

野火_i.MX RT1021 EVK_原理图_V1.0

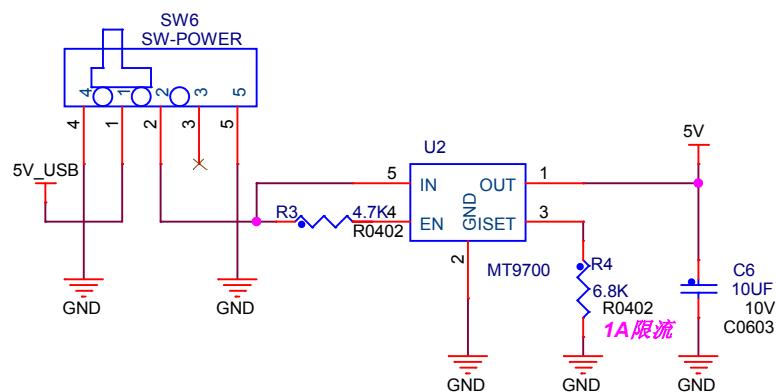
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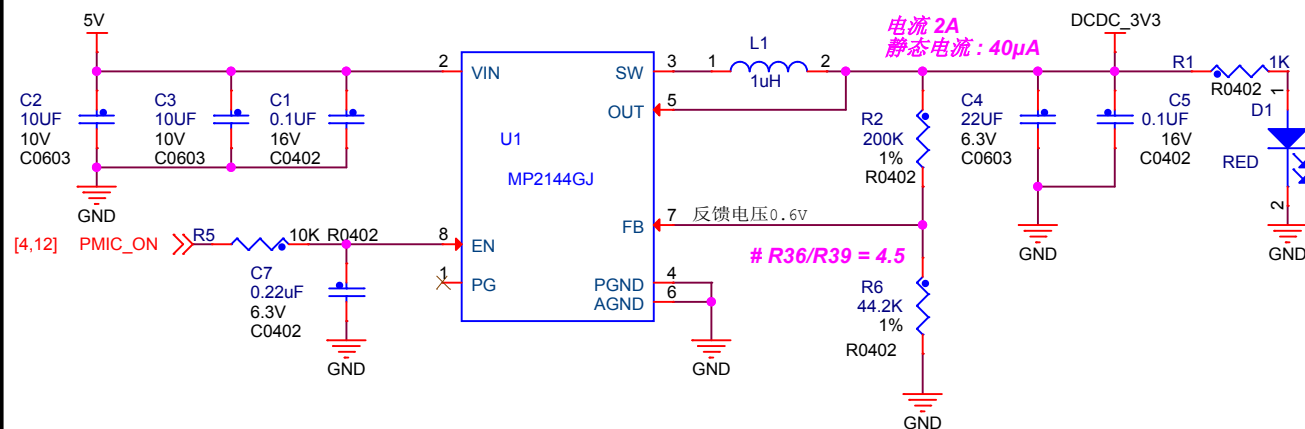
历史版本

