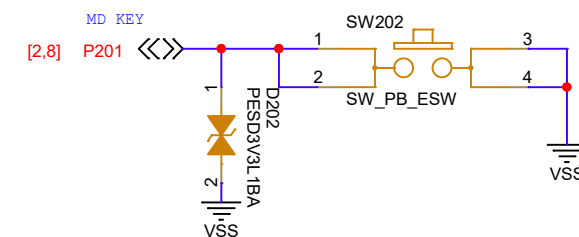
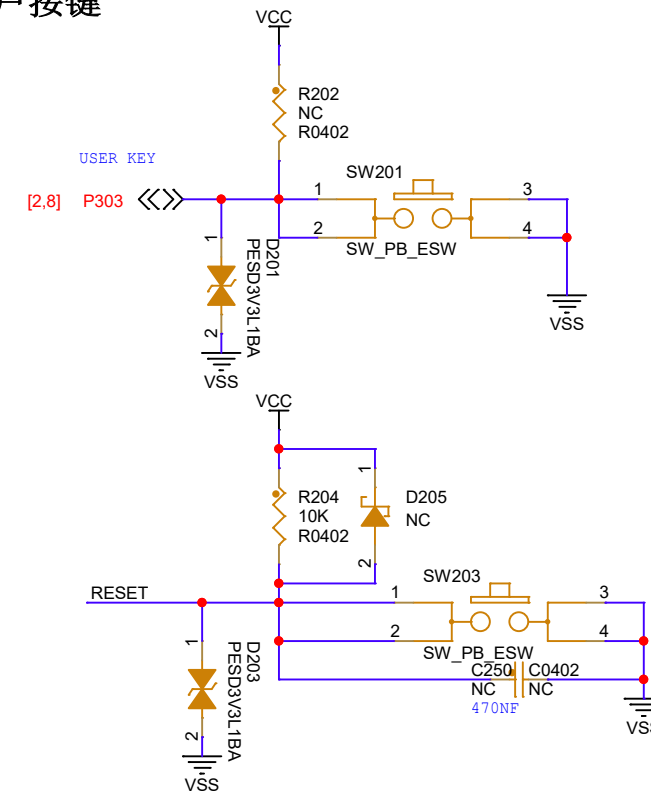


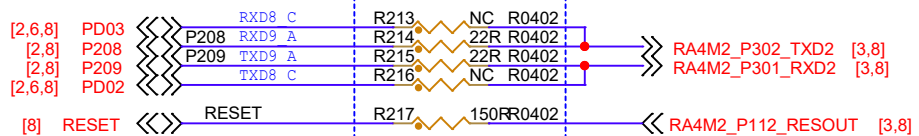
核心板芯片	R7KA8T2L	R7KA8P1K
C168-169	0.1uF	NC
C170	0.1uF	2.2uF
C171-C174	NC	0.1uF
C191-C192	NC	0.1uF
R145-R150	NC	NC
R151-R168	0R	NC
R170	0R	2.20K 1%
L171	NC	120R@100M
R172-R180	NC	0R
R191-R193	NC	0R

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	MCU 电源		V1.1.
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如果使用USB HS，主晶振只能选12/20/24/48MHz

