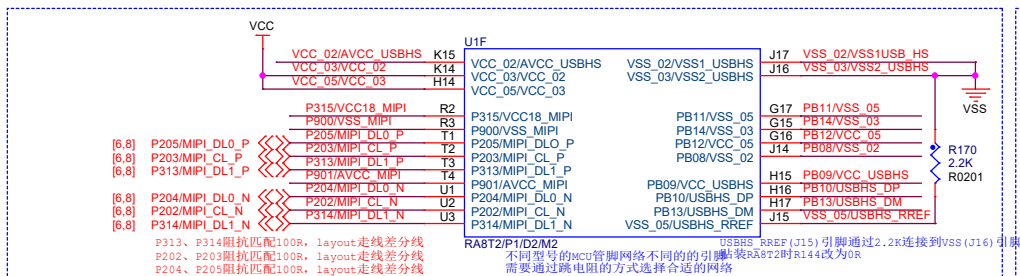


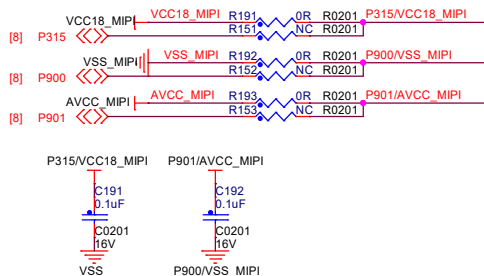
核心板缺省功能阻容设置

核心板芯片	R7KA8T2L	R7KA8P1K
C168~169	0.1uF	NC
C170	0.1uF	2.2uF
C171~C174	NC	0.1uF
C191~C192	NC	0.1uF
R145~R150	NC	NC
R151~R168	0R	NC
R170	0R	2.20K 1%
L171	NC	120R@100M
R172~R180	NC	0R
R191~R193	NC	0R



MIPI部分

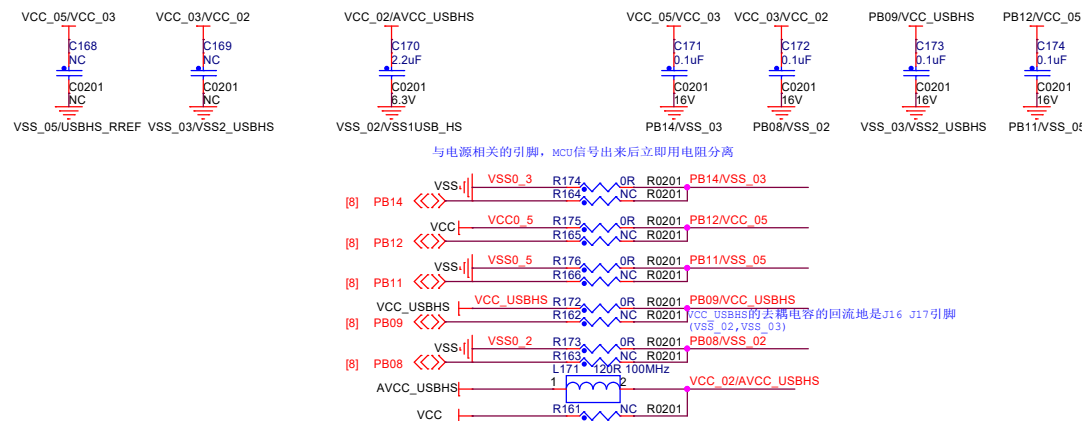
要贴的器件靠近MCU摆放，NC器件在MCU-BTB间任意摆放



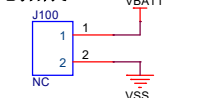
电阻选装

由于RA8P1/D2/M2和RA8T2的部分引脚网络不同，通过选装阻容的方式，应对不同型号的IC贴装。默认贴装RA8P1/D2/M2

要贴的器件靠近MCU摆放，NC器件在MCU-BTB间任意摆放



通孔拓展

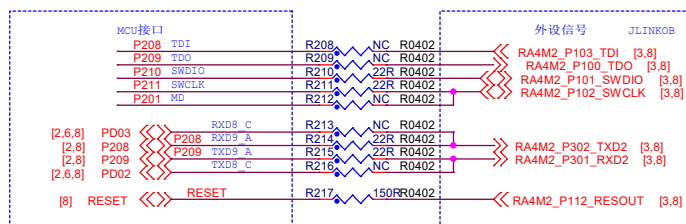


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Size A3	Document Number MCU 电源	Rev V1.1
Date: Saturday, October 11, 2025	Sheet 1	of 10



