

野火_瑞萨启明4M2开发板原理图_V0.1

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Title

野火_瑞萨启明4M2开发板原理图

Size
A4

Document Number
目录

Rev
V0.1

Date: Thursday, November 24, 2022

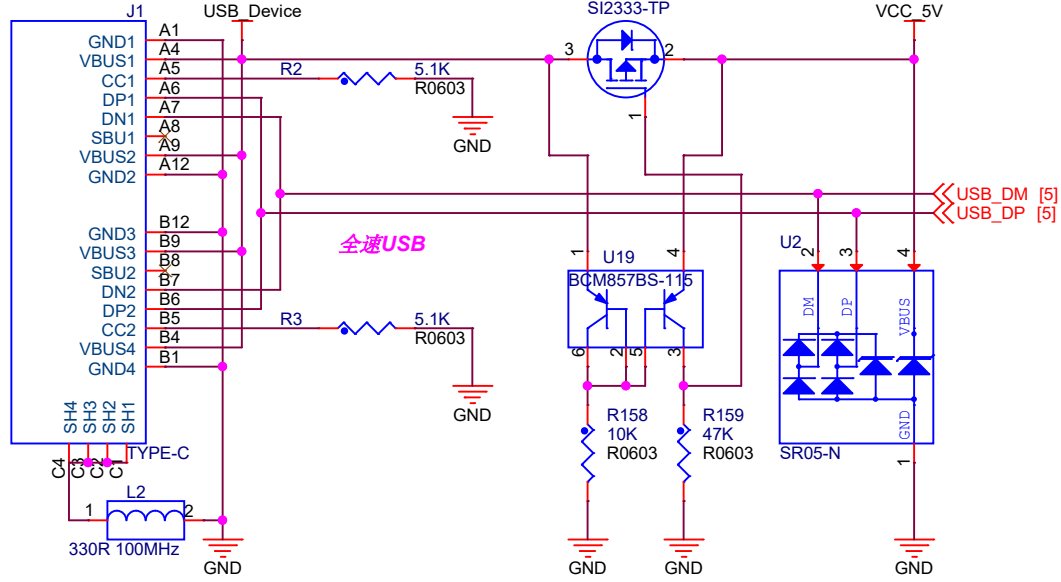
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历史版本

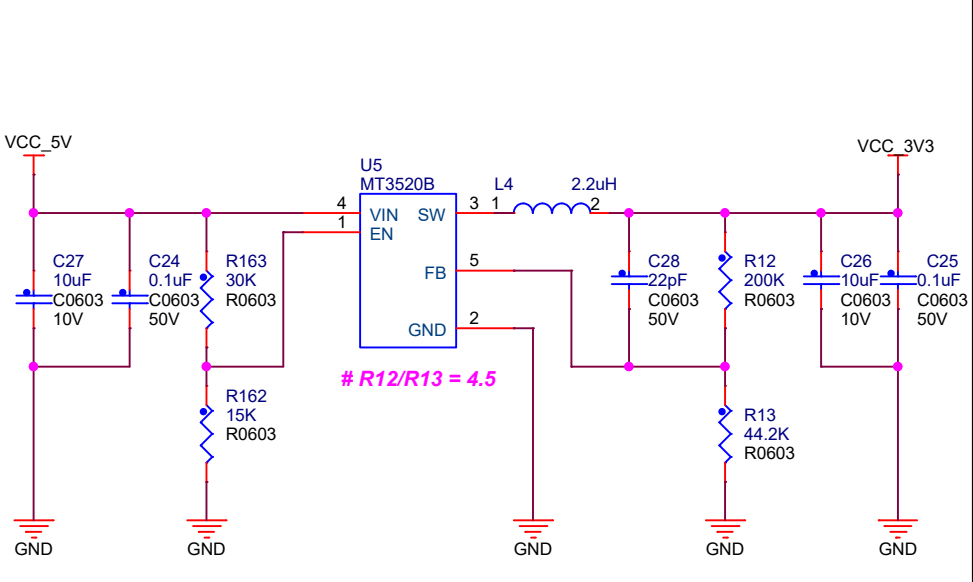
| 版本号 | 日期 | 设计 | 描述 |
|------|------------|-----|------|
| V0.1 | 2022-11-12 | yrs | 初始版本 |
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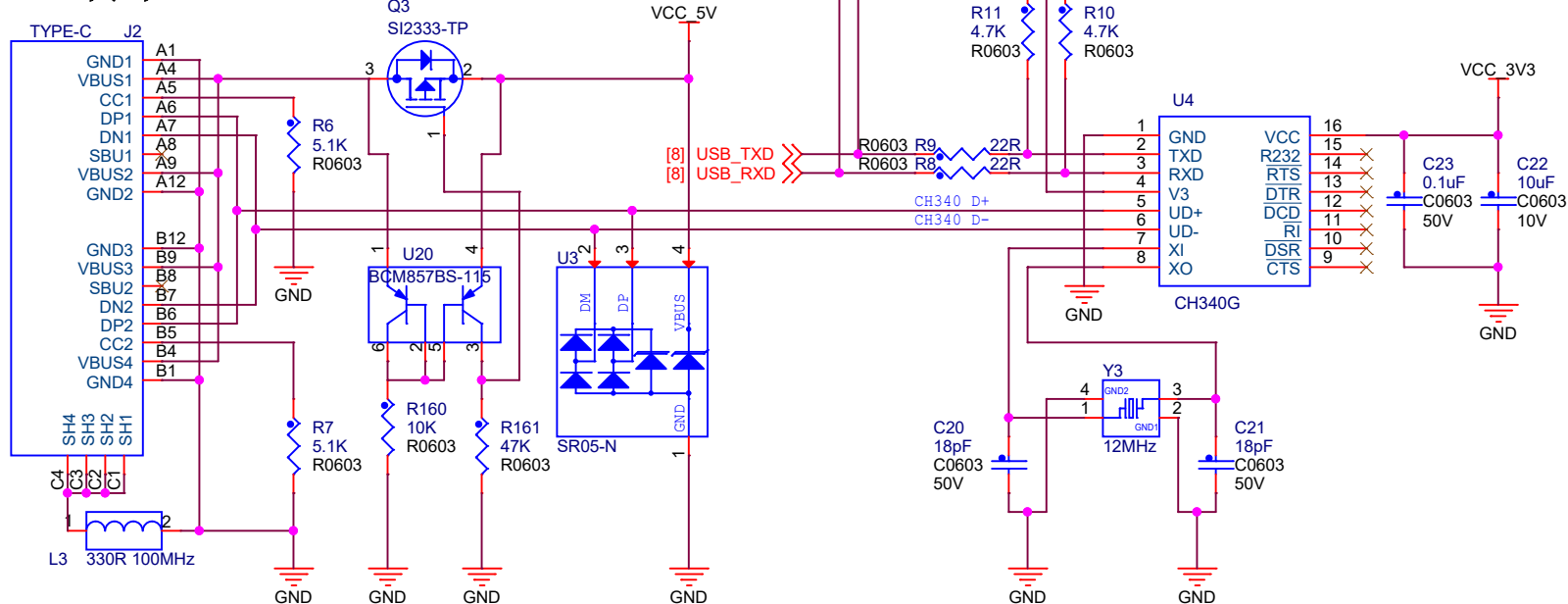
USB Device



