

野火STM32F429/F767/H743底板原理图_V2.1

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历史版本

版本号	日期	设计	描述
V1.0	2018-11-30	cancore	初始版本
V2.0	2019-03-12	cancore	增加SWD接口， 增加一个EBF-Module接口
V2.1	2021-09-27	cancore	修改电源芯片， USB转串口换成CH340C， 修改USB接口HOST， Device各一个
V2.2	2024-0826	LPC	更新can 485 232 的替代料

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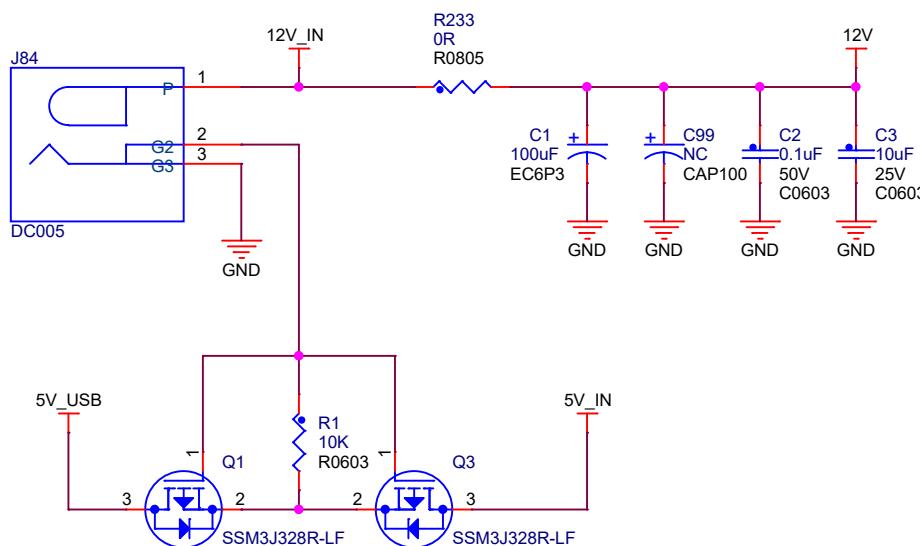
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Date: Monday, August 26, 2024

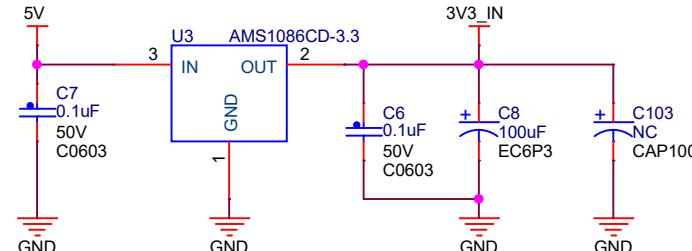
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DC IN : 6V~12V

