



Radxa Rock 4D schematic

V1.11

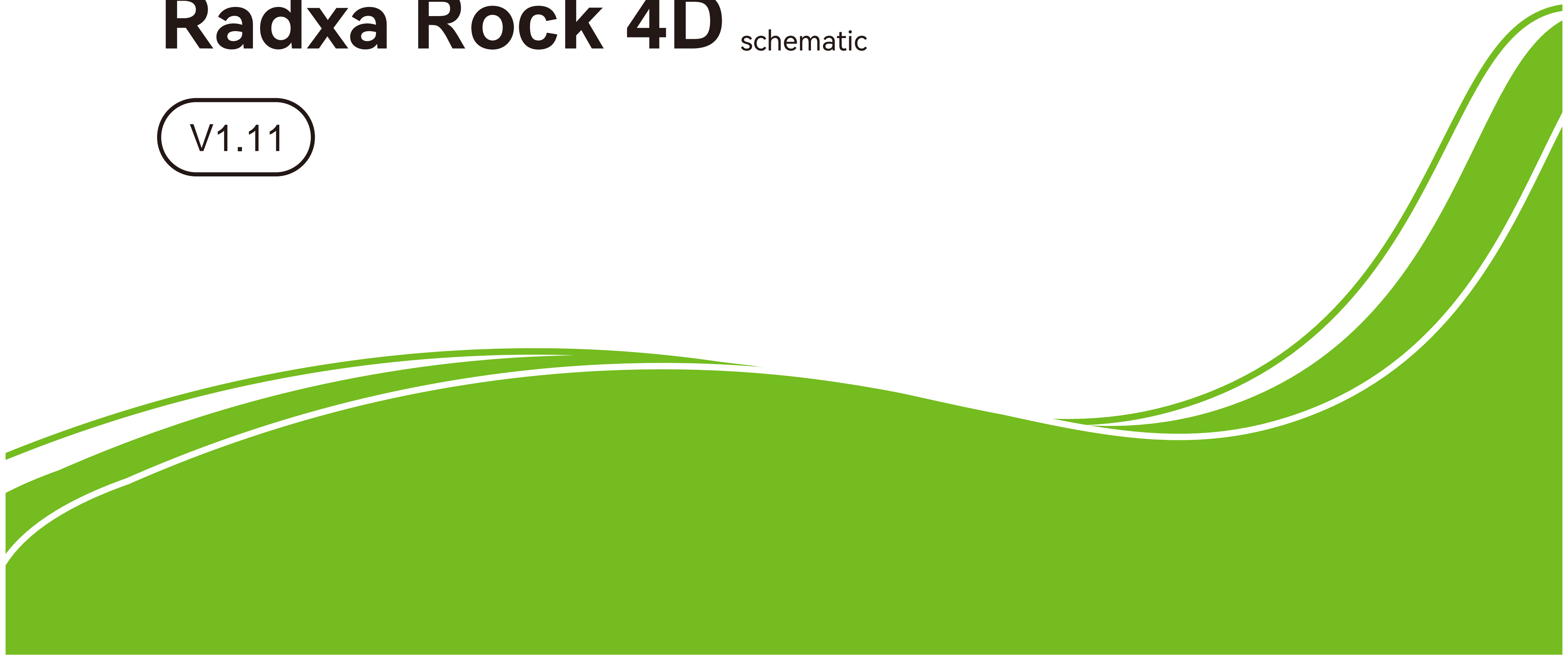


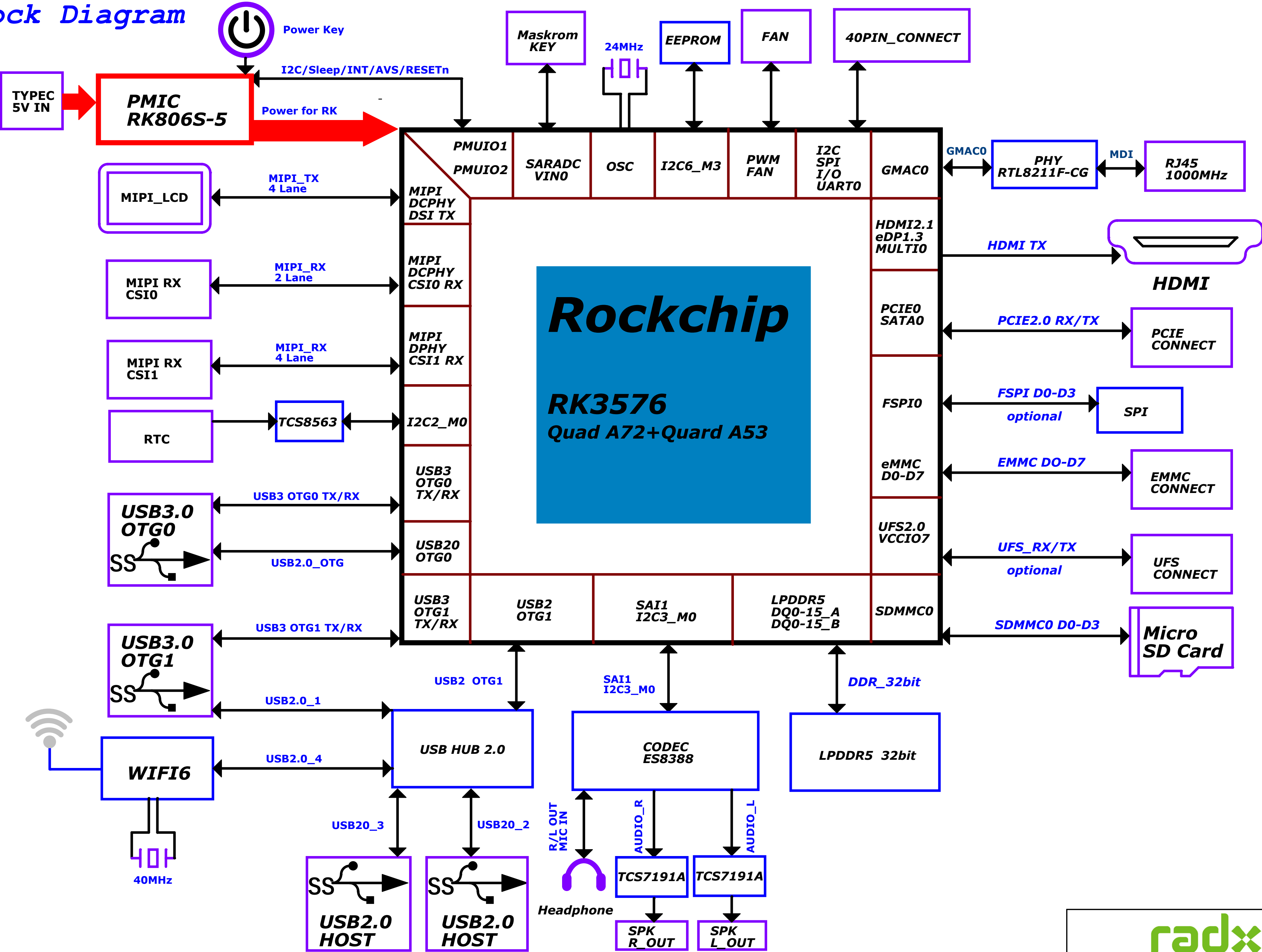
Table of Content

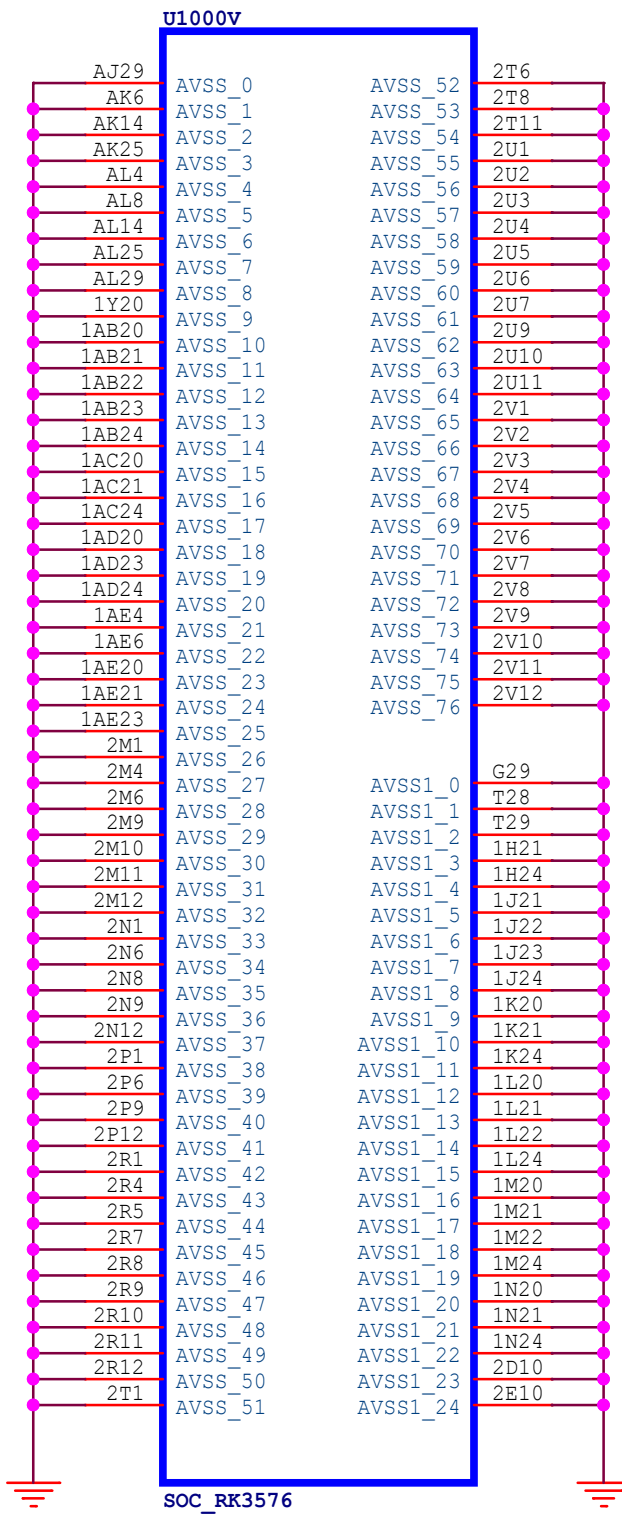
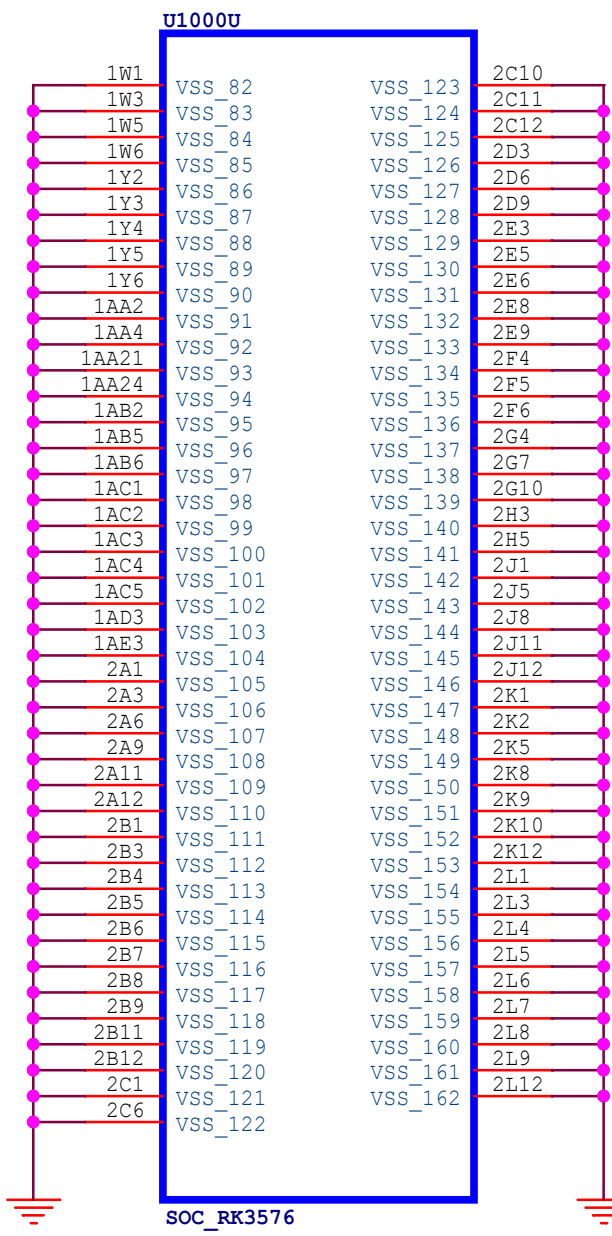
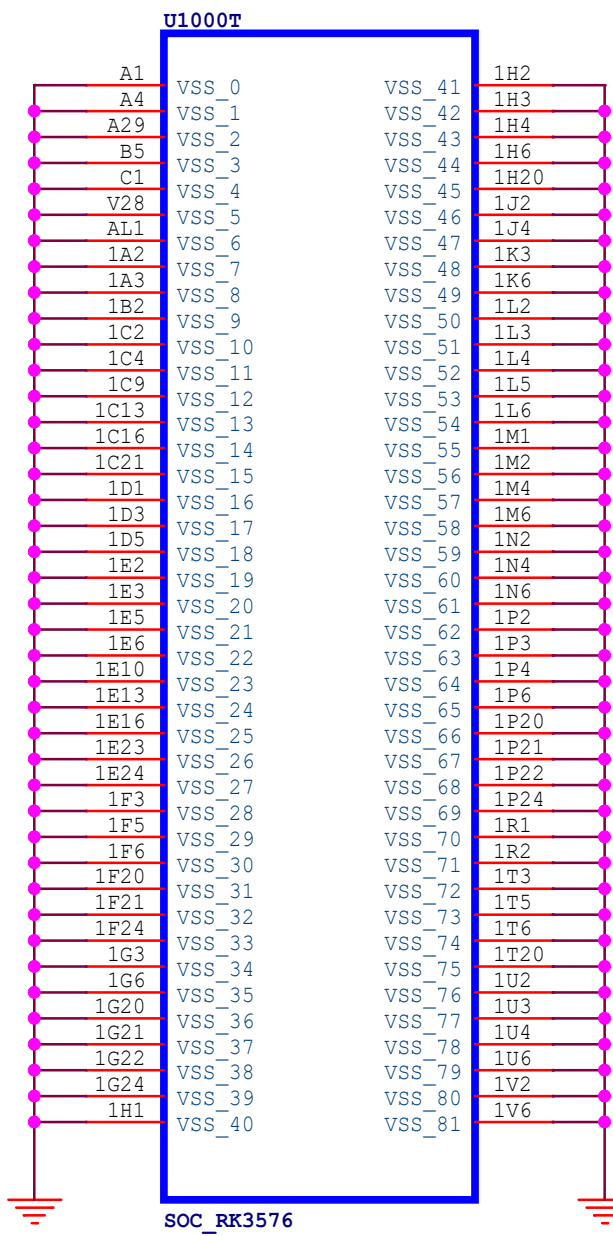
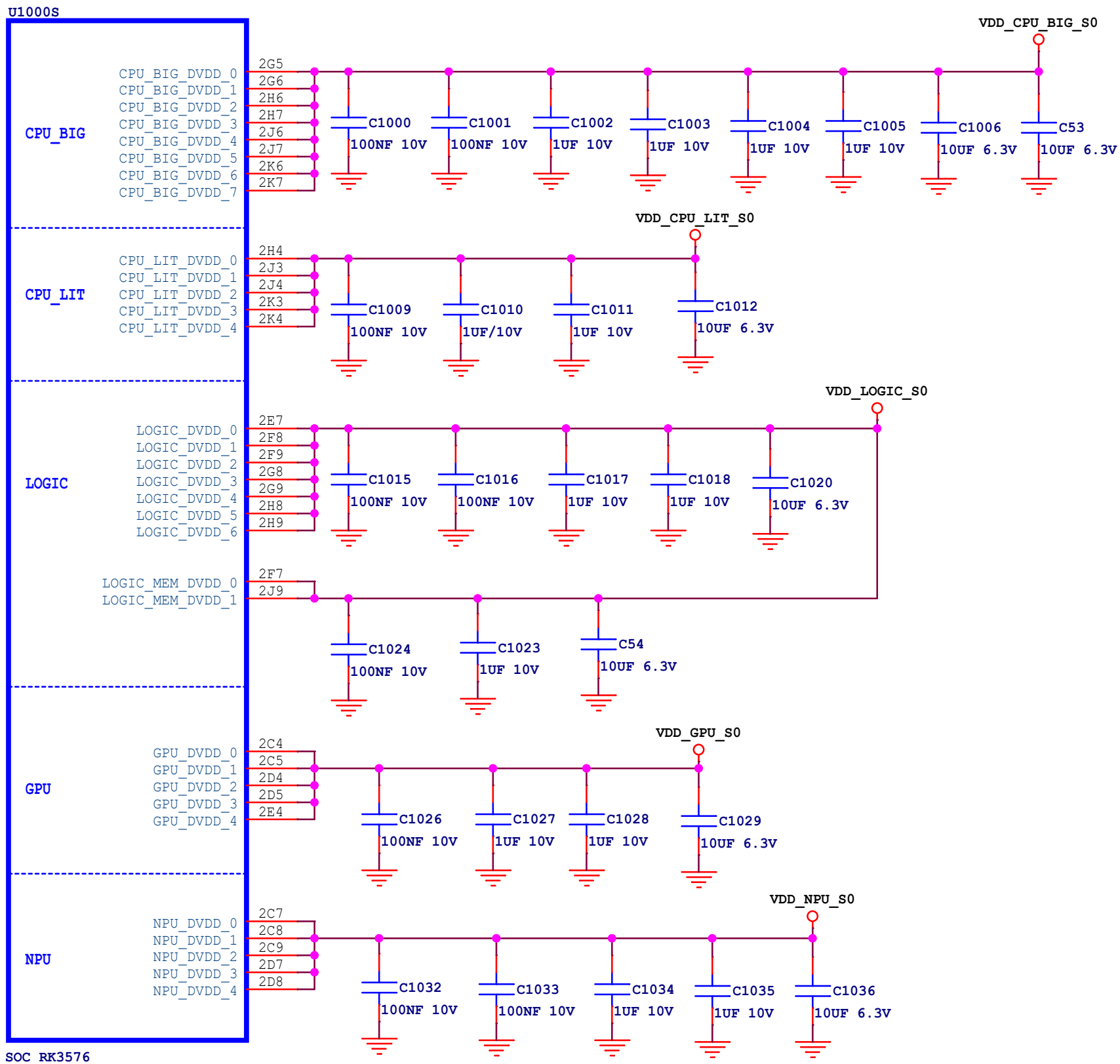
01.cover
02.Index and Notes
03.Block Diagram
04.RK3576-Power/GND
05.RK3576-OSC/PLL/PMUIO
06.RK3576-DDR PHY
07.RK3576-MIPI DSI/CSI
08.RK3576-PCIe/SATA/USB3
09.RK3576-TypeC/USB2
10.RK3576-eMMC/UFS/SD
11.RK3576-SARADC
12.RK3576-HDMI/eDP
13.RK3576-GPIO VCCIO2/3/6
14.RK3576-GPIO VCCIO4/5
15.LPDDR5_1X32bit_315P
16.Audio-CODEC
17.ETHERNET
18.MIPI CSI/DSI
19.EMMC/SPI/UFS
20.HDMI TX
21.USB HUB/USB2/USB3
22.USB WIFI
23.TF Card/EEPROM/PCIE
24.Audio SPK
25.Power-PMIC RK806S-5
26.Power-Ext
27.Power-DC IN/RTC
28.40PIN/FAN/LED/KEY