## 接口信号

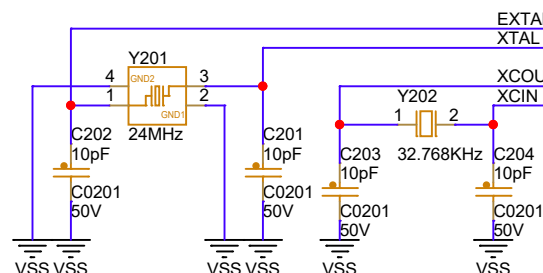


## 通孔拓展

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

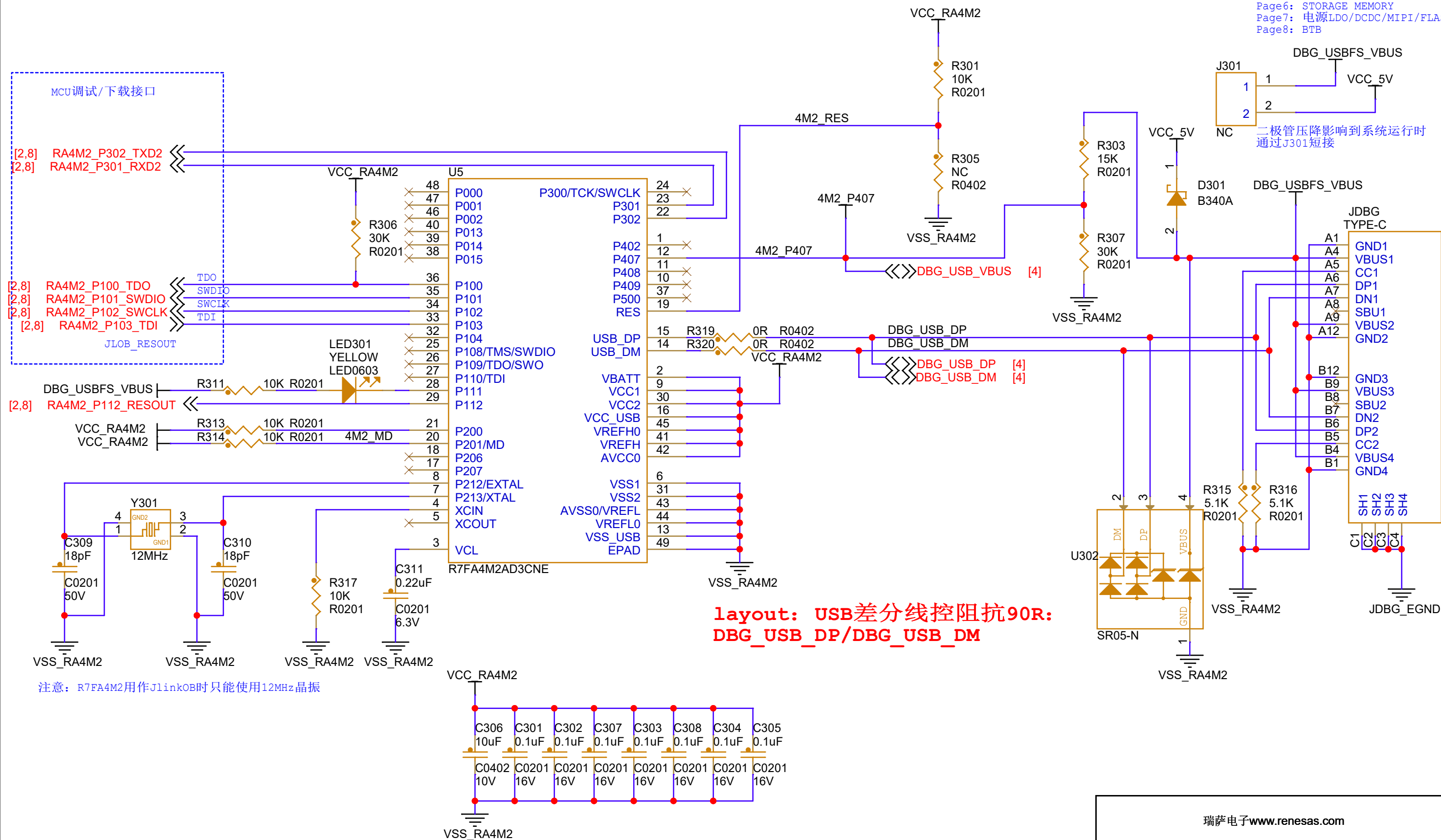


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	MCU IO		
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Jlink OB

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- Page7: 电源LDO/DCDC/MIPI/FLASH
- Page8: BTB



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<b>Title</b>	
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## CPKHMI-RA8P1核心板

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A4

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Jlink OB

Rev  
V1.1

Date: Wednesday, January 07, 2026

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如果使用USB HS，主晶振只能选12/20/24/48MHz

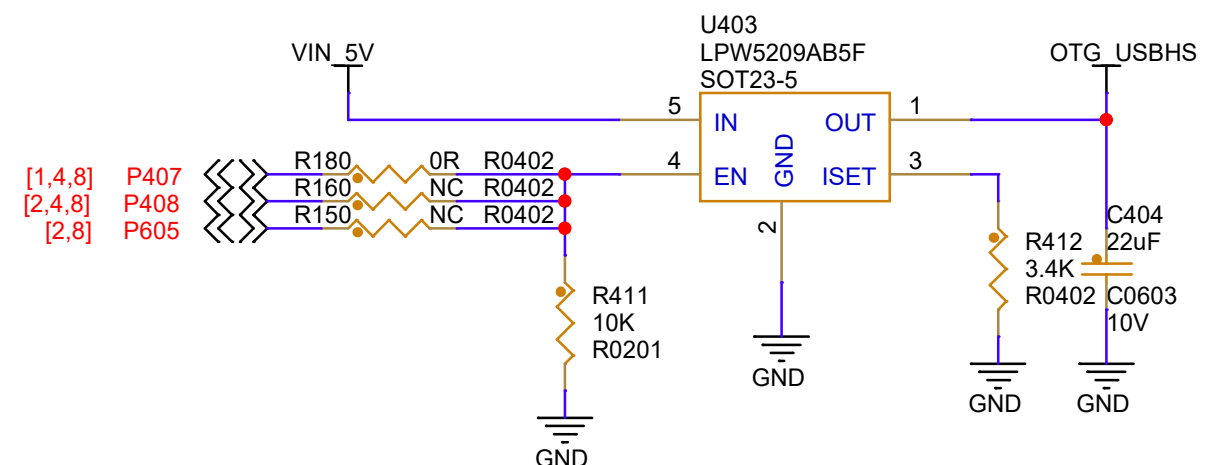


[3] DBG\_USB\_VBUS <<>> R149 NC R0402 <<>> P407 [1,4,8]

[3] DBG\_USB\_DP <<>> R147 NC R0402 <<>> P814\_USB\_DP [1,4,8]

[3] DBG\_USB\_DM <<>> R148 NC R0402 <<>> P815\_USB\_DM [1,4,8]

