



# Radxa X5

V1.2

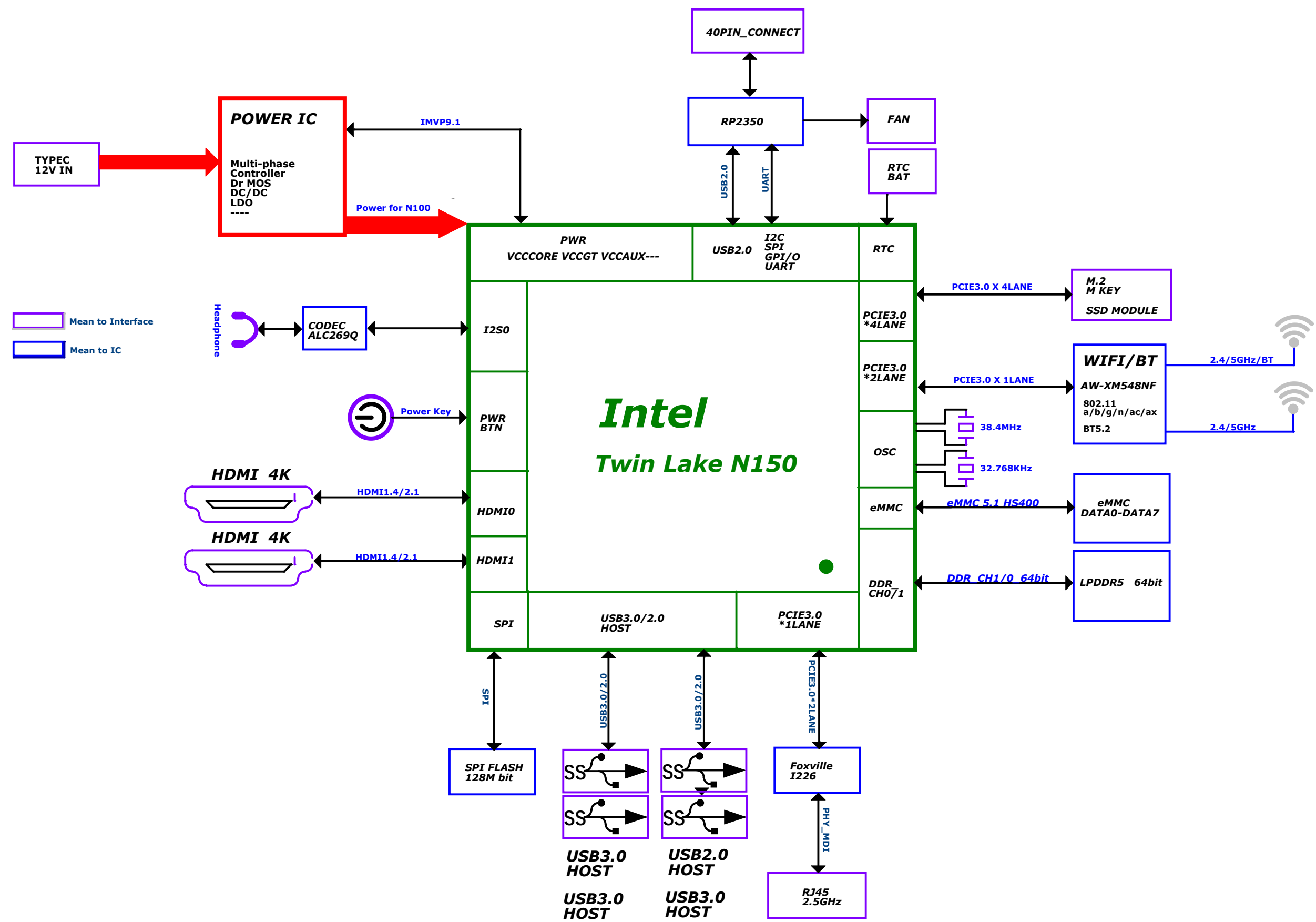
schematic



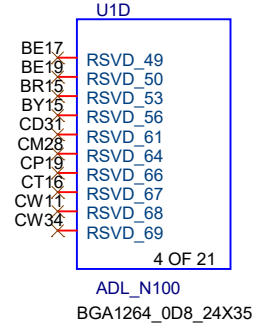
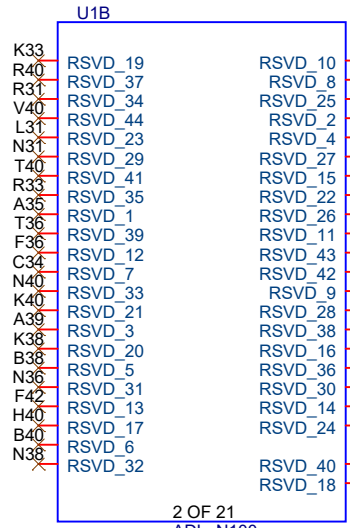
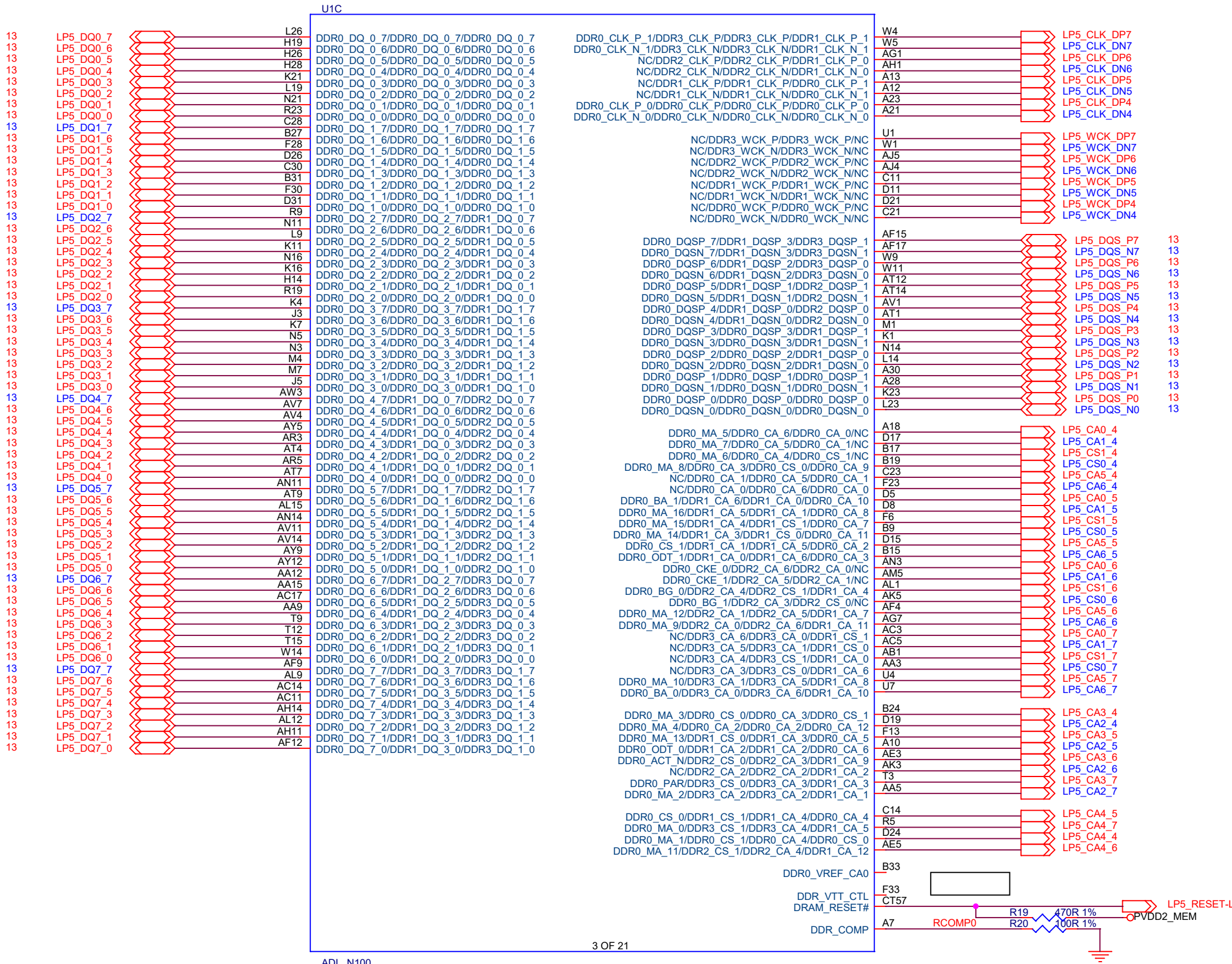
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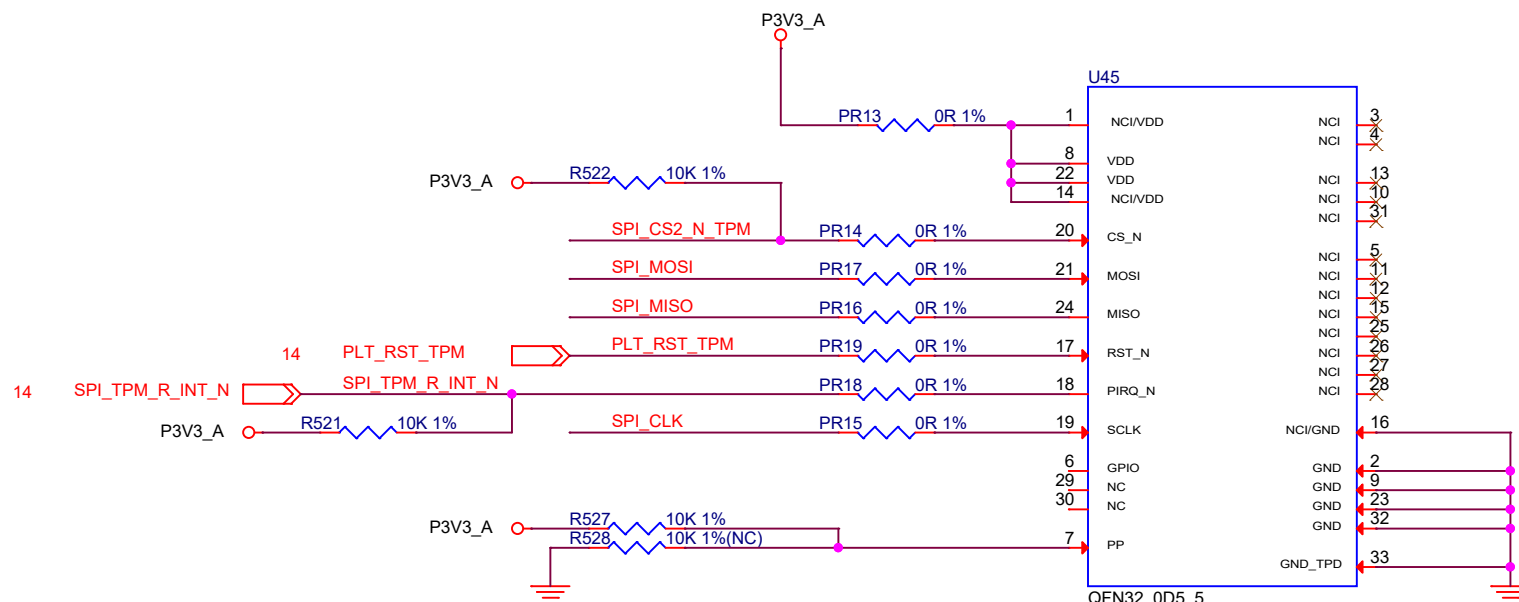
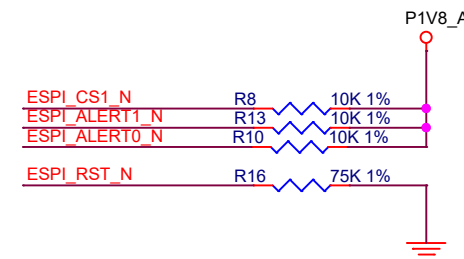
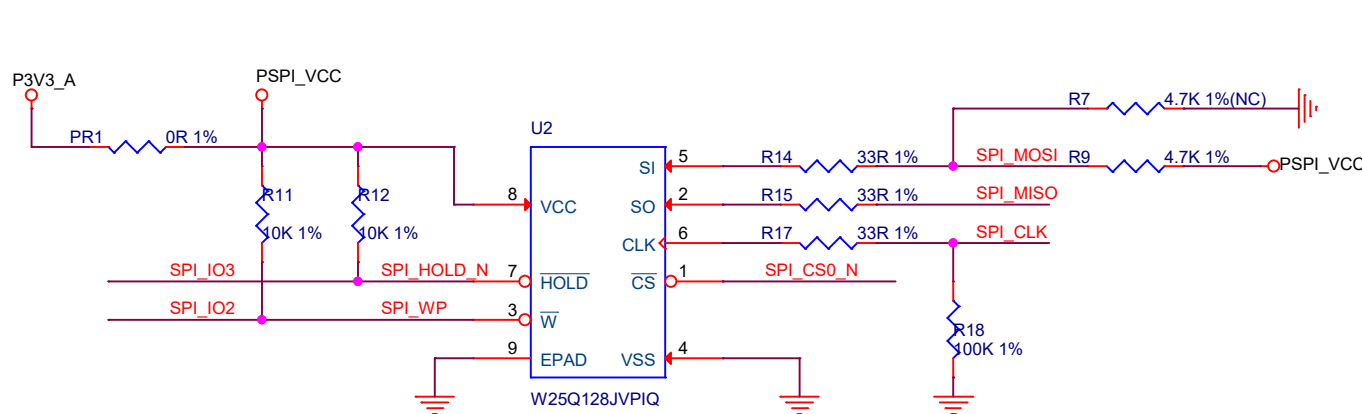
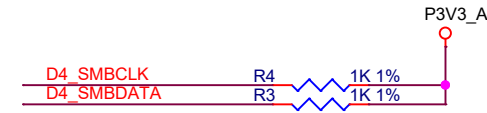
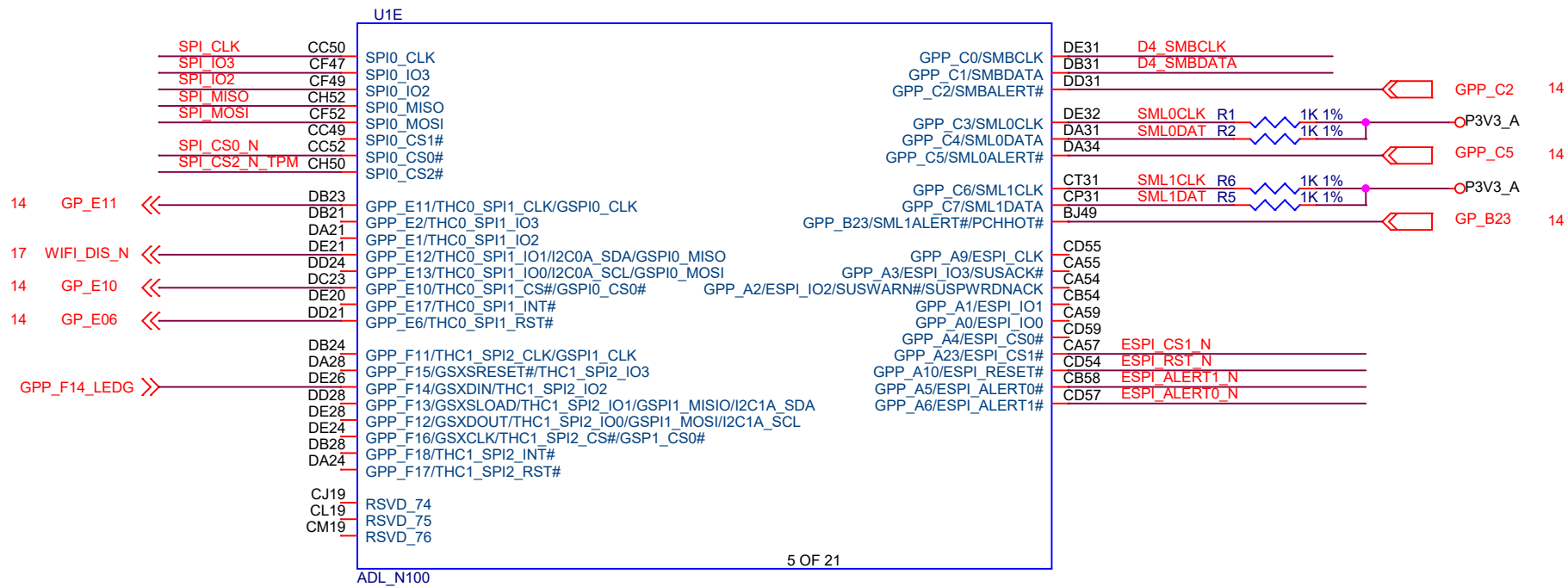
# X5 Block Diagram