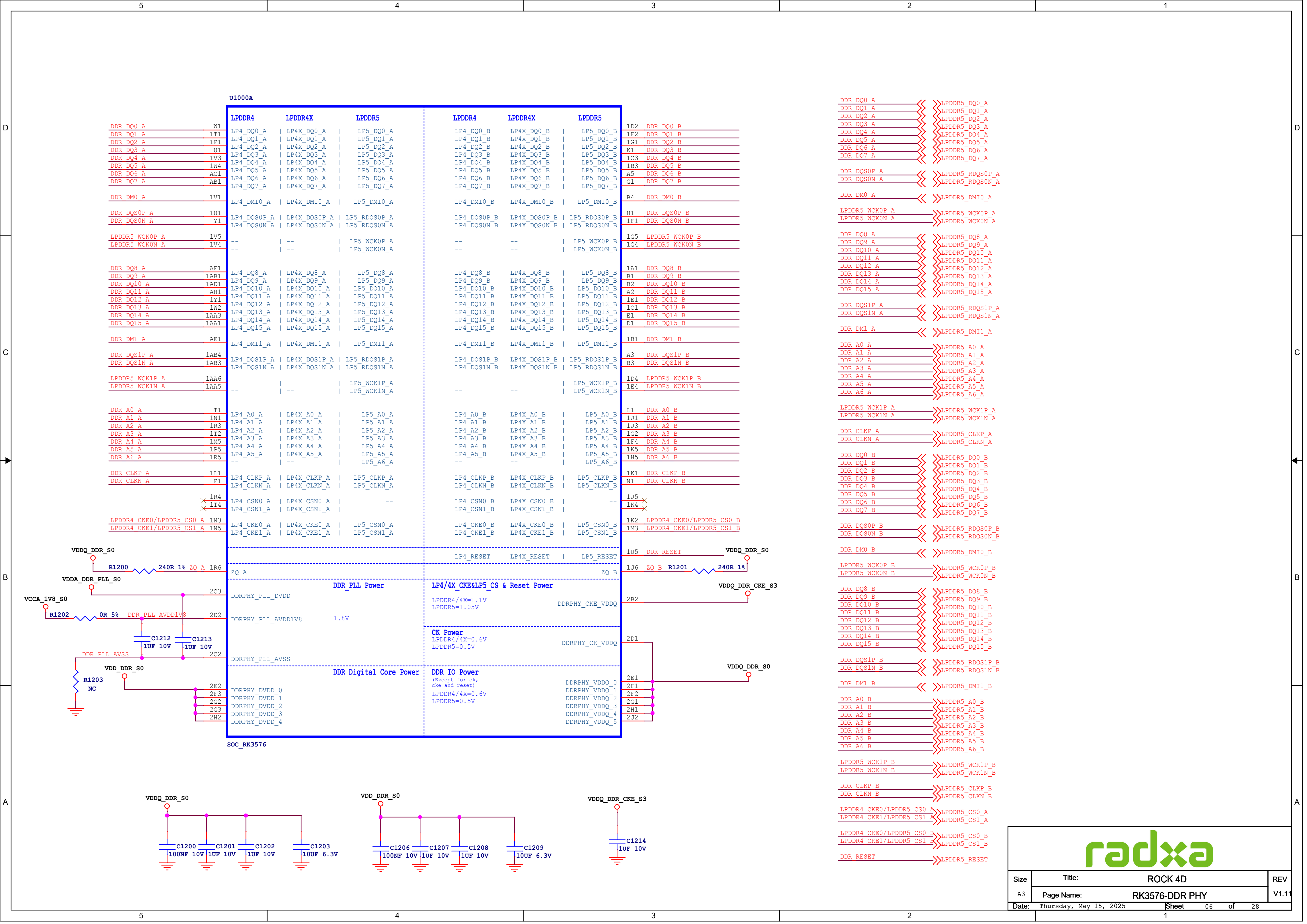


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Size	Title: ROCK 4D	REV
A4	Page Name: Index and Notes	V1.11
Date:	Thursday, May 15, 2025	Sheet 02 of 28

Block Diagram







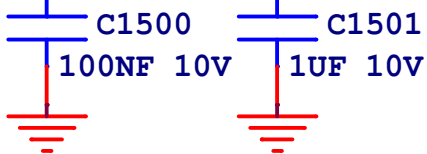
U1000P

MIPI DPHY CSI1/2 RX

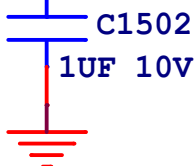
MIPI V1.2/2.5Gbps

MIPI_DPHY_CSI1_RX_D0N		--	AE28	⟷	MIPI_DPHY_CSI1_RX_D0N
MIPI_DPHY_CSI1_RX_D0P		--	AE29	⟷	MIPI_DPHY_CSI1_RX_D0P
MIPI_DPHY_CSI1_RX_D1N		--	AF28	⟷	MIPI_DPHY_CSI1_RX_D1N
MIPI_DPHY_CSI1_RX_D1P		--	AF29	⟷	MIPI_DPHY_CSI1_RX_D1P
MIPI_DPHY_CSI1_RX_CLKN		--	1AC23	⟷	MIPI_DPHY_CSI1_RX_CLKN
MIPI_DPHY_CSI1_RX_CLKP		--	1AC22	⟷	MIPI_DPHY_CSI1_RX_CLKP
MIPI_DPHY_CSI1_RX_D2N		MIPI_DPHY_CSI2_RX_D0N	AG28	⟷	MIPI_DPHY_CSI1_RX_D2N
MIPI_DPHY_CSI1_RX_D2P		MIPI_DPHY_CSI2_RX_D0P	AG29	⟷	MIPI_DPHY_CSI1_RX_D2P
MIPI_DPHY_CSI1_RX_D3N		MIPI_DPHY_CSI2_RX_D1N	AH28	⟷	MIPI_DPHY_CSI1_RX_D3N
MIPI_DPHY_CSI1_RX_D3P		MIPI_DPHY_CSI2_RX_D1P	AH29	⟷	MIPI_DPHY_CSI1_RX_D3P
--		MIPI_DPHY_CSI2_RX_CLKN	1AD22	⟷	MIPI_DPHY_CSI2_RX_CLKN
--		MIPI_DPHY_CSI2_RX_CLKP	1AD21	⟷	MIPI_DPHY_CSI2_RX_CLKP

MIPI_DPHY_CSI1/2_RX_AVDD0V75 2L11 VDDA_0V75_S0



MIPI_DPHY_CSI1/2_RX_AVDD1V8 1W20 VCCA_1V8_S0

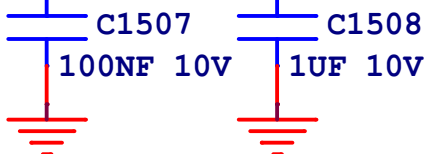


MIPI DPHY CSI3/4 RX

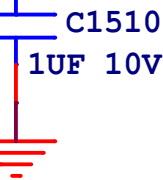
MIPI V1.2/2.5Gbps

MIPI_DPHY_CSI3_RX_D0N		--	H29	✗	
MIPI_DPHY_CSI3_RX_D0P		--	H28	✗	
MIPI_DPHY_CSI3_RX_D1N		--	J29	✗	
MIPI_DPHY_CSI3_RX_D1P		--	J28	✗	
MIPI_DPHY_CSI3_RX_CLKN		--	1H23	✗	
MIPI_DPHY_CSI3_RX_CLKP		--	1H22	✗	
MIPI_DPHY_CSI3_RX_D2N		MIPI_DPHY_CSI4_RX_D0N	K29	✗	
MIPI_DPHY_CSI3_RX_D2P		MIPI_DPHY_CSI4_RX_D0P	K28	✗	
MIPI_DPHY_CSI3_RX_D3N		MIPI_DPHY_CSI4_RX_D1N	L29	✗	
MIPI_DPHY_CSI3_RX_D3P		MIPI_DPHY_CSI4_RX_D1P	L28	✗	
--		MIPI_DPHY_CSI4_RX_CLKN	1K23	✗	
--		MIPI_DPHY_CSI4_RX_CLKP	1K22	✗	

MIPI_DPHY_CSI3/4_RX_AVDD0V75 2D11 VDDA_0V75_S0



MIPI_DPHY_CSI3/4_RX_AVDD1V8 2D12 VCCA_1V8_S0



SOC_RK3576

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MIPI DCPHY DSI TX

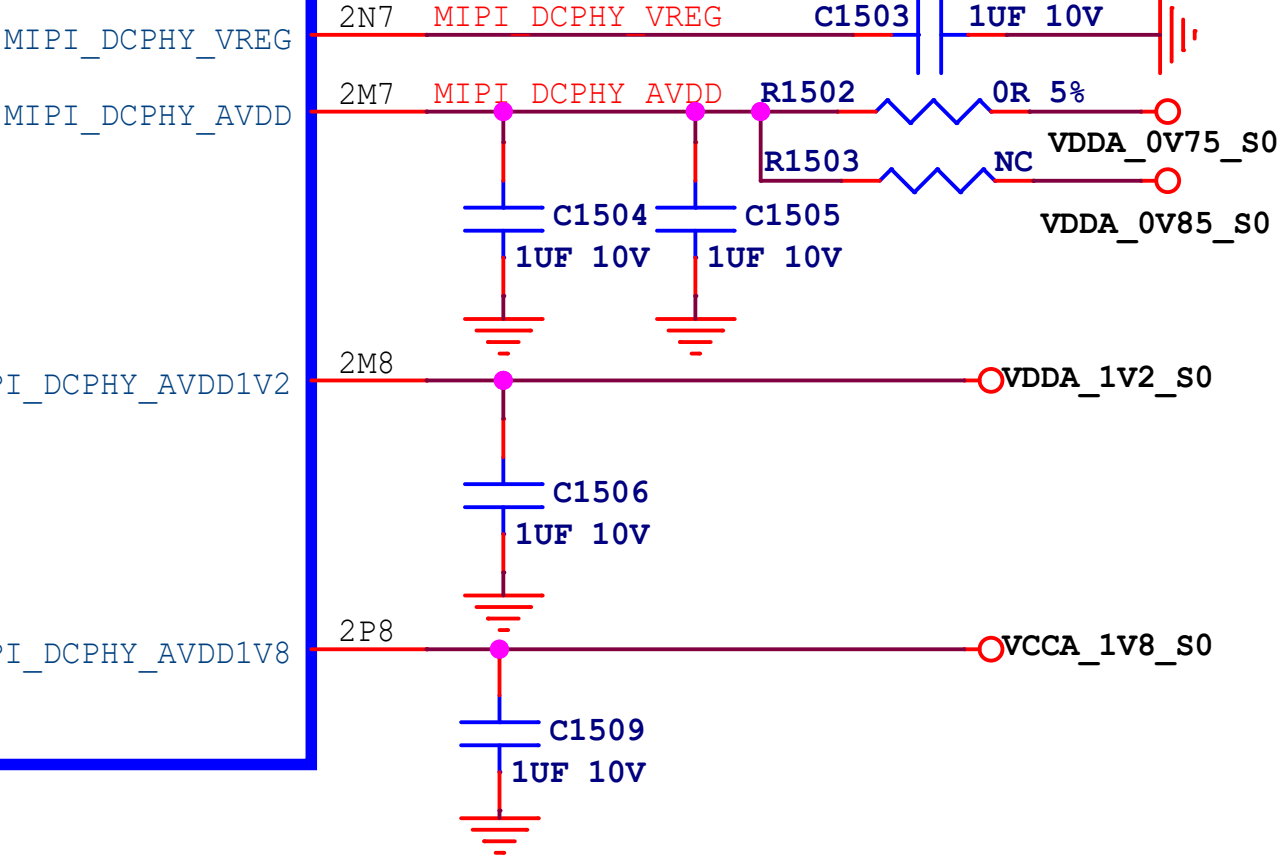
D-PHY:V2.0 2.5Gbps/Lane
C-PHY:V1.1 1.7Gsps/Trio

MIPI_DPHY_DSI_TX_D0N		MIPI_CPHY_DSI_TX_TRIO0_A	AK15	⟷	MIPI_DPHY_DSI_TX_D0N
MIPI_DPHY_DSI_TX_D0P		MIPI_CPHY_DSI_TX_TRIO0_B	AL15	⟷	MIPI_DPHY_DSI_TX_D0P
MIPI_DPHY_DSI_TX_D1N		MIPI_CPHY_DSI_TX_TRIO0_C	AK16	⟷	MIPI_DPHY_DSI_TX_D1N
MIPI_DPHY_DSI_TX_D1P		MIPI_CPHY_DSI_TX_TRIO1_A	AL16	⟷	MIPI_DPHY_DSI_TX_D1P
MIPI_DPHY_DSI_TX_CLKN		MIPI_CPHY_DSI_TX_TRIO1_B	AK17	⟷	MIPI_DPHY_DSI_TX_CLKN
MIPI_DPHY_DSI_TX_CLKP		MIPI_CPHY_DSI_TX_TRIO1_C	AL17	⟷	MIPI_DPHY_DSI_TX_CLKP
MIPI_DPHY_DSI_TX_D2N		MIPI_CPHY_DSI_TX_TRIO2_A	AK18	⟷	MIPI_DPHY_DSI_TX_D2N
MIPI_DPHY_DSI_TX_D2P		MIPI_CPHY_DSI_TX_TRIO2_B	AL18	⟷	MIPI_DPHY_DSI_TX_D2P
MIPI_DPHY_DSI_TX_D3N		MIPI_CPHY_DSI_TX_TRIO2_C	AK19	⟷	MIPI_DPHY_DSI_TX_D3N
MIPI_DPHY_DSI_TX_D3P		NO_USE	AL19	⟷	MIPI_DPHY_DSI_TX_D3P

MIPI DCPHY CSI RX

D-PHY:V2.0 4.5Gbps/Lane
C-PHY:V1.1 2.5Gsps/Trio

MIPI_DPHY_CSI0_RX_D0N		MIPI_CPHY_CSI_RX_TRIO0_A	AL20	⟷	MIPI_DPHY_CSI0_RX_D0N
MIPI_DPHY_CSI0_RX_D0P		MIPI_CPHY_CSI_RX_TRIO0_B	AK20	⟷	MIPI_DPHY_CSI0_RX_D0P
MIPI_DPHY_CSI0_RX_D1N		MIPI_CPHY_CSI_RX_TRIO0_C	AL21	⟷	MIPI_DPHY_CSI0_RX_D1N
MIPI_DPHY_CSI0_RX_D1P		MIPI_CPHY_CSI_RX_TRIO1_A	AK21	⟷	MIPI_DPHY_CSI0_RX_D1P
MIPI_DPHY_CSI0_RX_CLKN		MIPI_CPHY_CSI_RX_TRIO1_B	AL22	⟷	MIPI_DPHY_CSI0_RX_CLK0N
MIPI_DPHY_CSI0_RX_CLKP		MIPI_CPHY_CSI_RX_TRIO1_C	AK22	⟷	MIPI_DPHY_CSI0_RX_CLK0P
MIPI_DPHY_CSI0_RX_D2N		MIPI_CPHY_CSI_RX_TRIO2_A	AL23	✗	
MIPI_DPHY_CSI0_RX_D2P		MIPI_CPHY_CSI_RX_TRIO2_B	AK23	✗	
MIPI_DPHY_CSI0_RX_D3N		MIPI_CPHY_CSI_RX_TRIO2_C	AL24	✗	
MIPI_DPHY_CSI0_RX_D3P		NO_USE	AK24	✗	

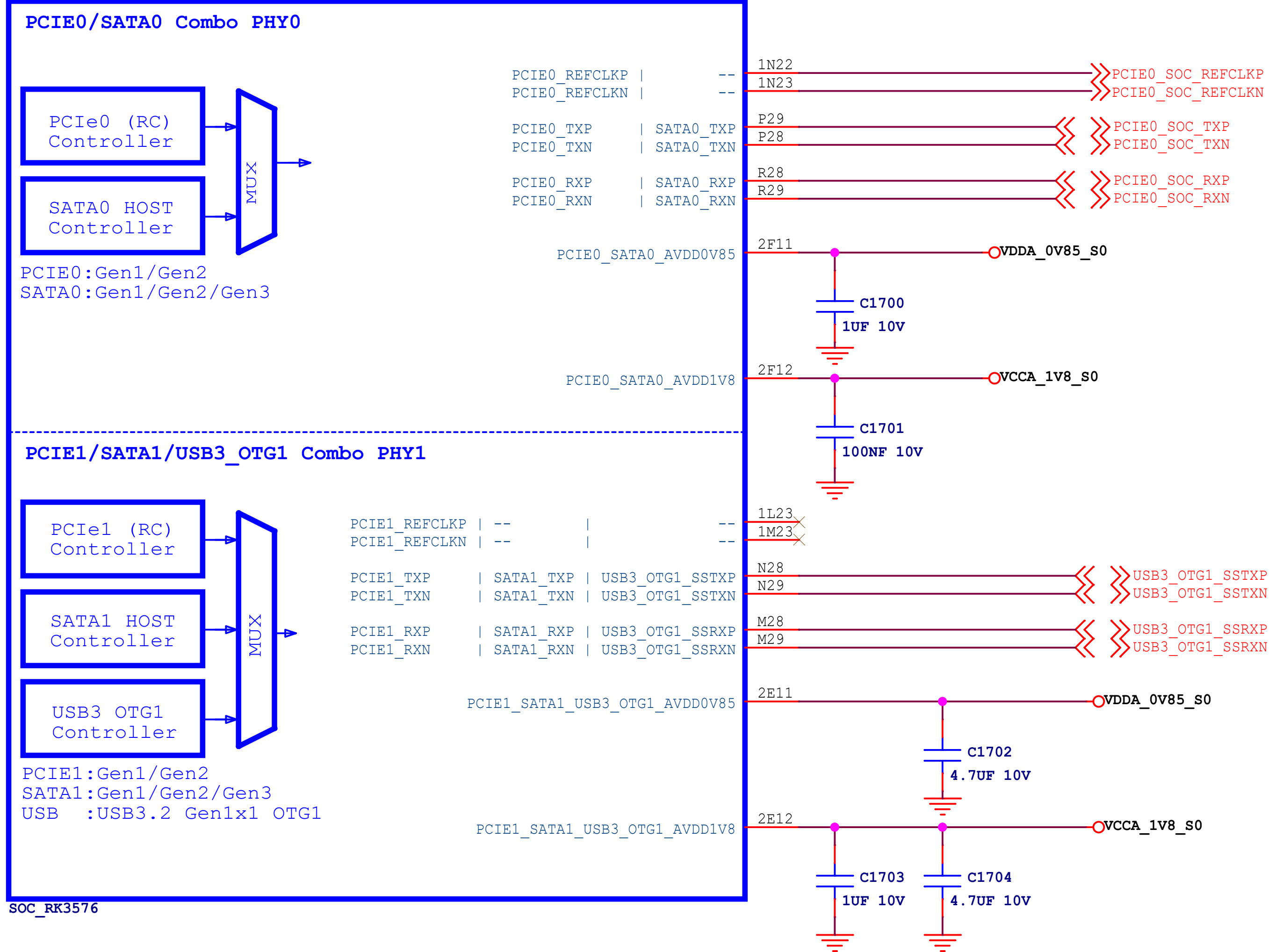


SOC_RK3576

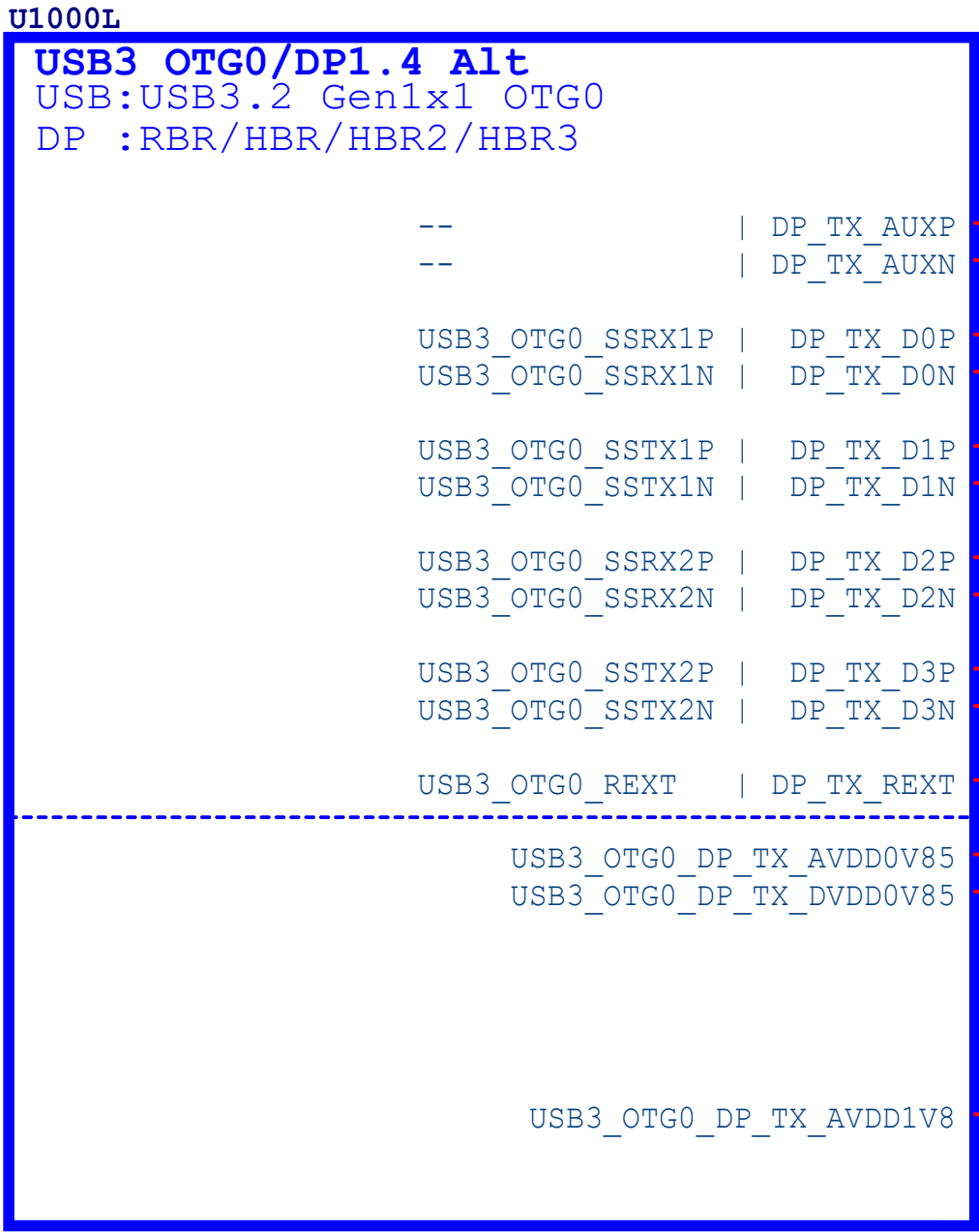
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Date:	Thursday, May 15, 2025	Sheet	07 of 28

