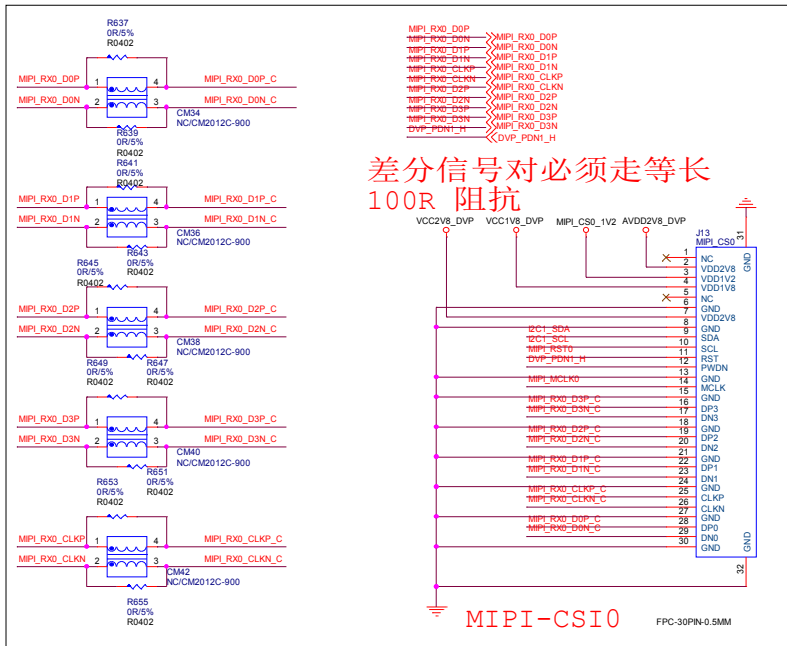
TC358775XBG LVDS
(引脚顺序和众云RK3288一致)

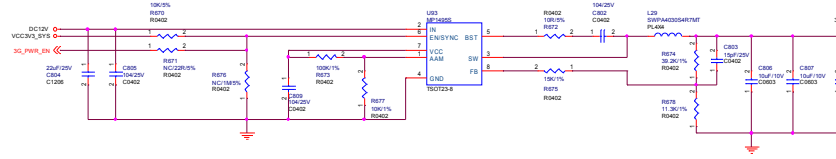


1.2V LVDS电压选择

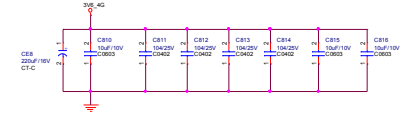


LVDS电压选择

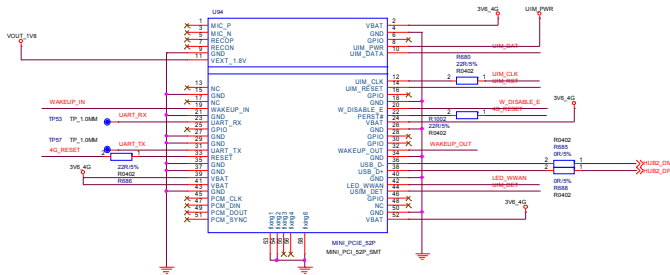




4G 模块3.6V 电源 (3.3-4.2 推荐3.6V)

