



Radxa Dragon Q8B

schematic

V1.3

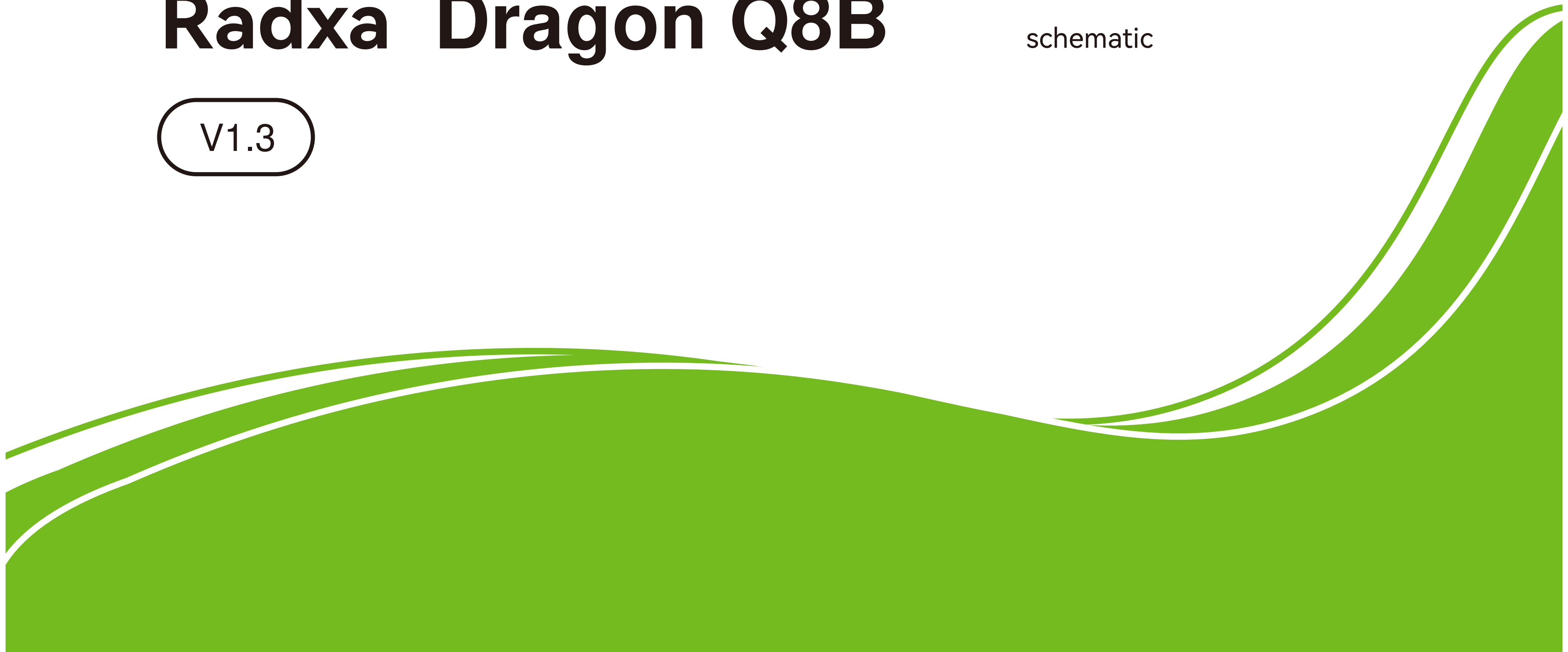
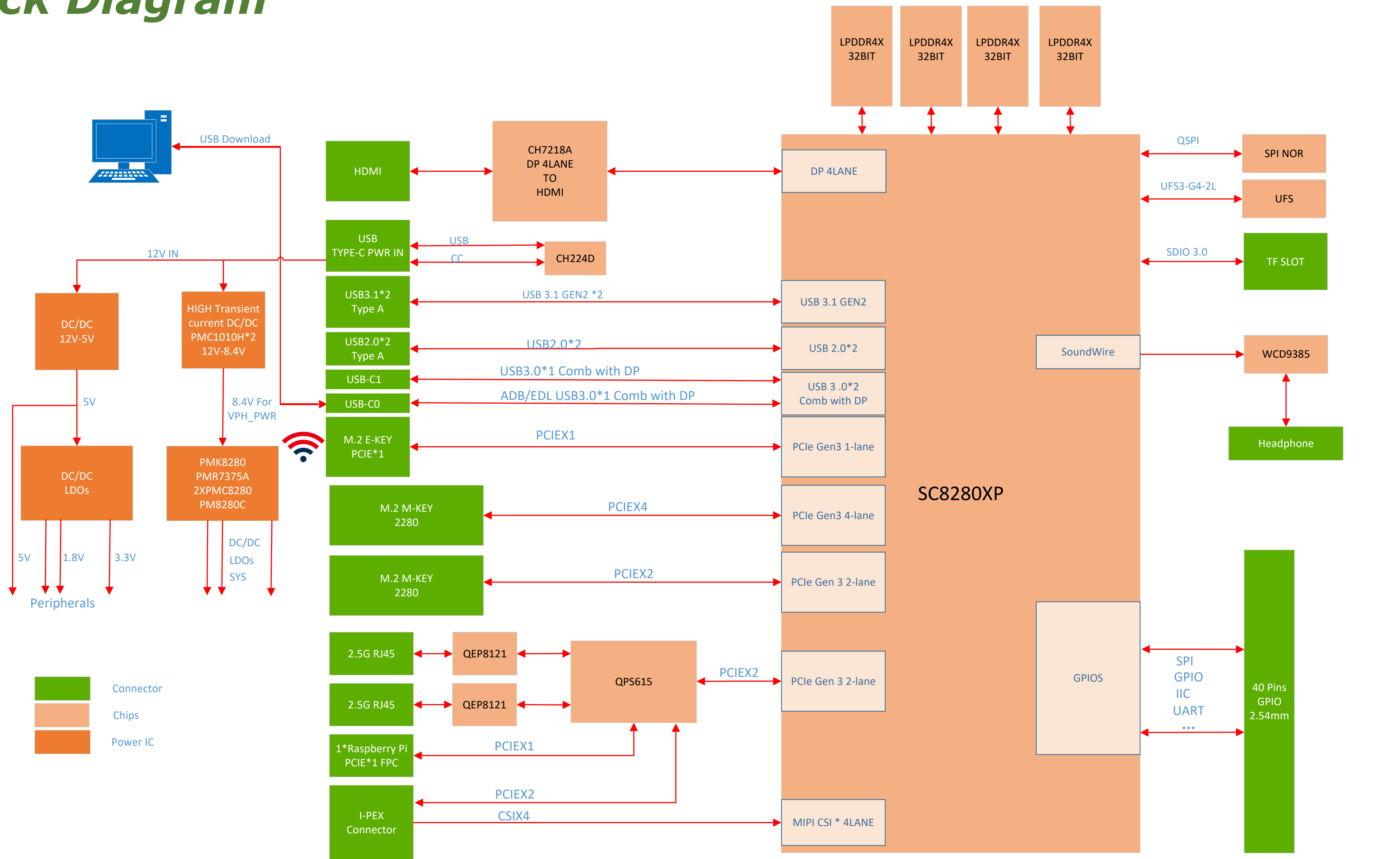


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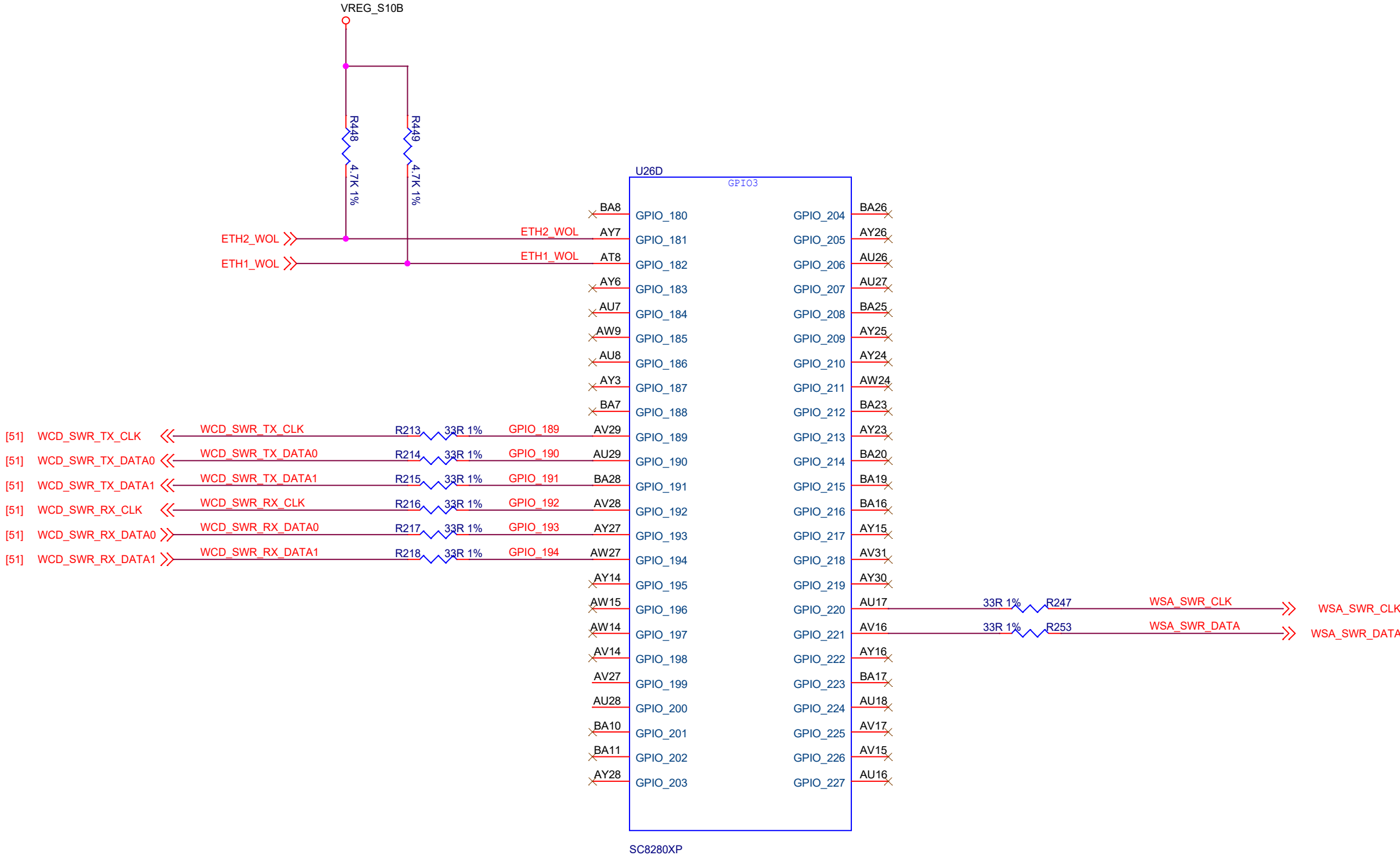
Block Diagram



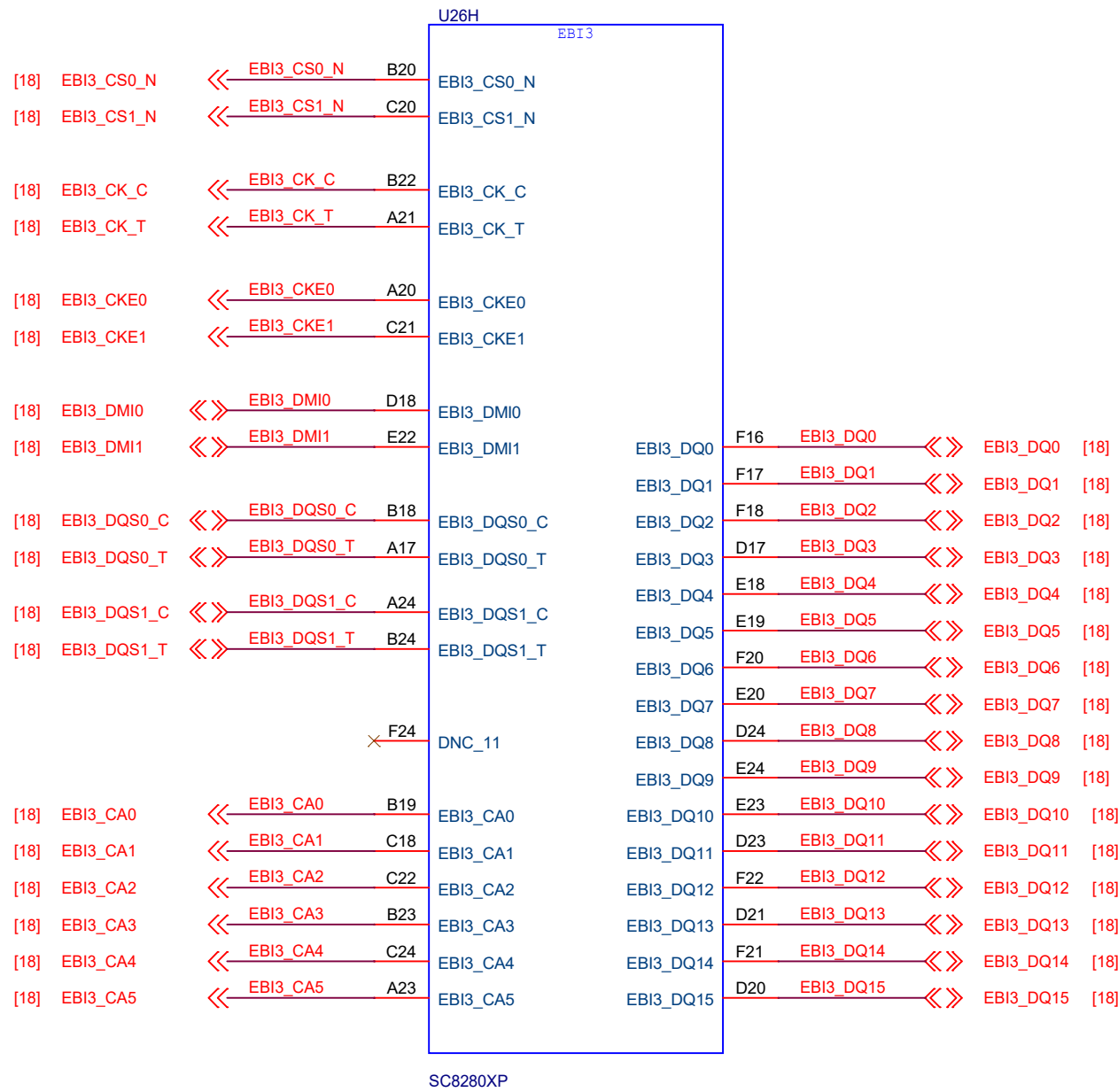
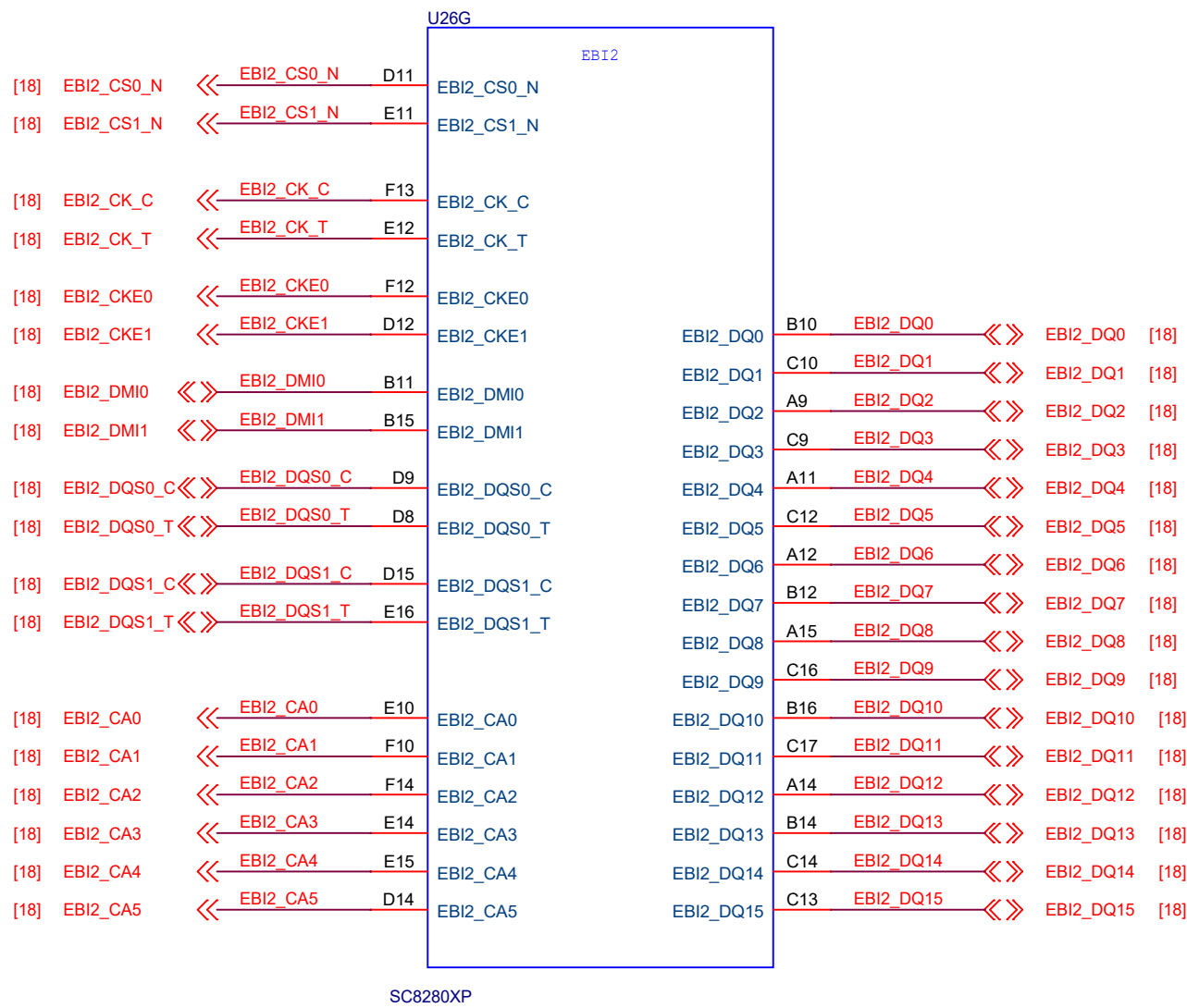
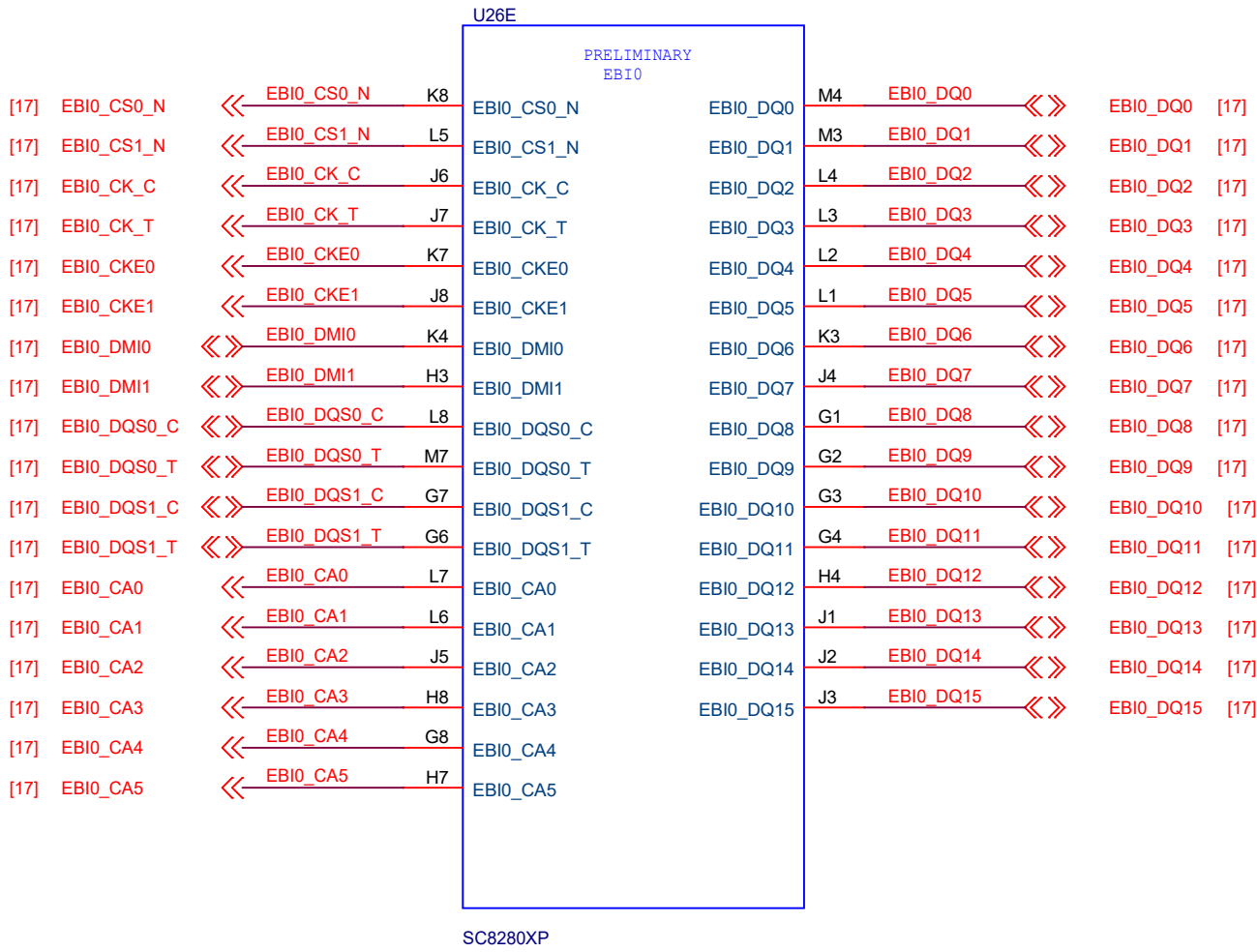
SC8280XP_GPIO1



