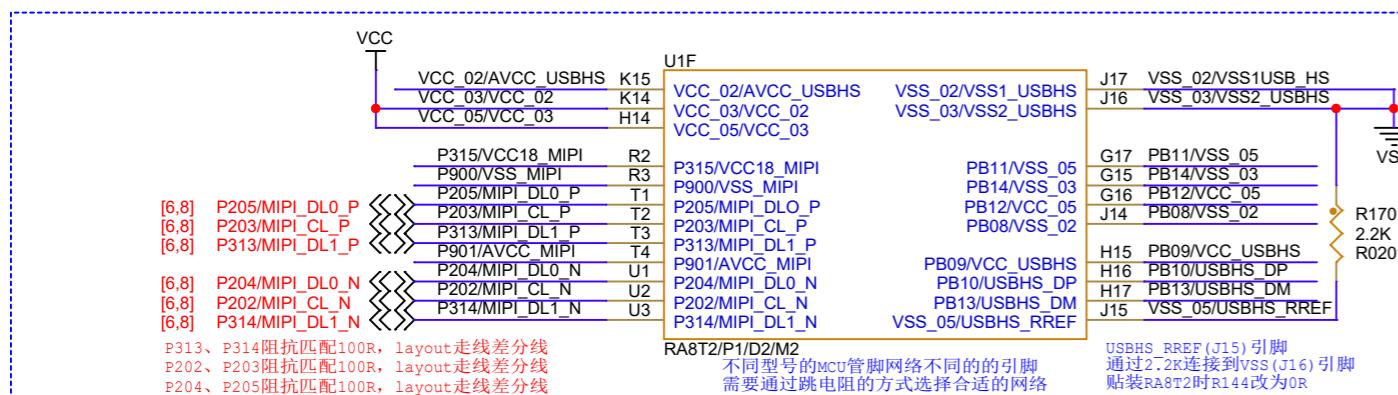


[www.gitee.com/
ramcu/cpk_examples](http://www.gitee.com/ramcu/cpk_examples)

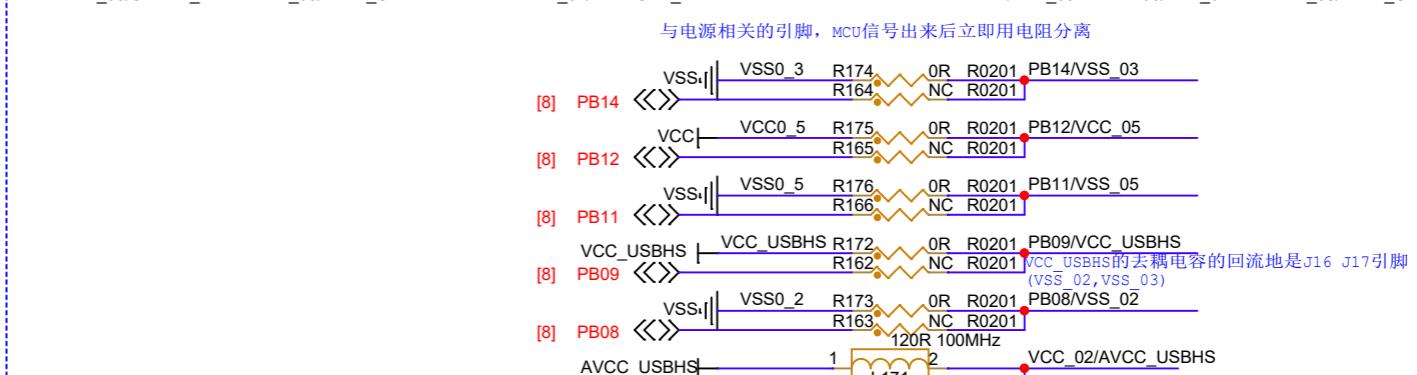
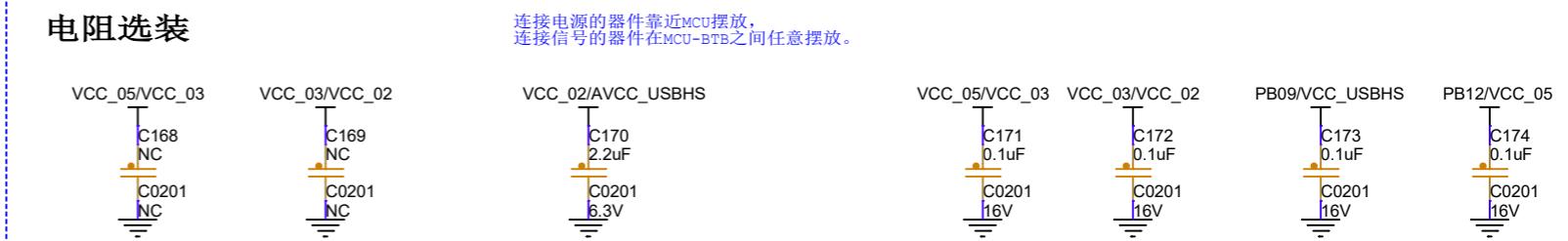


[www.github.com/
renesas/cpk_examples](http://www.github.com/renesas/cpk_examples)

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



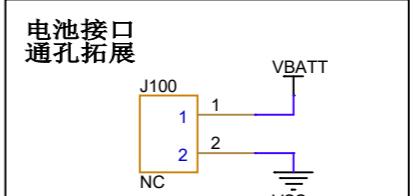
电阻选装



差分线走到J1 (BTB) 附近再用电阻分离。

- [4] USBHS_DP <> R177 OR R0201 PB10/USBHS_DP
- [8] PB10 <> R167 OR NC R0201
- [4] USBHS_DM <> R178 OR R0201 PB13/USBHS_DM
- [8] PB13 <> R168 OR NC R0201