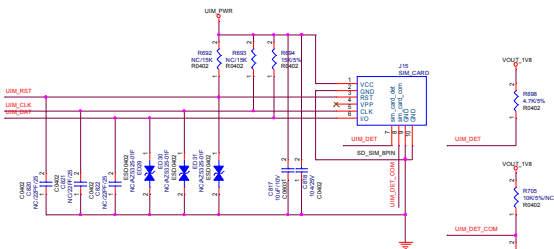


4G 模块3.6V 电源滤波网络

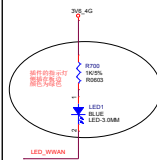


4G 模块 MINIPICIE

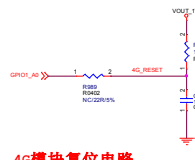
RK3399 USB2.0 HOST 1口从HUB扩展而来



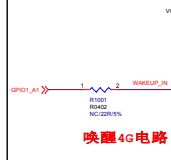
自弹式SIM卡



网络状态指示



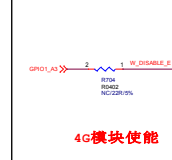
4G模块复位电路



唤醒4G电路

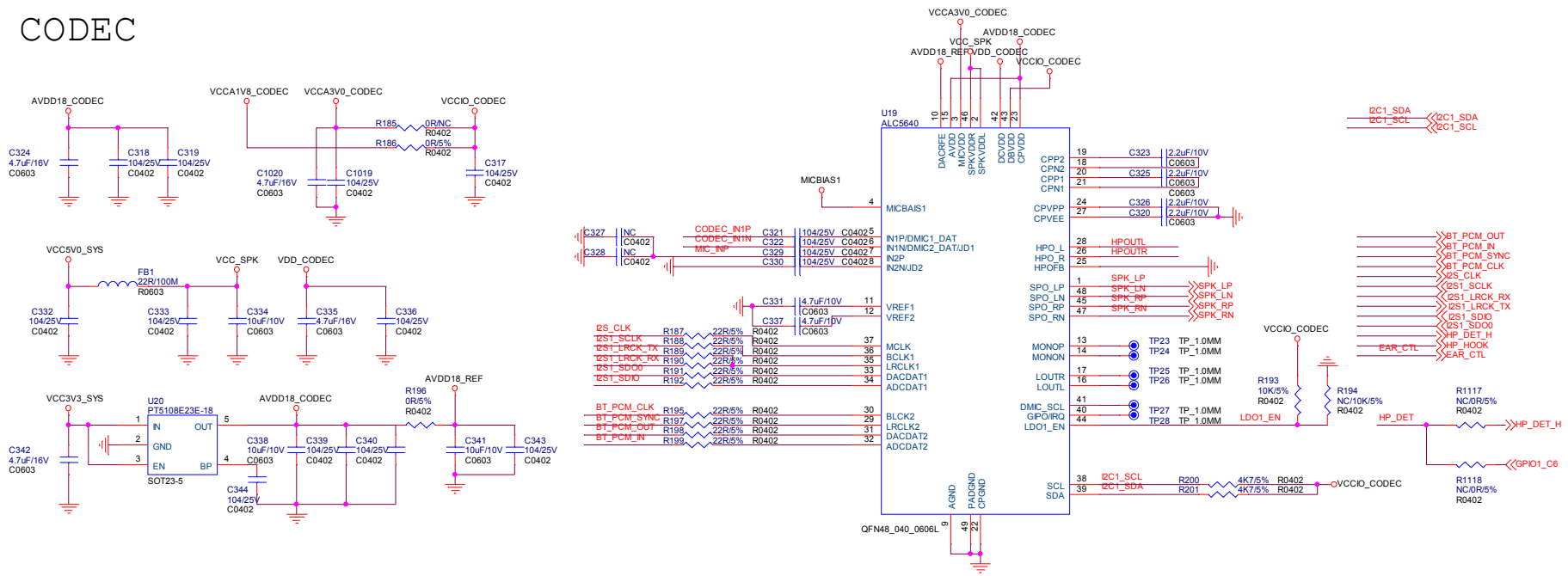