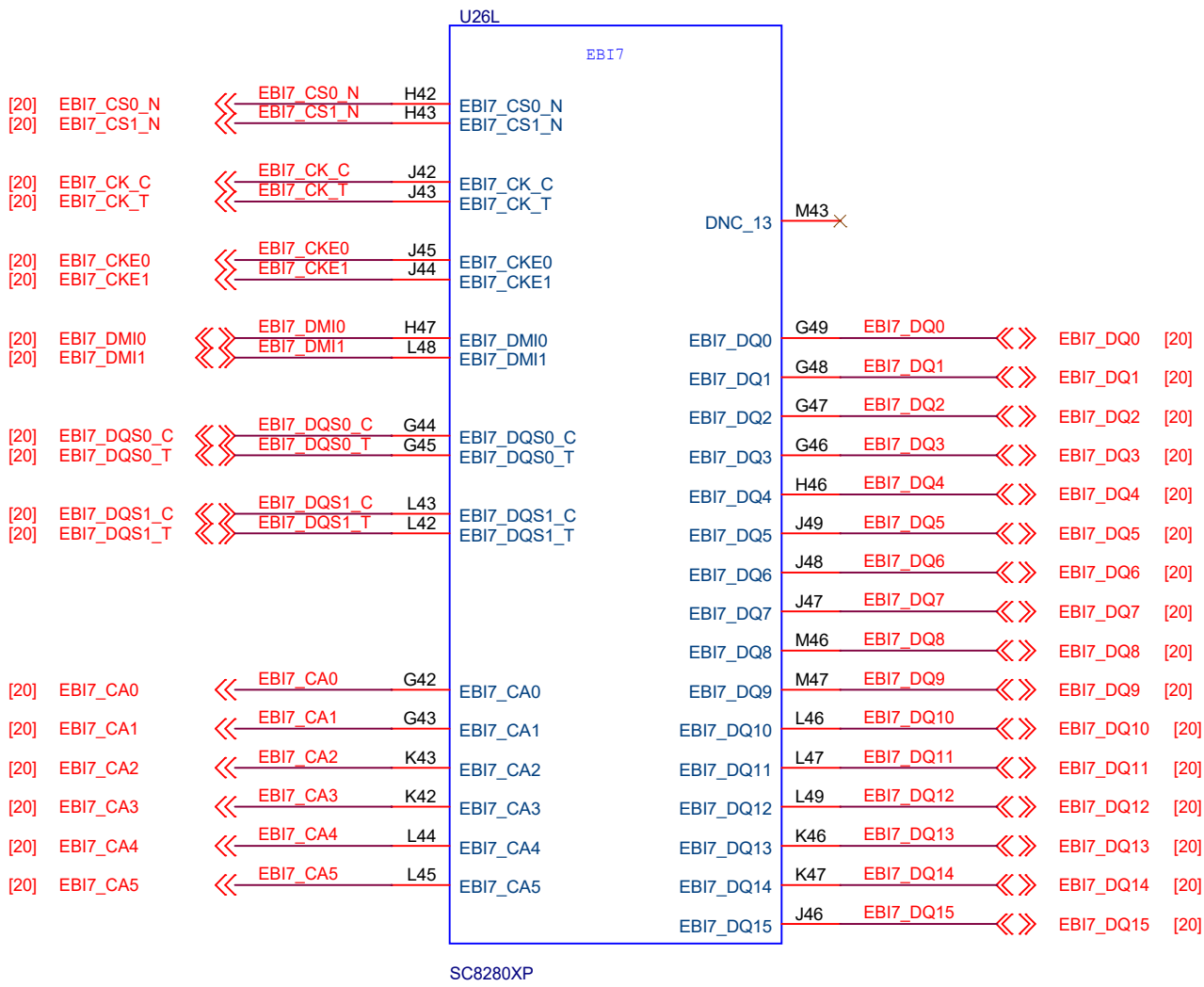
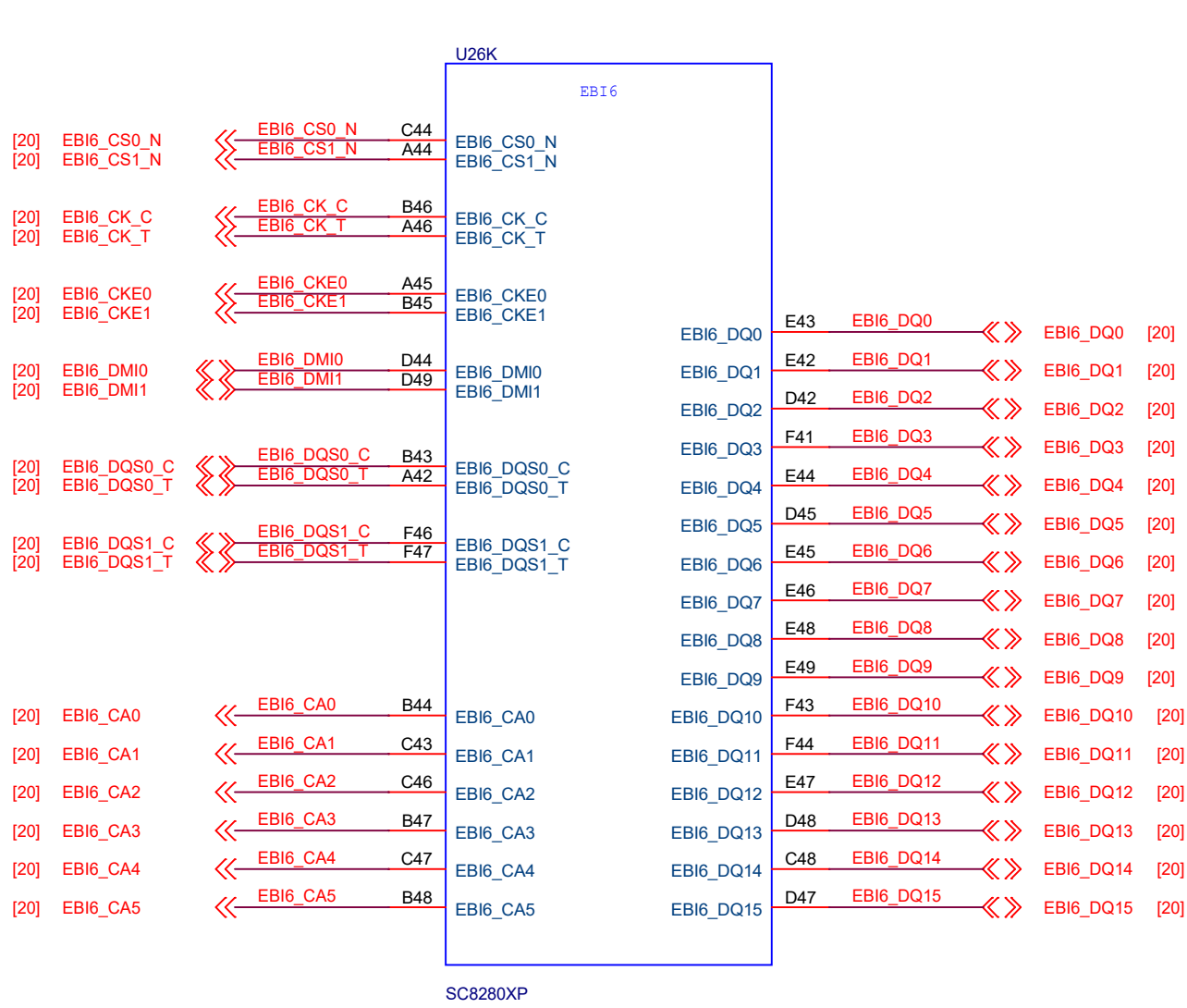
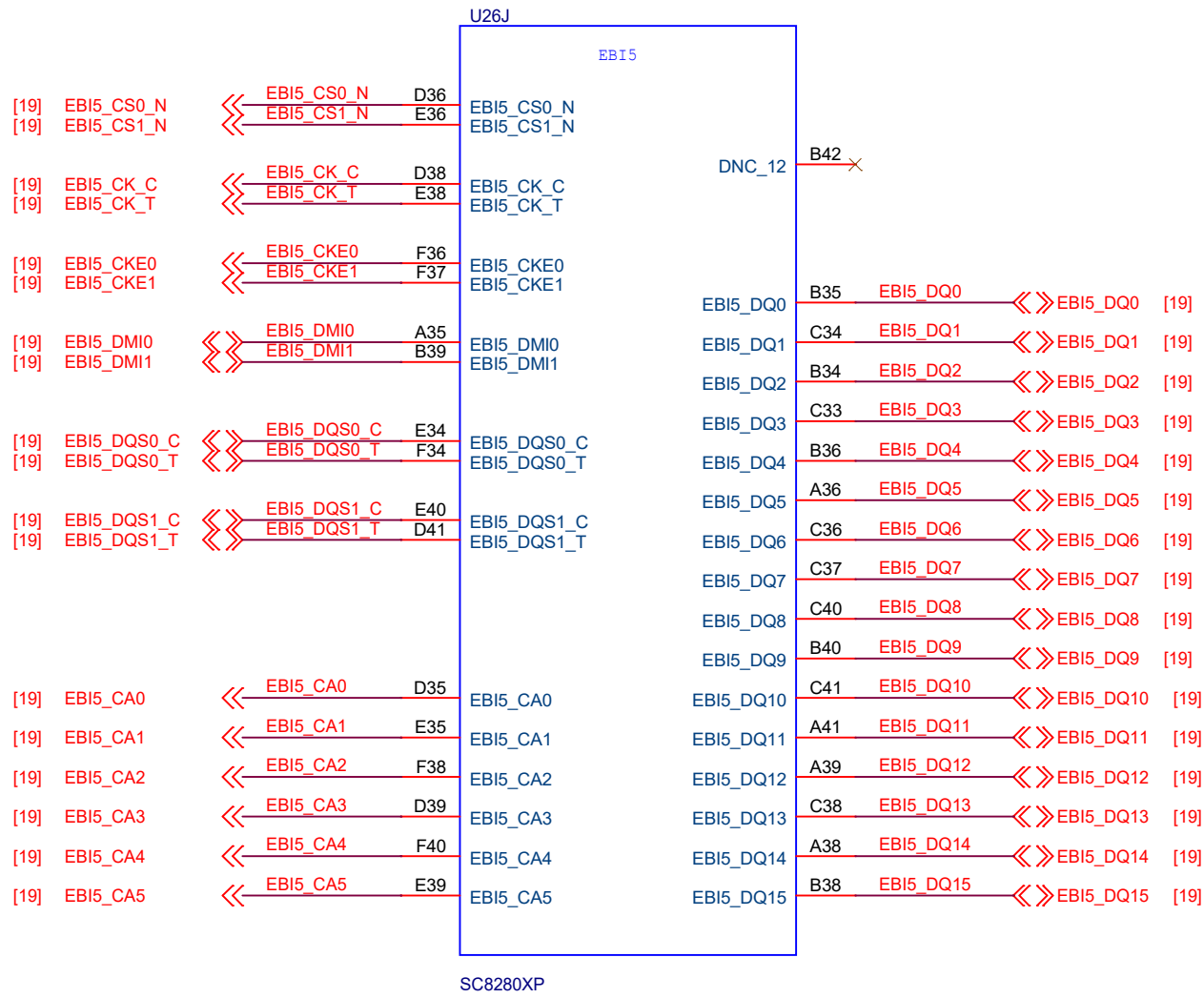
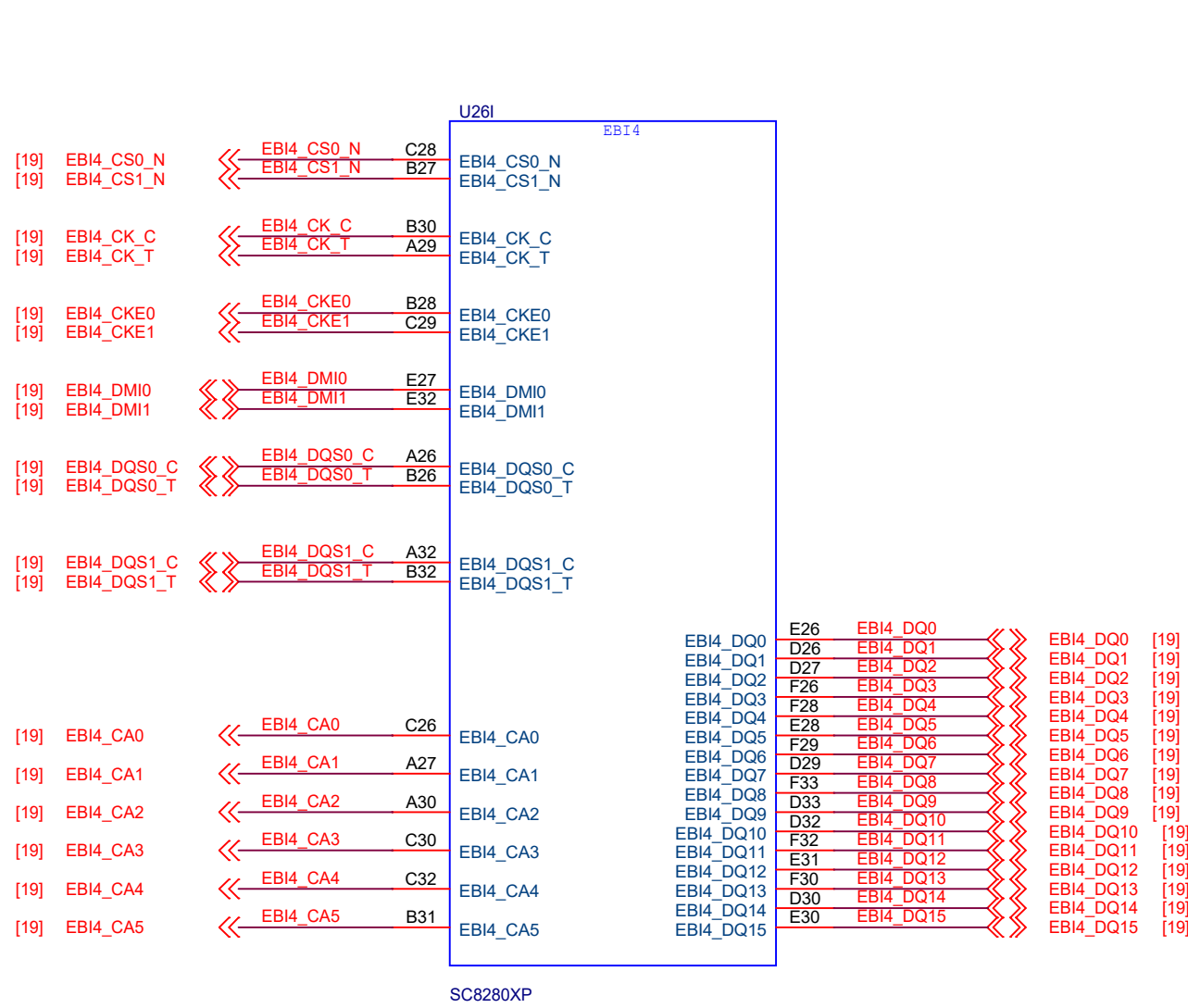
SC8280XP_GPIO3