版本号	日期	设计	描述
V1.0	2018-10-23	cancore	初始版本

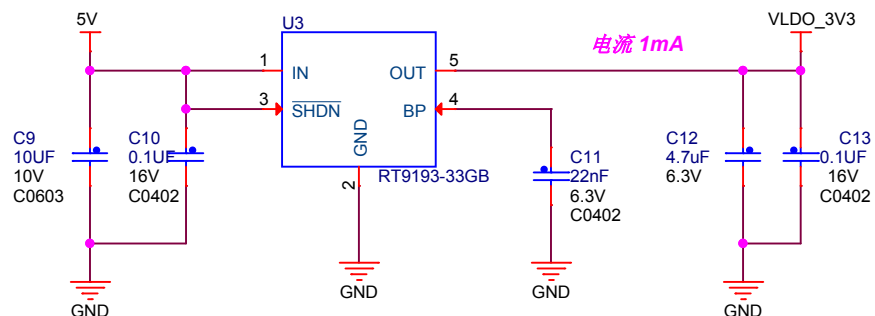
5V供电, 输出过流保护



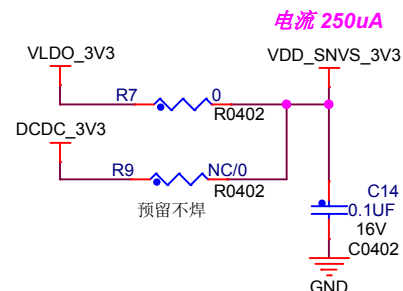
DC-DC 5V转3.3V



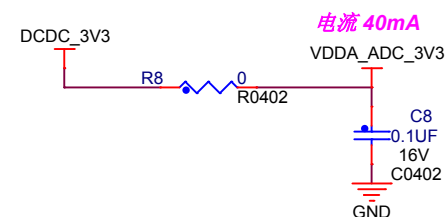
LDO 5V转3.3V, SNVS供电



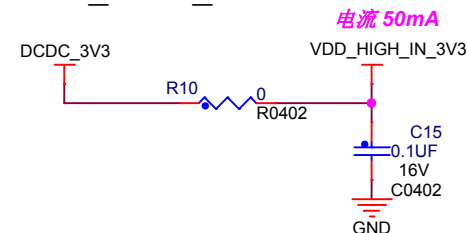
SNVS供电



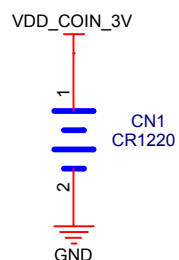
ADC供电



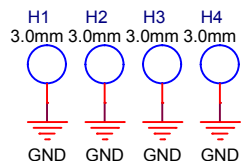