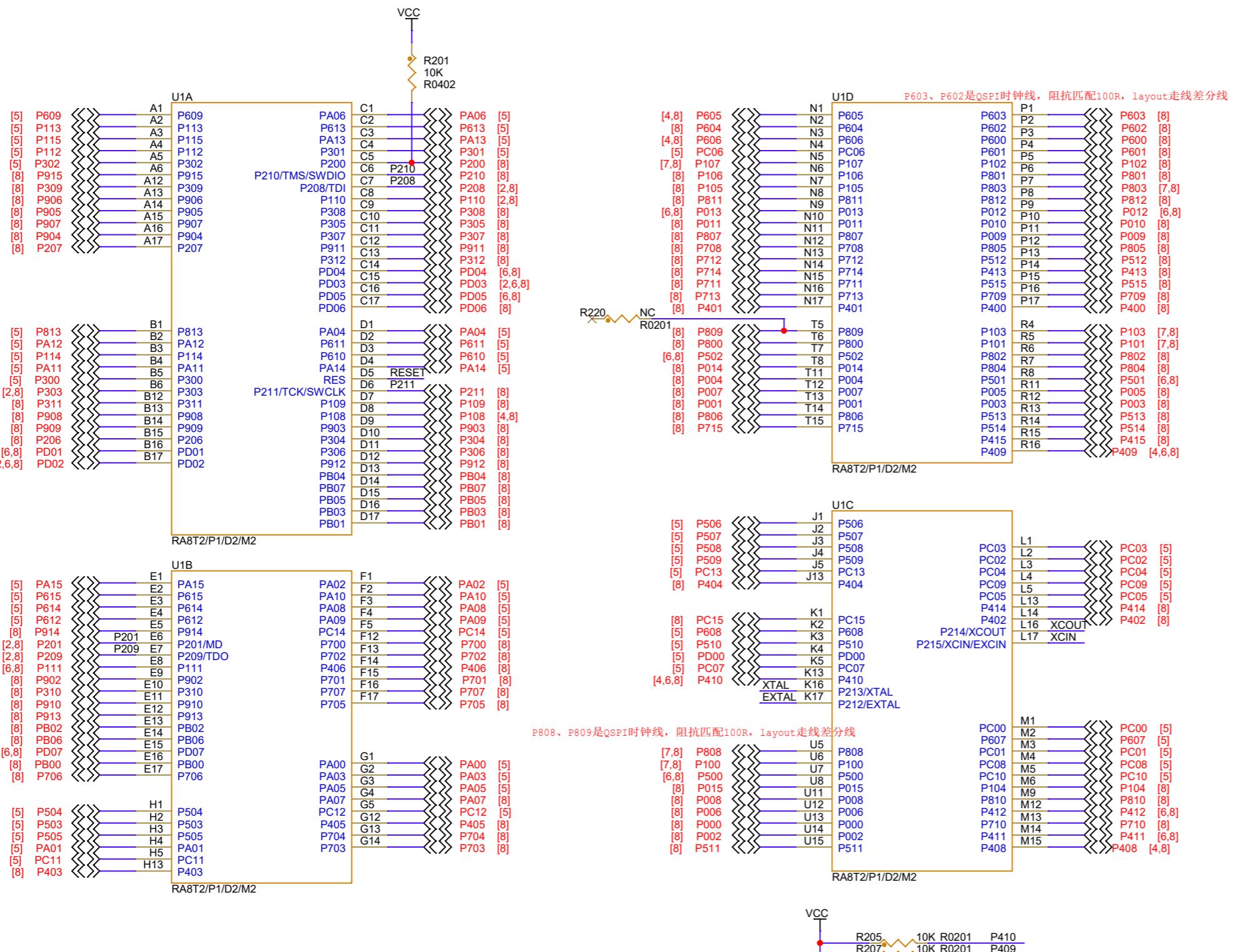
电池接口通孔拓展



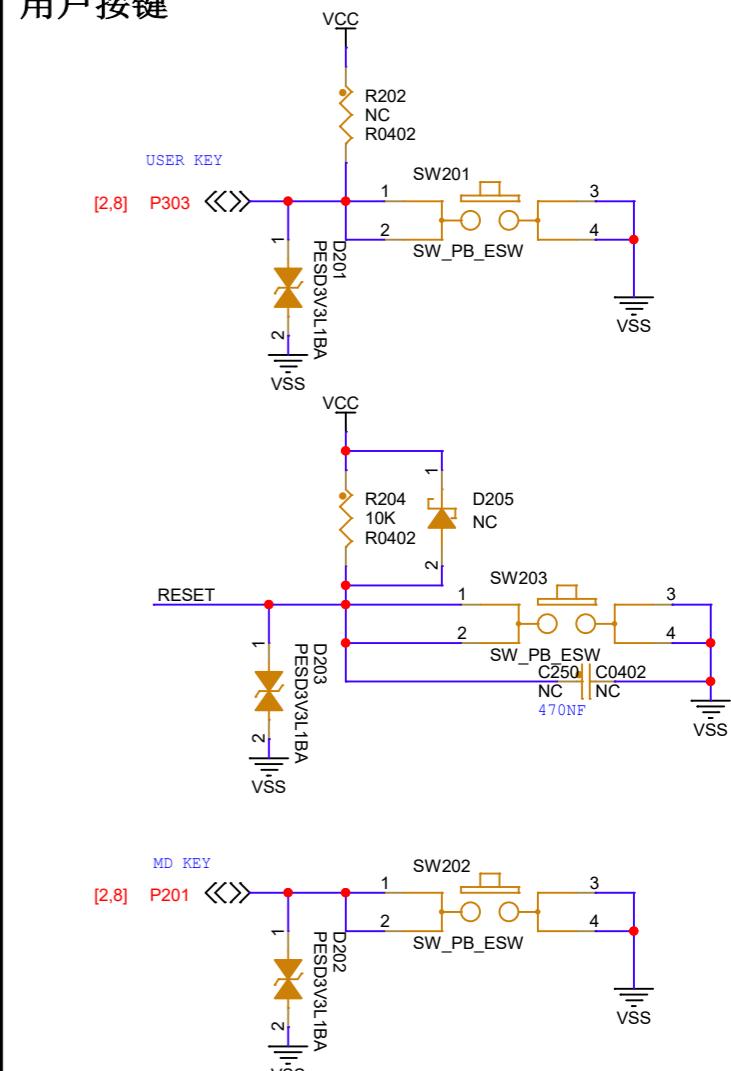
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A3	MCU 电源	V1.1
Size	Document Number	Rev
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用户按键