CPU DDRC



# SPI AND JTAG



radxa

|       |                            |               |
|-------|----------------------------|---------------|
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| A3    | Page Name: 03 SPI AND JTAG | V1.2          |
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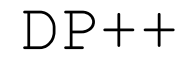
## DISPLAY

### DDI Port Signal Mapping for HDMI / DP

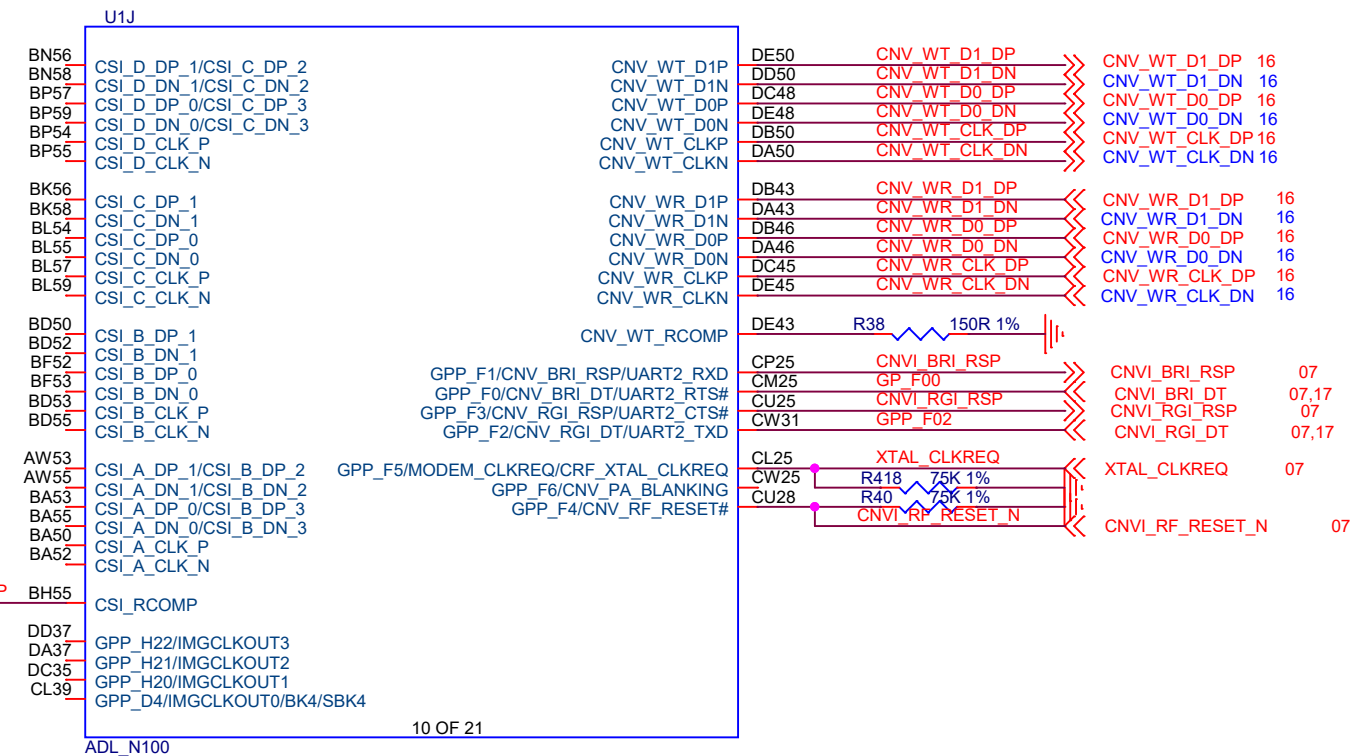
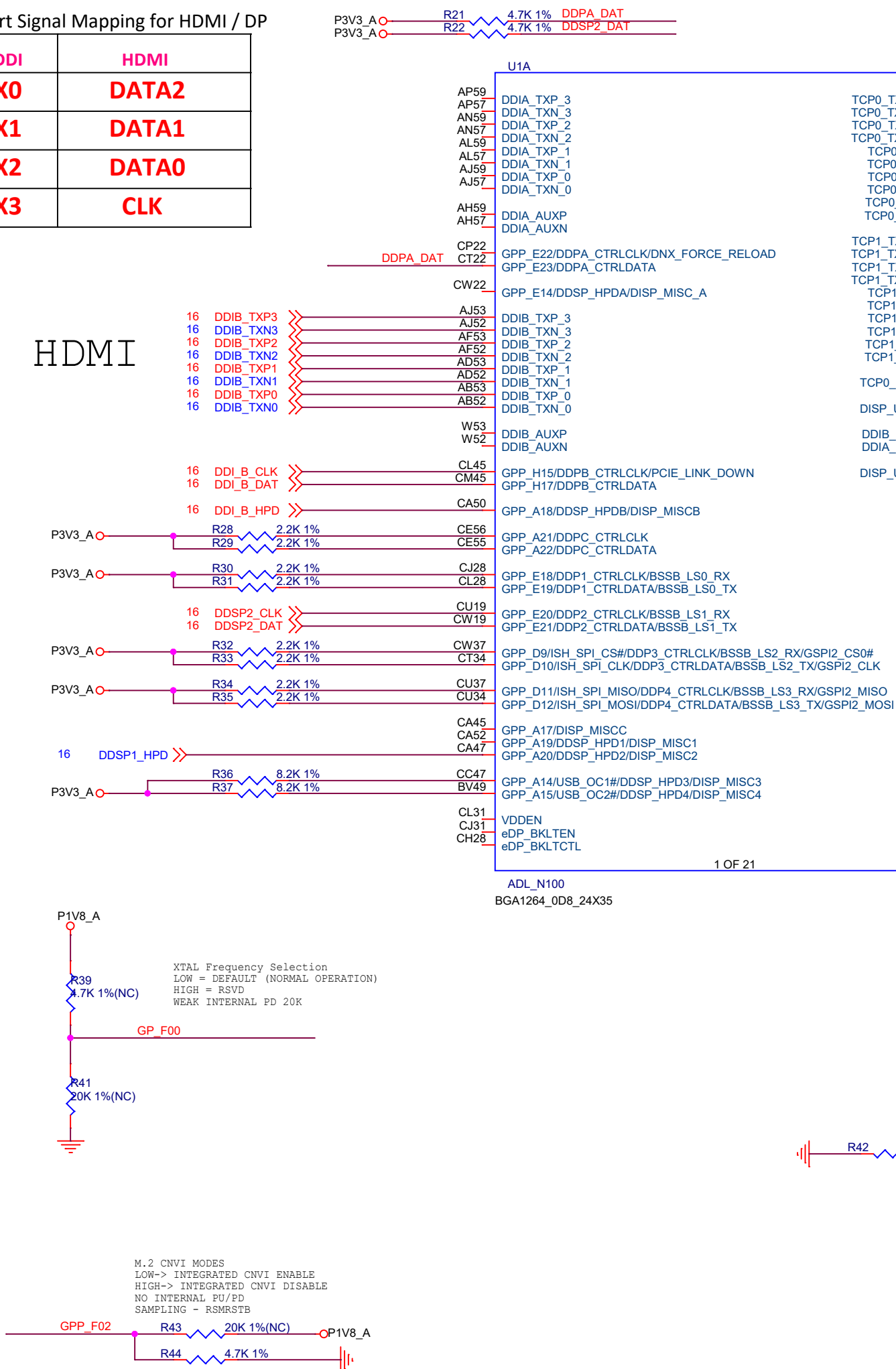
| DDI        | HDMI         |
|------------|--------------|
| <b>TX0</b> | <b>DATA2</b> |
| <b>TX1</b> | <b>DATA1</b> |
| <b>TX2</b> | <b>DATA0</b> |
| <b>TX3</b> | <b>CLK</b>   |

## TCP Port Signal Mapping for HDMI / DP

| TCP   | HDMI  | DP    |
|-------|-------|-------|
| TX0   | DATA2 | LANE0 |
| TX1   | DATA0 | LANE2 |
| TXRX0 | DATA1 | LANE1 |
| TXRX1 | CLK   | LANE3 |