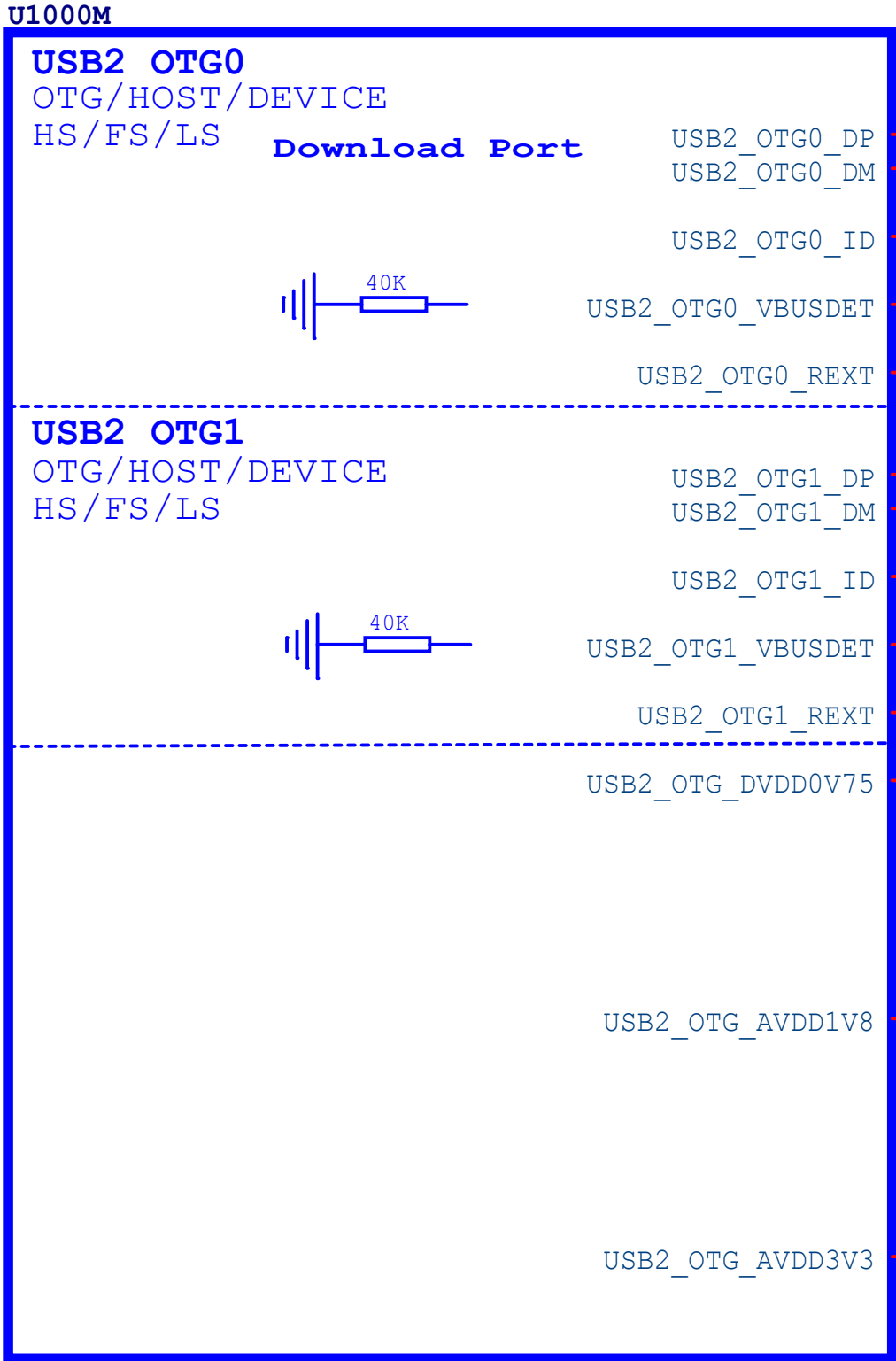
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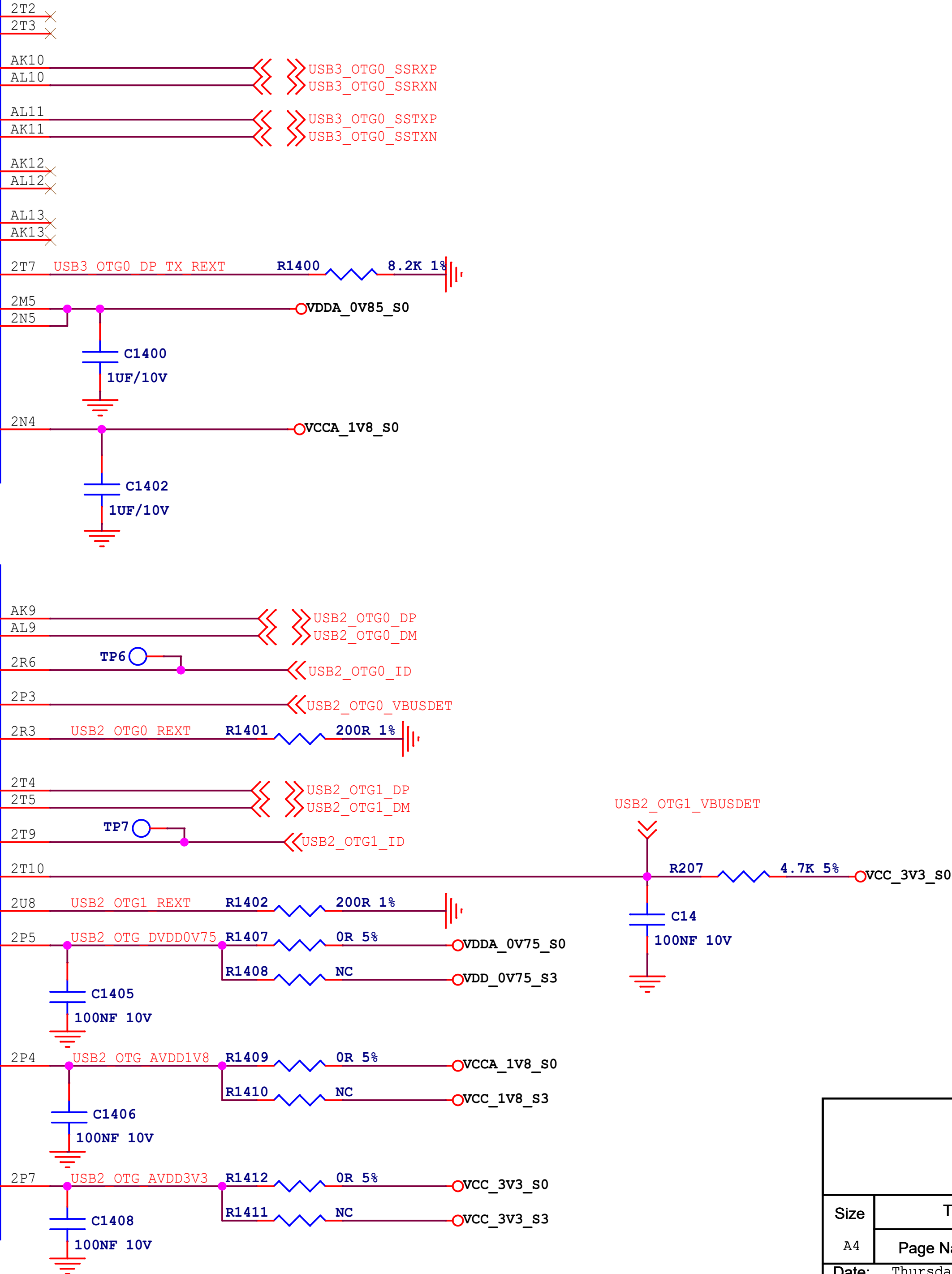
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A4			
Date: Thursday, May 15, 2025		Sheet 08 of 28	



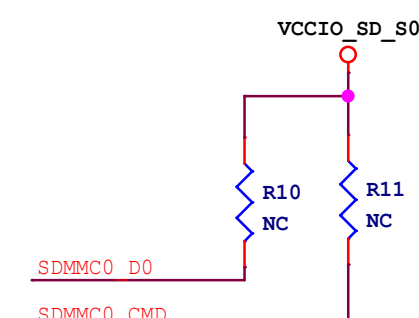
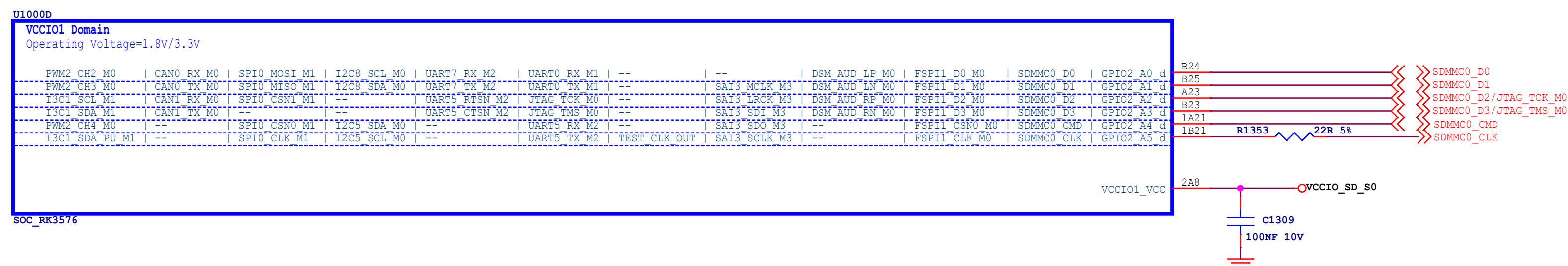
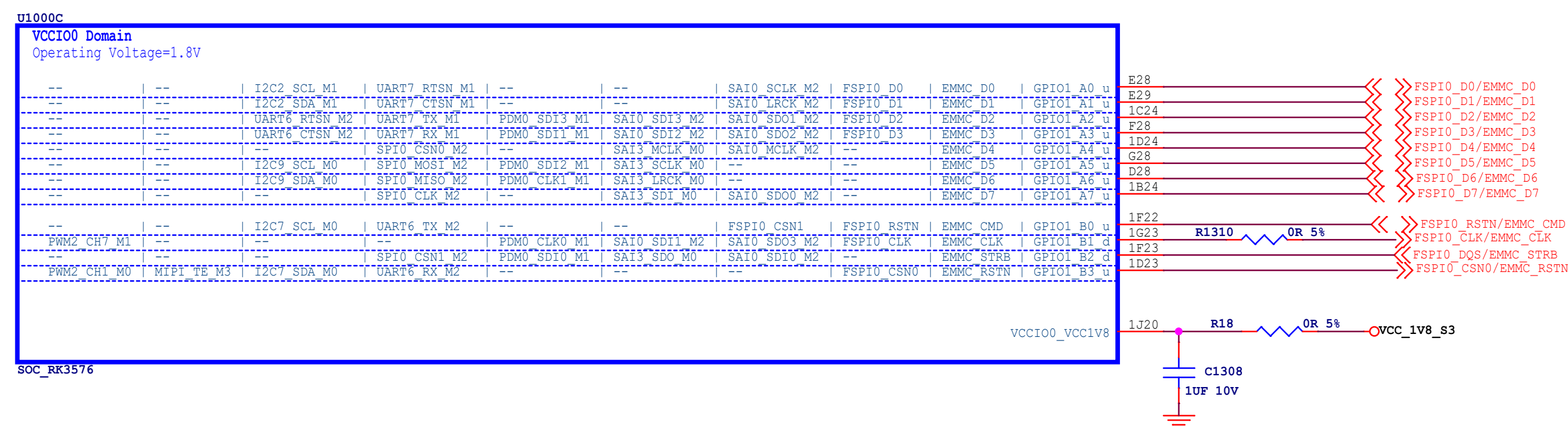
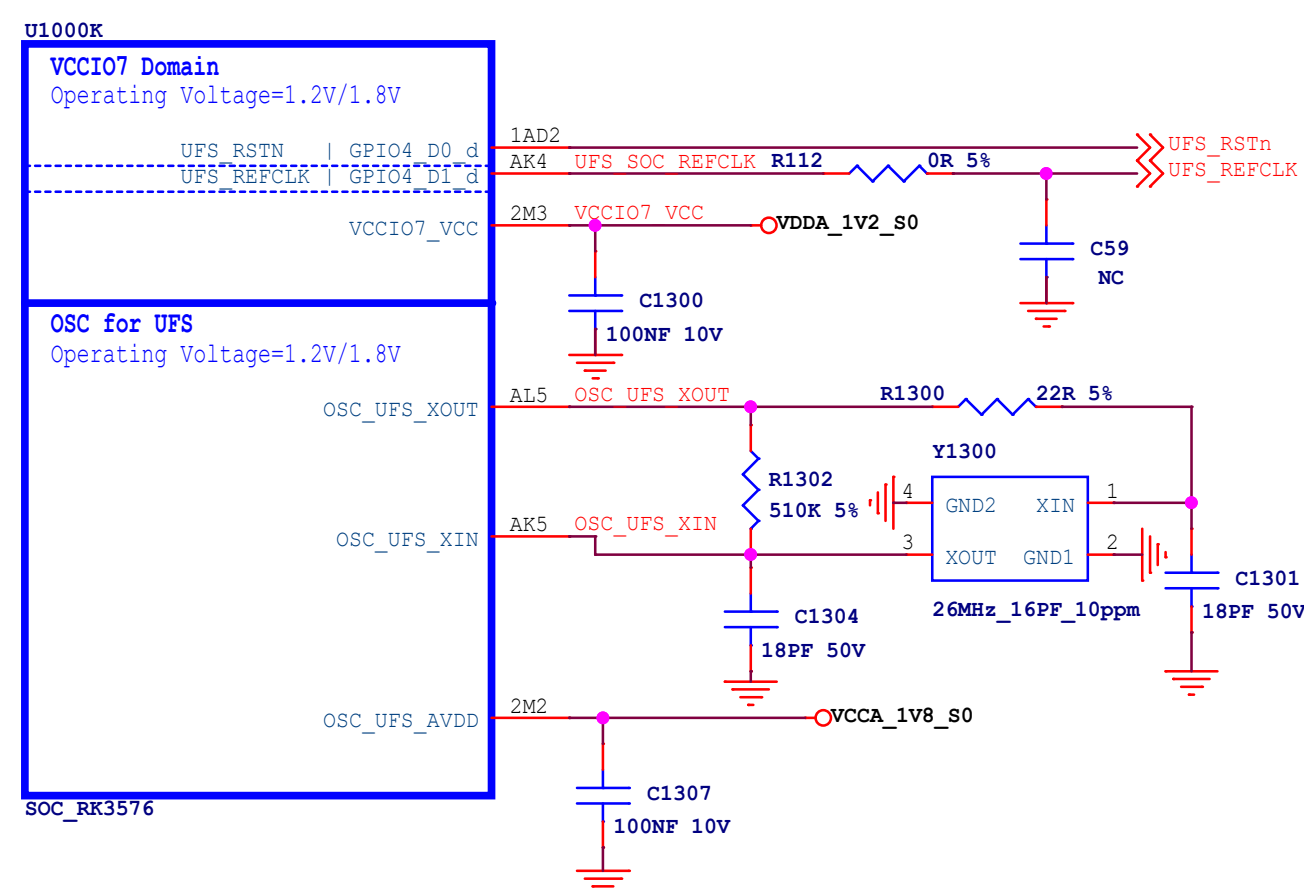
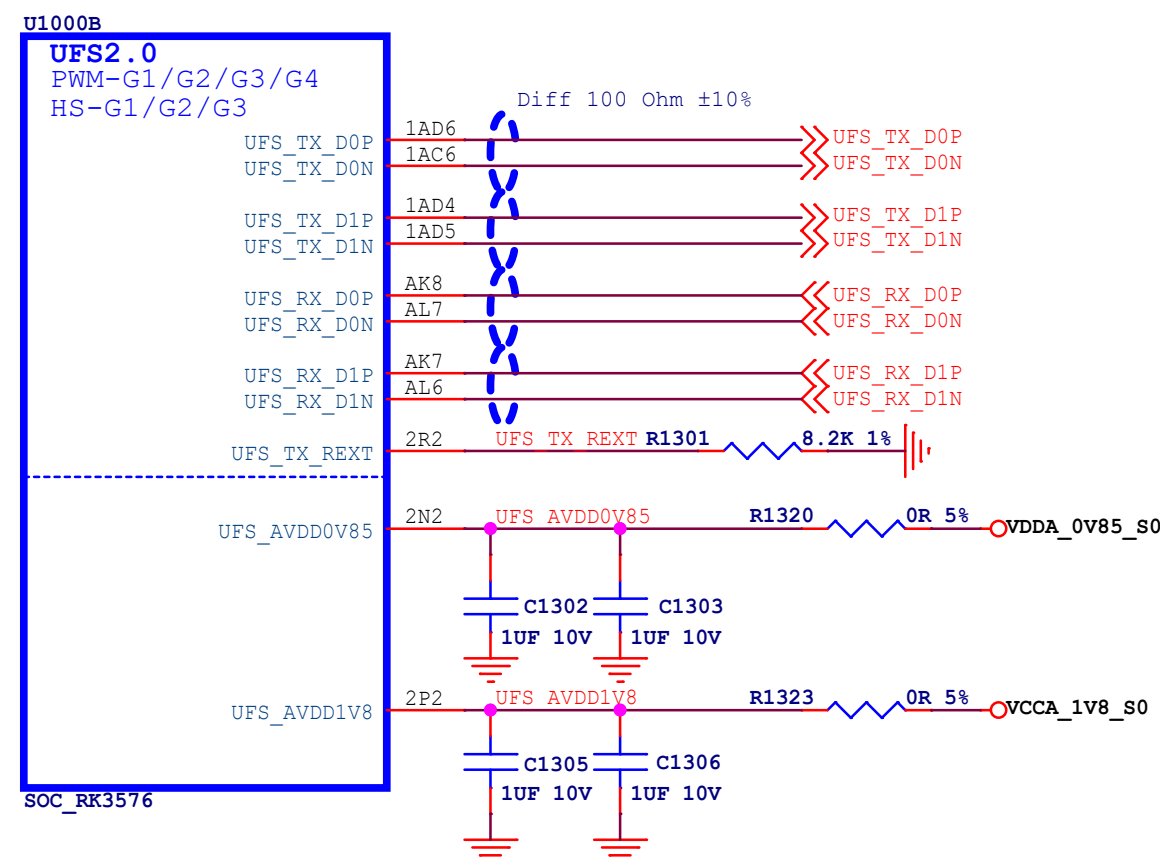
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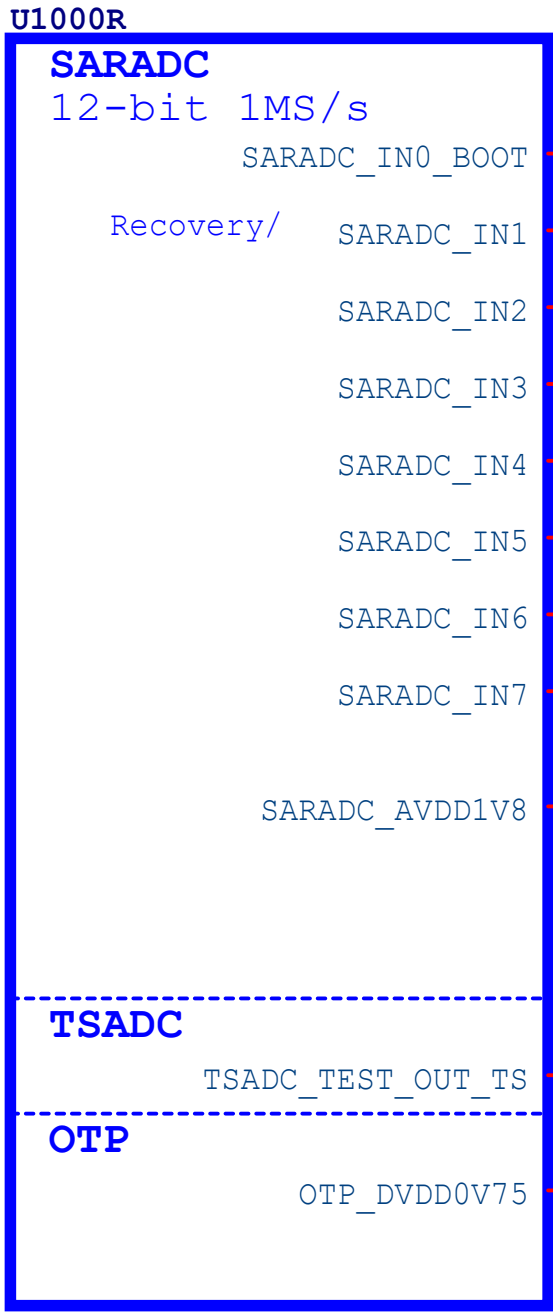