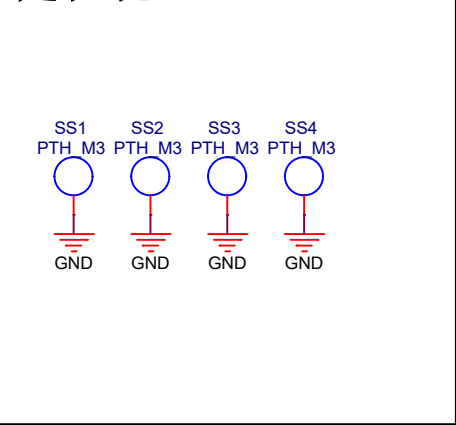
DC-DC



USB转串口

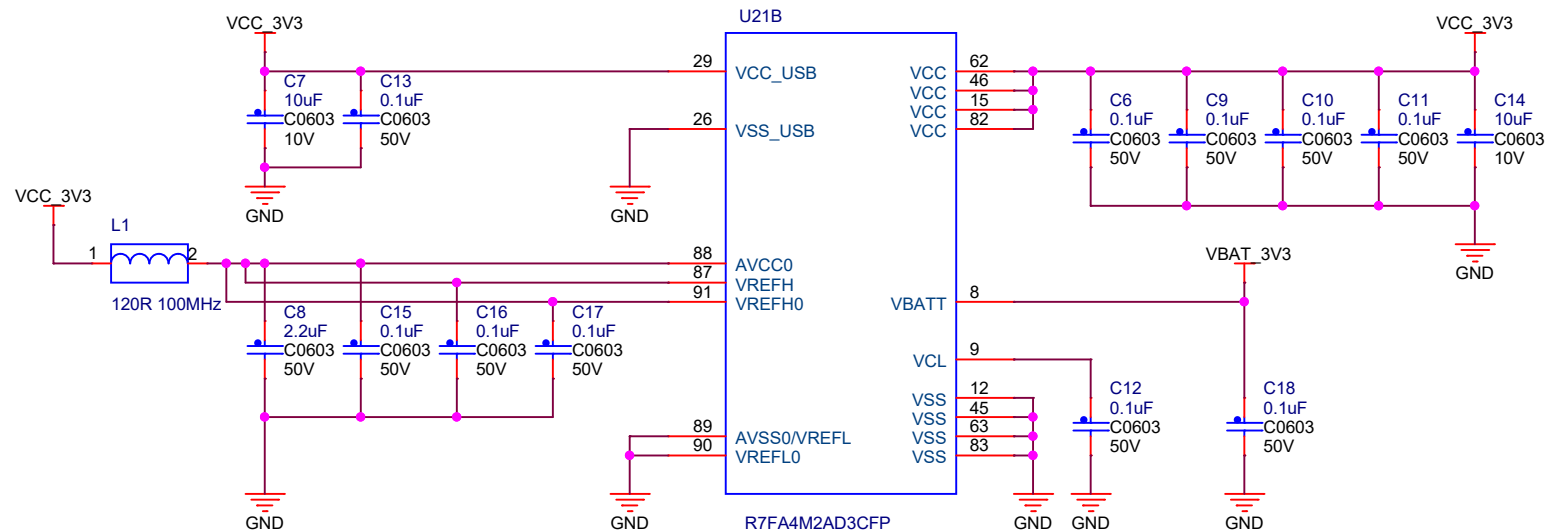


定位孔



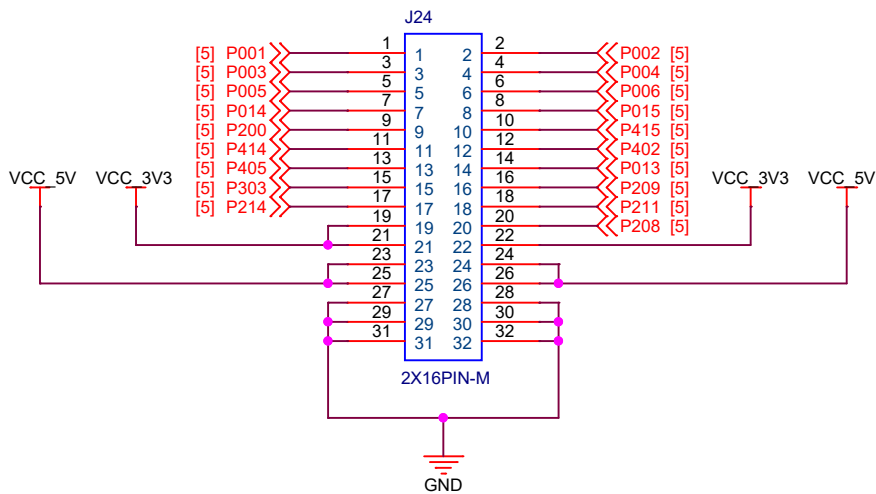
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MCU电源

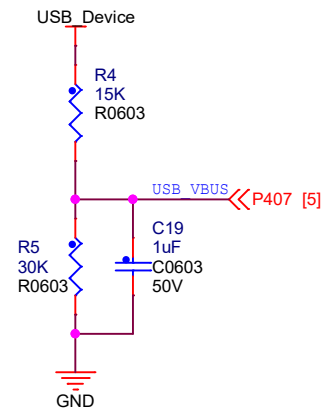


IO 引出

引出未使用过的IO口(数量18)