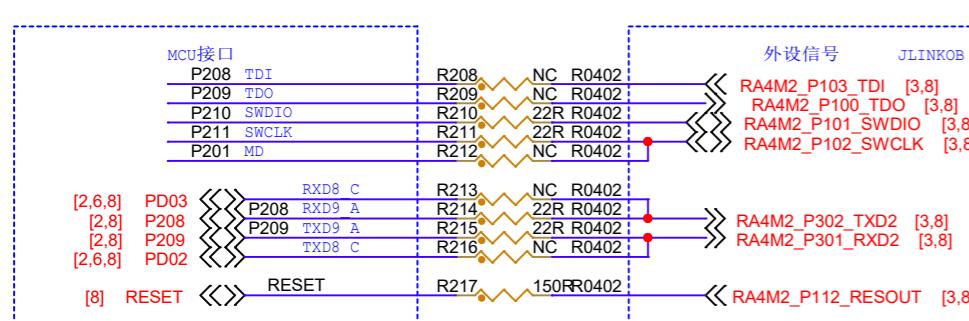


LED

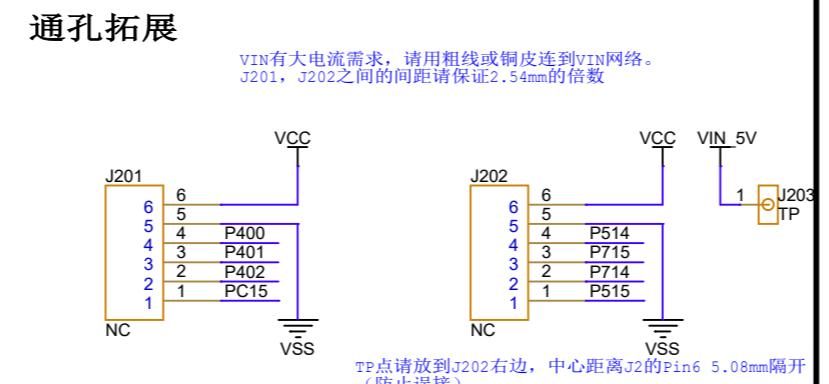


如果使用USB HS, 主晶振只能选12/20/24/48MHz

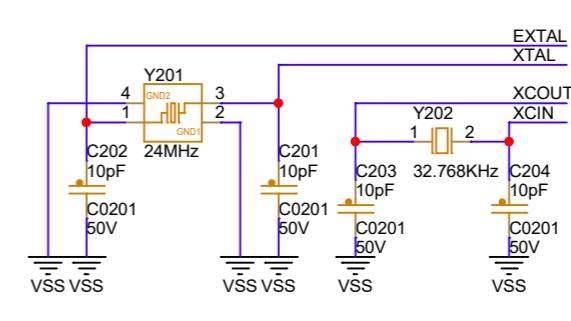
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通孔拓展



晶振



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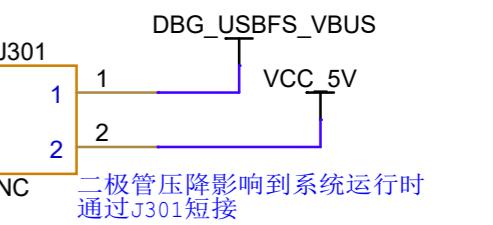
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Size A3 Document Number MCU IO Rev V1.1