SC8280XP_EBI_0_3



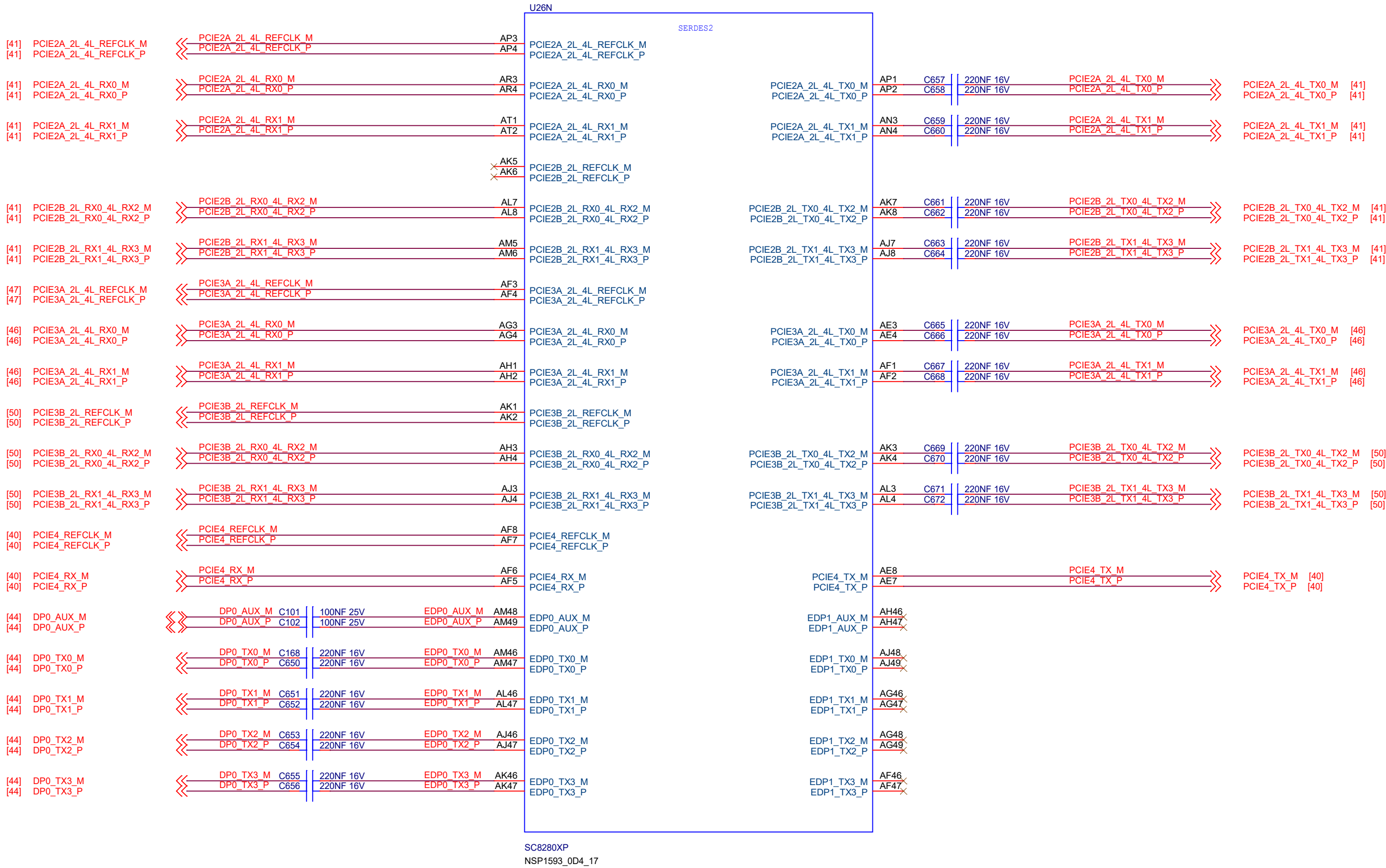
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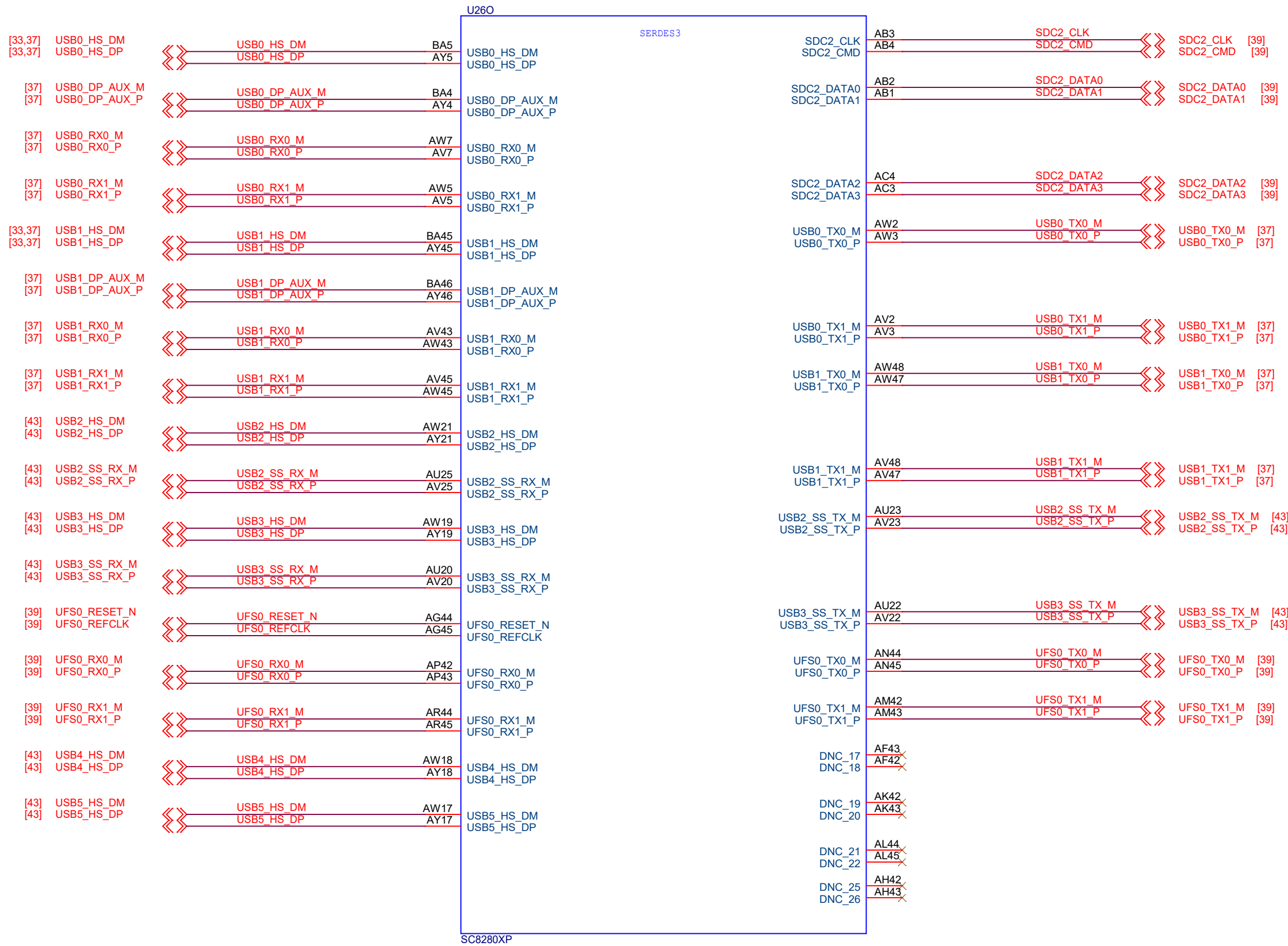
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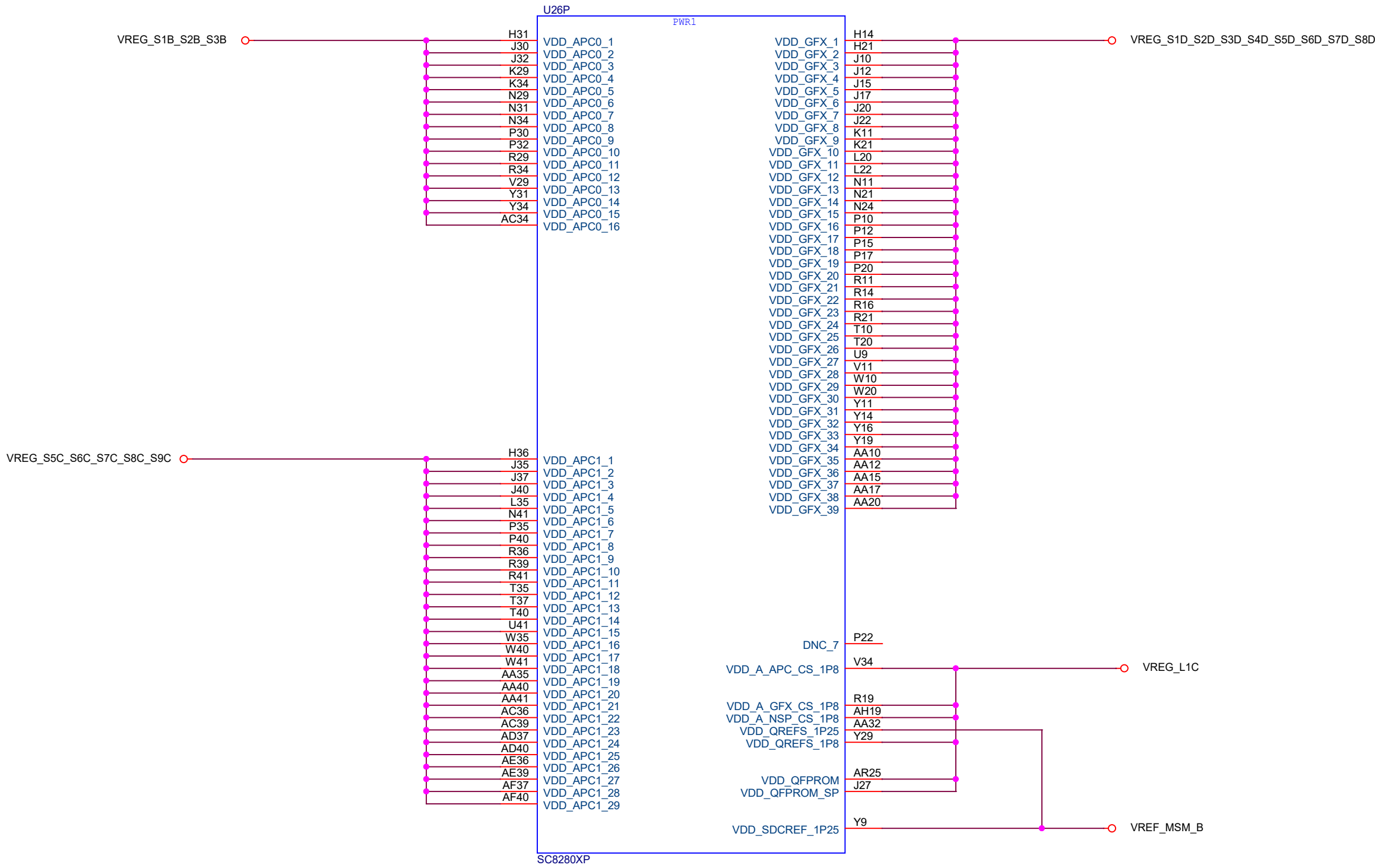
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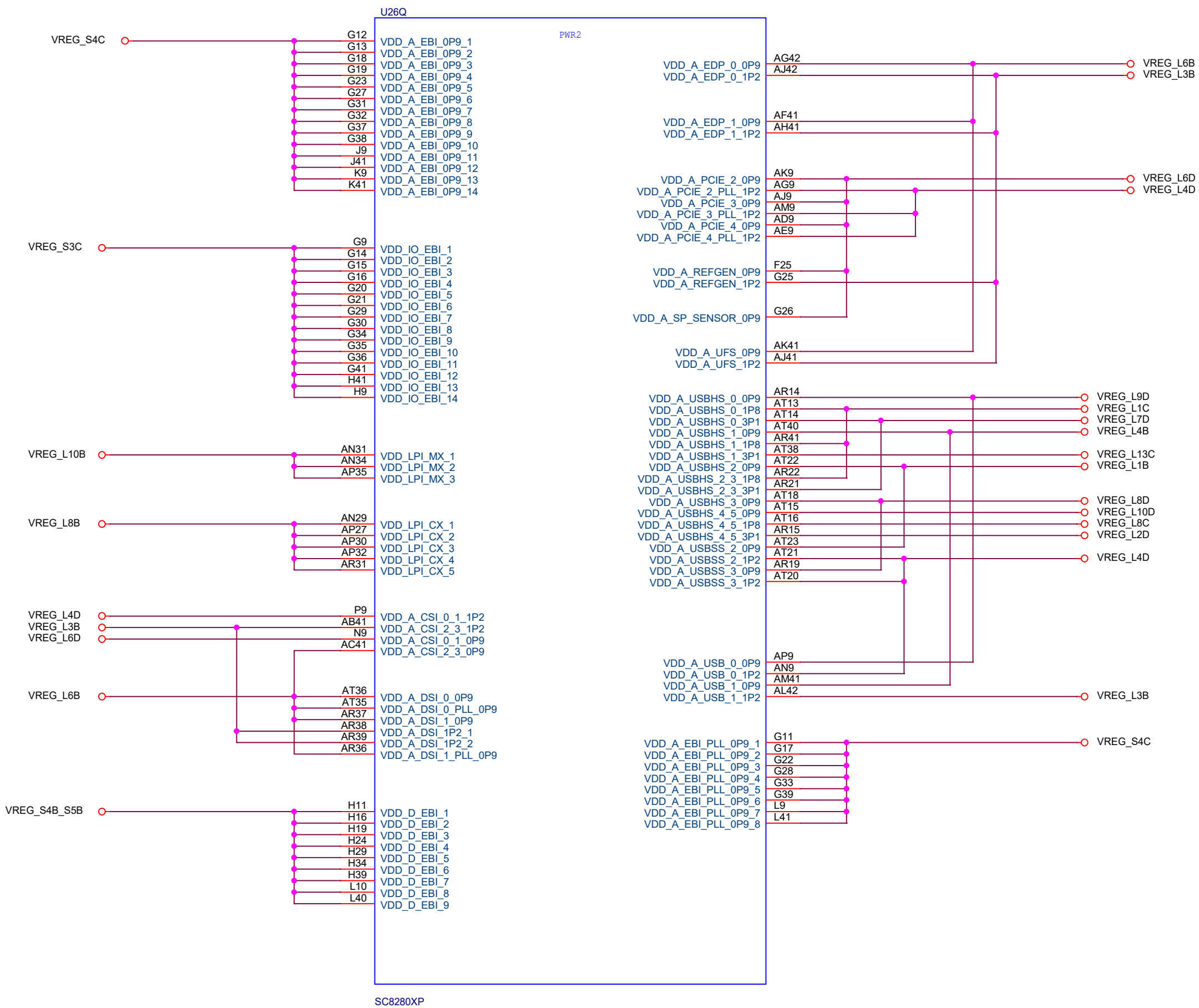
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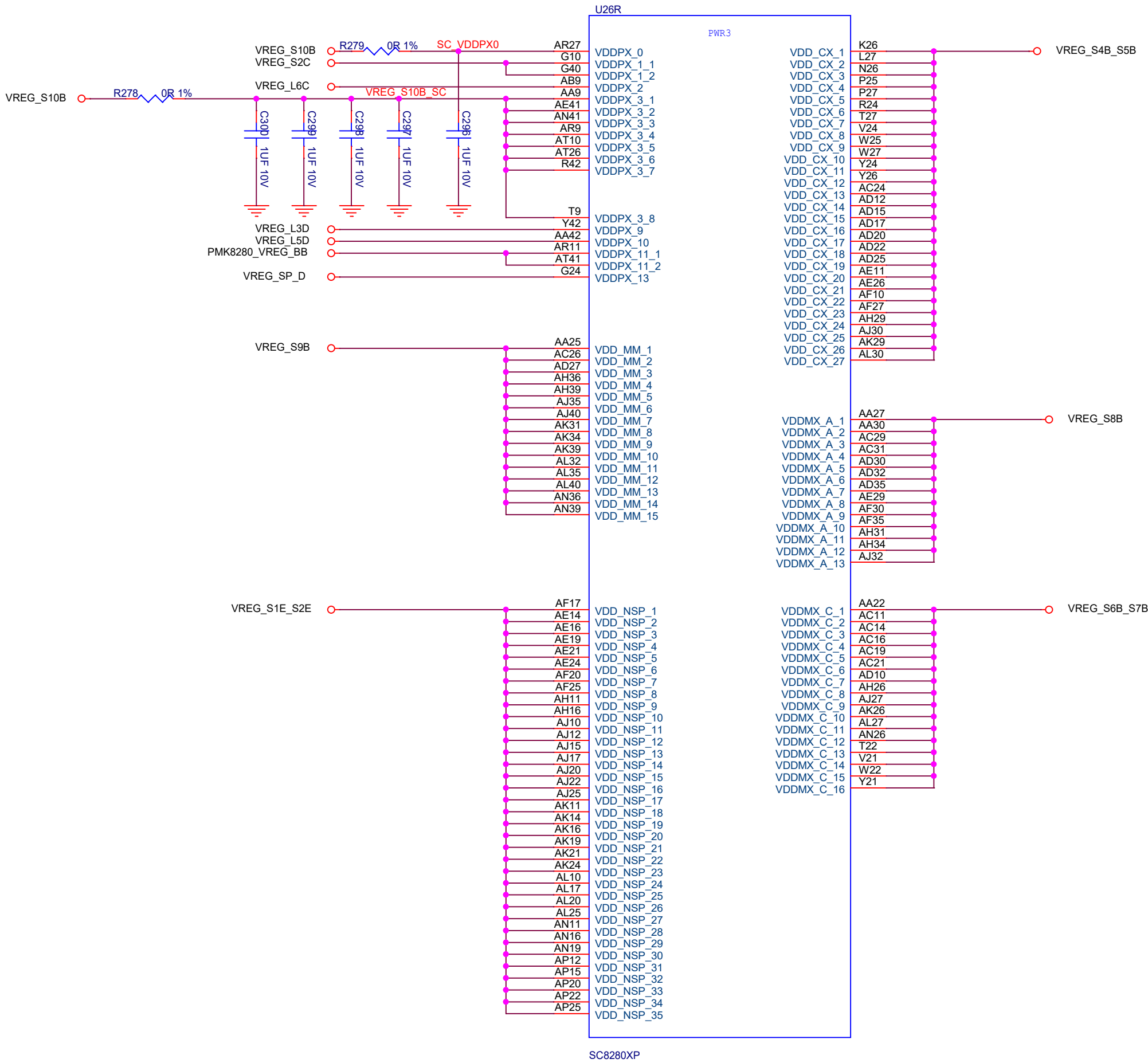
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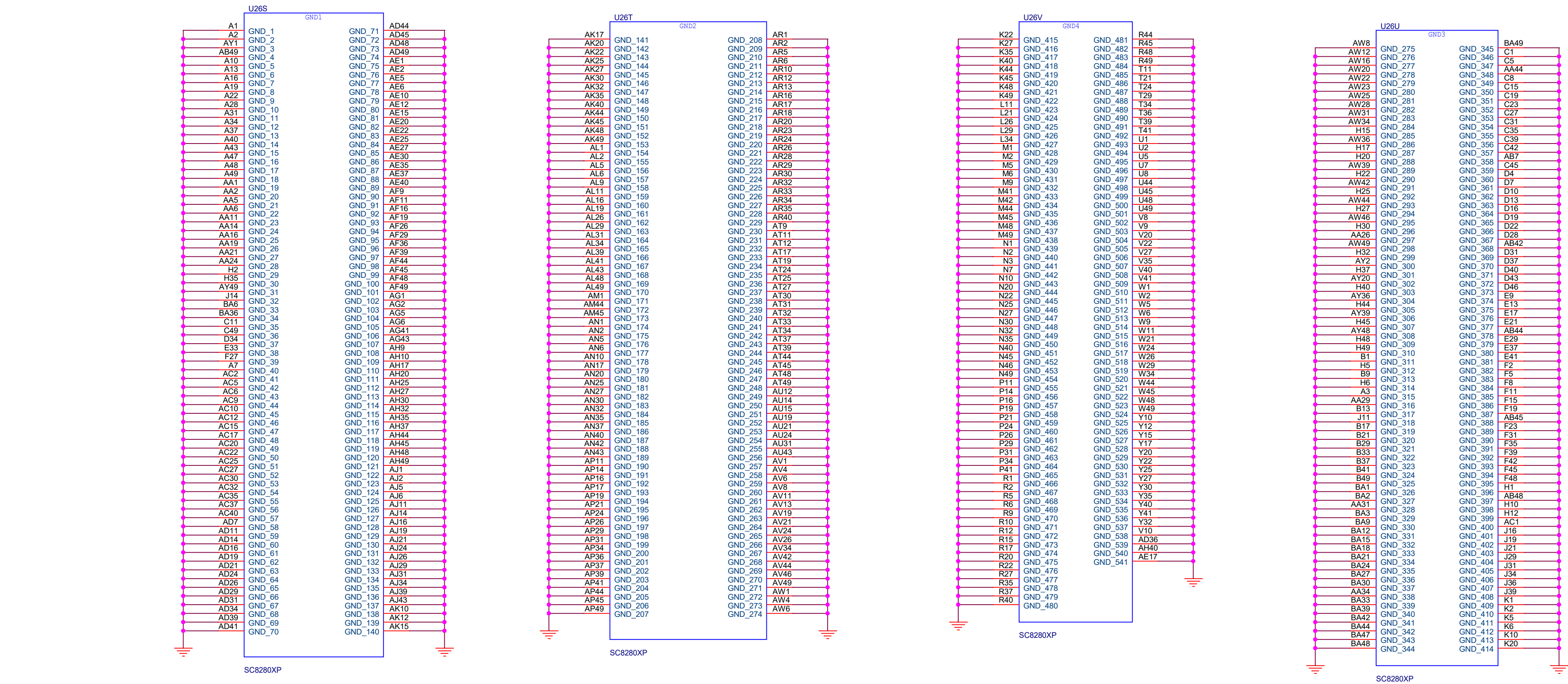
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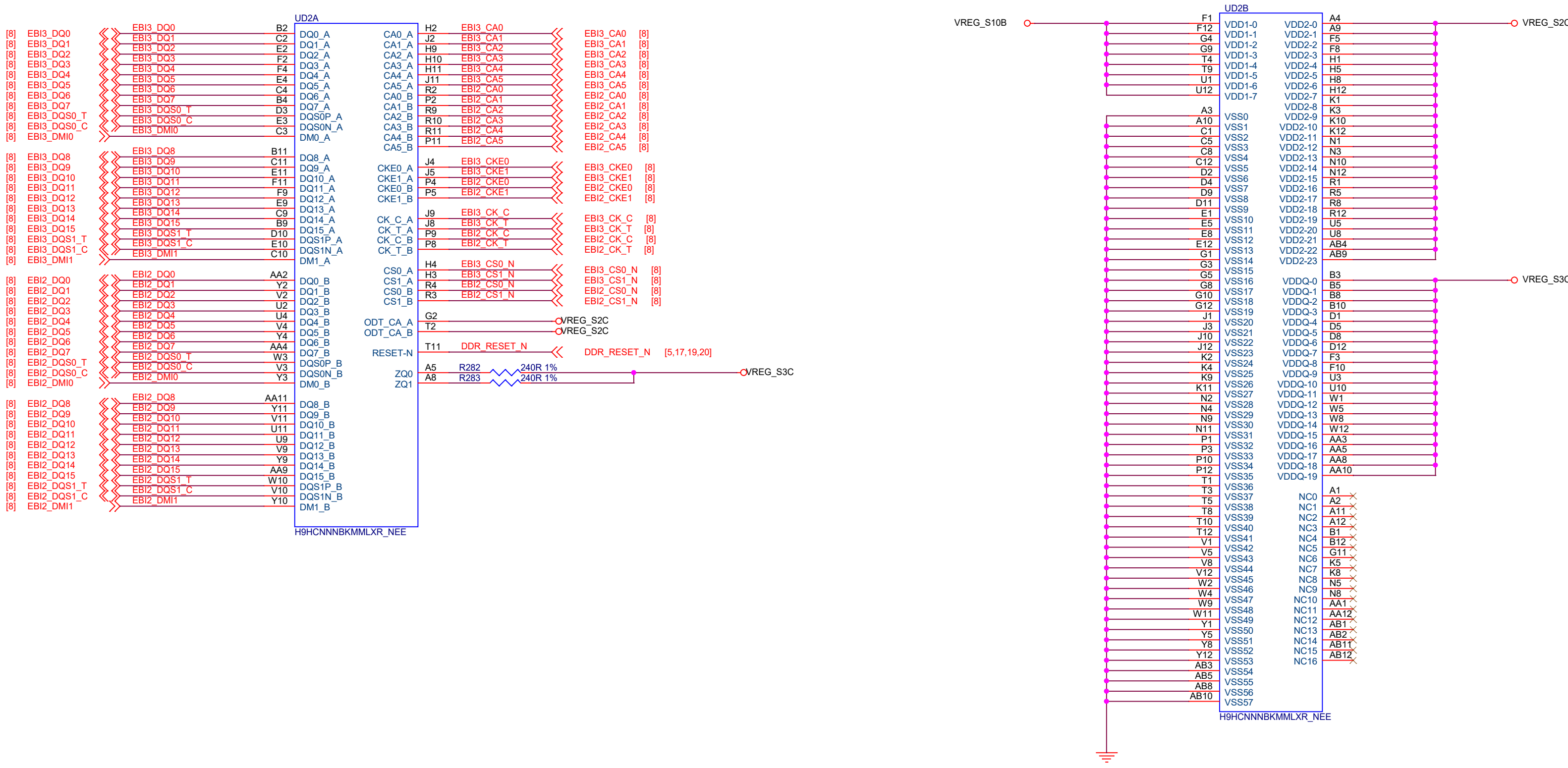
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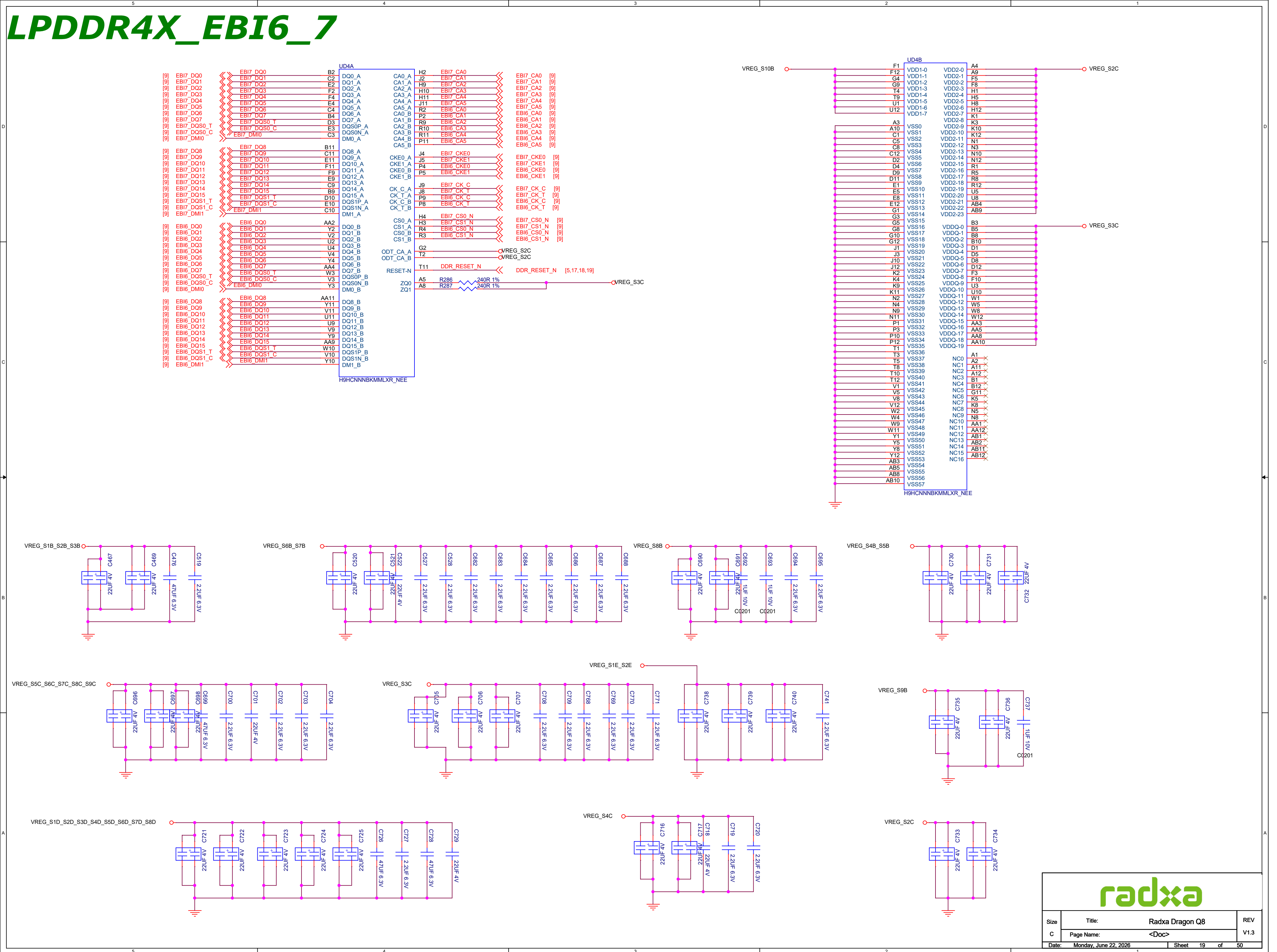
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LPDDR4X_EBI2_3



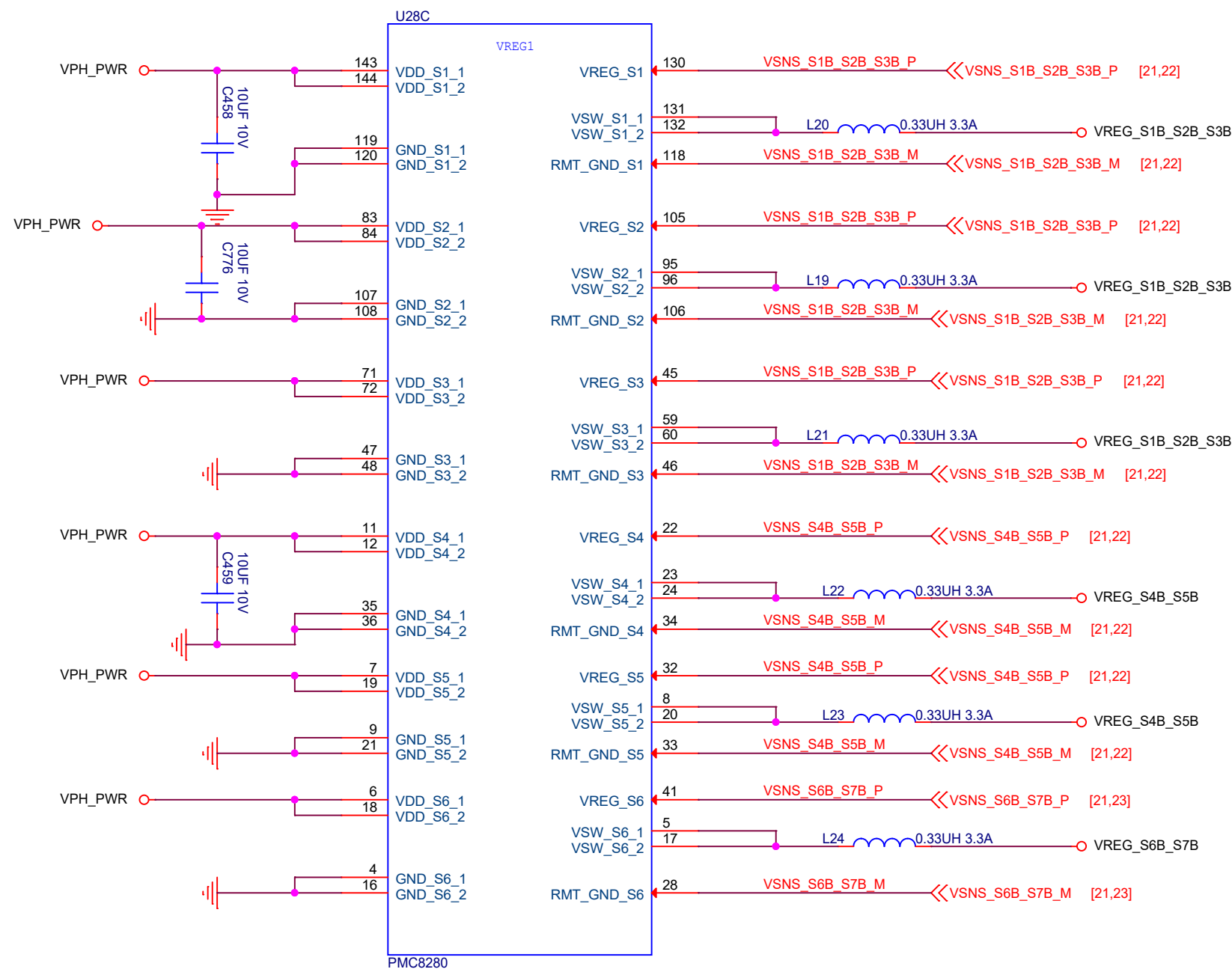
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SC8280XP_DECAP