4G唤醒输出电路

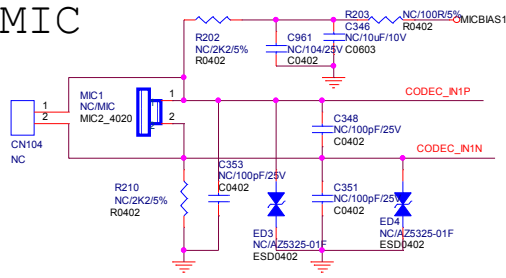


4G模块使能

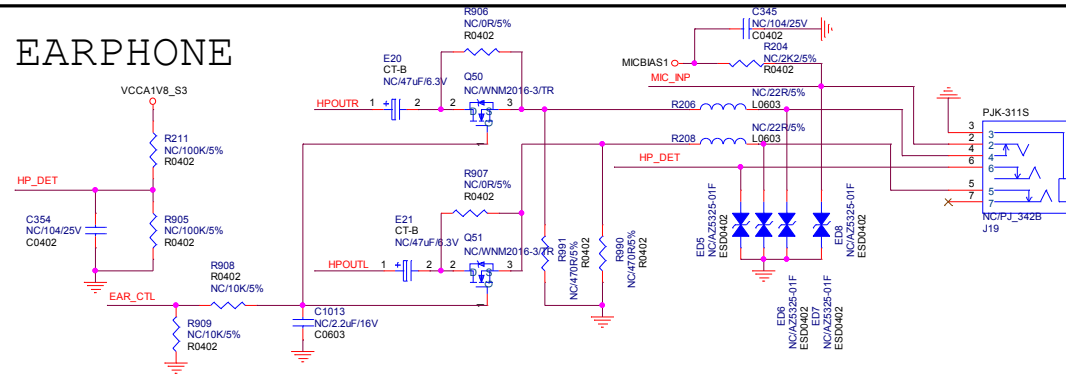
CODEC

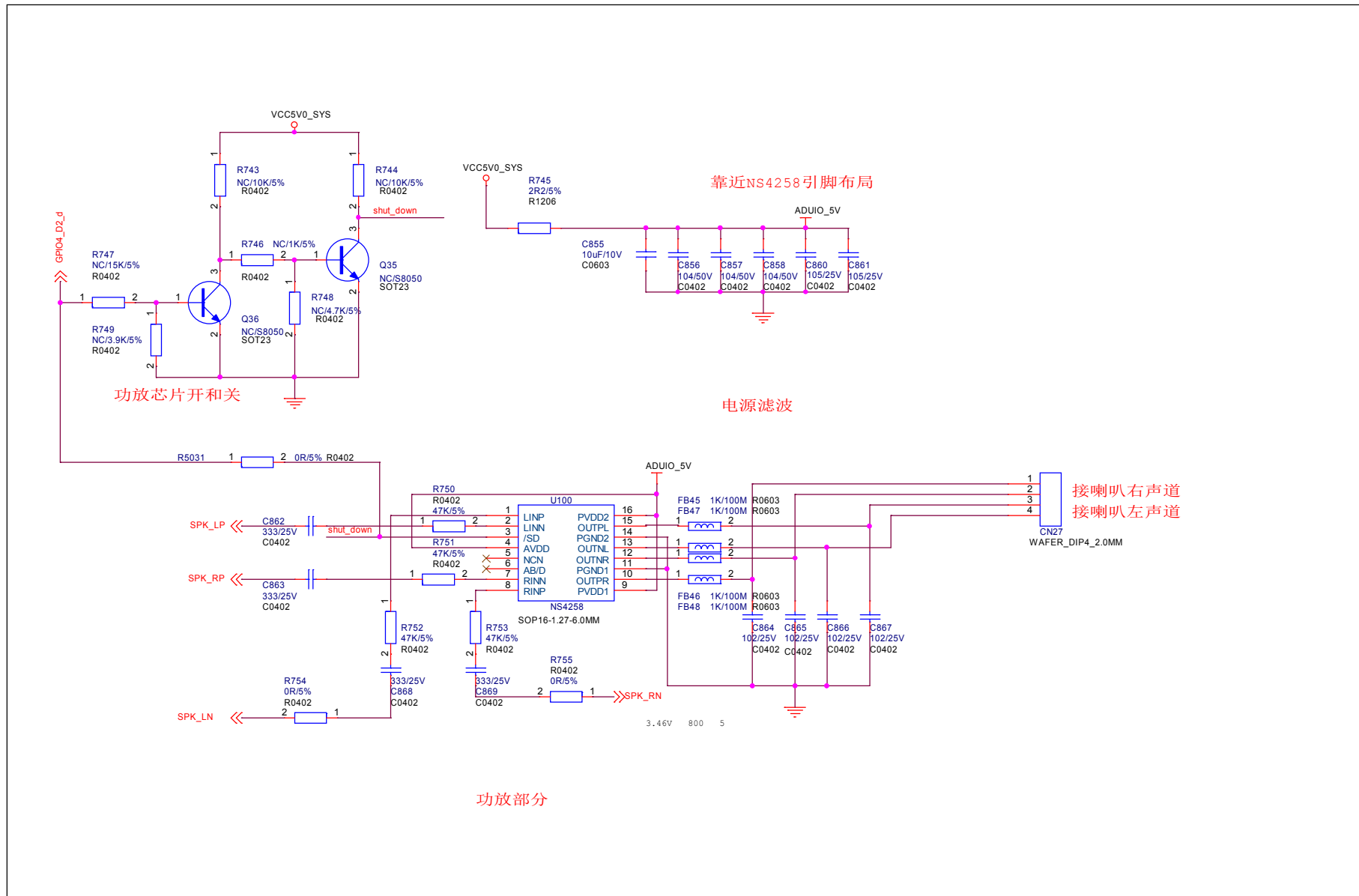


MIC



EARPHONE





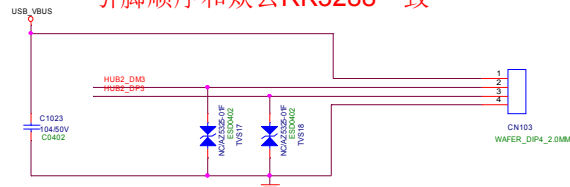
扩展USB2.0给
4G模块用



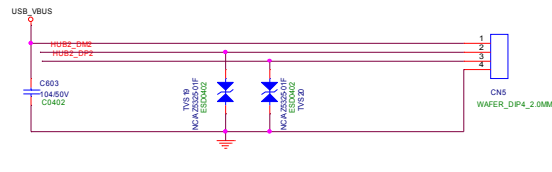
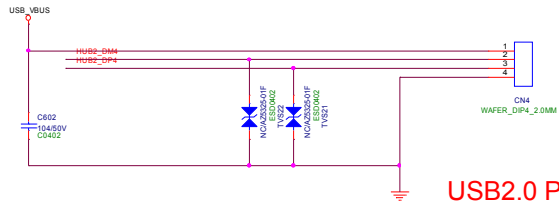
扩展USB2.0给
M2.NGFF接口用



