



# Radxa X4

schematic

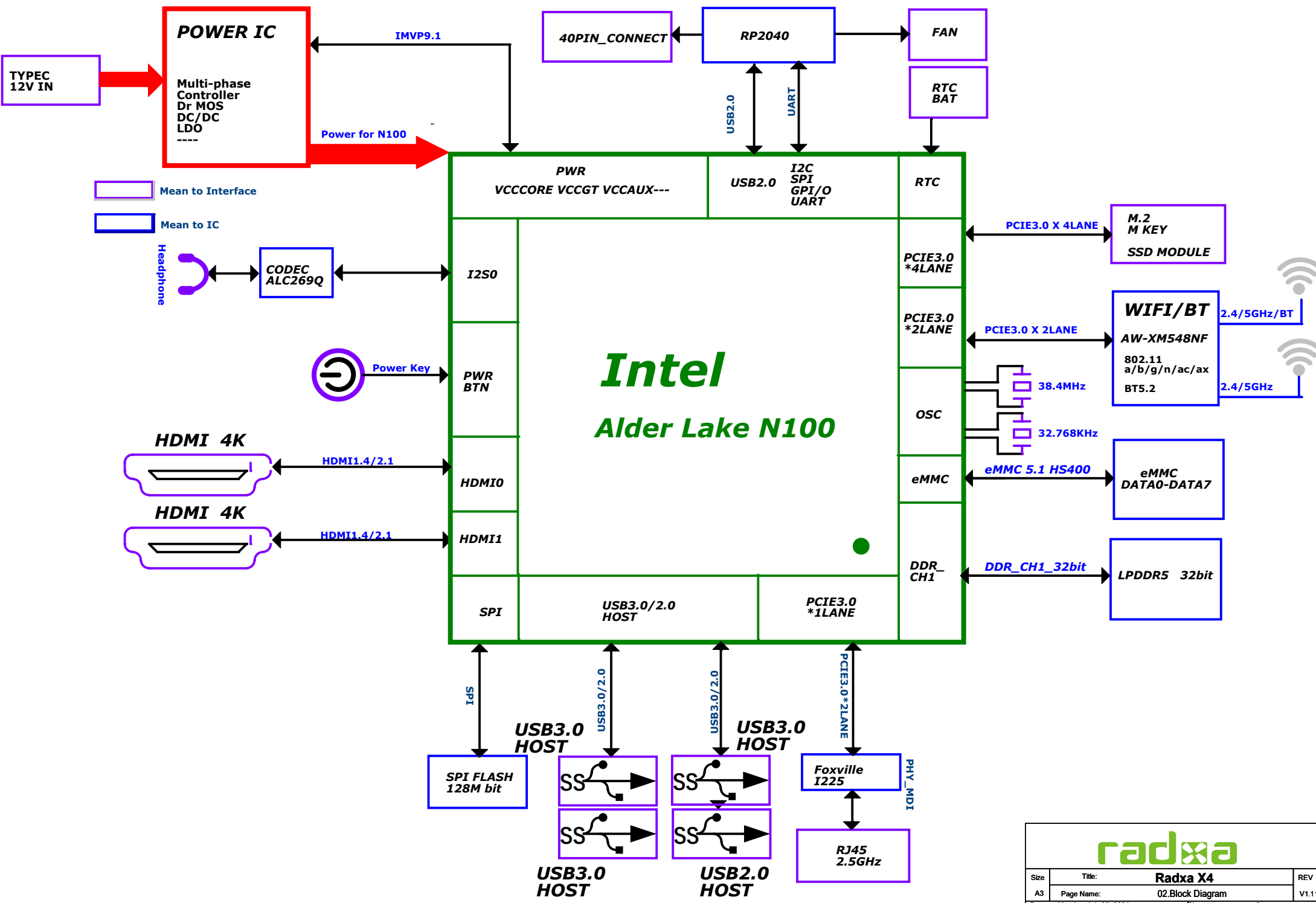
V1.11

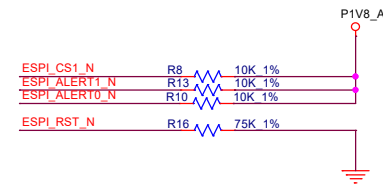
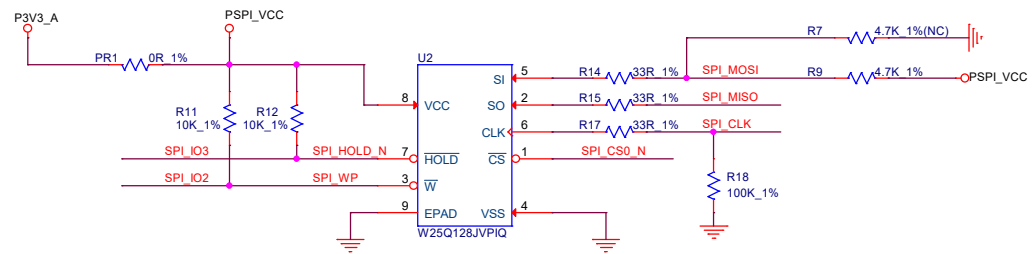
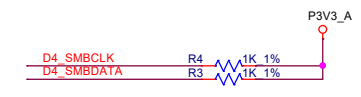
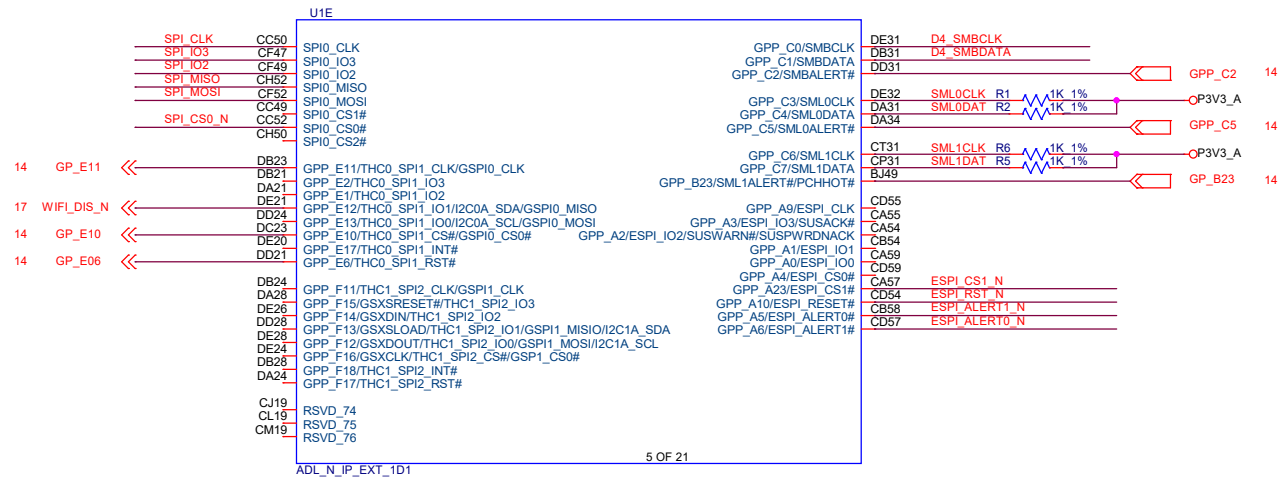


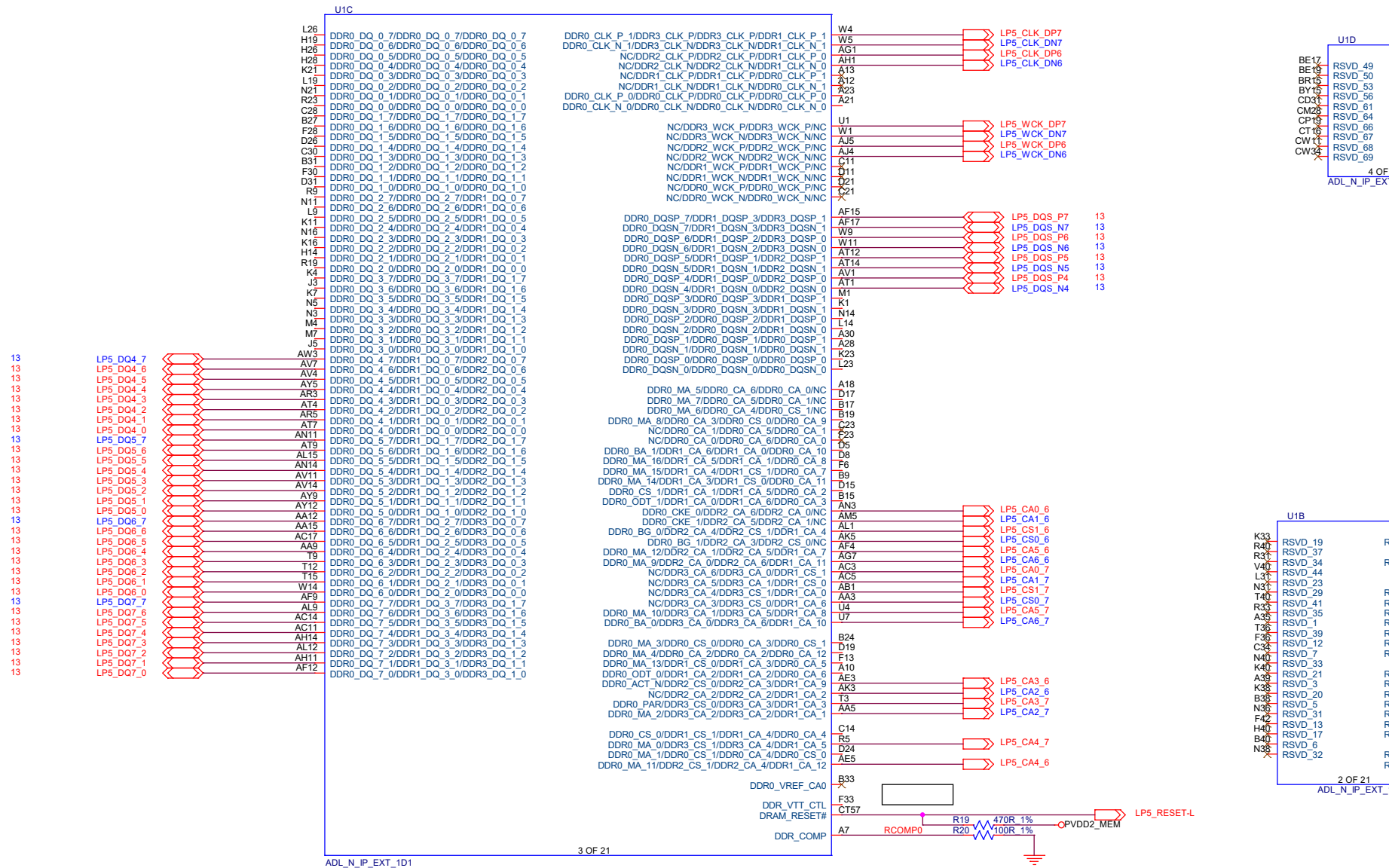
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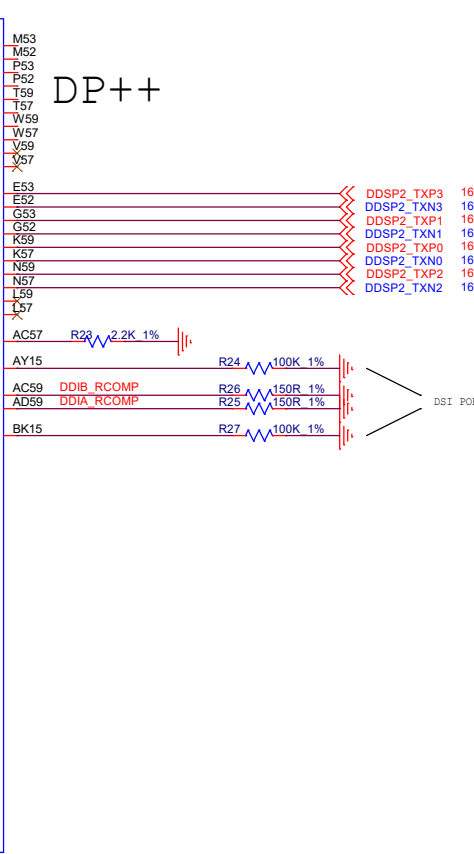
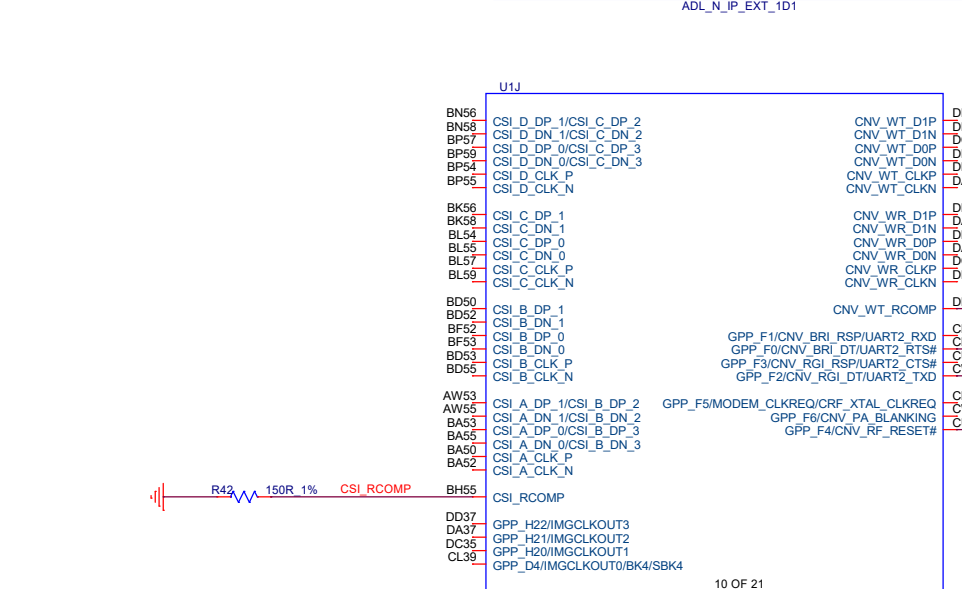
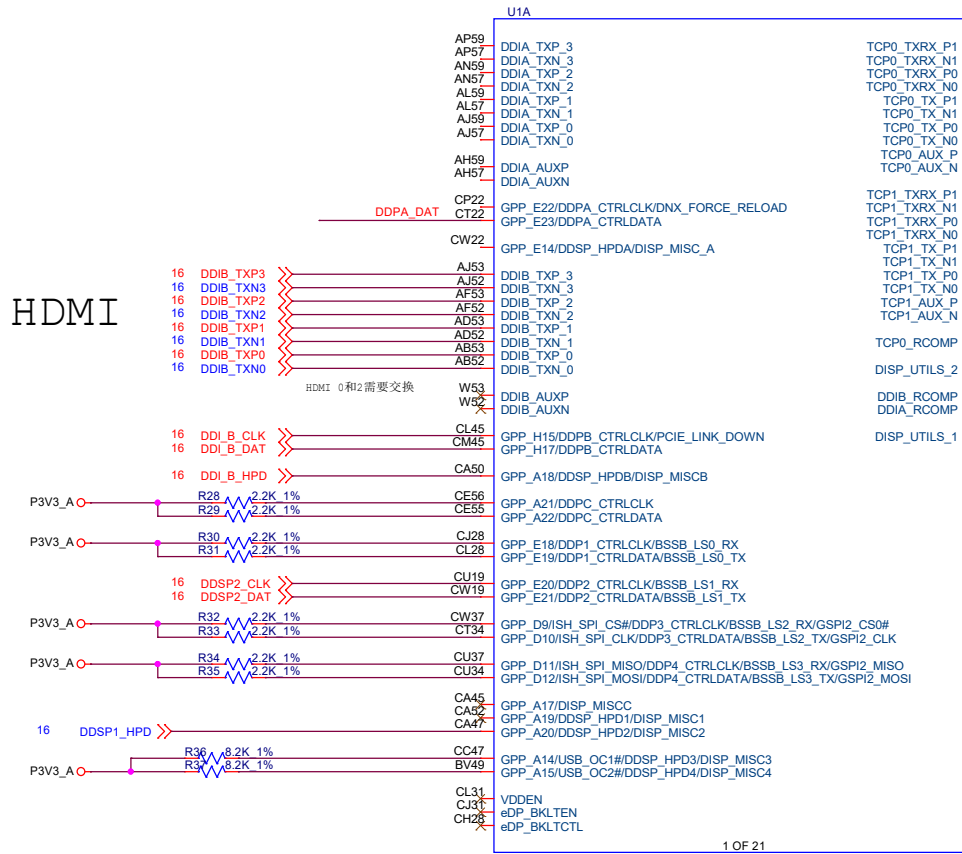