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Jlink OB

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



MCU调试/下载接口

[2,8] RA4M2_P302_TXD2

[2,8] RA4M2_P301_RXD2

[2,8] RA4M2_P100_TDO

[2,8] RA4M2_P101_SWDIO

[2,8] RA4M2_P102_SWCLK

[2,8] RA4M2_P103_TDI

DBG_USBFS_VBUS

[2,8] RA4M2_P112_RESOUT

VCC_RA4M2
VCC_RA4M2

R311 10K R0201

R313 10K R0201

R314 10K R0201

4M2_MD

21

20

18

17

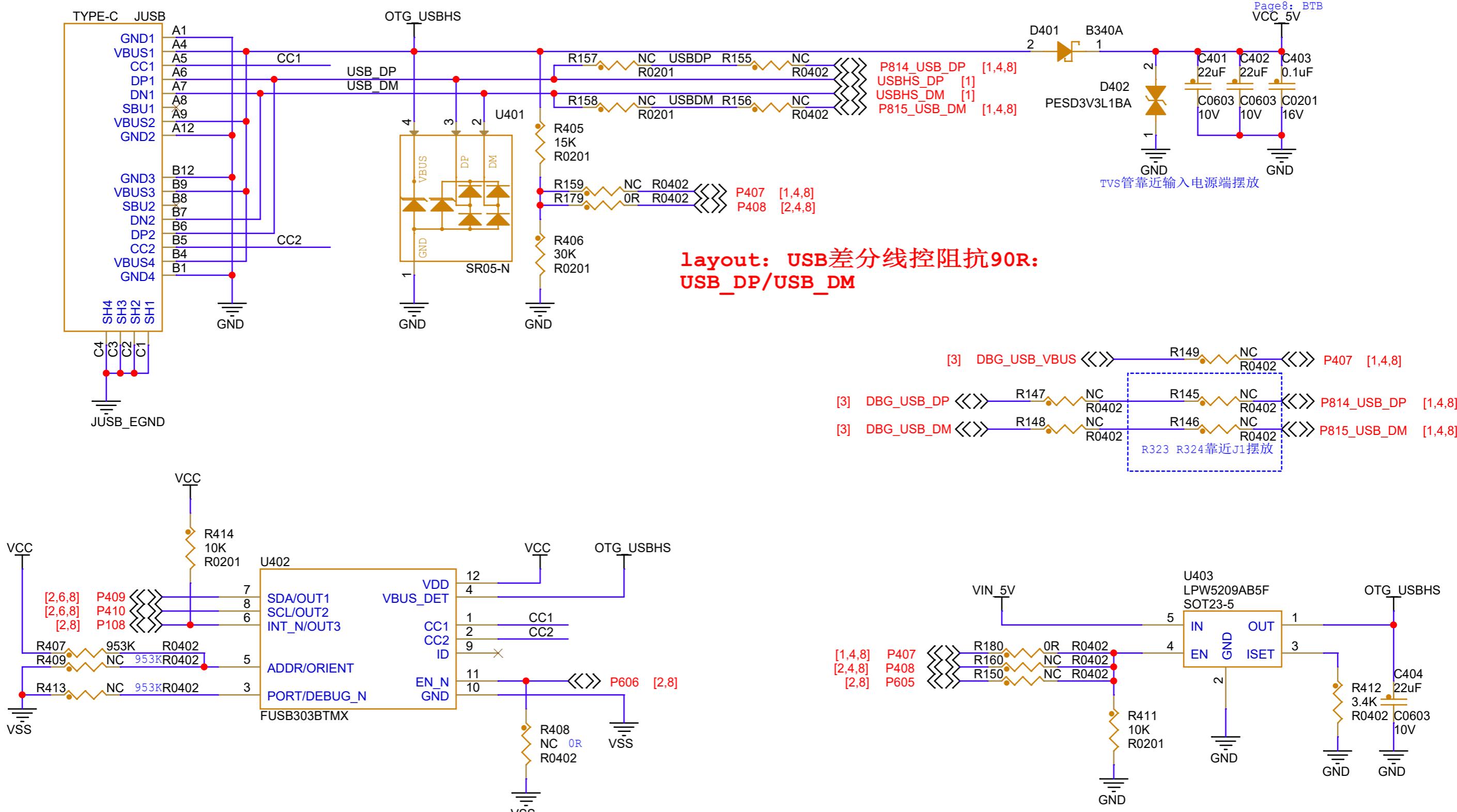
8

VSS_RA4M2

USB HS

如果使用USB HS, 主晶振只能选12/20/24/48MHz

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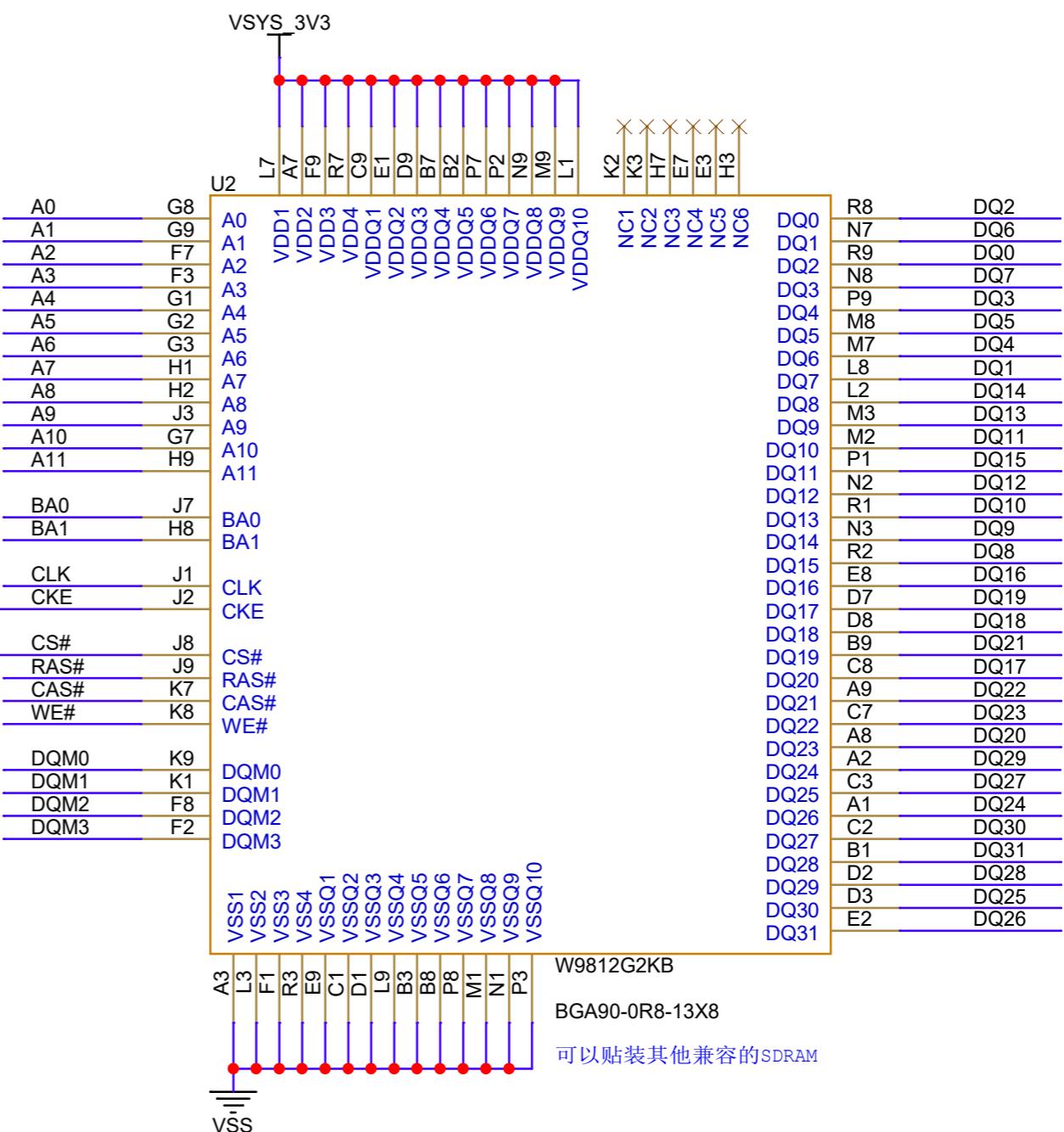
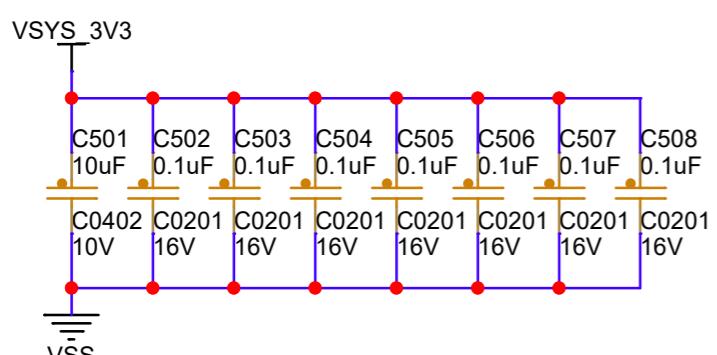
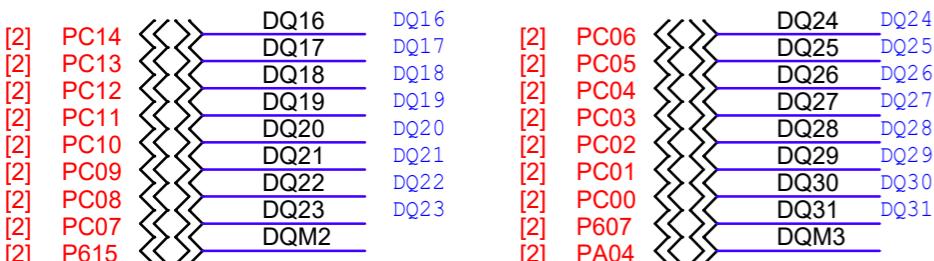
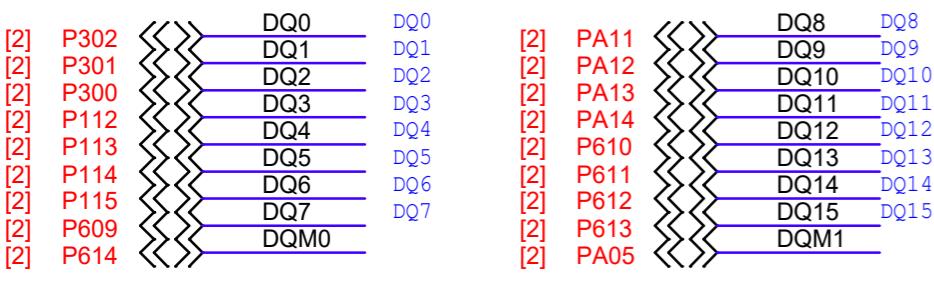
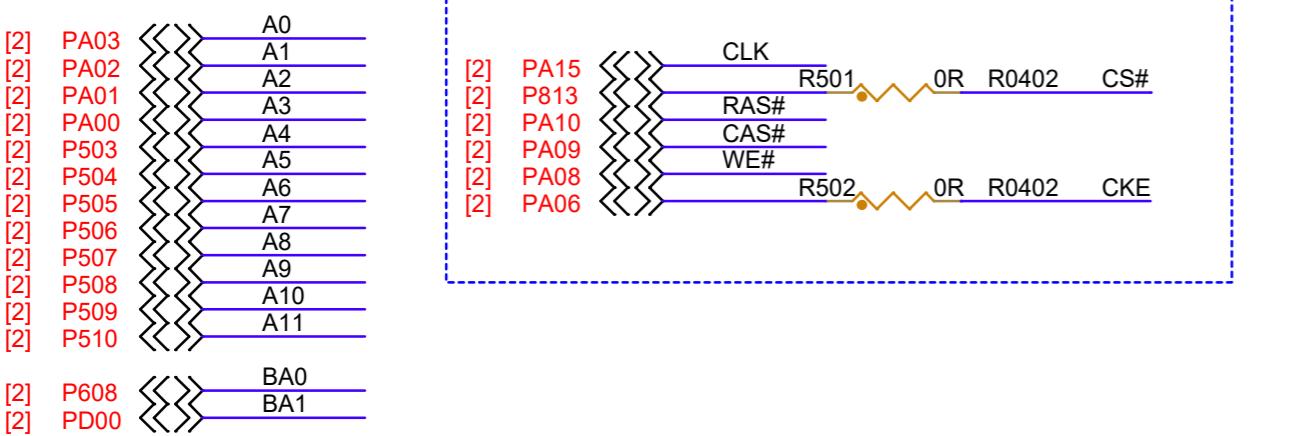
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SDRAM