USB检测

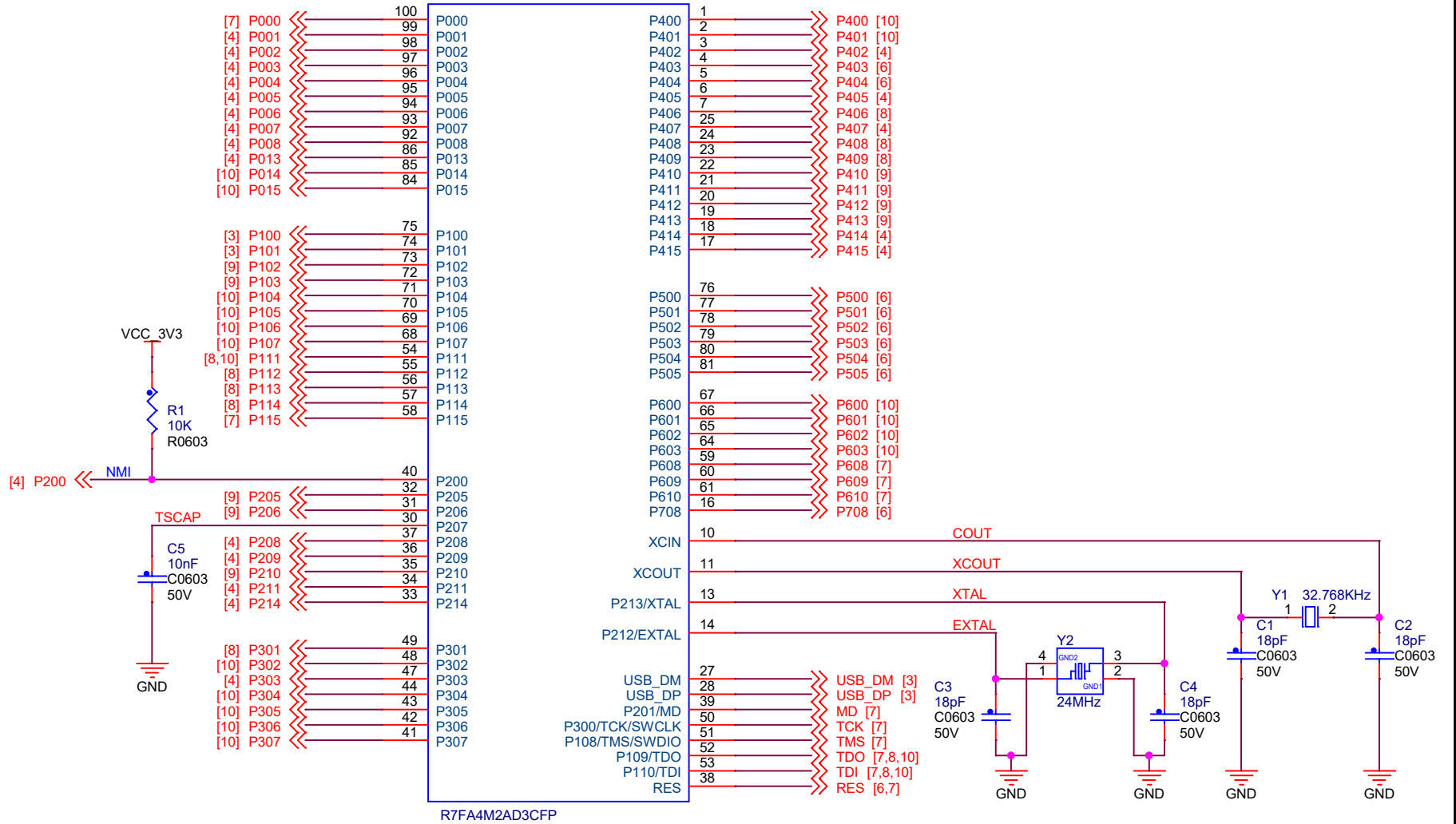


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GPIO

IO数量: 82



R7FA4M2AD3CFP

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