VDD_HIGH_IN供电



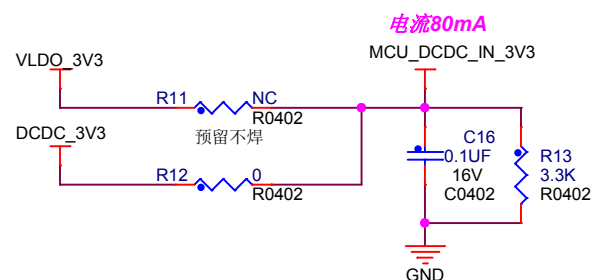
RTC电池



定位孔



内部DCDC输入



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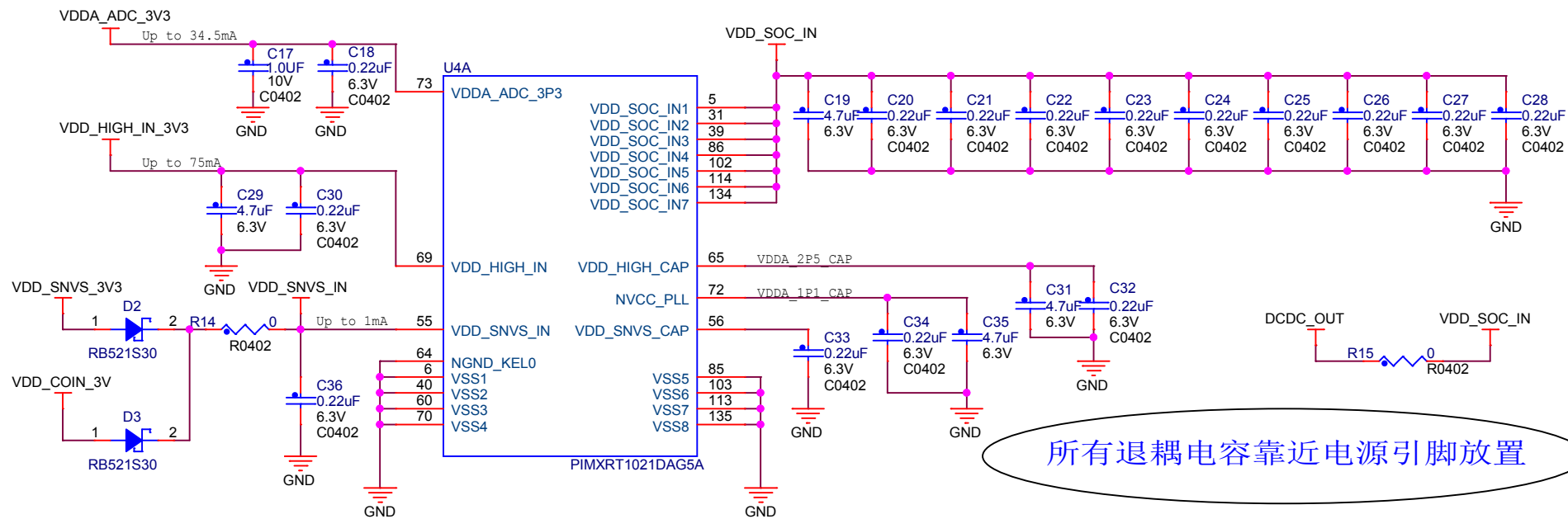
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Size A4	Document Number 主电源	Rev V1.0
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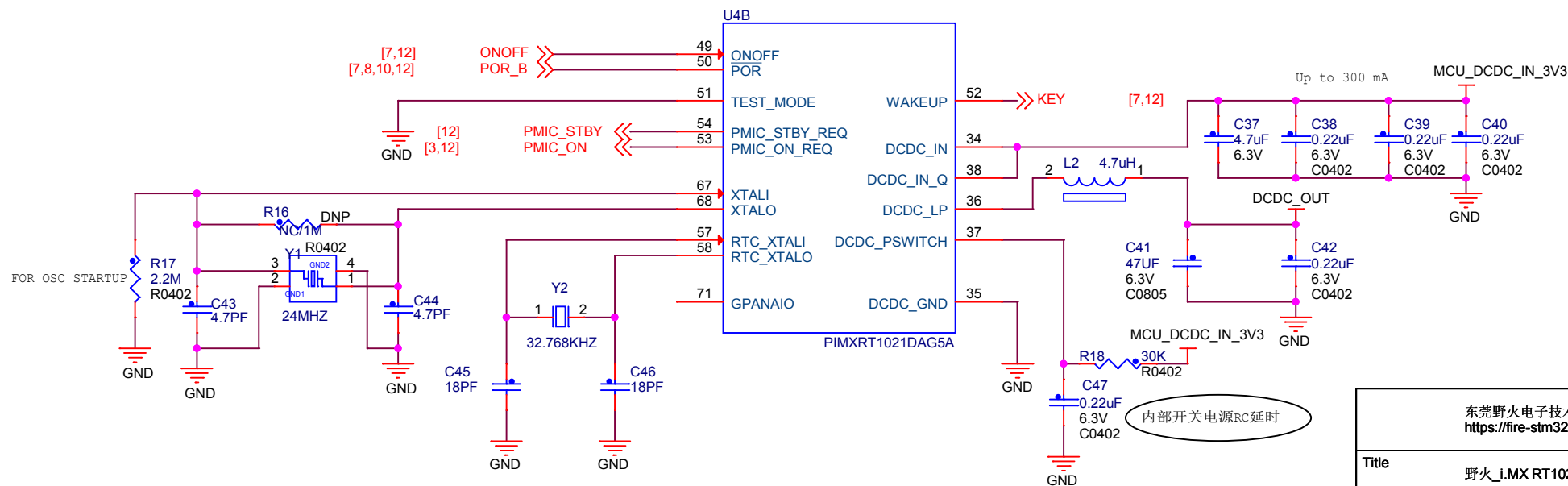
D