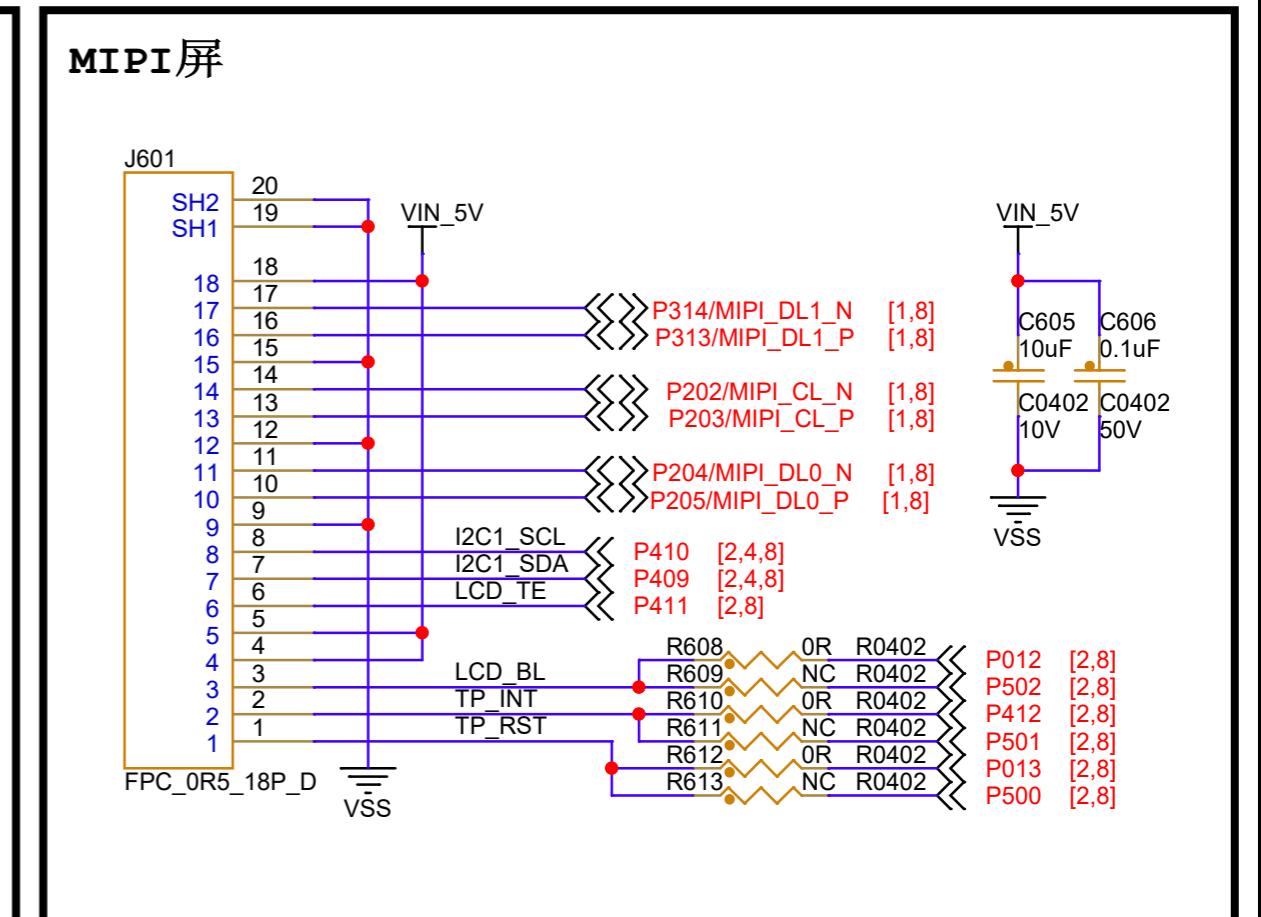
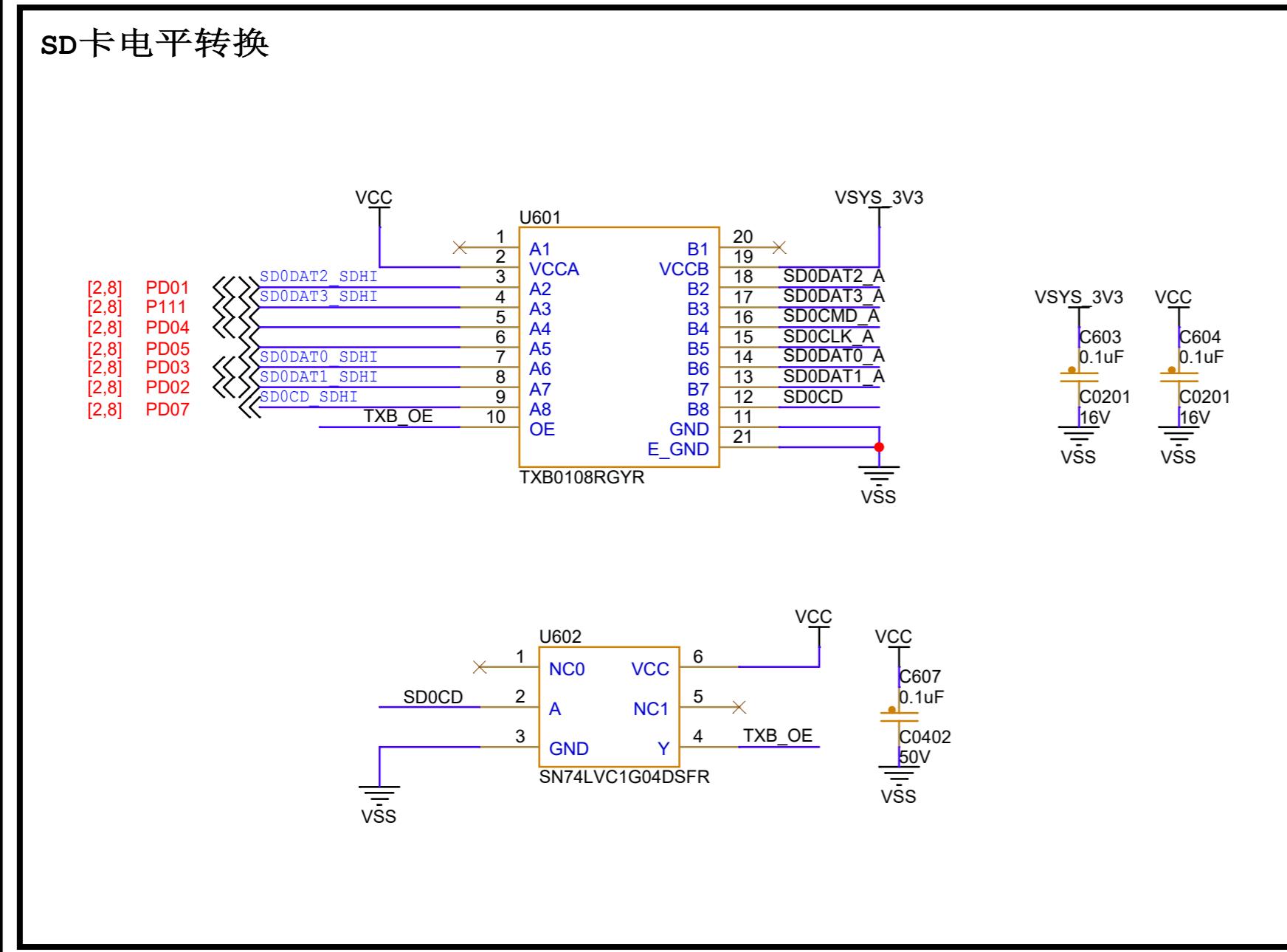
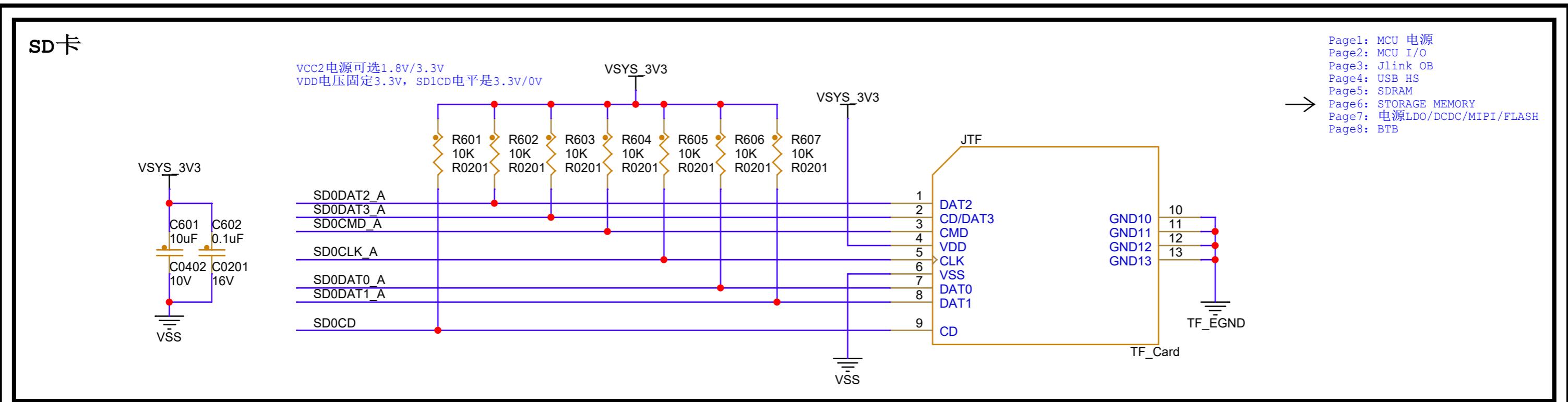
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 Page8: BTB