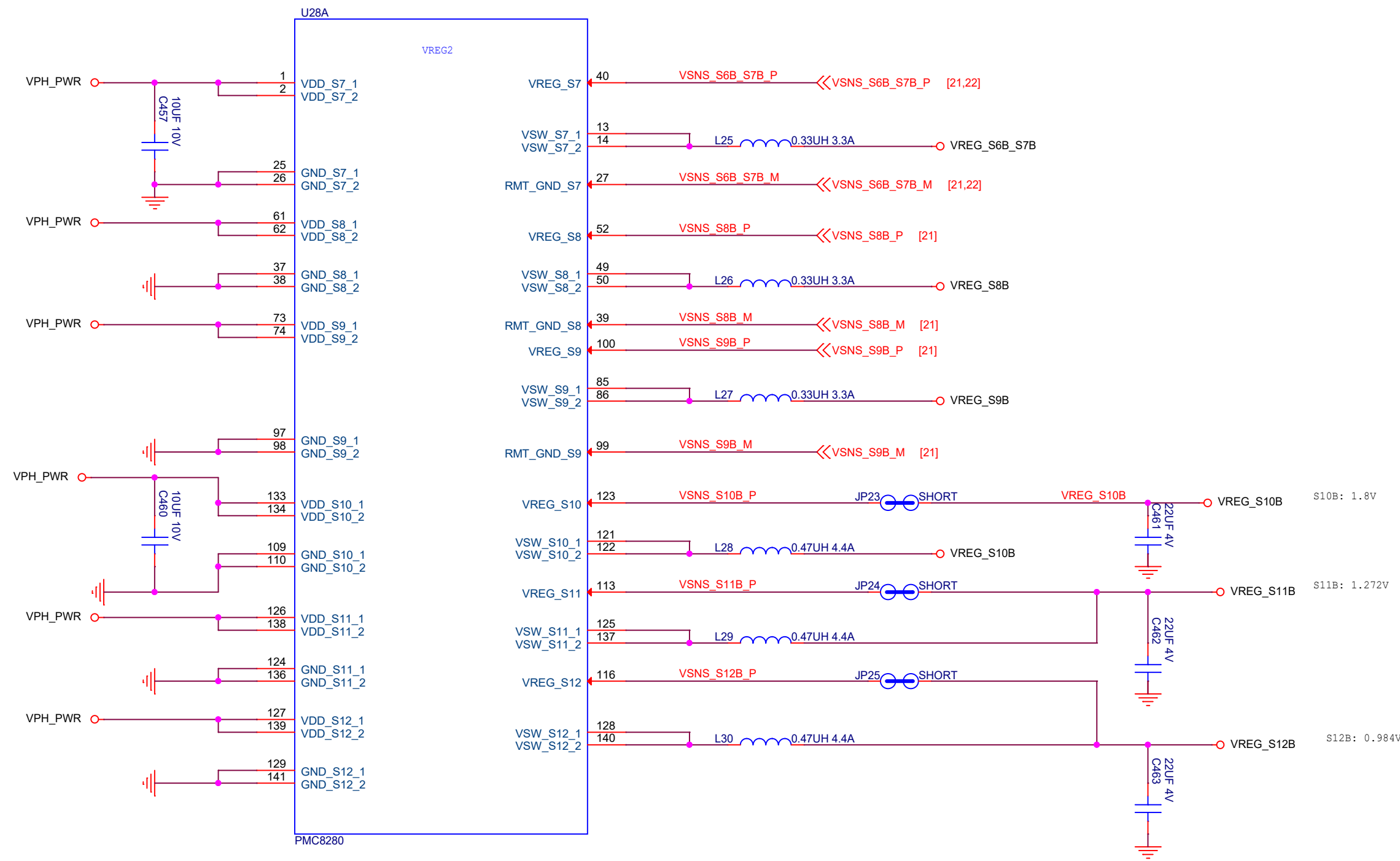
MC8280_1_BUCK_S1_S6



radxa

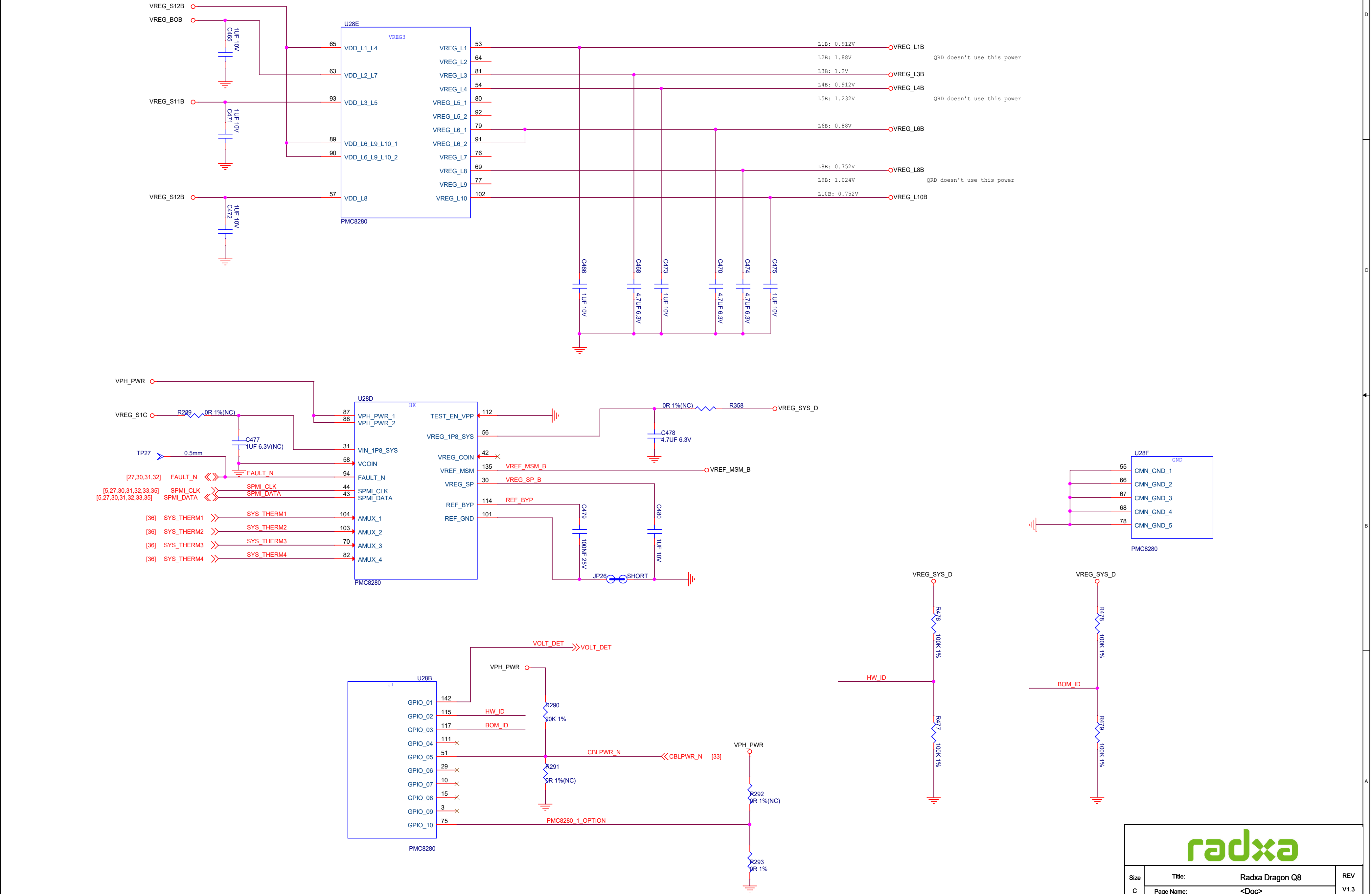
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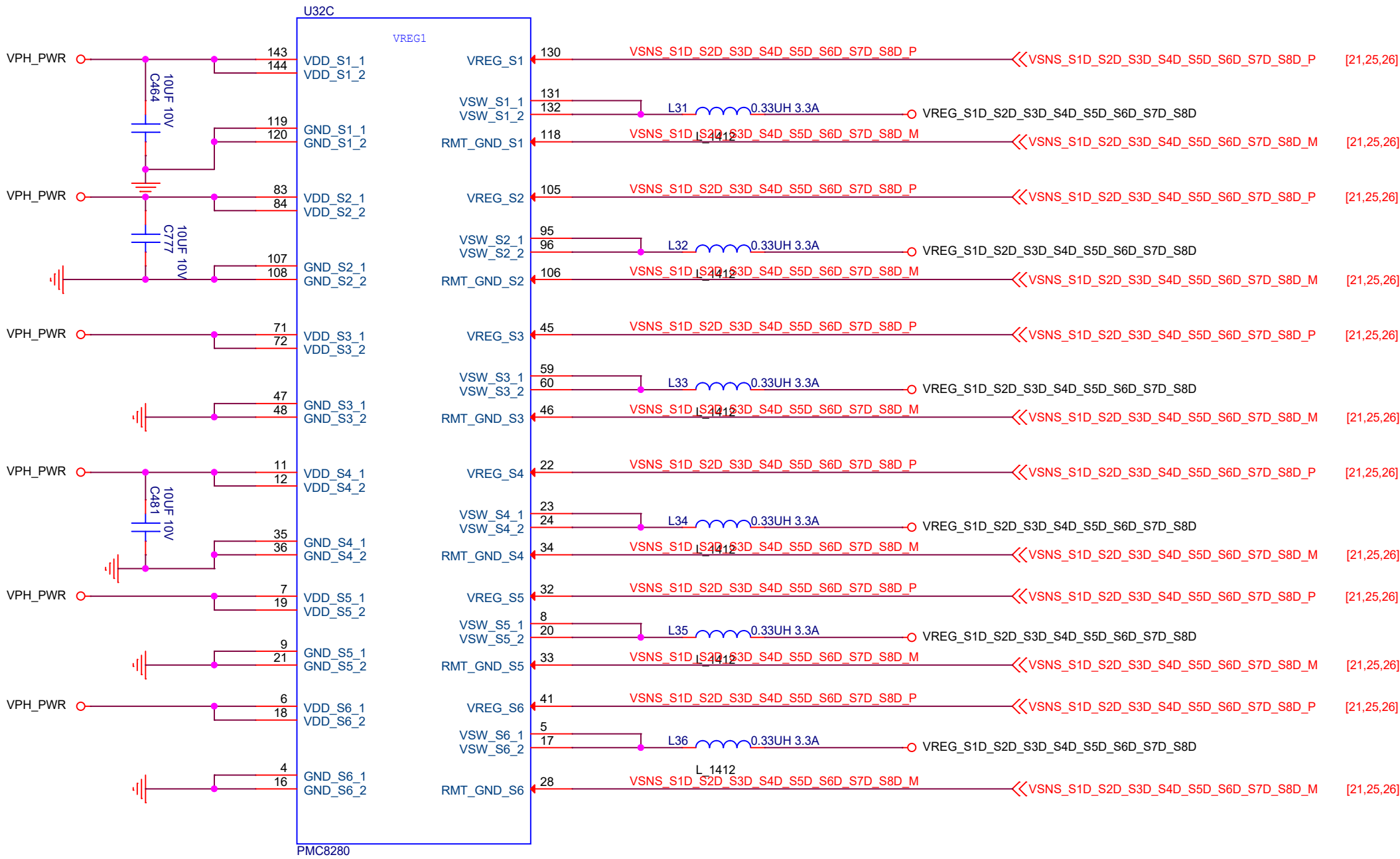


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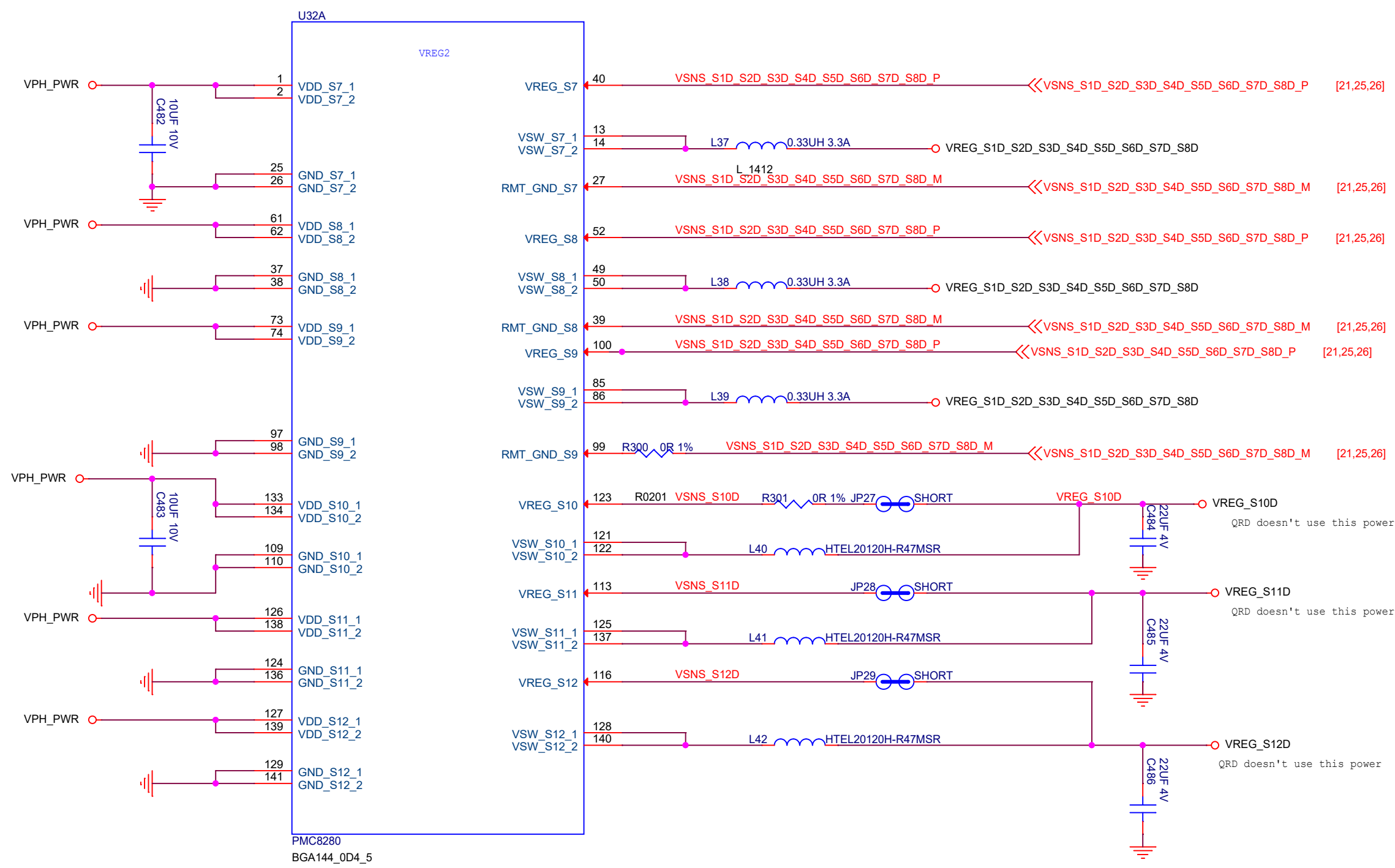
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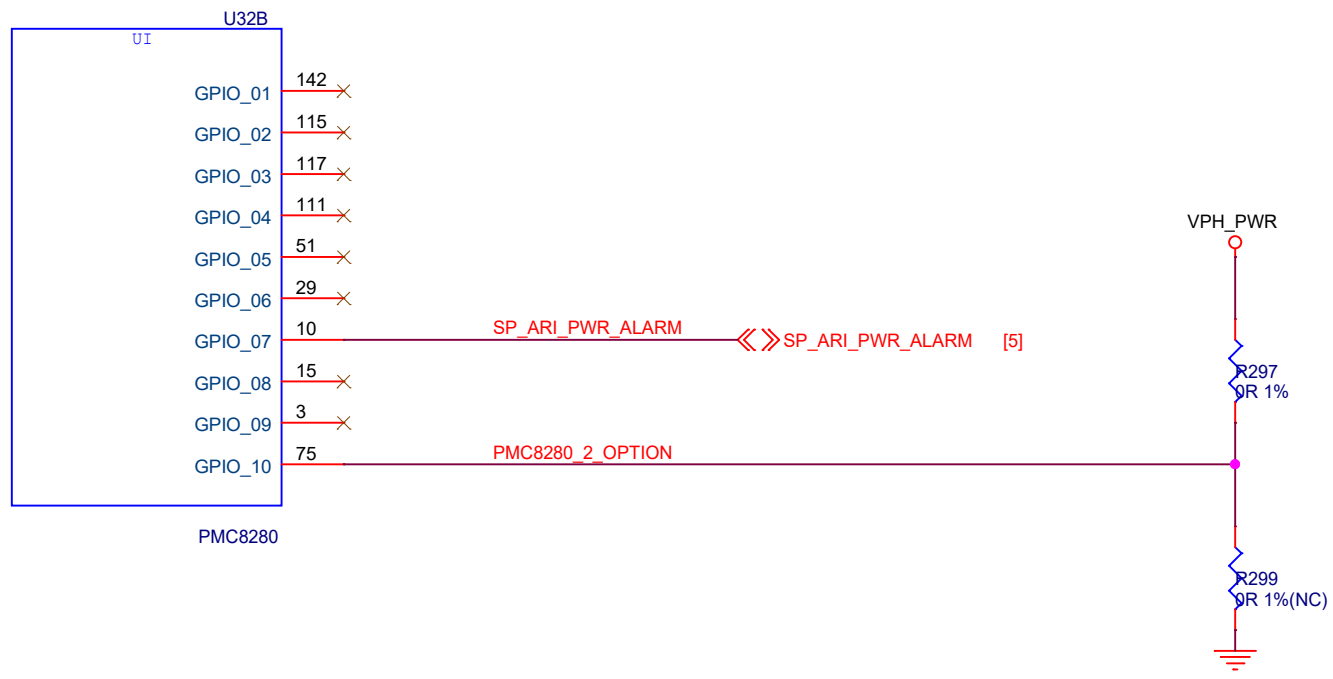
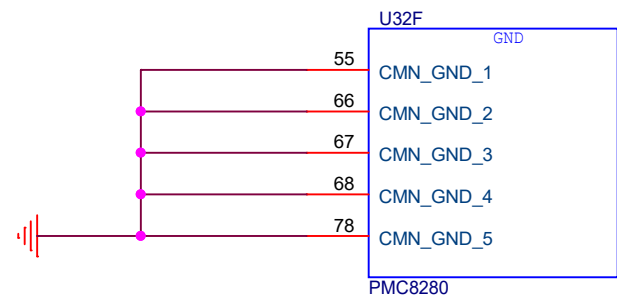
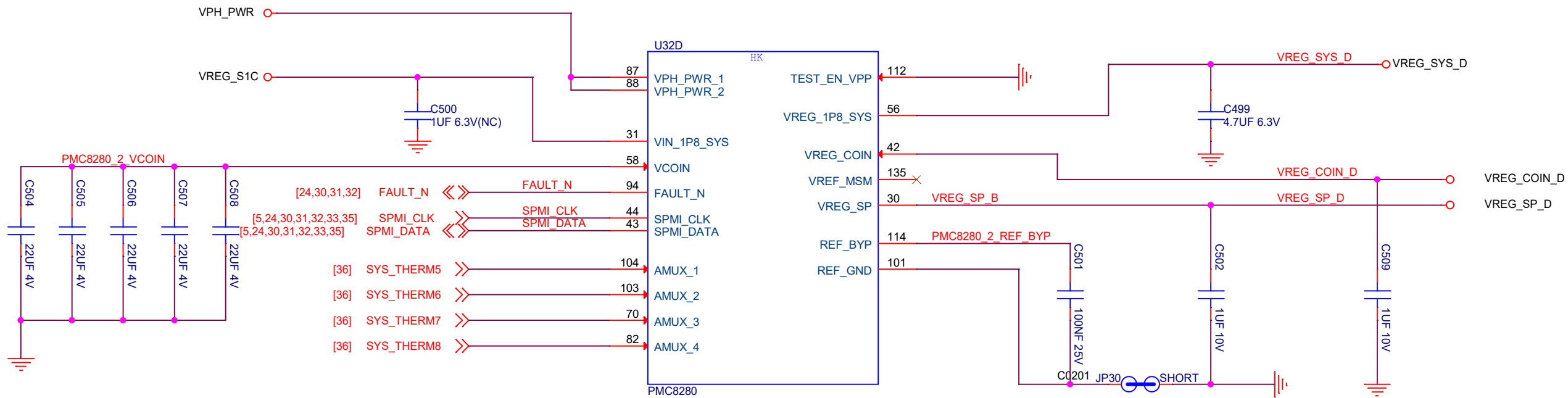
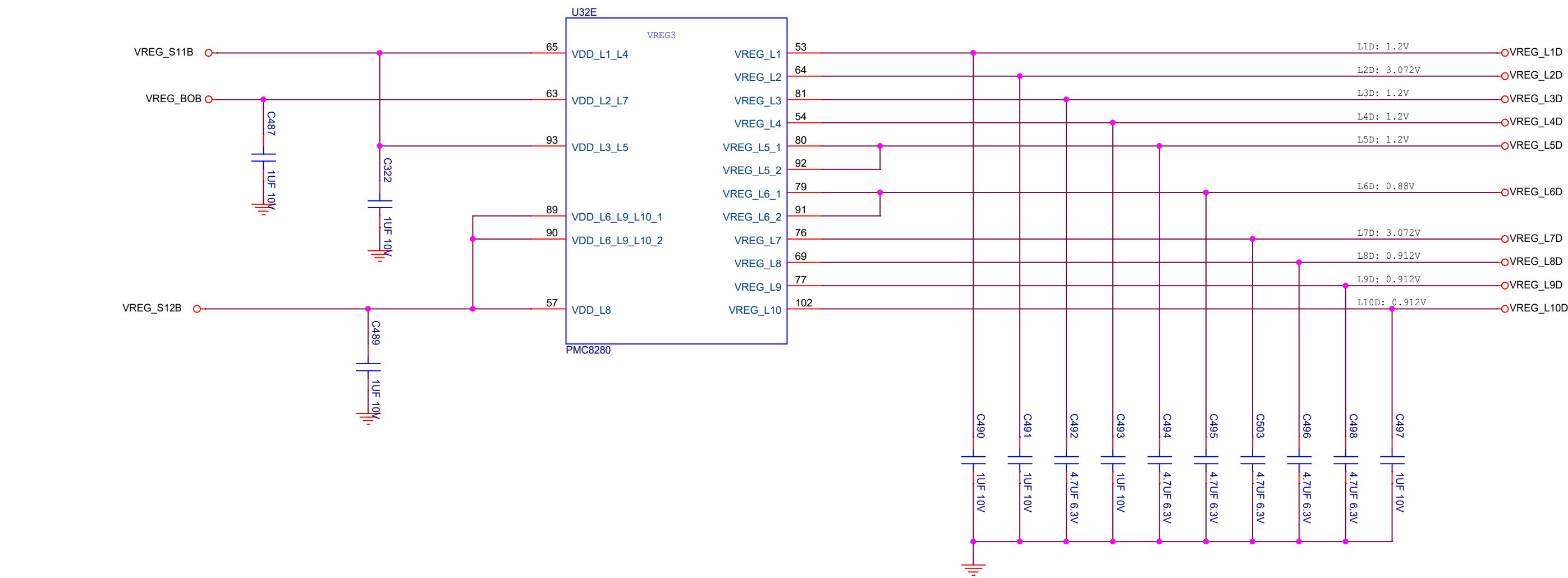


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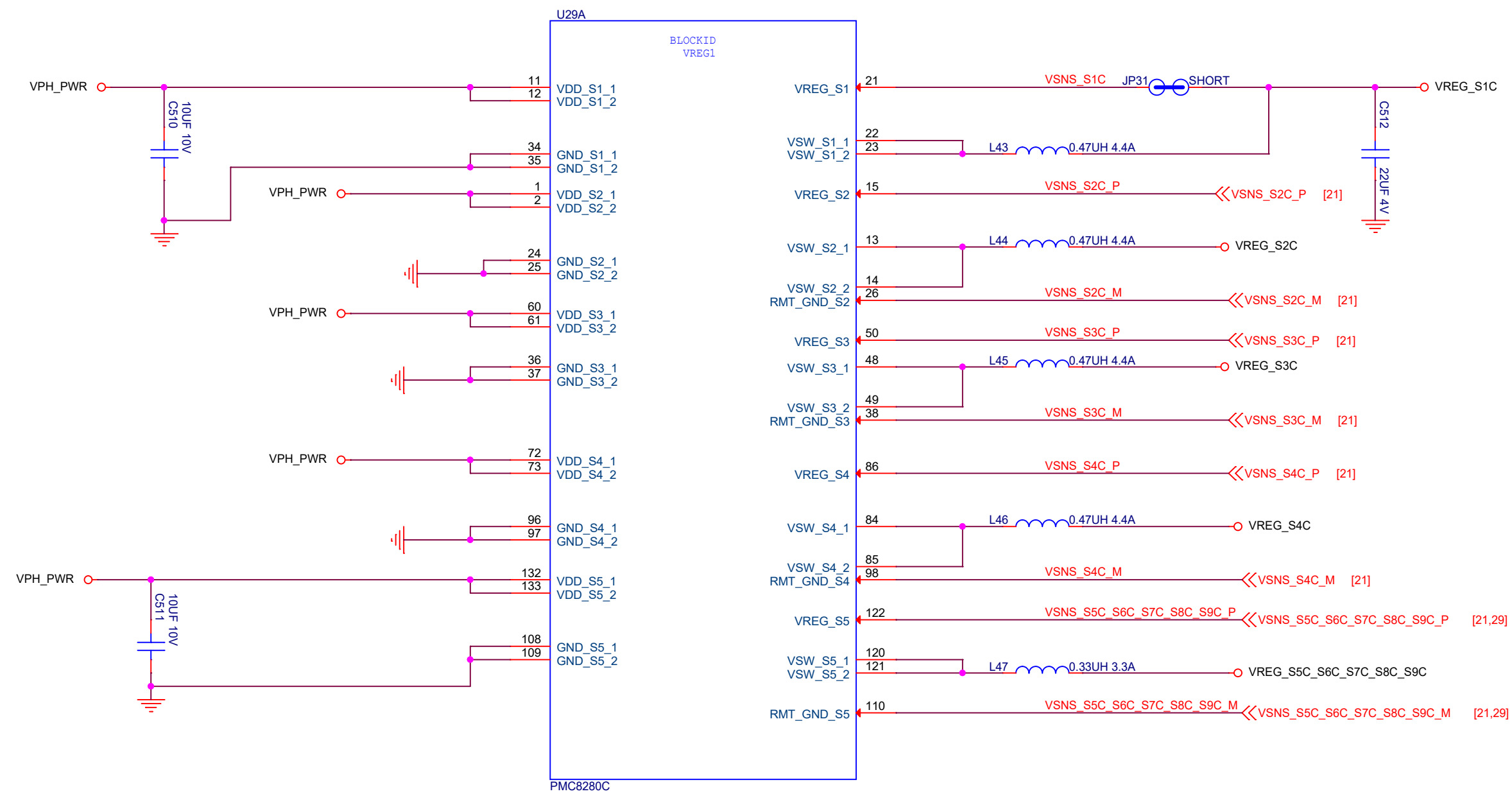