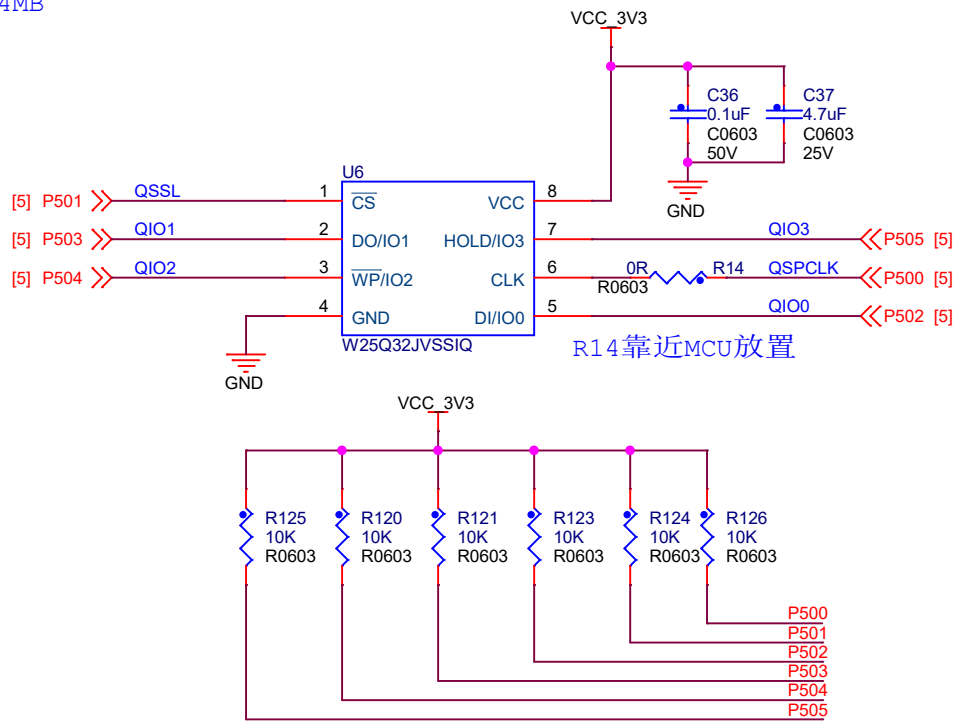
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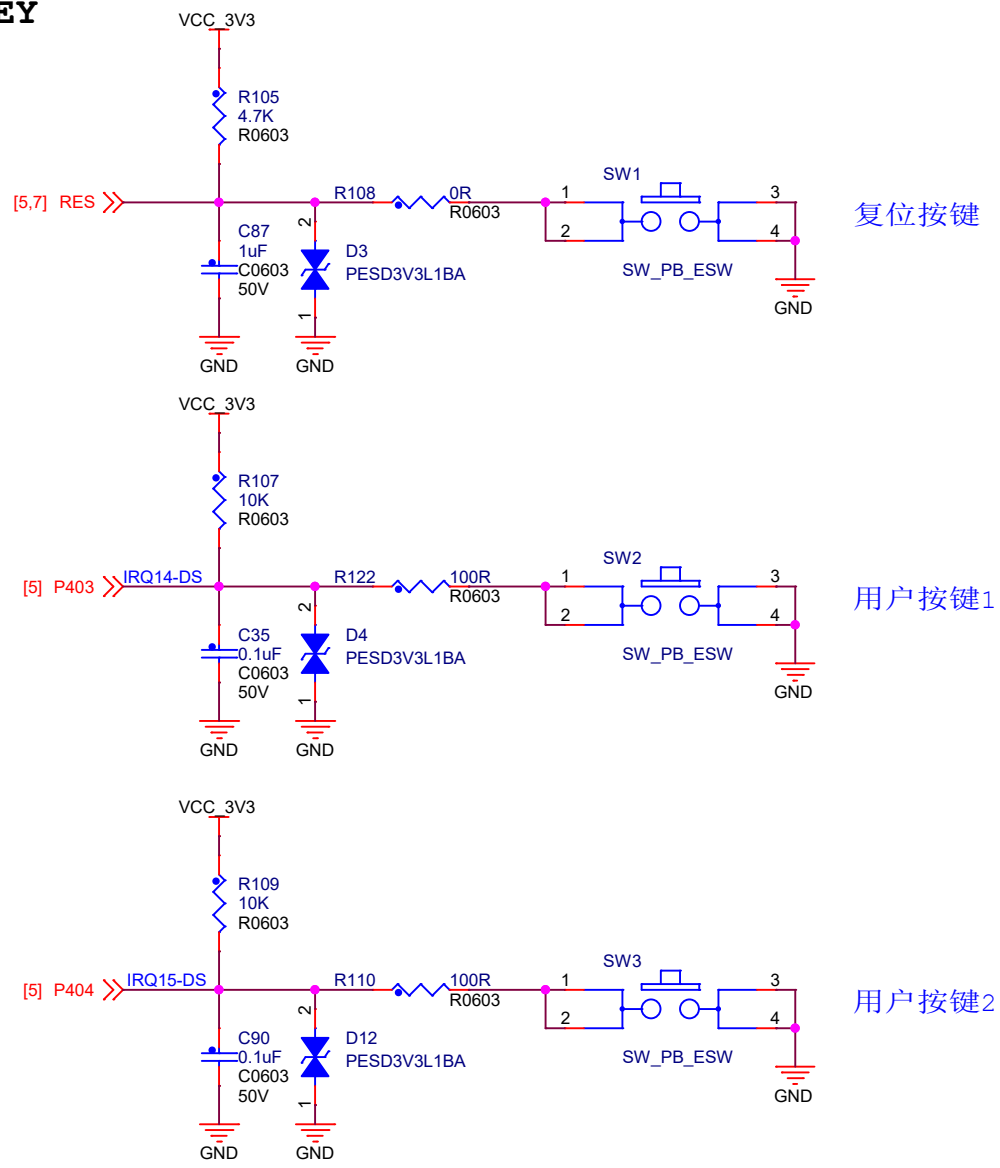
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QSPI Flash