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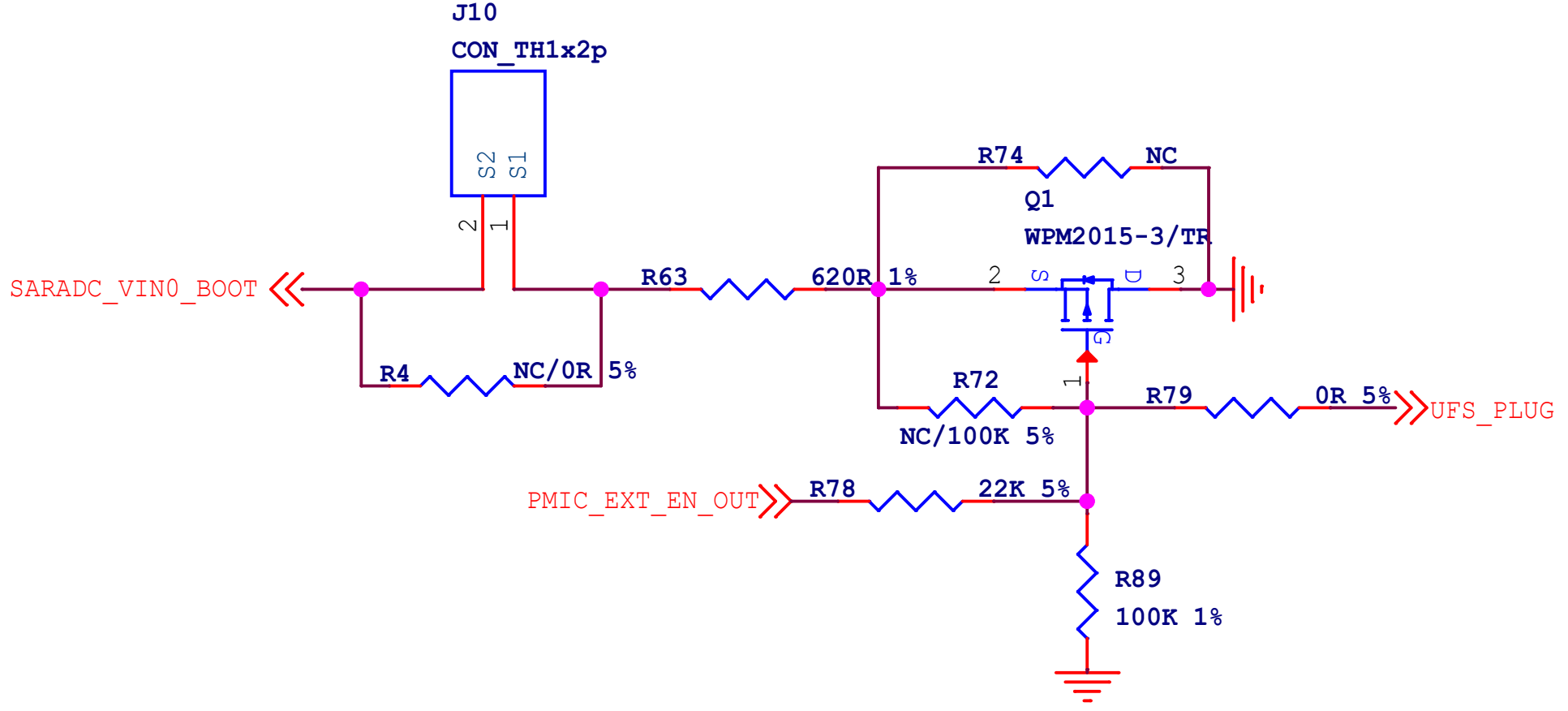
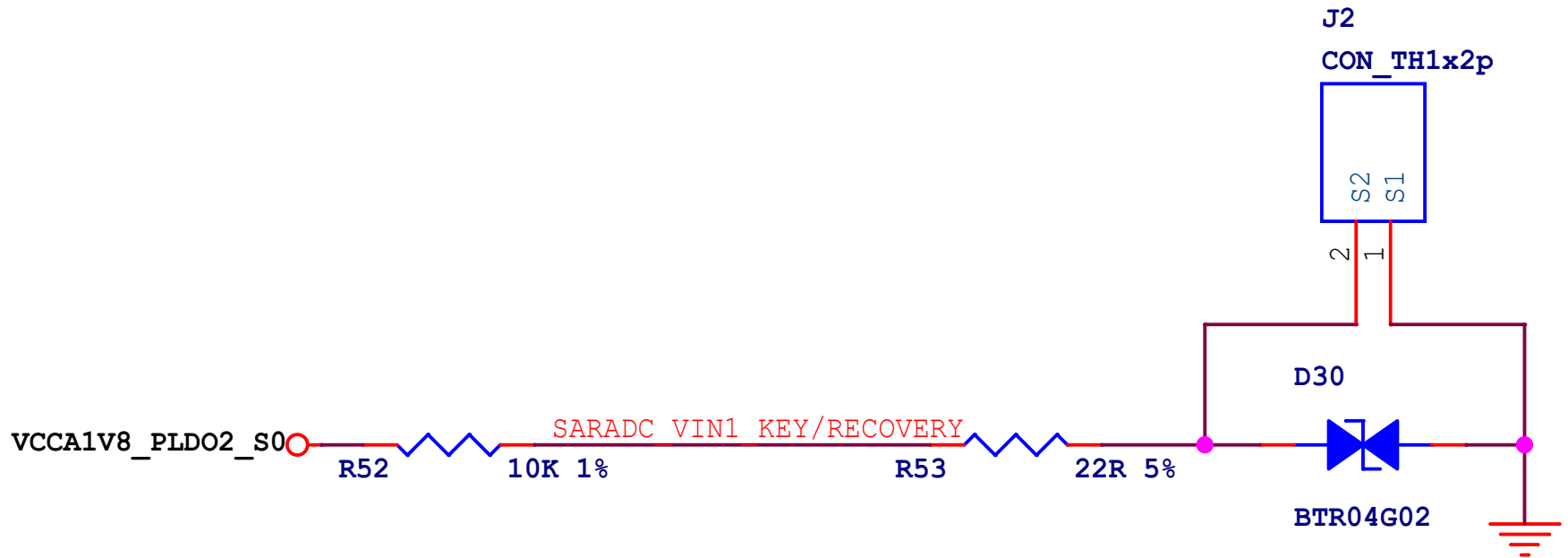
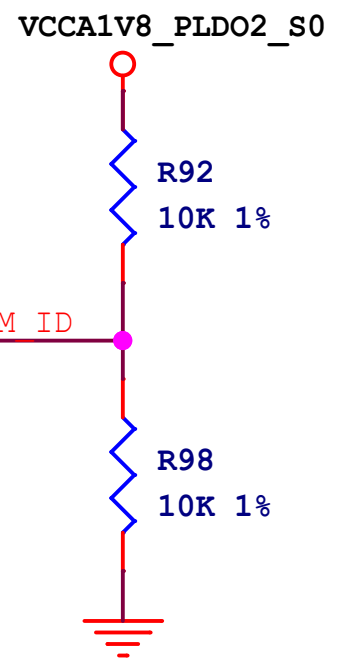
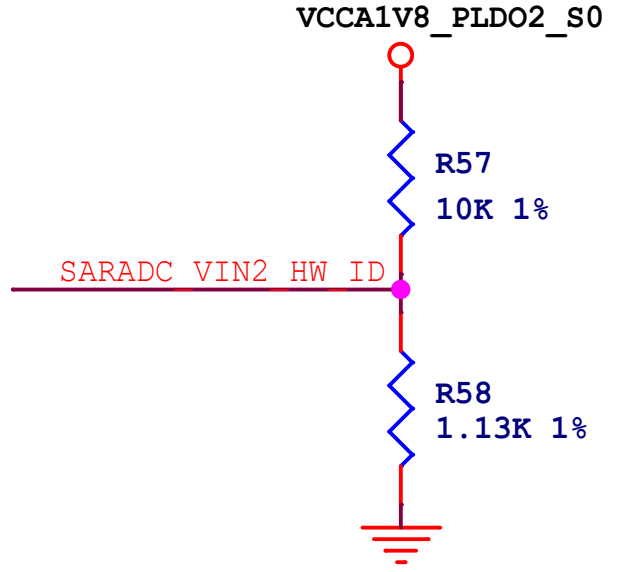
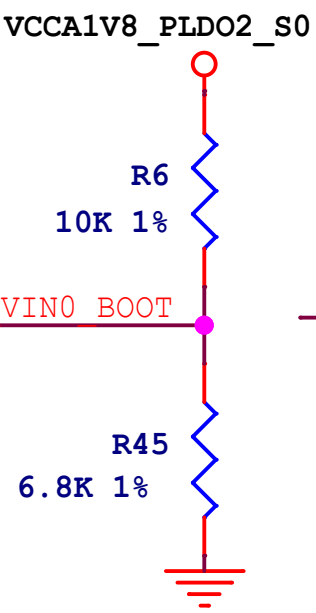
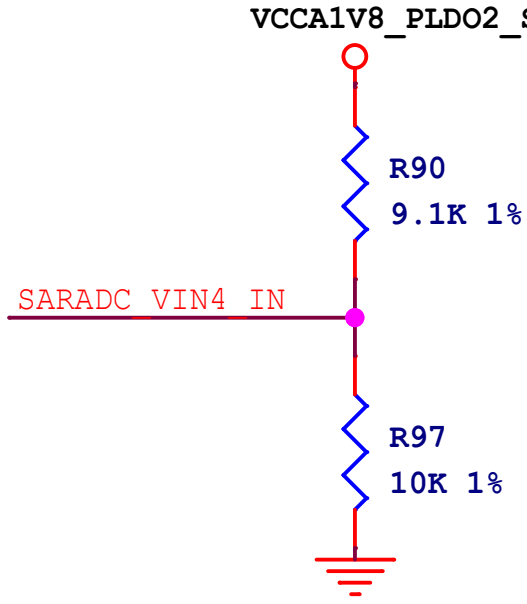
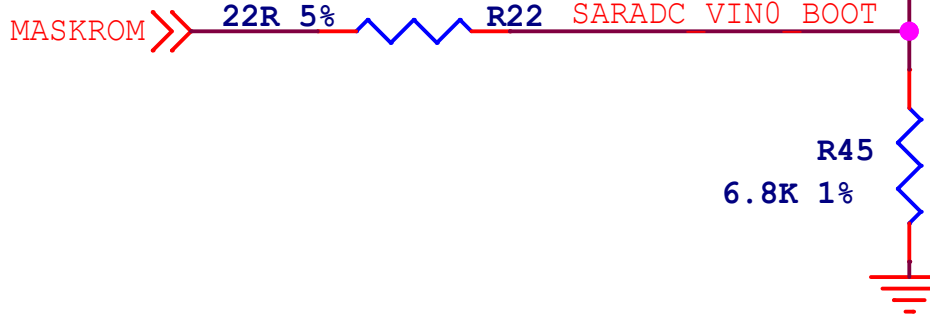
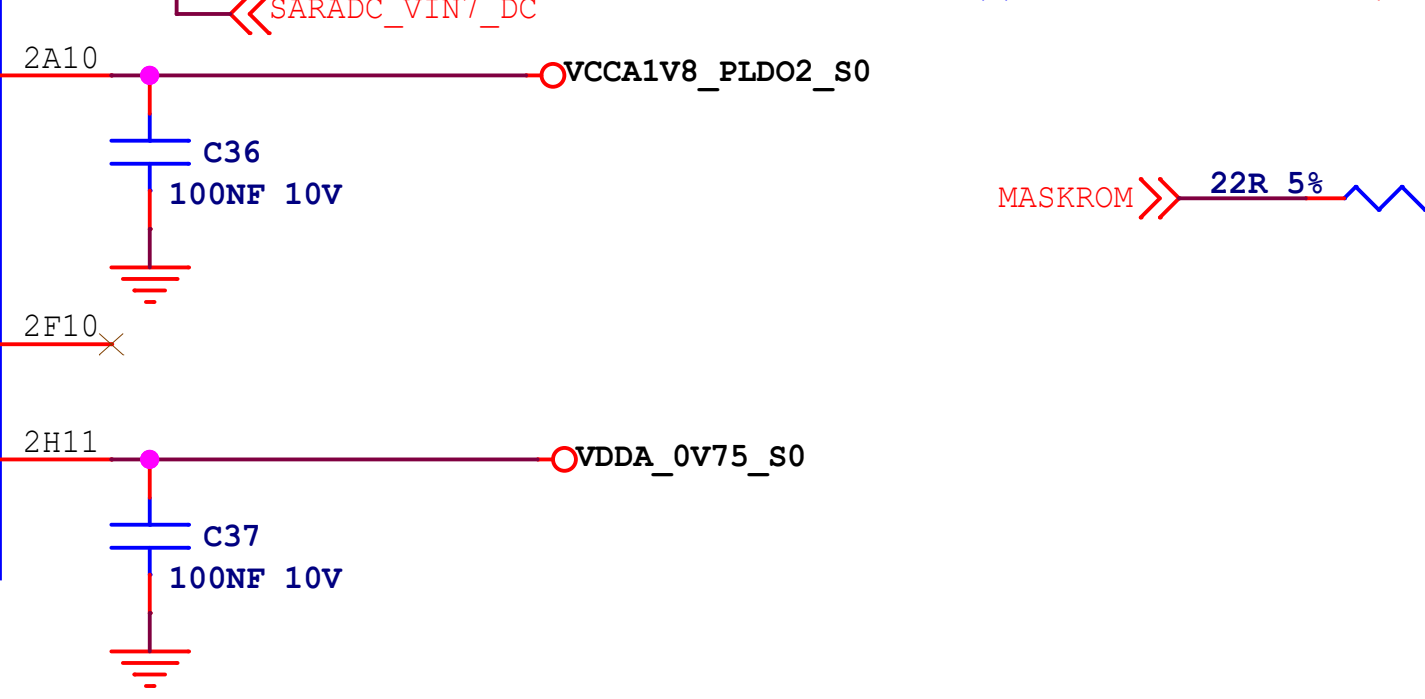
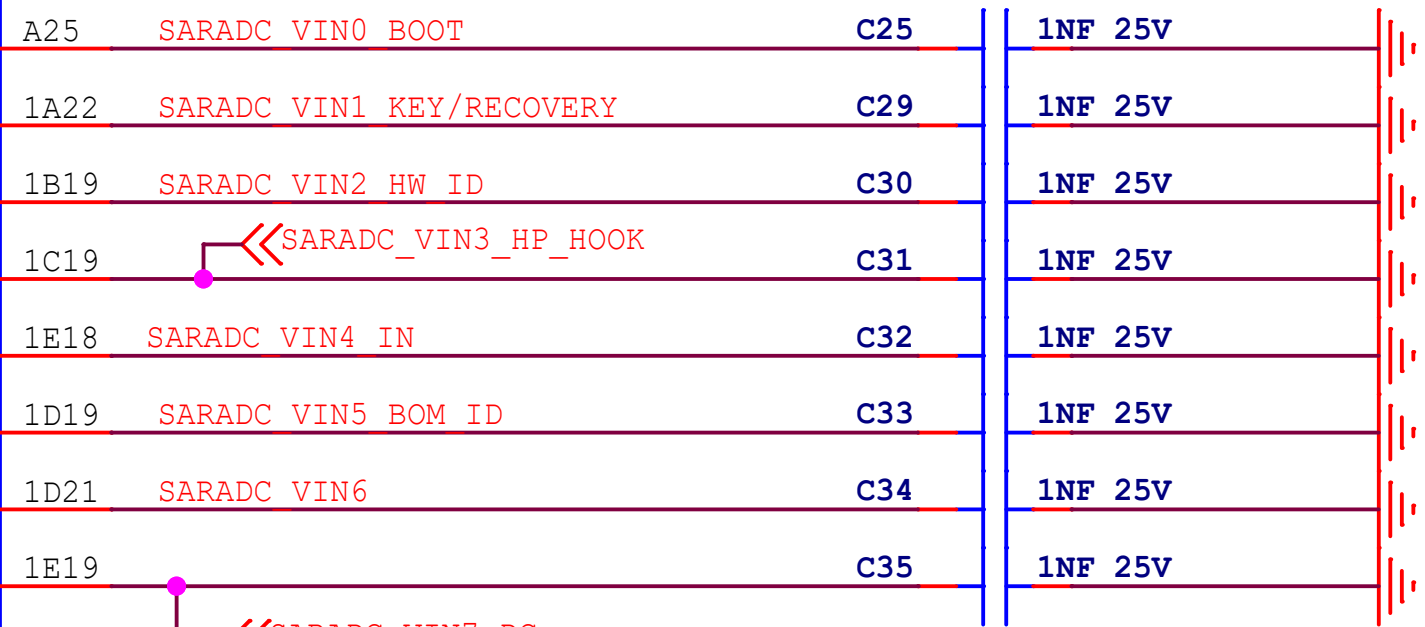