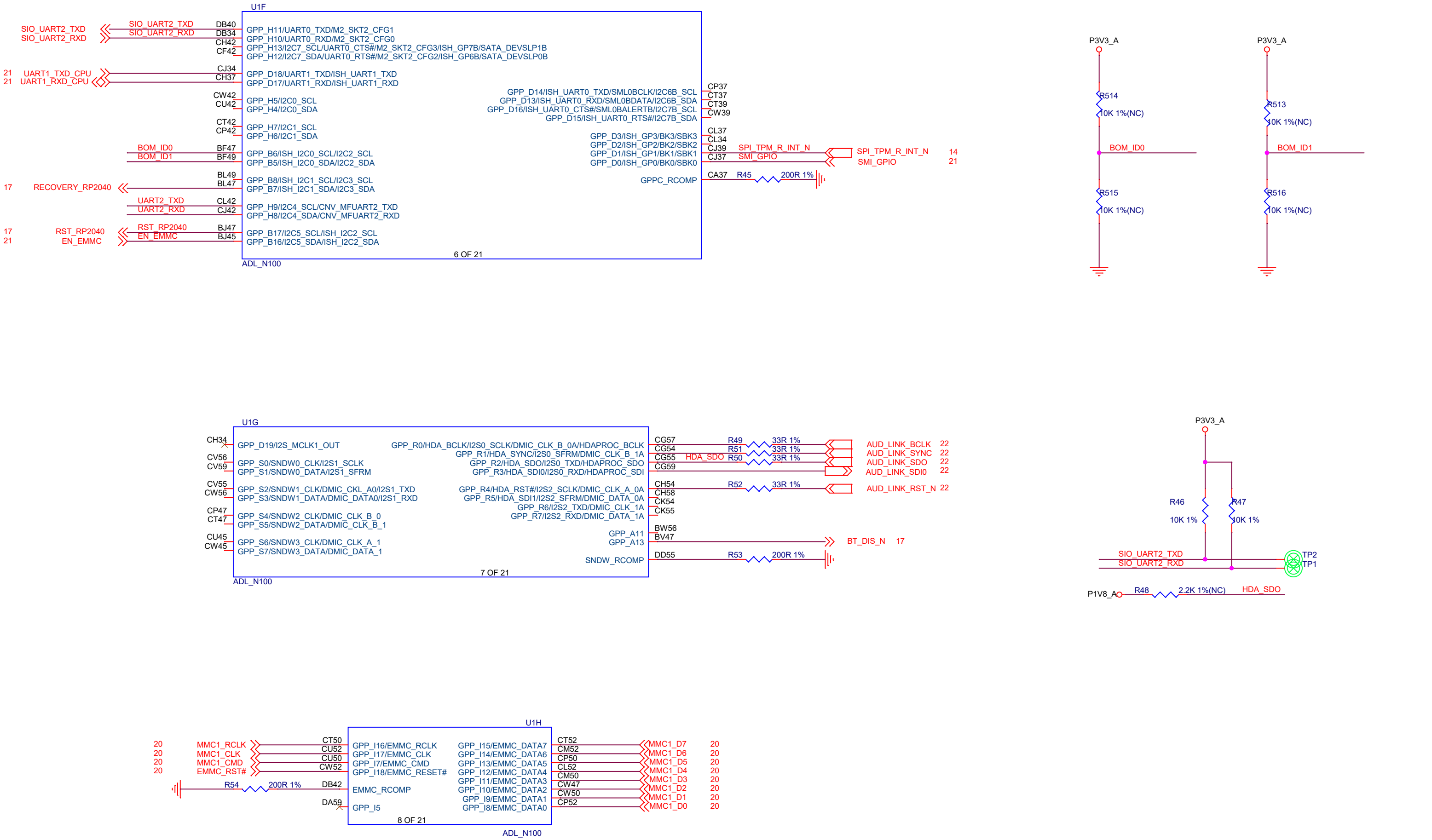


HDMI

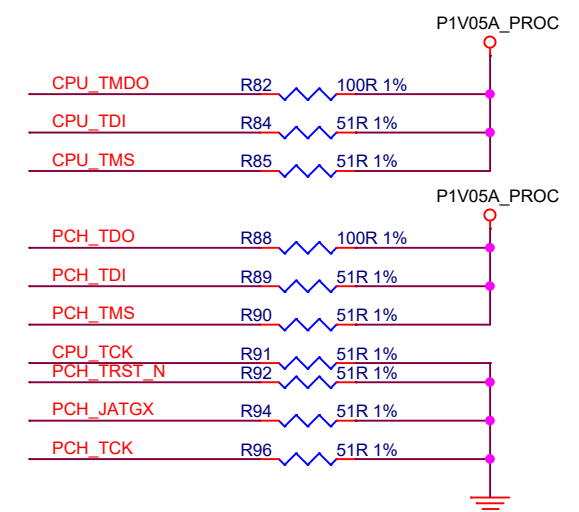
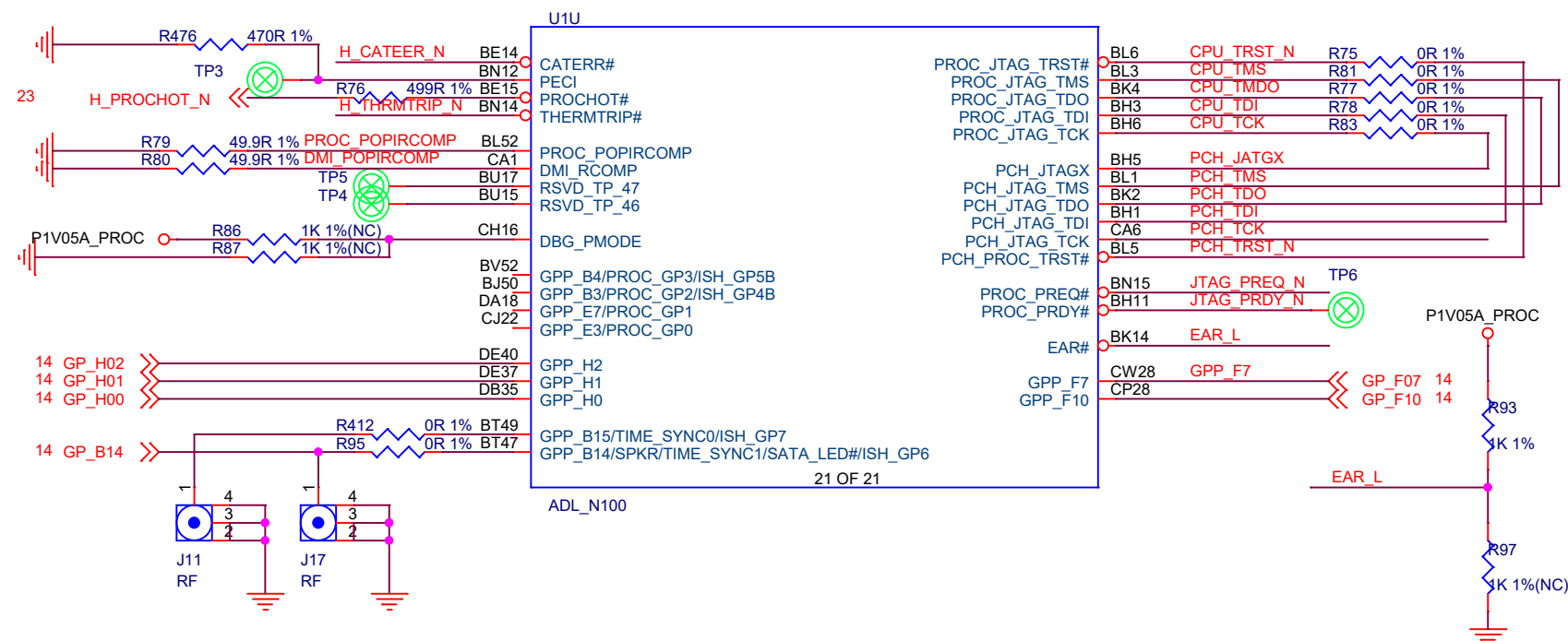
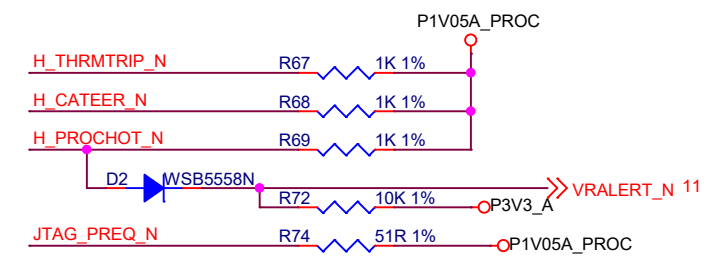
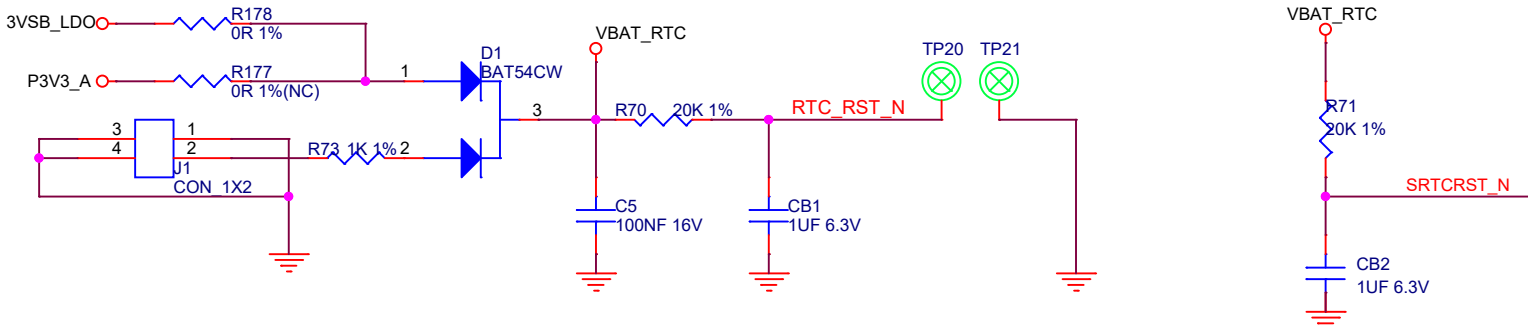
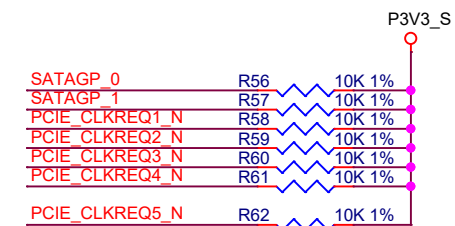
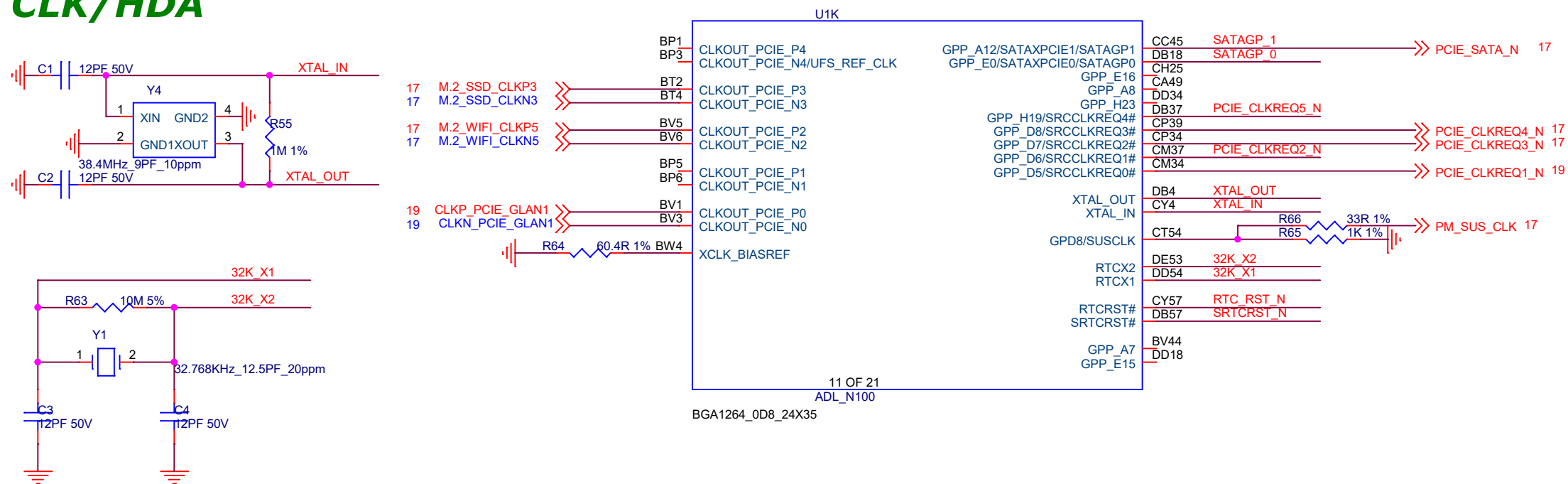


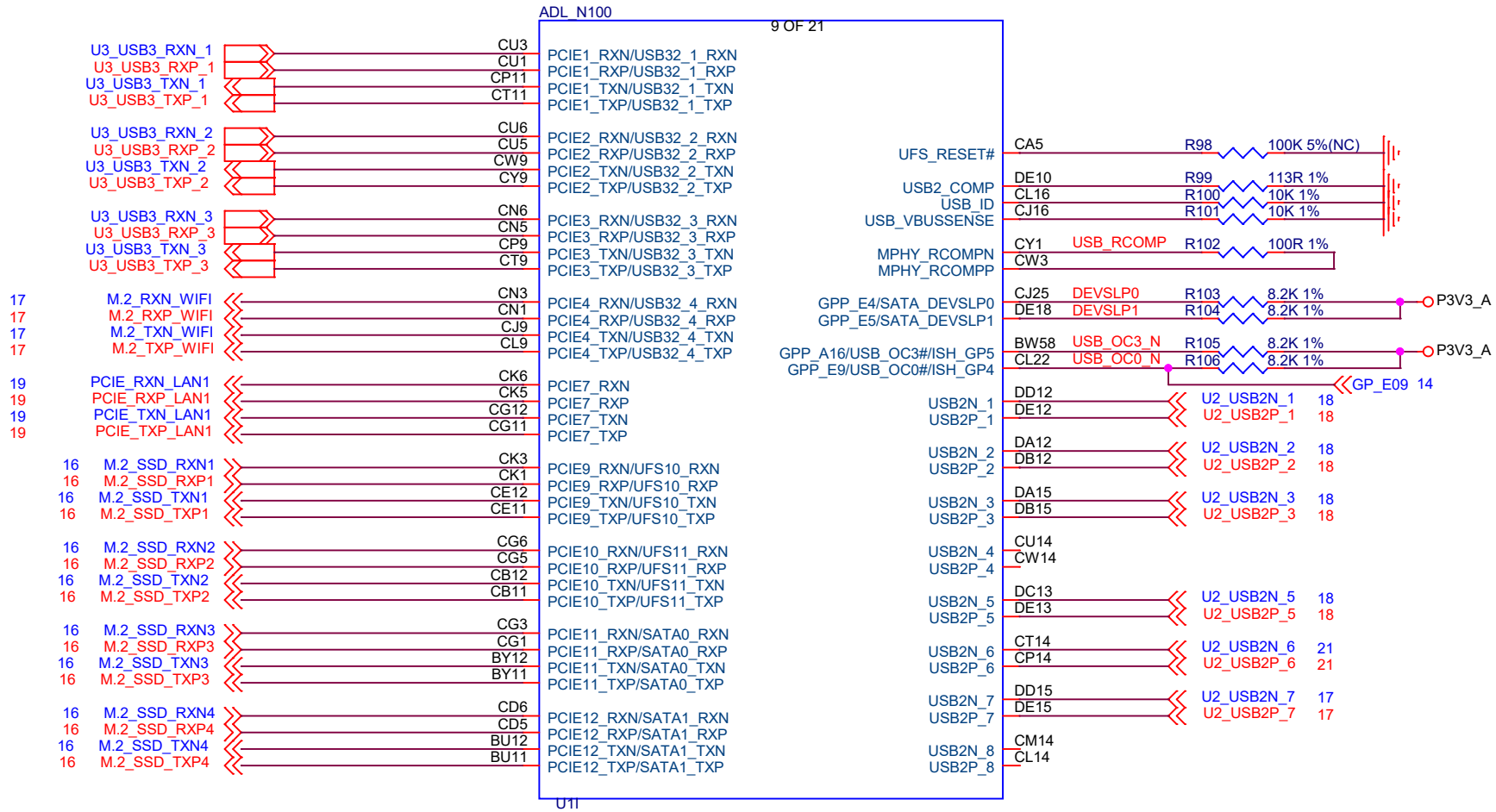
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| Size<br>A3                       | Title: Radxa X5       | REV<br>V1.2   |
|                                  | Page Name: 05 DISPLAY |               |
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PSE\_GBE



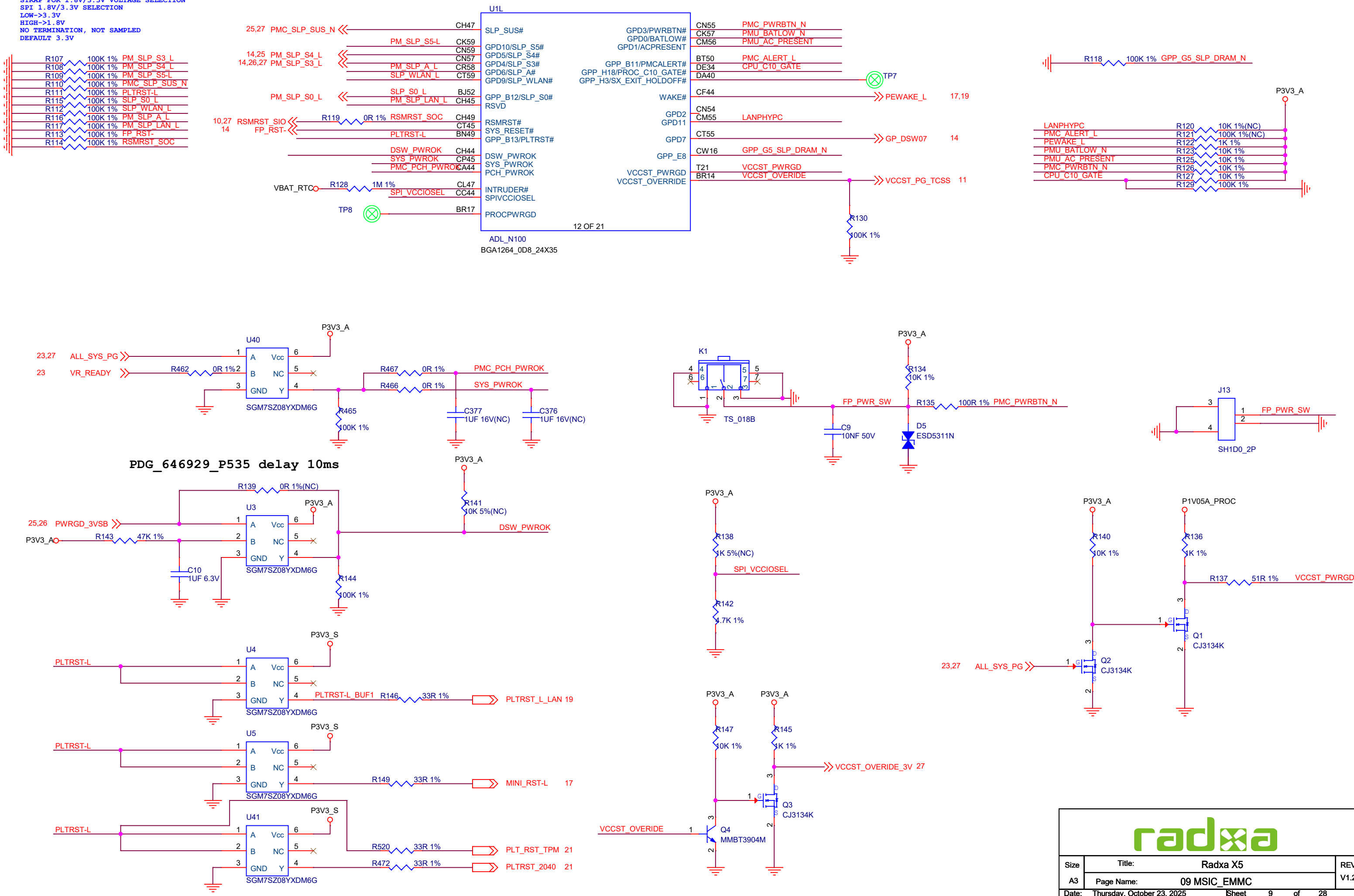
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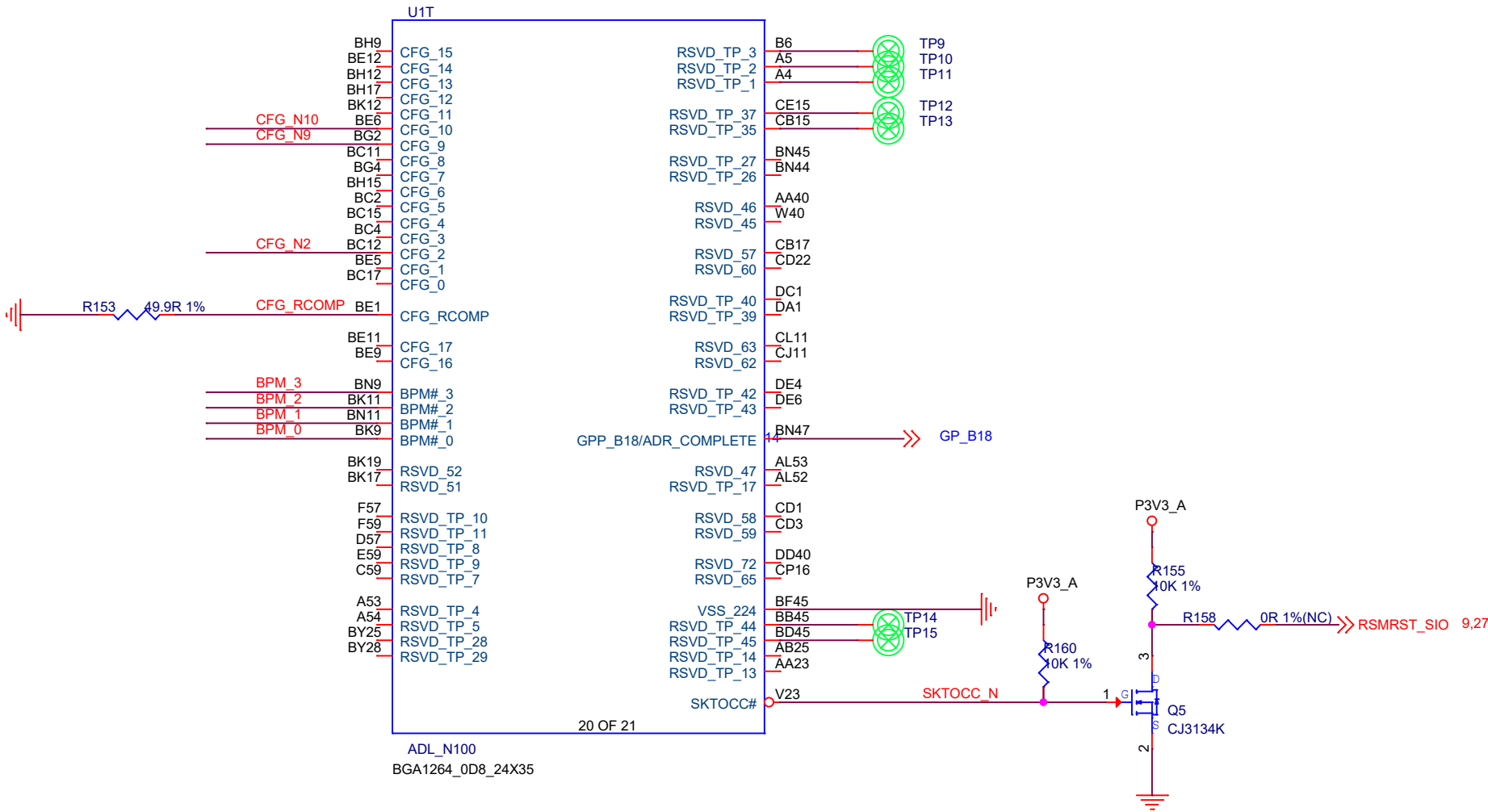
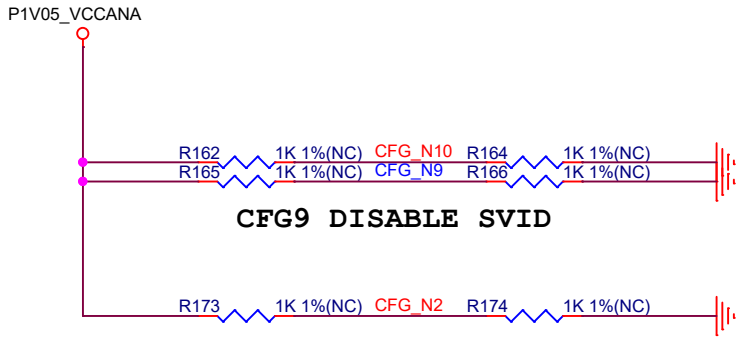
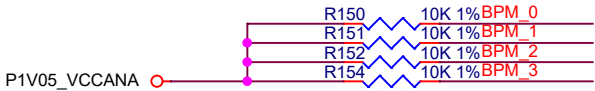
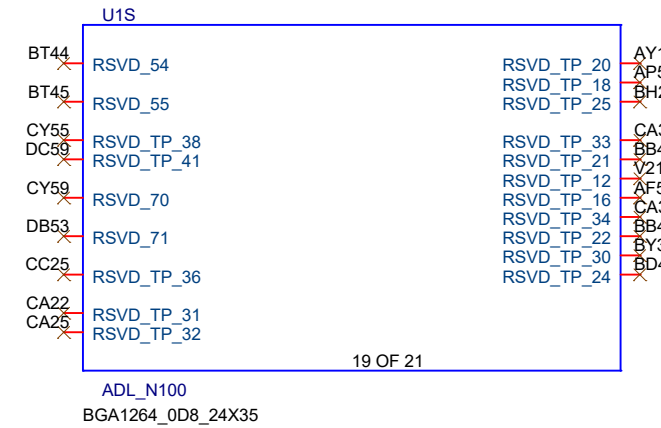