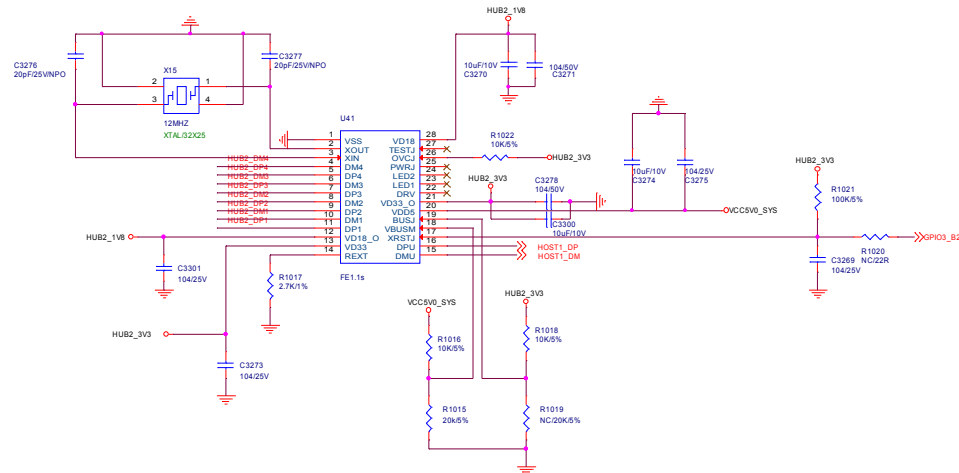
扩展 USB 2.0 预留
引脚顺序和众云RK3288一致

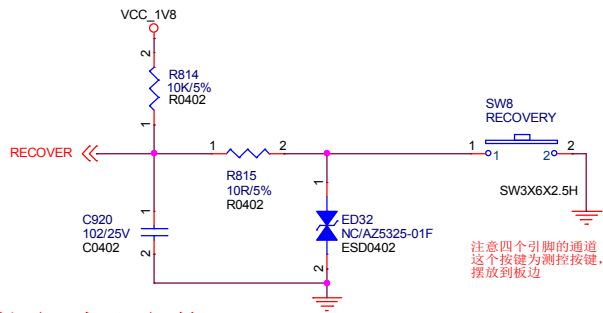


扩展 USB 2.0 预留
引脚顺序和众云RK3288一致



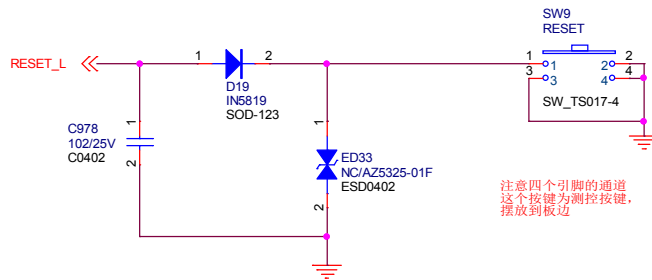
USB2.0 Port





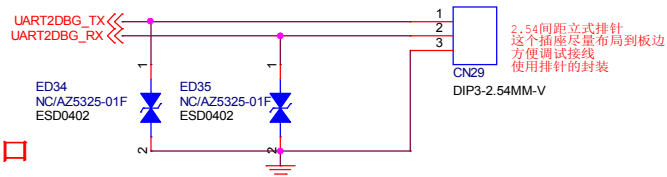
注意四个引脚的通道
这个按键为测控按键，