Size	Title:	ROCK 4D	REV	
	A4	Page Name:	RK3576-TypeC/USB2	V1.11
Date:		Thursday, May 15, 2025	Sheet	09 of 28





SOC_RK3576



Size	Title: ROCK 4D		REV
A4	Page Name: RK3576-SARADC		V1.11
Date:	Thursday, May 15, 2025	Sheet	11 of 28

U1000Q

HDMI TX/eDP TX Combo Phy

HDMI:V2.1 12Gbps
eDP :V1.3 5.4Gbps

HDMI_TX_SBDP | EDP_TX_AUXP
HDMI_TX_SBDN | EDP_TX_AUXN

HDMI_TX_D0P | EDP_TX_D0P
HDMI_TX_D0N | EDP_TX_D0N

HDMI_TX_D1P | EDP_TX_D1P
HDMI_TX_D1N | EDP_TX_D1N

HDMI_TX_D2P | EDP_TX_D2P
HDMI_TX_D2N | EDP_TX_D2N

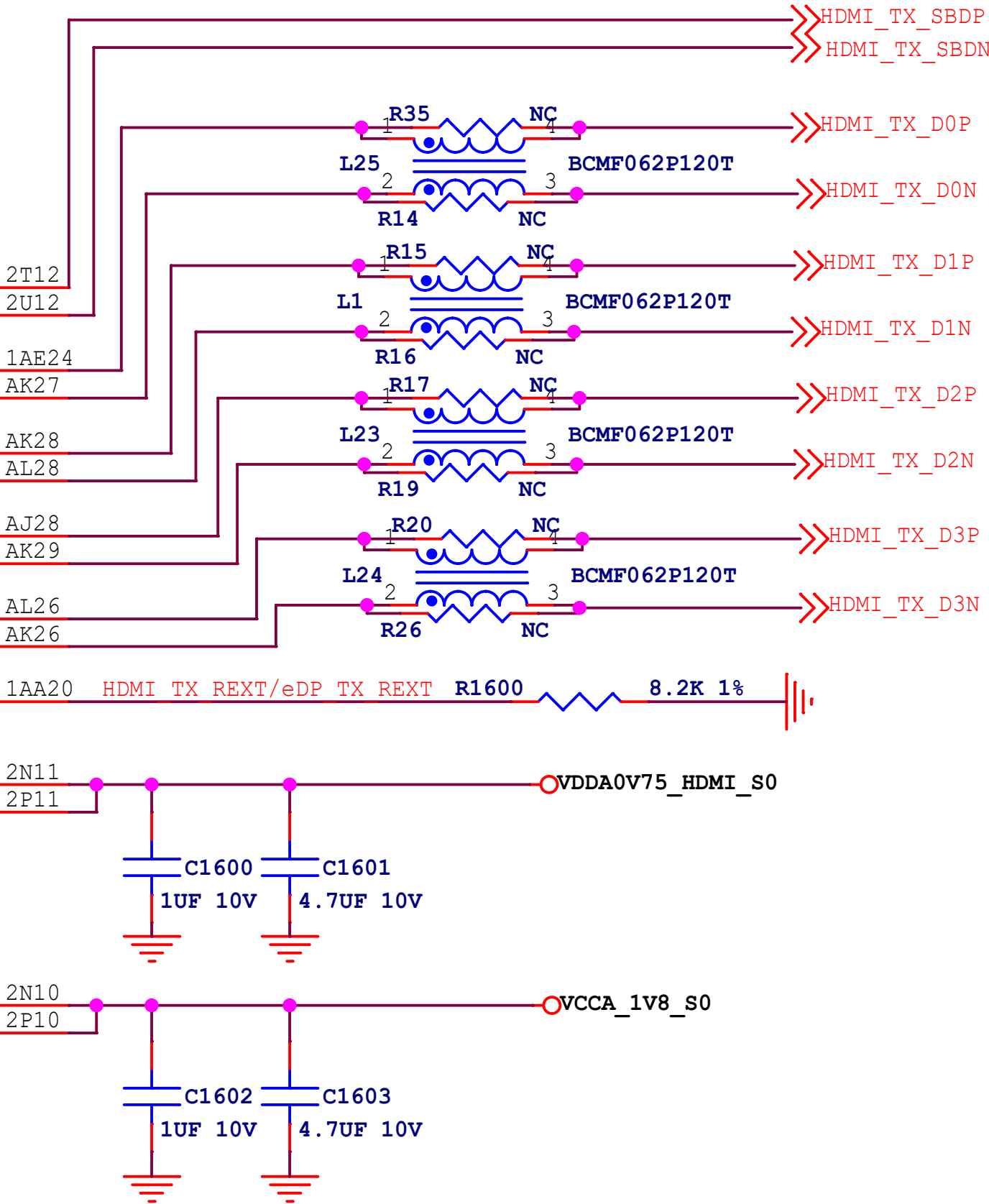
HDMI_TX_D3P | EDP_TX_D3P
HDMI_TX_D3N | EDP_TX_D3N

HDMI_TX_REXT | EDP_TX_REXT

HDMI_TX_EDP_TX_AVDDD0V75
HDMI_TX_EDP_TX_AVDDC0V75

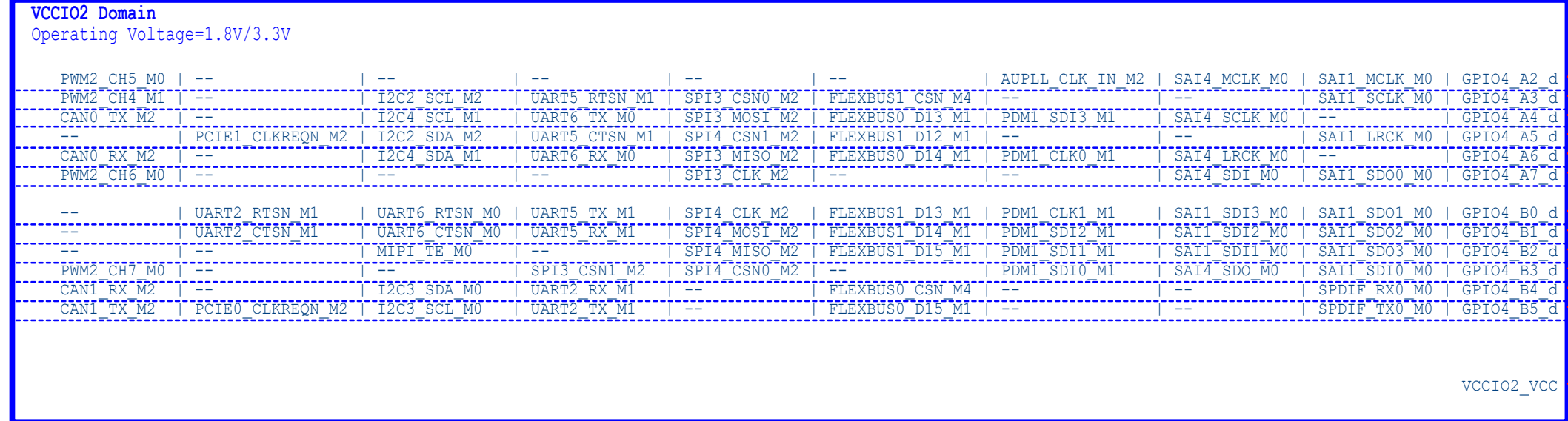
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SOC_RK3576

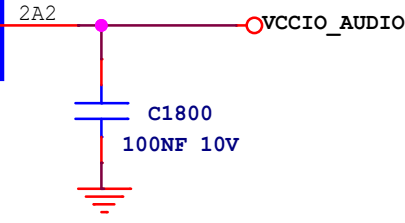
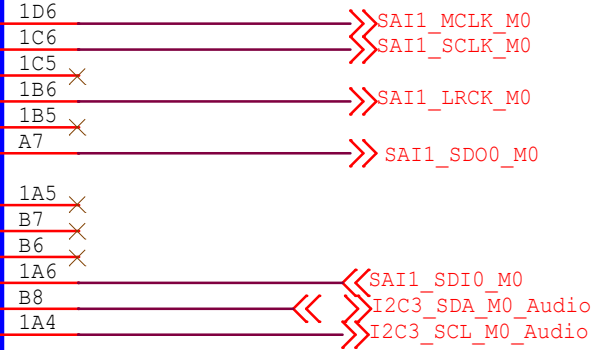


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	Page Name: RK3576-HDMI/eDP	
Date:	Thursday, May 15, 2025	Sheet 12 of 28

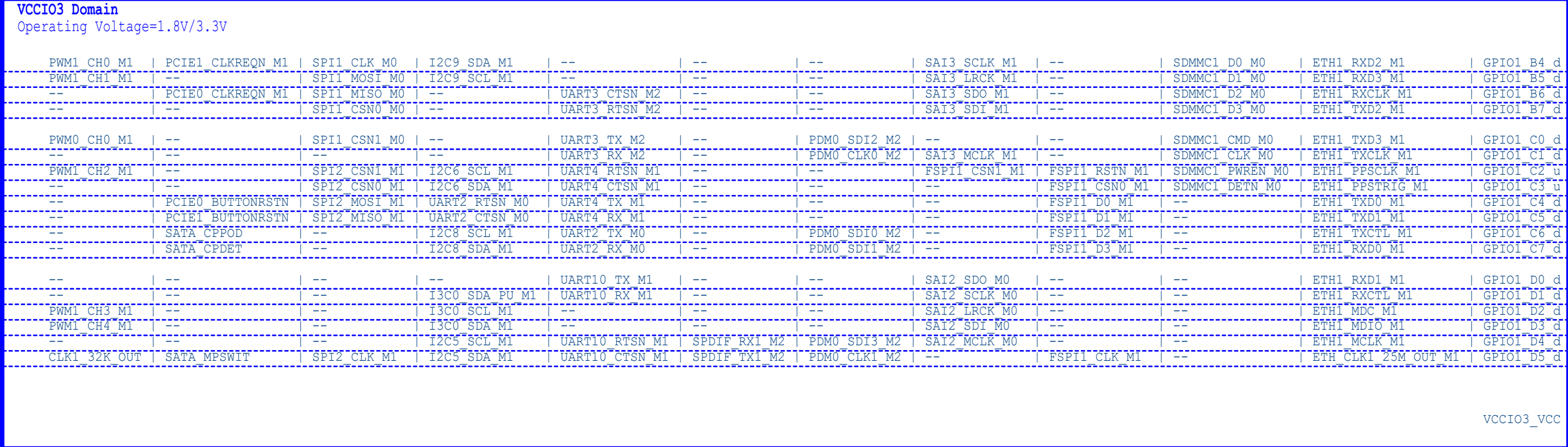
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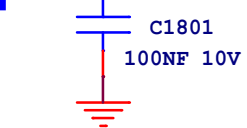
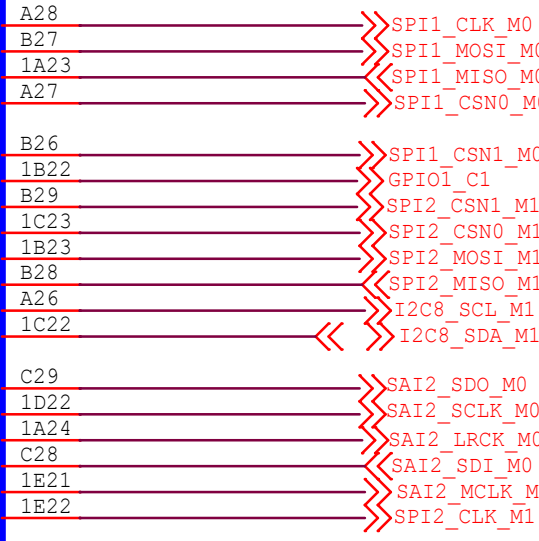
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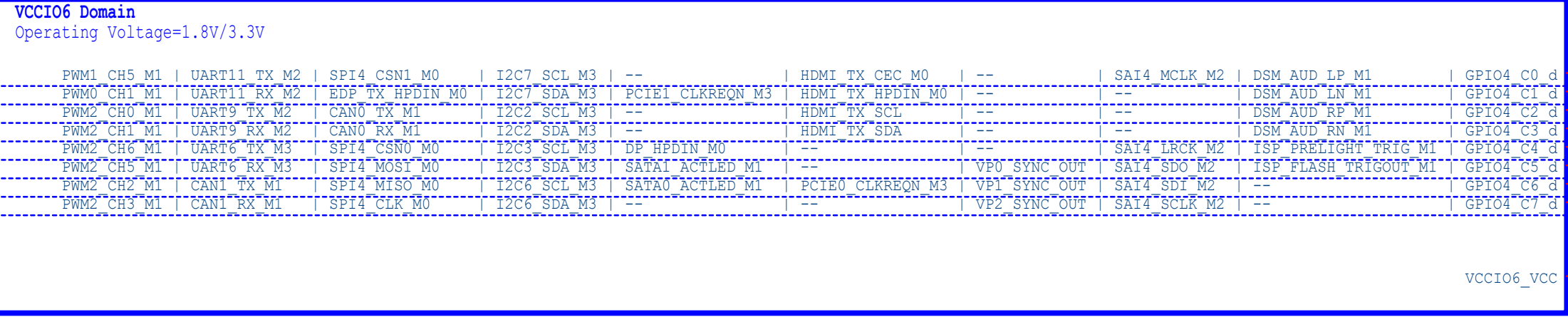
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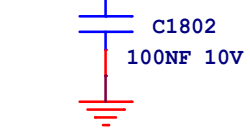
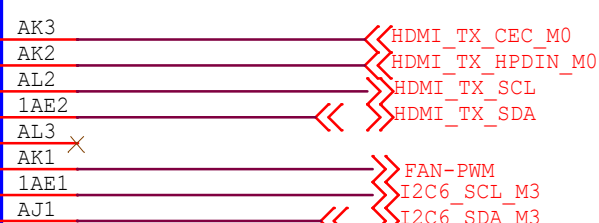
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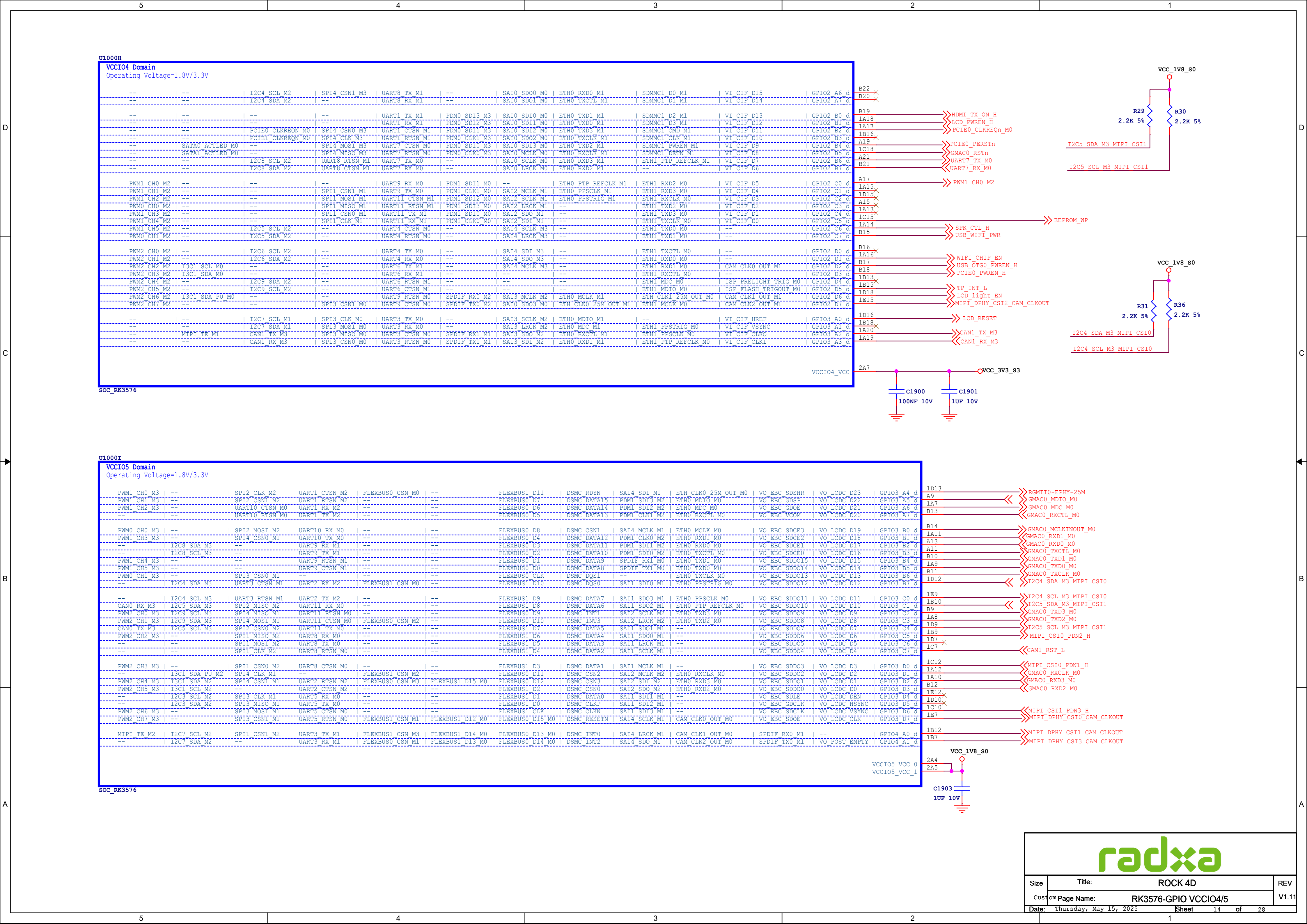