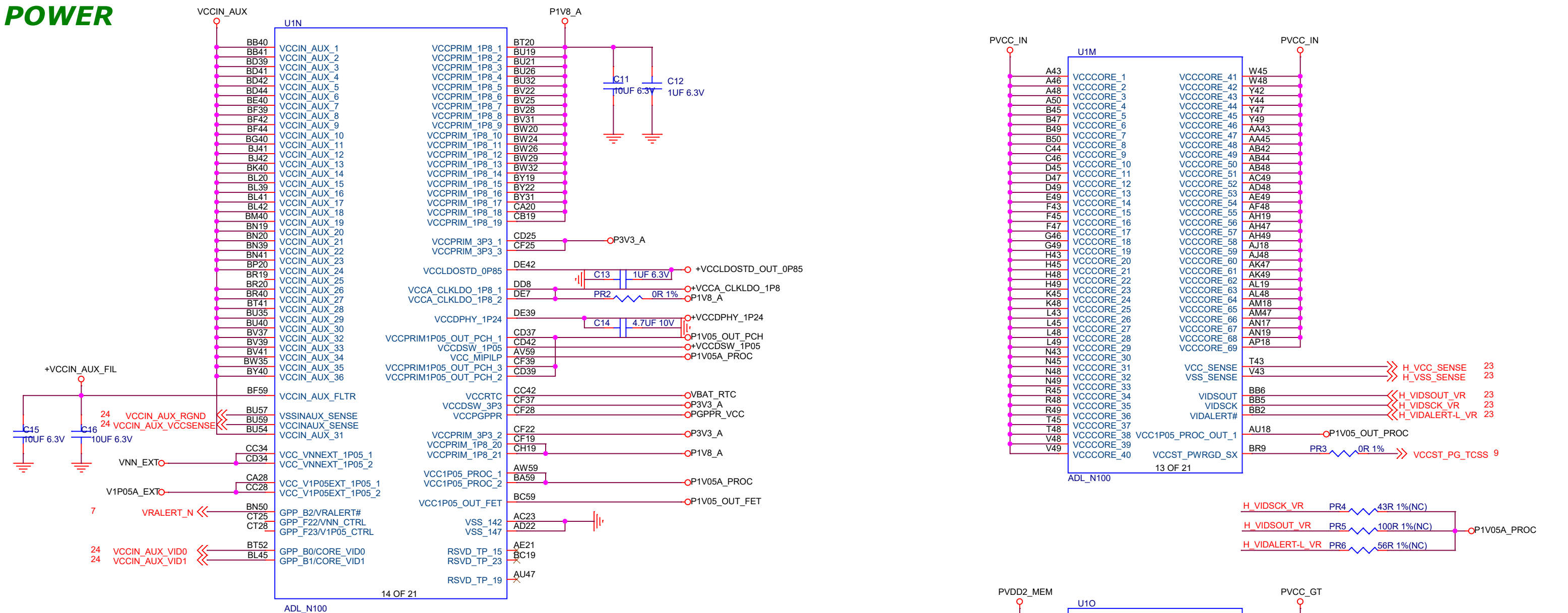
## MSIC\_EMMC

```
STRAP FOR 1.8V/3.3V VOLTAGE SELECTION
SPI 1.8V/3.3V SELECTION
LOW->3.3V
HIGH->1.8V
NO TERMINATION, NOT SAMPLED
DEFAULT 3.3V
```

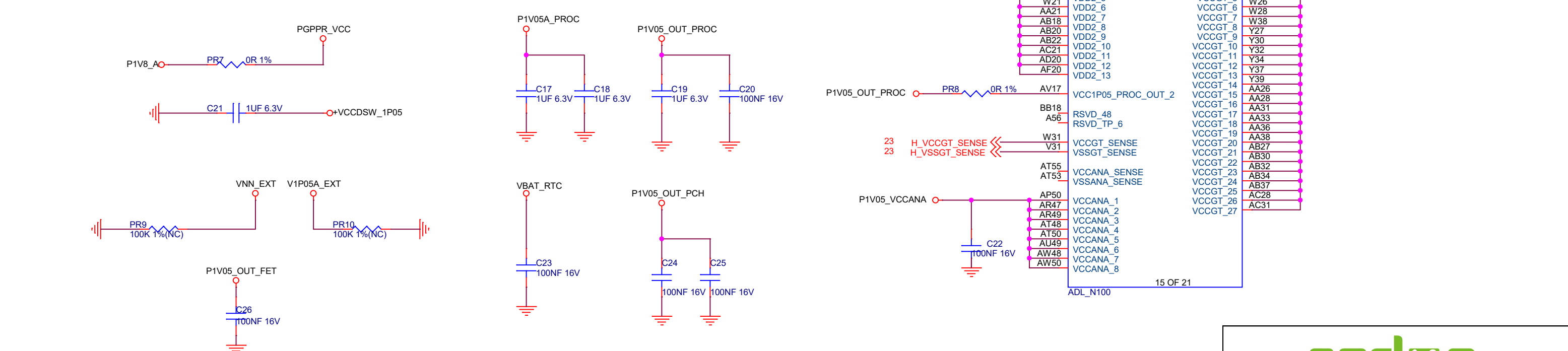


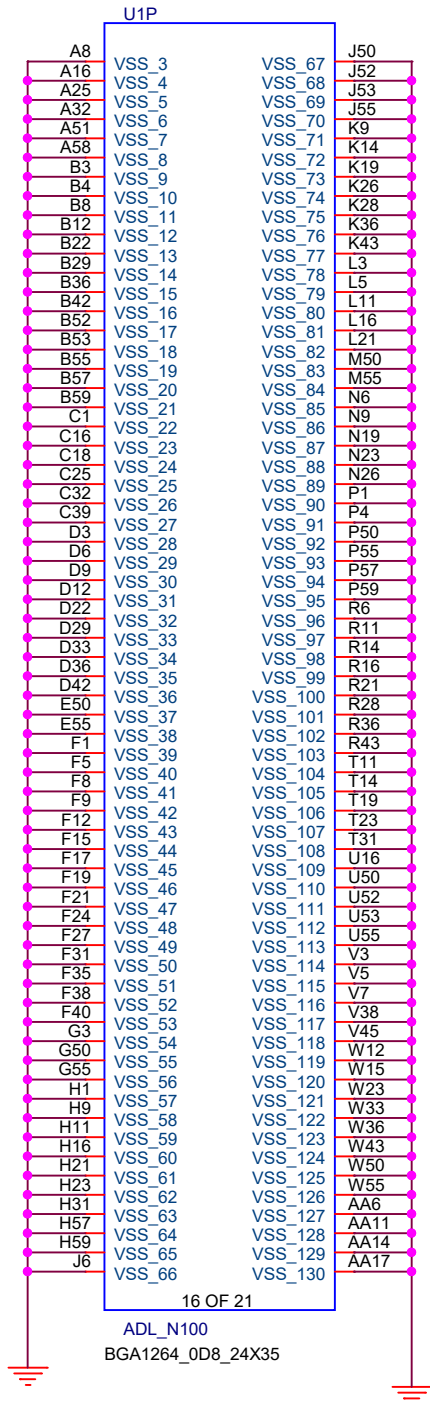
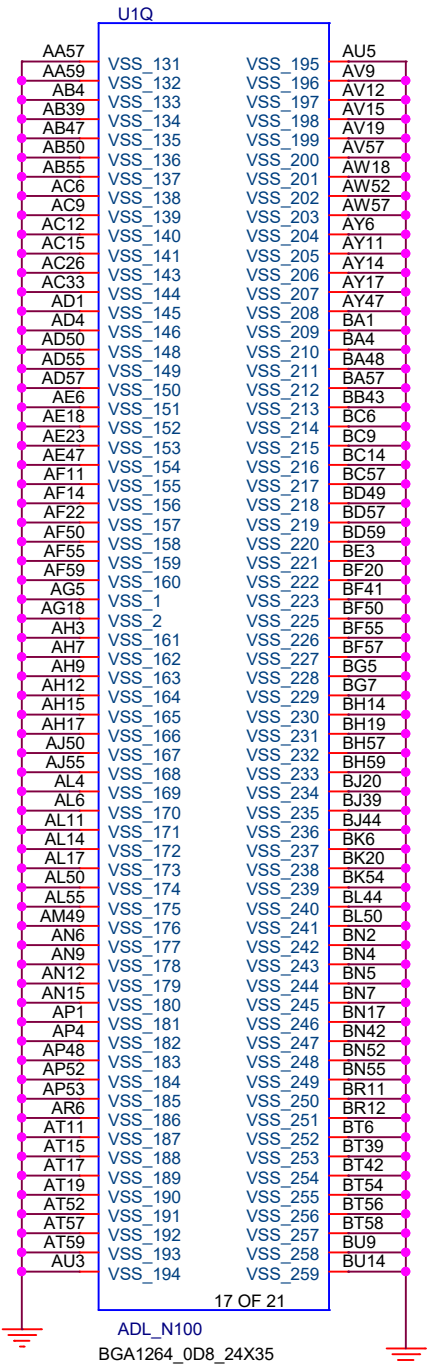
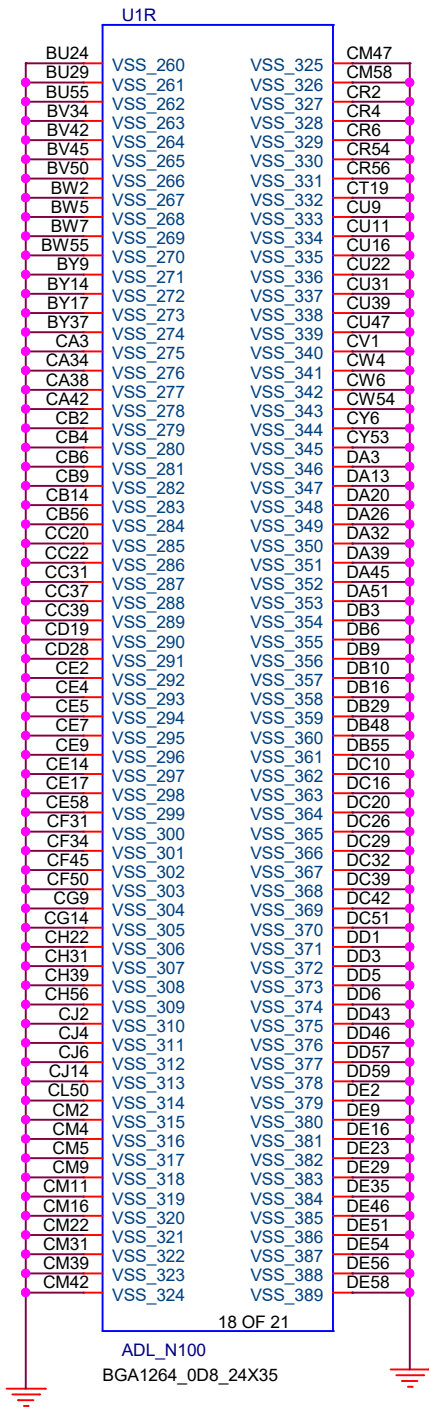