摆放到板边

一键恢复默认参数



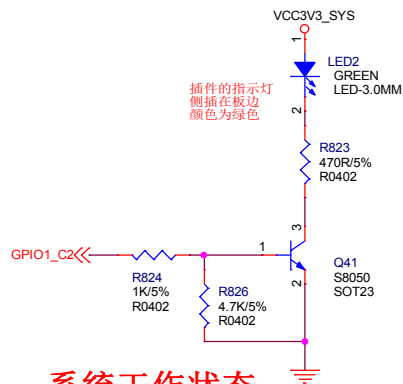
注意四个引脚的通道
这个按键为测控按键，
摆放到板边

重启按键



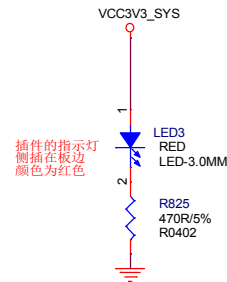
2.54间距立式排针
这个插座尽量布局到板边
方便调试接线
使用排针的封装

调试串口



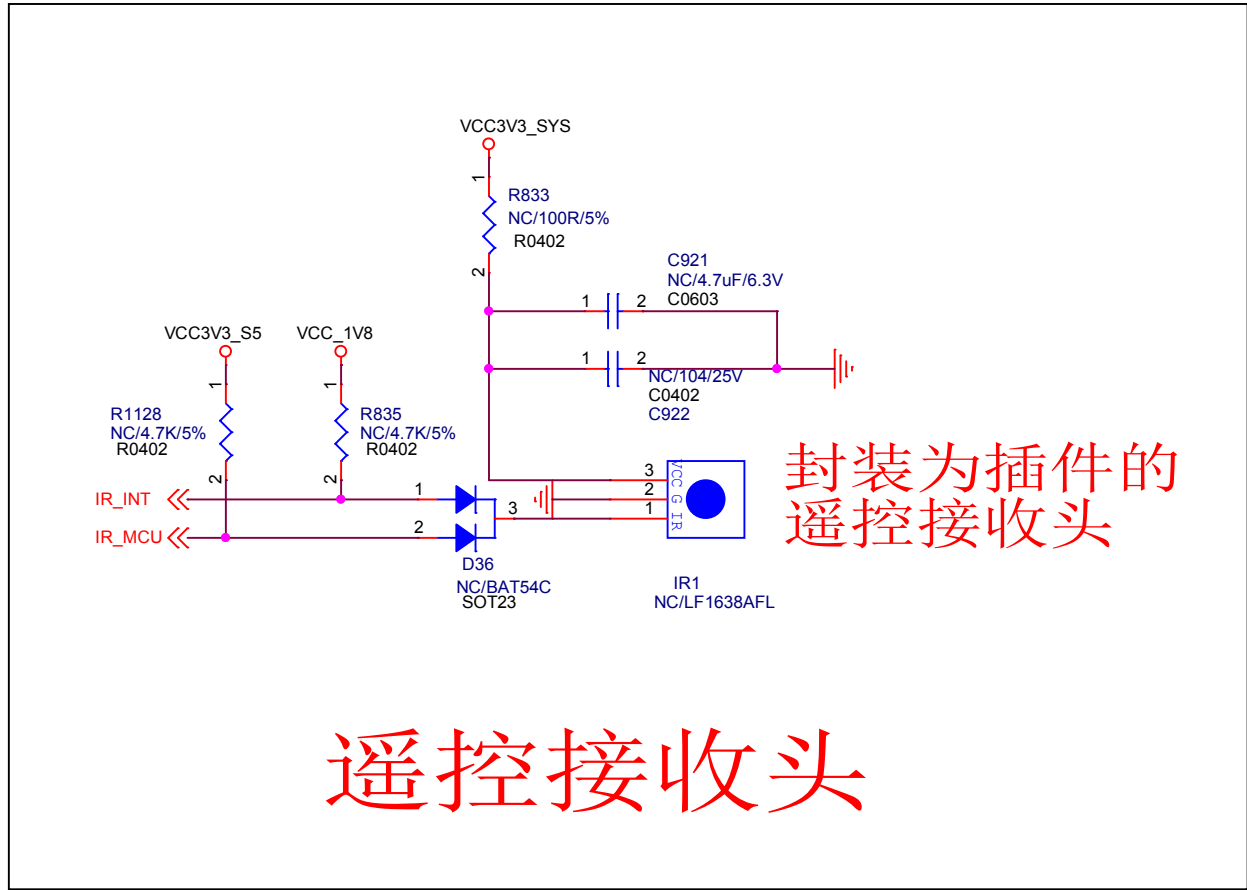
插件的指示灯
侧插在板边
颜色为绿色

系统工作状态 指示灯 (绿色)