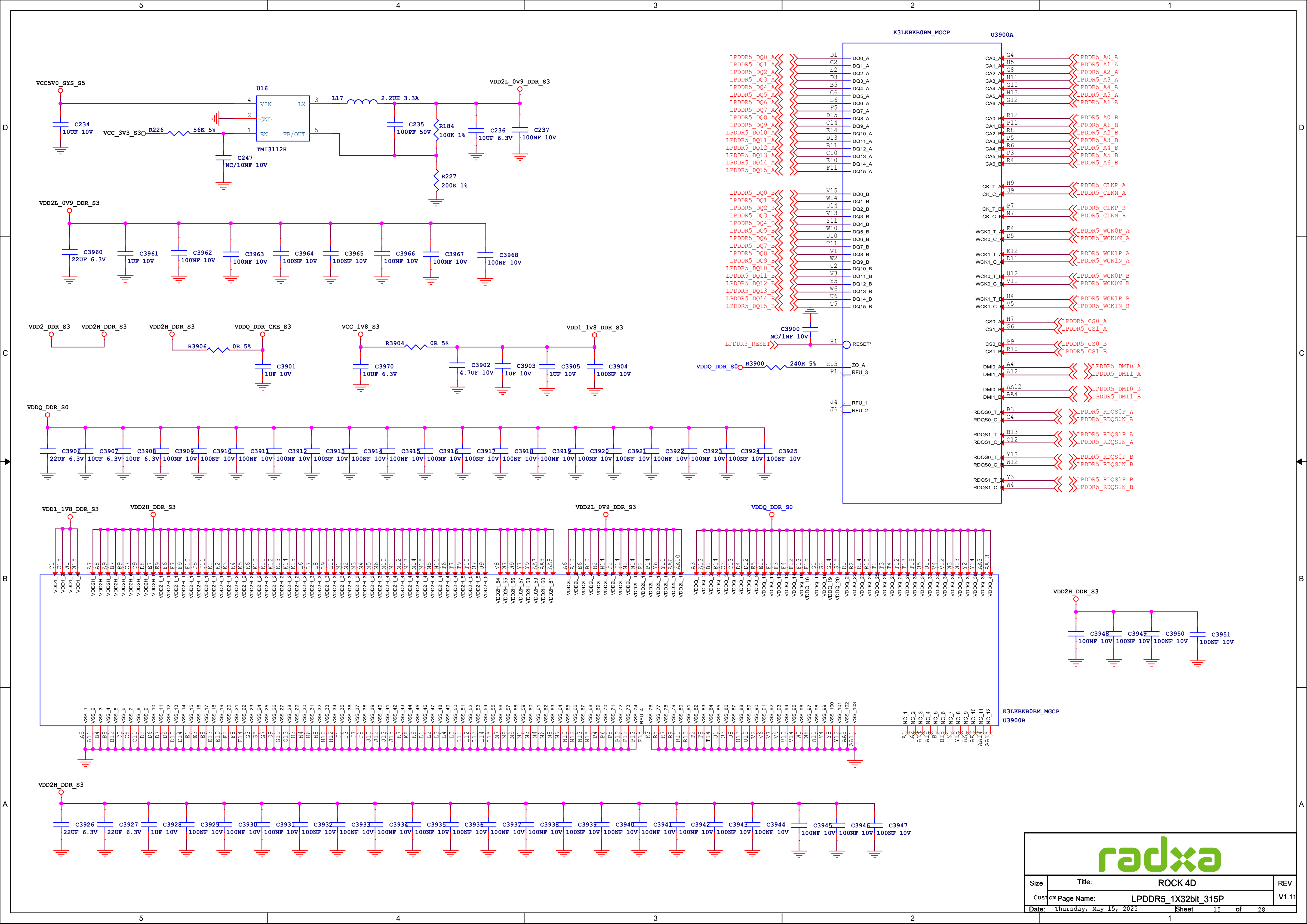
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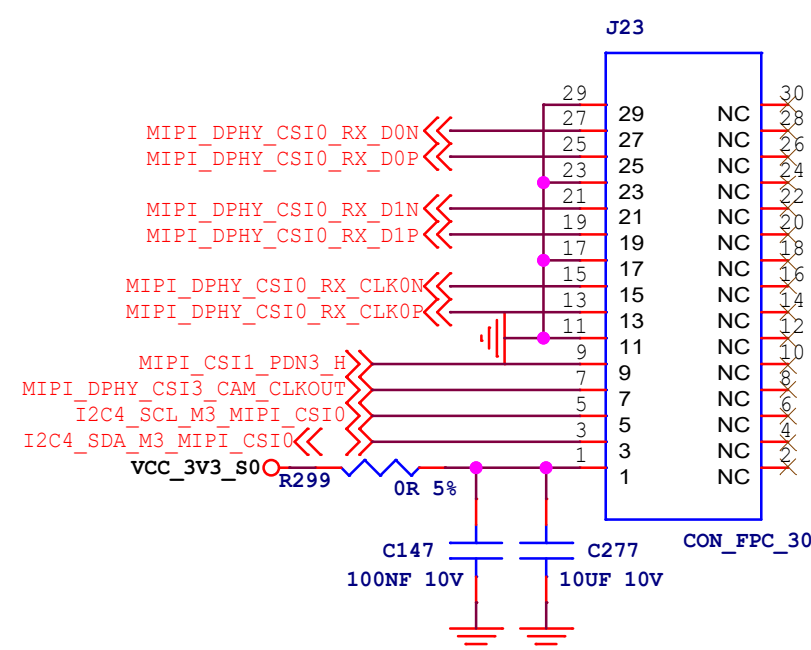
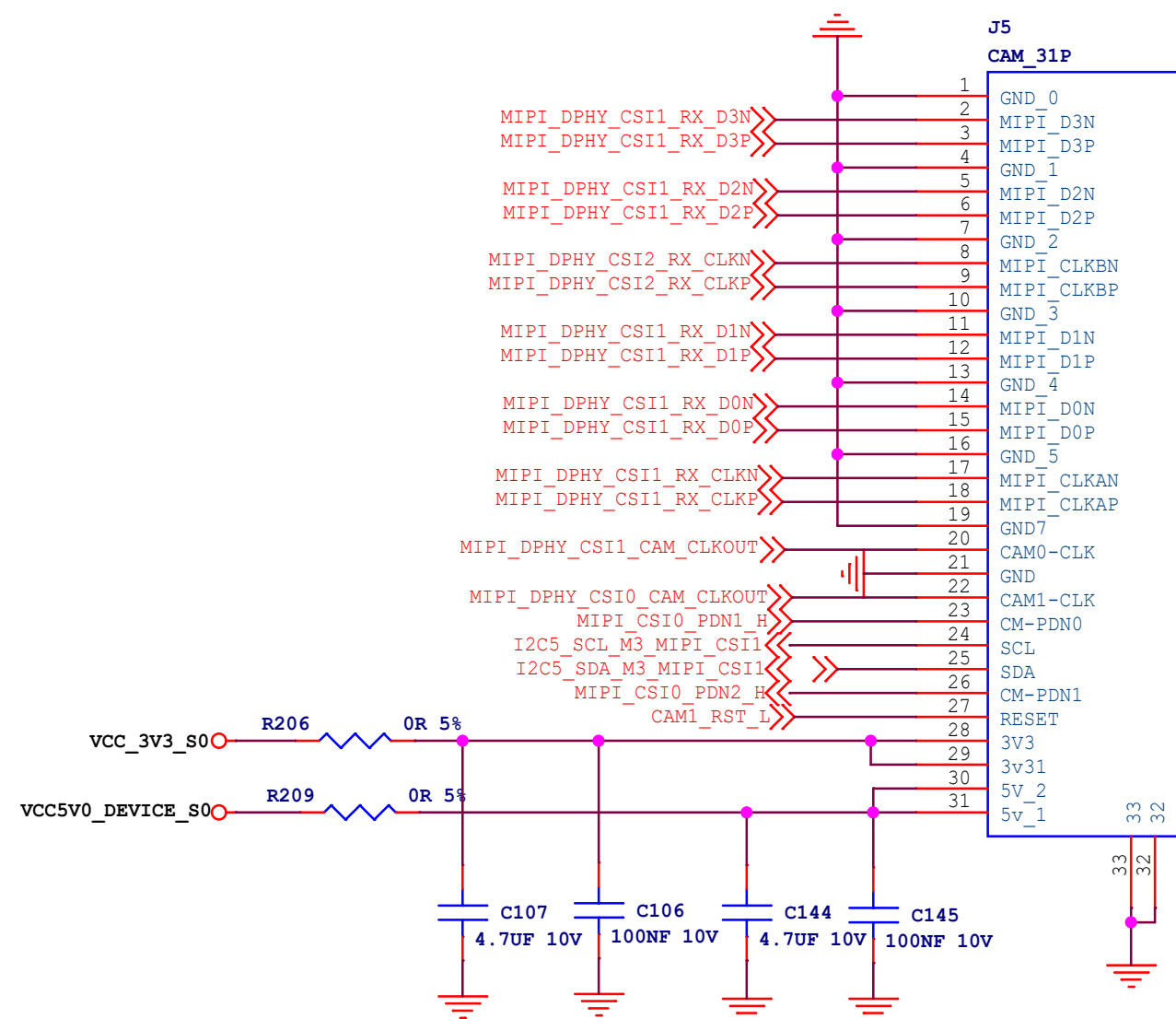
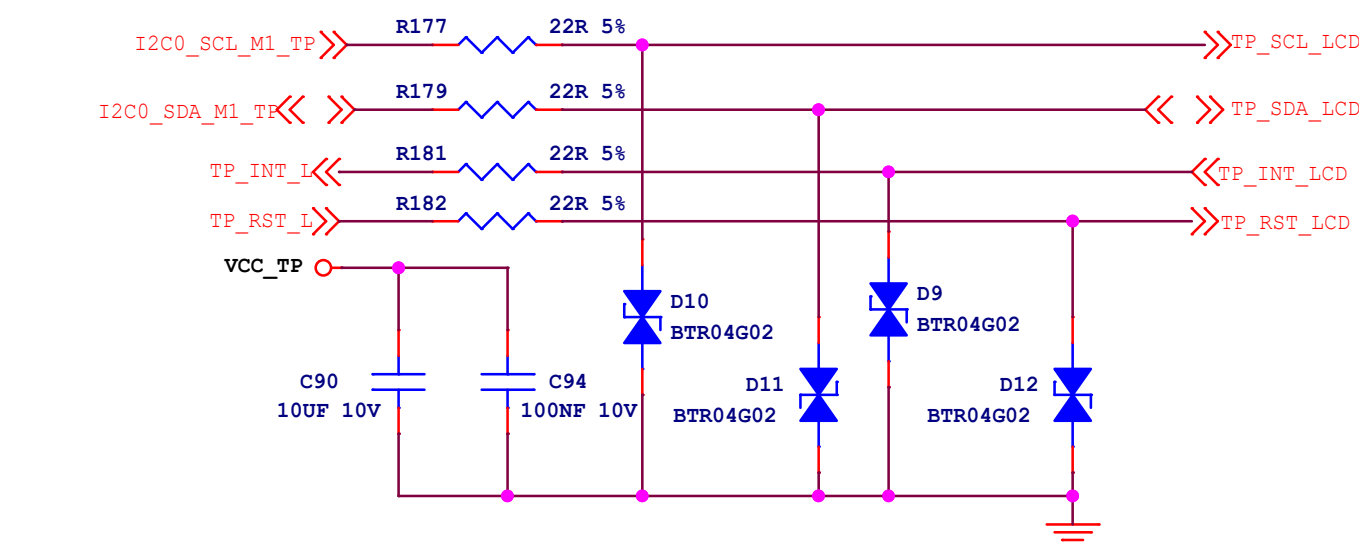
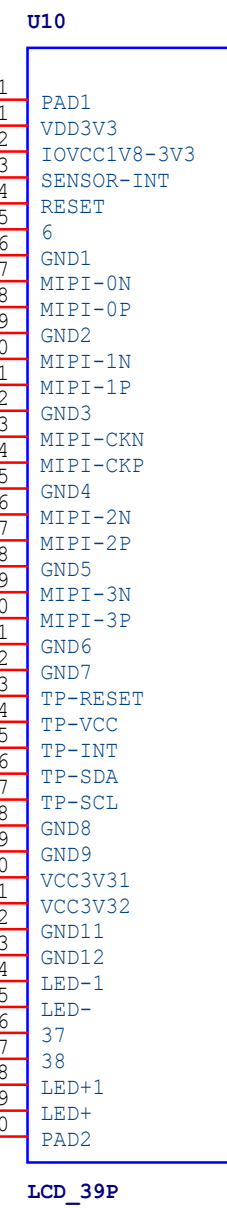
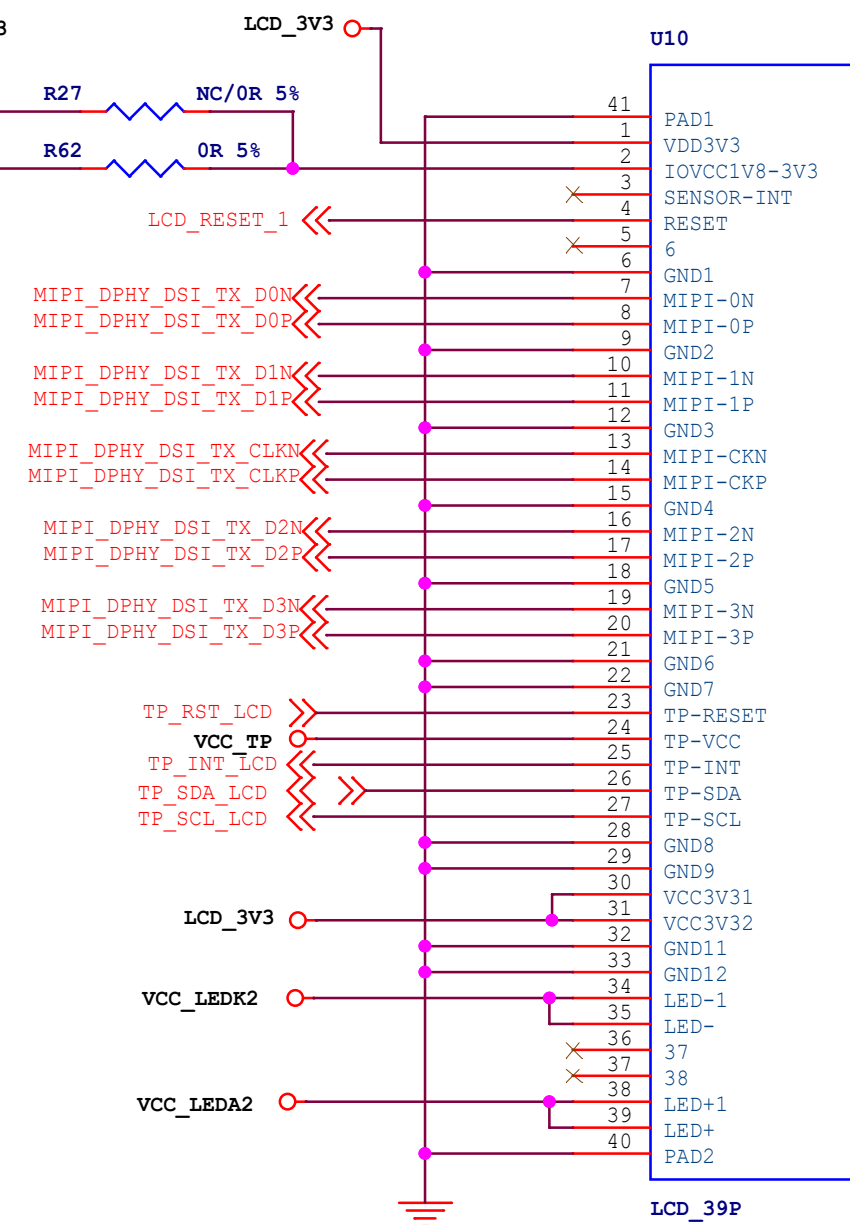
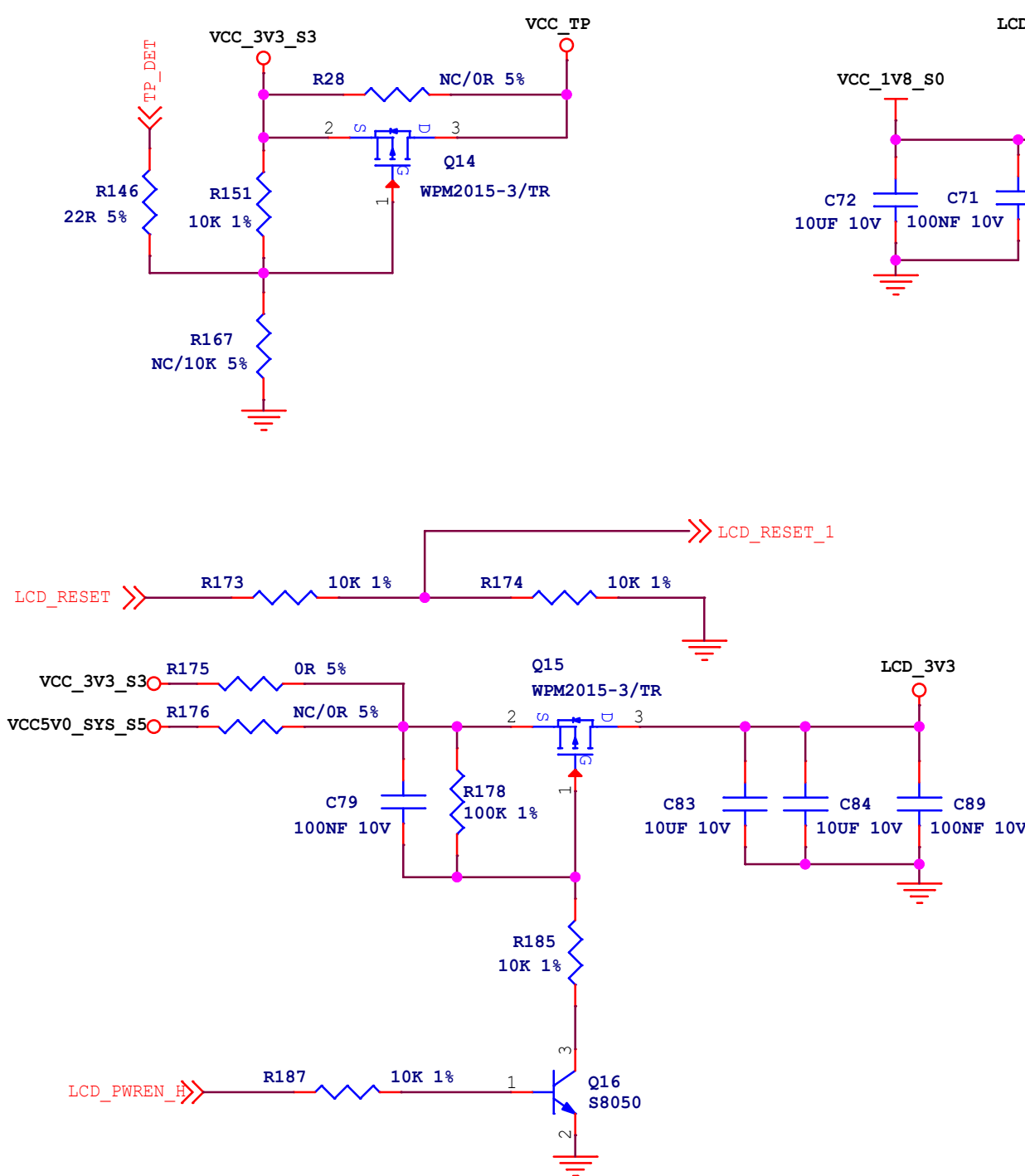
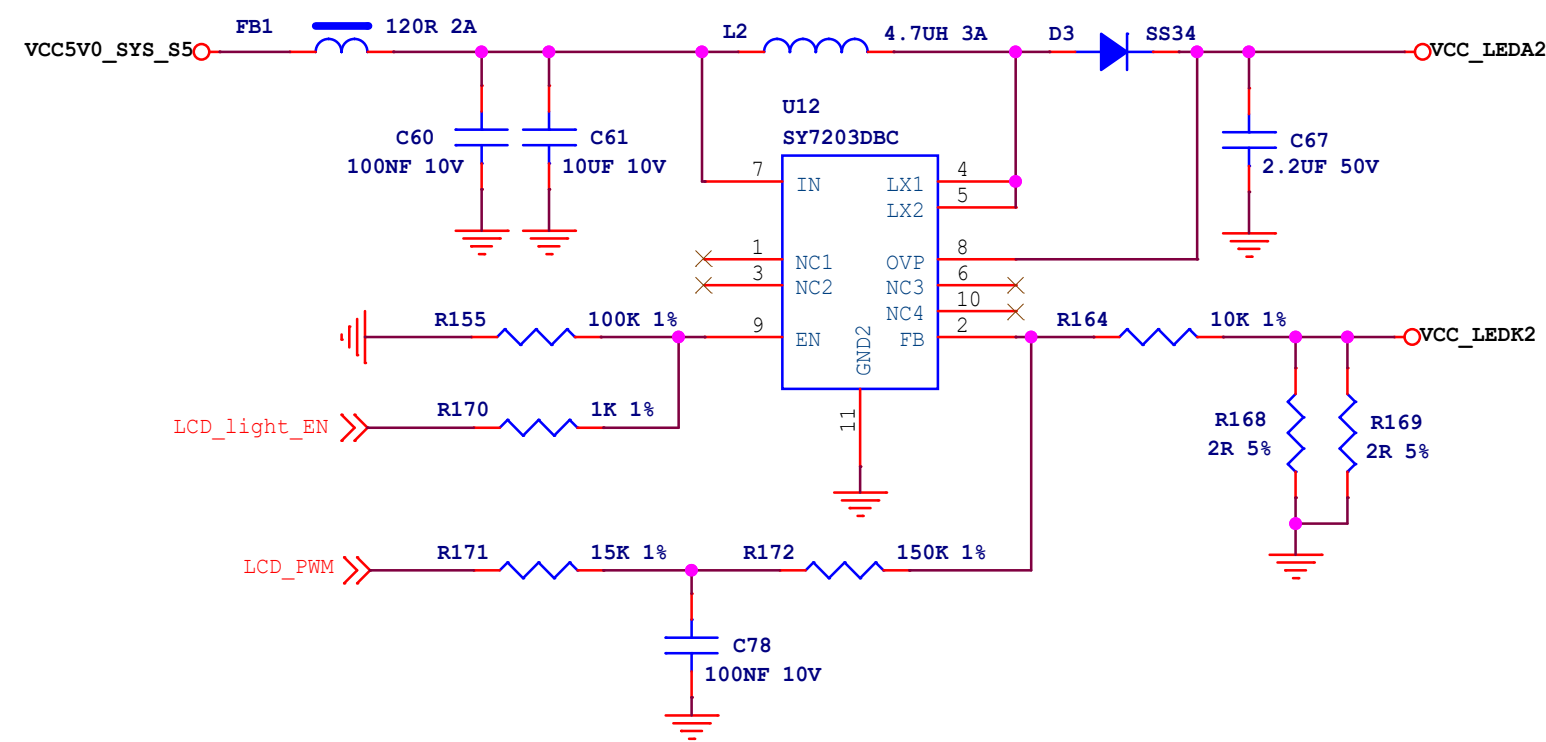