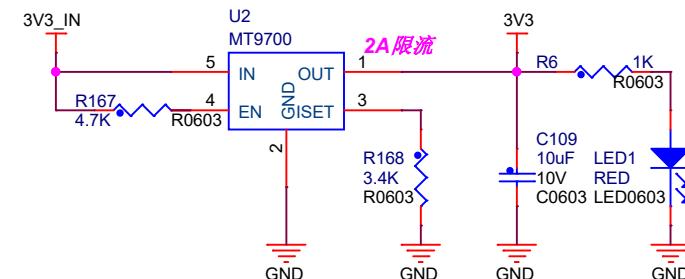


DC电源插入时，Q1/Q3截止，防止电流流向USB
DC电源断开时，Q1/Q3打开，USB供电

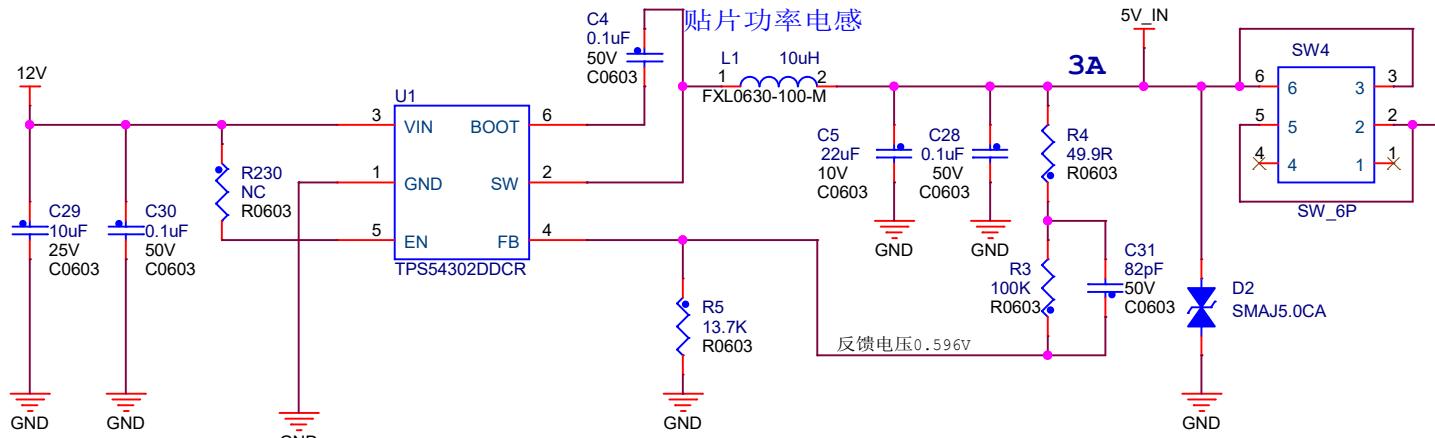
LDO 3.3V



3.3V 输出过流保护

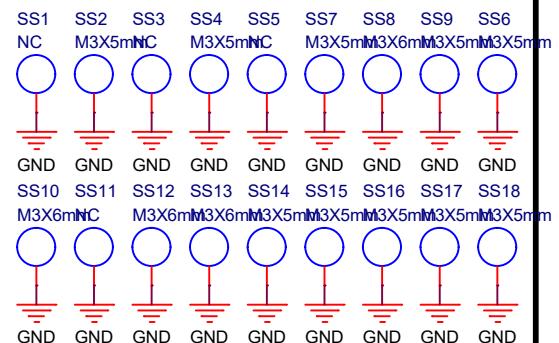


DC/DC 5V



R230为100K/NC
根据使用芯片决定是否需要焊对应的电阴

定位孔

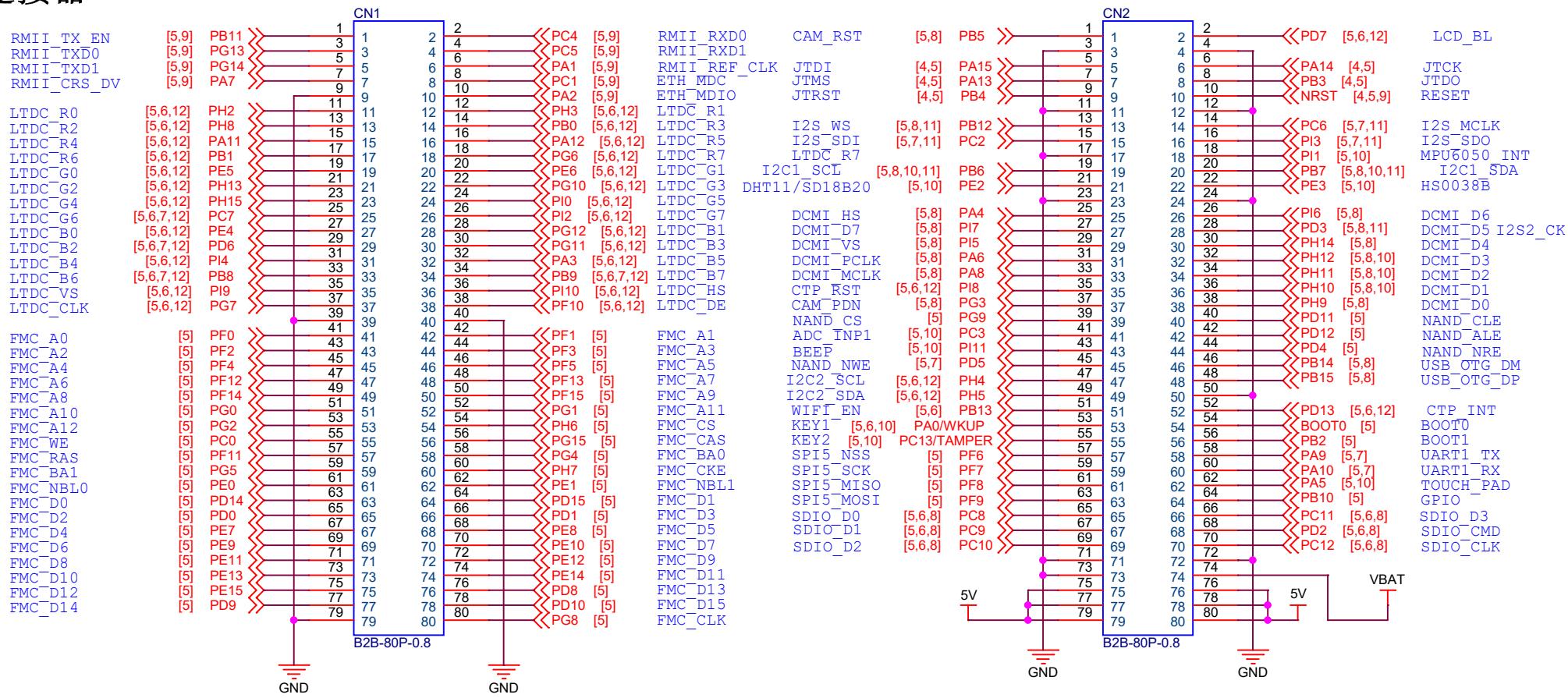


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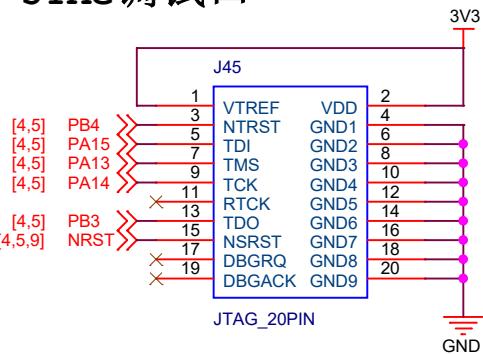
Title **附录一：实验设计与方法** **实验原理图**

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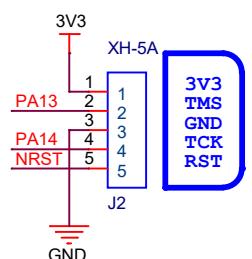
连接器