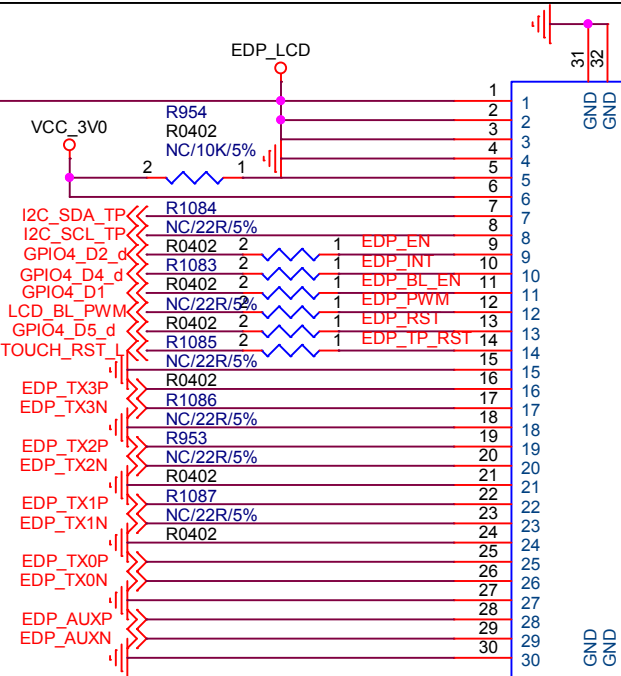
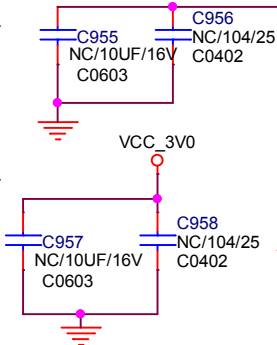
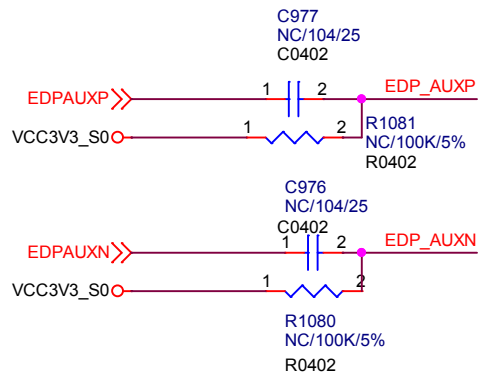


插件的指示灯
侧插在板边
颜色为红色

系统电源 指示灯 (红色)



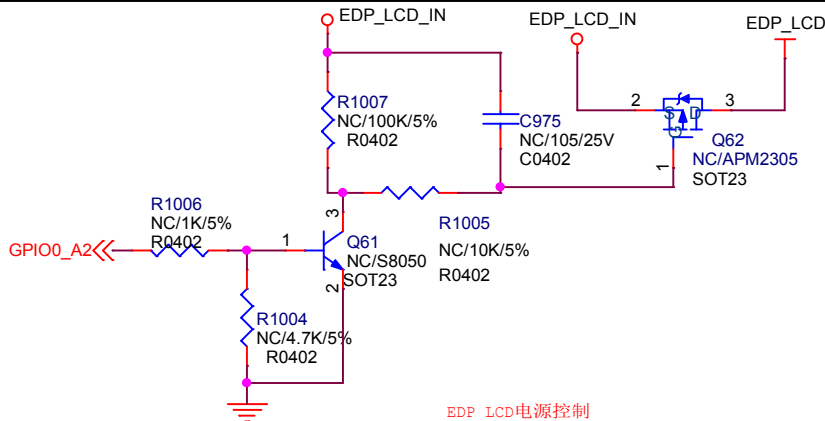
遥控接收头



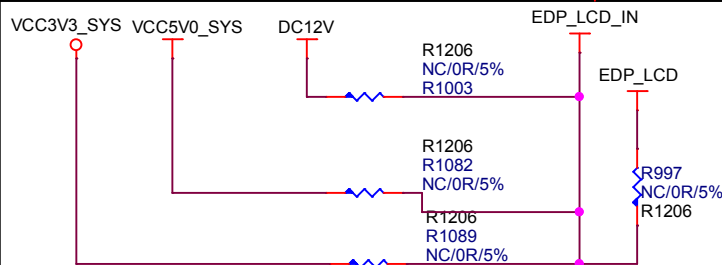
注意：
 1、eDP1.2a及以上协议的eDP显示屏，Aux的偏置电阻不贴。
 2、若是较低协议的显示屏，需要贴片。