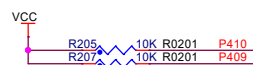
如果使用USB HS，主晶振只能选12/20/24/48MHz

接口信号

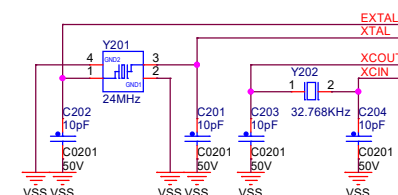


通孔拓展

VIN有大电流需求，请用粗线或铜皮连到VIN网络。
J201, J202之间的间距请保证2.54mm的倍数



晶振

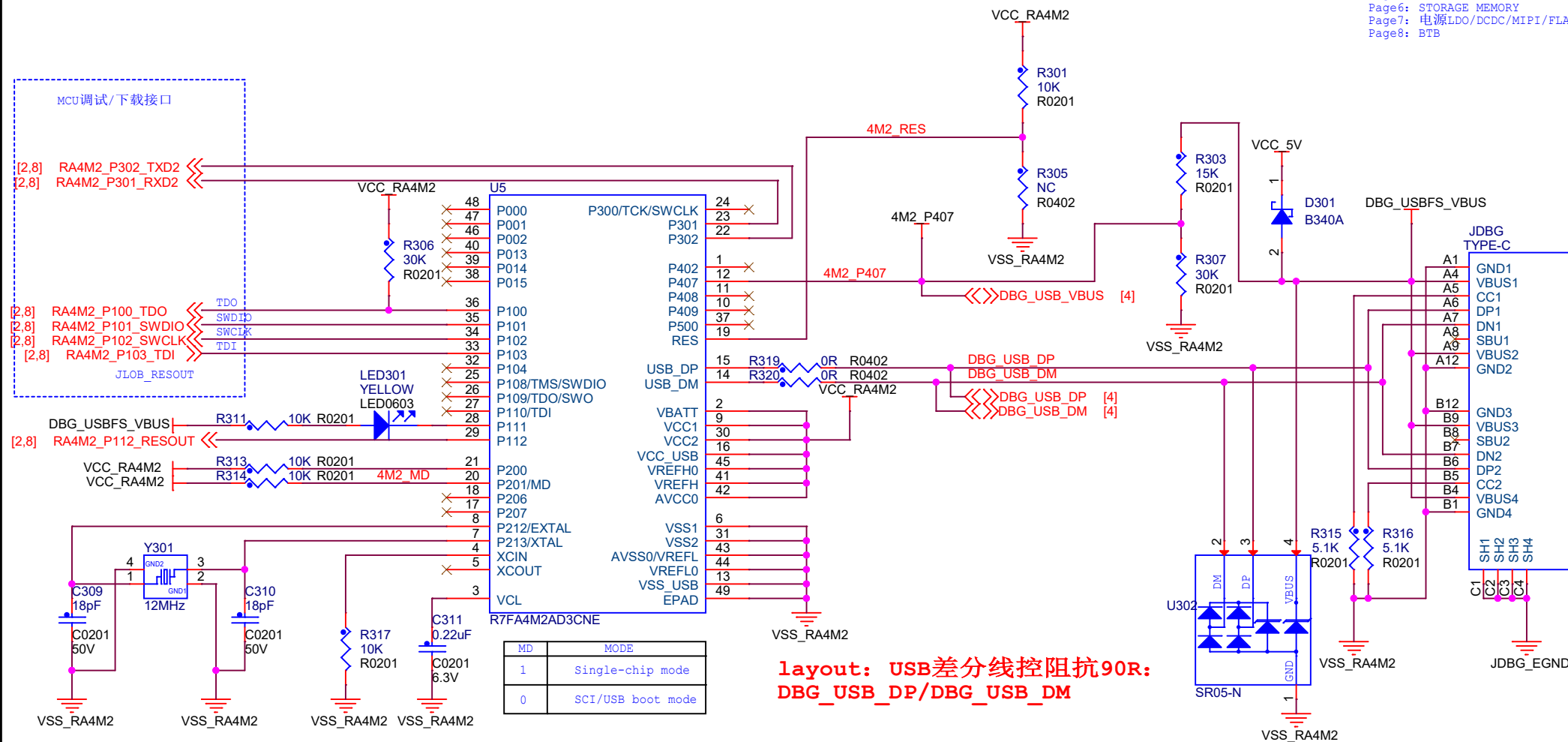


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Jlink OB

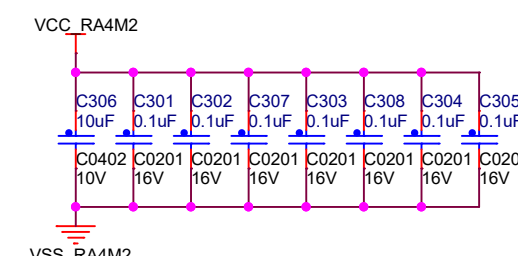
注意: R7FA4M2只能12MHz晶振

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Page4: USB HS
Page5: SDRAM
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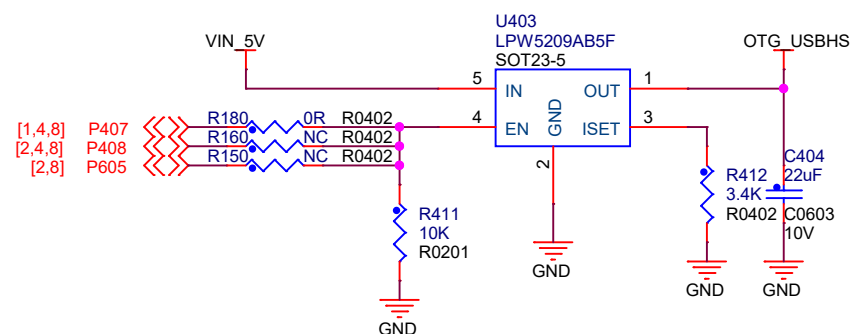
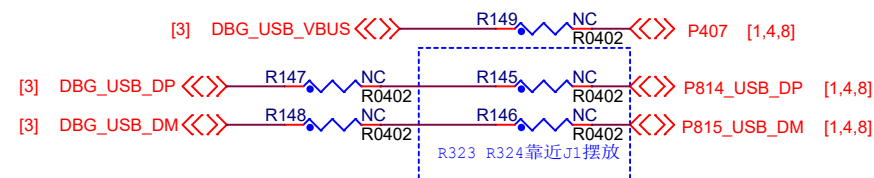
layout: USB差分线控阻抗90R:
DBG_USB_DP/DBG_USB_DM

测试点 1.25间距/预留



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如果使用USB HS，主晶振只能选12/20/24/48MHz