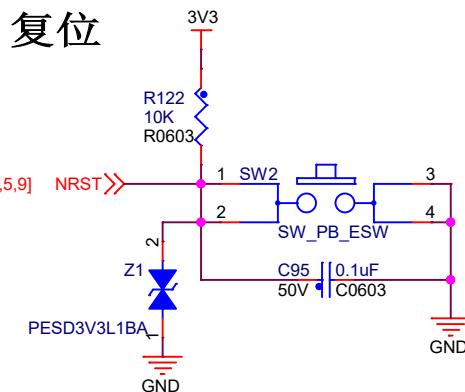
JTAG调试口



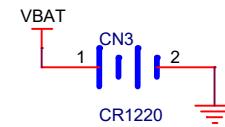
SWD调试口



复位



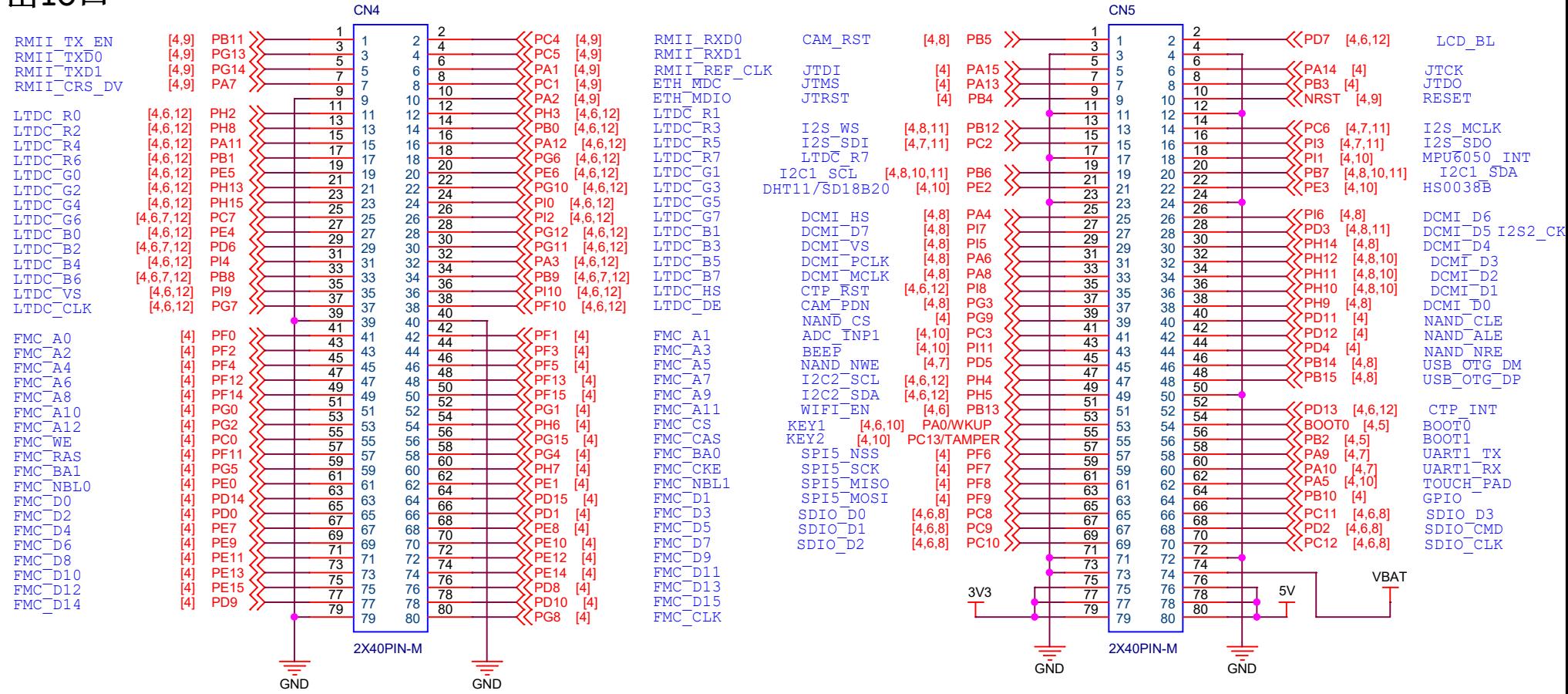
RTC电池



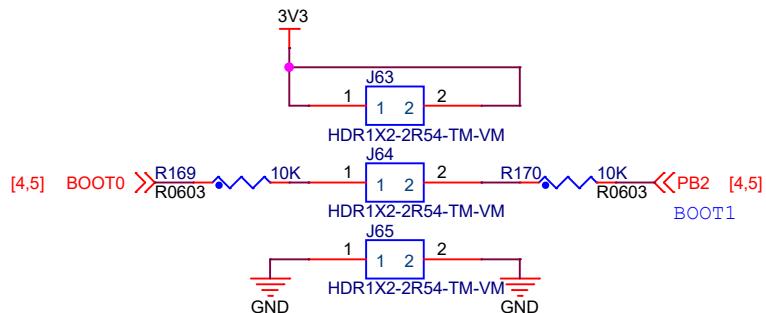
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引出IO口



设置启动模式

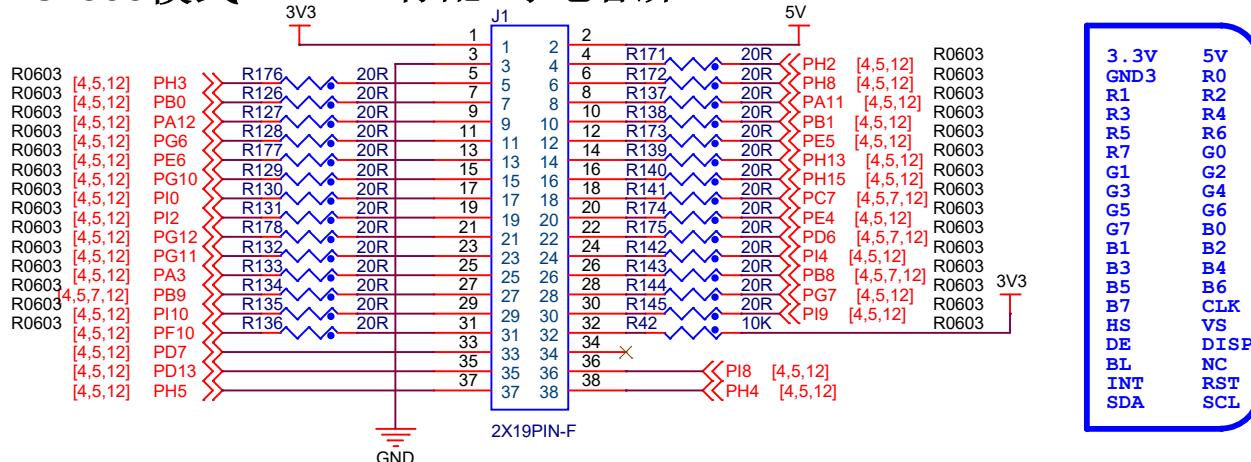


F429 BOOT设置		
BOOT0	BOOT1	启动方式
0	X	用户闪存
1	0	系统存储器/ISP
1	1	内嵌SRAM
默认配置是用户闪存（即内部Flash）		

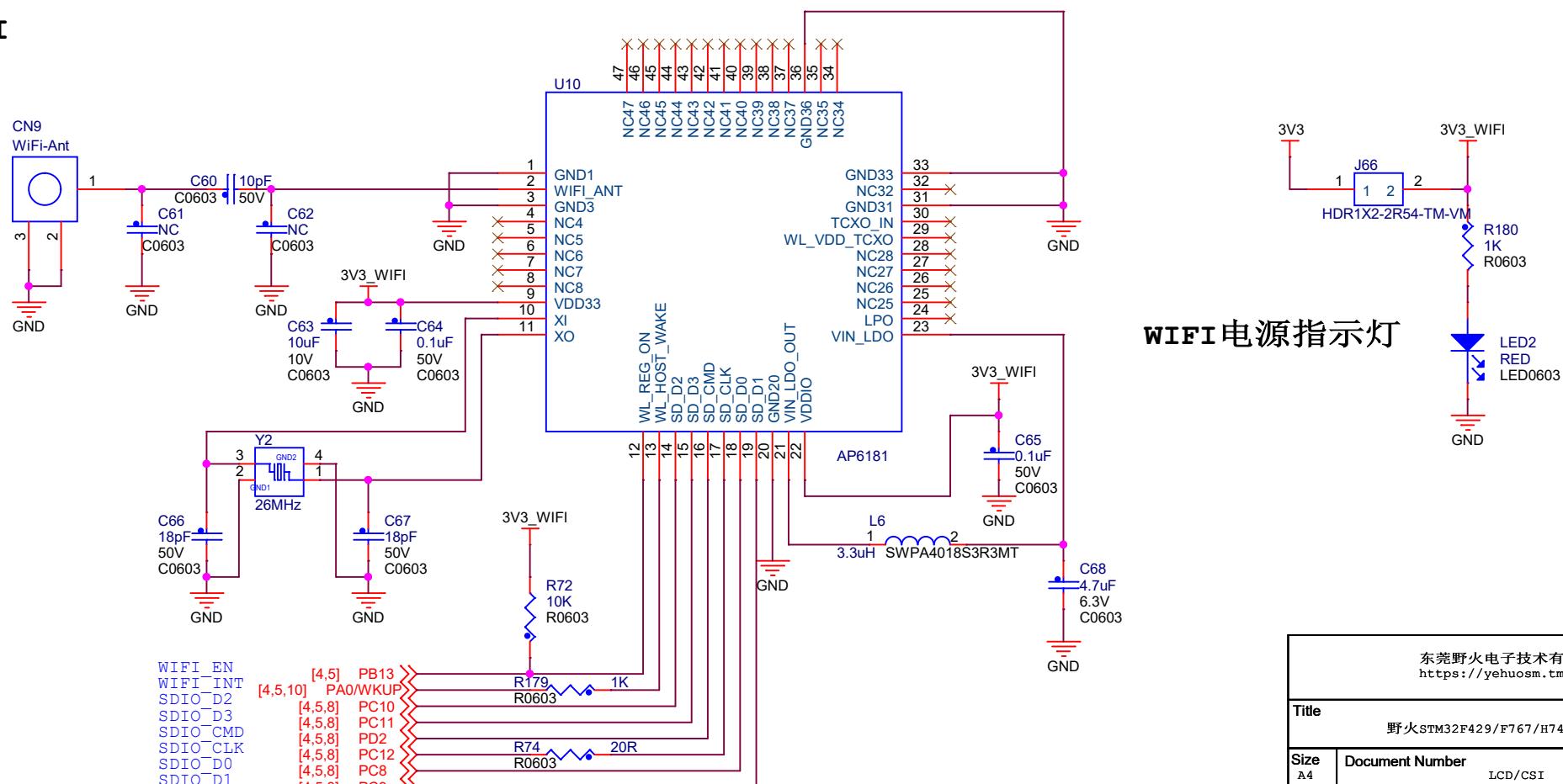
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液晶接口-RGB888模式