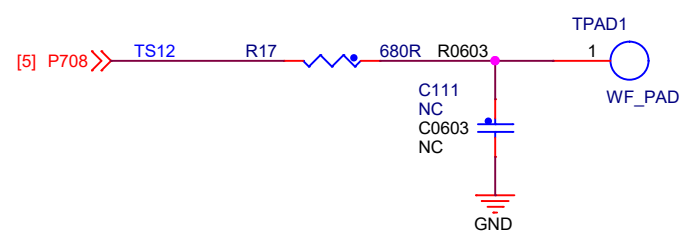
4MB



KEY



电容按键

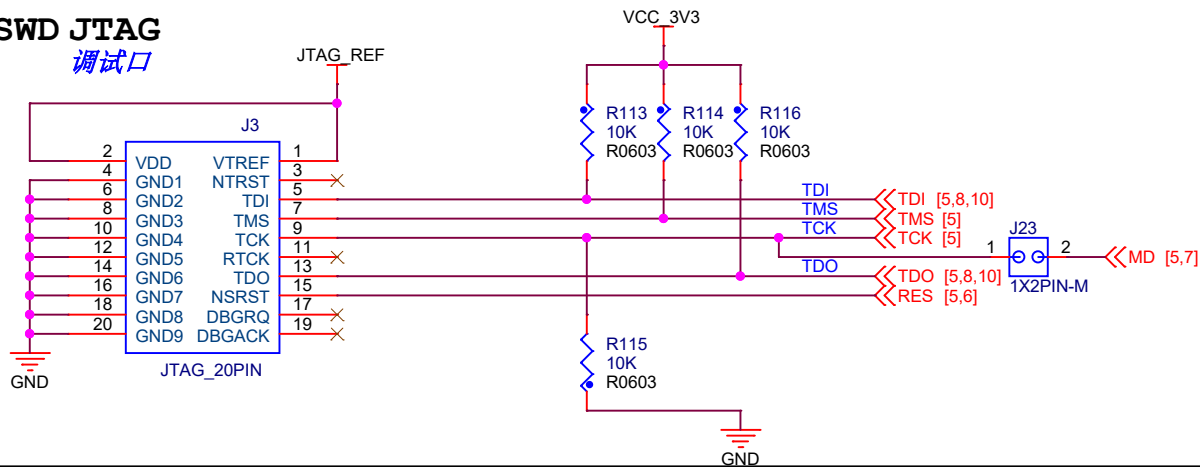


电极尺寸: 10mm~15mm (方形/圆形)
 电极间间距: 至少为尺寸的0.8倍
 导线长度: 尽量缩短导线。在拐角处形成 45 度角
 电极下方可以挖空或者放置网状覆铜, 网状覆铜抗干扰更强
 线宽: 约 0.15 mm 至 0.20 mm

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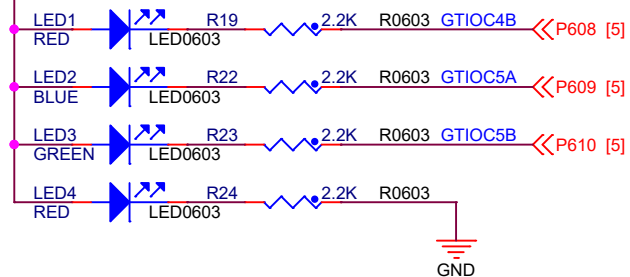
SWD JTAG

调试口

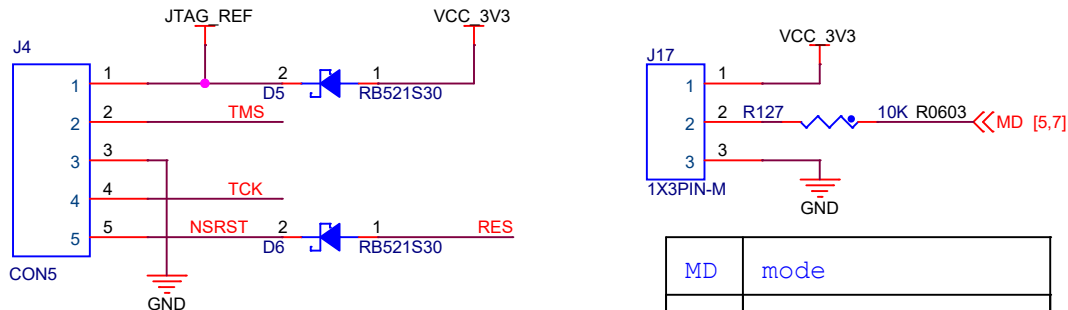
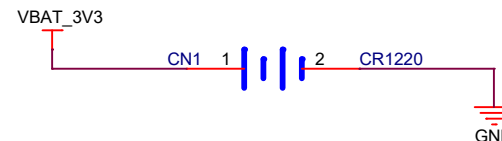