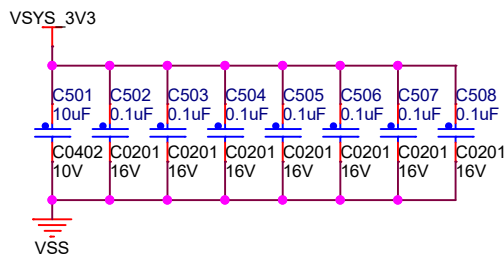
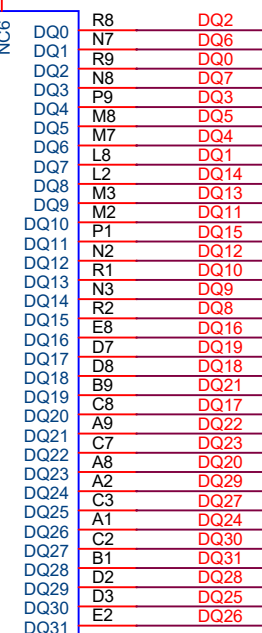
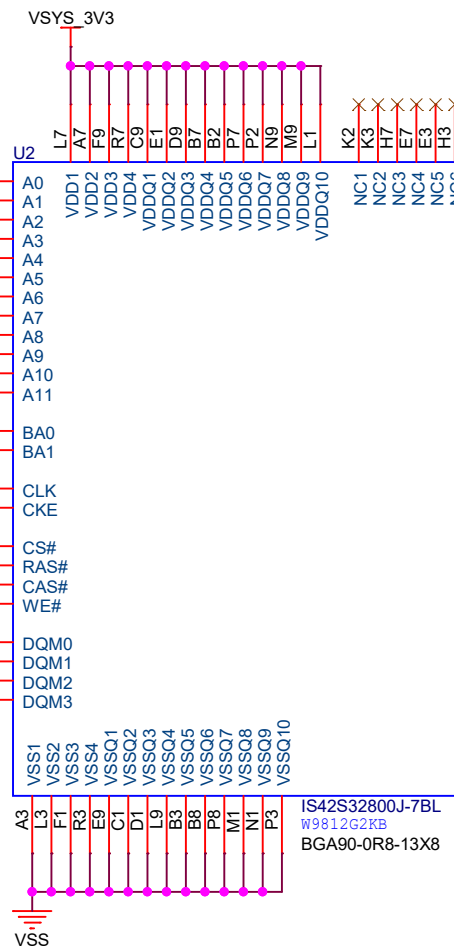
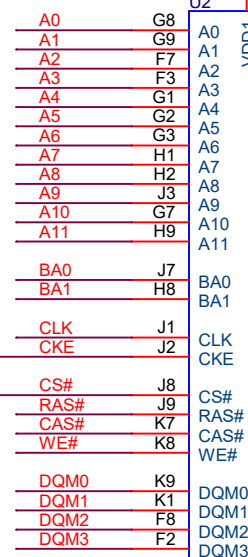
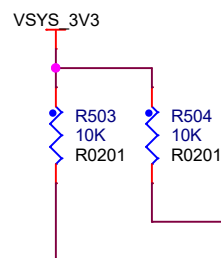
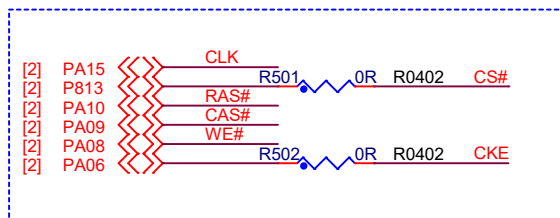
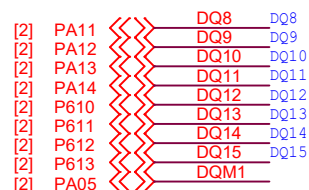
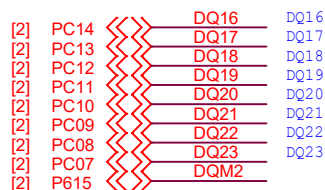
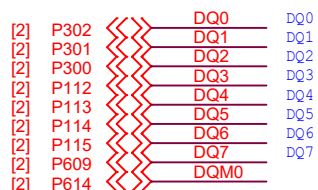
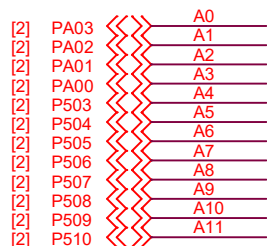


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SDRAM

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layout: SDRAM走线控阻抗50R:

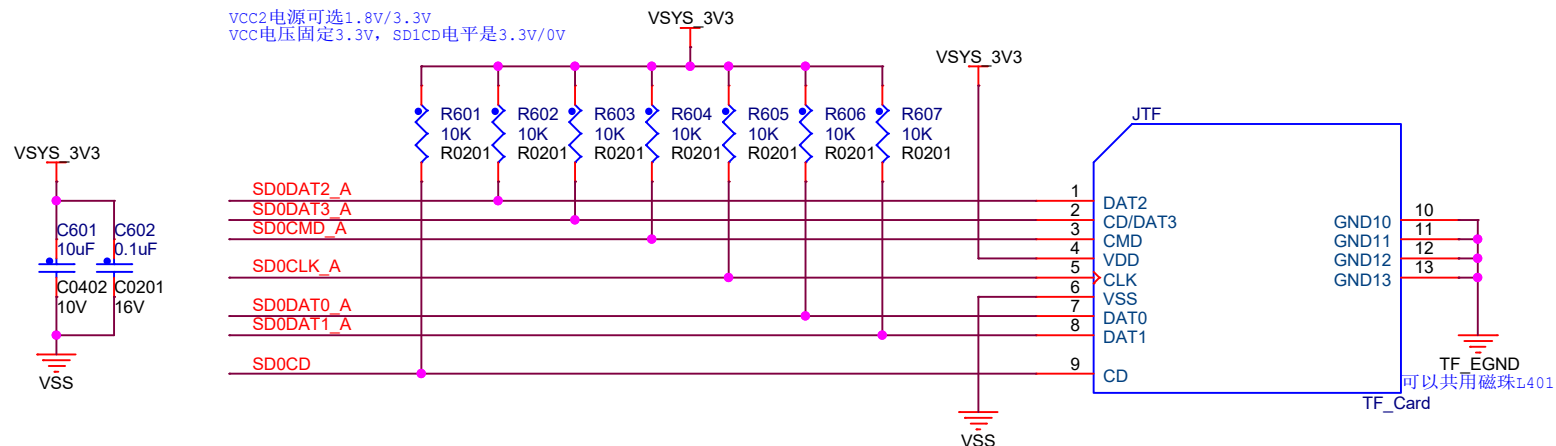


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Title			
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SD卡