标配5寸电容屏



WIFI



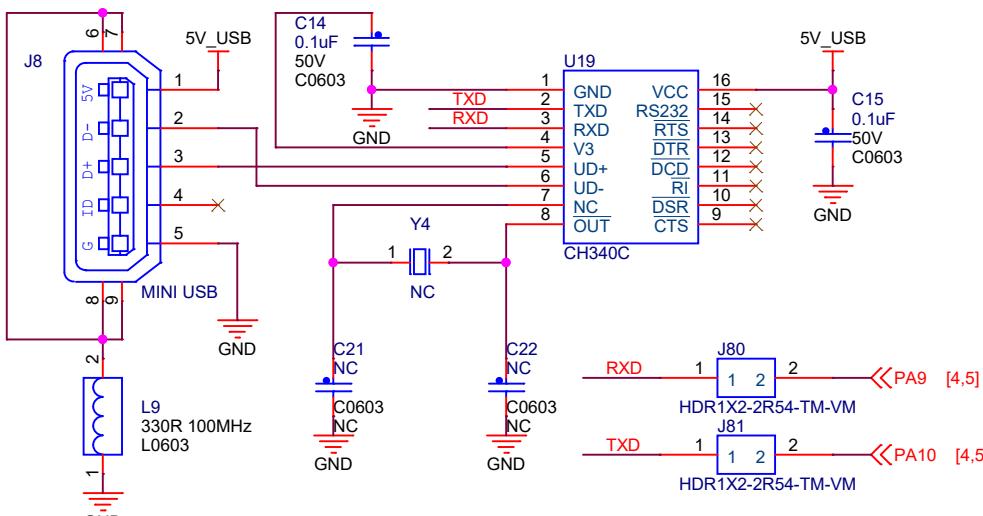
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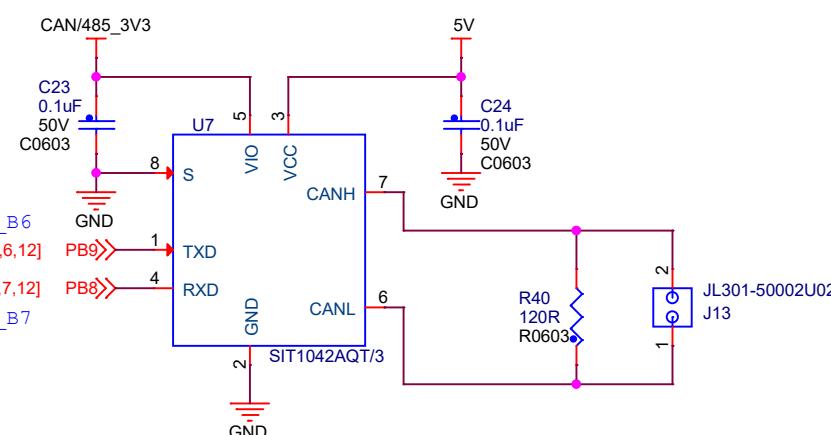
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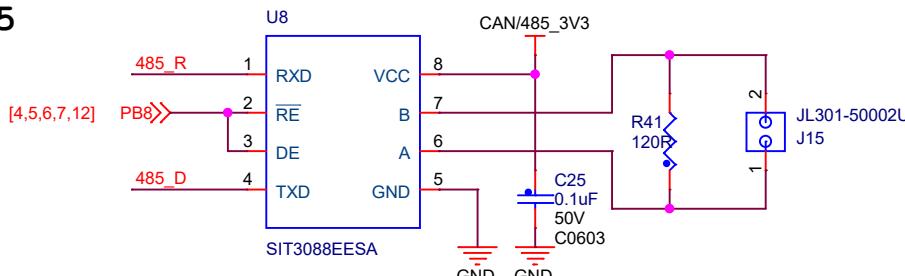
USB转串口



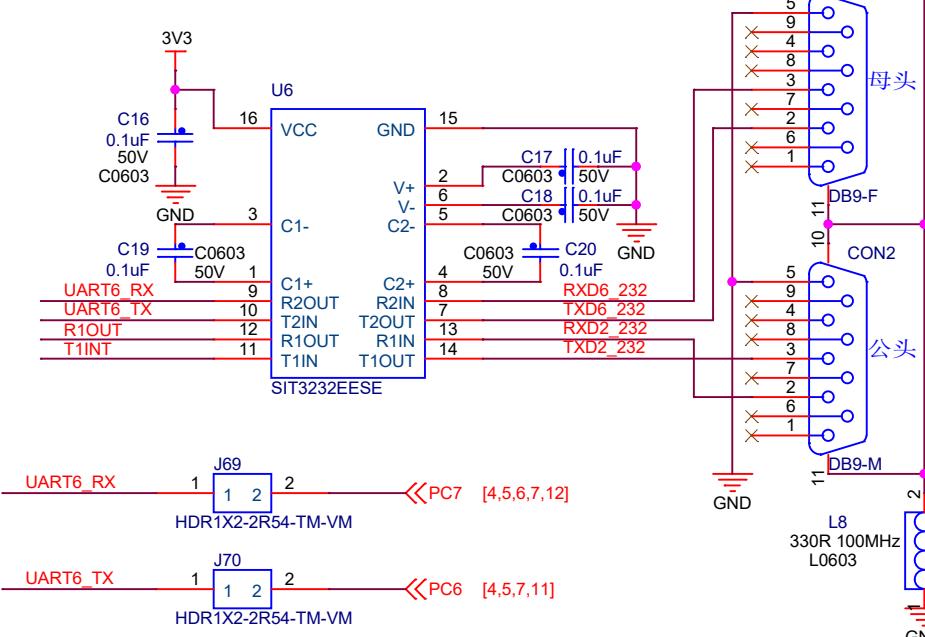
CAN



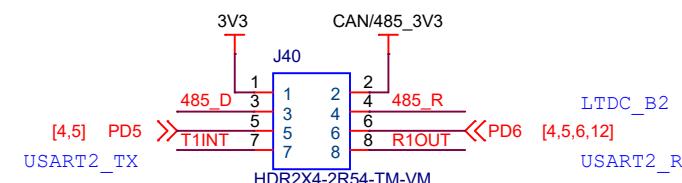
RS485



RS232串口

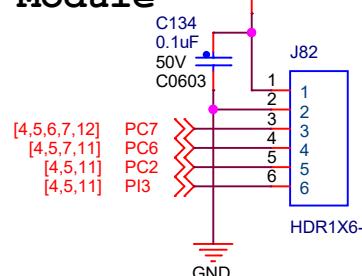


跳帽选择



CAN和485的电源
由跳帽J40的1和2脚控制， 默认不接

EBF-Module



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Journal of Oral Rehabilitation 2013; 40(12): 937-944