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PMC8280_2_HK/IO/GND/LDO



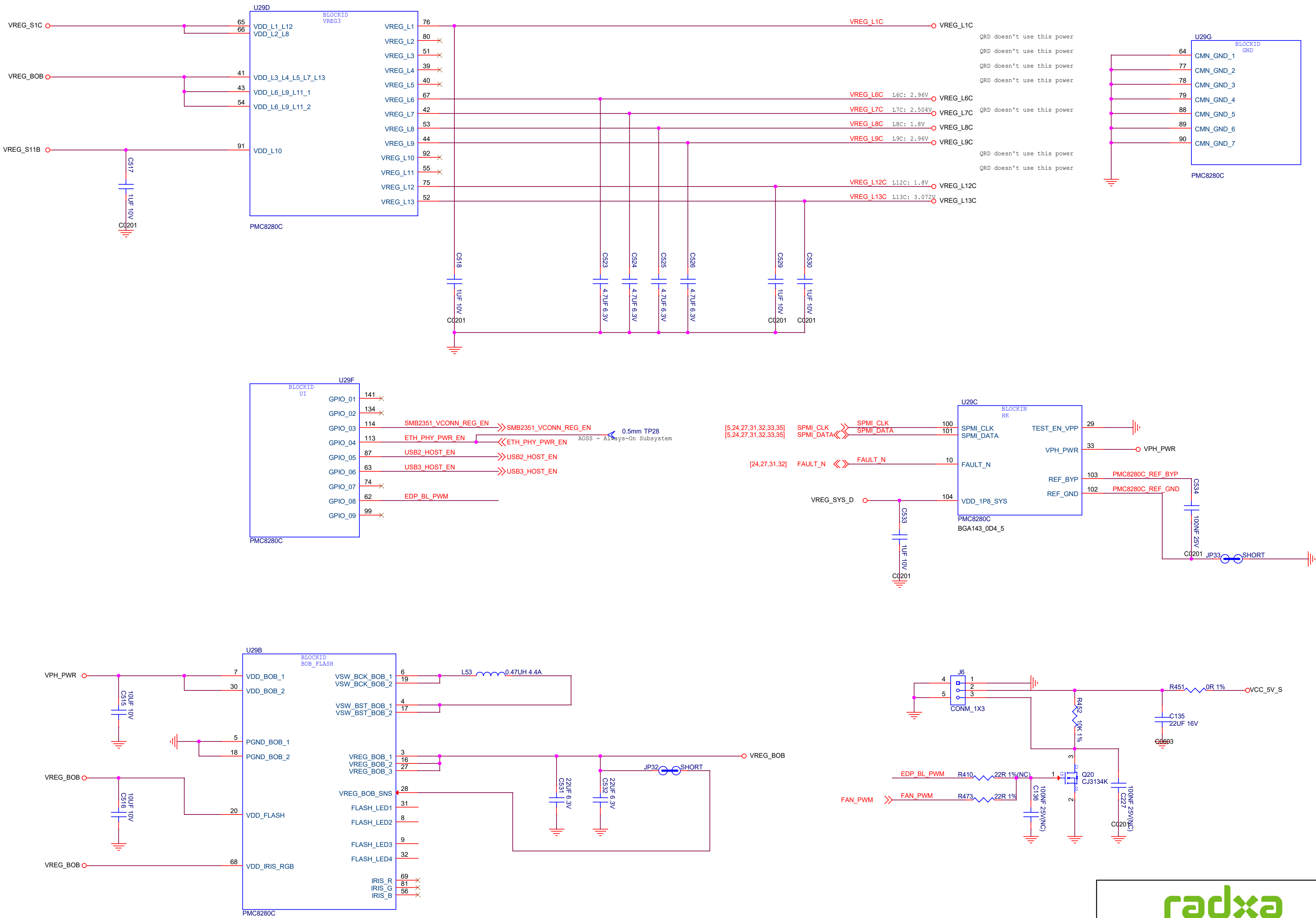
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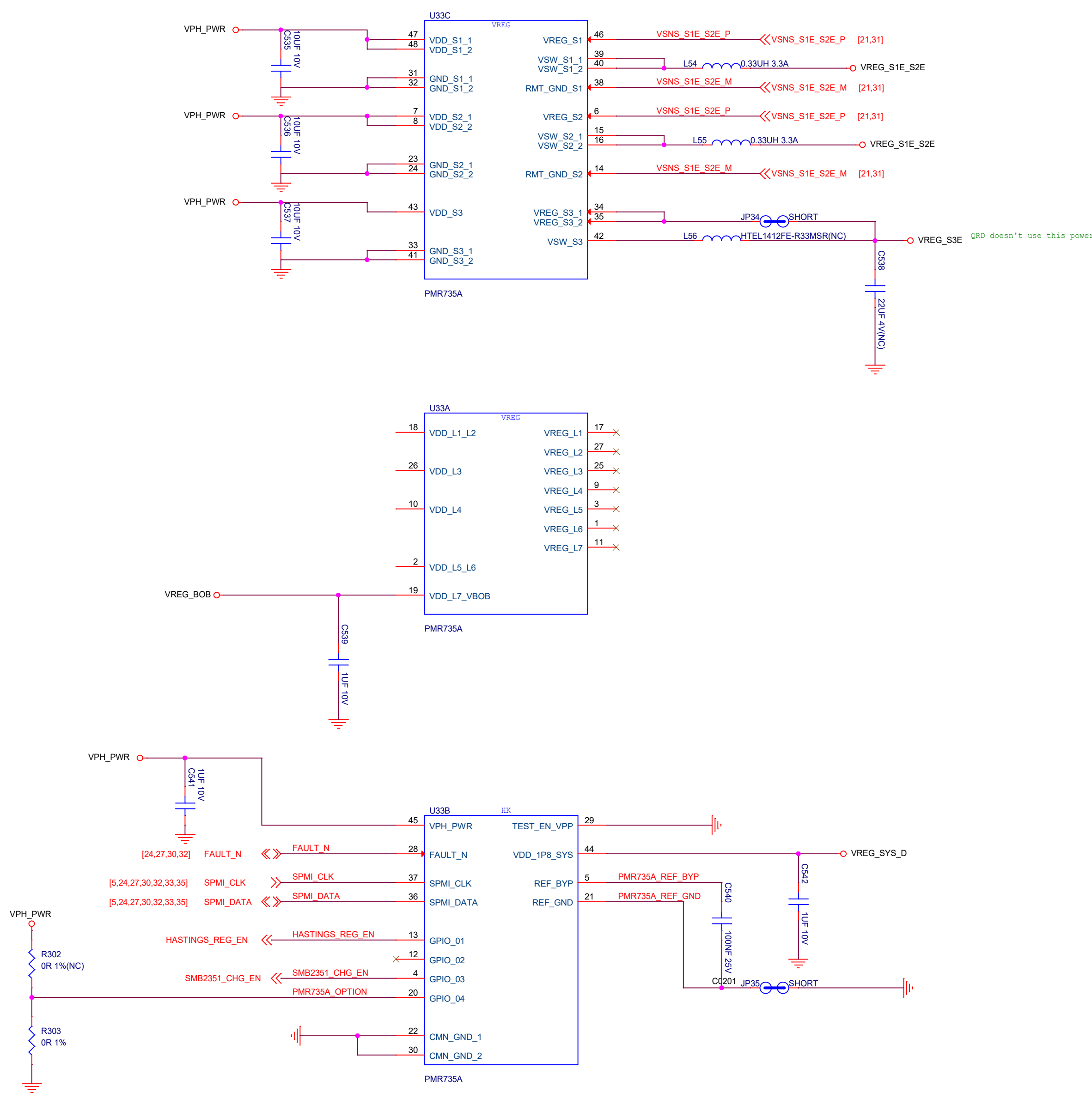
radxa

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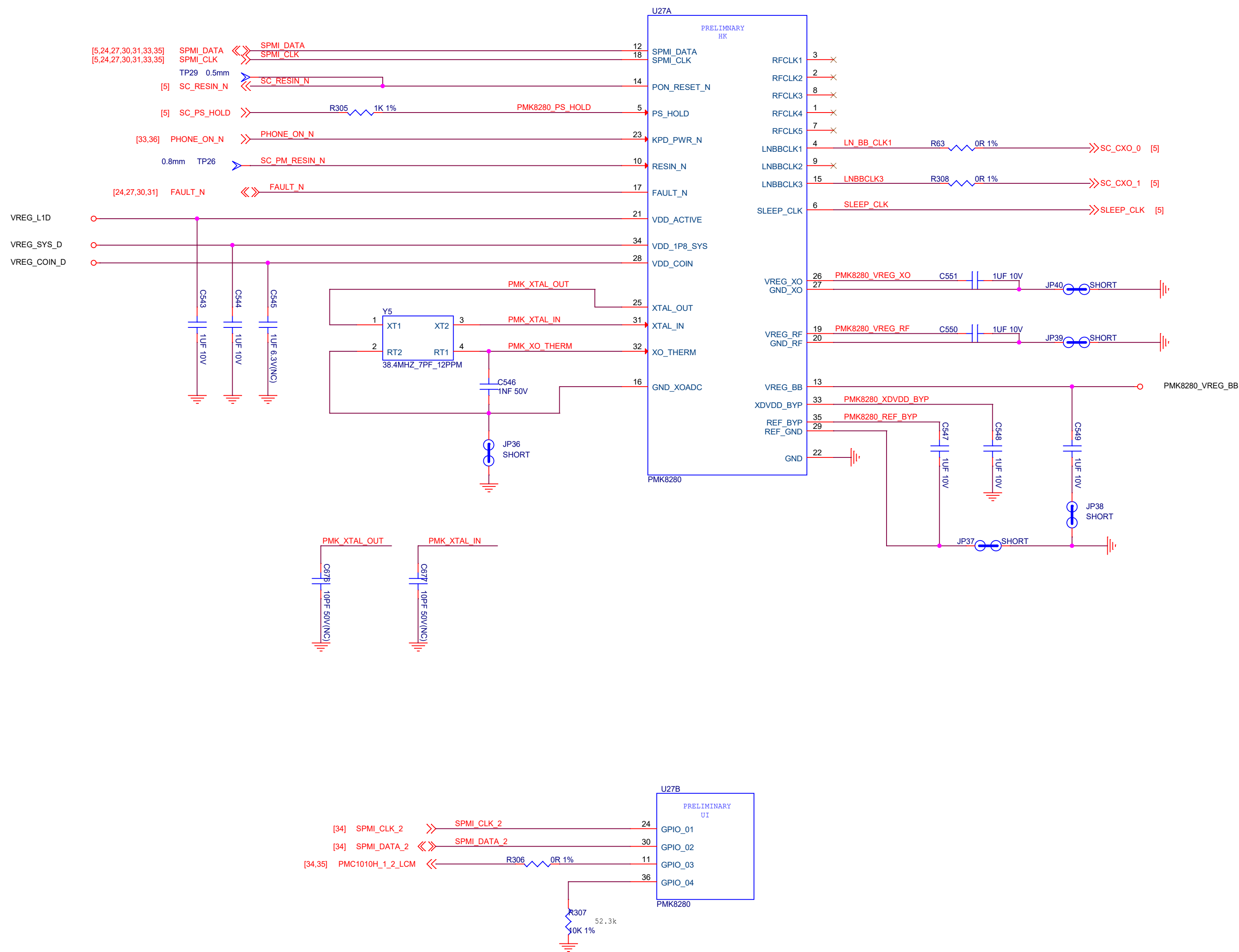
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PMR735A



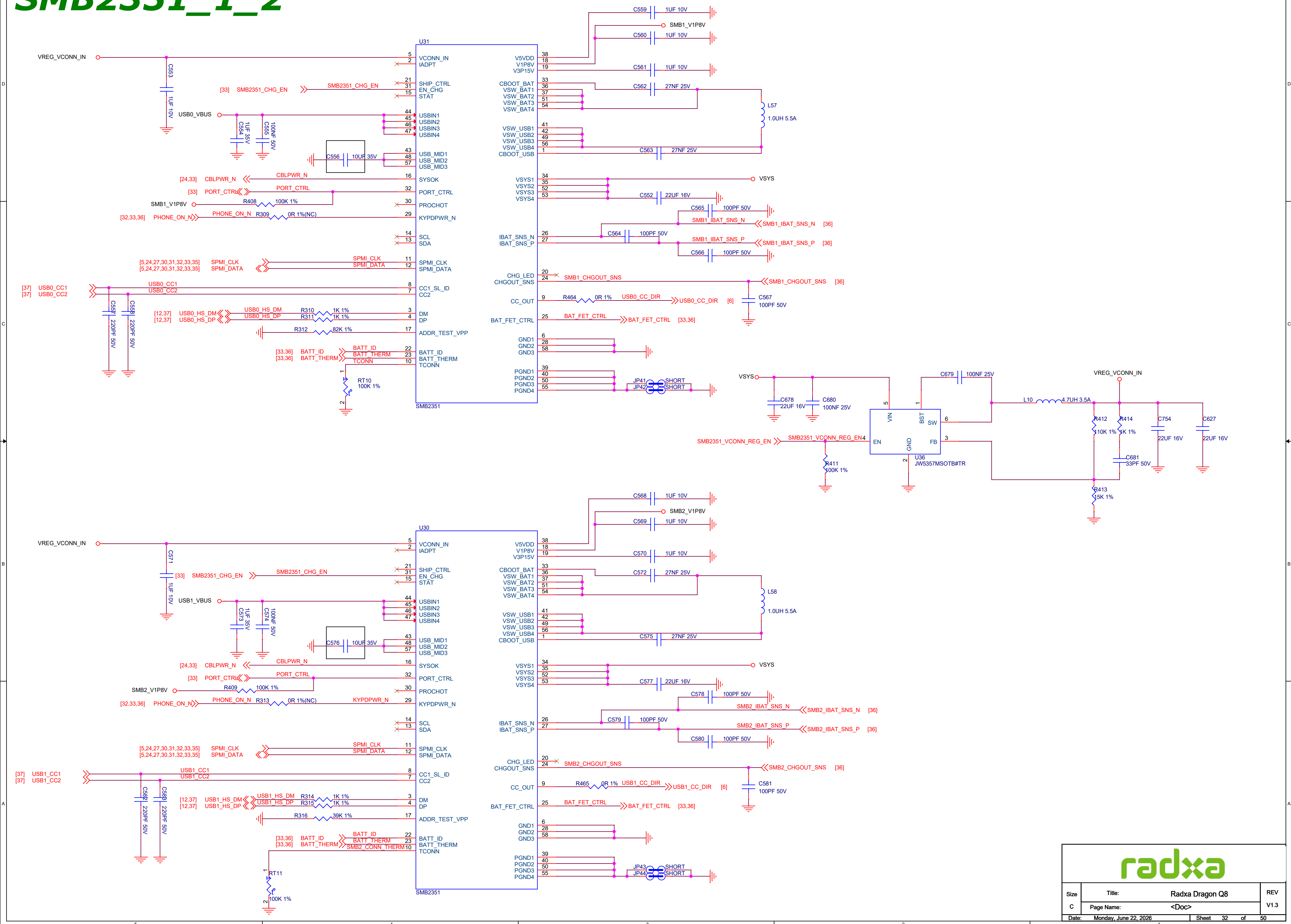
PMK8280



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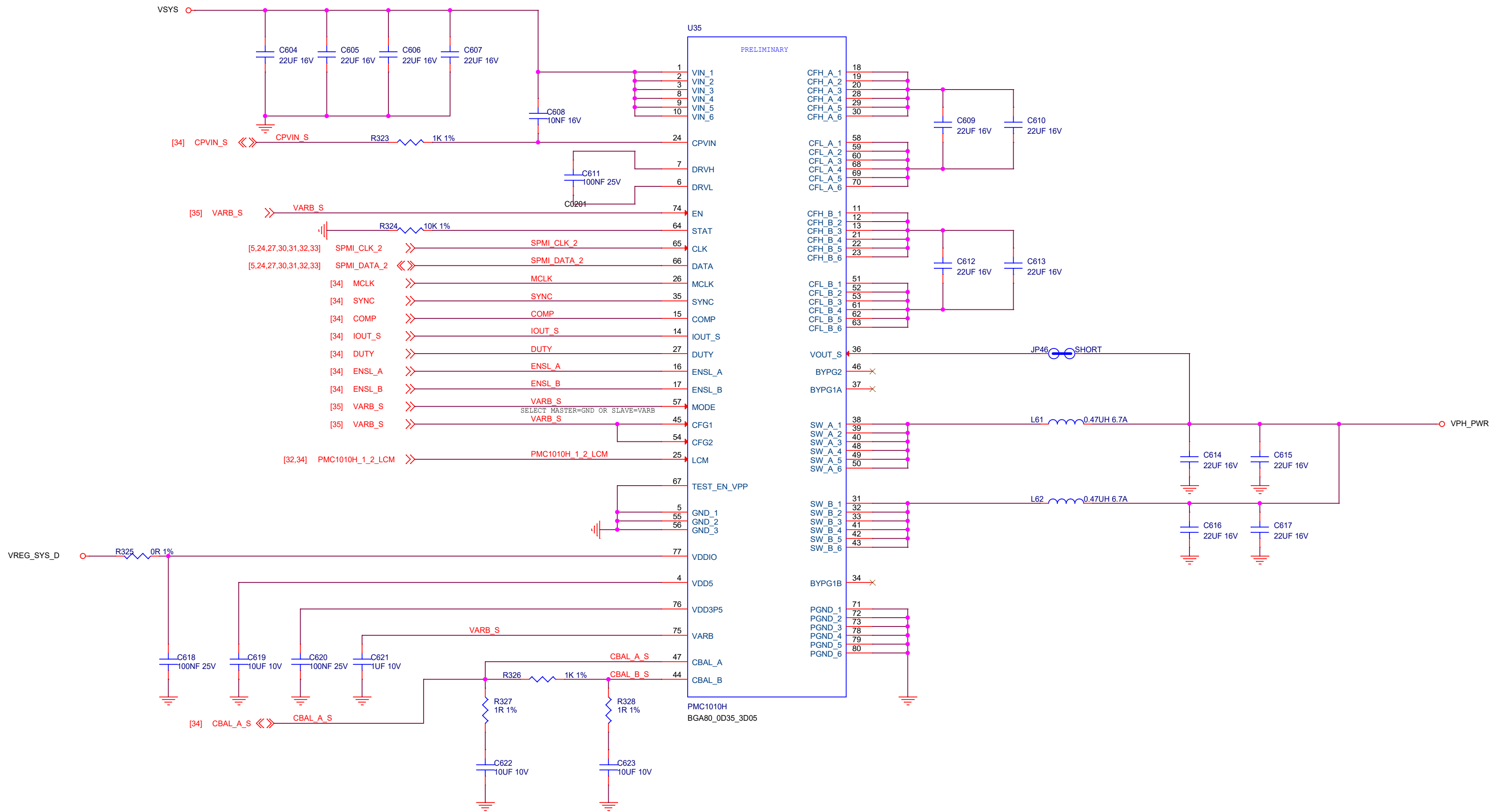
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SMB2351_1_2



Note:
Input capacitance must be at least 300 uF
and
output capacitance must not exceed 400 uF
to
prevent chattering between modes during
COMBO operation