VCC2电源可选1.8V/3.3V
VCC电压固定3.3V，SD1CD电平是3.3V/0V

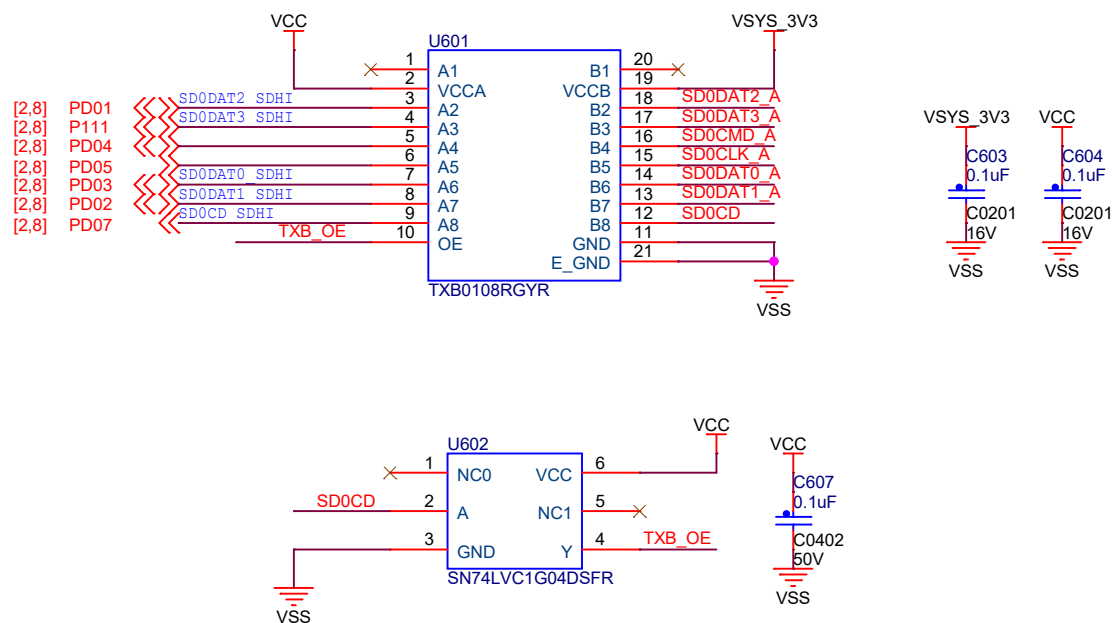


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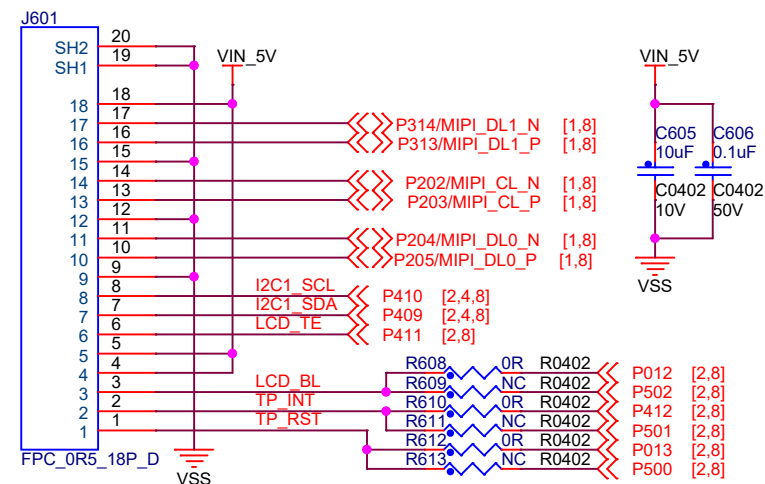