C



B

A



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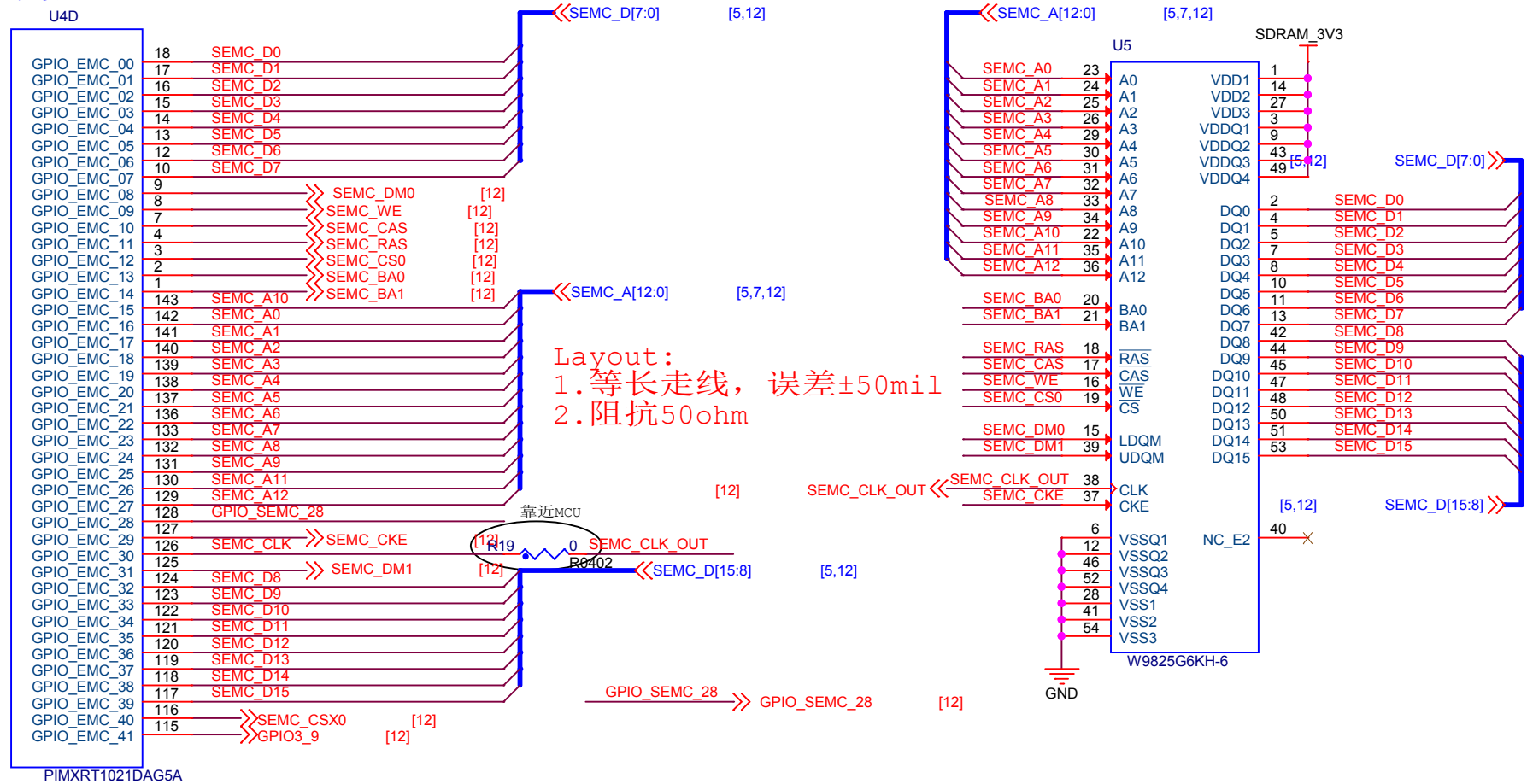
Title 野火_i.MX RT1021 EVK_原理图