R323 R324靠近J1摆放



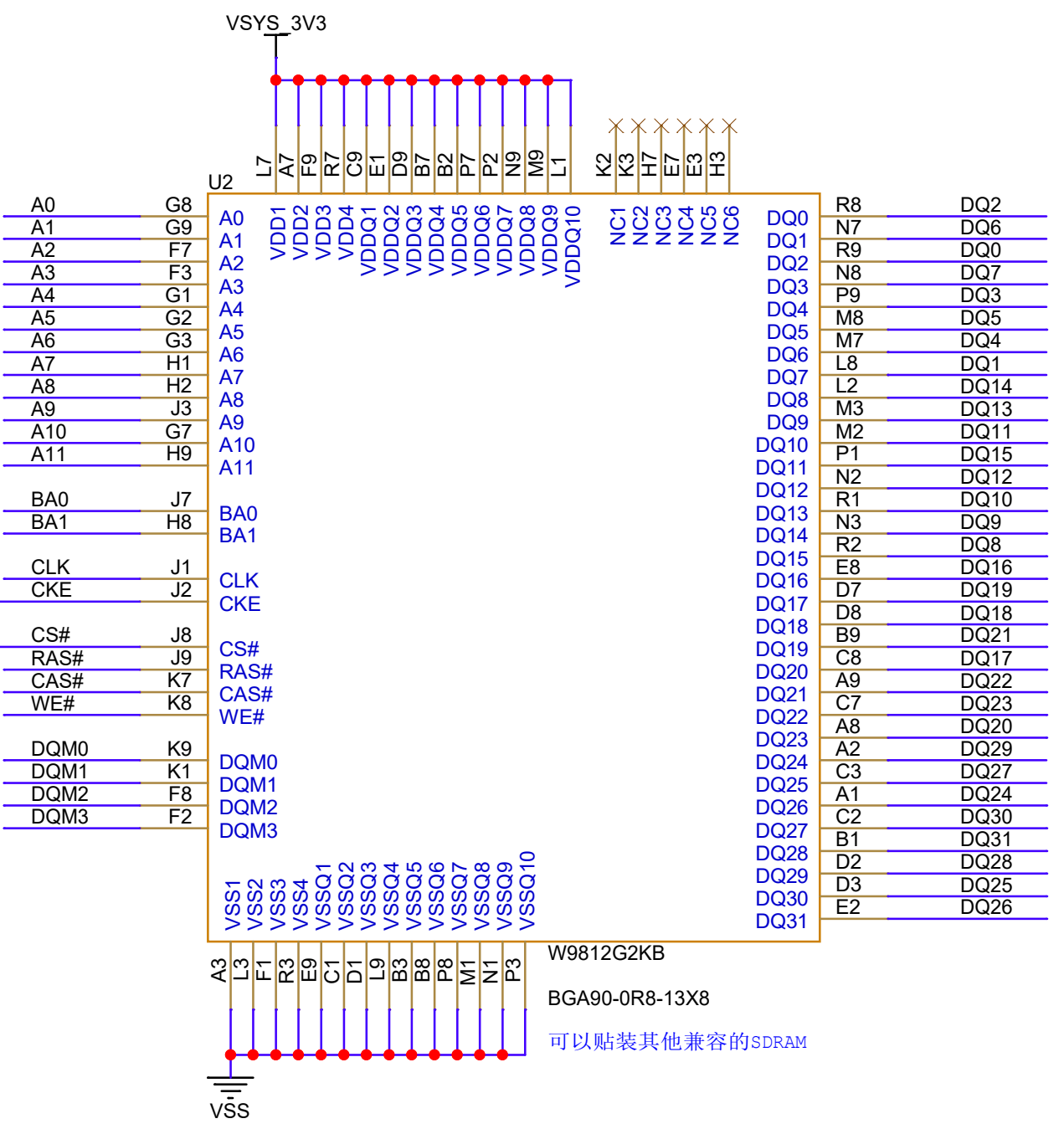
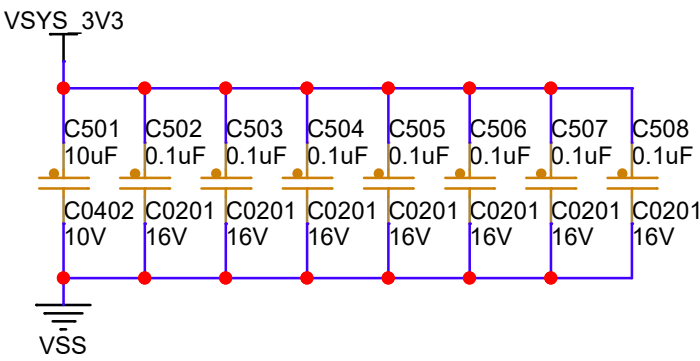
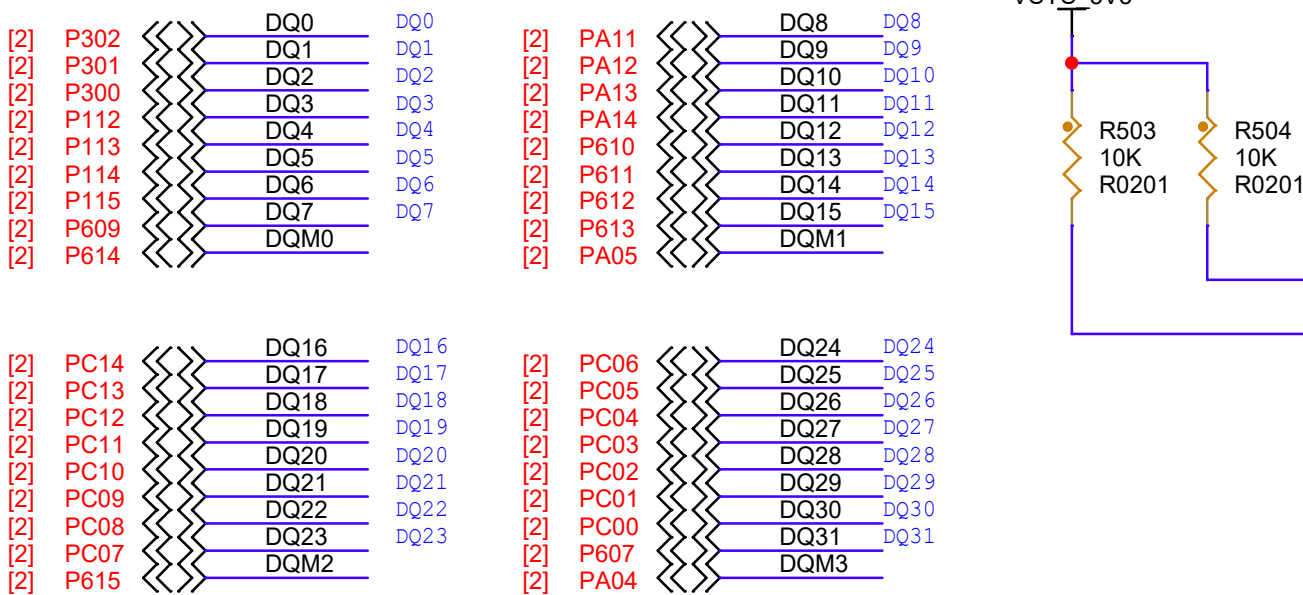
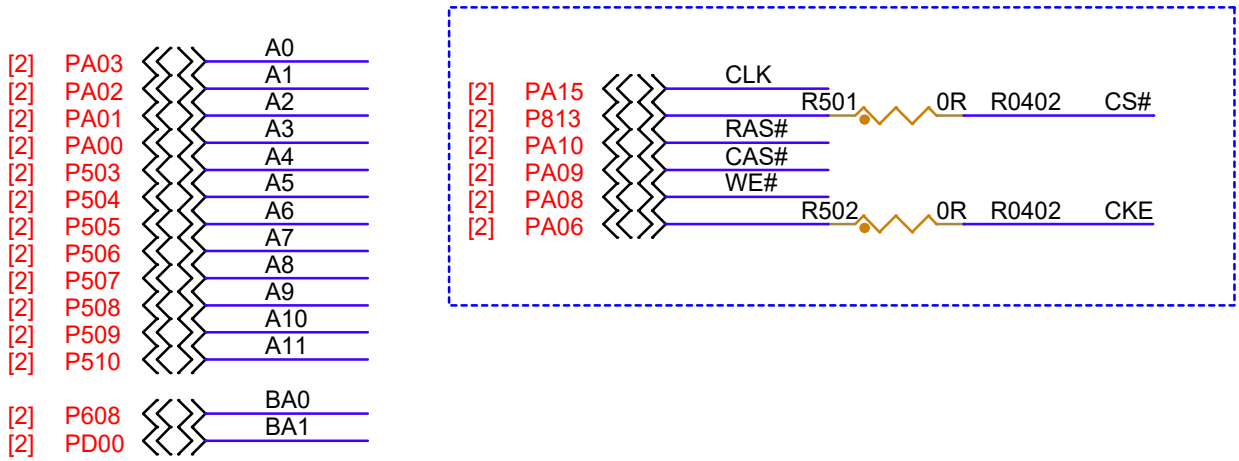
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SDRAM