# HDMI

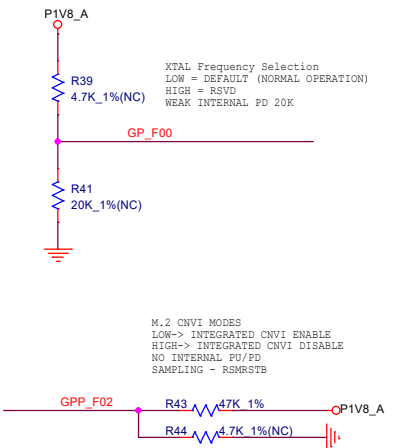


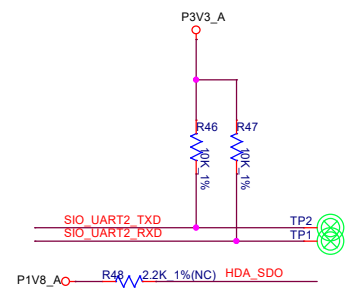
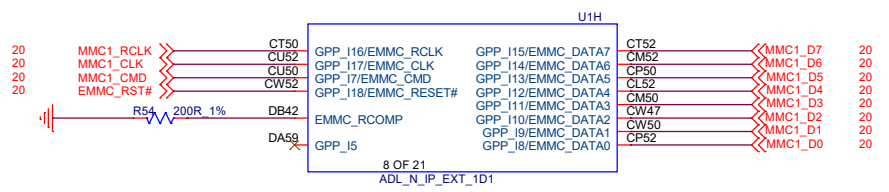
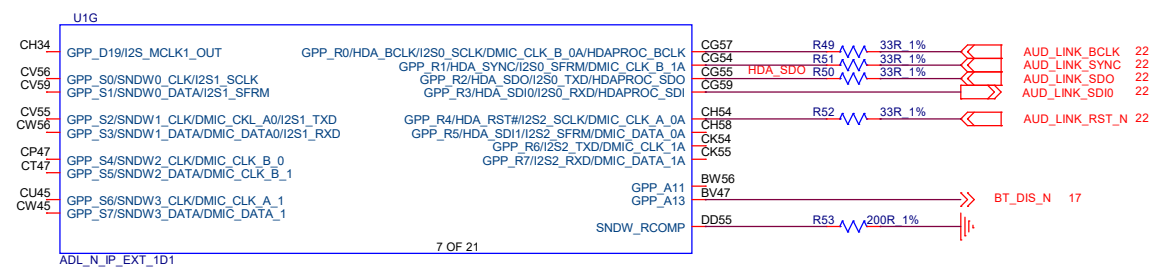
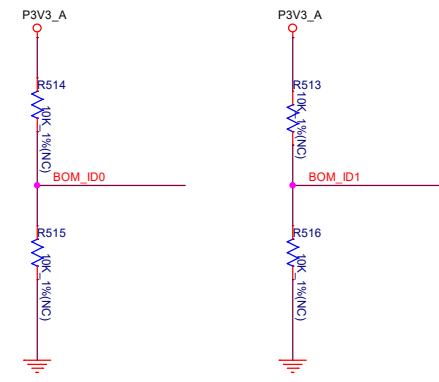
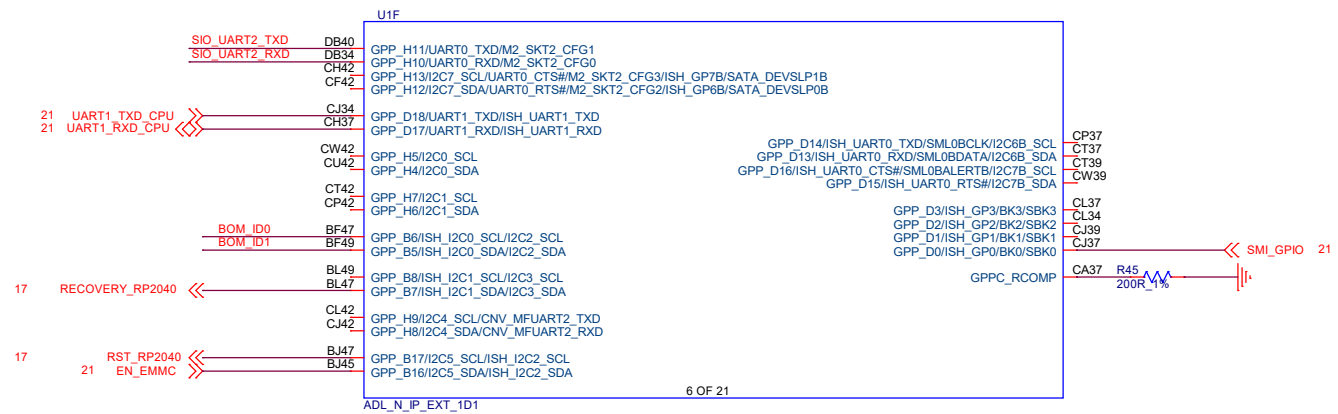
TCP Port Signal Mapping for HDMI / DP

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

DDI Port Signal Mapping for HDMI / DP

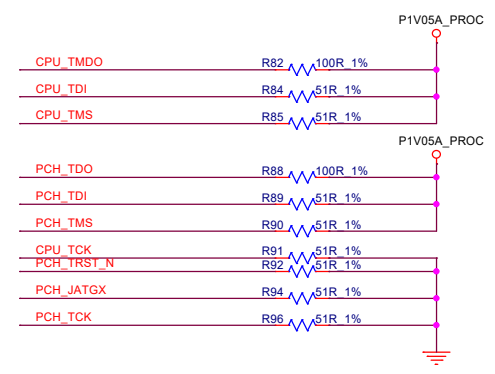
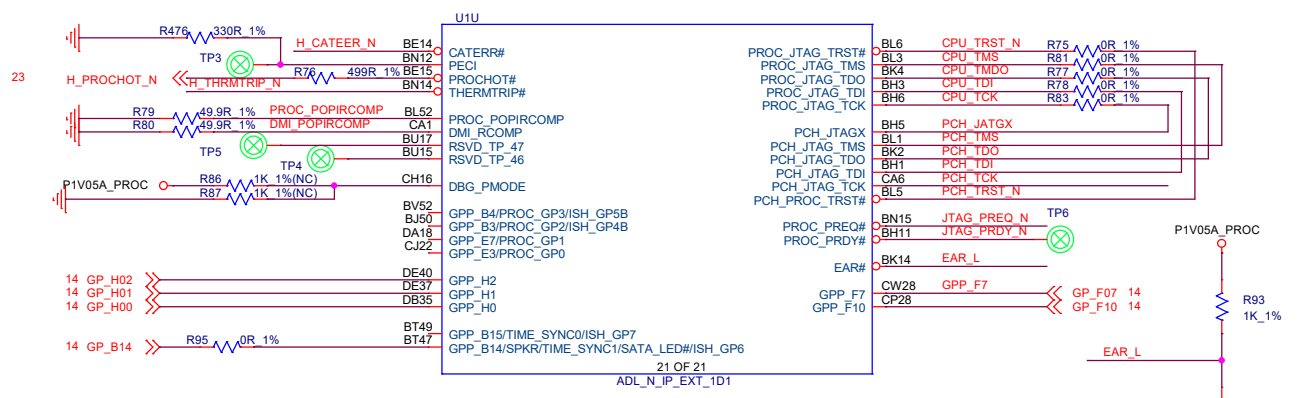
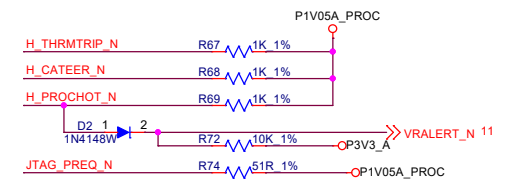
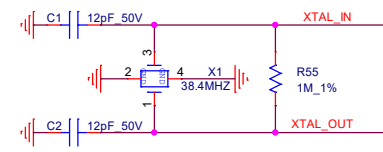
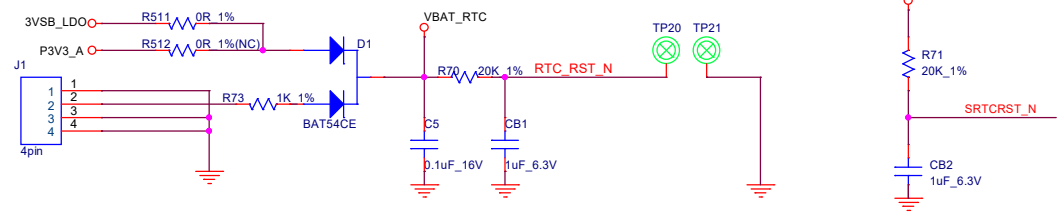
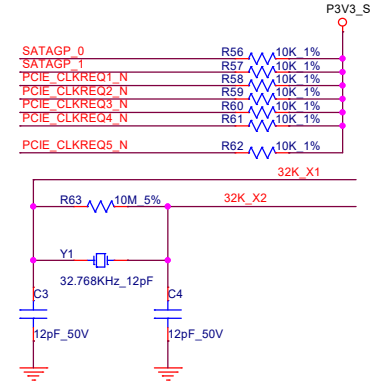
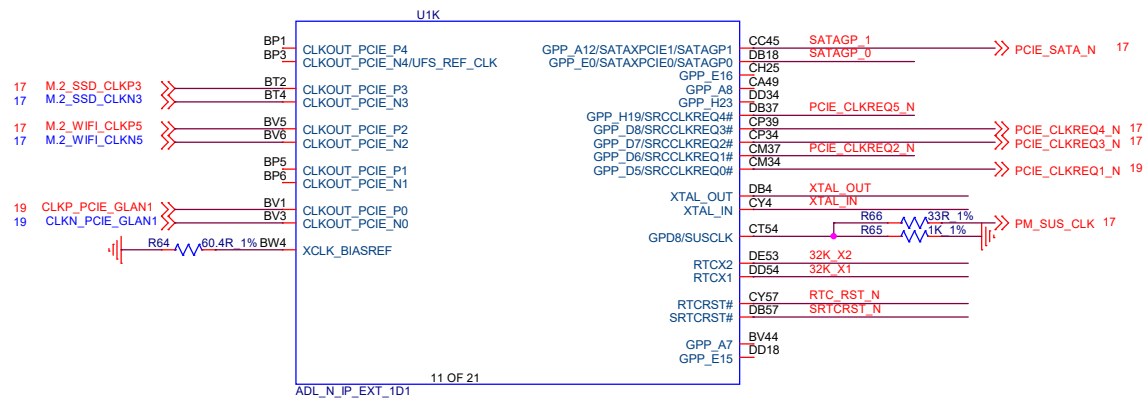
DDI	HDMI
TX0	DATA2
TX1	DATA1
TX2	DATA0
TX3	CLK