EDP接口为
90欧姆阻抗

eDP 屏接口 (LP079QX1)



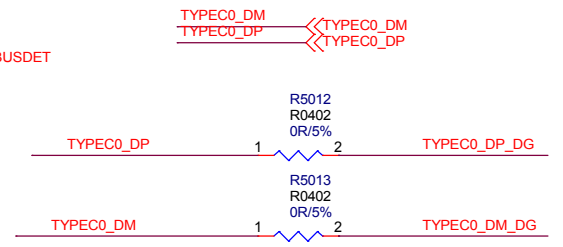
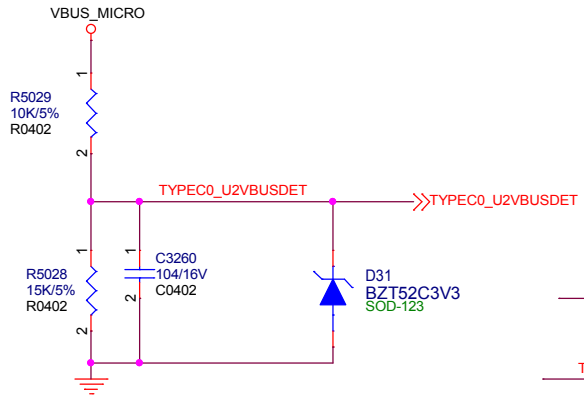
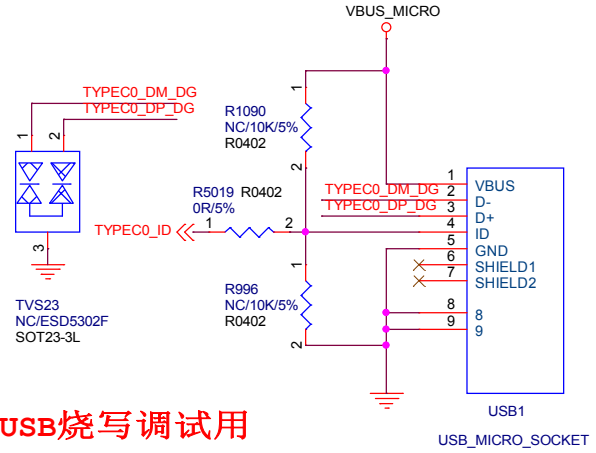
EDP LCD电源控制

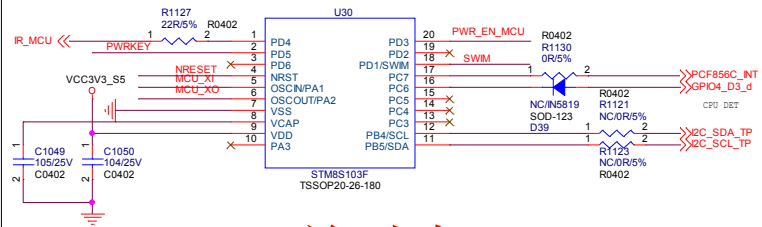


EDP LCD 电压选择

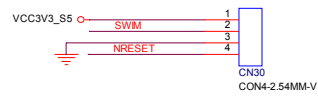
USB烧写调试用

MICRO 5P

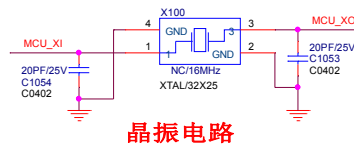
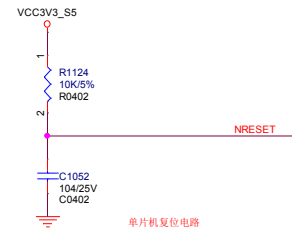
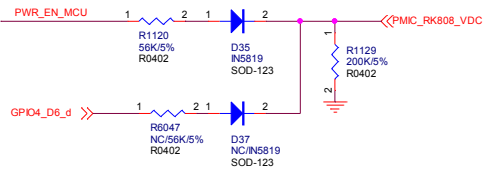