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Page4: USB HS  
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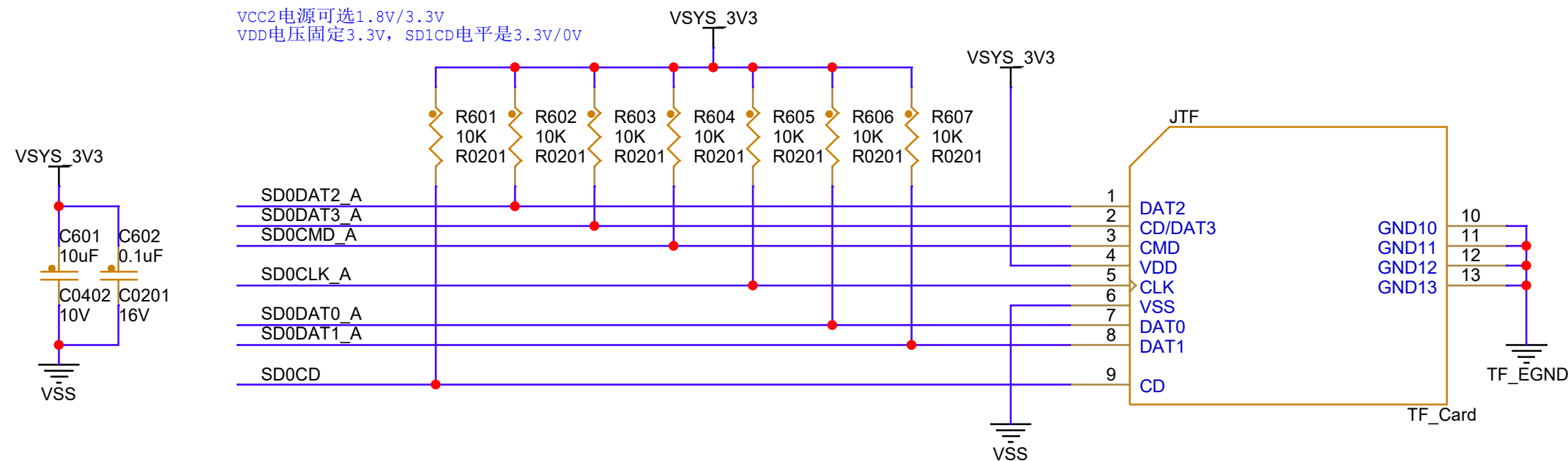
layout: SDRAM走线控阻抗50R:



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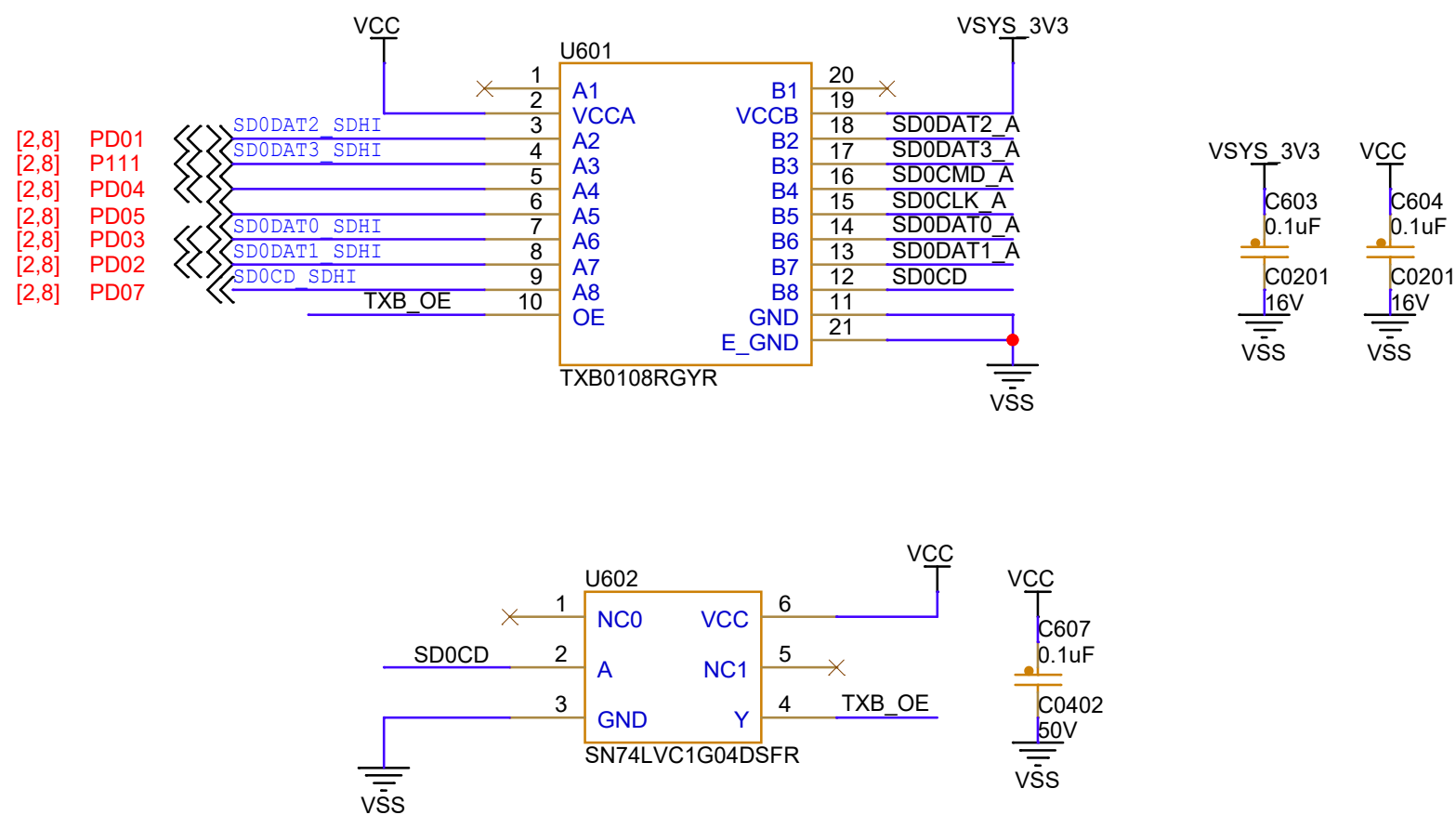
## SD卡