**radxa**

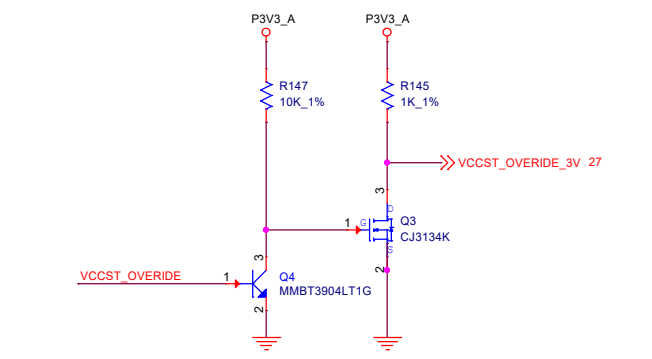
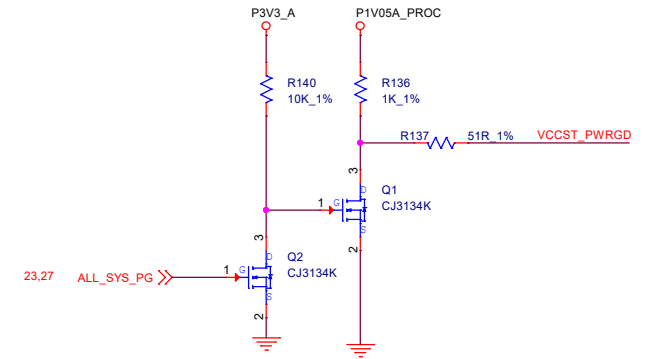
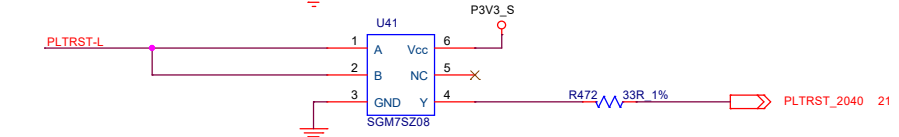
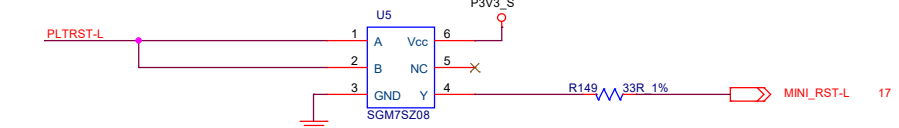
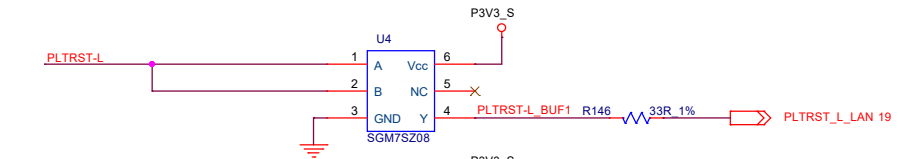
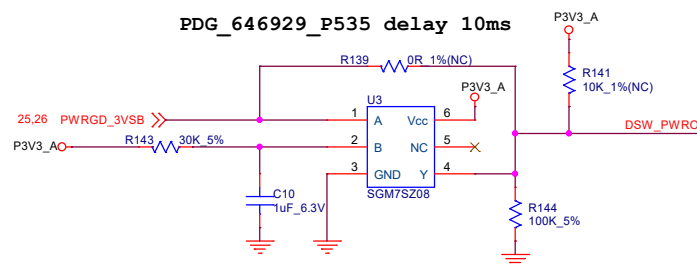
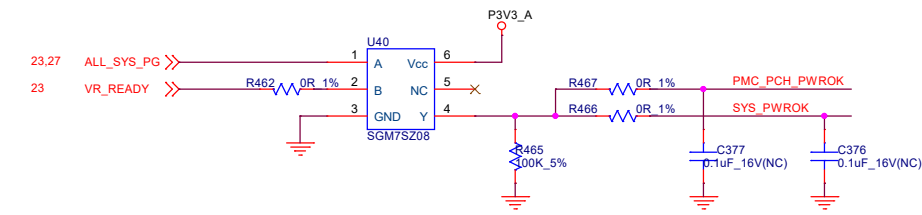
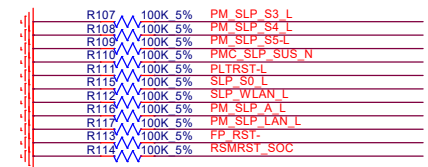
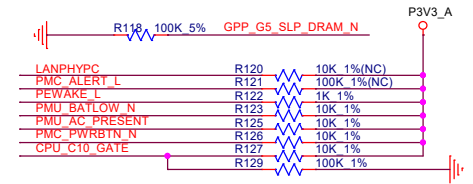
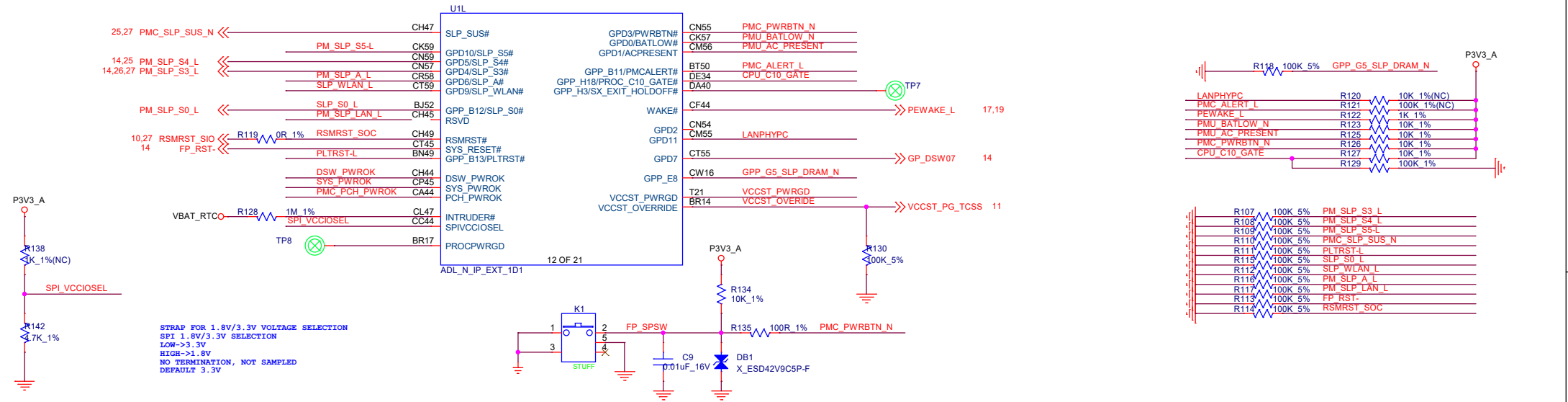
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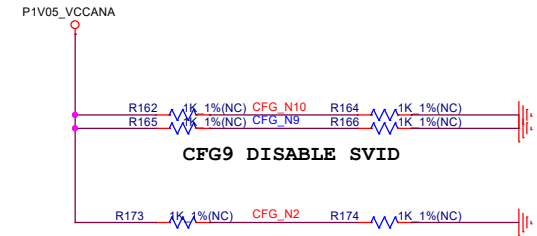
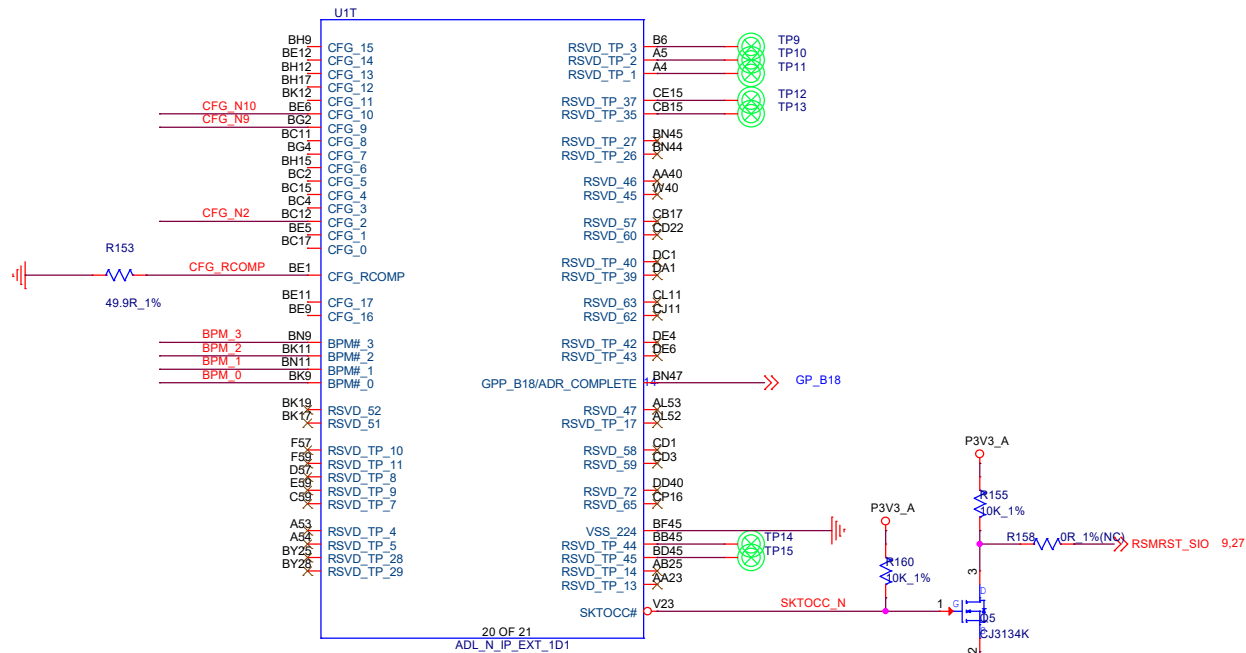
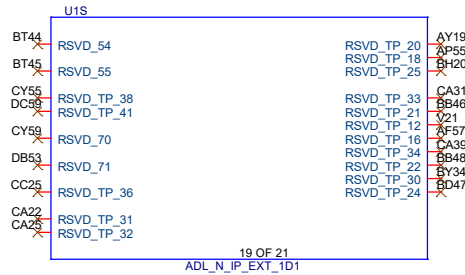


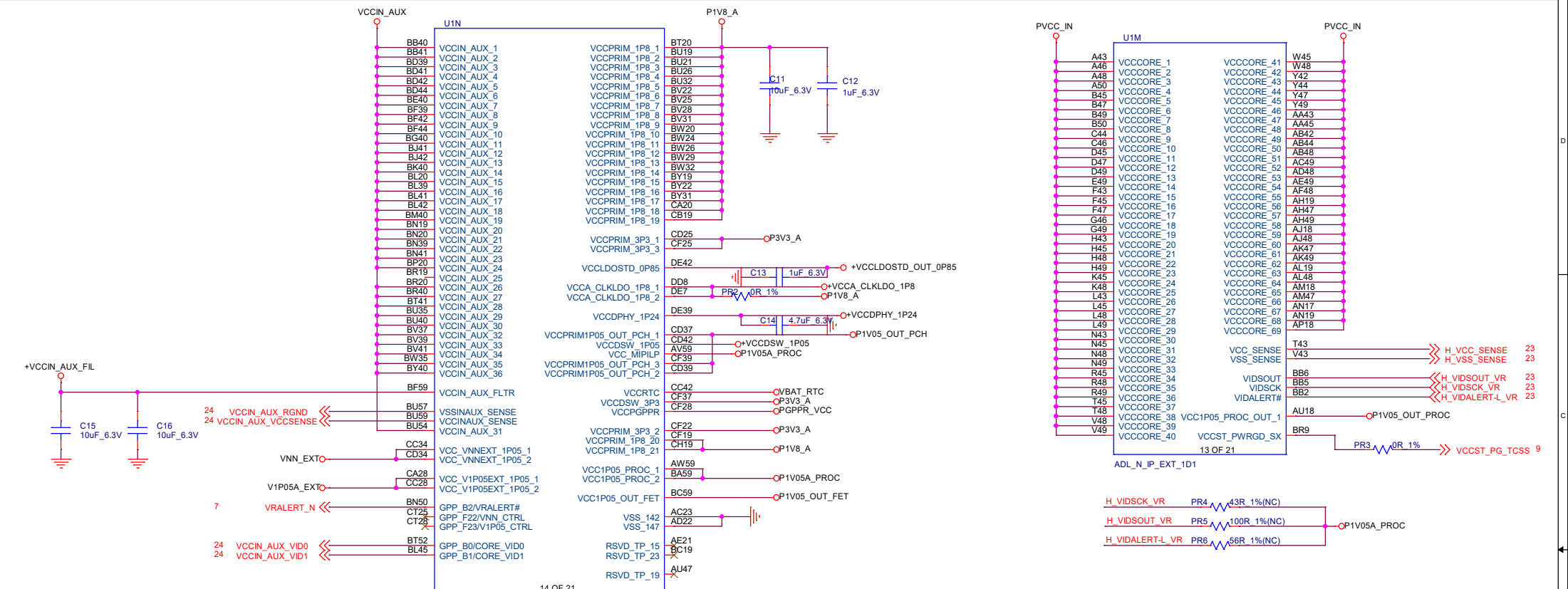
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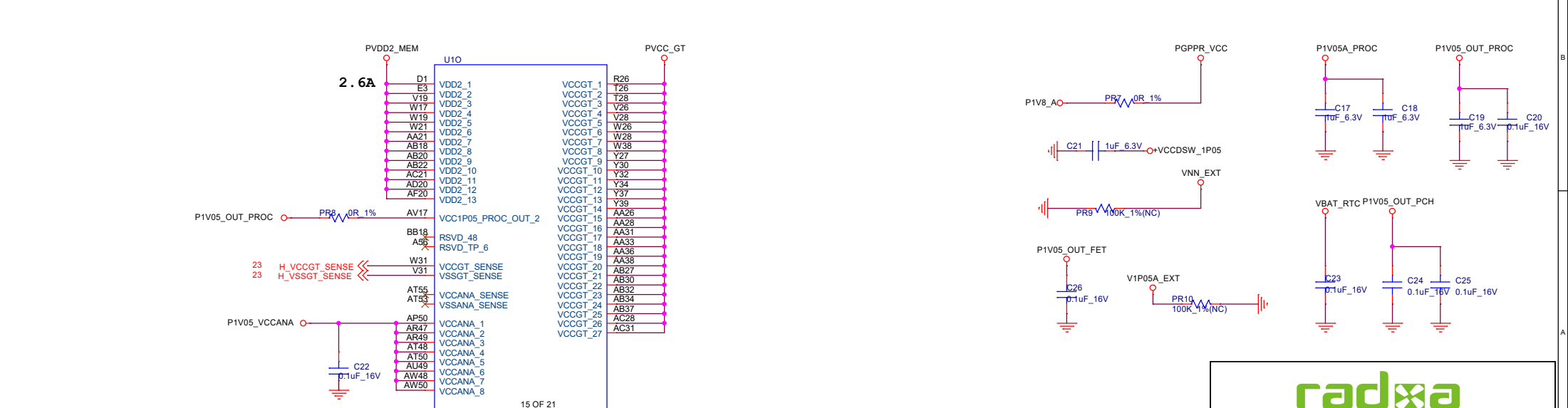