layout: SDRAM走线控阻抗50R:



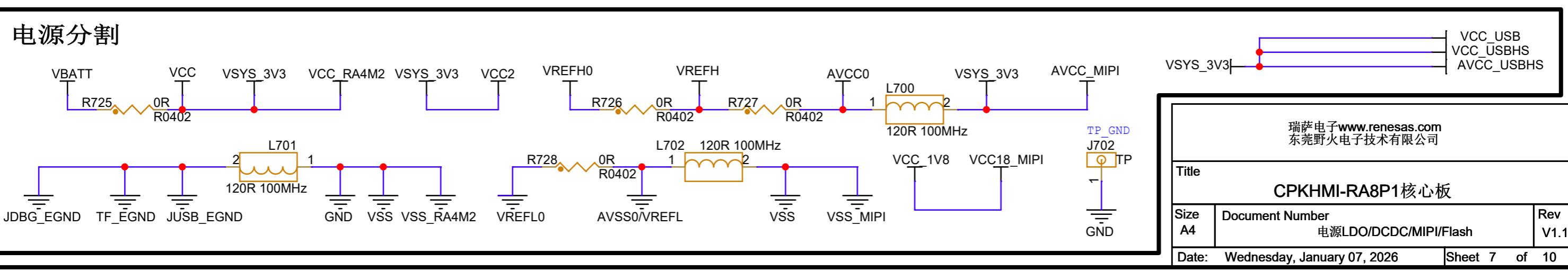
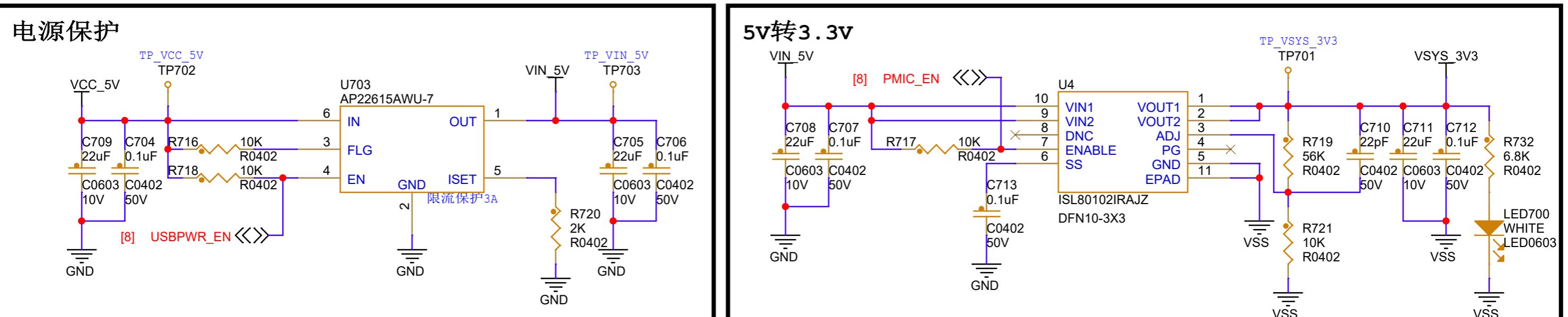
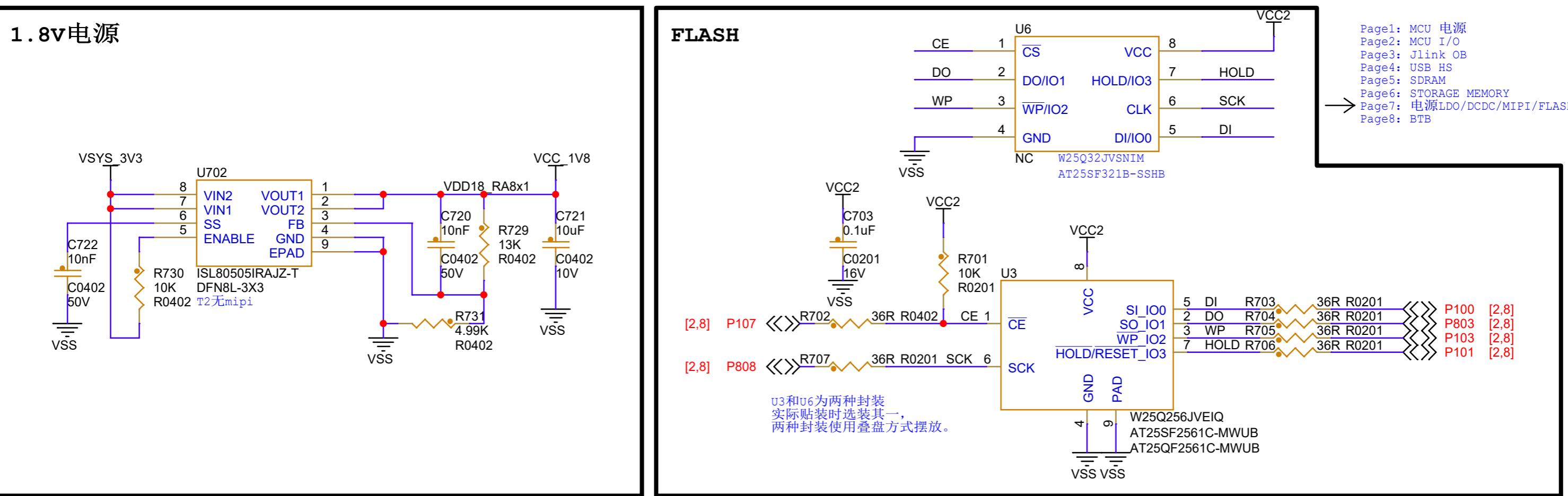
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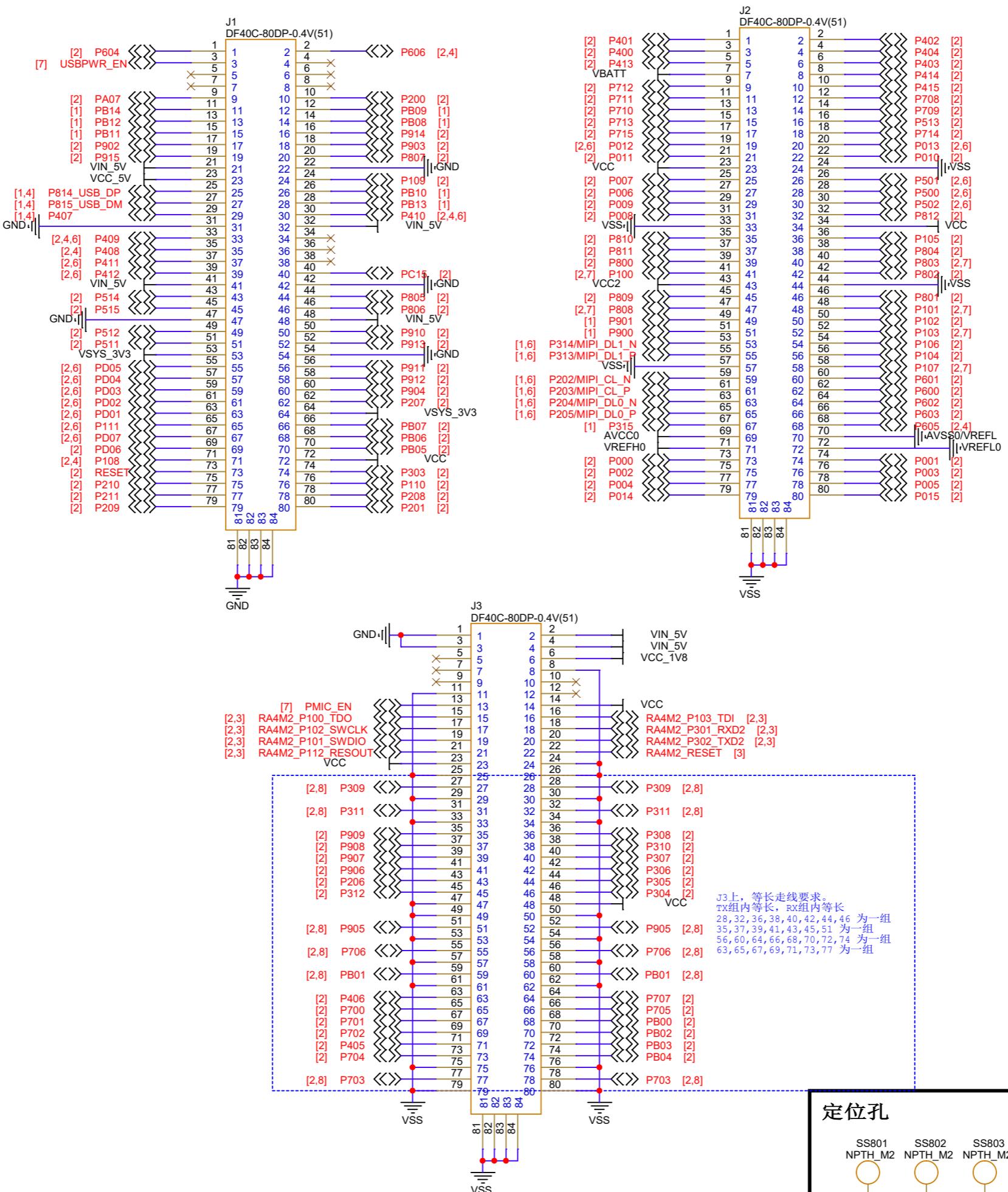
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历史版本

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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Title