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

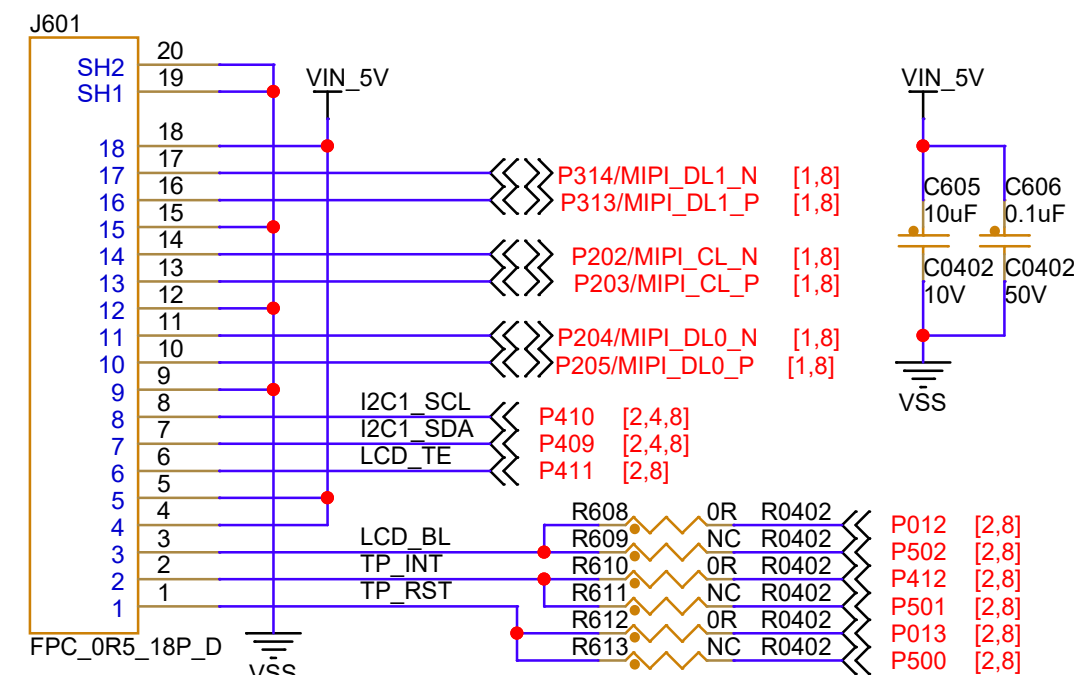


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## SD卡电平转换



## MIPI屏



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Title

## CPKHMI-RA8P1核心板

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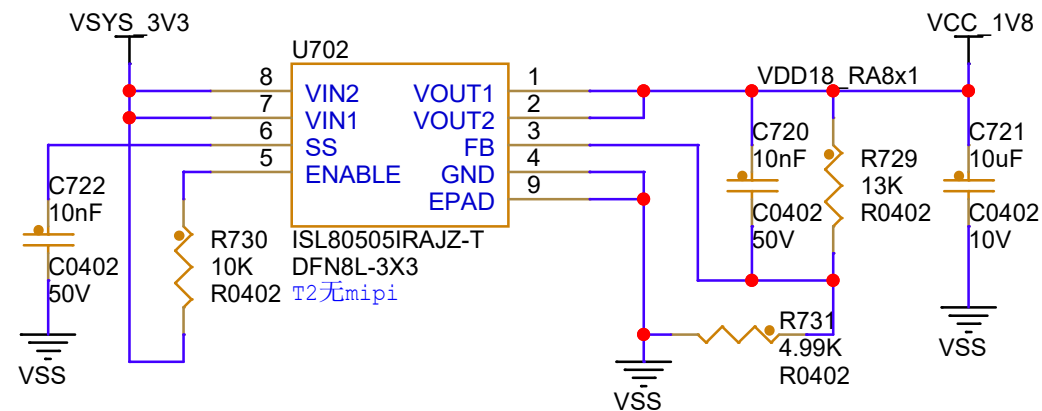
## STORAGE MEMORY

Rev
V1.1

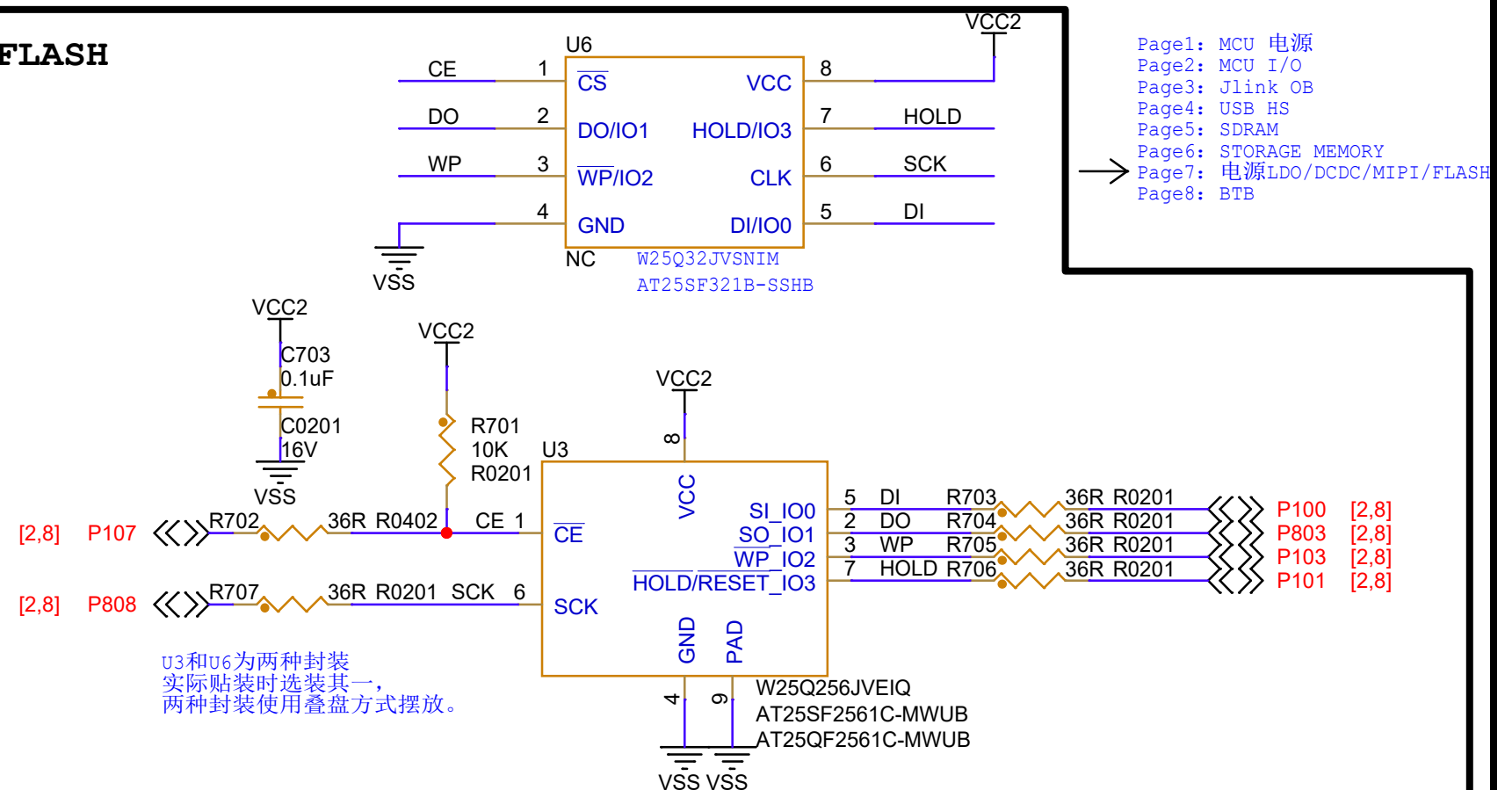
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## 1.8v电源