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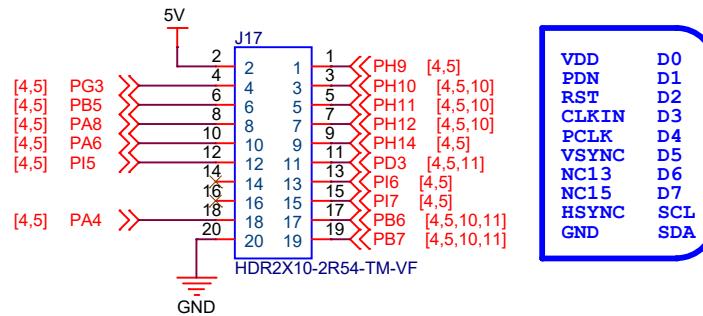
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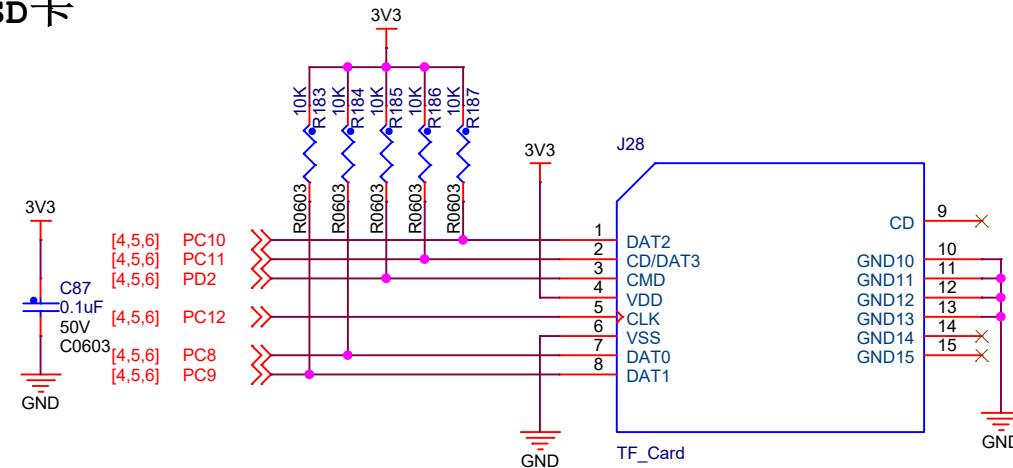
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1