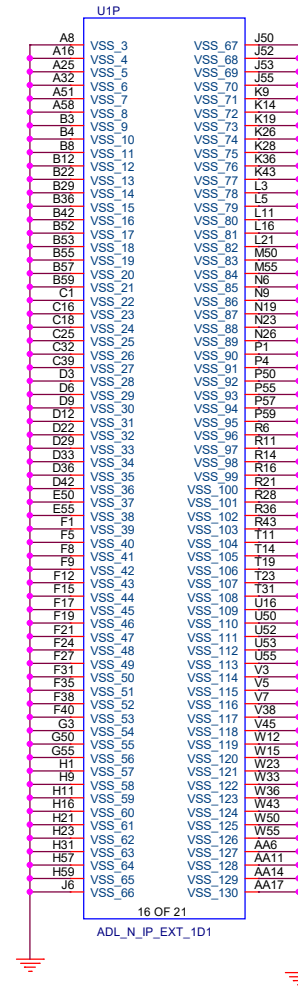
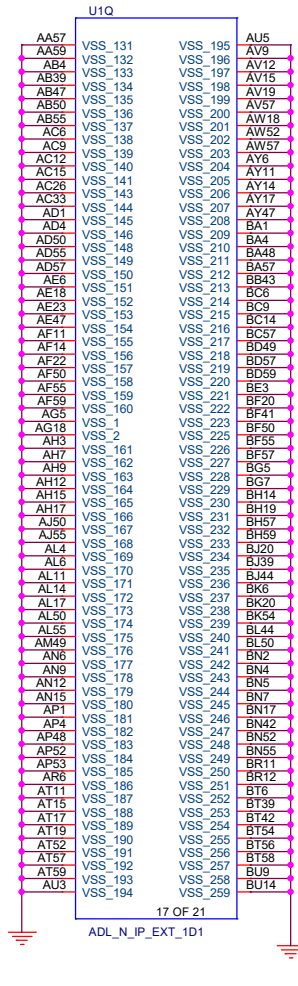
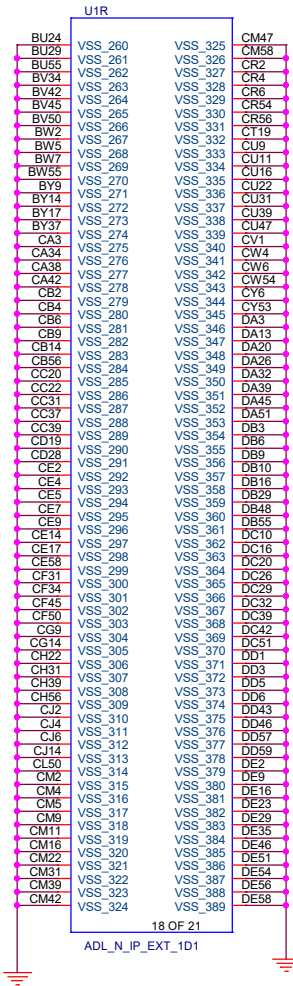


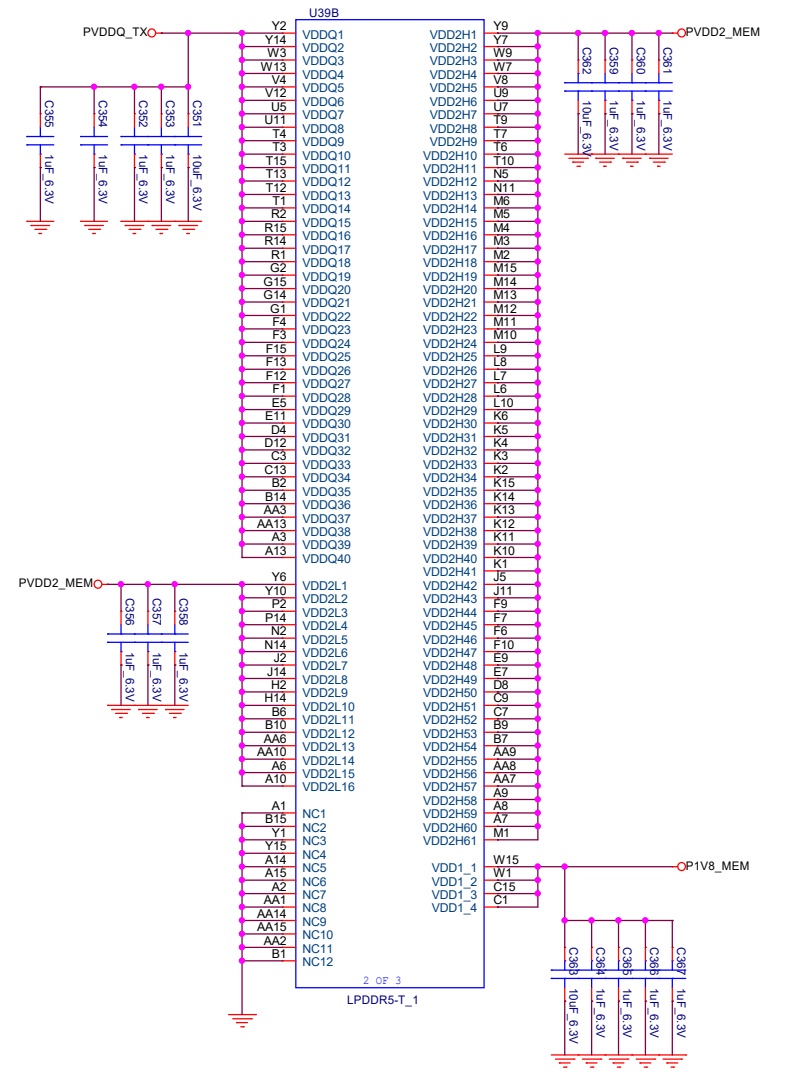
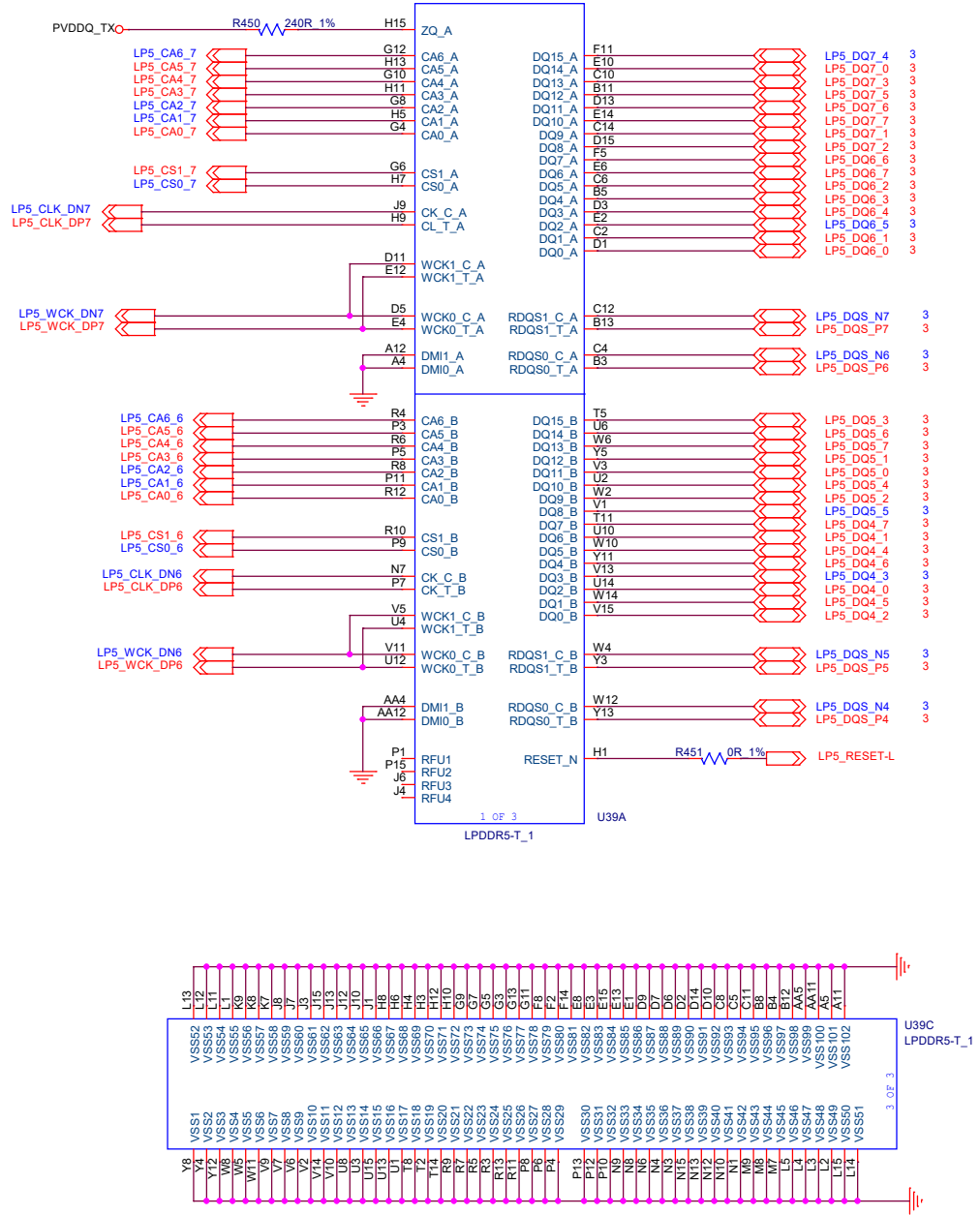
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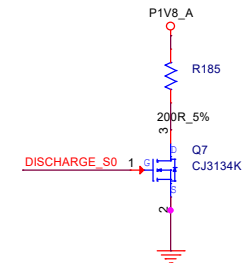
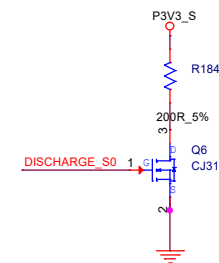
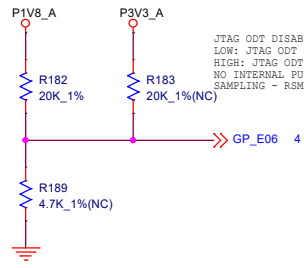
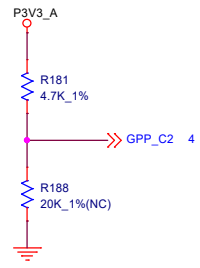
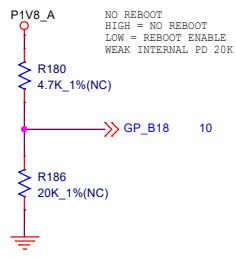
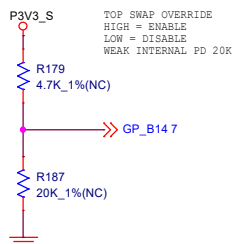


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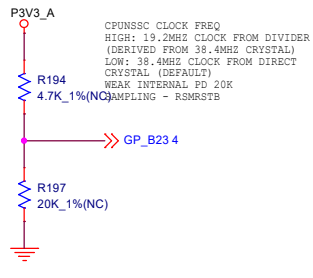
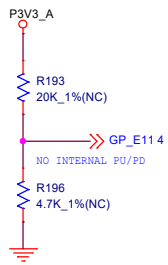
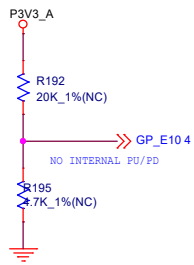
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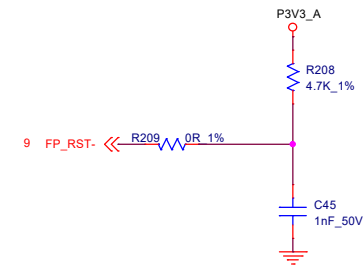
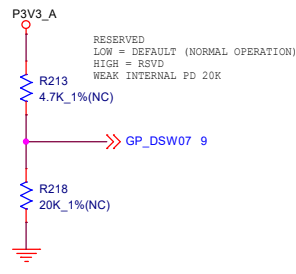
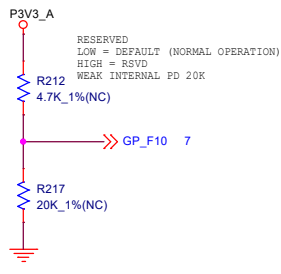
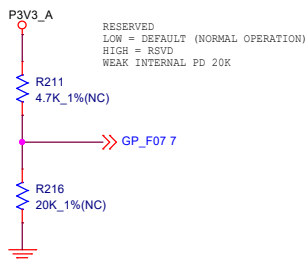
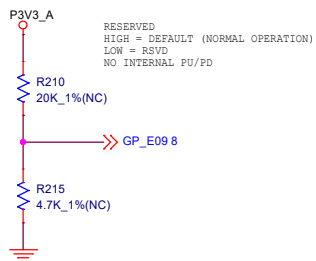
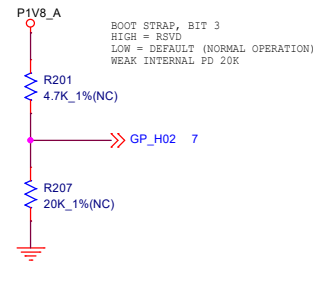
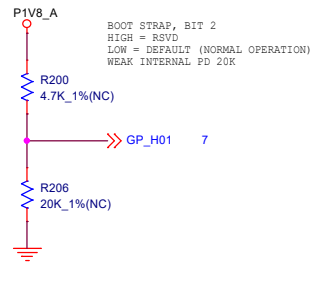
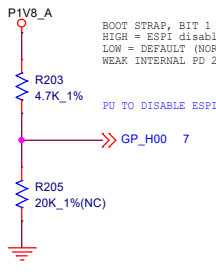
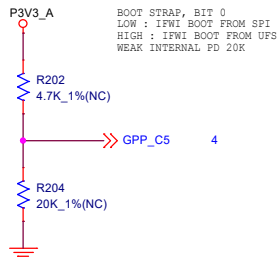
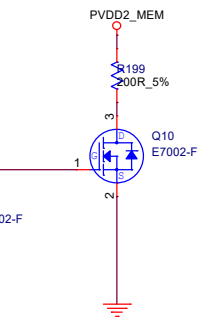
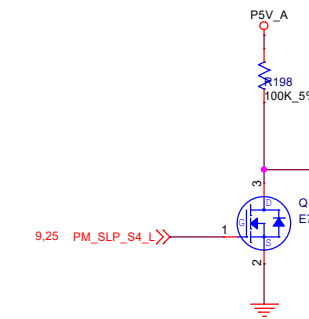
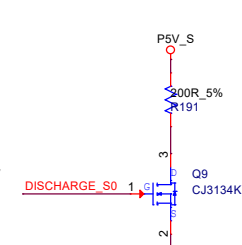
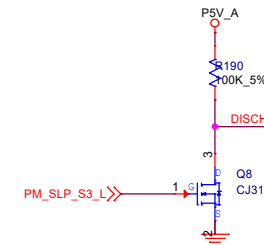