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SD卡电平转换



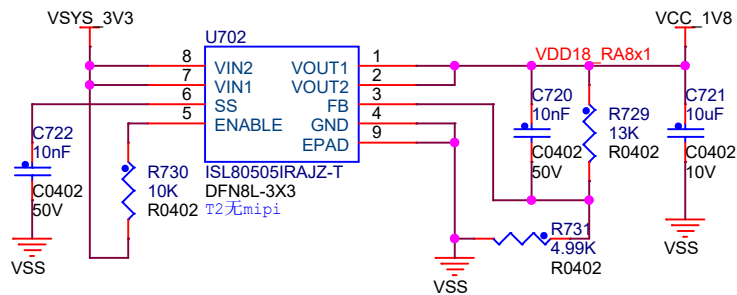
MIPI屏



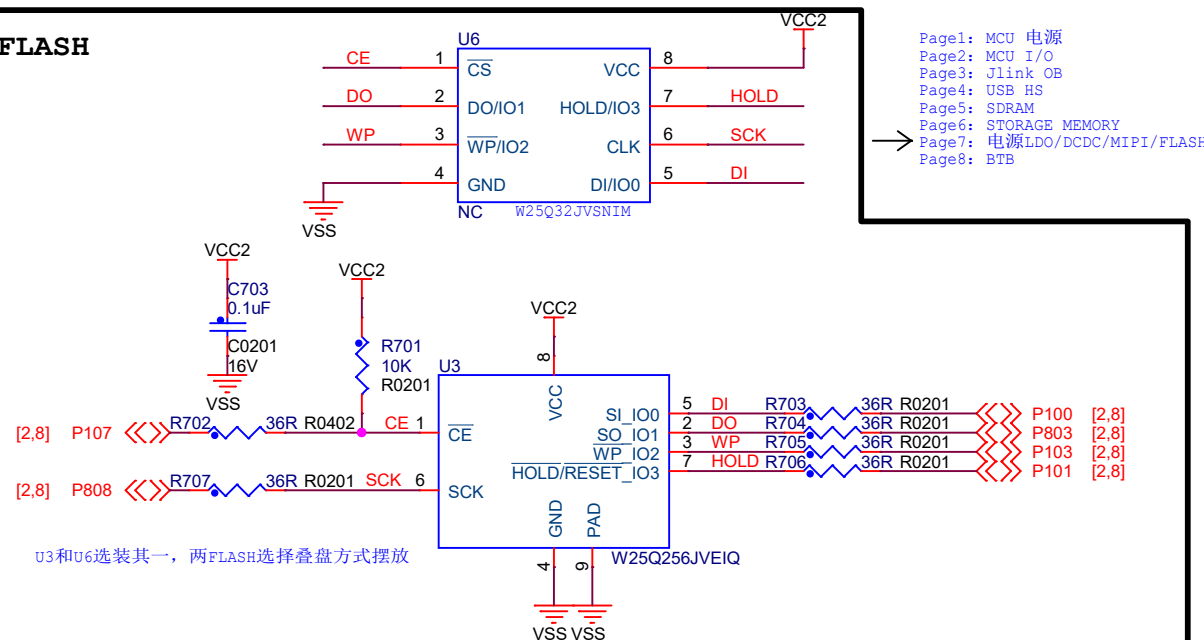
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1.8v电源