LED

VCC_3V3

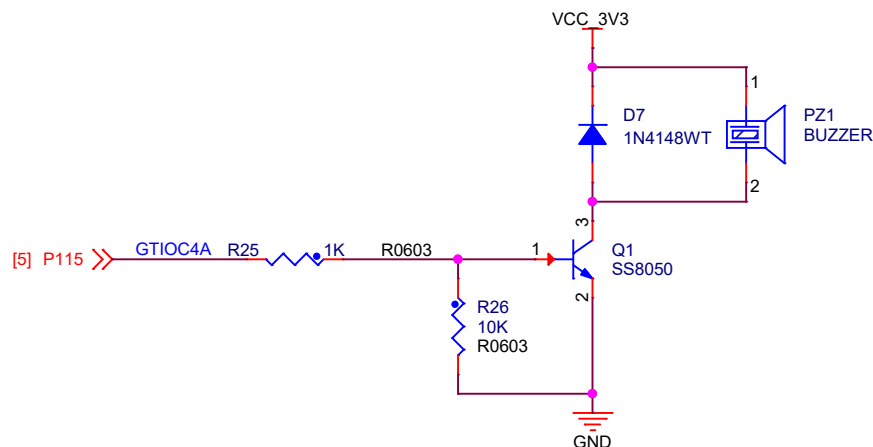


RTC 电池

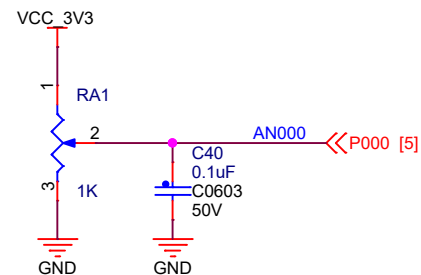


| | |
|----|-------------------|
| MD | mode |
| 1 | Single-chip mode |
| 0 | SCI/USB boot mode |

有源蜂鸣器



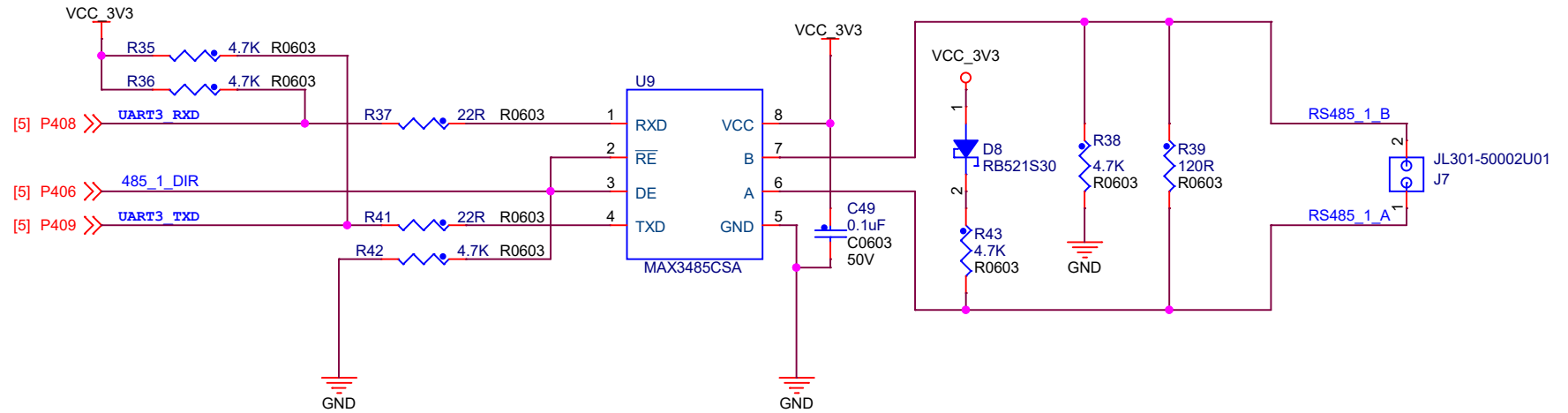
电位器



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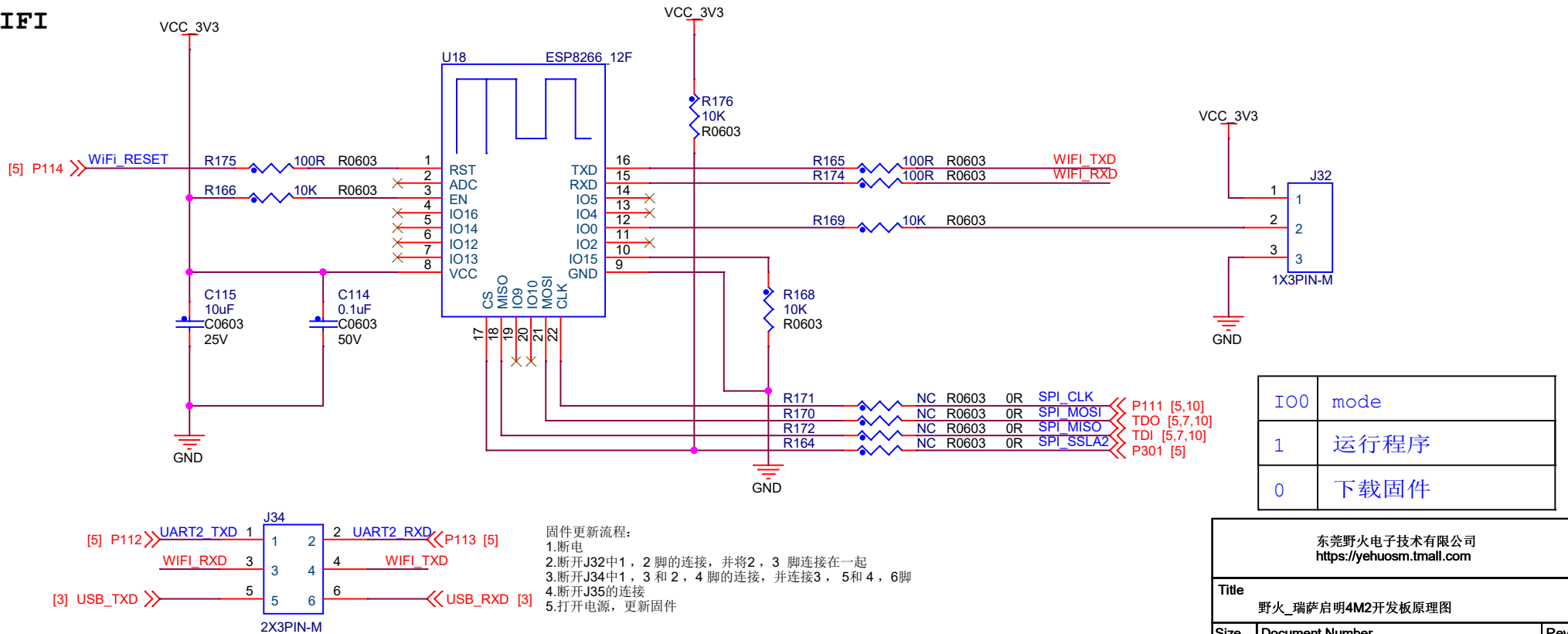
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485接口