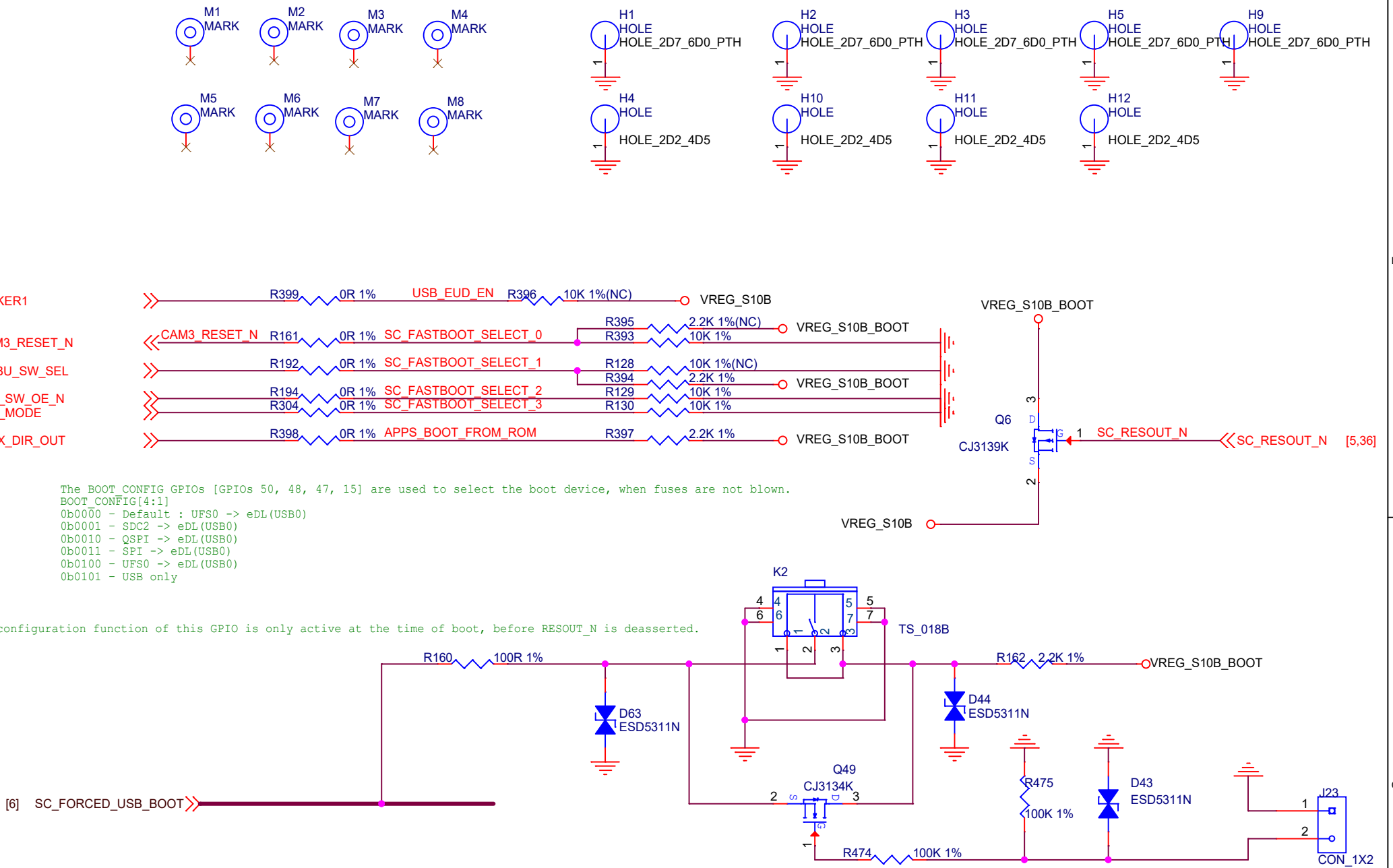
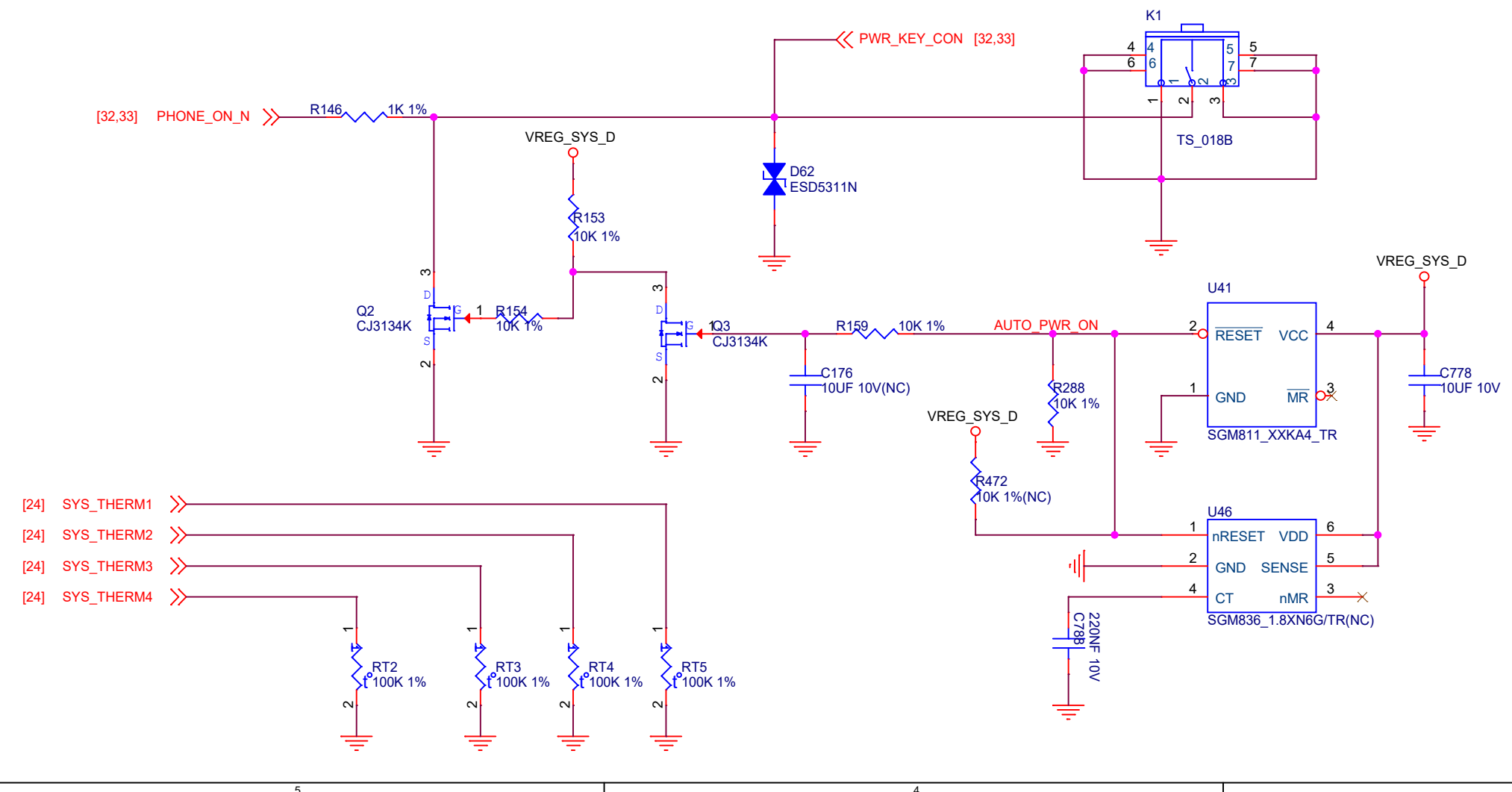
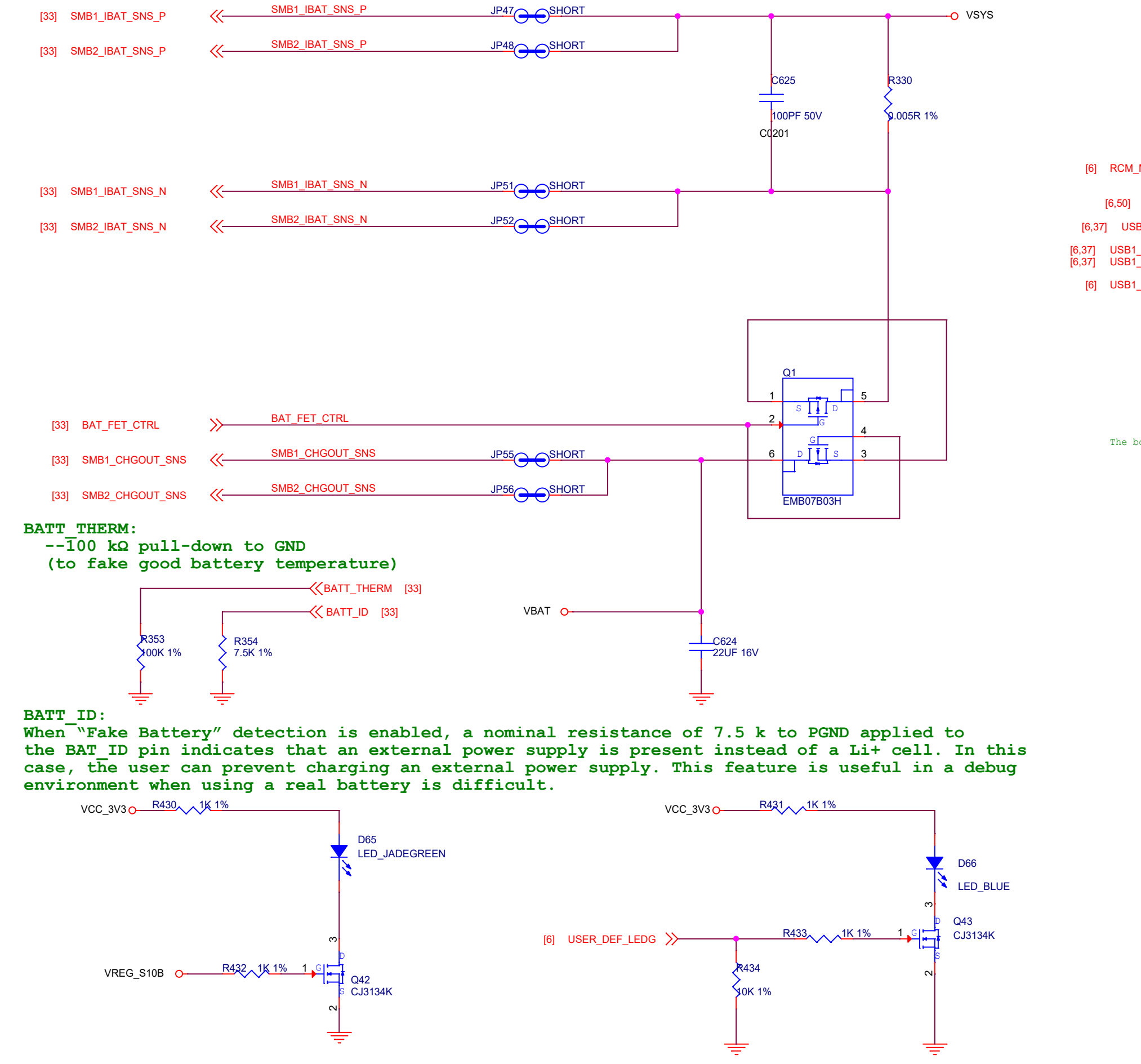
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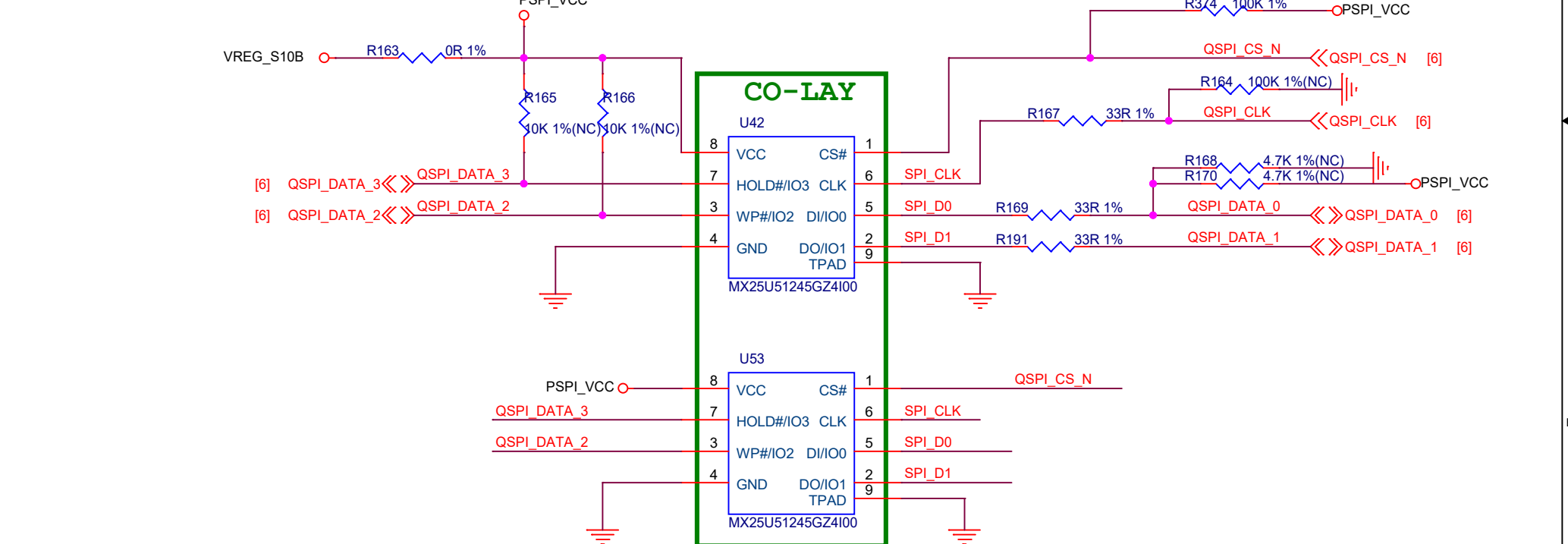
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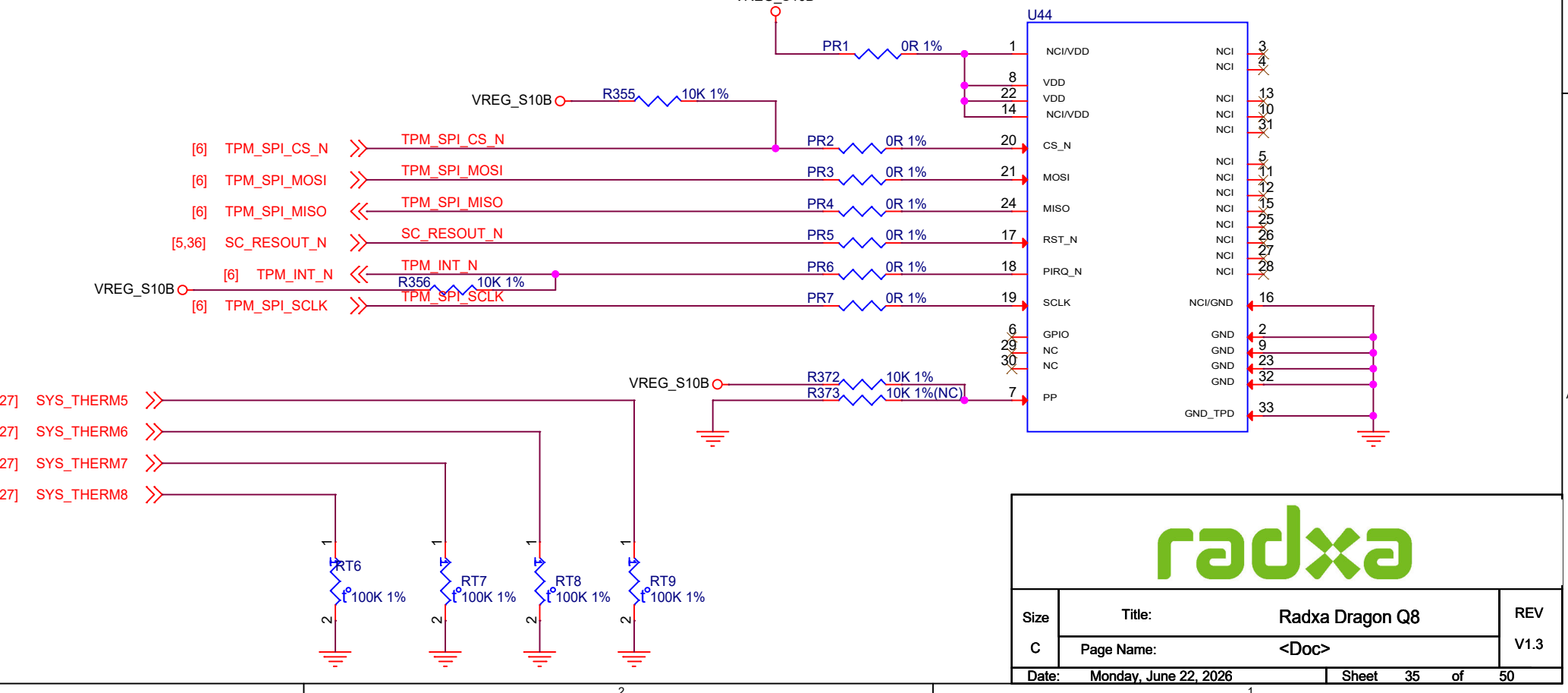
BAT_SEN

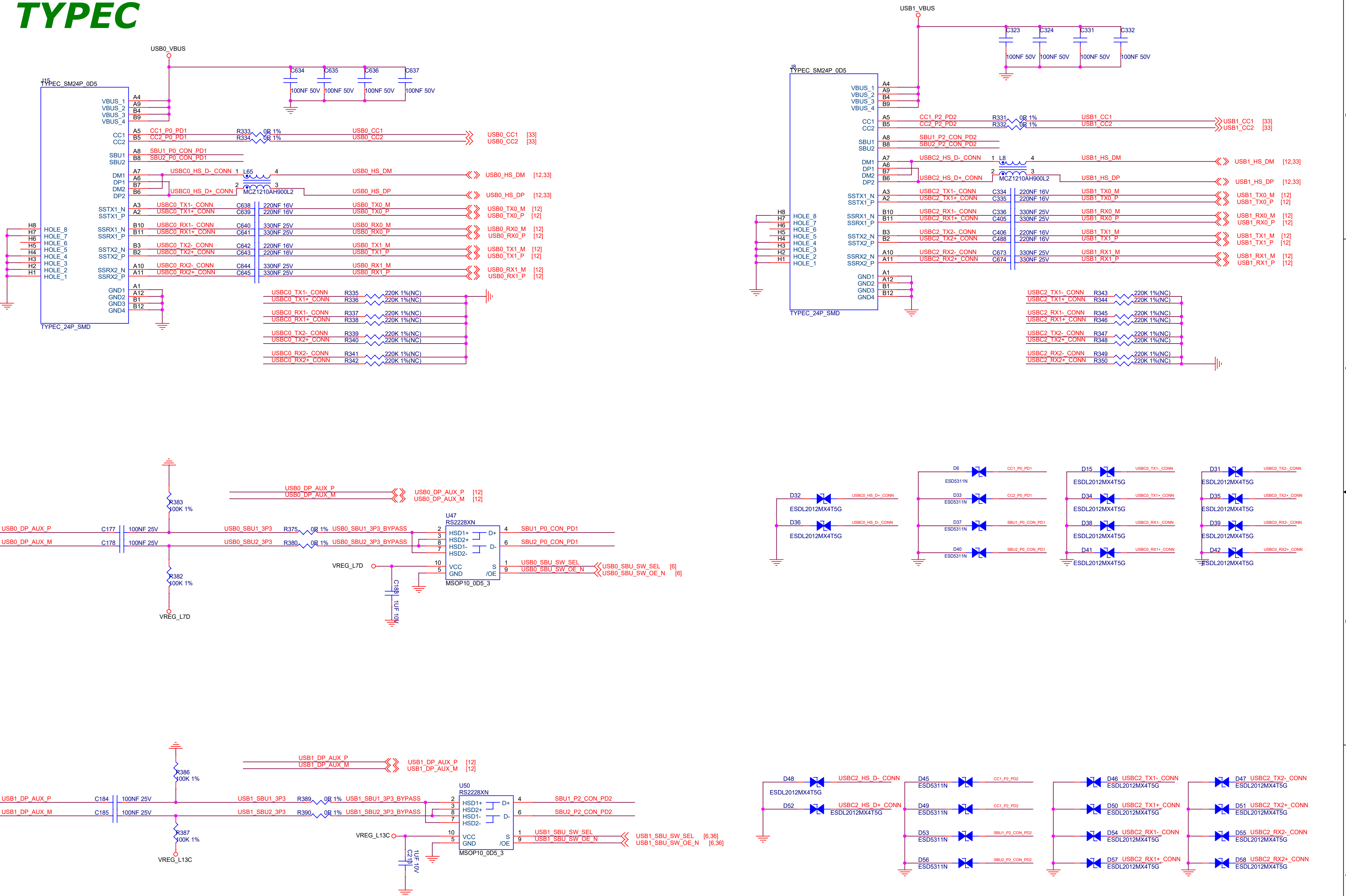


QSPI FLASH FOR BOOT



TPM

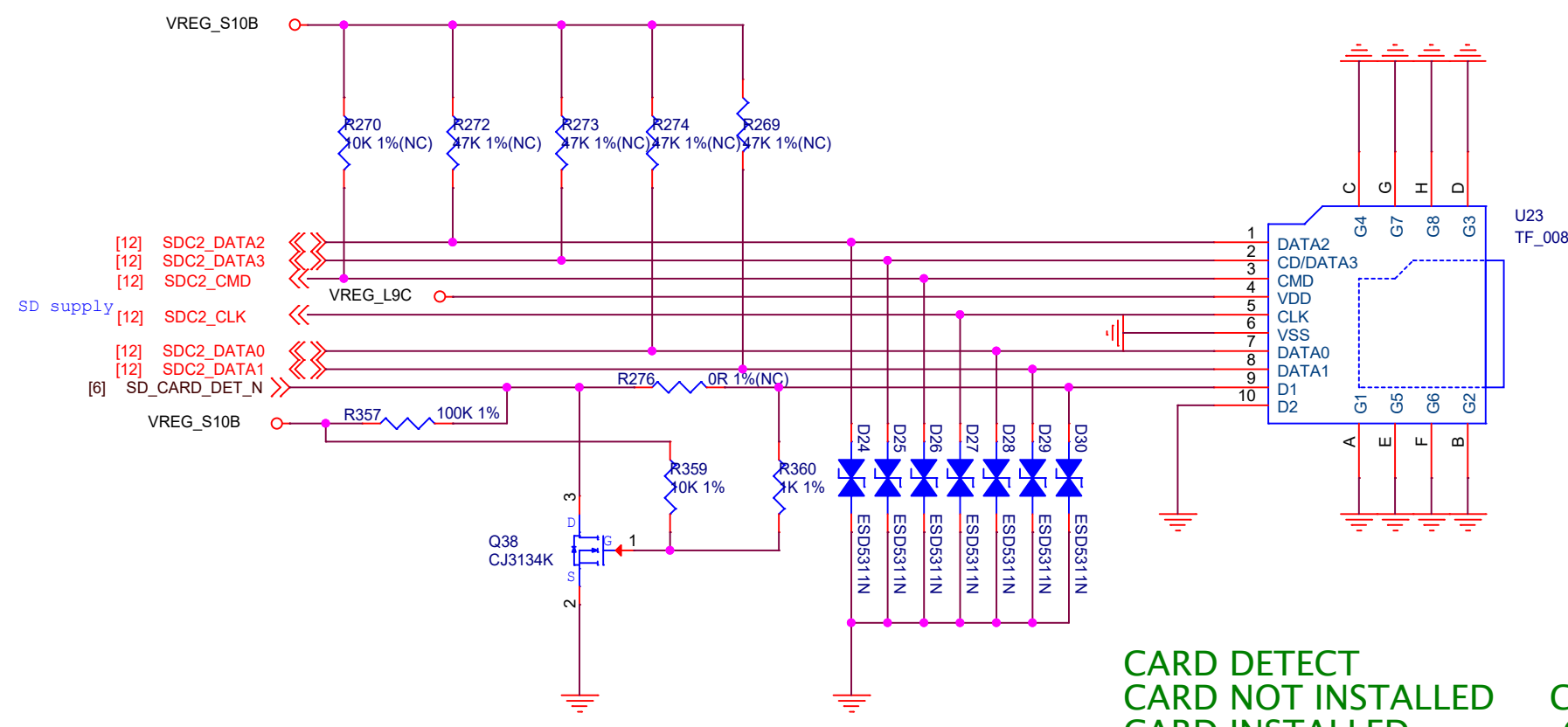
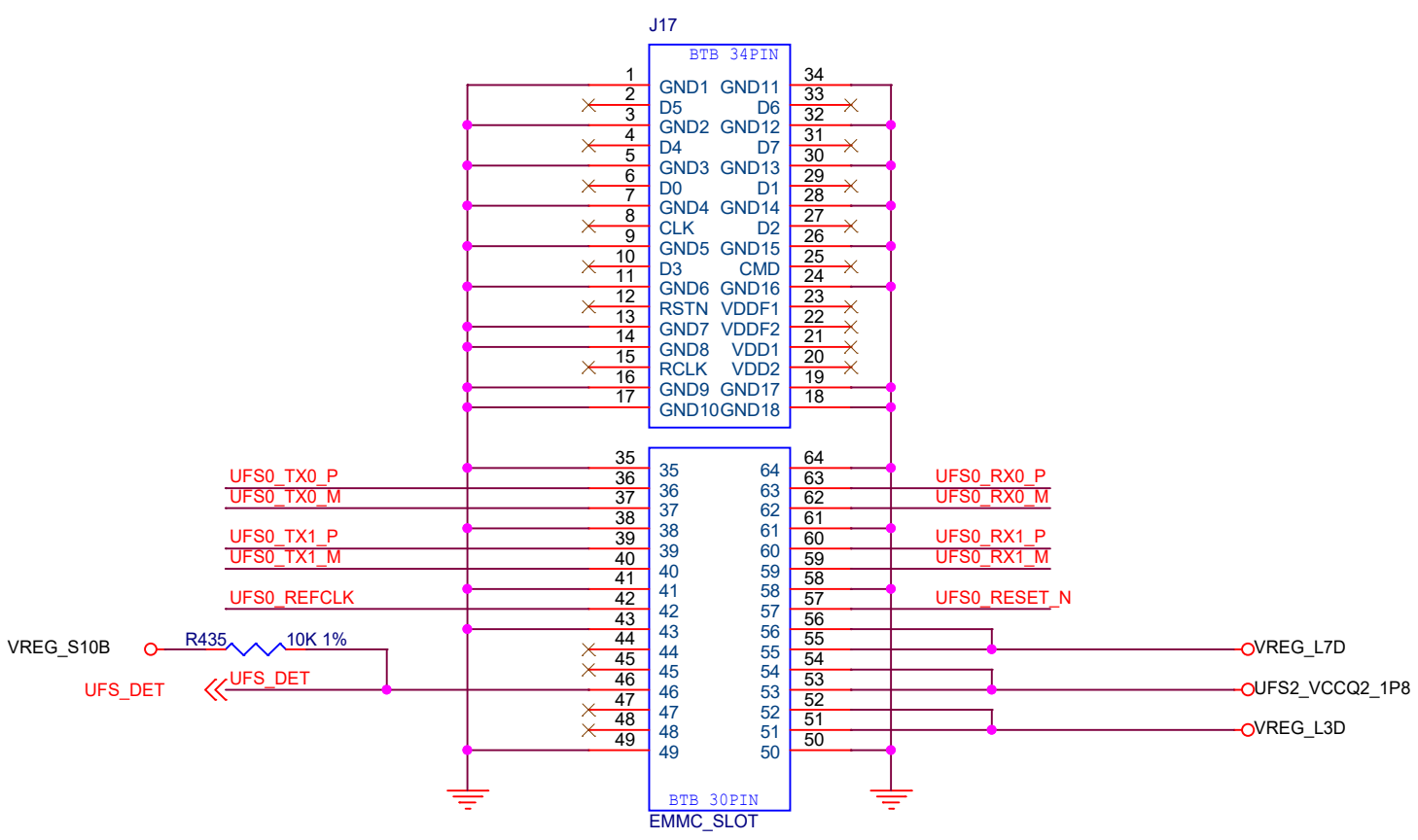
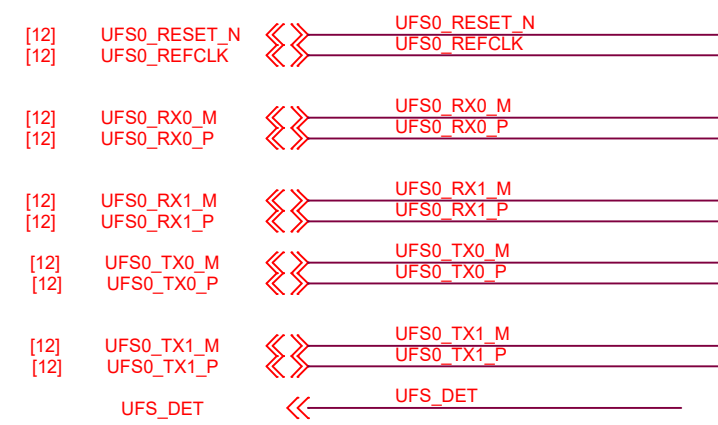




The image displays a complex PCB layout for a Radxa Dragon Q8 board. The layout is organized into several sections, each containing different components and their connections:

- Top Section:** Features a large microcontroller (U11) with numerous pins connected to various peripheral components. It includes a 10K 1% resistor (R426) and a 100NF 25V capacitor (C105).
- Middle Section:** Contains a microcontroller (U17) and a microcontroller (U43). It includes a 10K 1% resistor (R427) and a 100NF 25V capacitor (C106).
- Bottom Section:** Includes a microcontroller (U37) and a microcontroller (U4). It features a 10K 1% resistor (R421), a 100NF 25V capacitor (C105), and a 100NF 25V capacitor (C106).
- Right Section:** Shows a microcontroller (U14) and a microcontroller (U4). It includes a 10K 1% resistor (R427) and a 100NF 25V capacitor (C106).
- Left Section:** Contains a microcontroller (U11) and a microcontroller (U17). It includes a 10K 1% resistor (R426) and a 100NF 25V capacitor (C105).
- Bottom Left Section:** Features a microcontroller (U37) and a microcontroller (U4). It includes a 10K 1% resistor (R421), a 100NF 25V capacitor (C105), and a 100NF 25V capacitor (C106).
- Bottom Right Section:** Includes a microcontroller (U37) and a microcontroller (U4). It features a 10K 1% resistor (R421), a 100NF 25V capacitor (C105), and a 100NF 25V capacitor (C106).