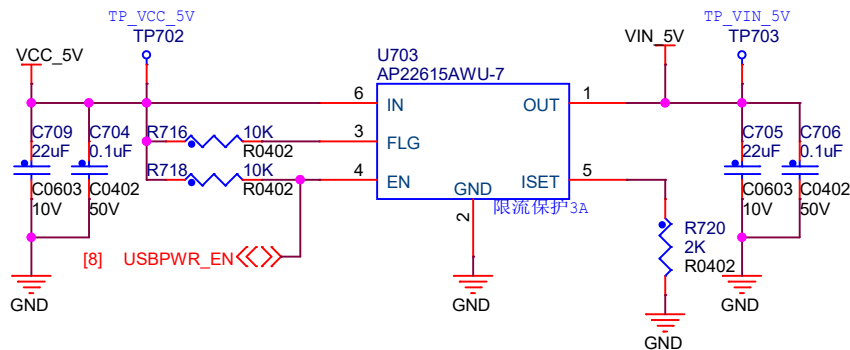


FLASH

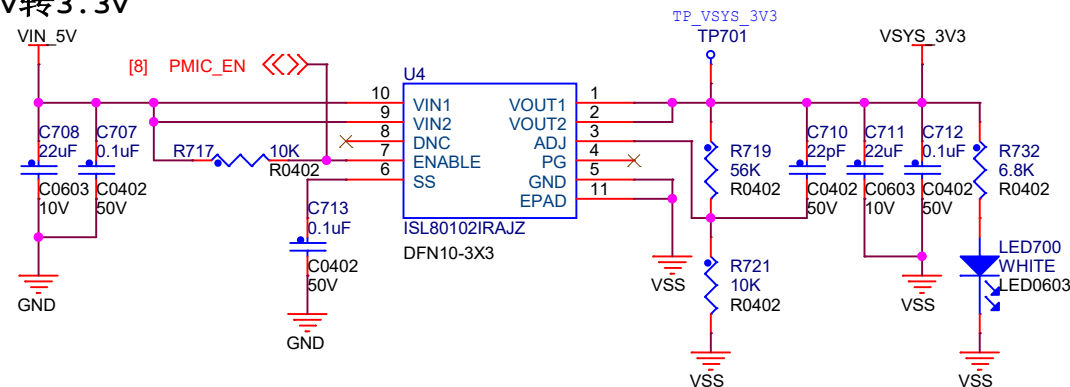


Page1: MCU 电源
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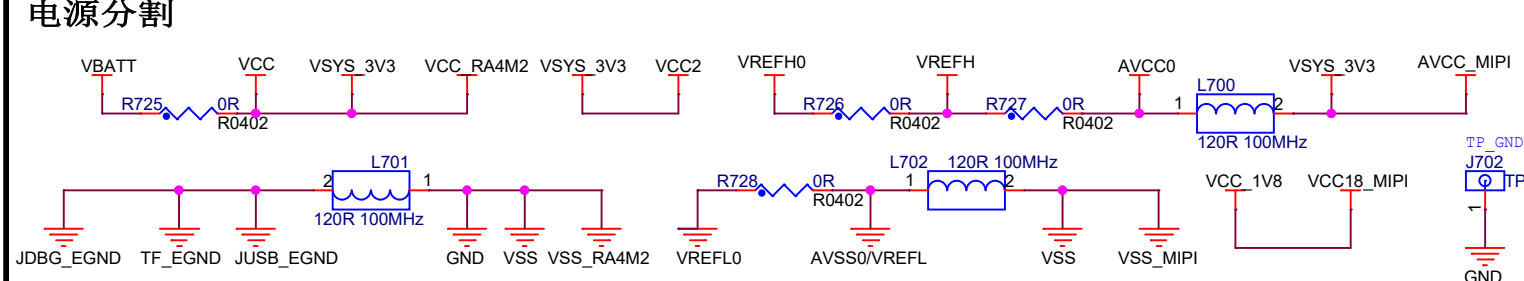
电源保护