1: 使能发送
0: 使能接收

WIFI



- 固件更新流程:
 1.断电
 2.断开J32中1, 2脚的连接, 并将2, 3脚连接在一起
 3.断开J34中1, 3和2, 4脚的连接, 并连接3, 5和4, 6脚
 4.断开J35的连接
 5.打开电源, 更新固件

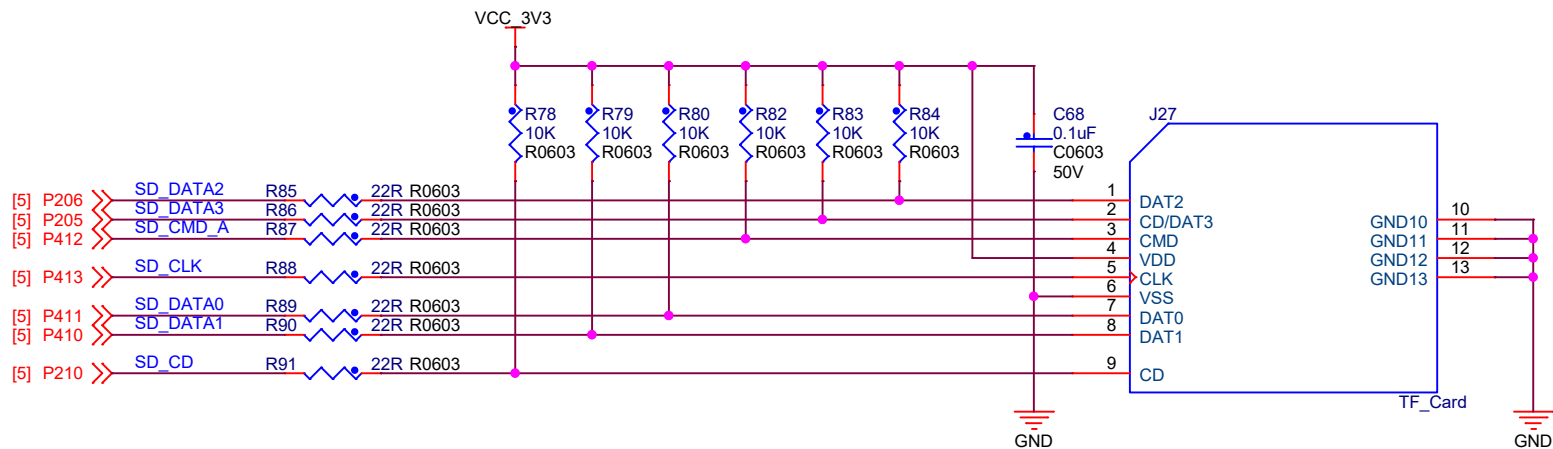
| | |
|-----|------|
| IO0 | mode |
| 1 | 运行程序 |
| 0 | 下载固件 |