# POWER

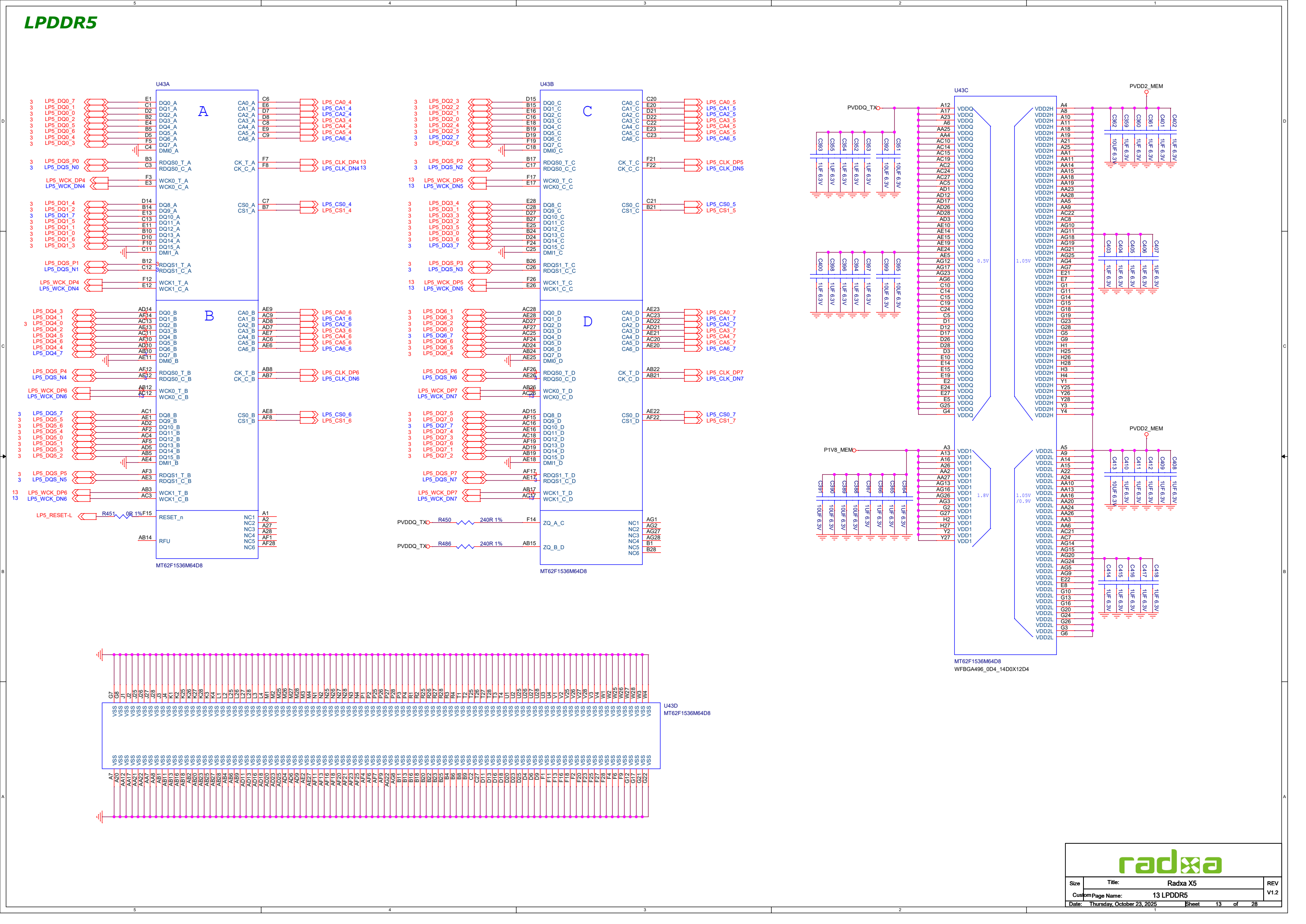


Intel HD Audio Supply. Can operate at 3.3V or 1.8V

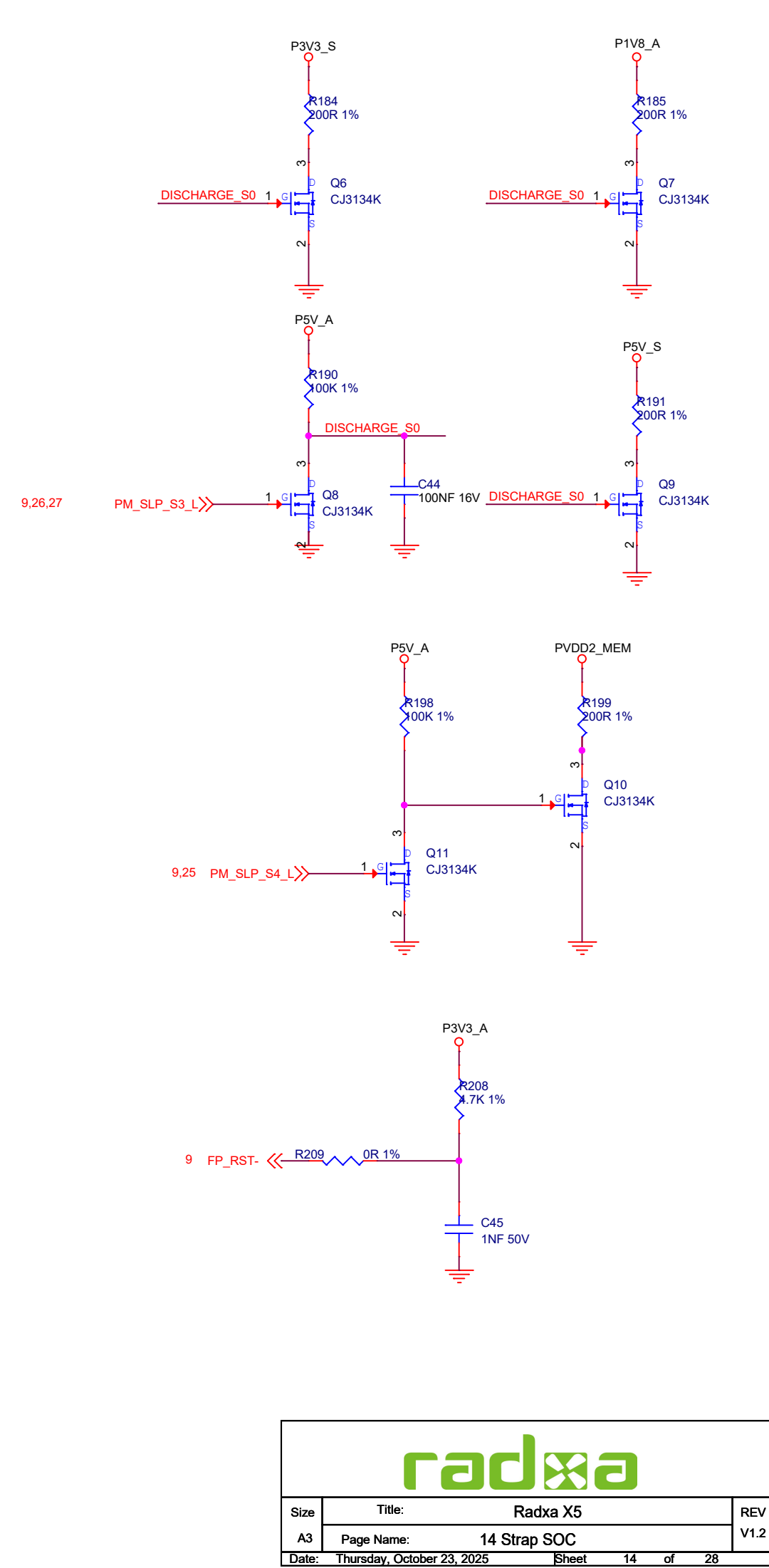
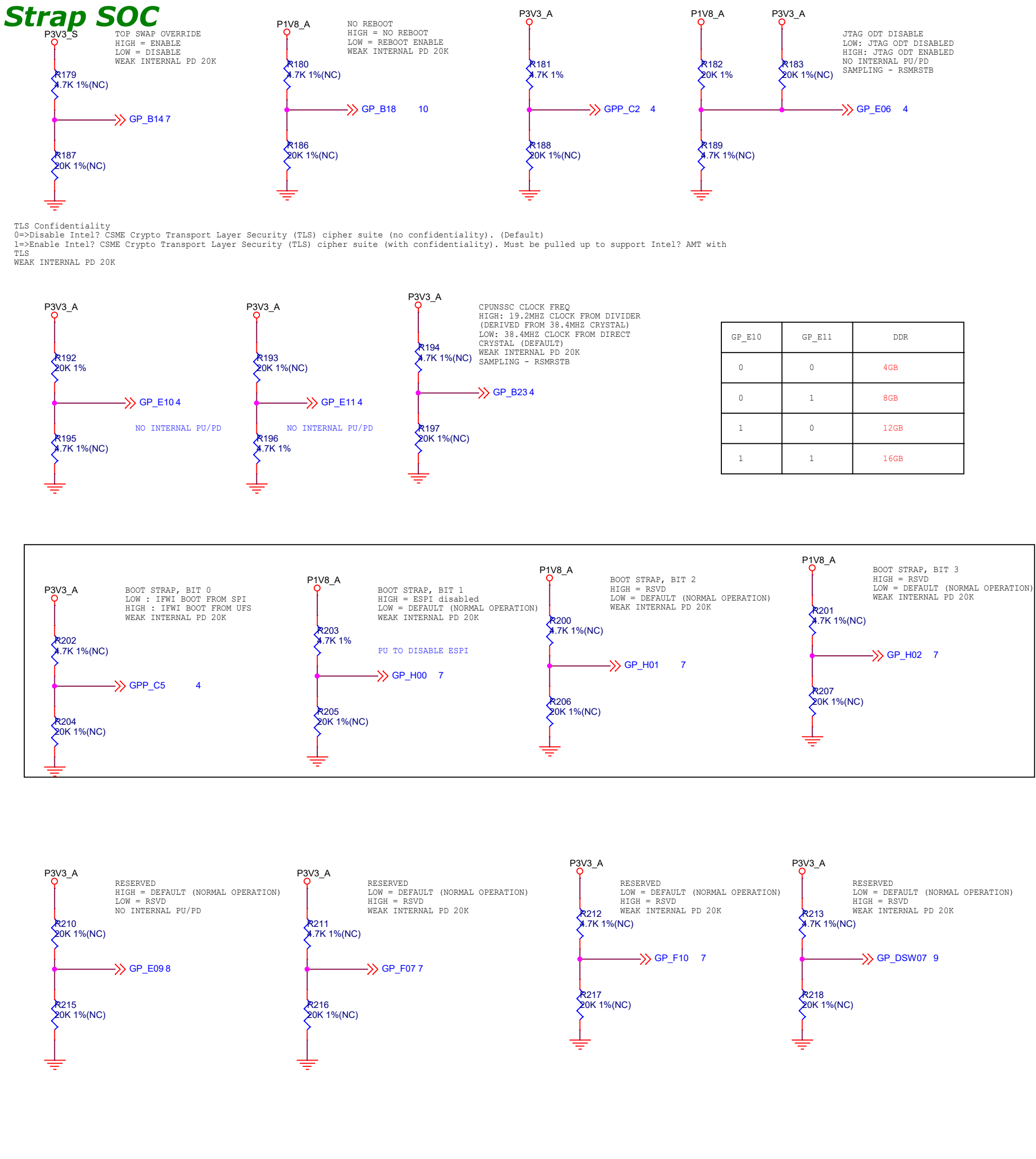




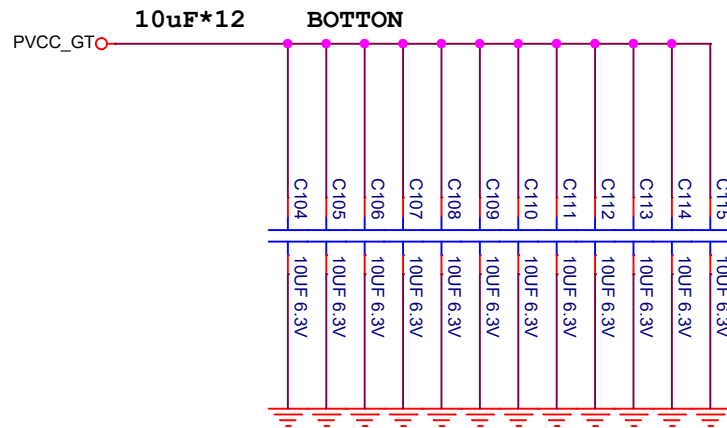
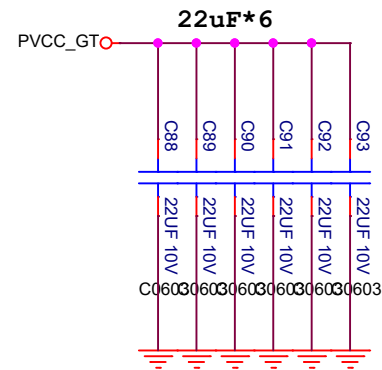
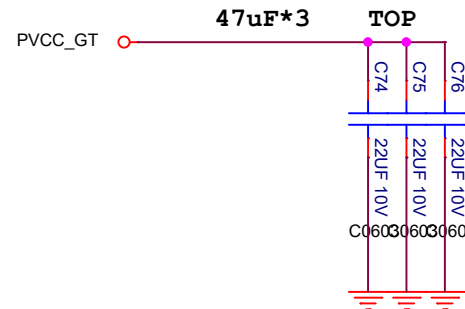
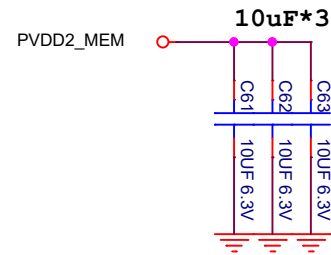
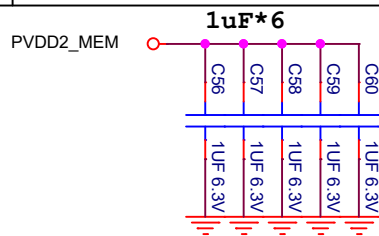
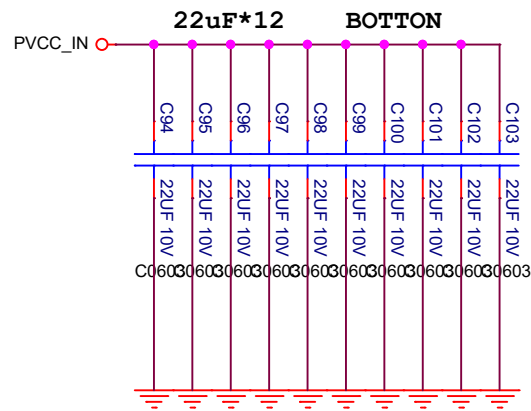
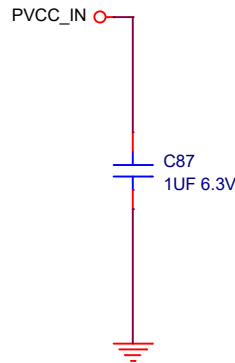
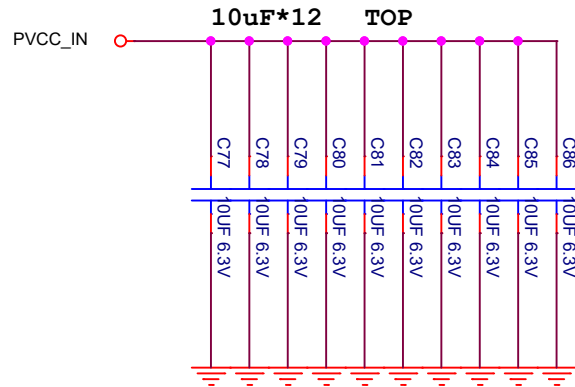
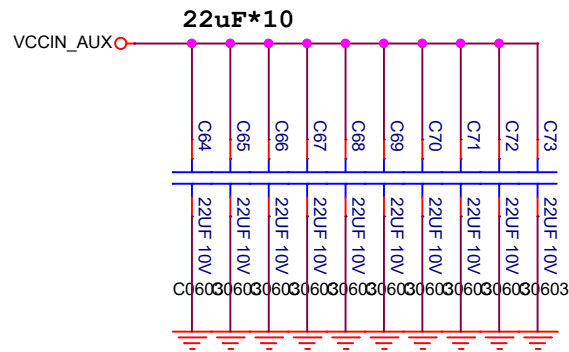
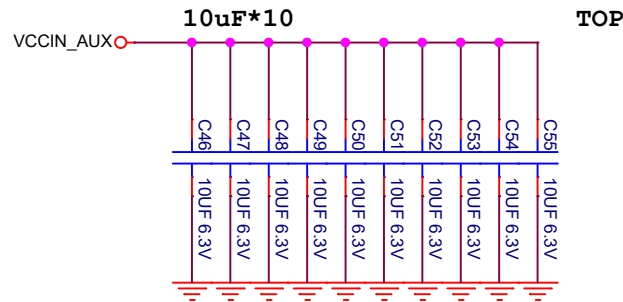
LPDDR5