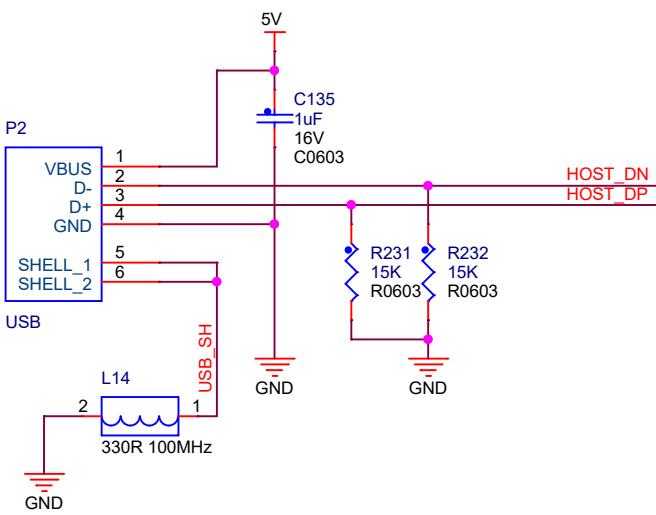
摄像头接口



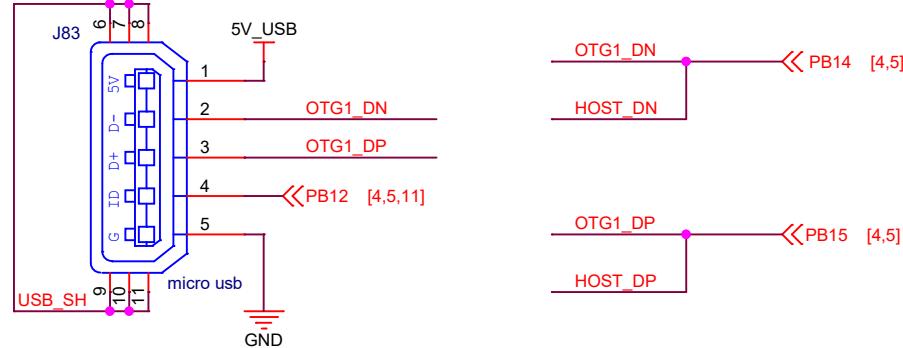
SD卡



USB HOST



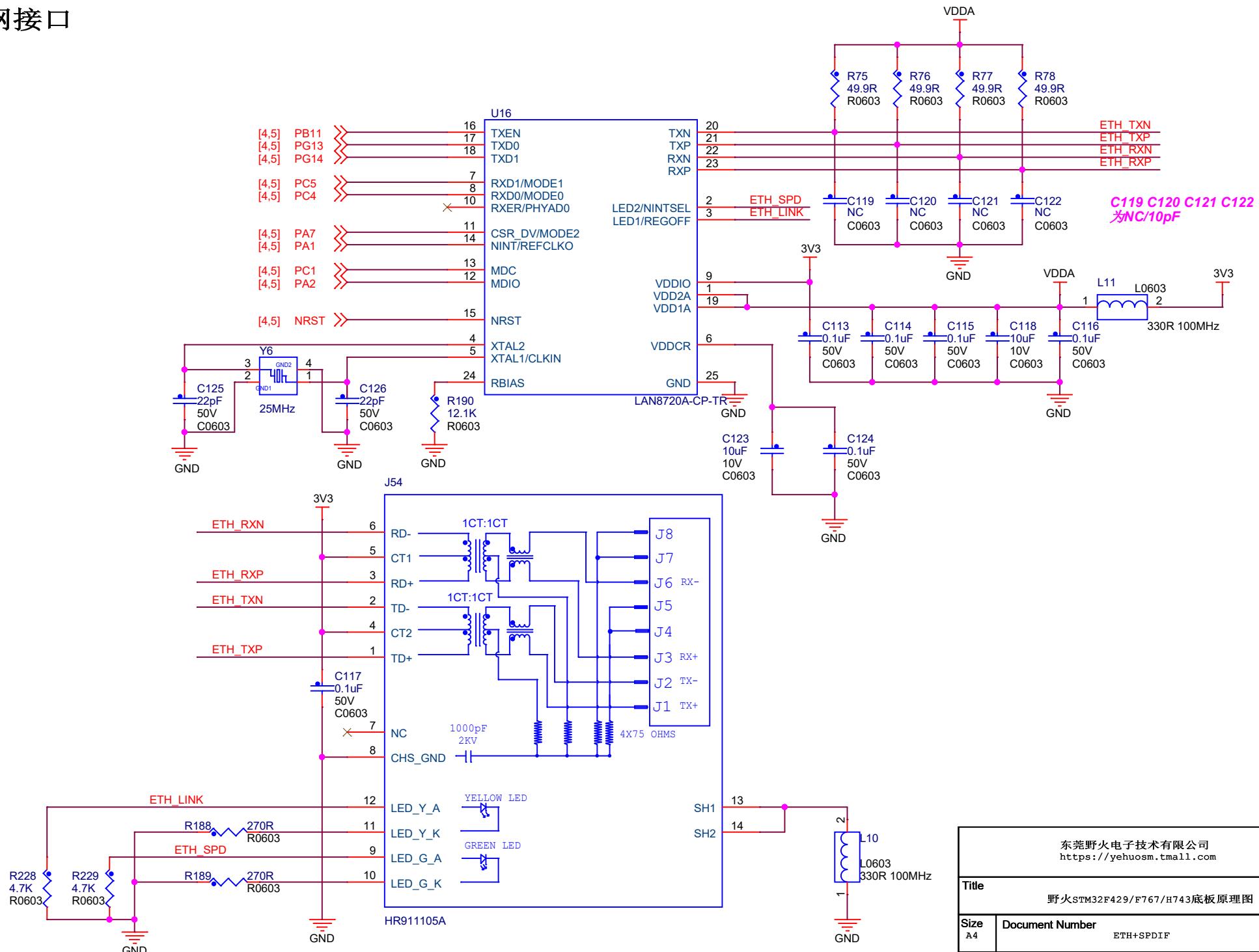
USB Device



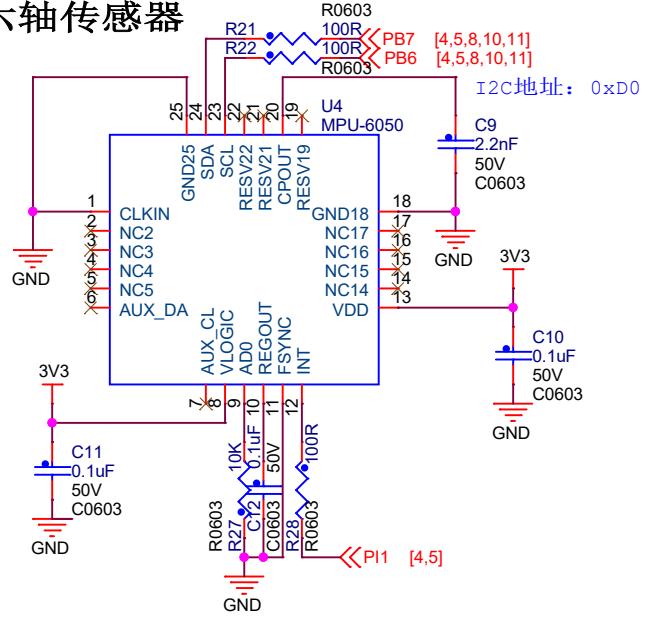
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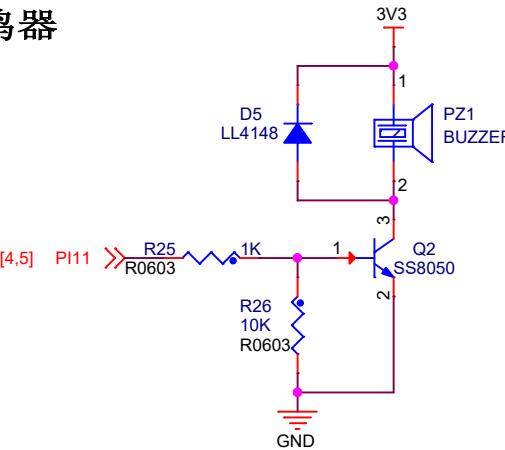
以太网接口