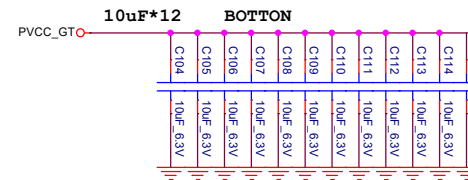
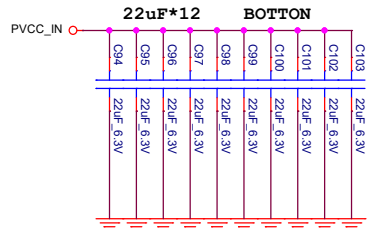
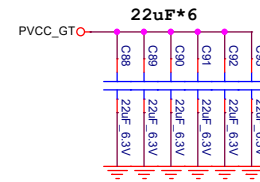
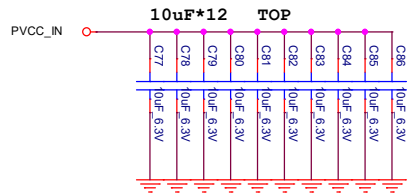
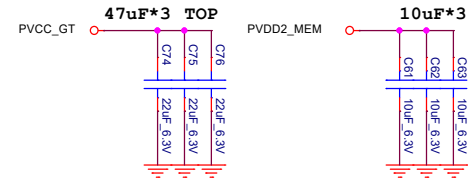
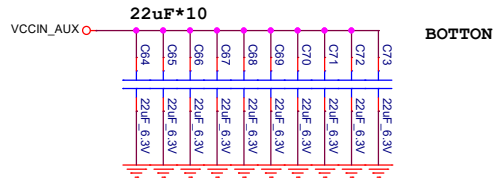
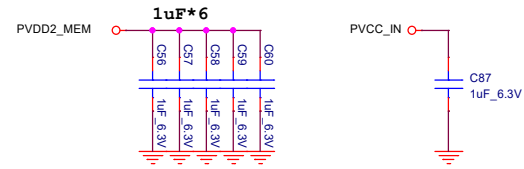
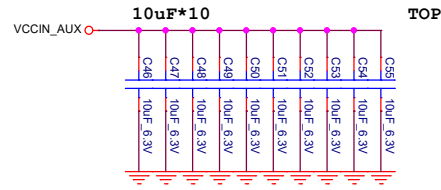
TLS Confidentiality  
 0=>Disable Intel? CSME Crypto Transport Layer Security (TLS) cipher suite (no confidentiality). (Default)  
 1=>Enable Intel? CSME Crypto Transport Layer Security (TLS) cipher suite (with confidentiality). Must be pulled up to support Intel? AMT with  
 TLS  
 WEAK INTERNAL PD 20K



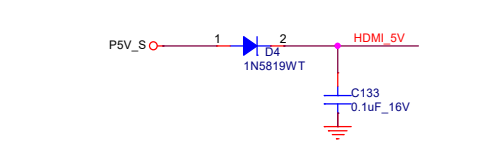
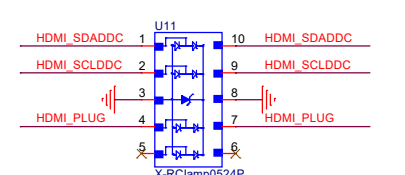
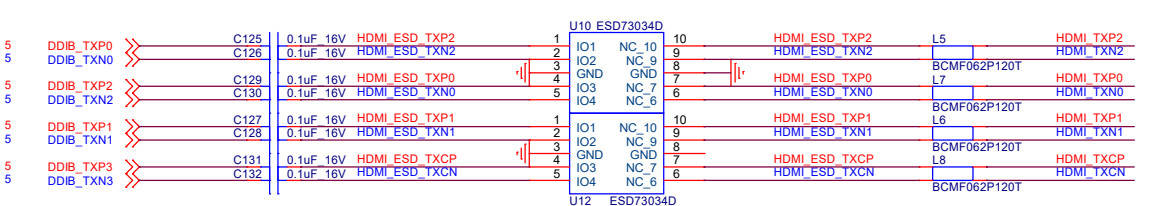
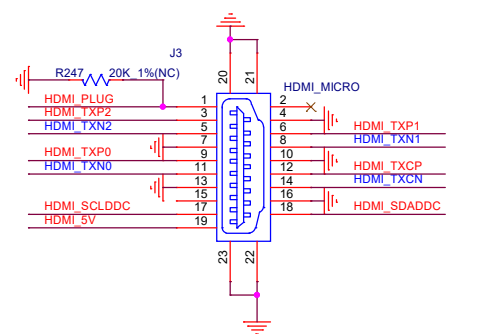
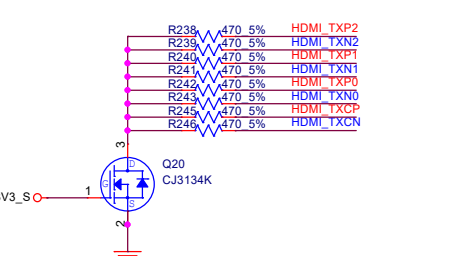
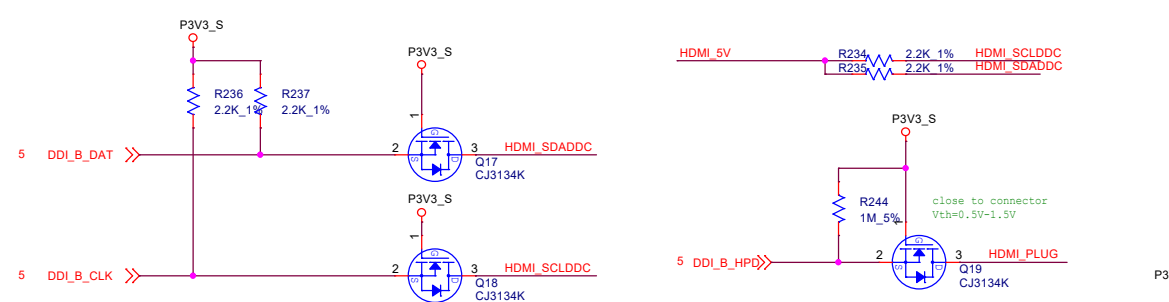
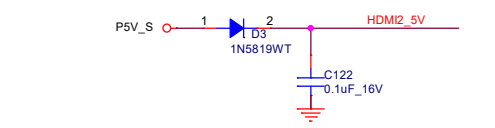
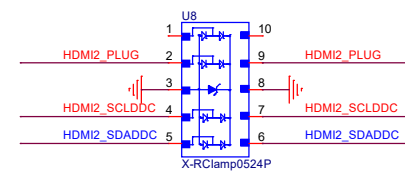
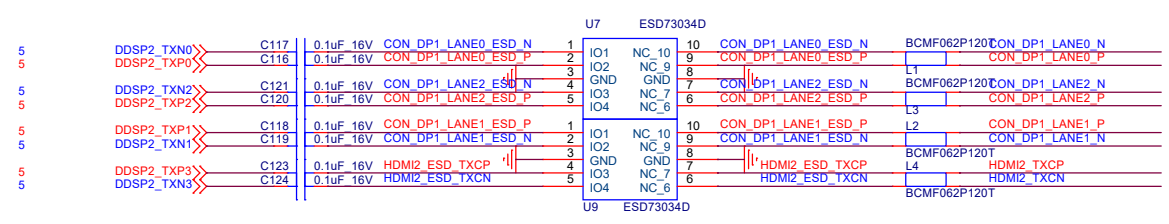
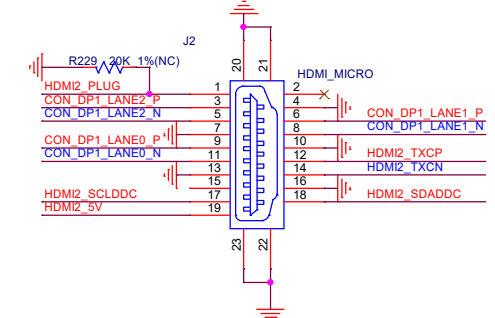
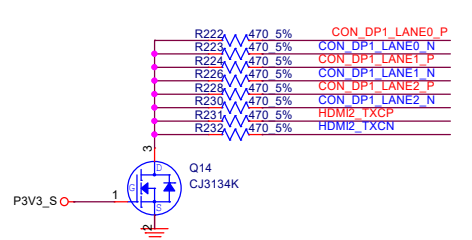
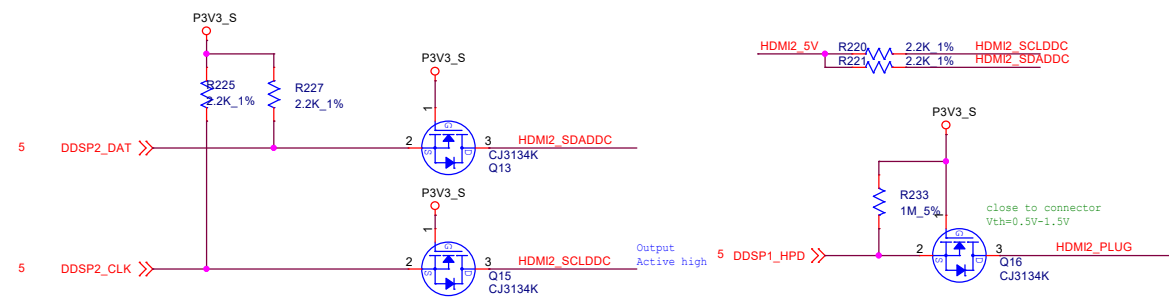
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1	1	32GB

9.26,27

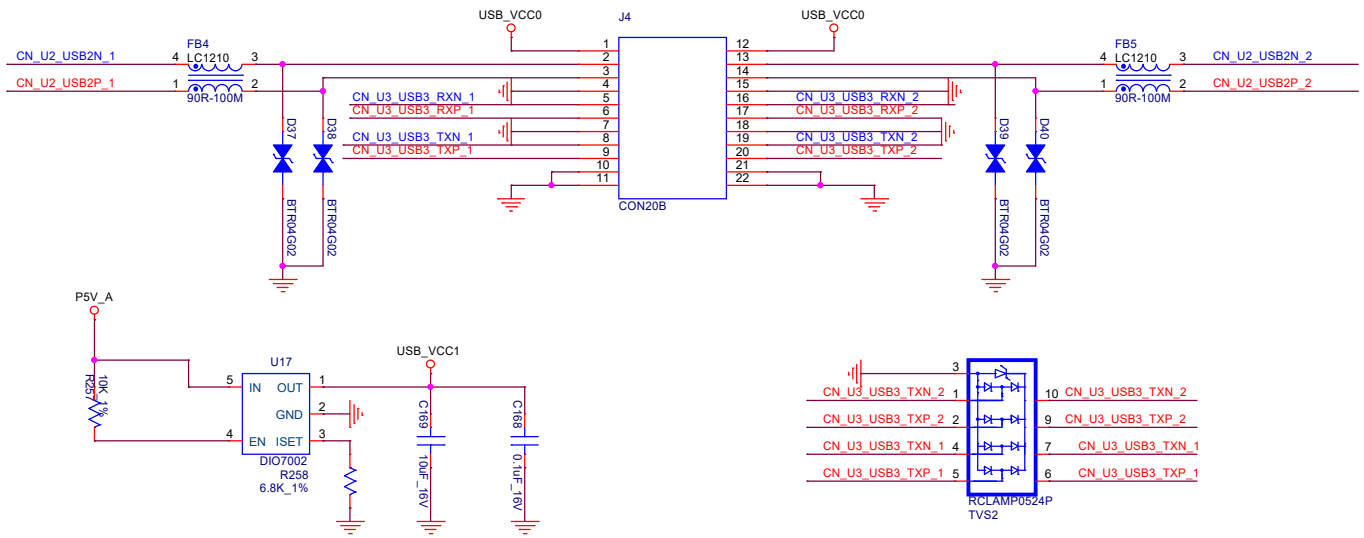




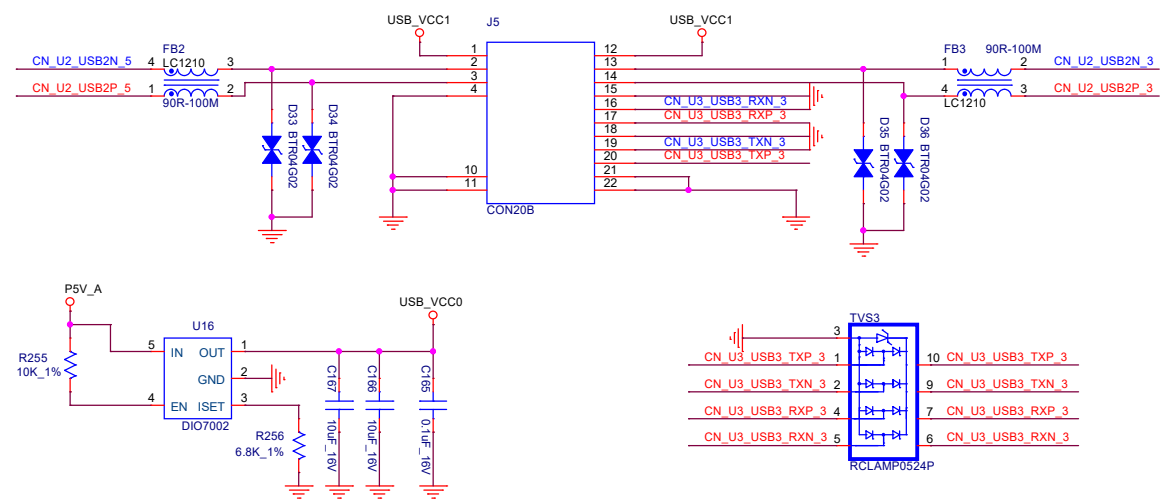
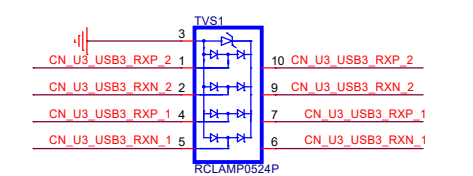
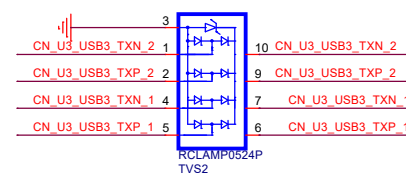
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A3	Page Name: 15 Decap	V1.11
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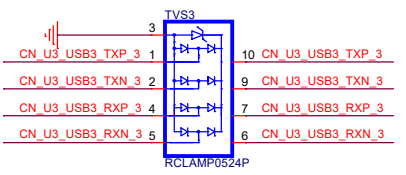