Size	Document Number	Rev
A4	MCU电源	V1.0

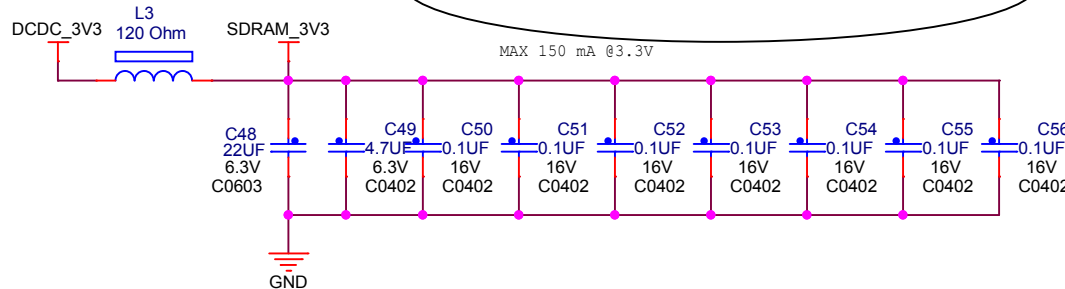
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SDRAM

容量为32M字节，16位宽



所有退耦电容靠近SDRAM放置



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Size A4	Document Number SDRAM	Rev V1.0
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A