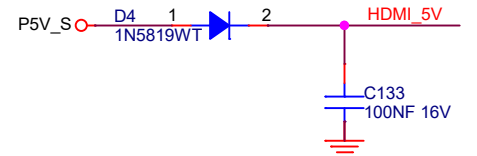
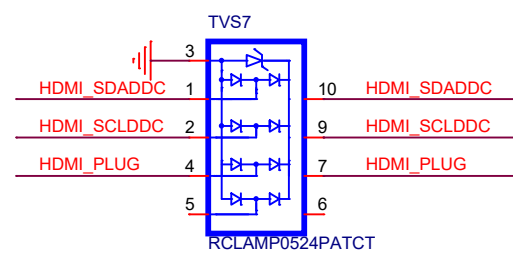
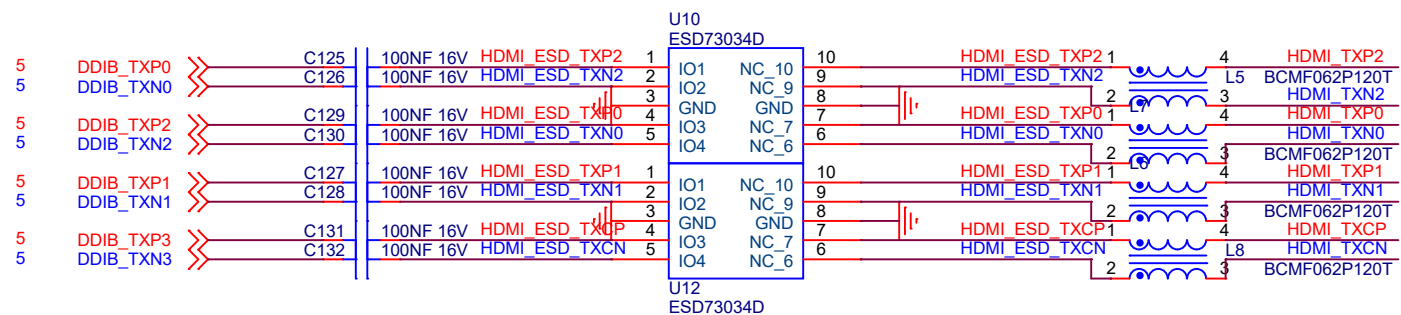
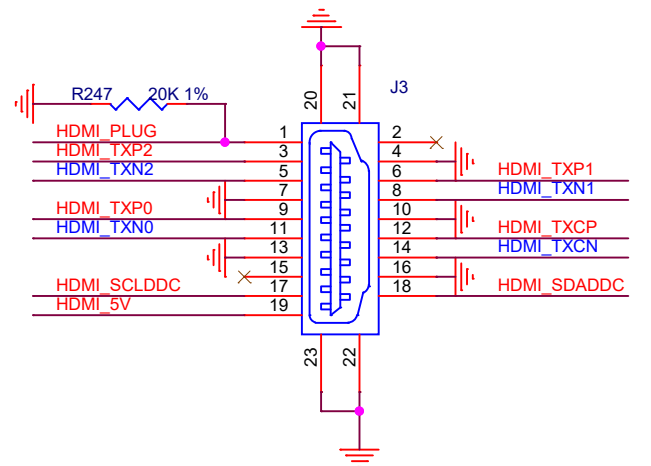
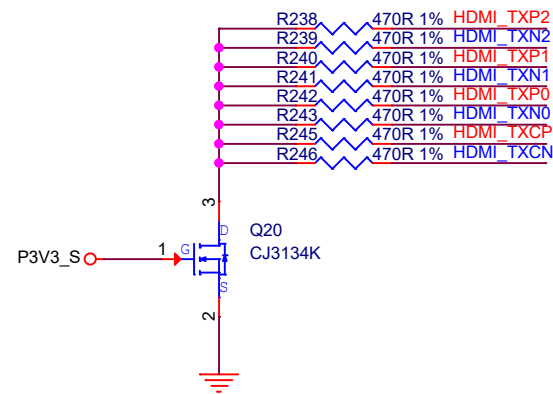
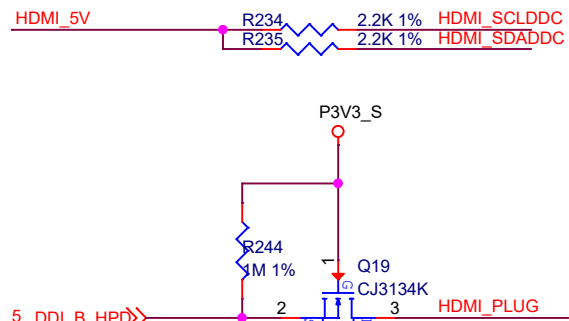
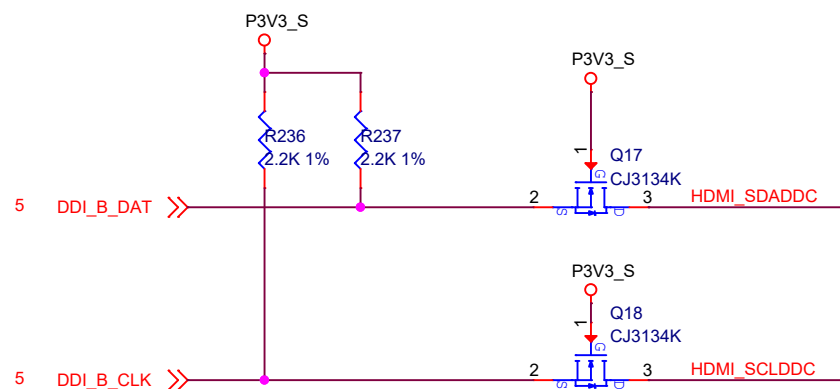
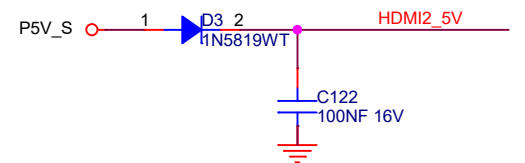
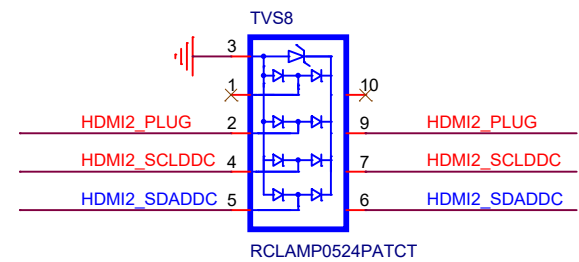
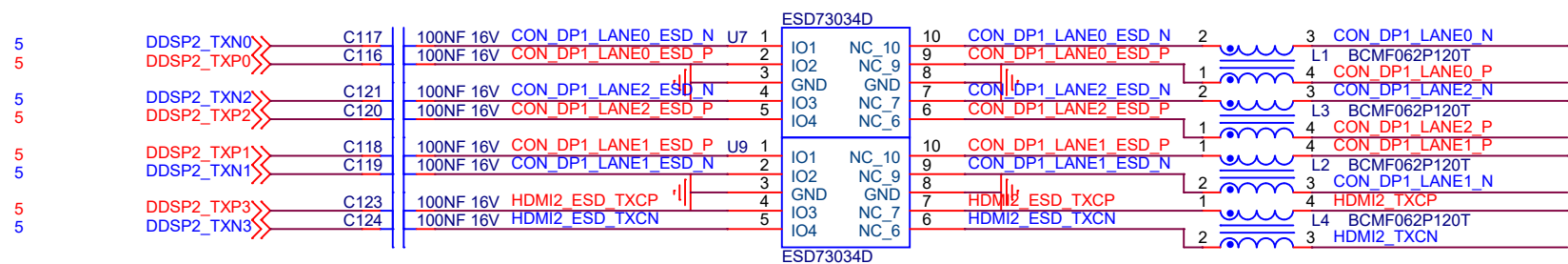
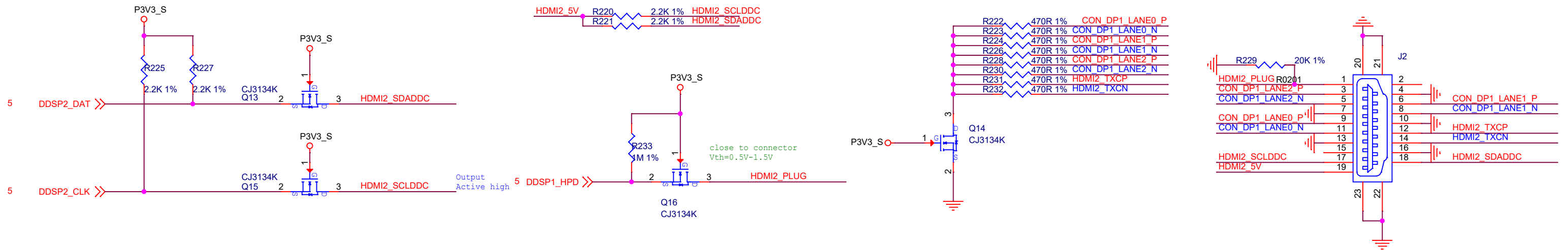
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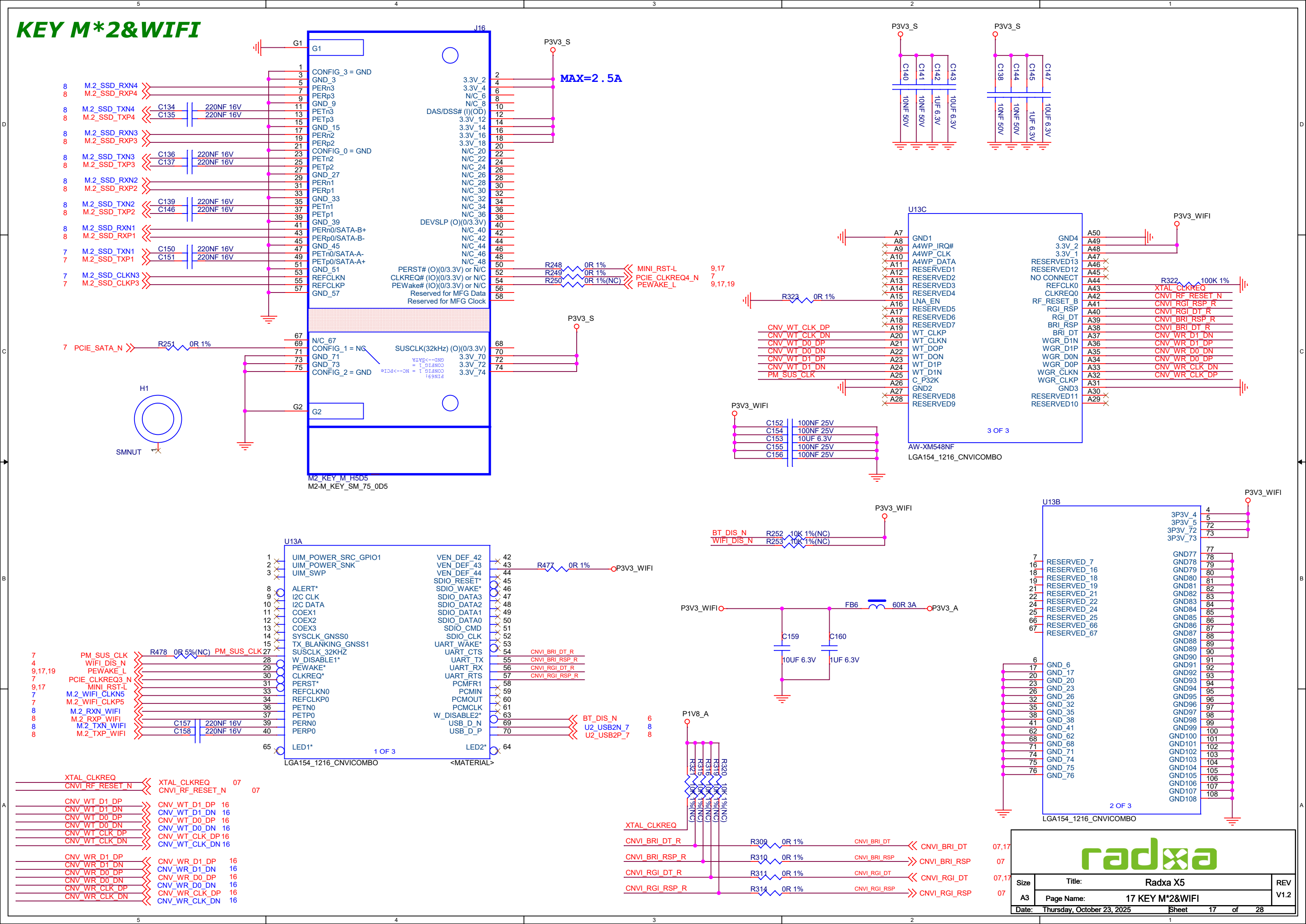
Decap



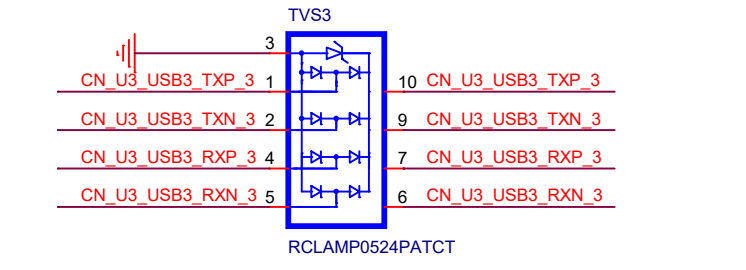
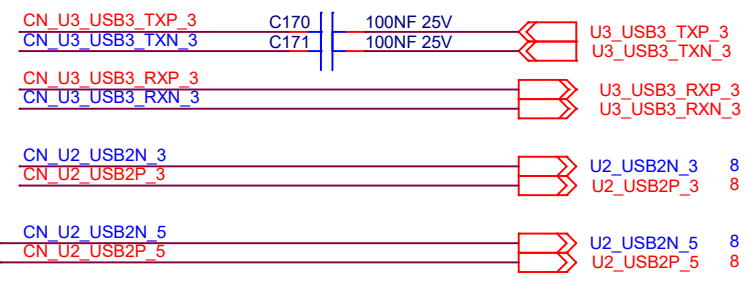
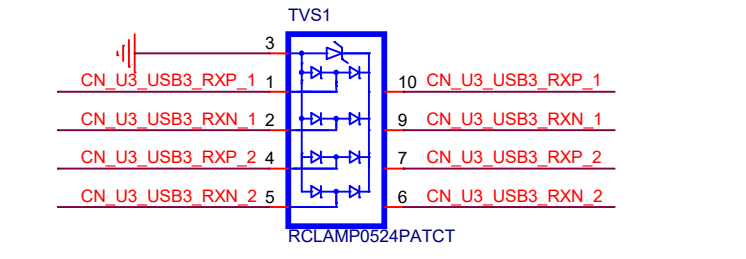
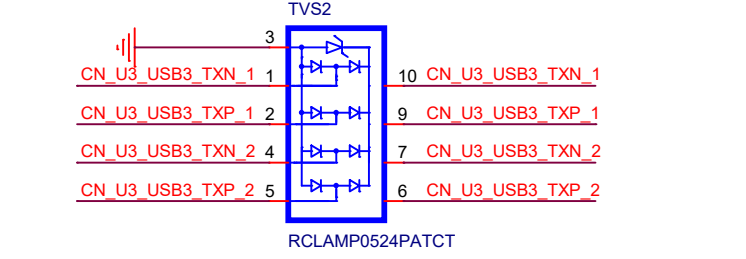
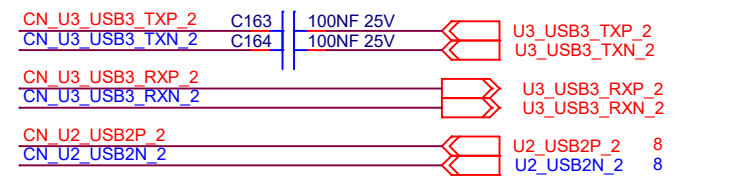
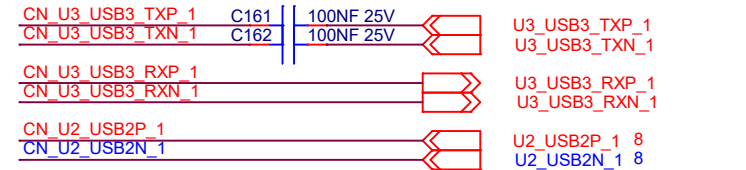
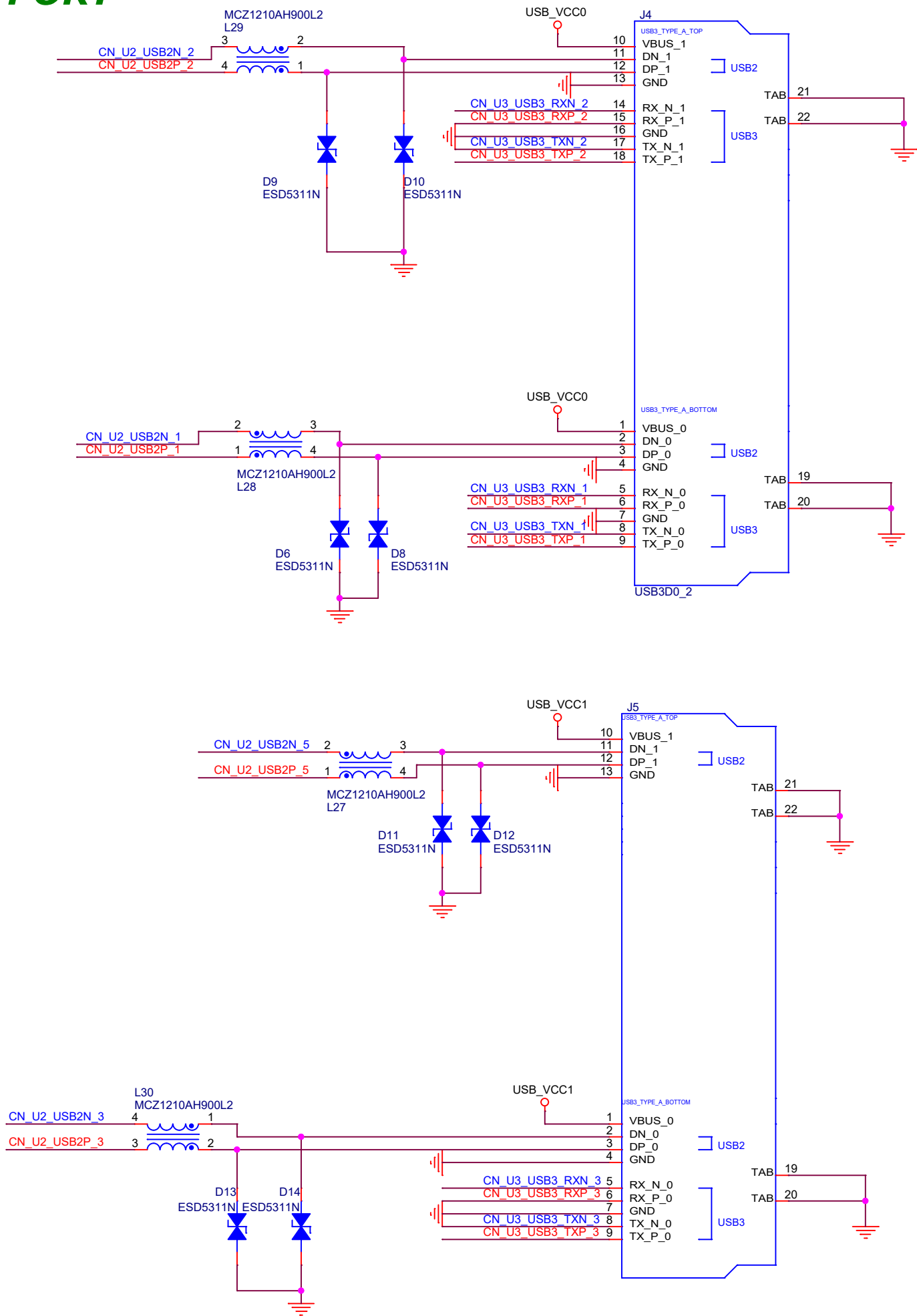
## DUAL HDMI