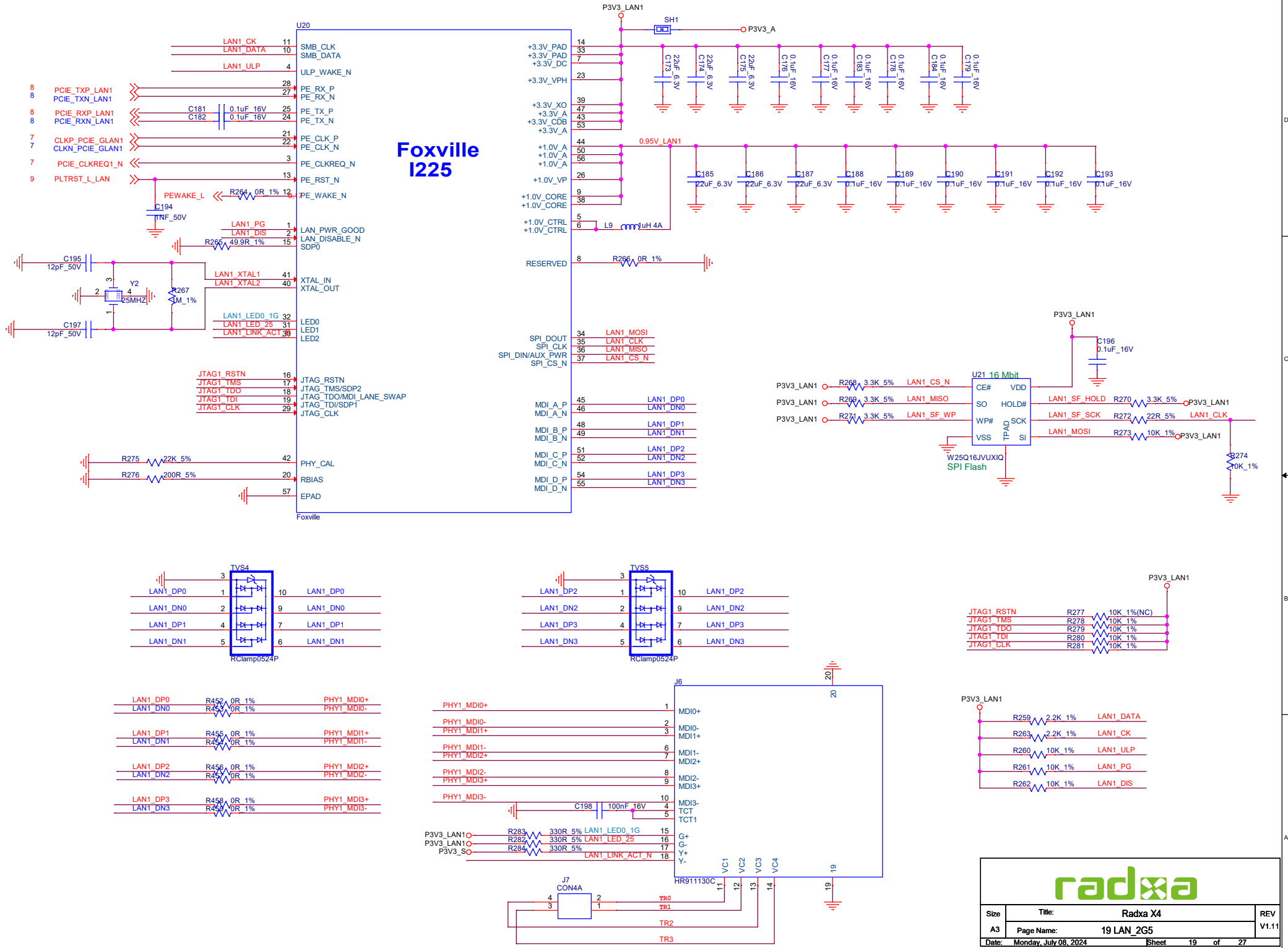


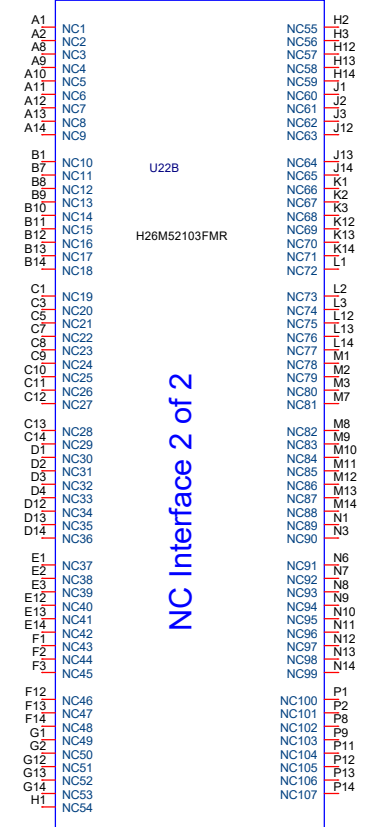
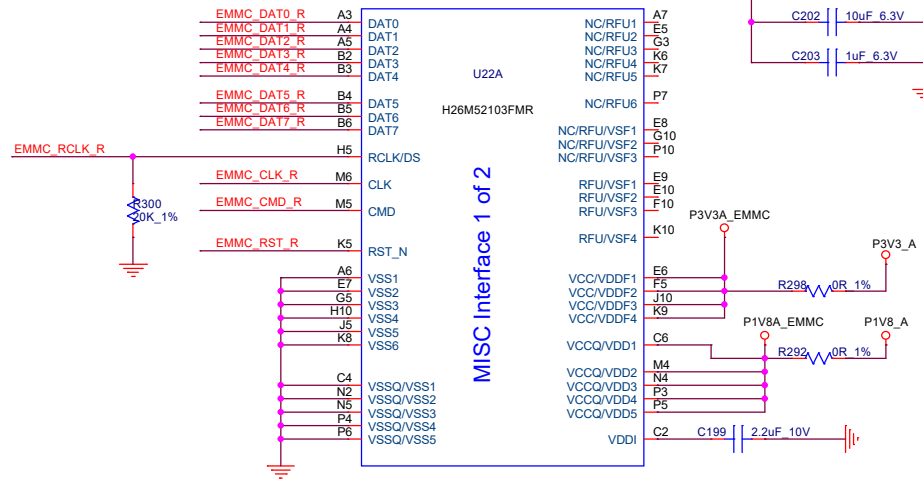
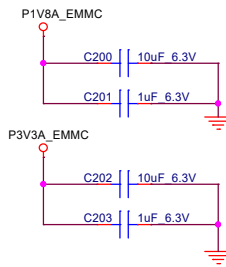
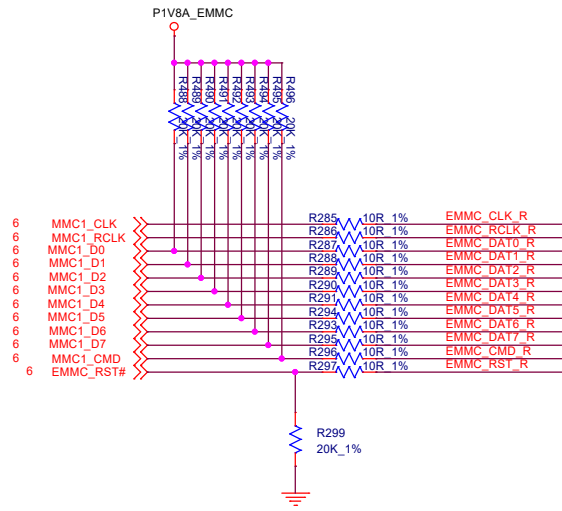
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CN U3_USB3_RXP_1			U3_USB3_RXP_1
CN U3_USB3_RXN_1			U3_USB3_RXN_1
CN U2_USB2P_1			U2_USB2P_1 8
CN U2_USB2N_1			U2_USB2N_1 8
CN U3_USB3_TXP_2	C163	0.1uF 16V	U3_USB3_TXP_2
CN U3_USB3_TXN_2	C164	0.1uF 16V	U3_USB3_TXN_2
CN U3_USB3_RXP_2			U3_USB3_RXP_2
CN U3_USB3_RXN_2			U3_USB3_RXN_2
CN U2_USB2P_2			U2_USB2P_2 8
CN U2_USB2N_2			U2_USB2N_2 8



CN U3_USB3_TXP_3	C170	0.1uF 16V	U3_USB3_TXP_3
CN U3_USB3_TXN_3	C171	0.1uF 16V	U3_USB3_TXN_3
CN U3_USB3_RXP_3			U3_USB3_RXP_3
CN U3_USB3_RXN_3			U3_USB3_RXN_3
CN U2_USB2N_3			U2_USB2N_3 8
CN U2_USB2P_3			U2_USB2P_3 8
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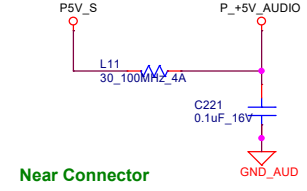
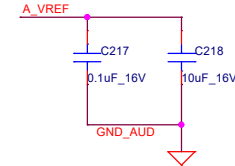
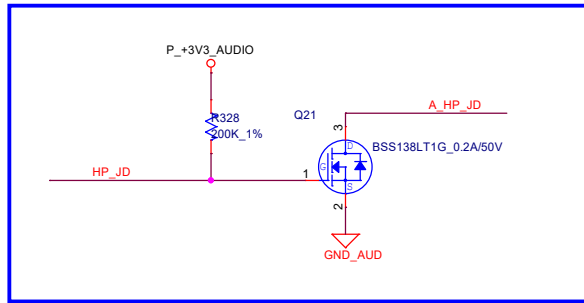




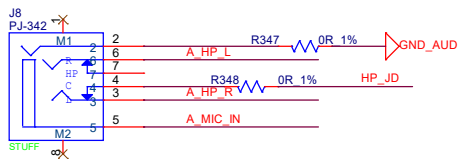
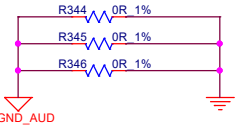
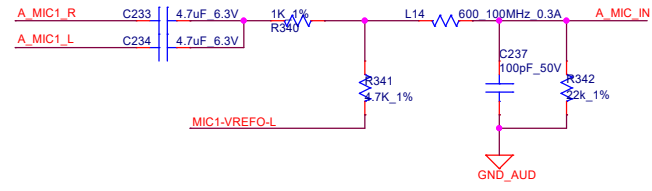
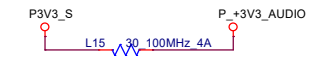
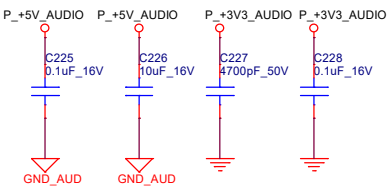
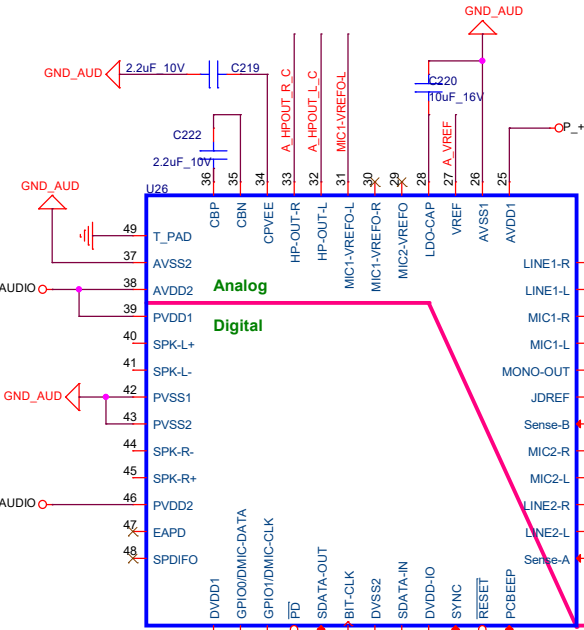
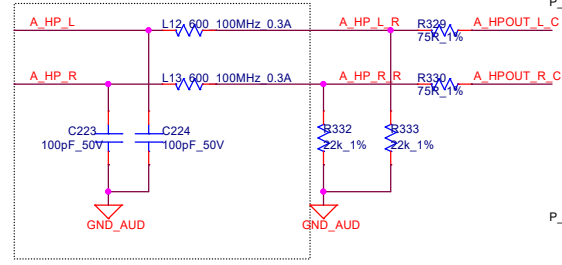