The layout is color-coded and includes a legend for component values and pin connections. The Radxa logo is visible in the bottom right corner.



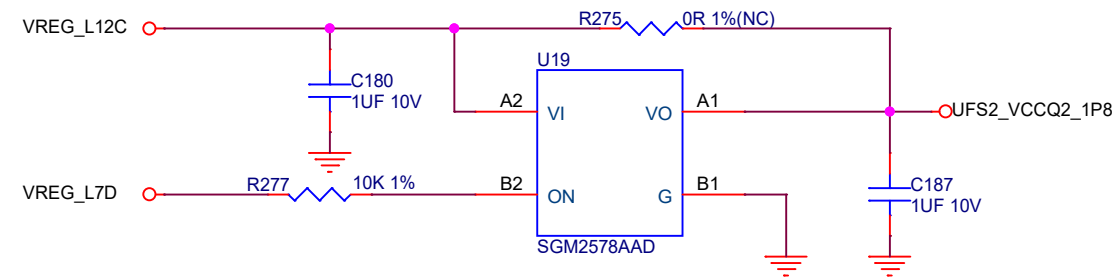
CARD DETECT

CARD NOT INSTALLED

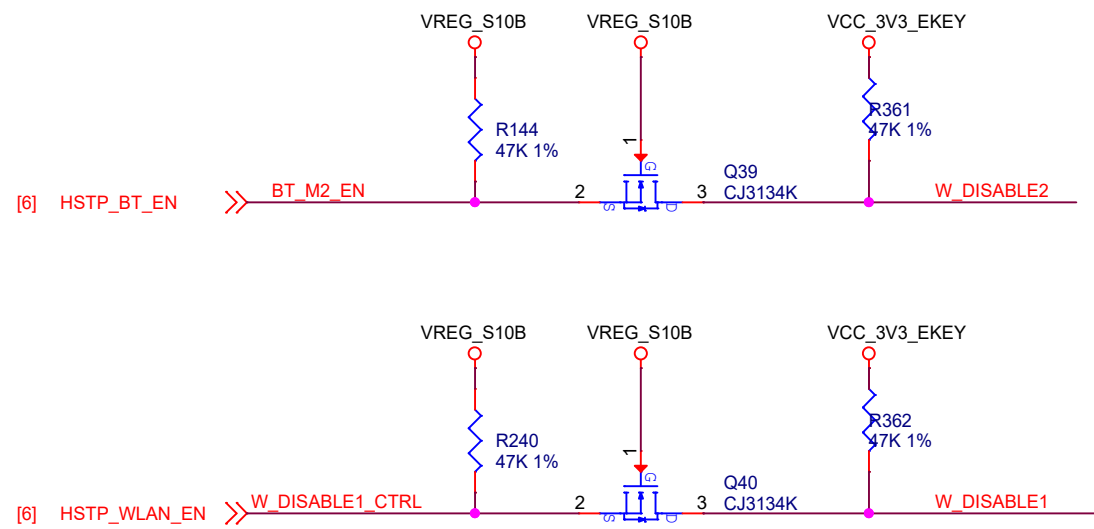
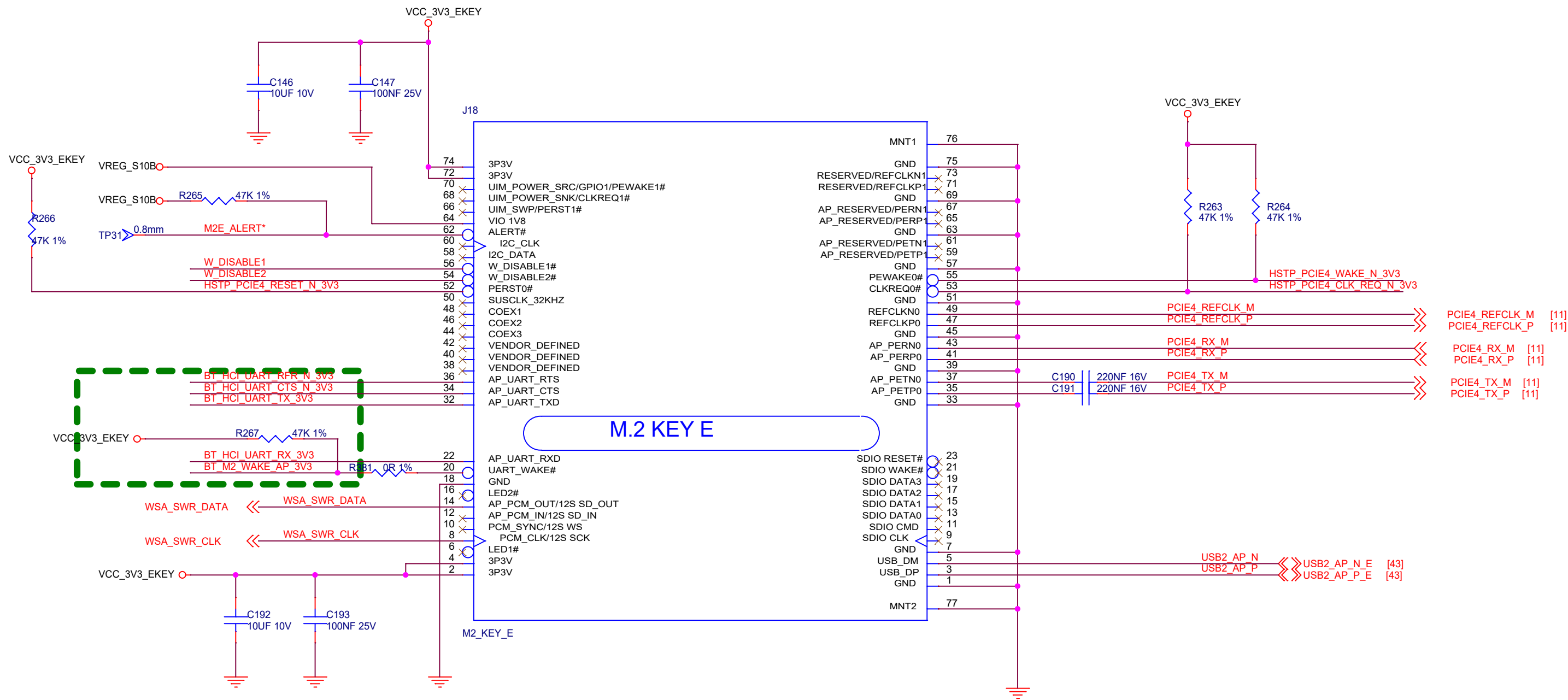
CARD INSTALLED

CASE CLOSED (GND)

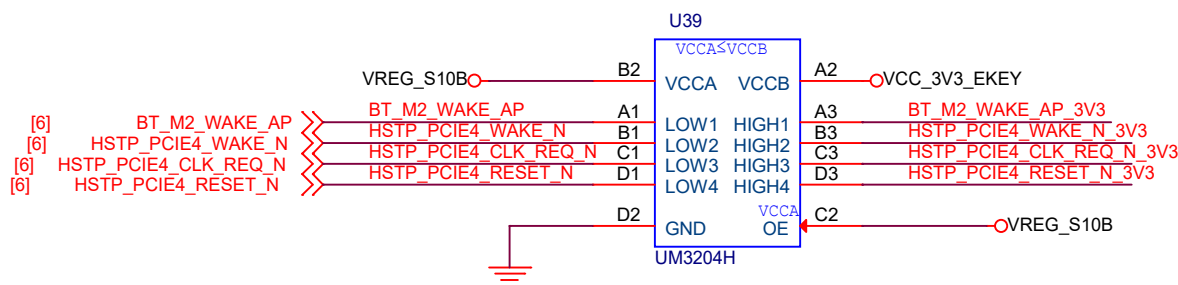
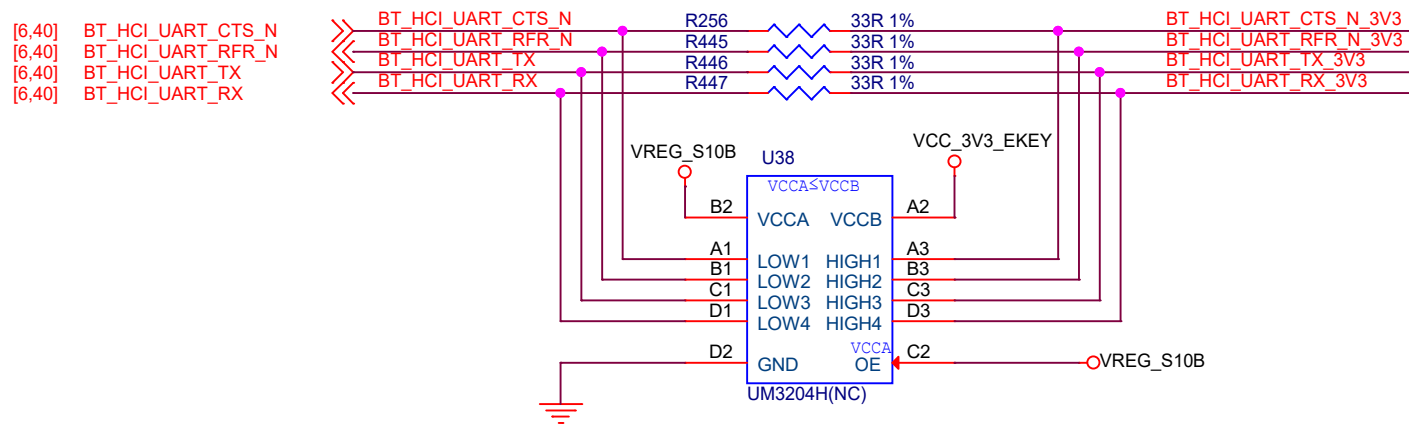
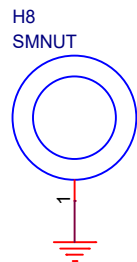
CASE OPEN (FLOATING)



M.2 EKEY



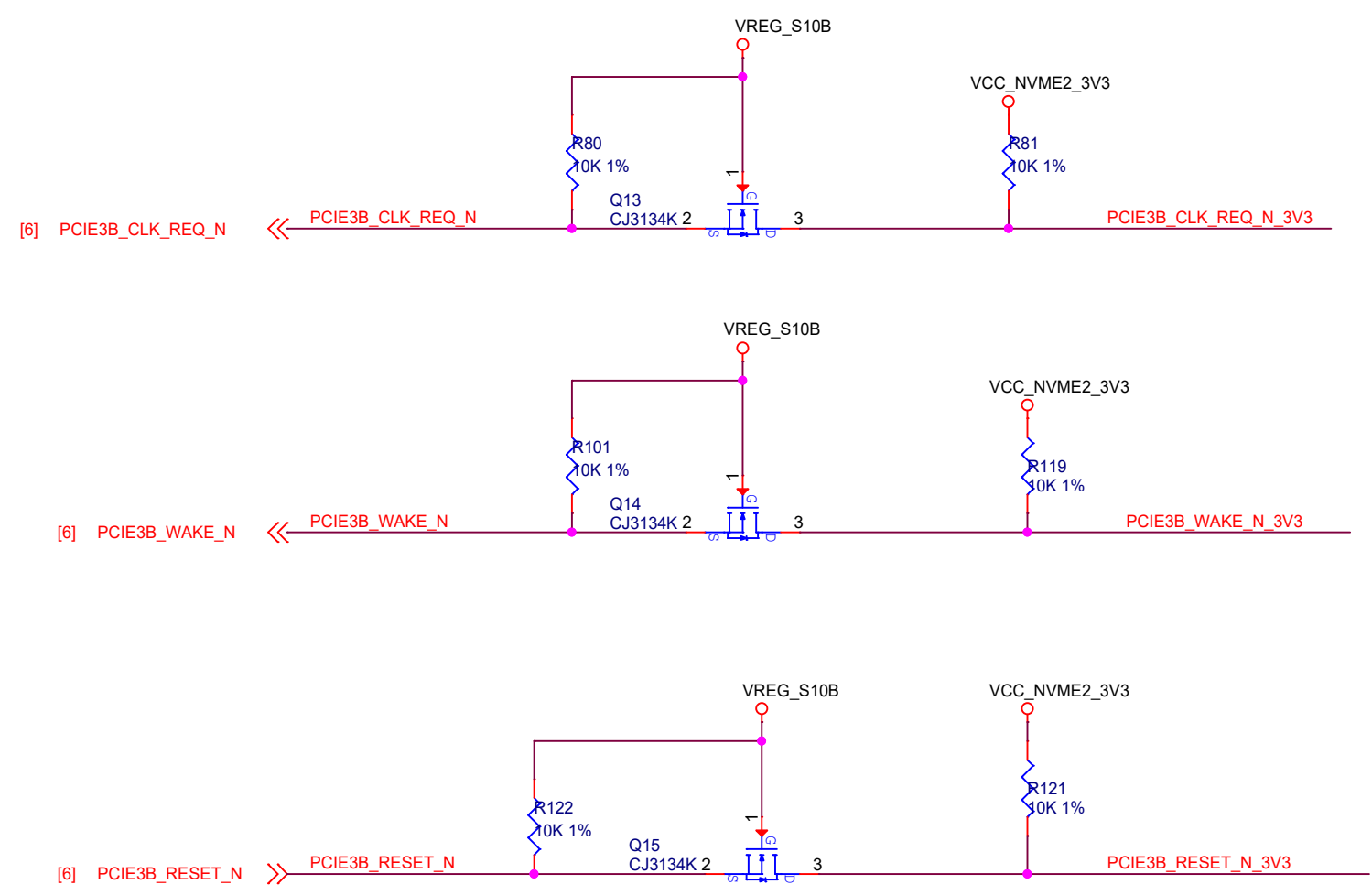
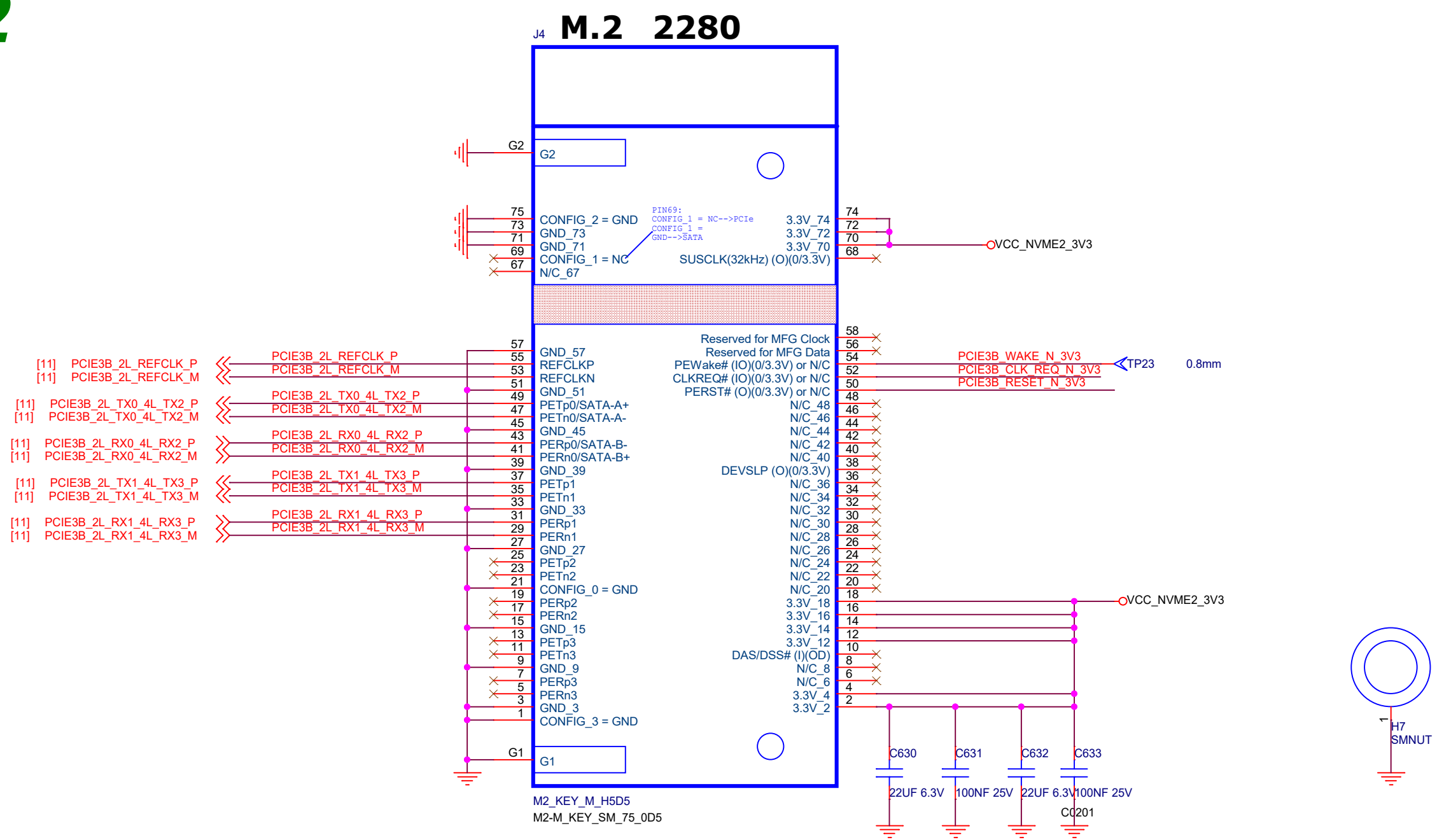
M2 J15_HOLE