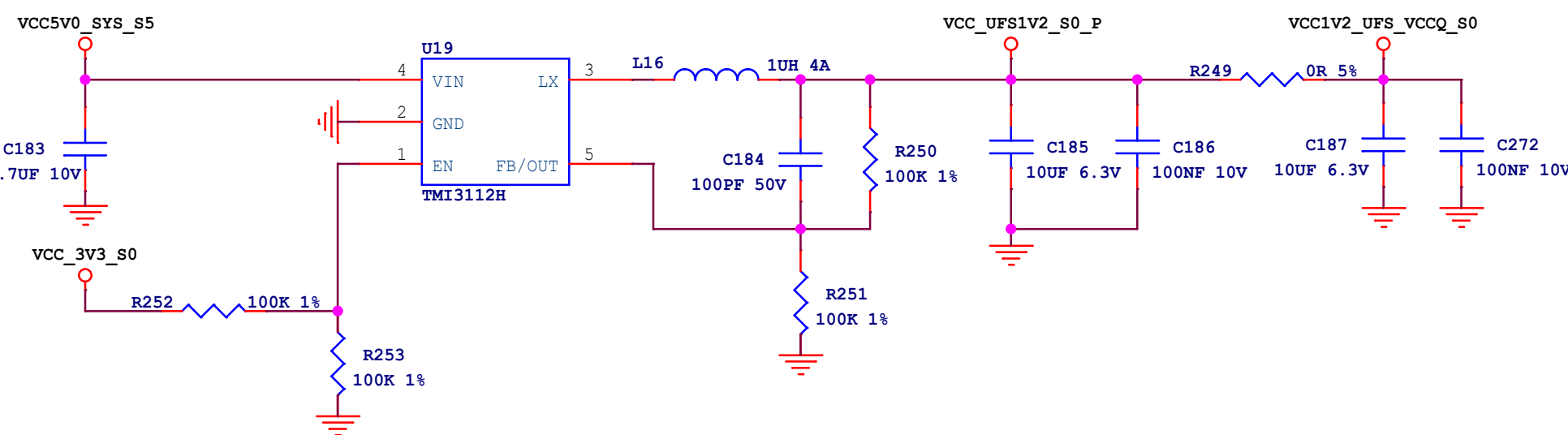
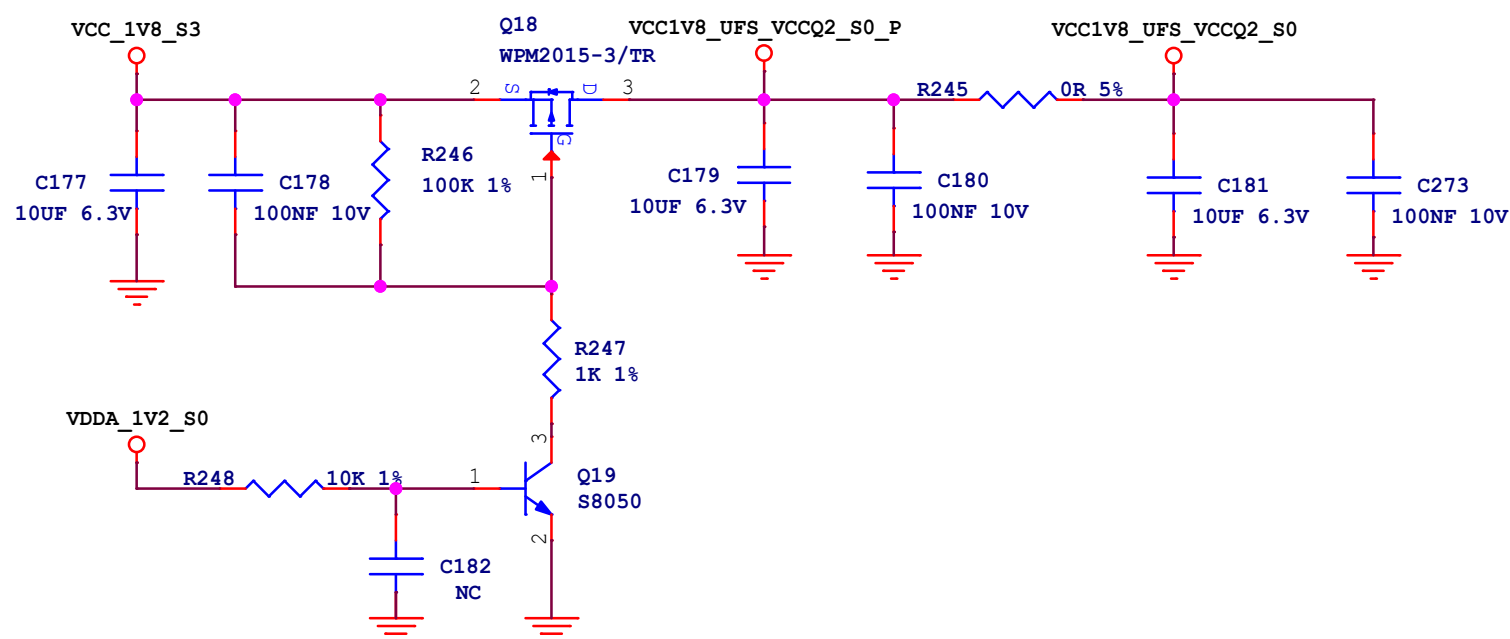
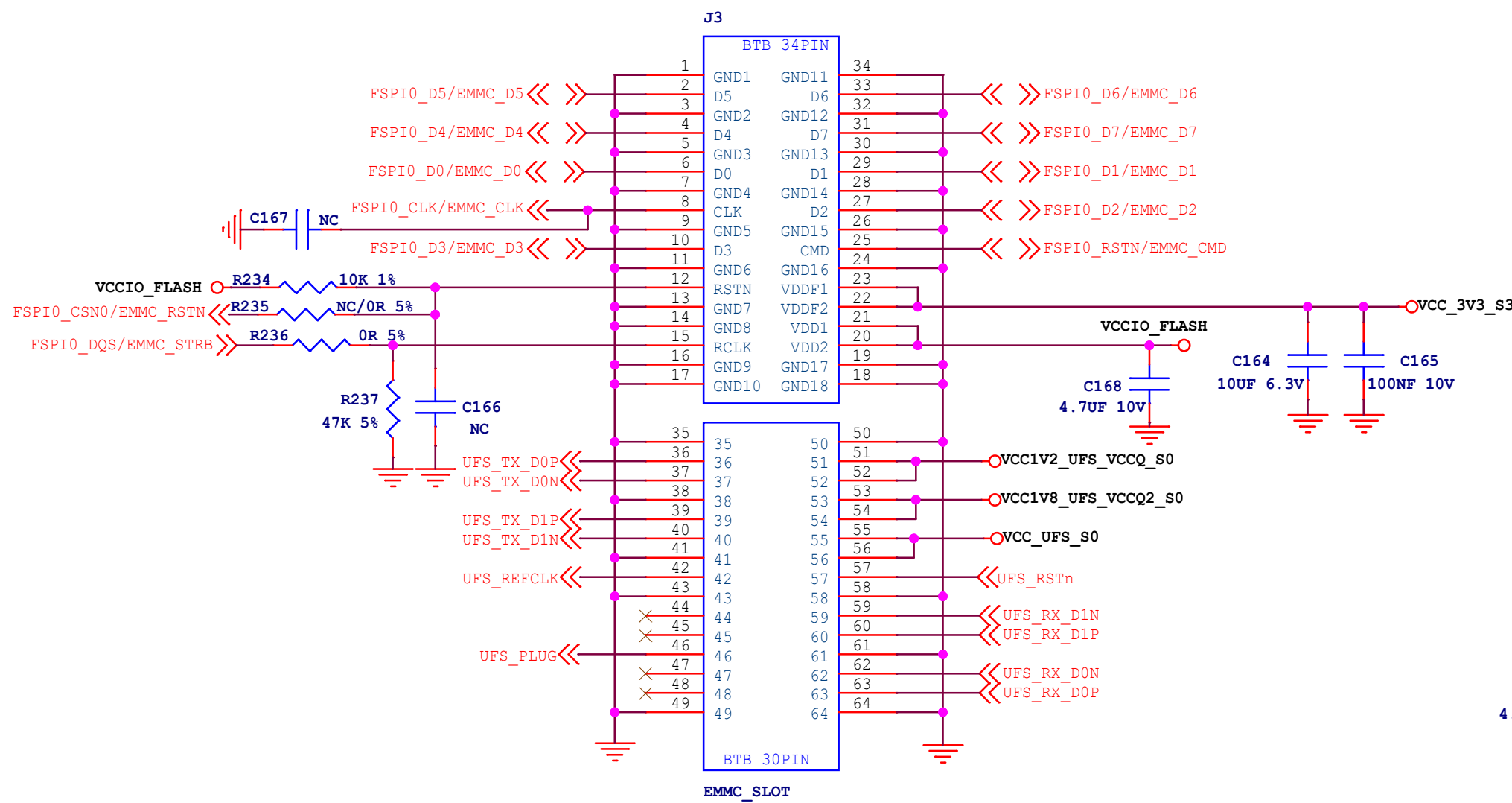
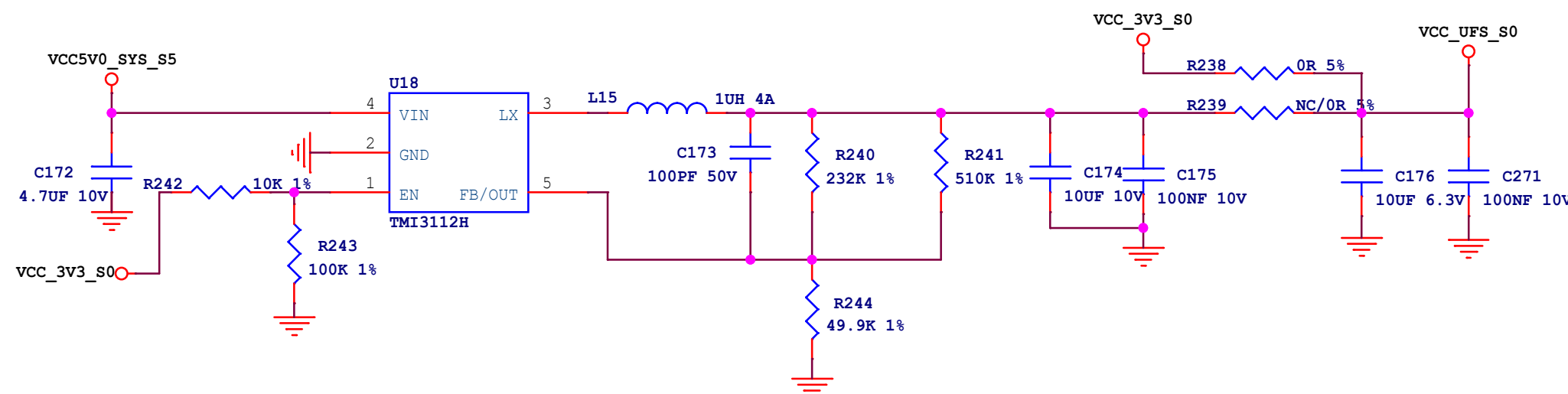
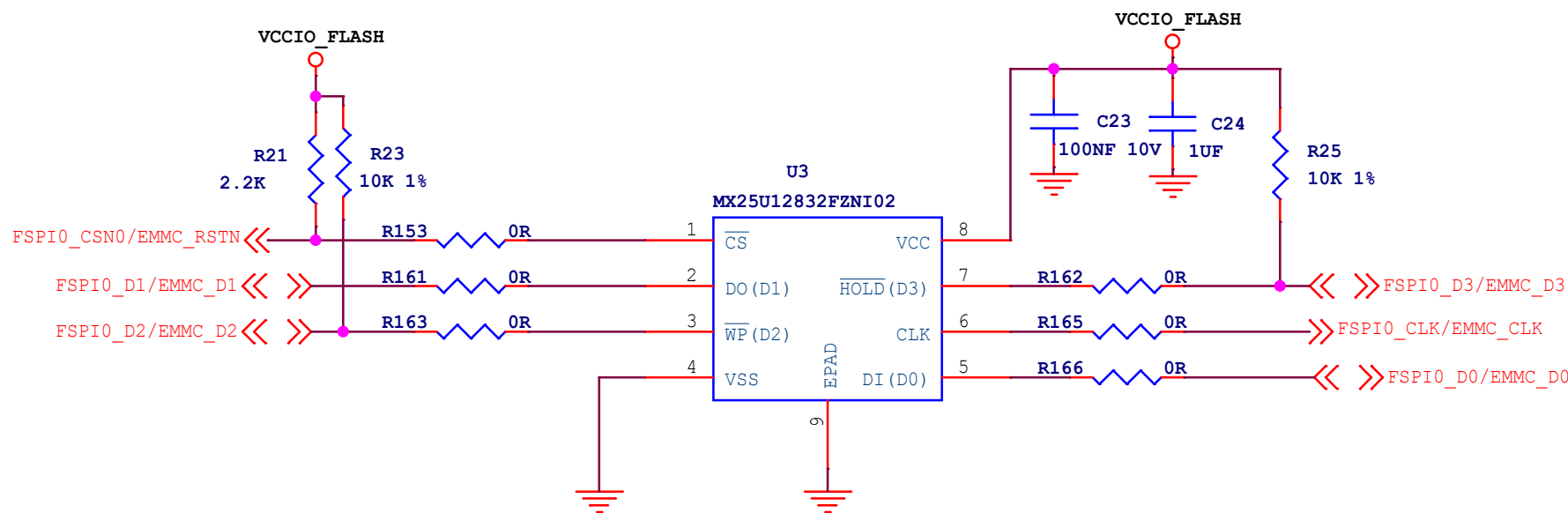
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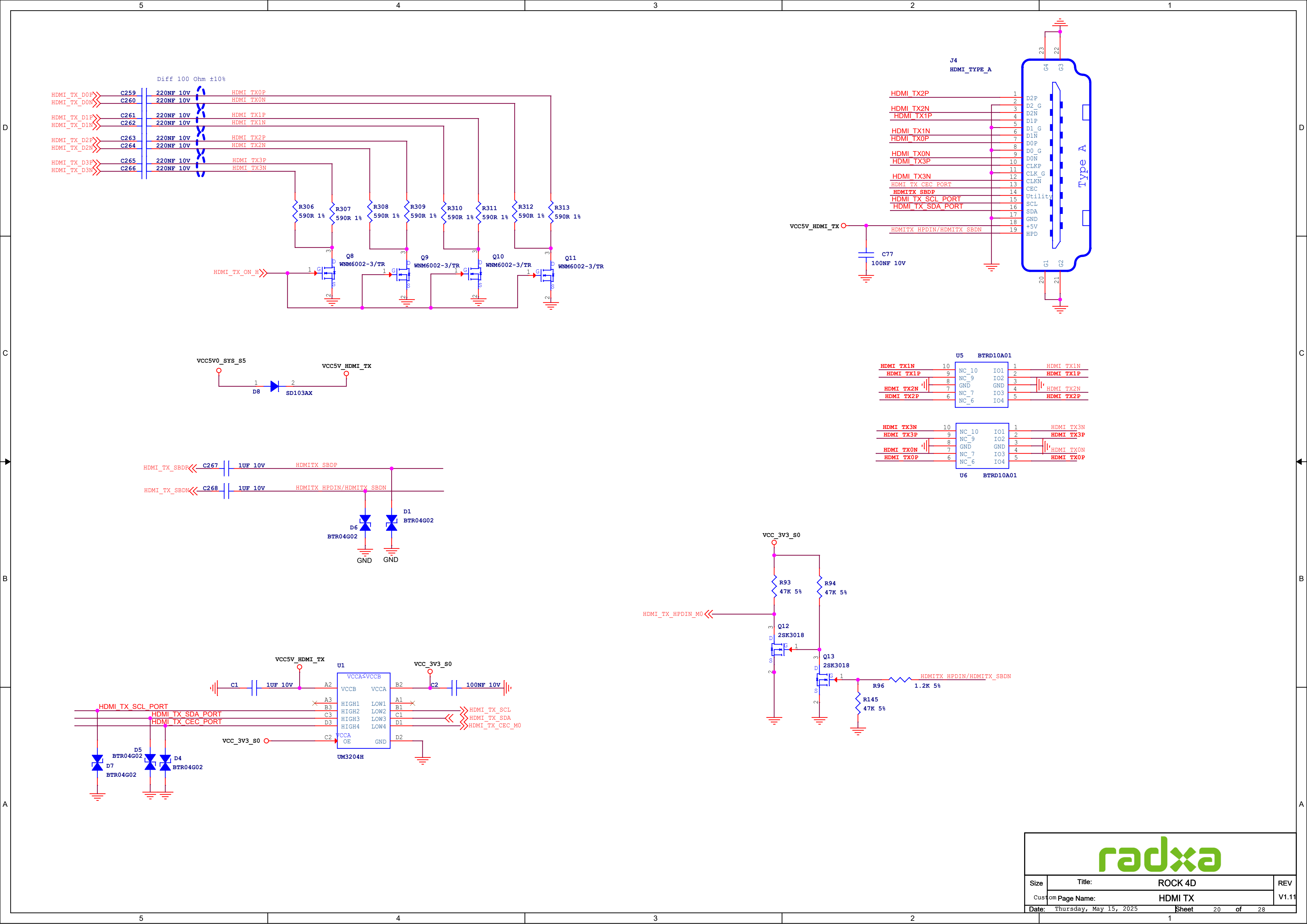