CPKHMI-RA8P1核心板

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CPKHMI-RA8P1核心板原理图

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Title

CPKHMI-RA8P1核心板

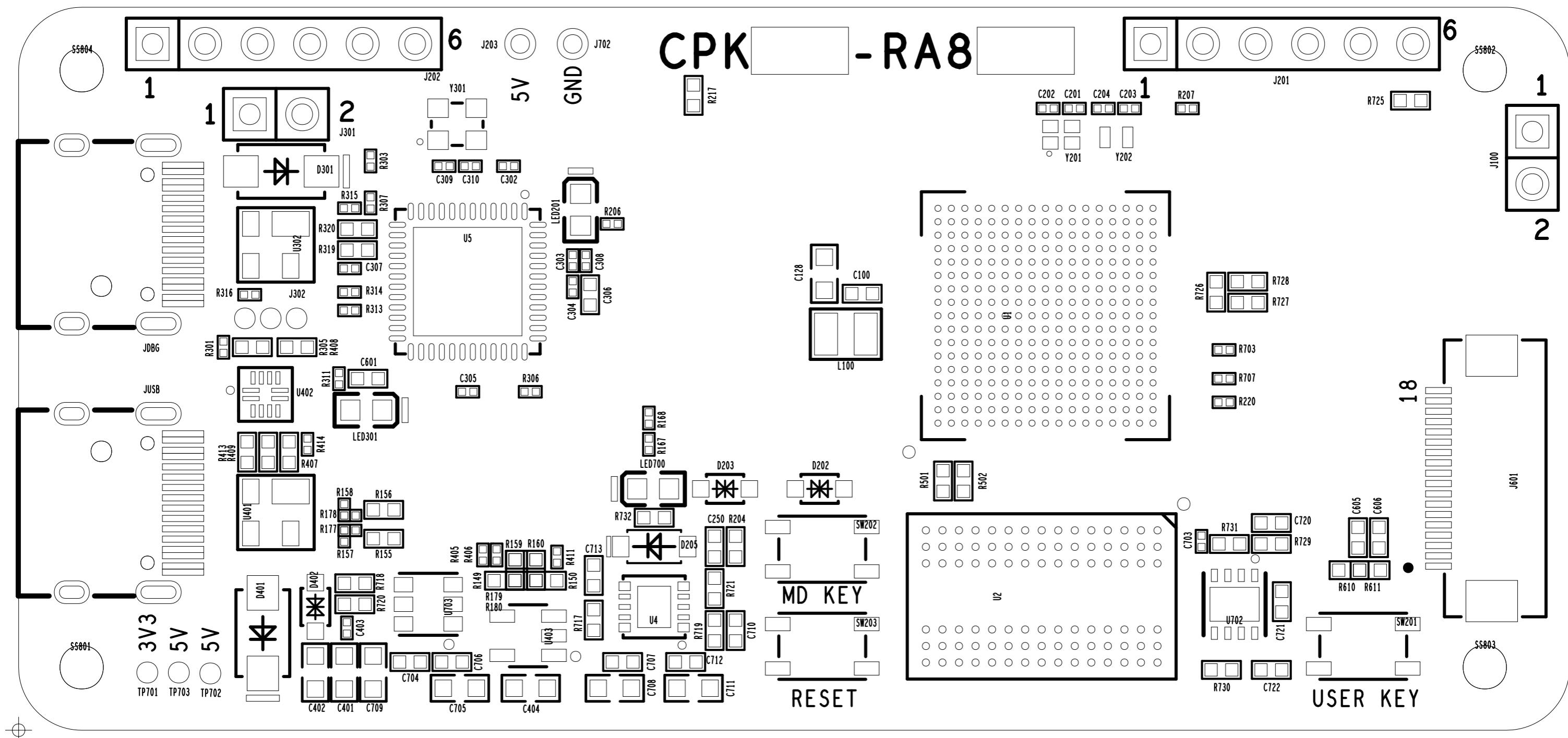
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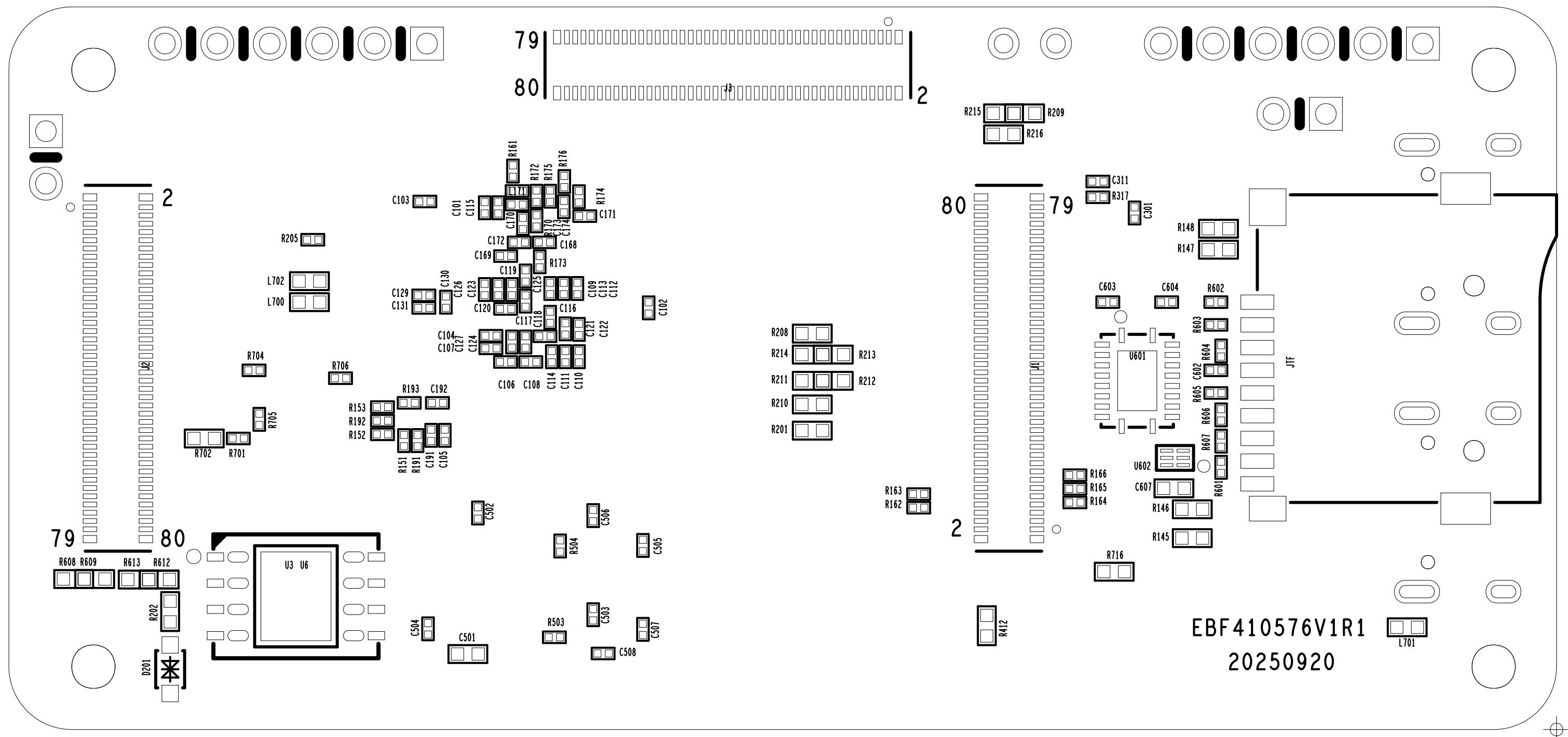
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CPKHMI-RA8P1 Power Supply

电源接入点