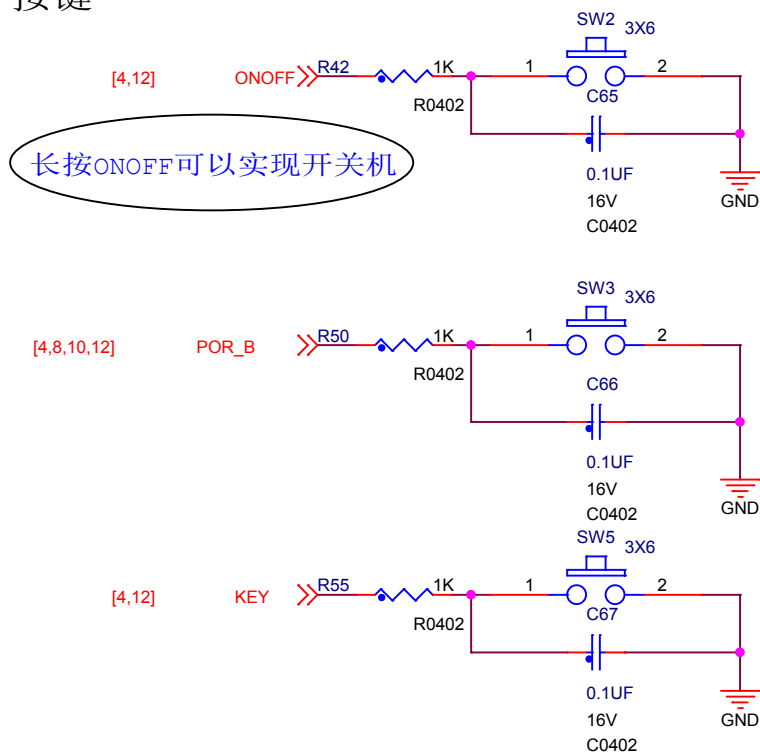


启动设置

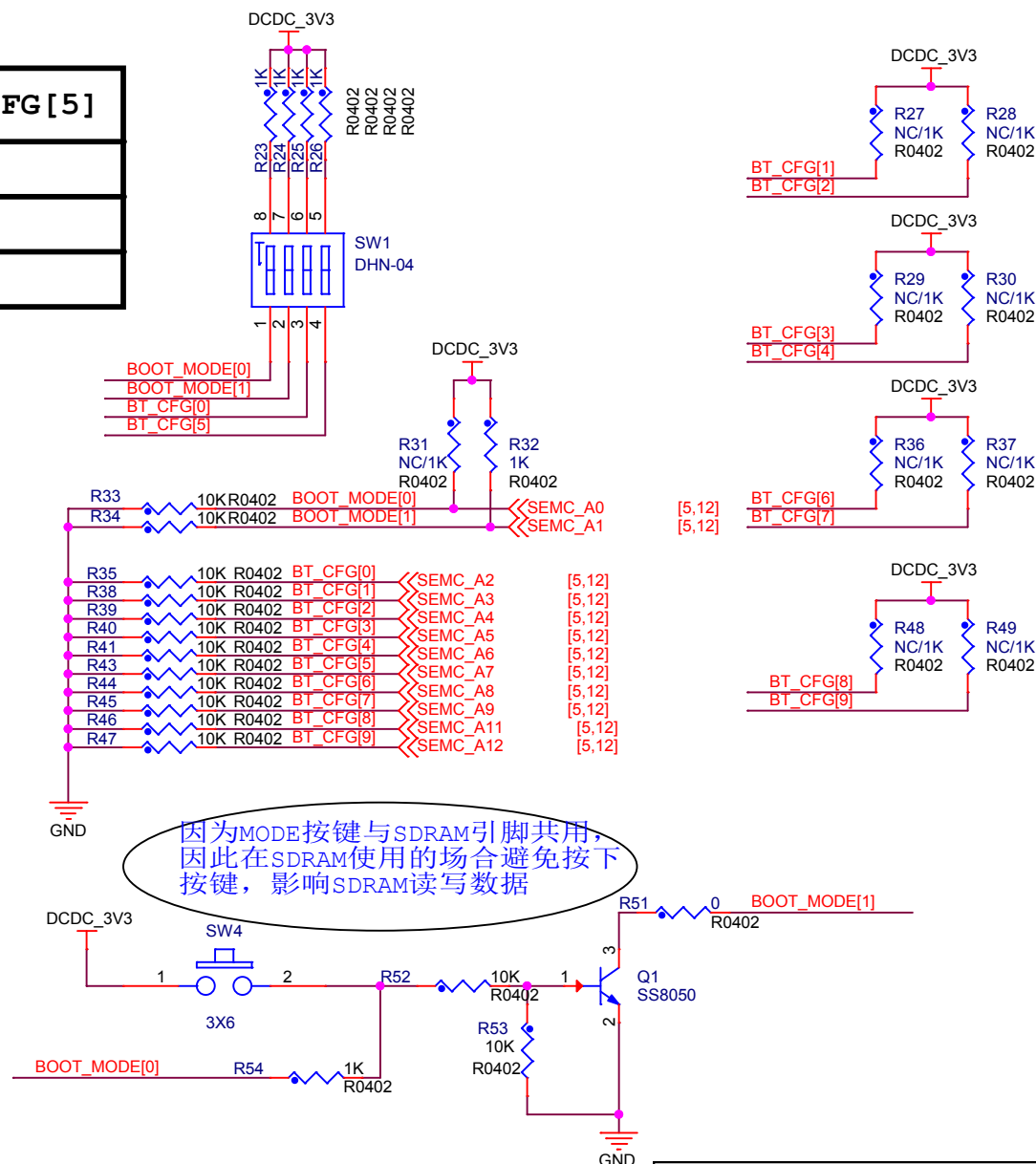
默认从flash启动

	BOOT_MODE0	BOOT_MODE1	BT_CFG[0]	BT_CFG[5]
USB	1	0	X	X
FLASH	0	1	0	0
SD	0	1	0	1

按键



1. 按住MODE键SW4不放
2. 按一次复位键SW3
3. 松开MODE键SW4即可从USB启动
通过USB启动的方式可以烧录固件



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Size A4	Document Number KEY/BOOT CFG	Rev V1.0
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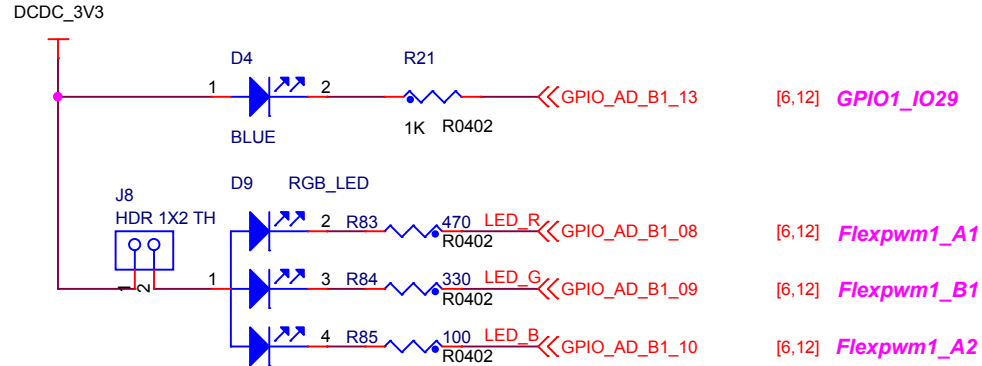
D