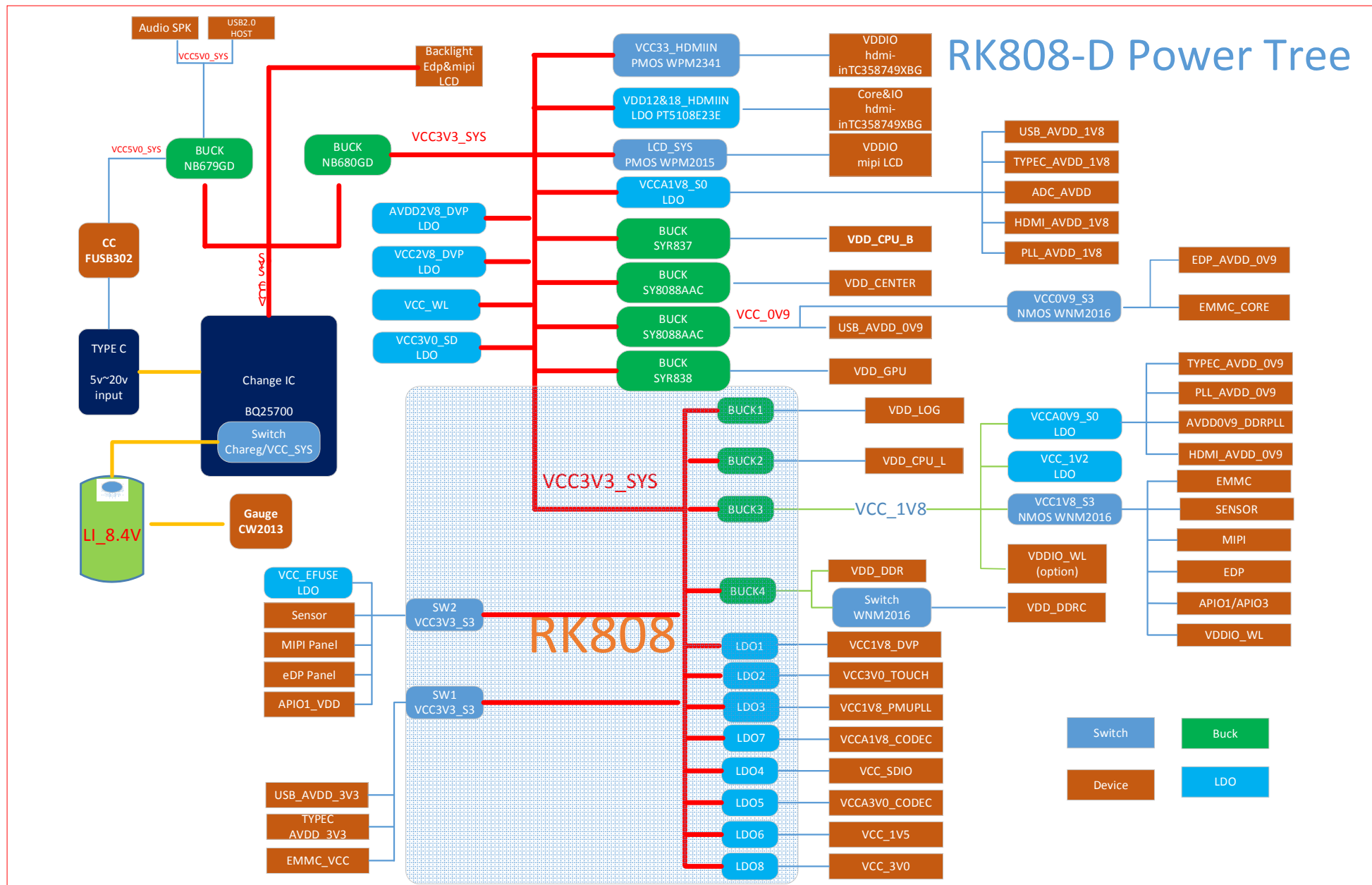


单片机



ST 单片机烧写接口





Rockchip 瑞芯微电子		Fuzhou Rockchip Electronics	
Project:	RK3399_VR&tablet Ref		
File:	Power Tree-RK808-D		
Date:	Thursday, November 02, 2017	Rev:	V1.0
Designed by:	HXS	Sheet:	6 of 49