5v转3.3v

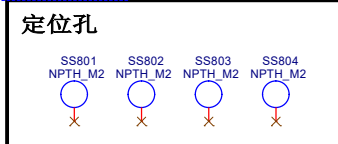
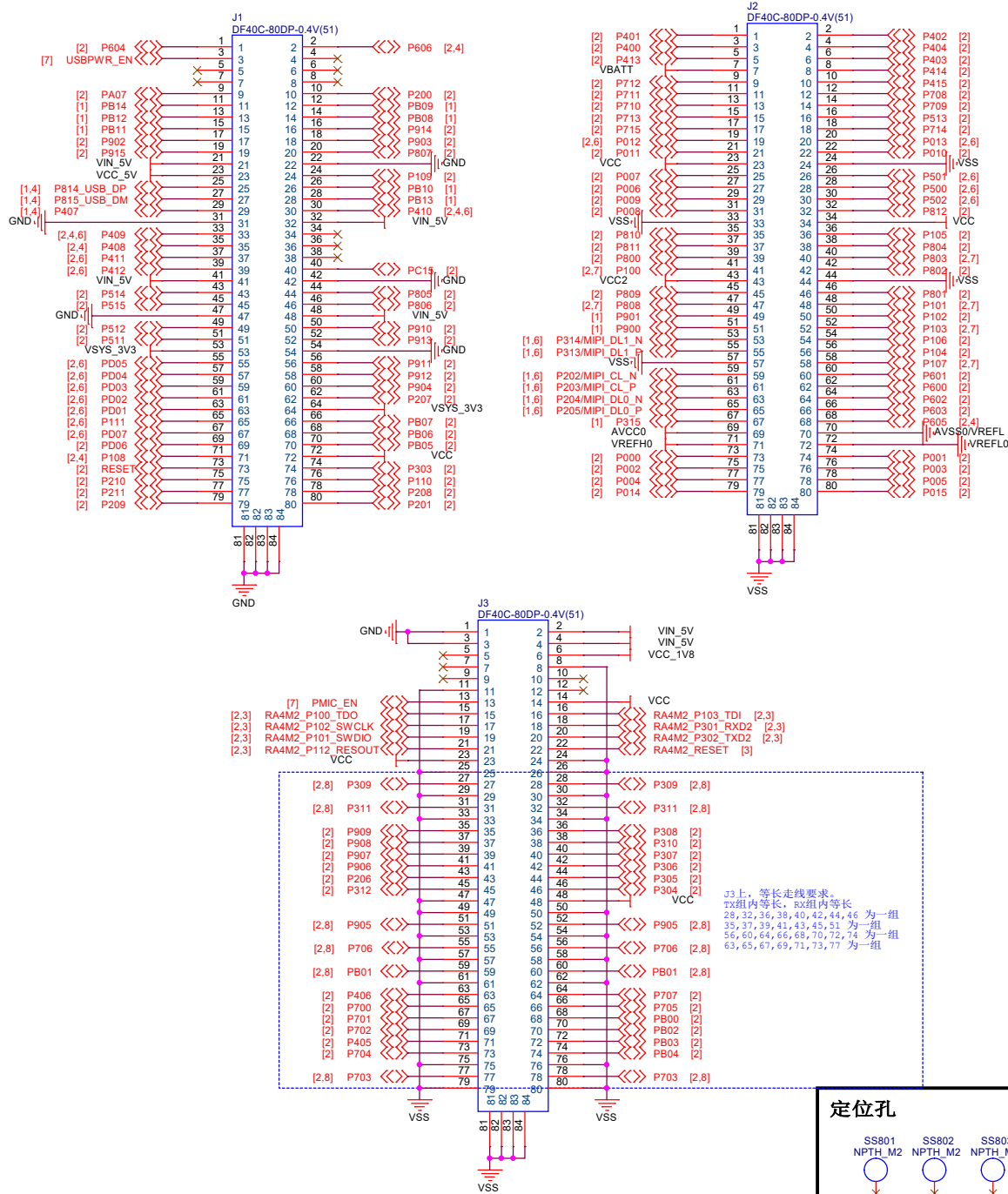


电源分割



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历史版本

版本号	日期	设计	描述
V1.0	2025-08-28	LPC	量产版本
V1.1	2025-09-17	LPC	修正VCC_USB连接

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