C

B

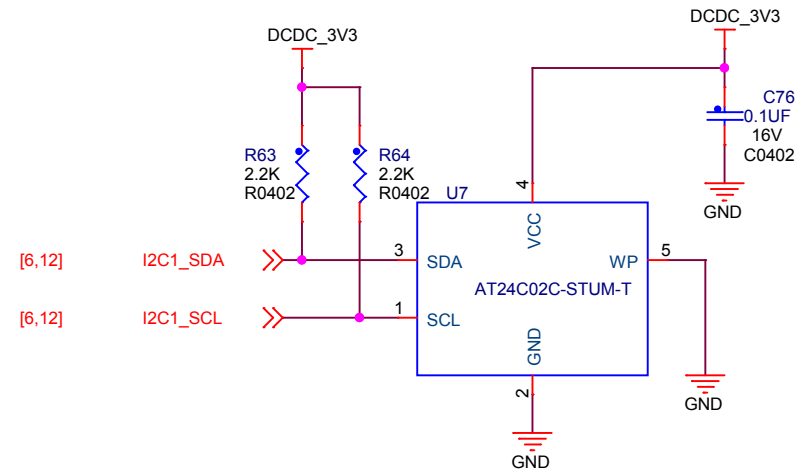
A

LED

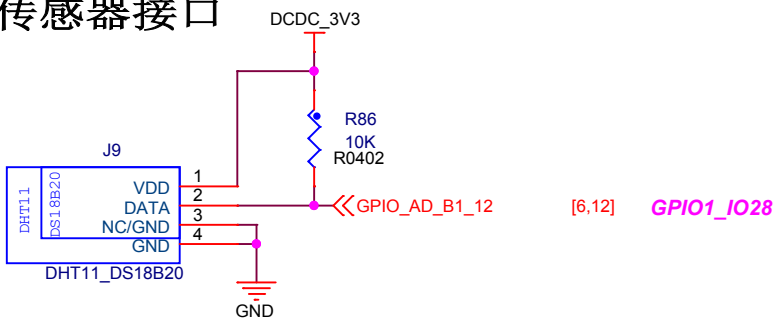


EEPROM

容量为256字节

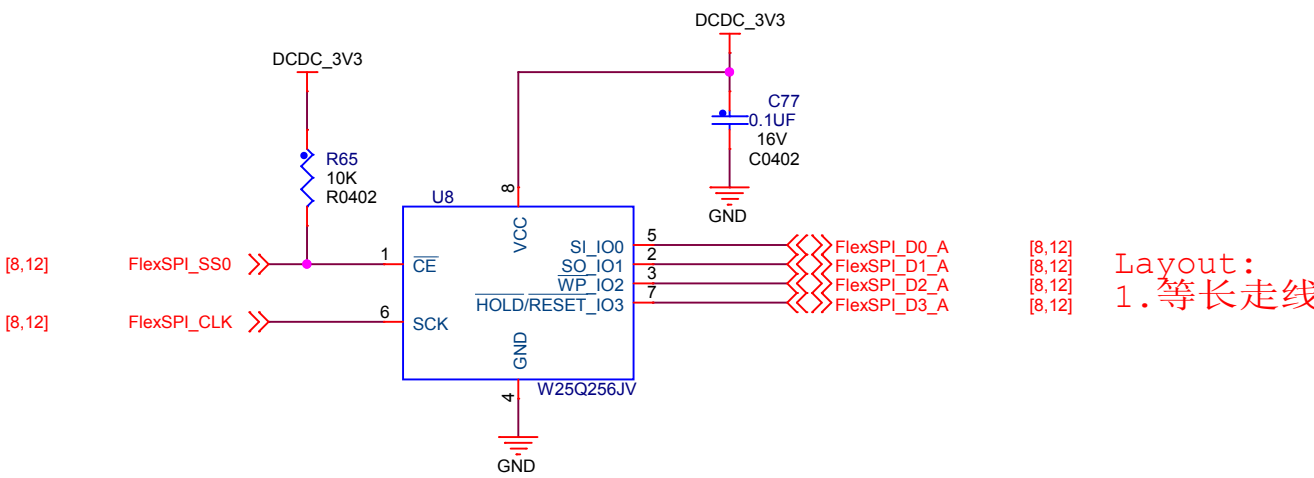


温湿度传感器接口



QSPI FLASH

容量为32M字节



Layout:
1. 等长走线

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D



B