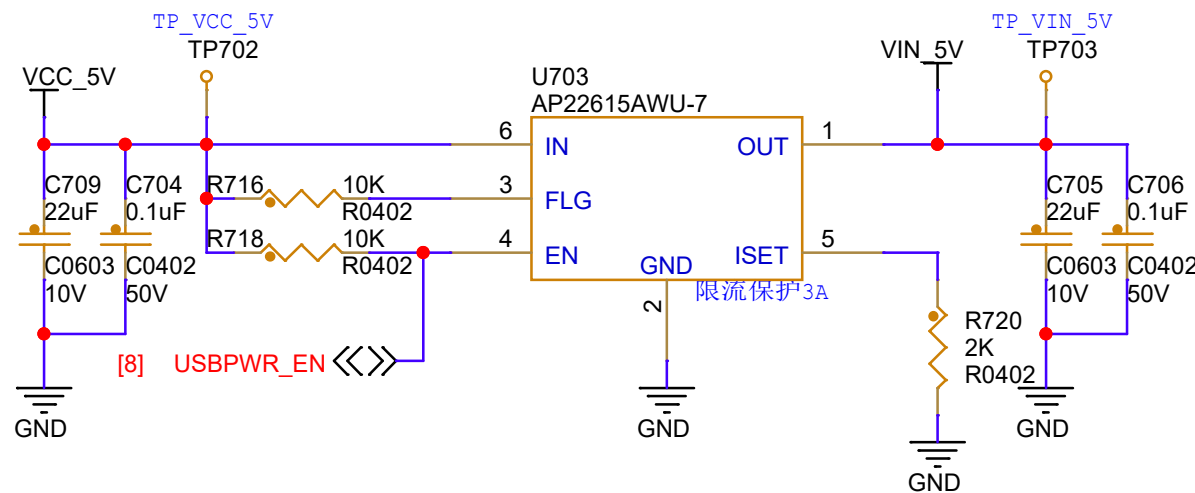


## FLASH

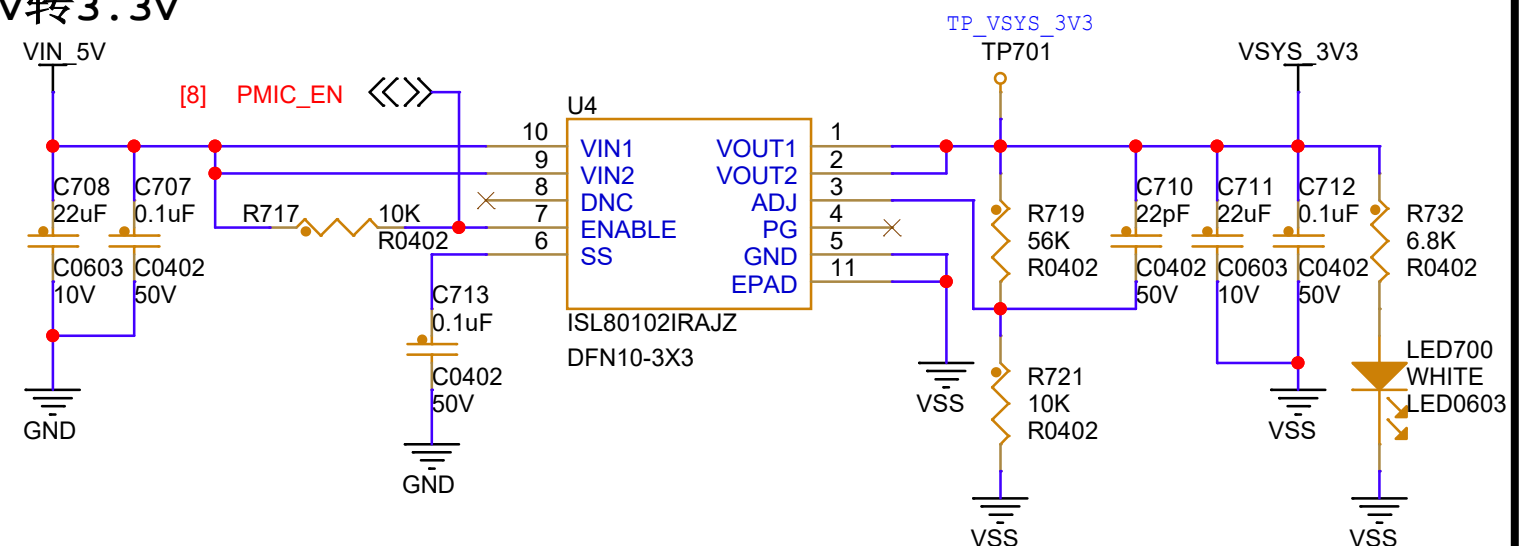


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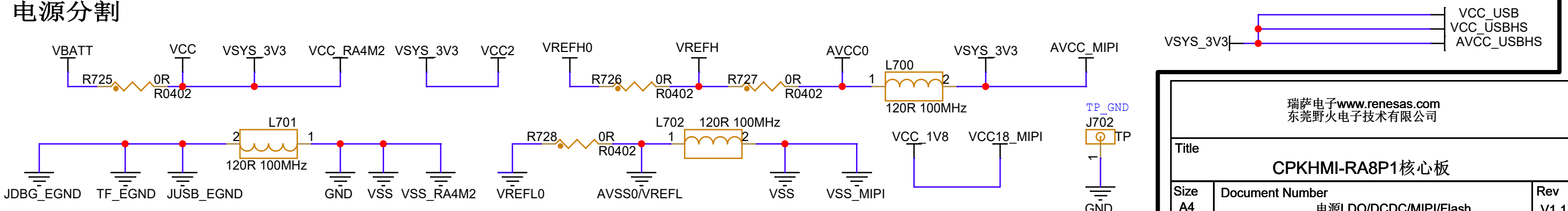
## 电源保护