NC Interface 2 of 2

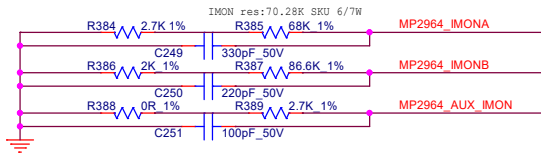
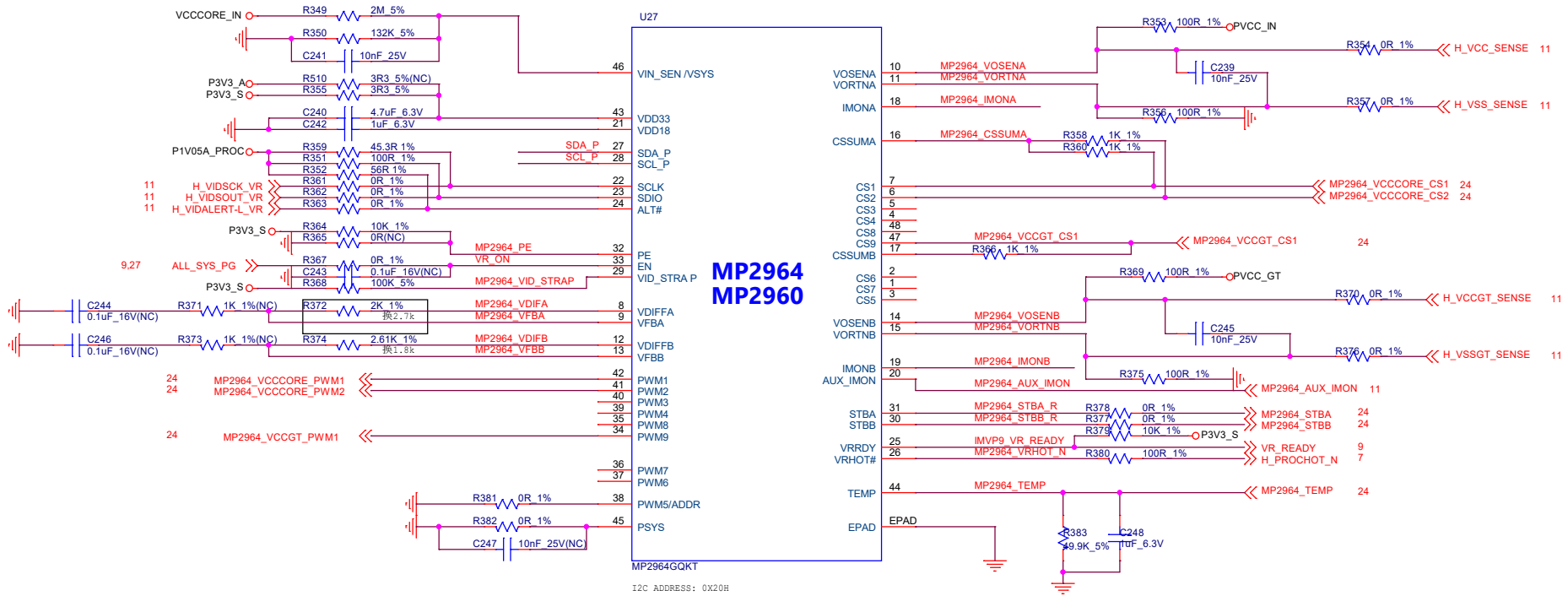
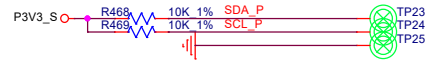


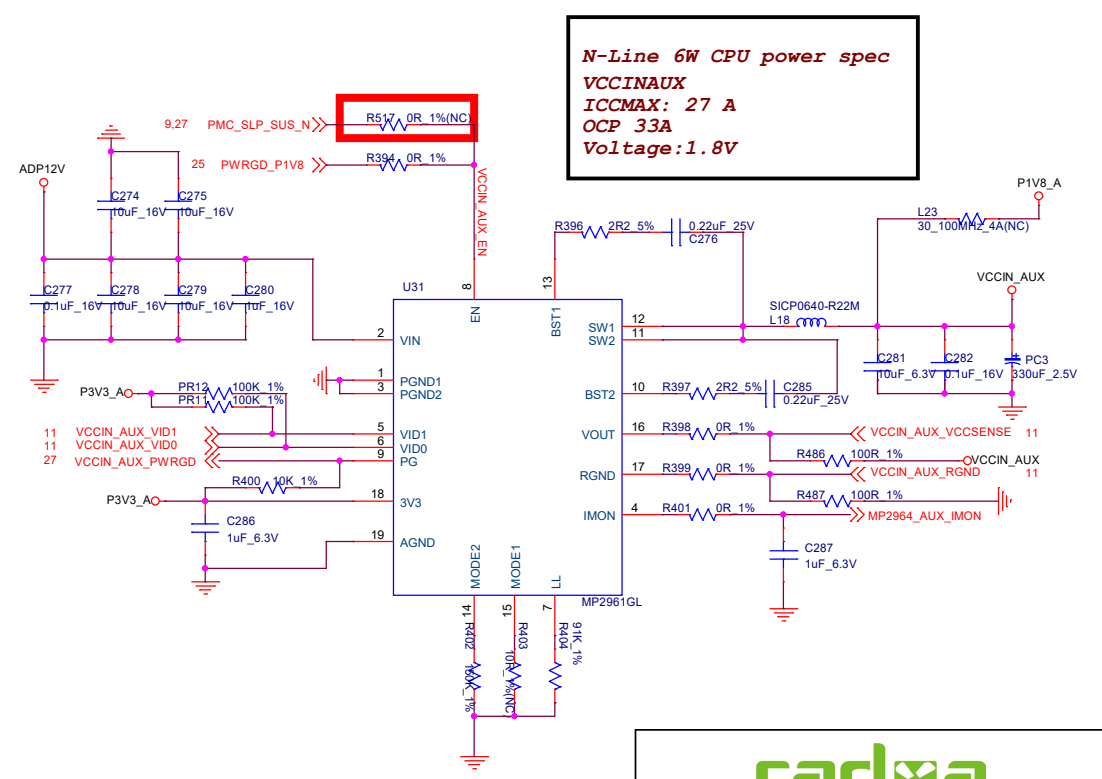
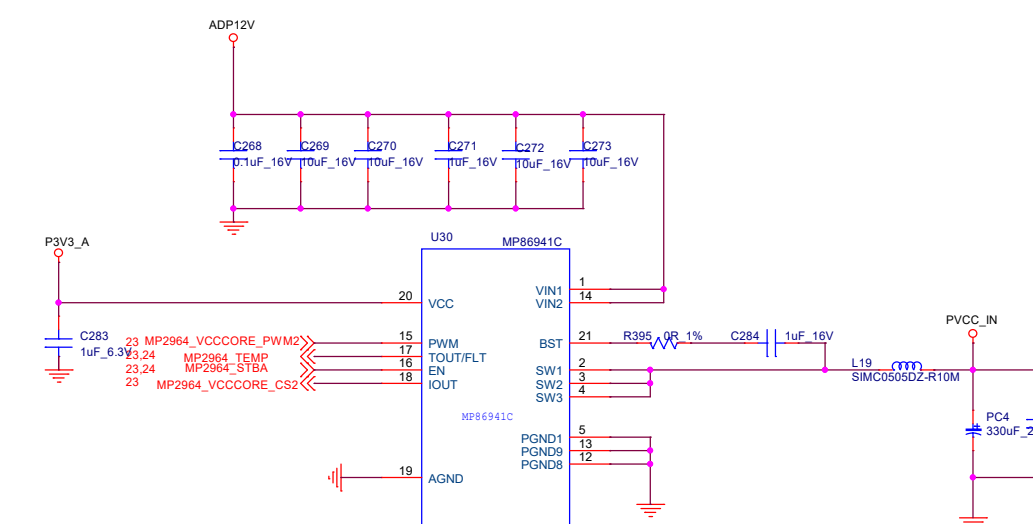
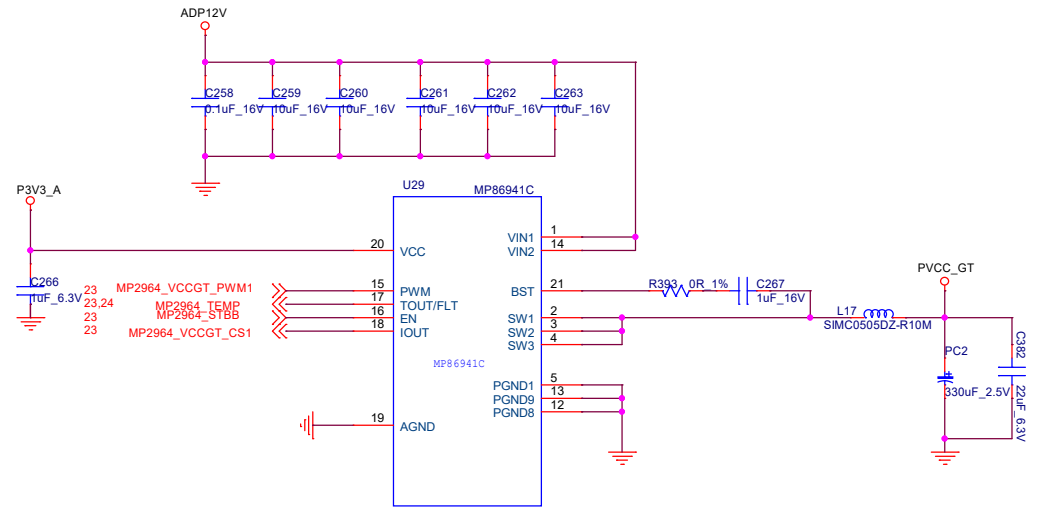
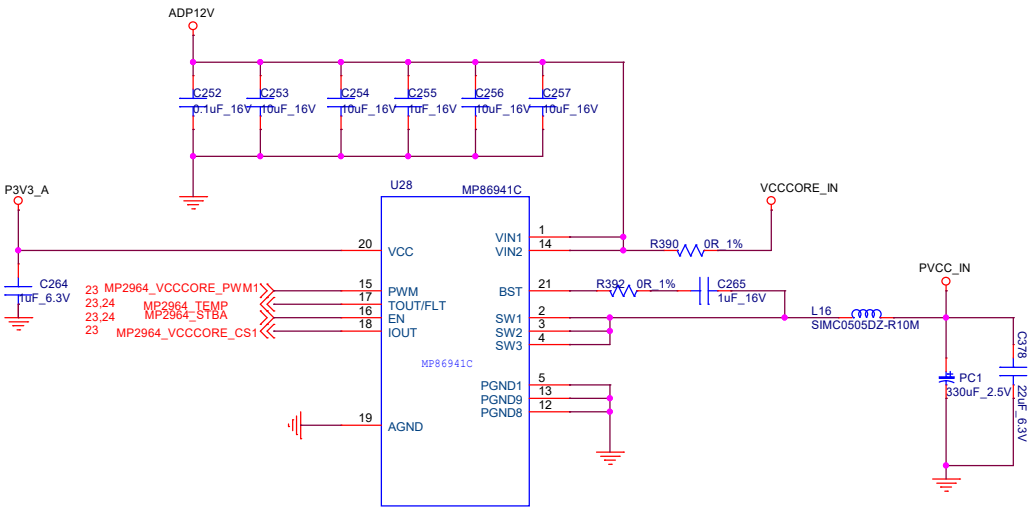


Near Connector



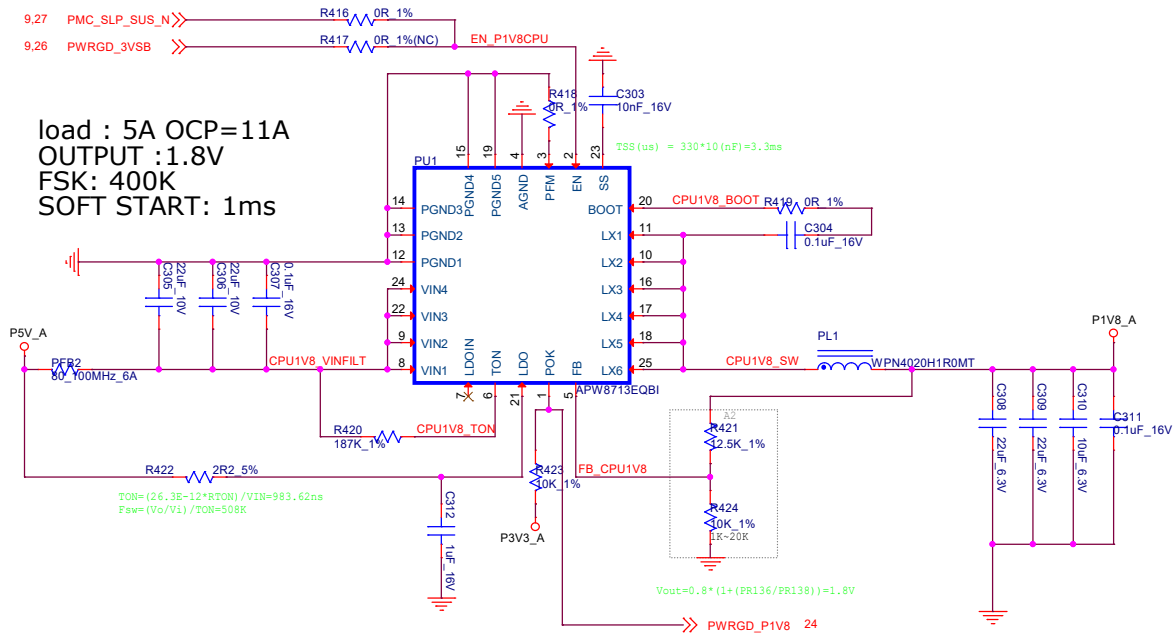
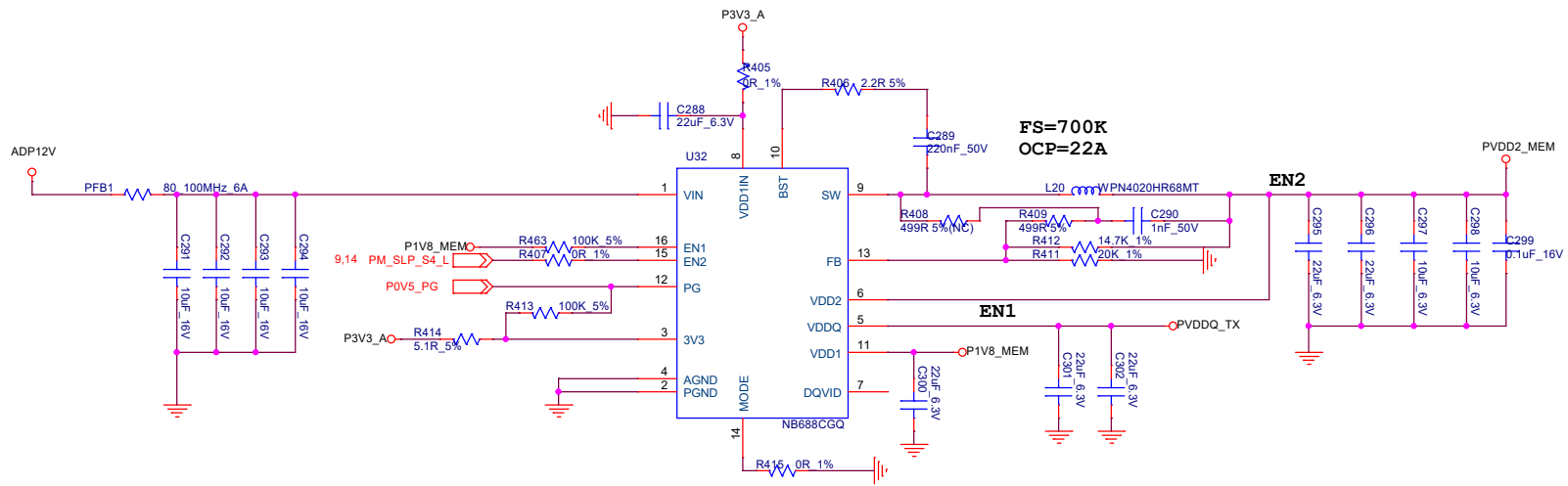
RAIL	RES	CAP	ICCMAX
VCCCORE	70.28K	330PF	37A
	53.97K	330PF	53A
VCCGT	82.75K	220PF	29A
VCCIN_AUX	11K	220PF	27A