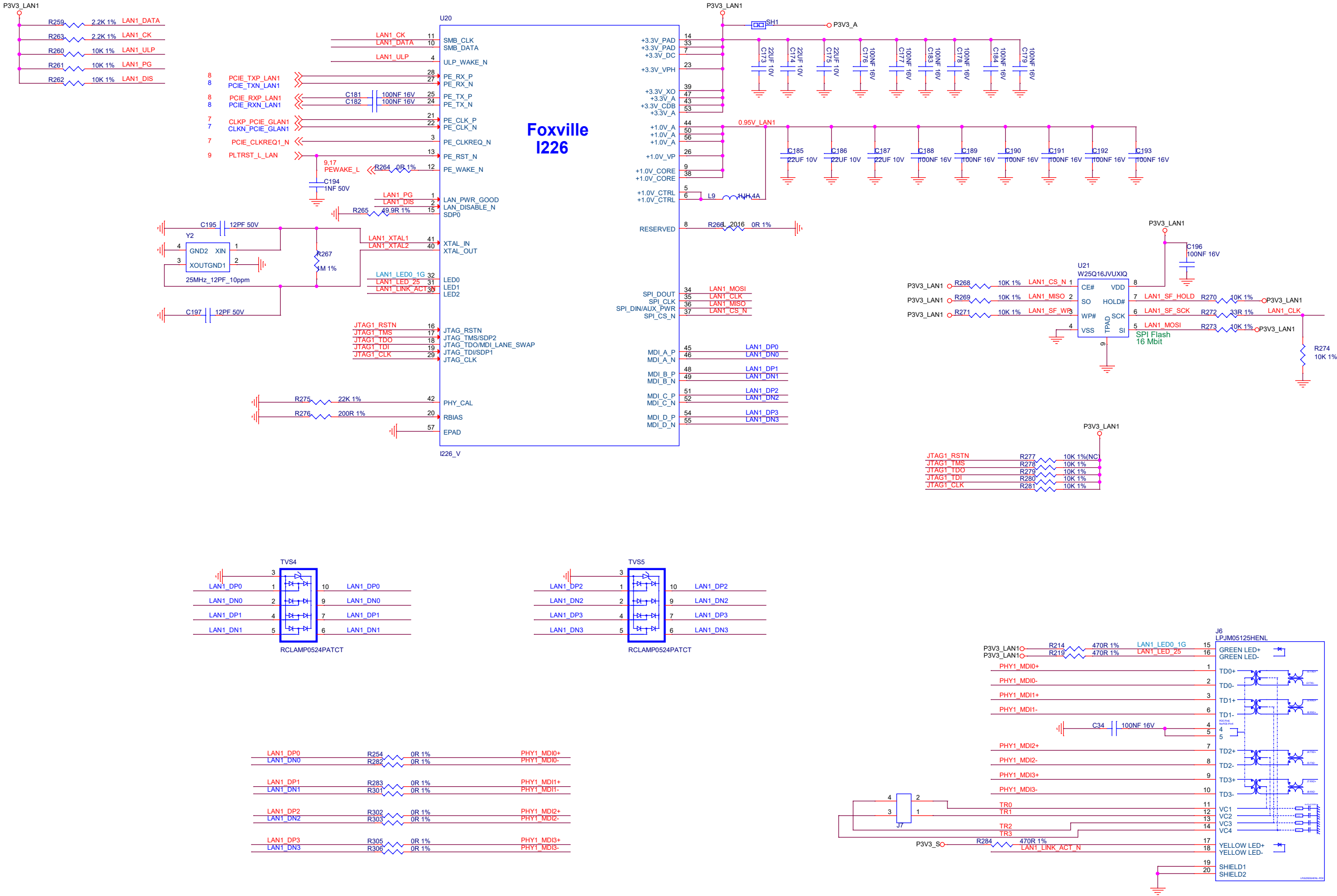
KEY M\*2&WIFI



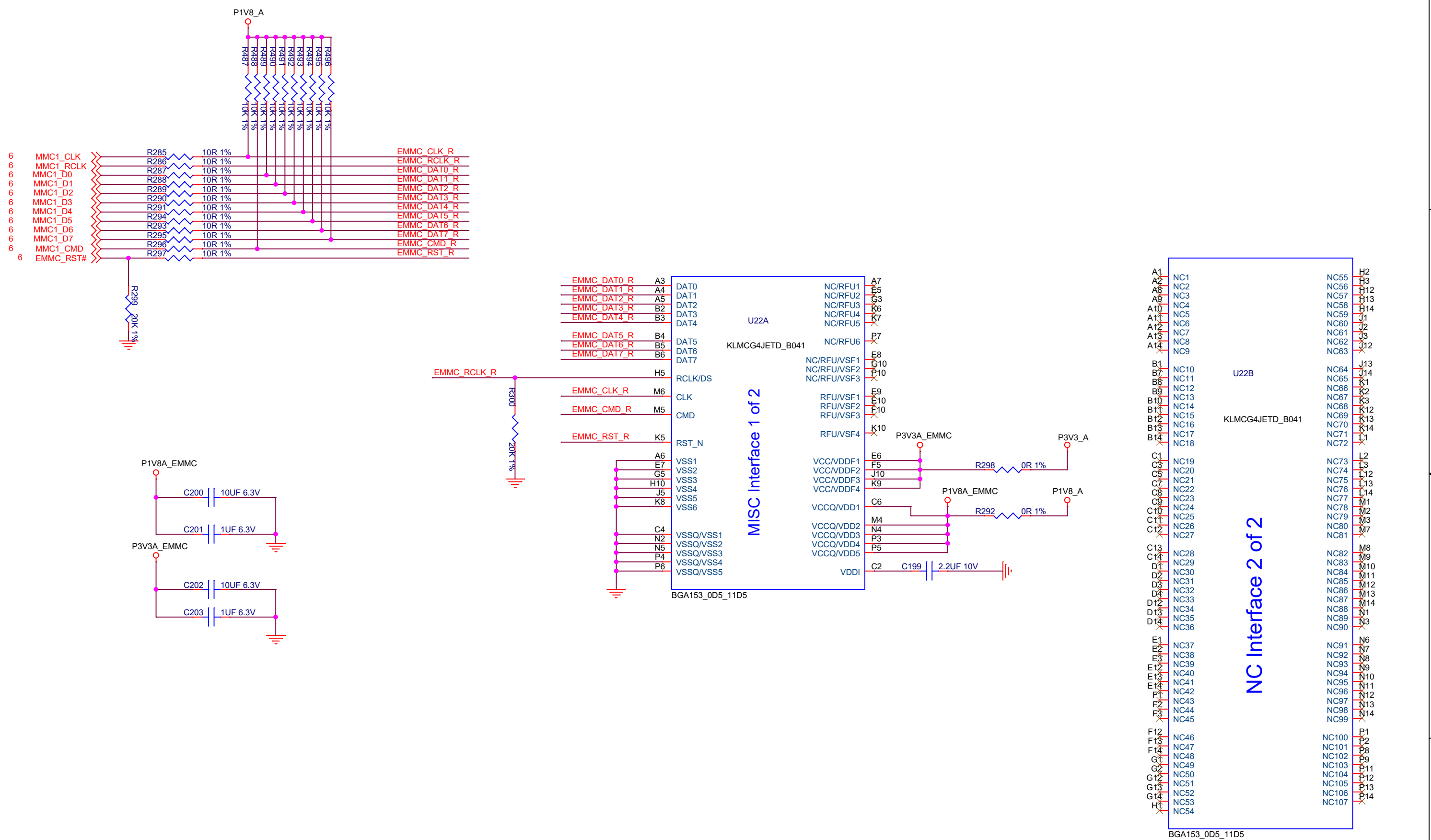
USB PORT



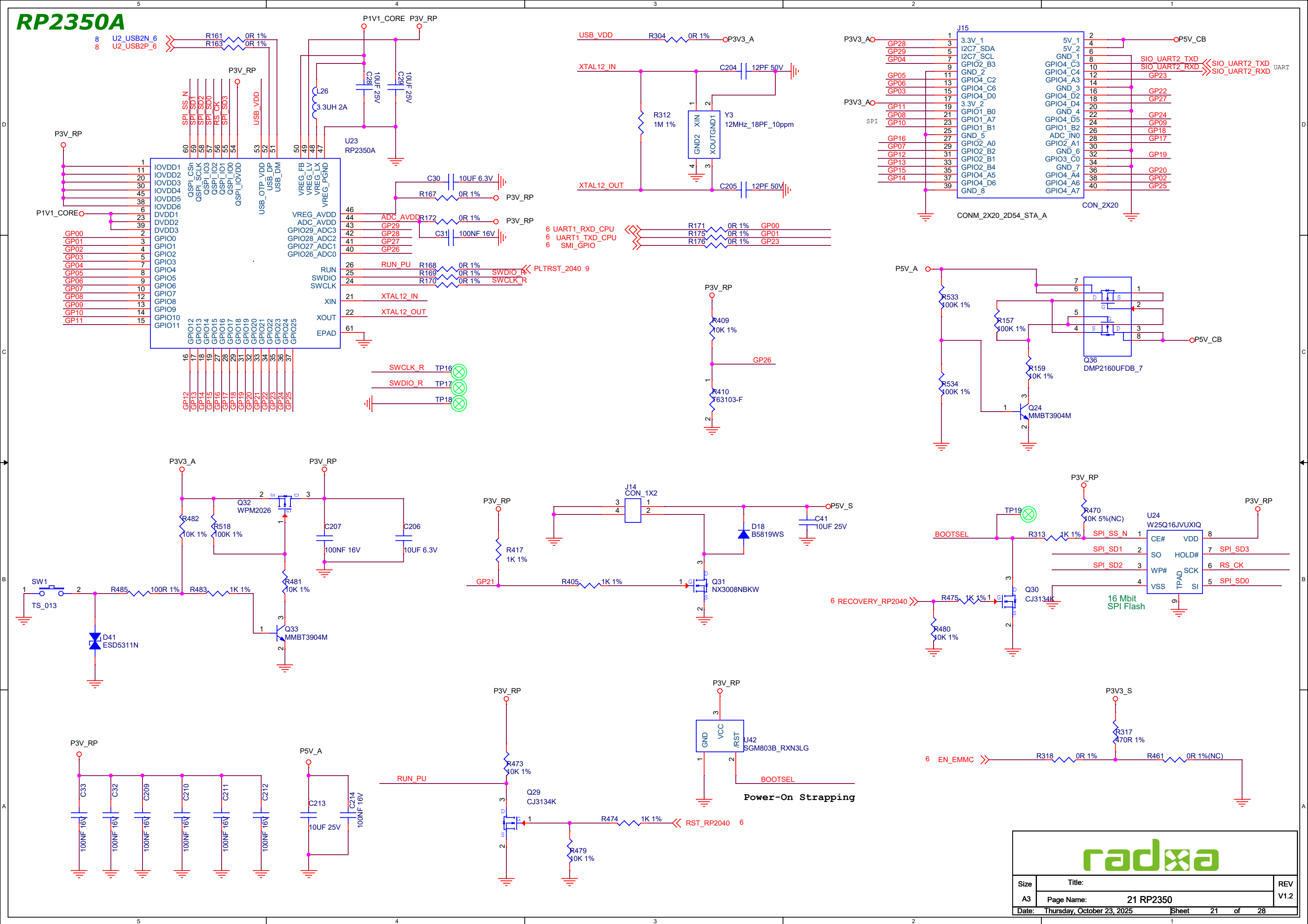
LAN\_2G5



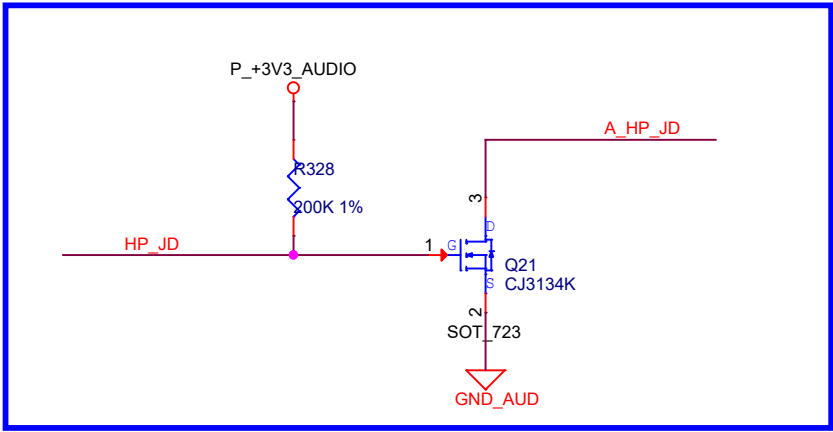
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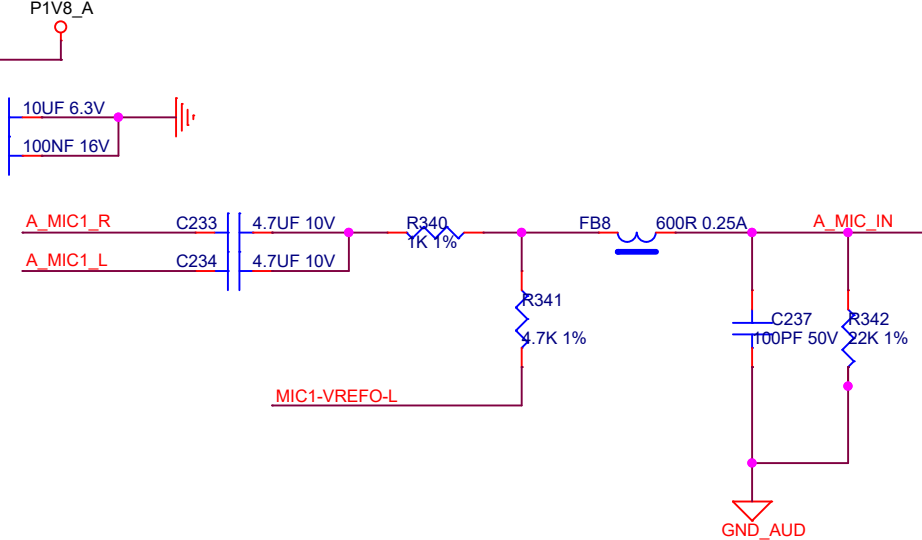
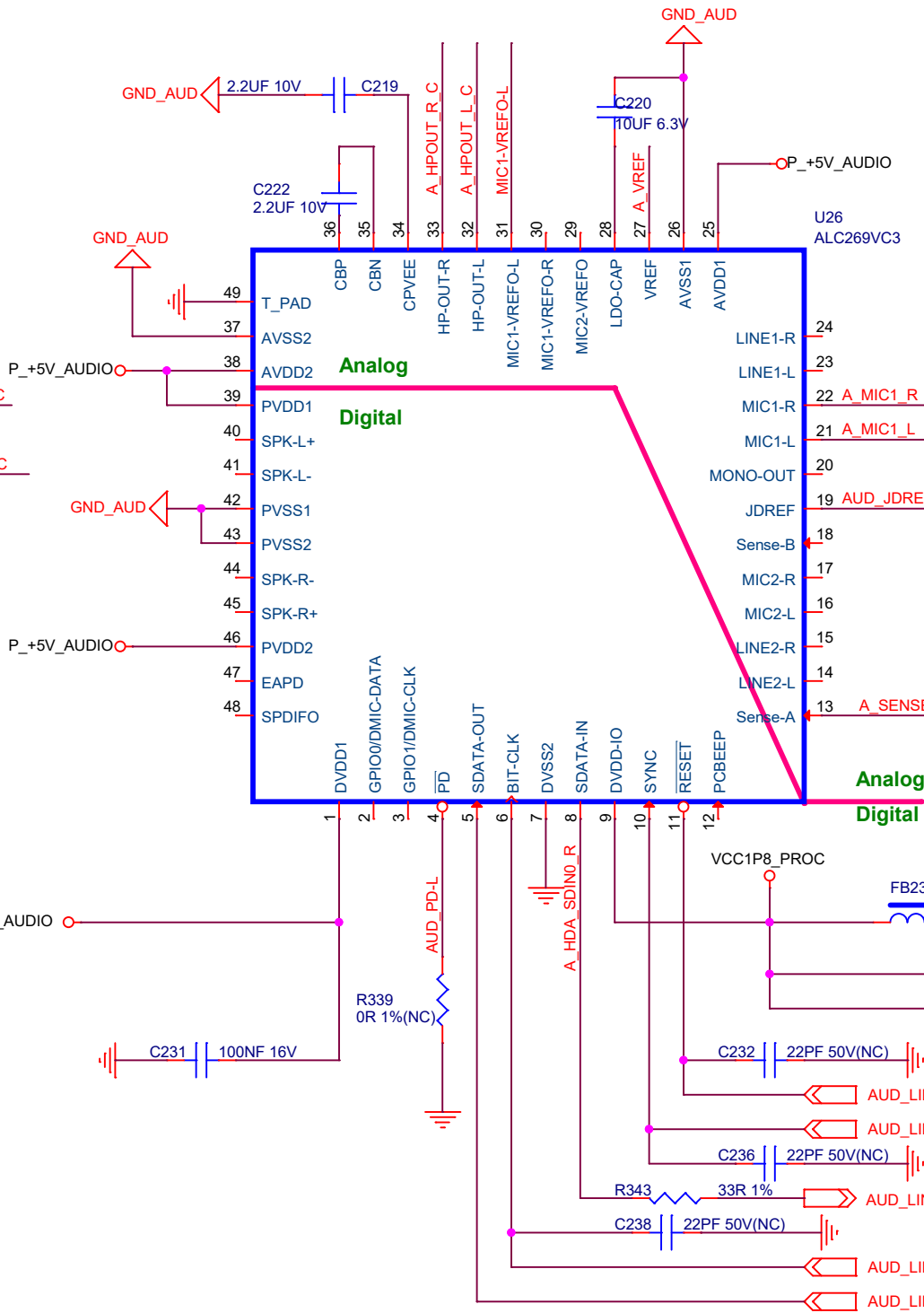
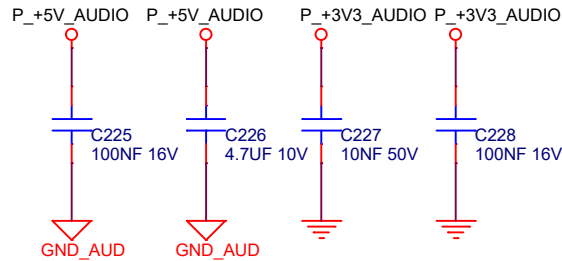
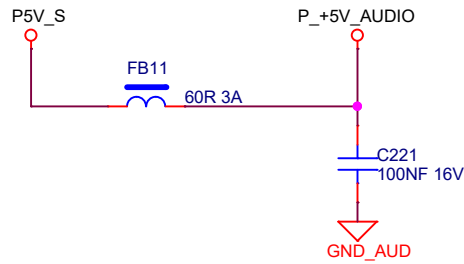
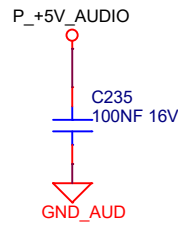
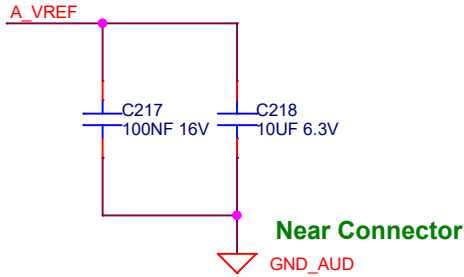
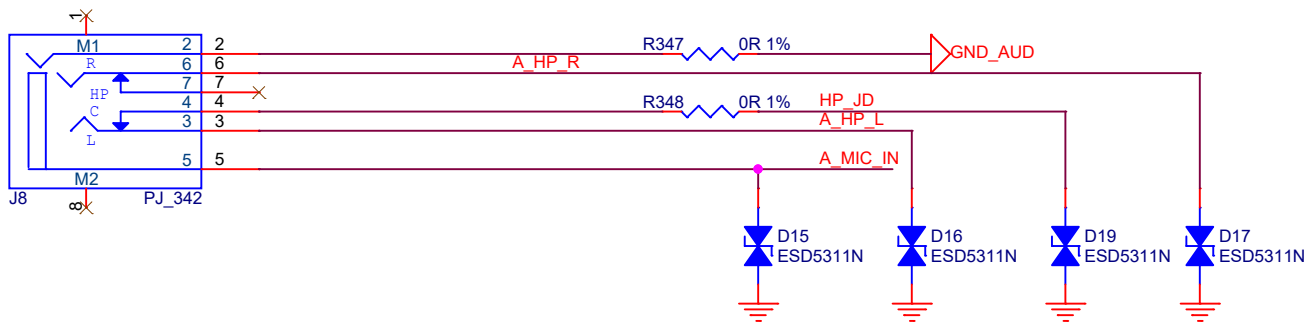
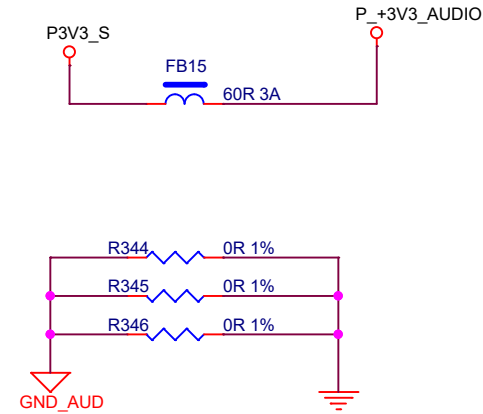
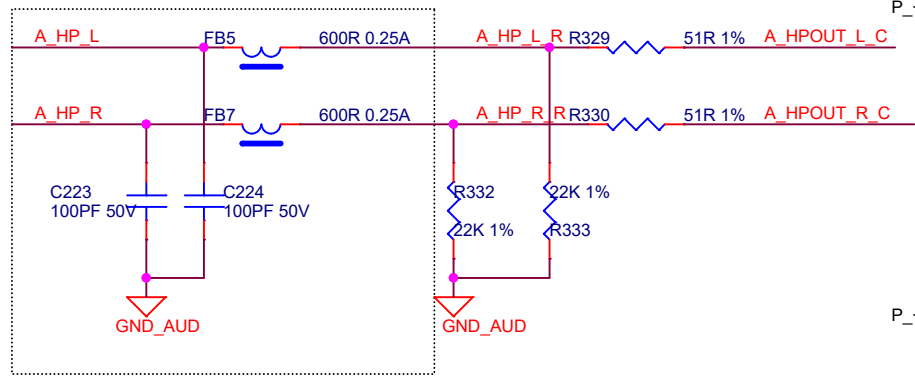
# RP2350A

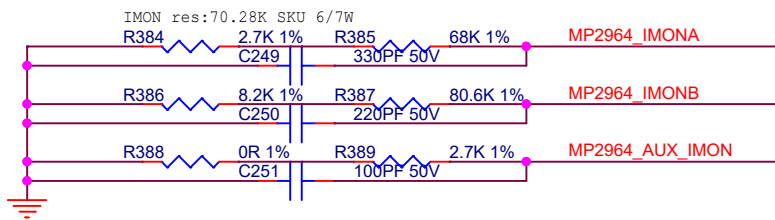
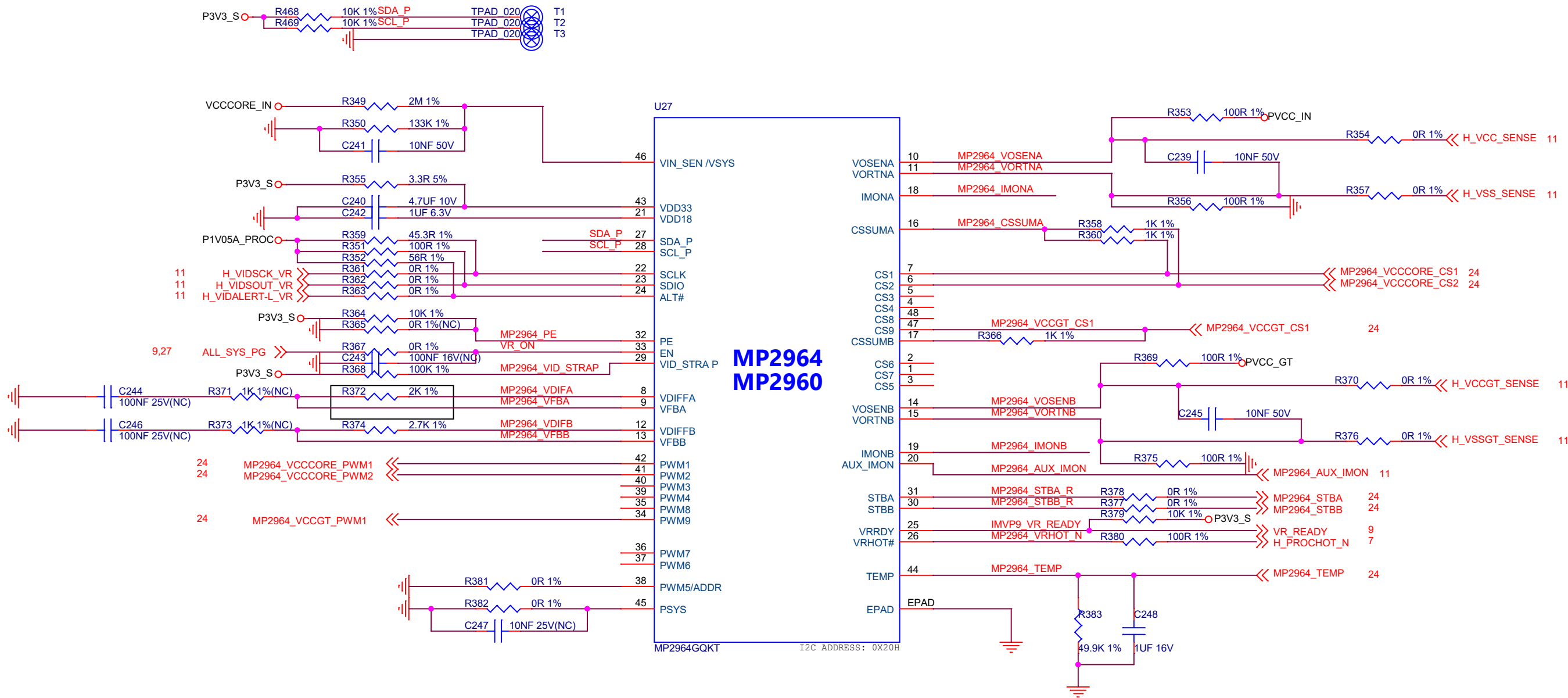


ALC269VC3



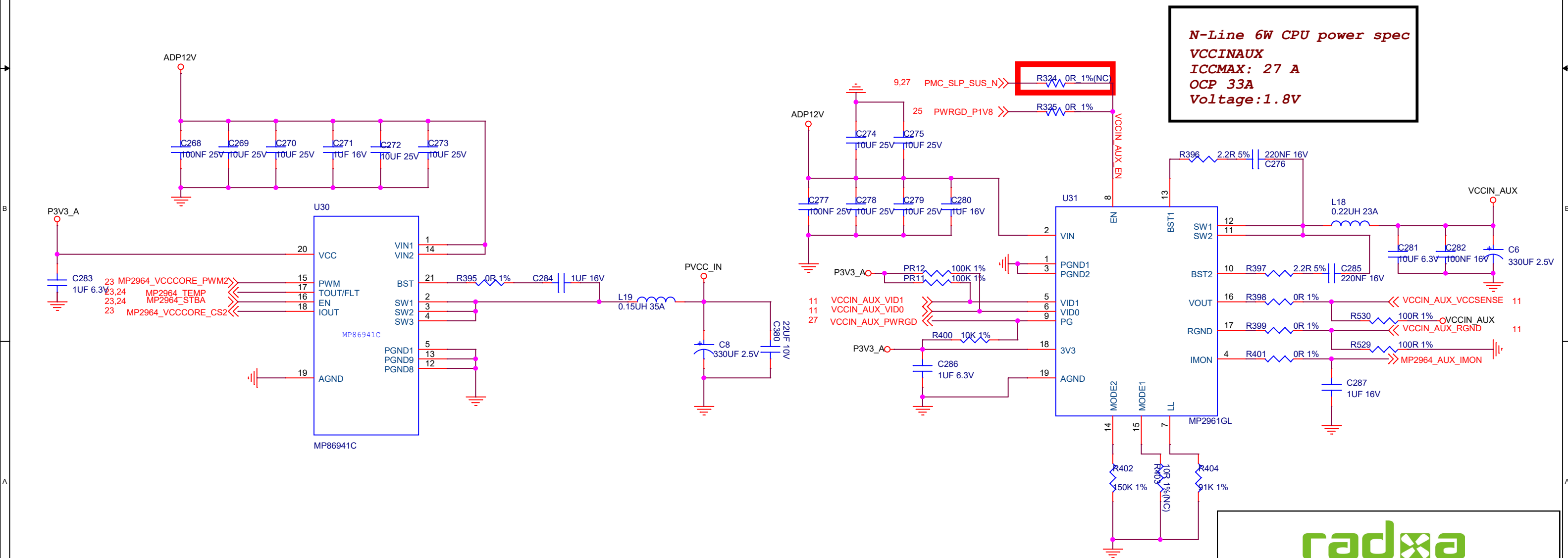