## 5v转3.3v

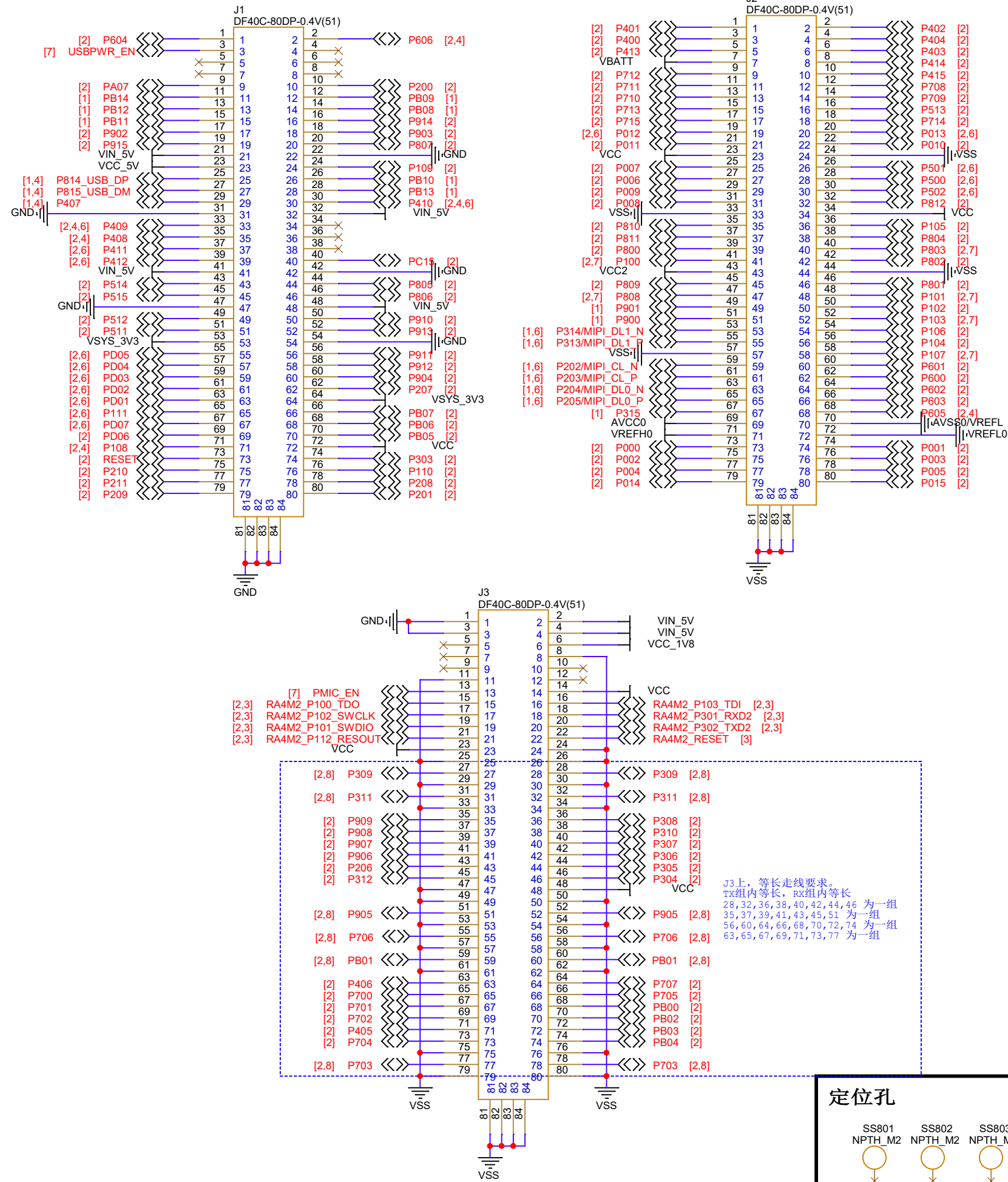


## 电源分割

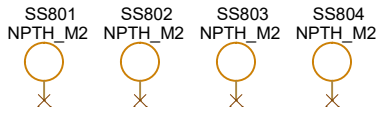


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Title		
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定位孔