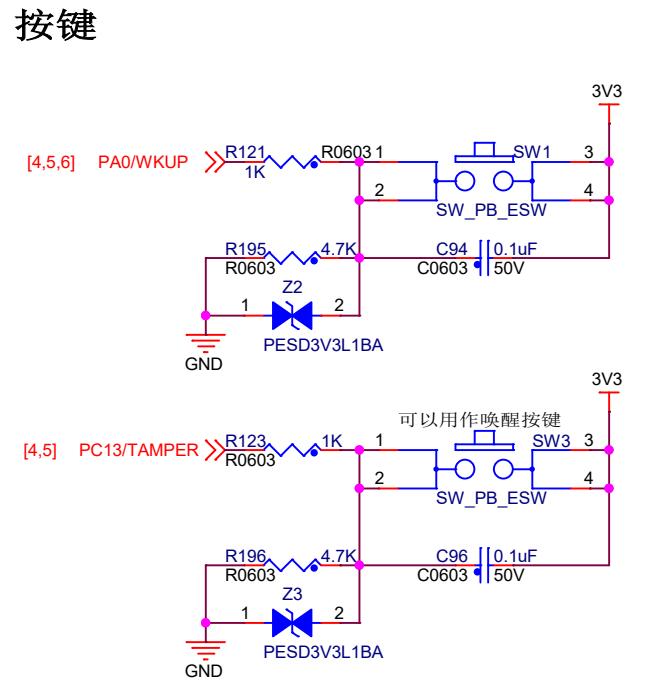
六轴传感器



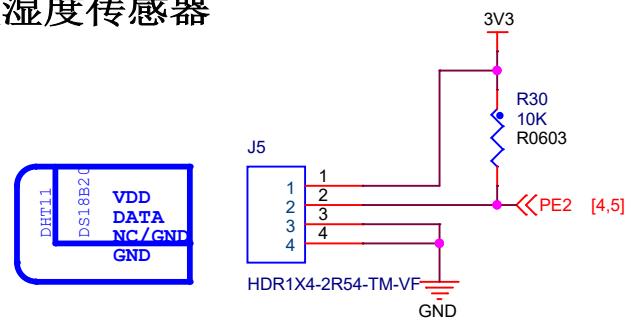
蜂鸣器



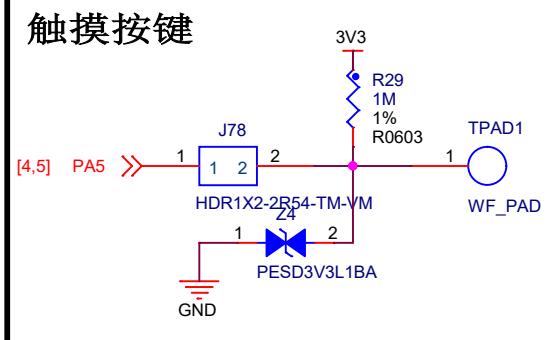
按键



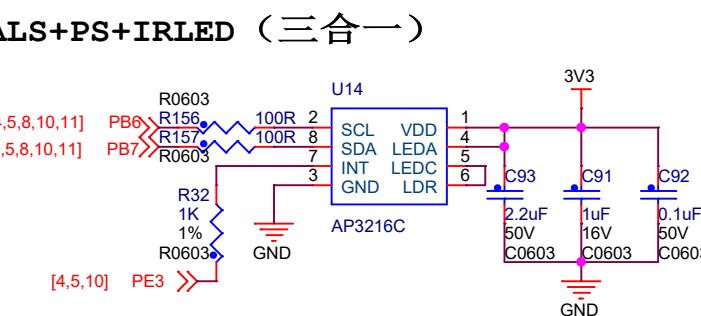
温湿度传感器



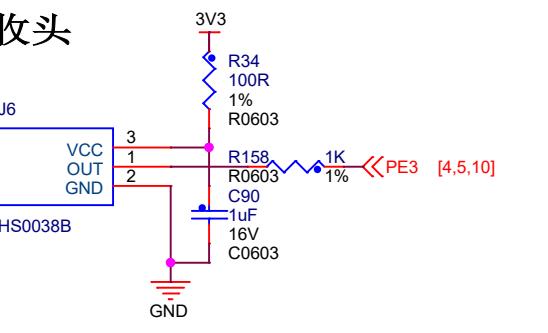
触摸按键



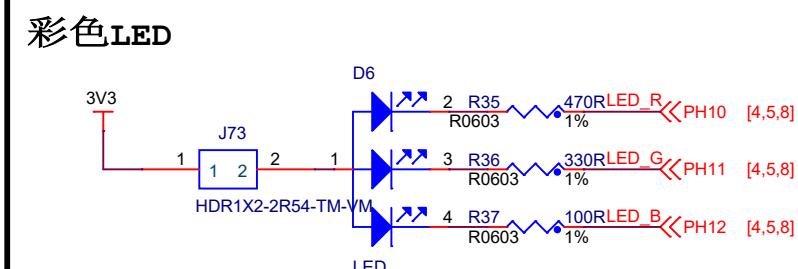
ALS+PS+IRLED (三合一)