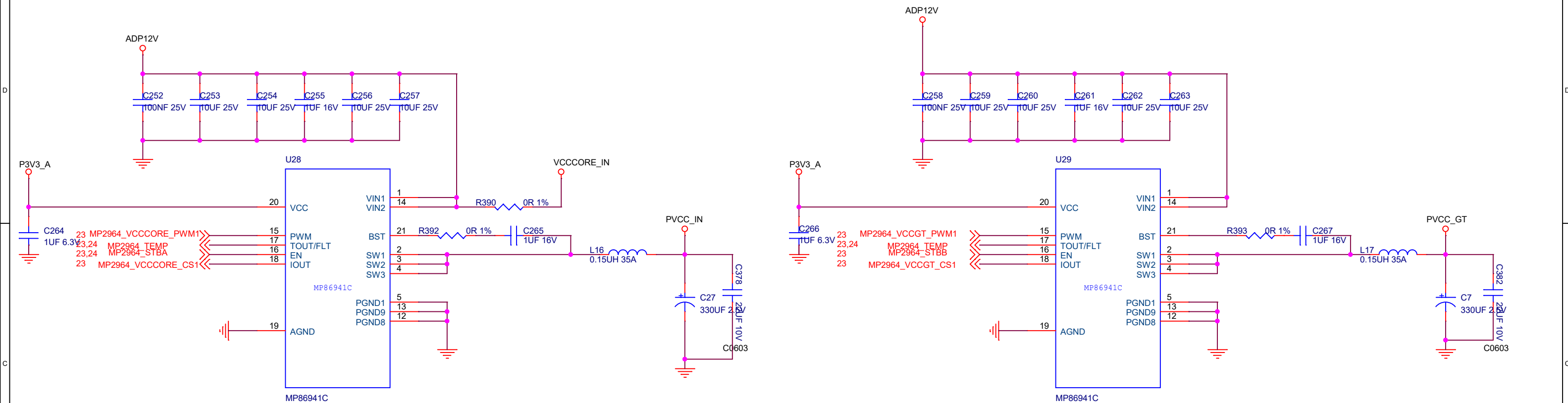
Near Connector





| RAIL      | RES    | CAP   | ICCMAX |
|-----------|--------|-------|--------|
| VCCCORE   | 70.28K | 330PF | 37A    |
|           | 53.97K | 330PF | 53A    |
| VCCGT     | 82.75K | 220PF | 29A    |
| VCCIN_AUX | 11K    | 220PF | 27A    |



**VCCGT**

```
N-Line 6W CPU power spec
VCCINAUX
ICCMAX: 27 A
OCP 33A
Voltage:1.8V
```



|       |                            |                |
|-------|----------------------------|----------------|
| Size  | Title:                     | REV<br>V1.2    |
| A3    | Page Name: 25 VDDQ         |                |
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# DC POWER

OCP : 19A  
load : 12A  
OUTPUT :3.3V  
FSK:  
SOFT START: 5ms