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百兆以太网PHY

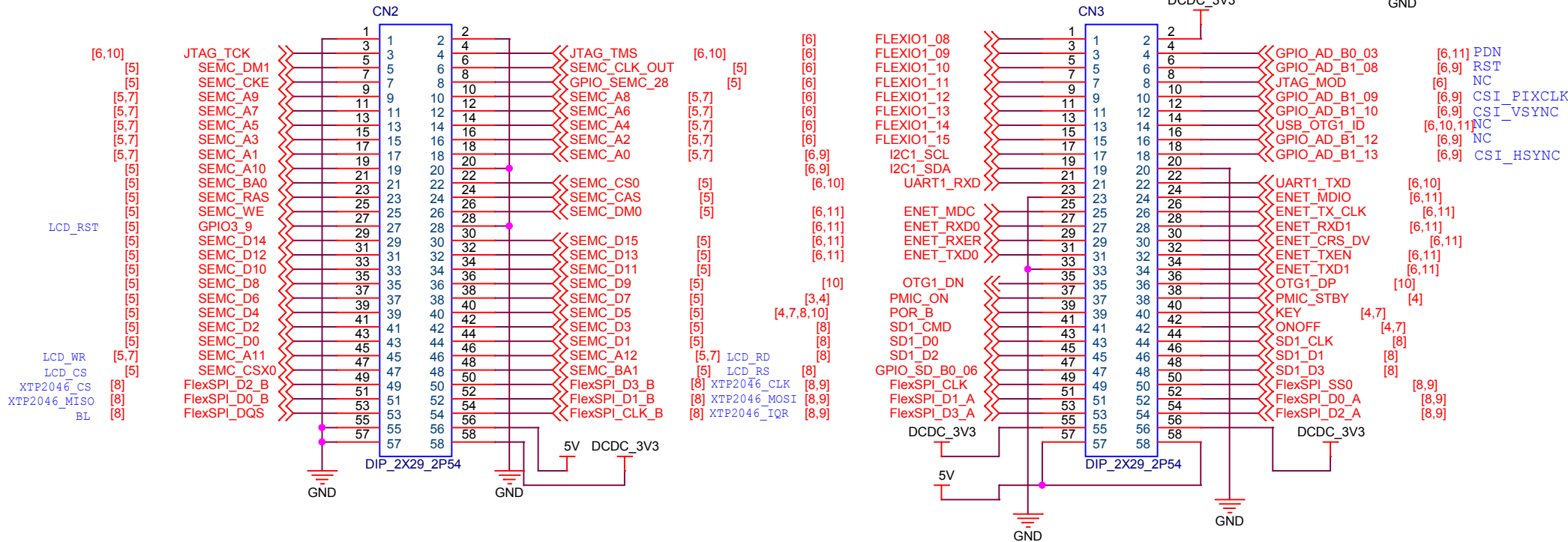
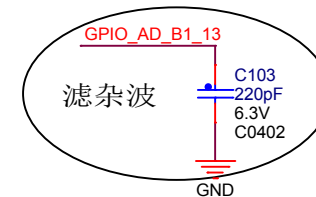


连接器

所有IO全部引出，包括GPIO引出97个，USB专用口1个，POR_B复位脚1个

CN2可选配转接板通过SEMC驱动野火的MCU液晶屏(8080)

CN3可选配转接板通过FLEXIO驱动野火的摄像头(OV5640)



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