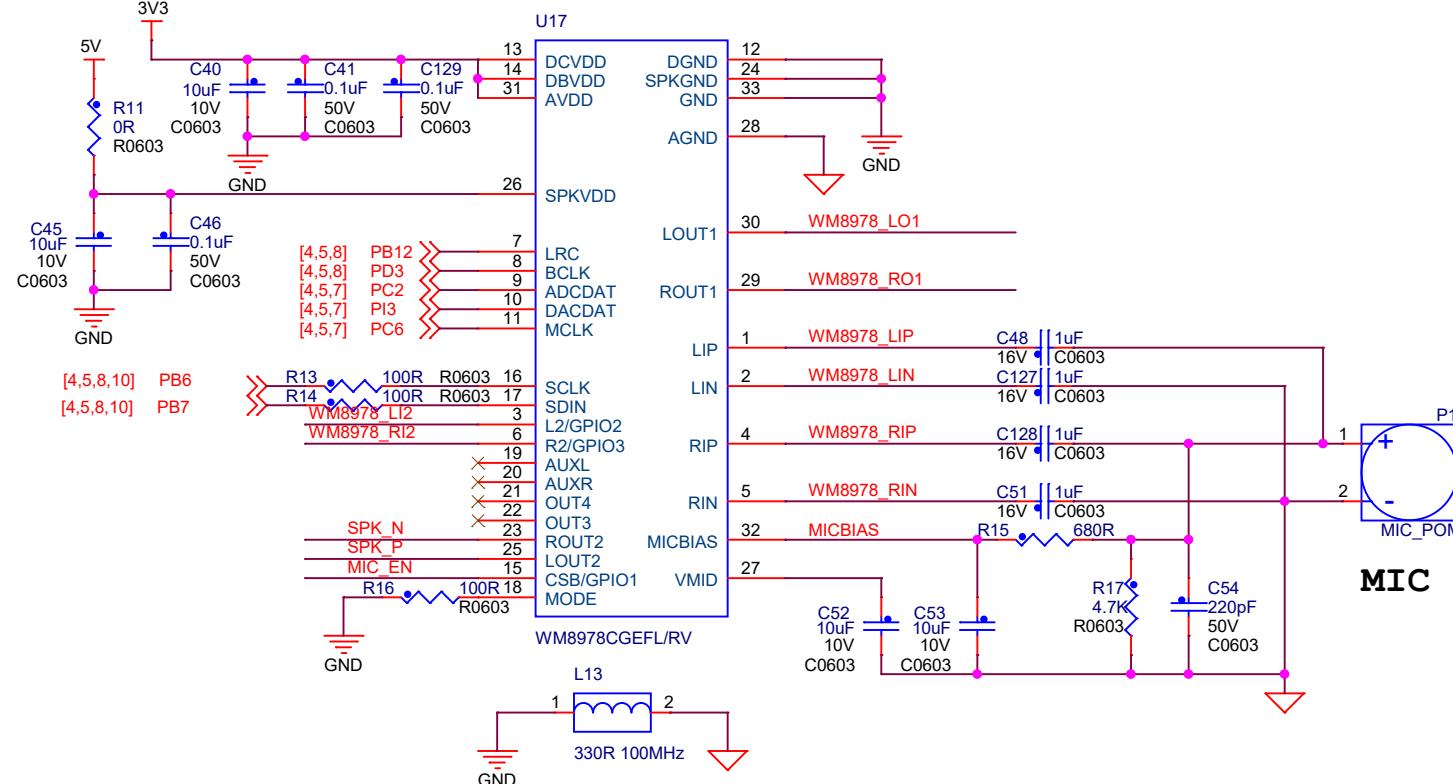
红外接收头



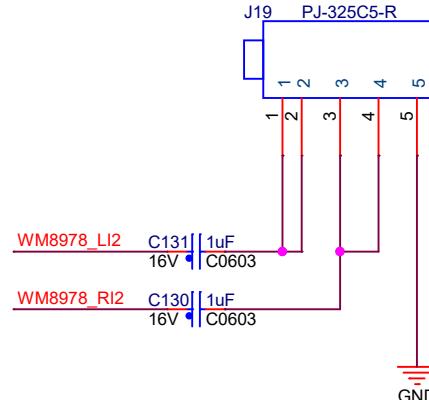
彩色LED



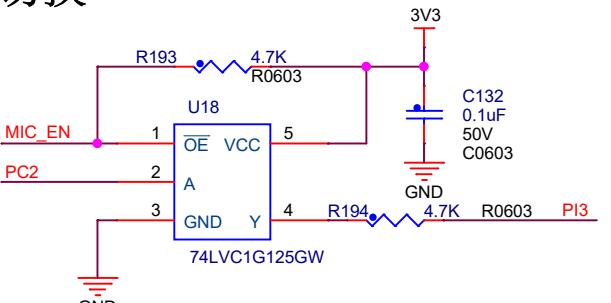
MIC插头



音频输入

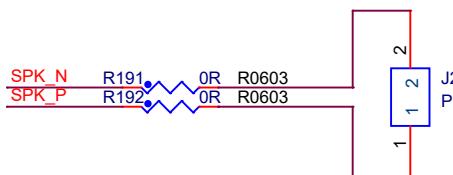


录音放音切换

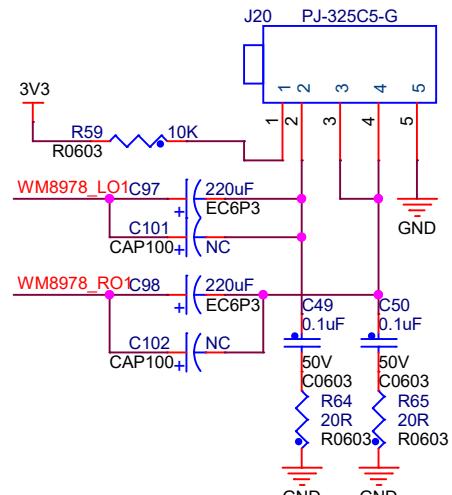


F767的I₂S是半双工，模拟开关切换
MIC_EN为高电平放音，低电平录音
F429/H743的I₂S是全双工，不需要切换

喇叭插座



耳机插座



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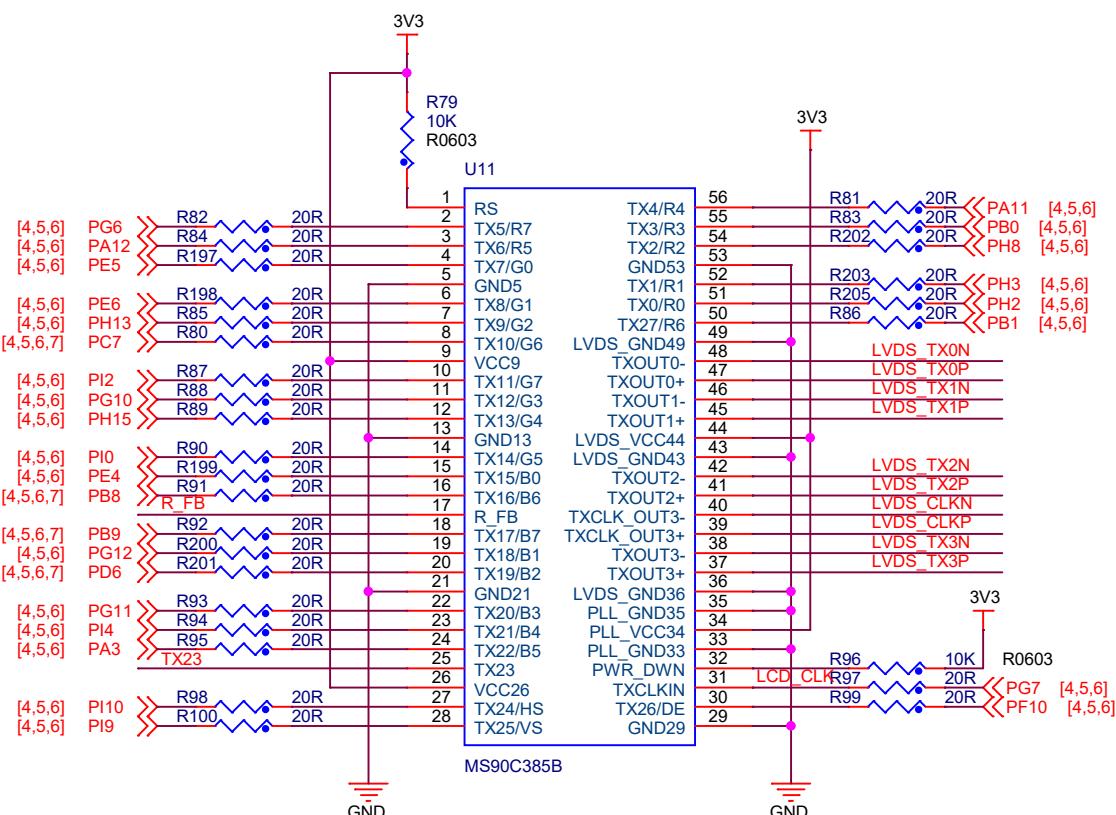
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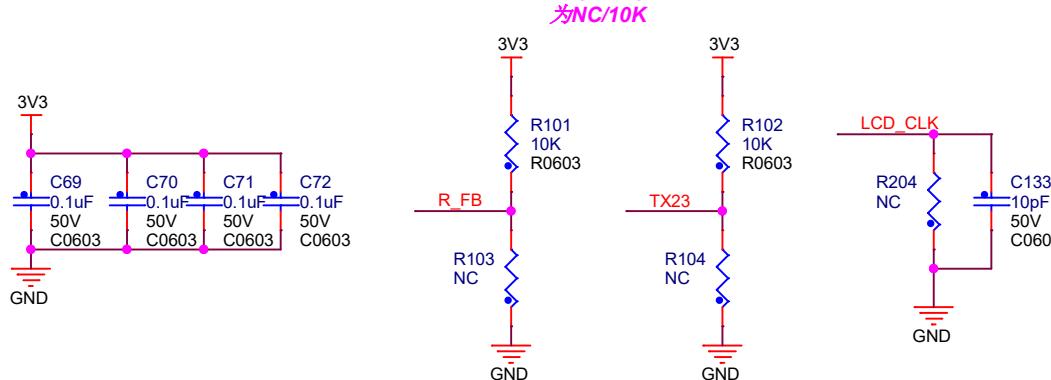
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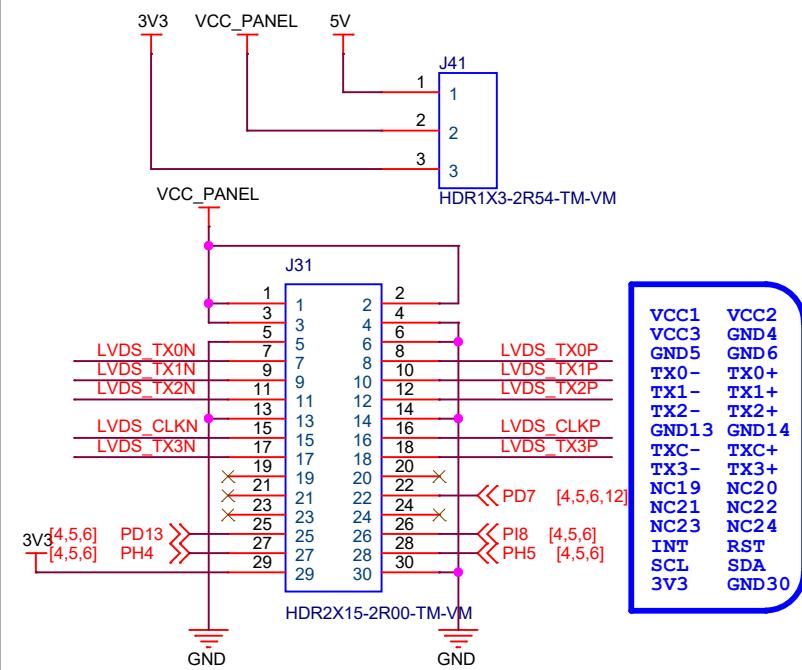
RGB888转LVDS



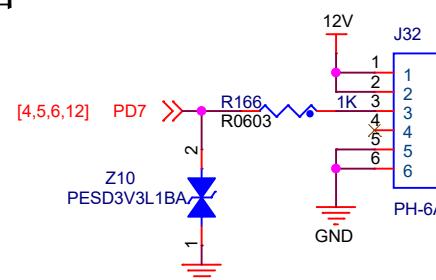
R101 R102
為NC/10K



驱屏接口



液晶背光接口



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