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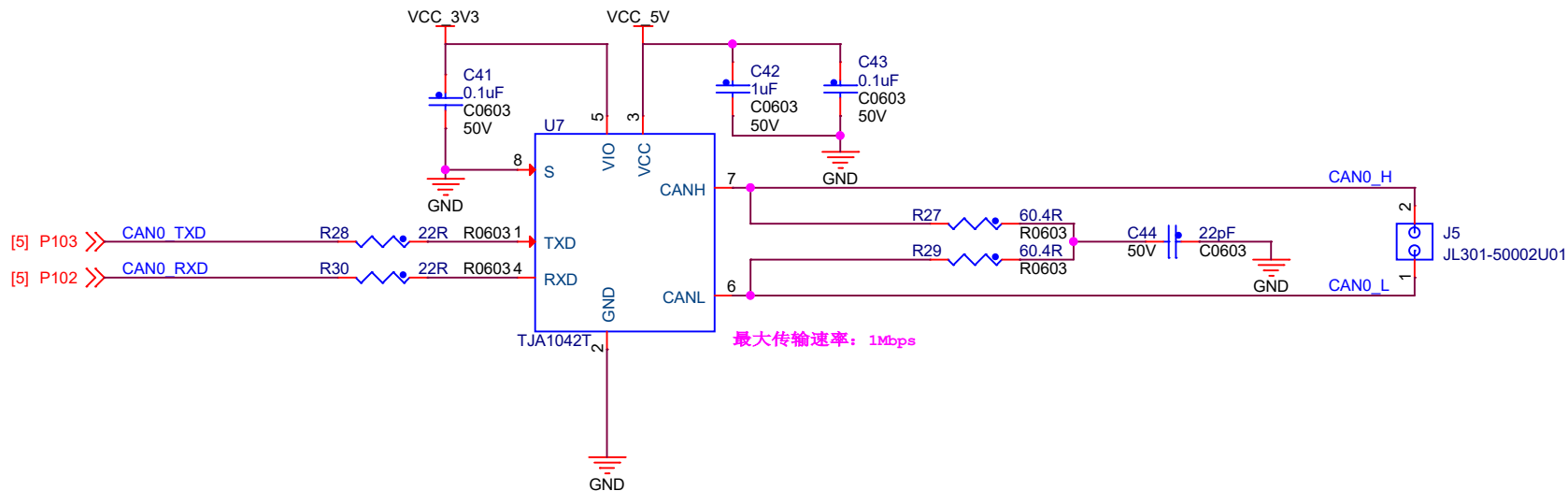
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SD卡



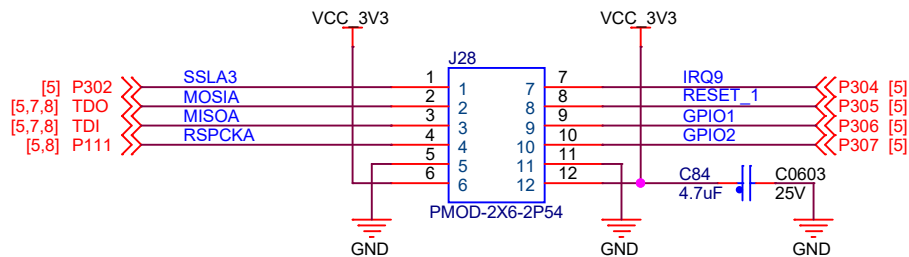
CAN



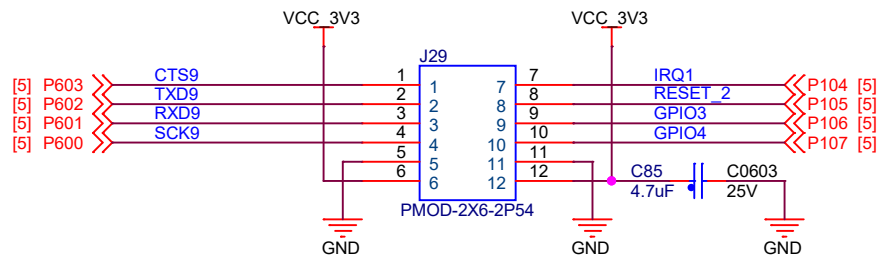
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PMOD HOST

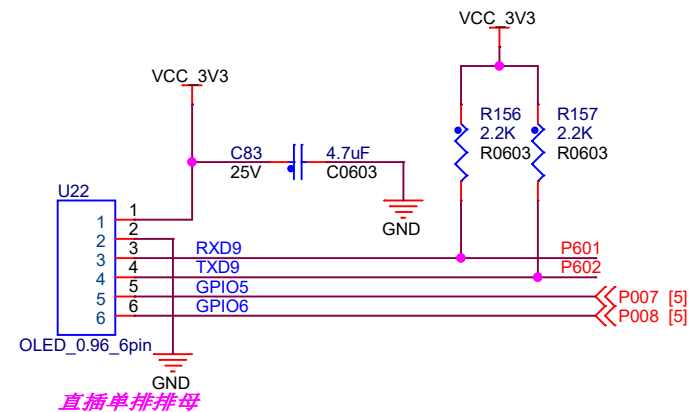


PMOD1 (Pmod Interface Type 2A (expanded SPI))
弯针双排排母



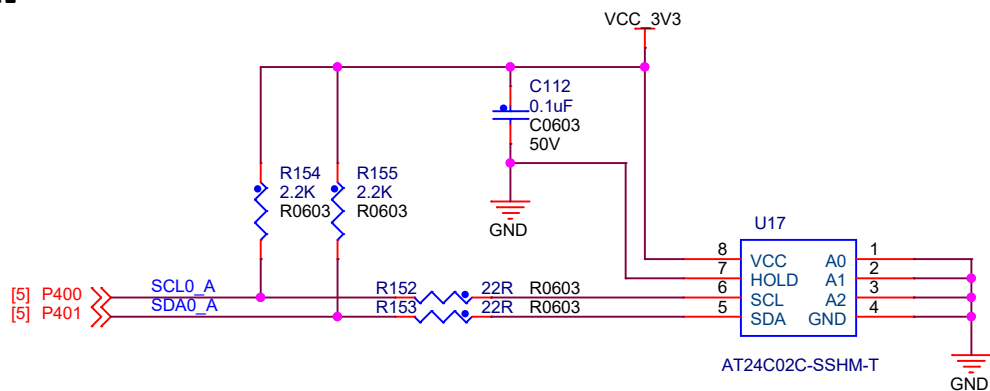
PMOD2 (Pmod Interface Type 4A (expanded UART))
弯针双排排母

EBF module



直插单排排母

EEPROM



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