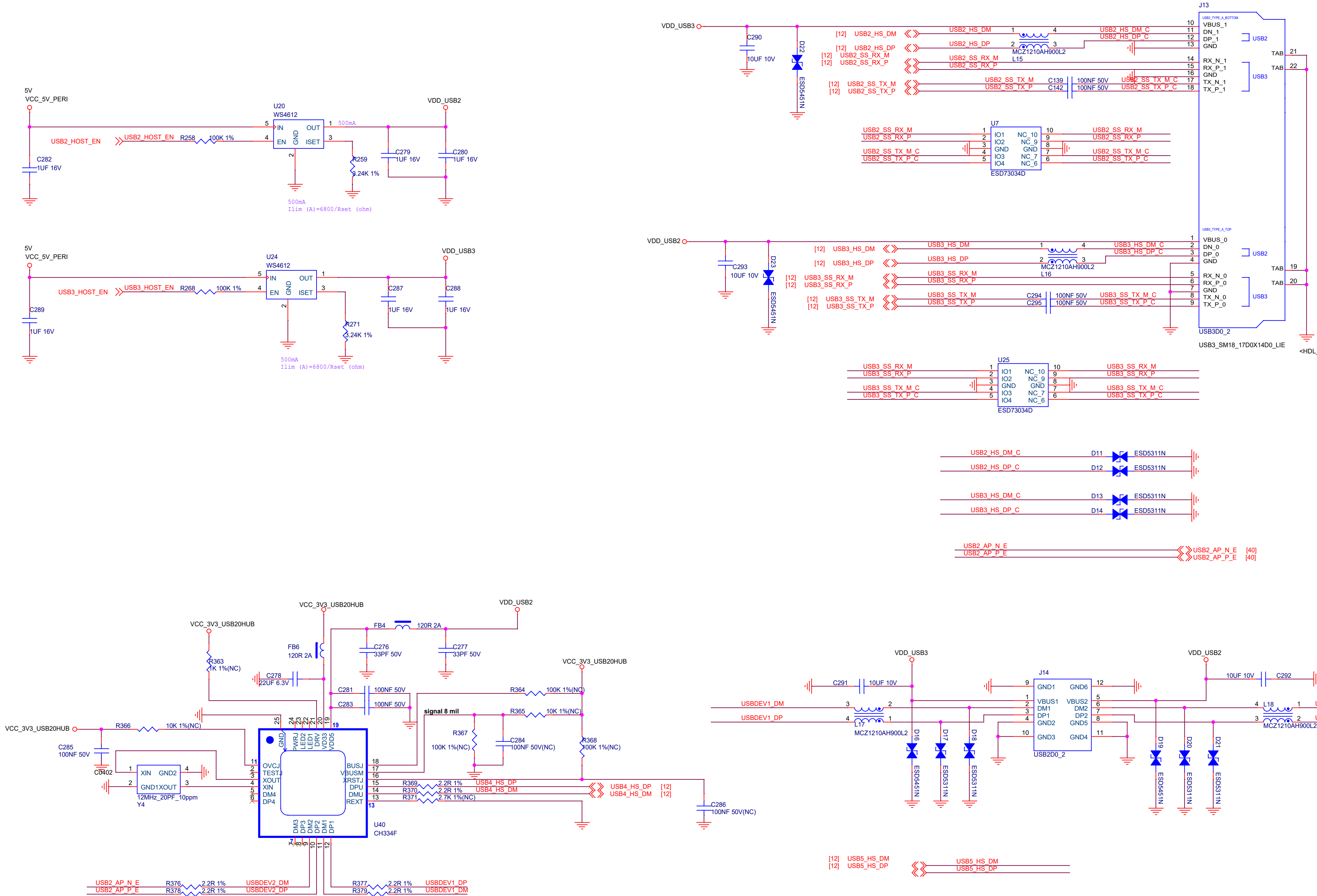


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M.2_M-KEY_2





DP TO HDMI

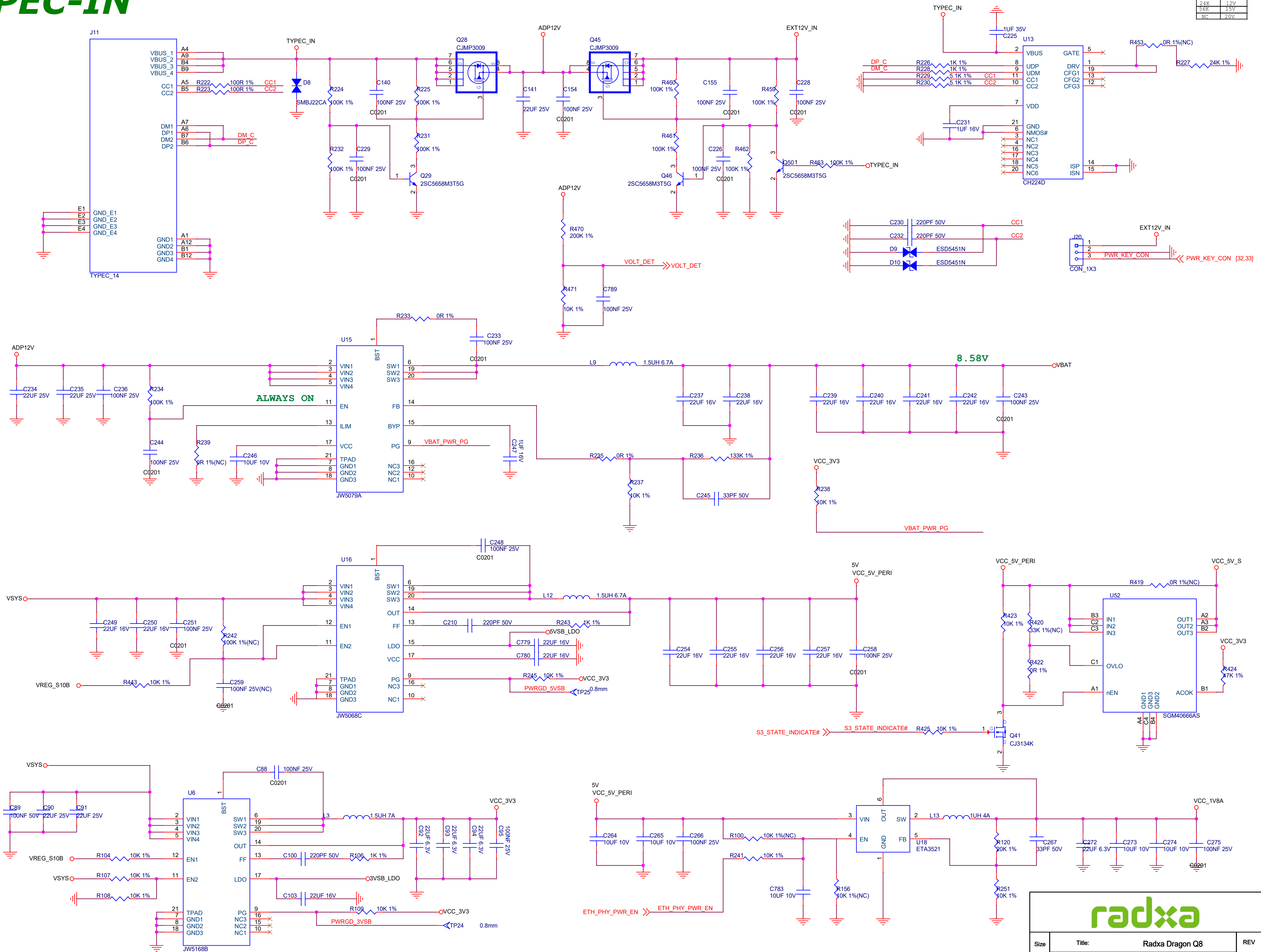
This schematic diagram illustrates the DP to HDMI interface circuit for the Radxa Dragon Q8. The central component is the QFN68_0D4_8, which is connected to various power and signal lines.

Power Management:

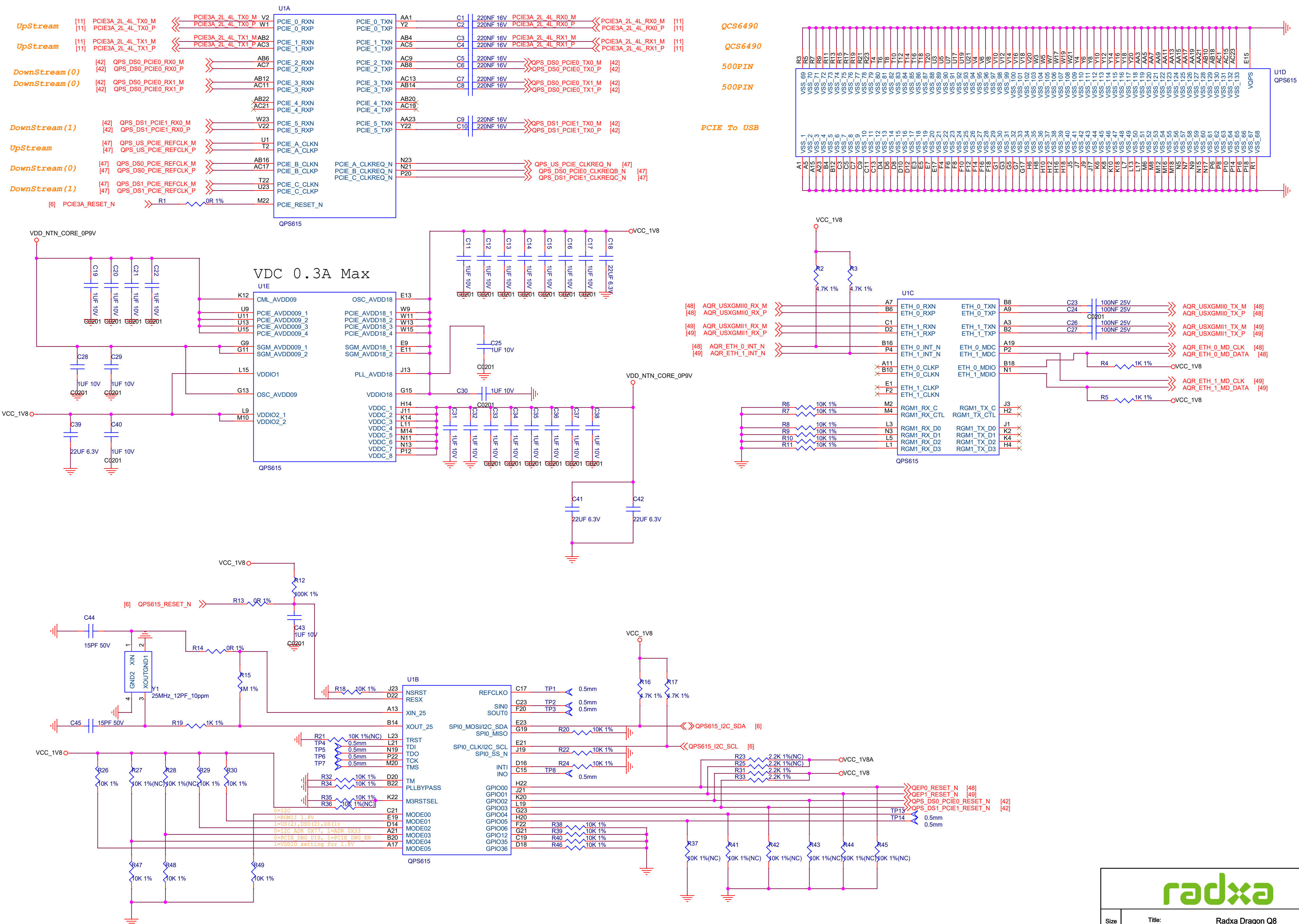
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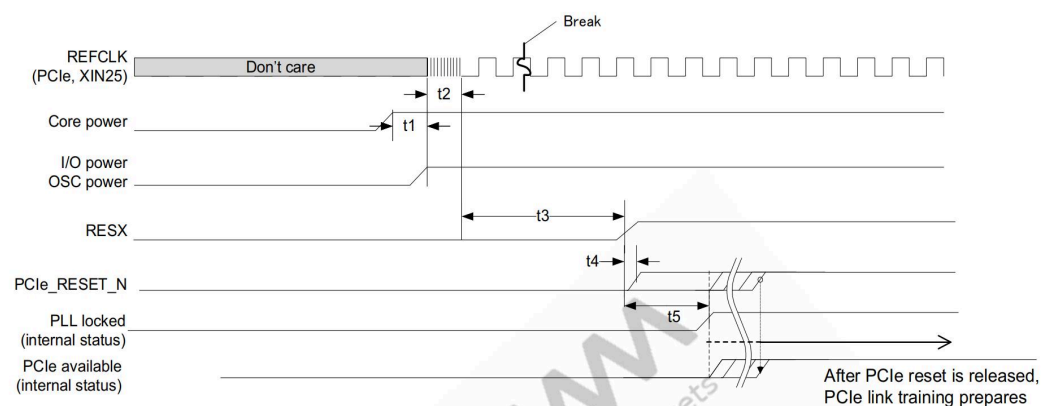
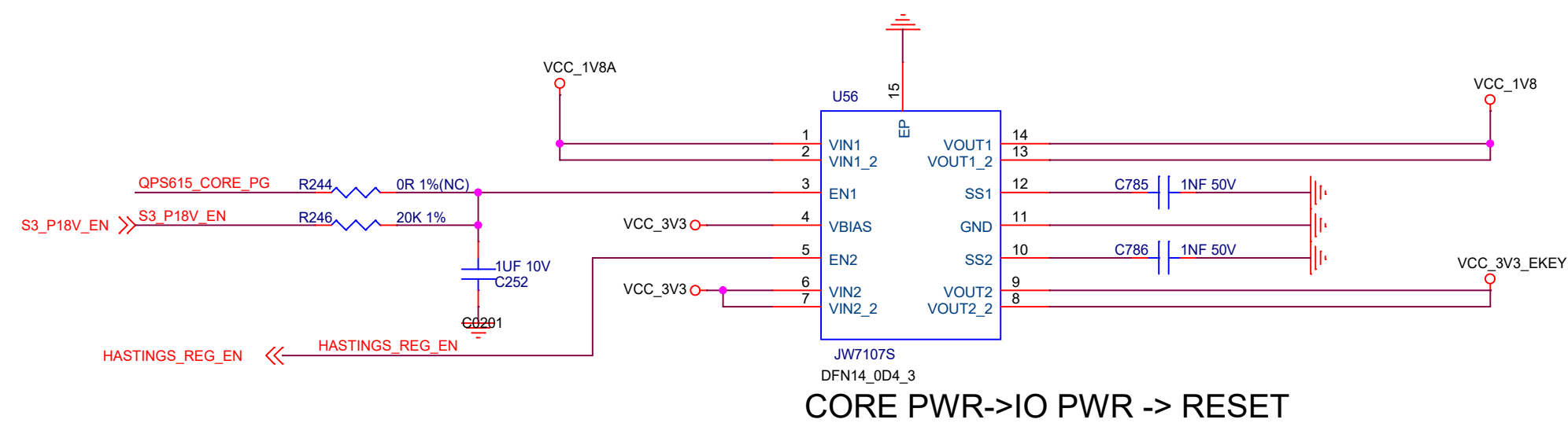
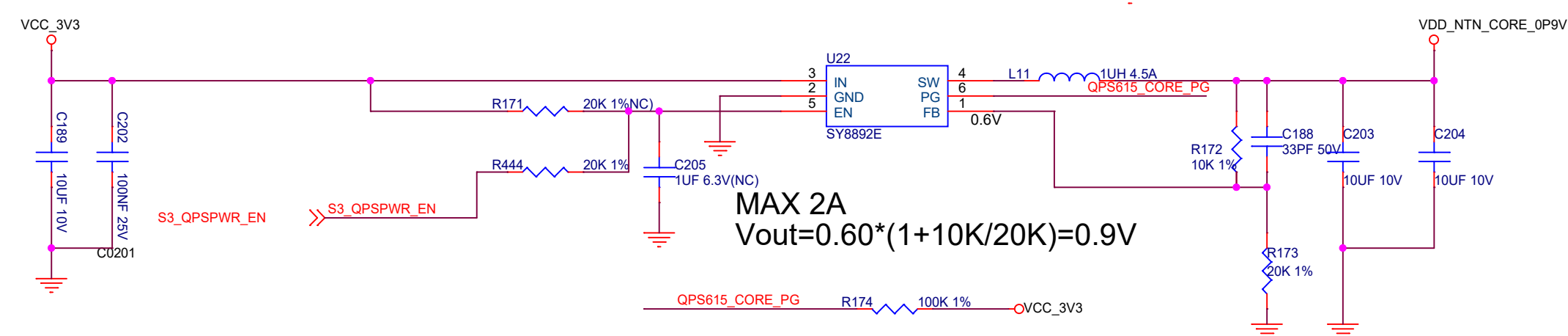
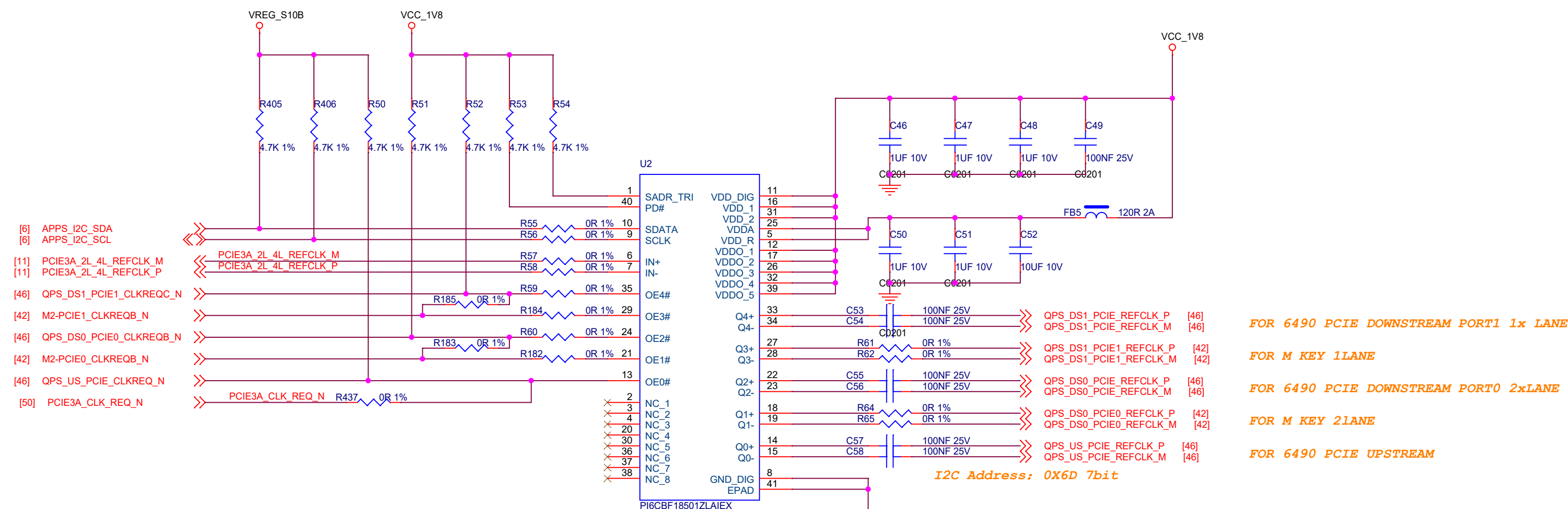
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NC	20V



PCIE BRIDGE



PCIE BRIDGE_2



ETH_2.5G_0

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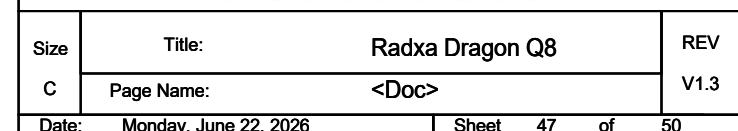
radxa

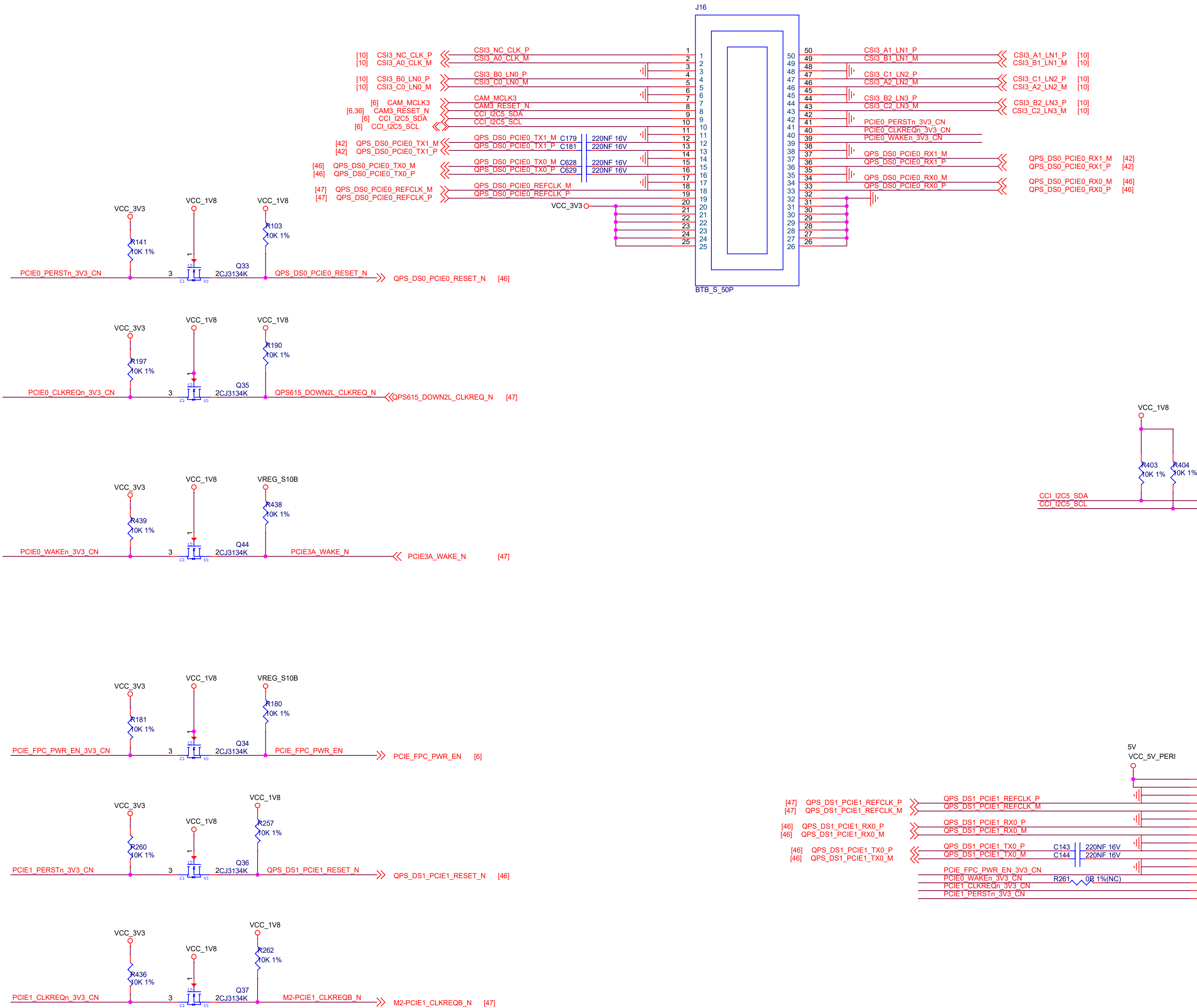
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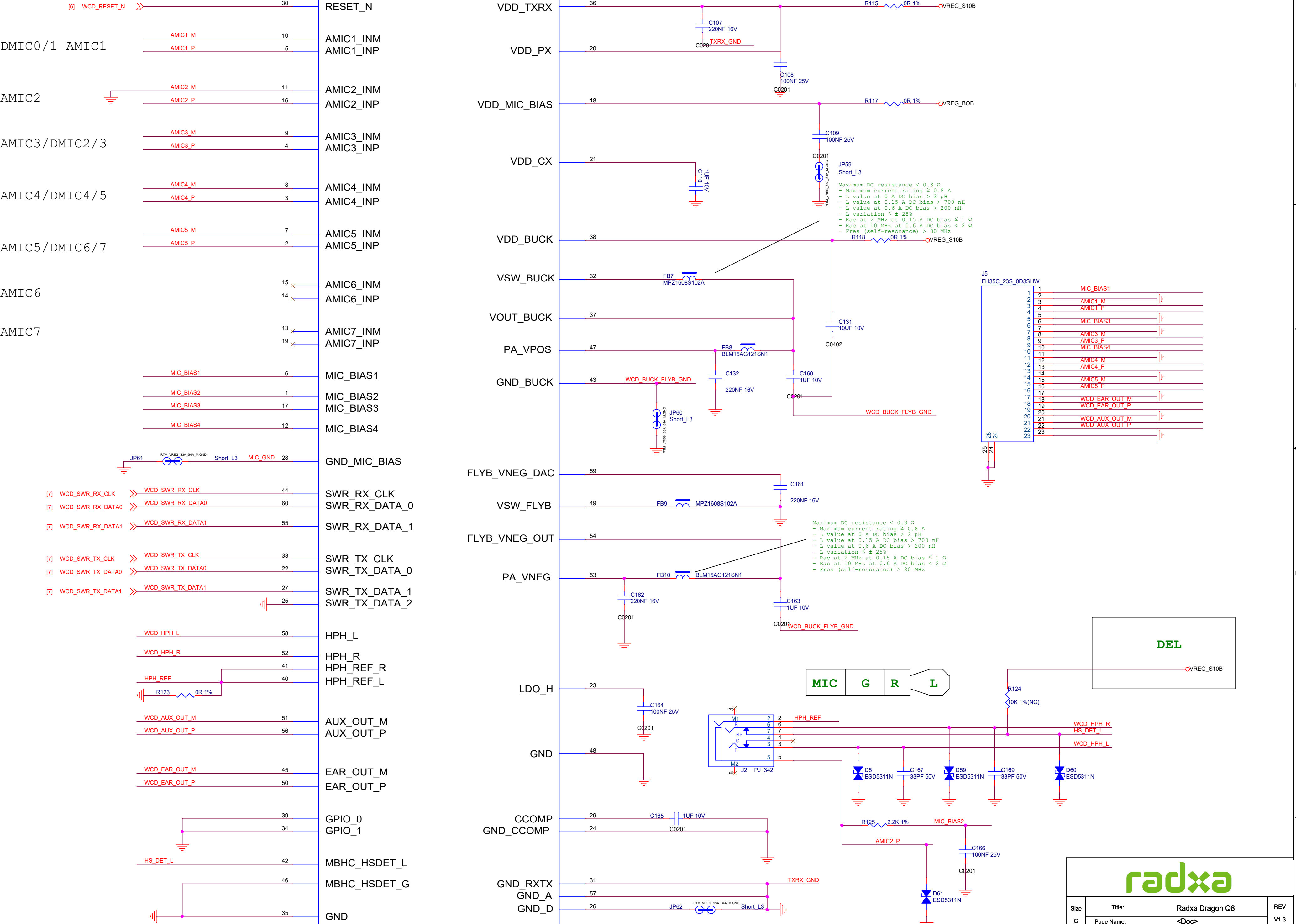
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