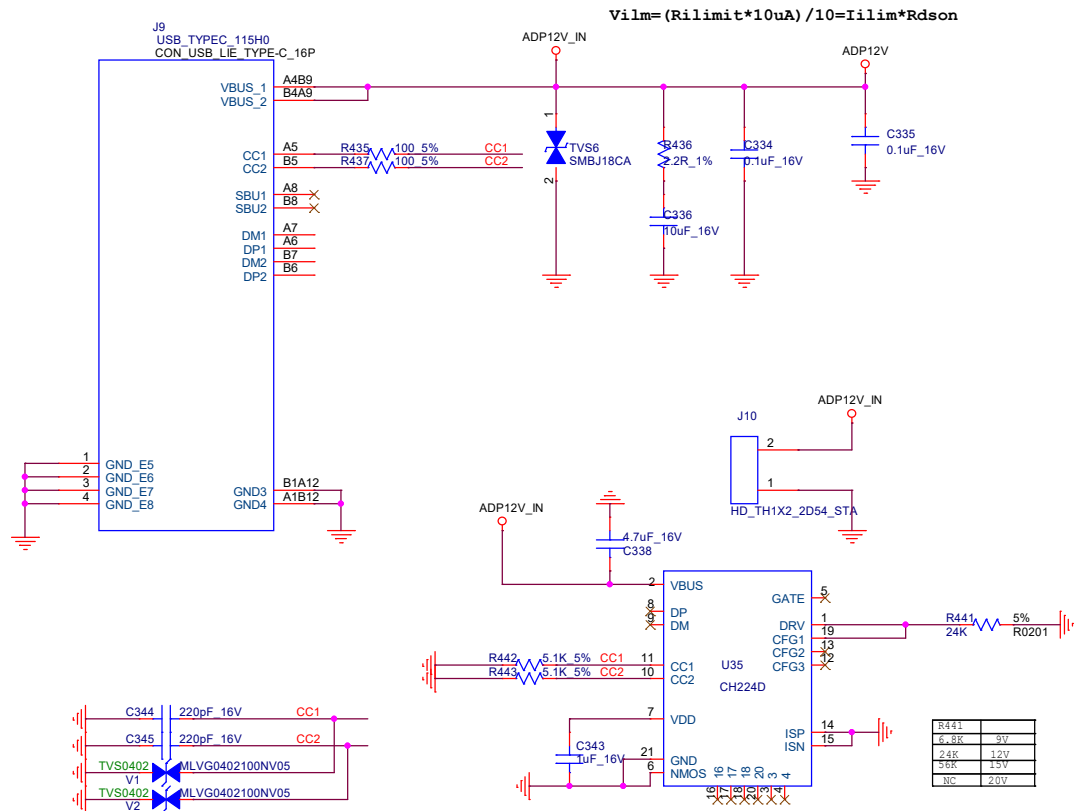
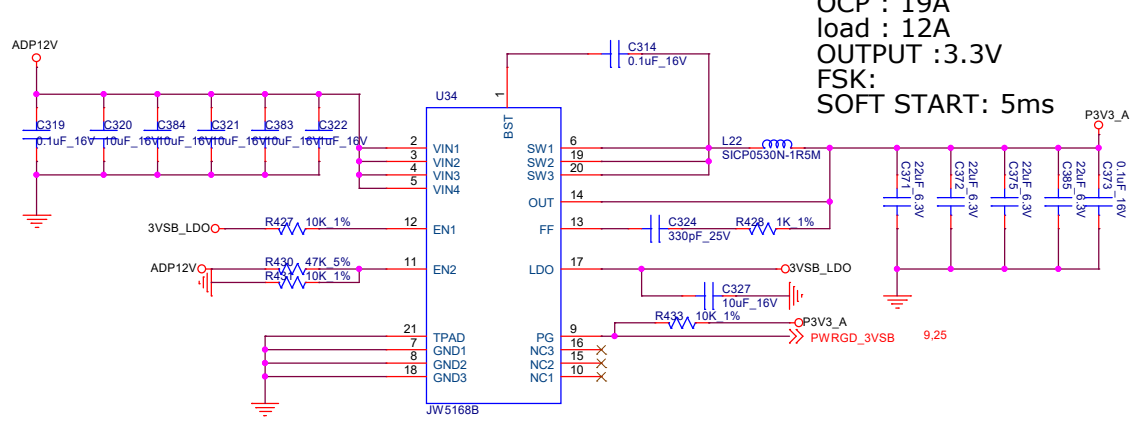
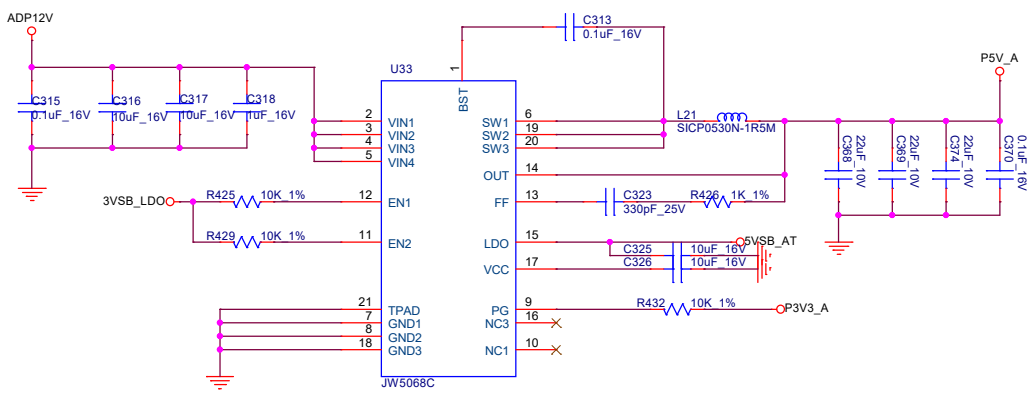


**N-Line 6W CPU power spec**  
**VCCINAUX**  
**ICCMAX: 27 A**  
**OCP 33A**  
**Voltage: 1.8V**



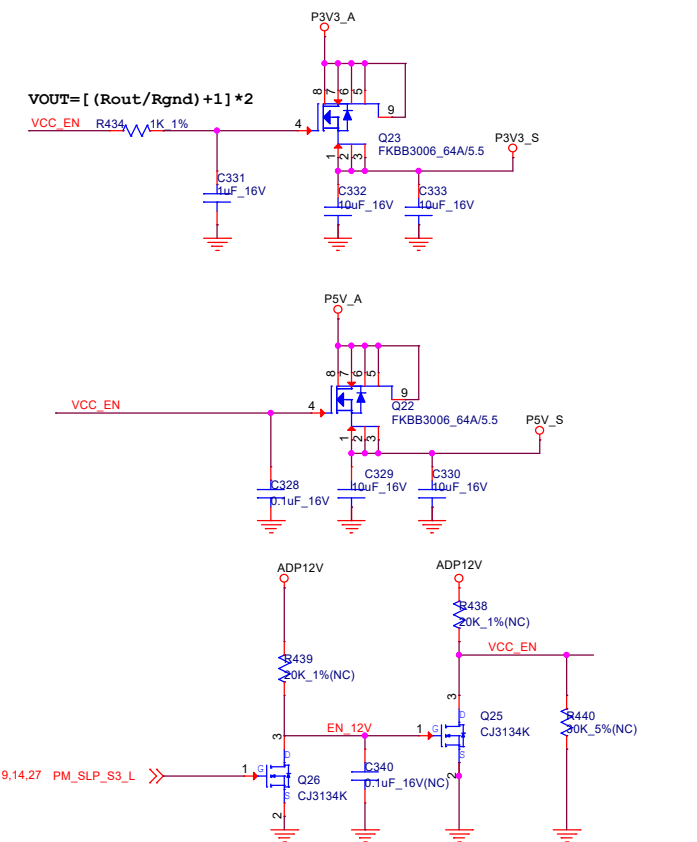


OCP : 19A  
 load : 12A  
 OUTPUT : 3.3V  
 FSK :  
 SOFT START: 5ms



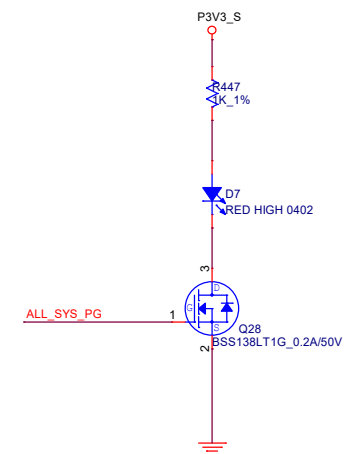
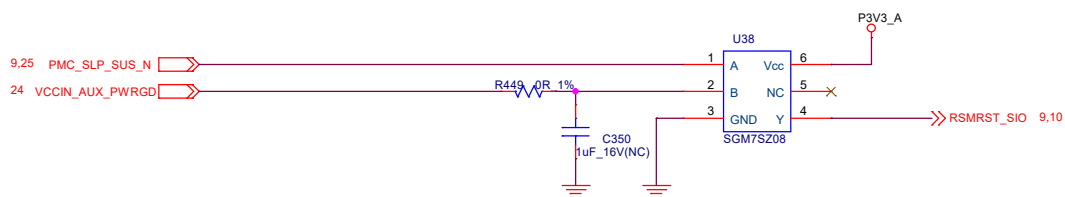
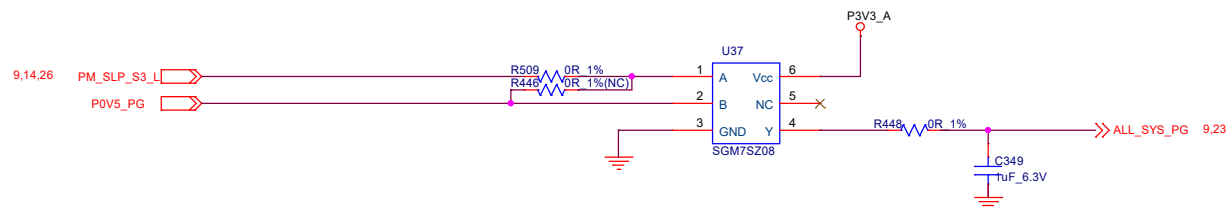
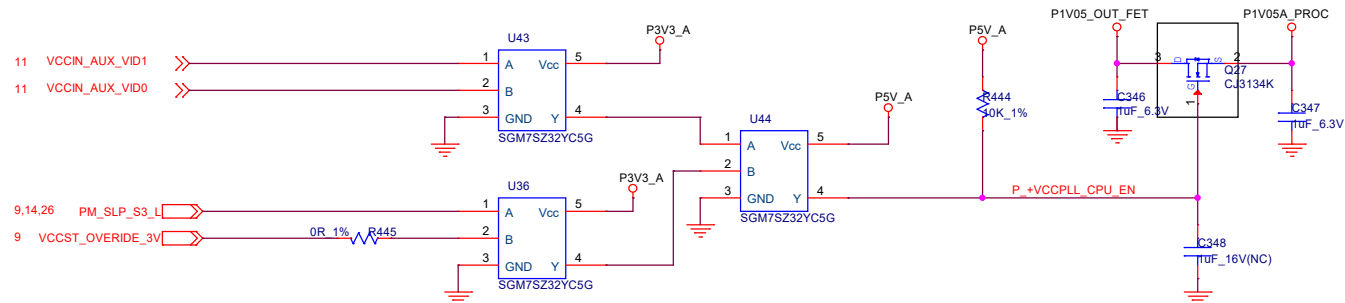
$$V_{ilm} = (R_{ilimit} * 10\mu A) / 10 = I_{ilim} * R_{dson}$$

$$V_{OUT} = [(R_{out}/R_{gnd}) + 1] * 2$$



R441	
6.8K	3V
24K	12V
56K	15V
NC	2.0V





Size	Title:		REV
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