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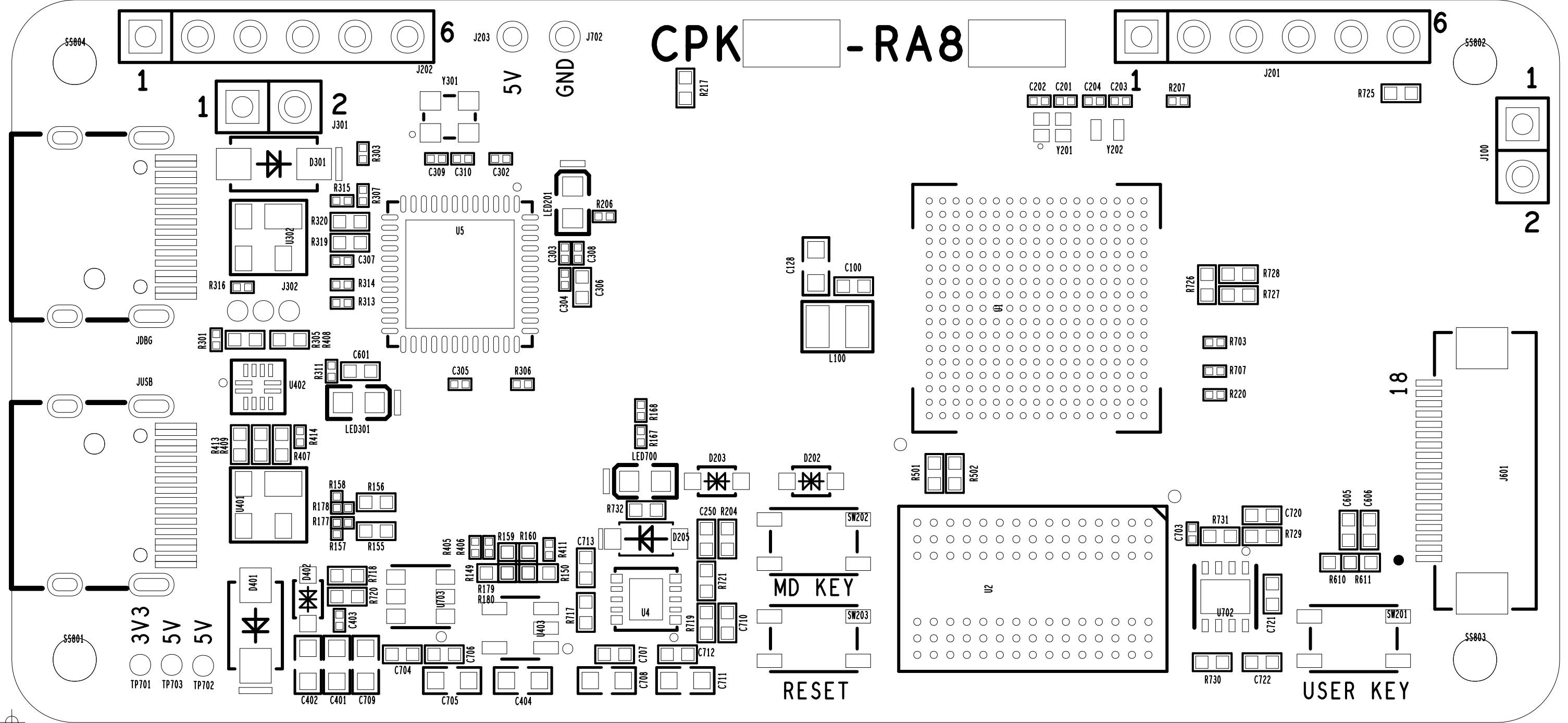
# 历史版本

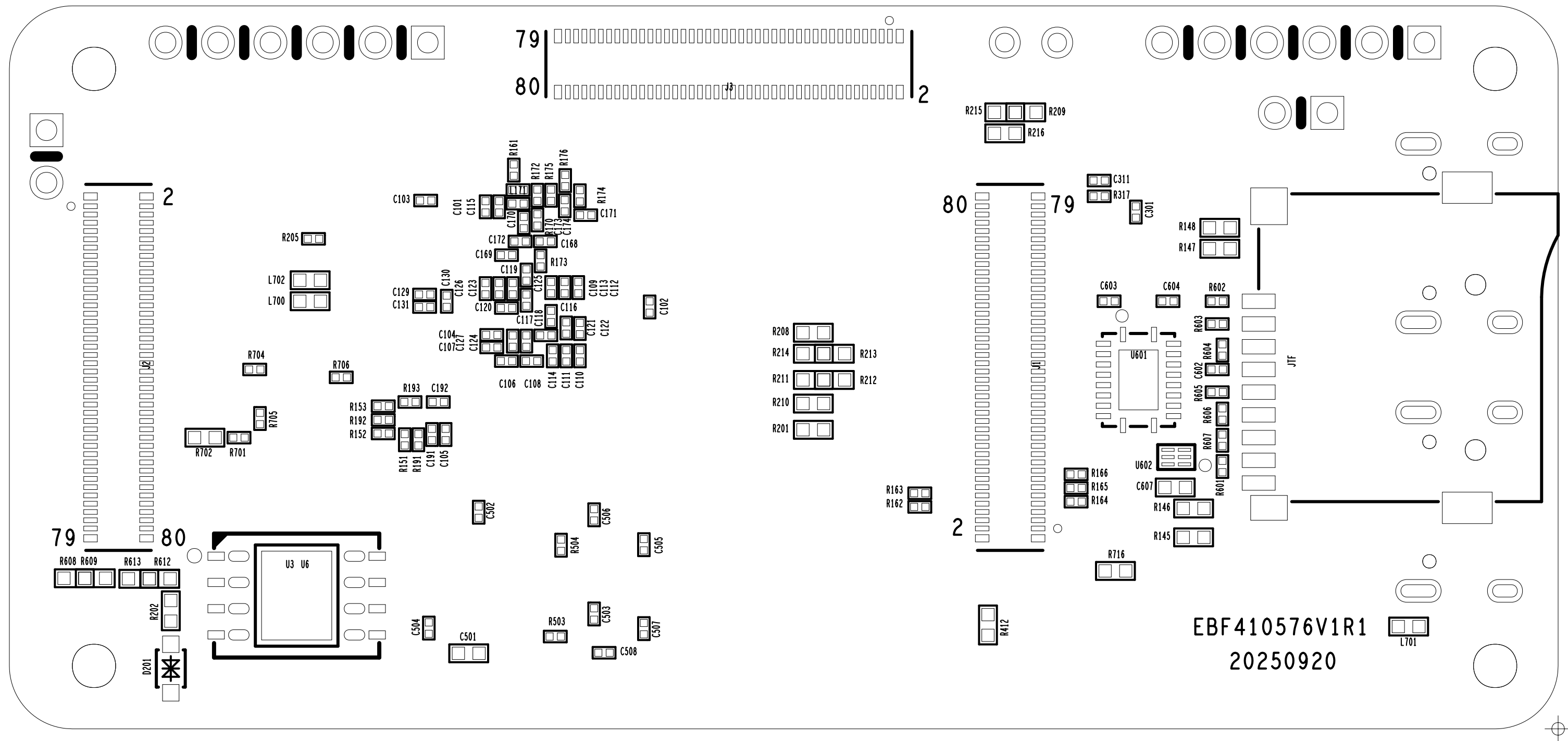
版本号	日期	设计	描述
V1.0	2025-08-28	LPC	量产版本
V1.1	2025-09-17	LPC	修正VCC_USB连接

# CPKHMI-RA8P1核心板原理图

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Page 10	目录







电源接入点

# CPKHMI-RA8P1 Power Supply

JUSB : USB-C  
DFP

JDBG : UFP

MIPI 电源/GPIO  
跳接电阻

USBHS 电源/GPIO  
跳接电感/电阻

贴装RA8P1/RA8T2/RA8M2时  
根据贴装的具体芯片选择