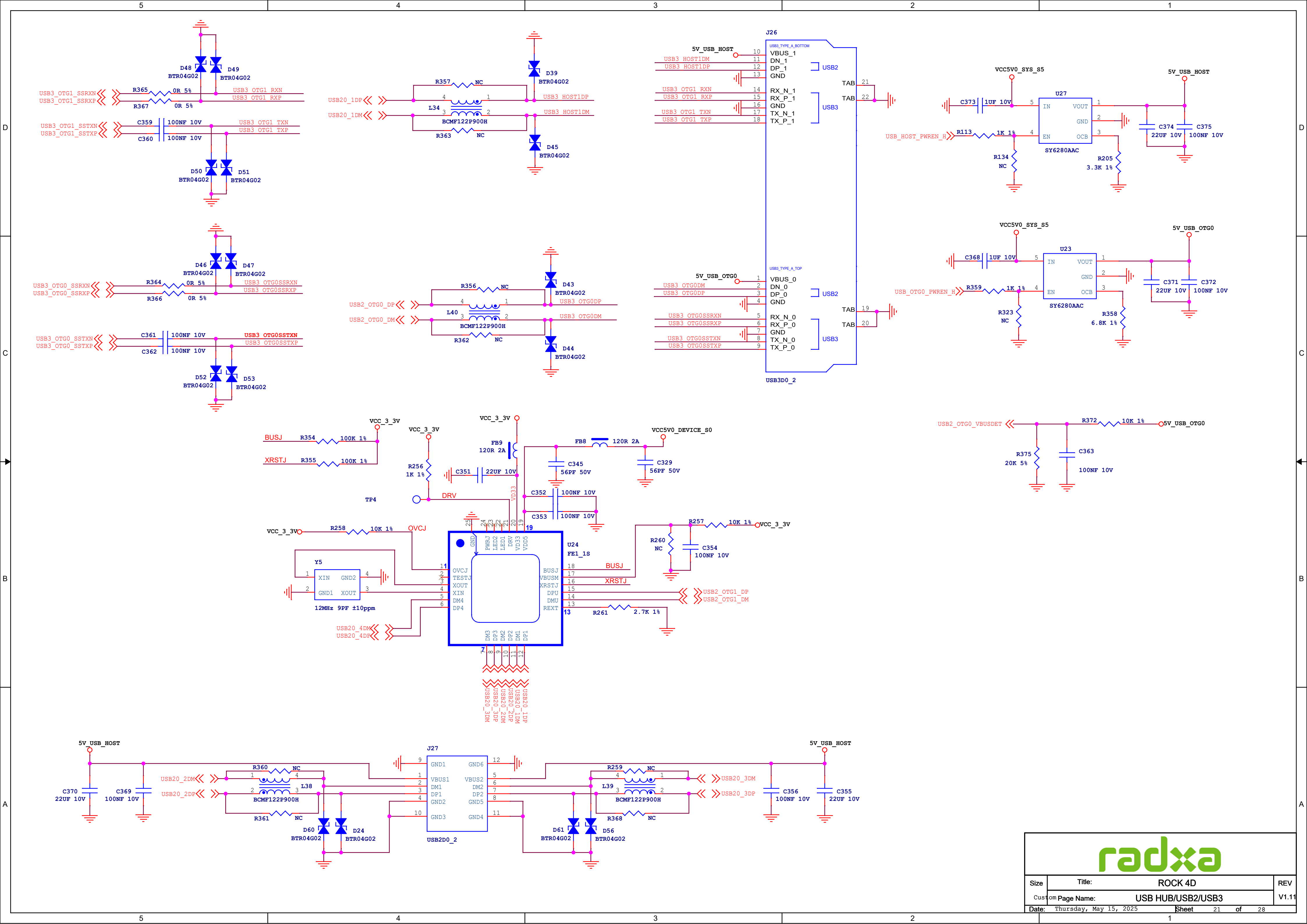




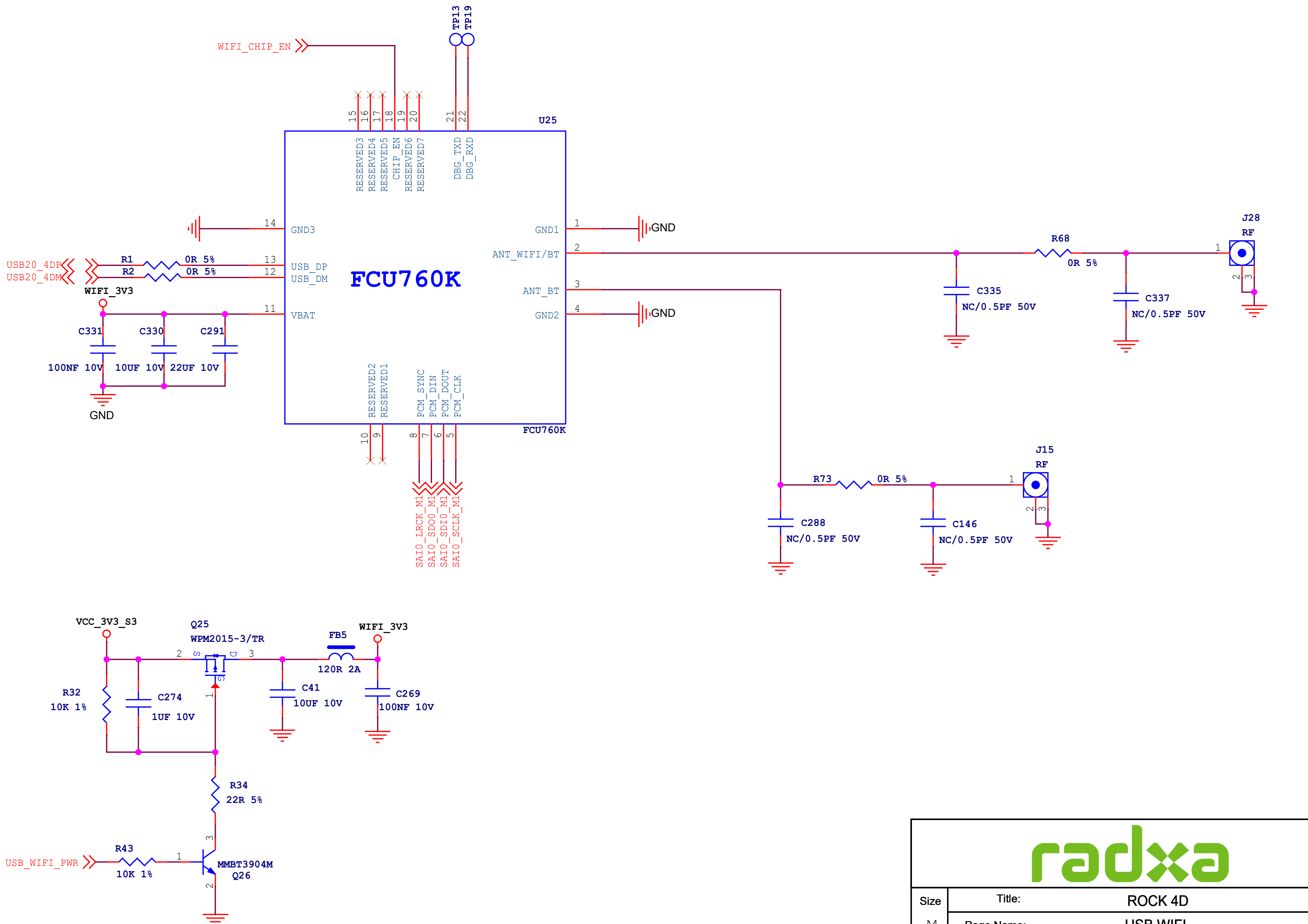


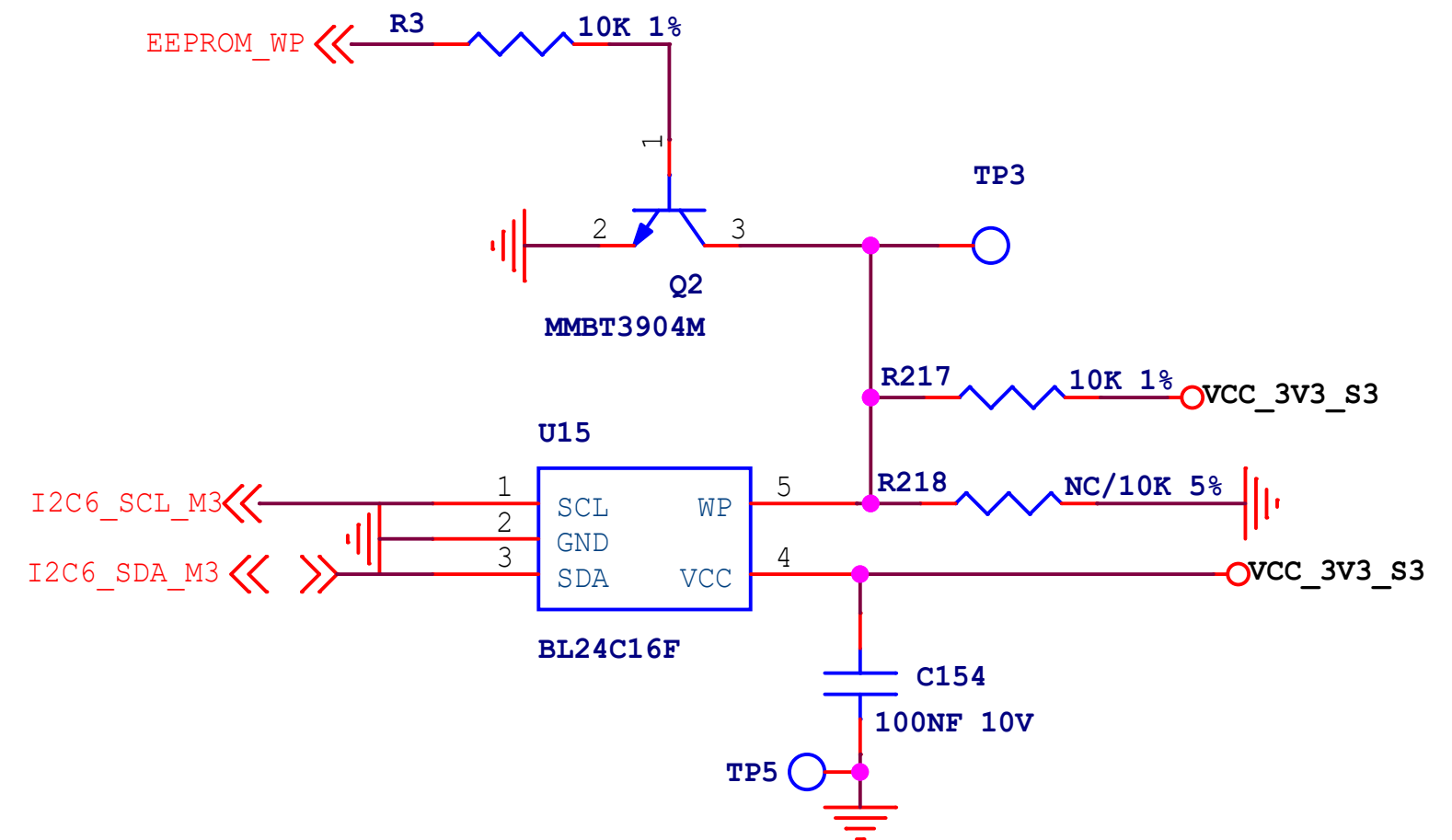
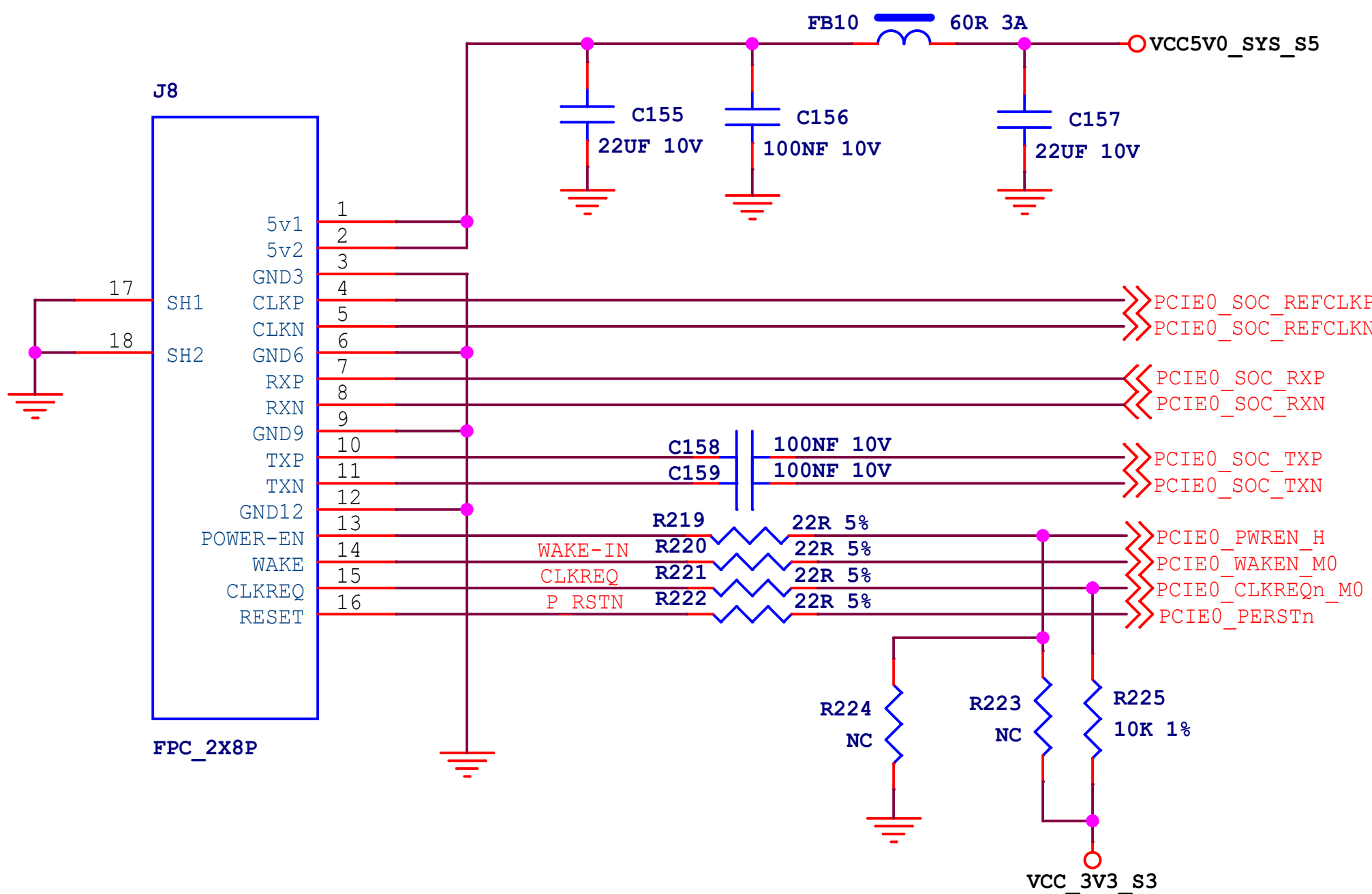
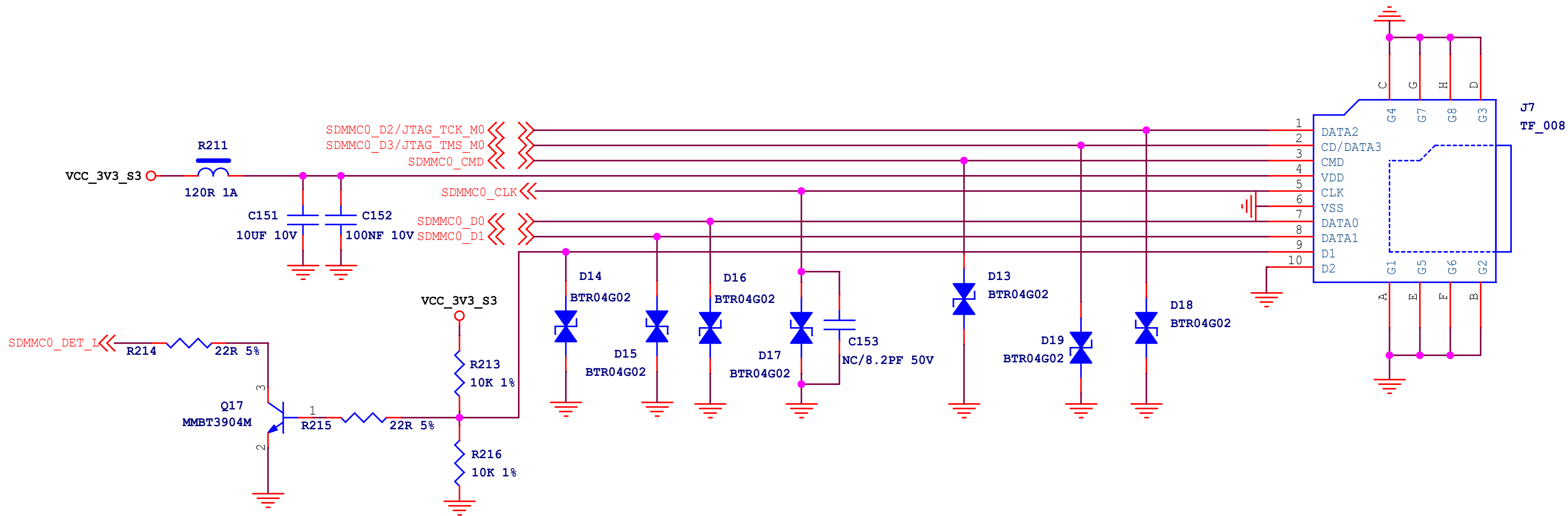
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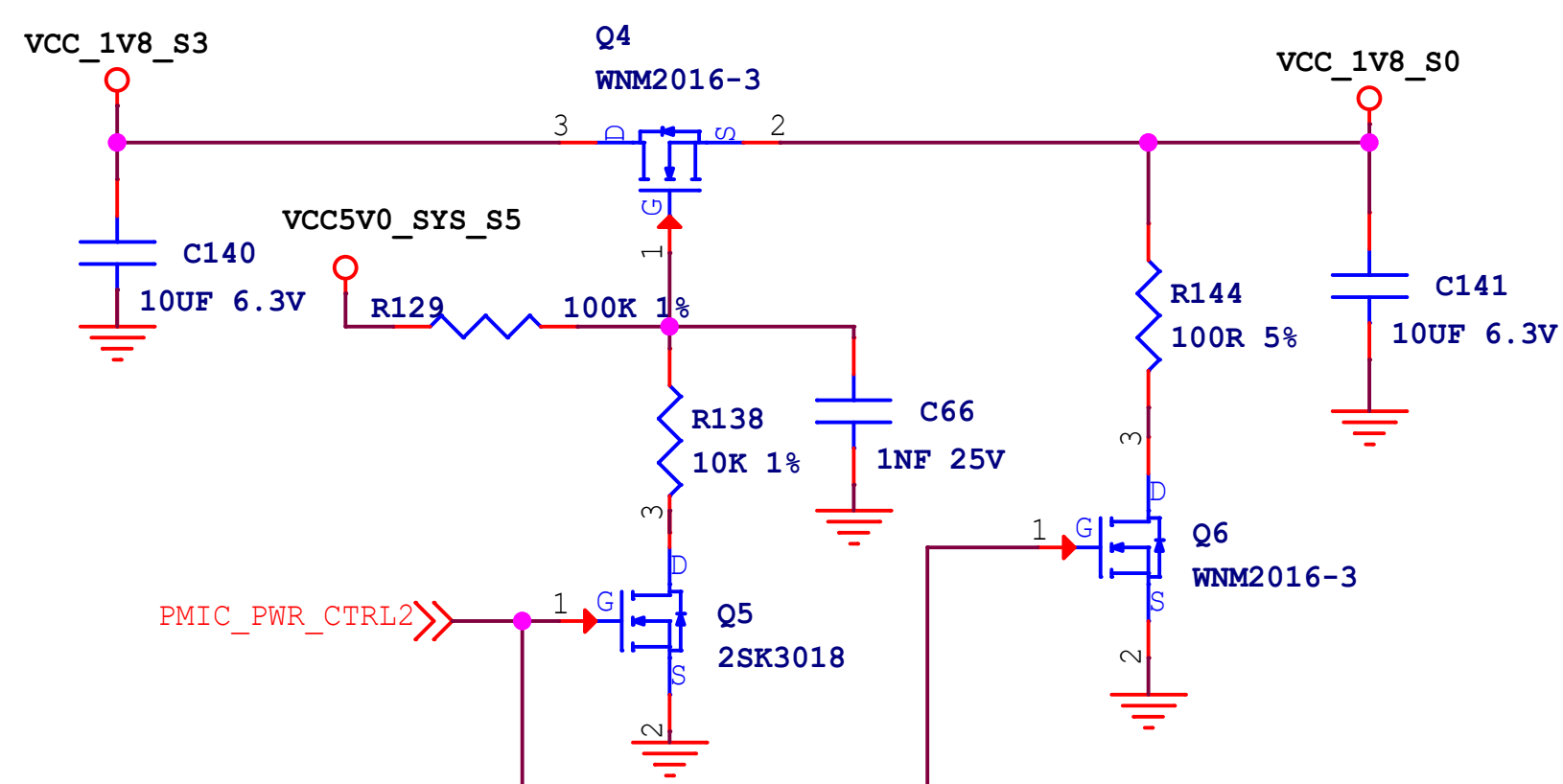
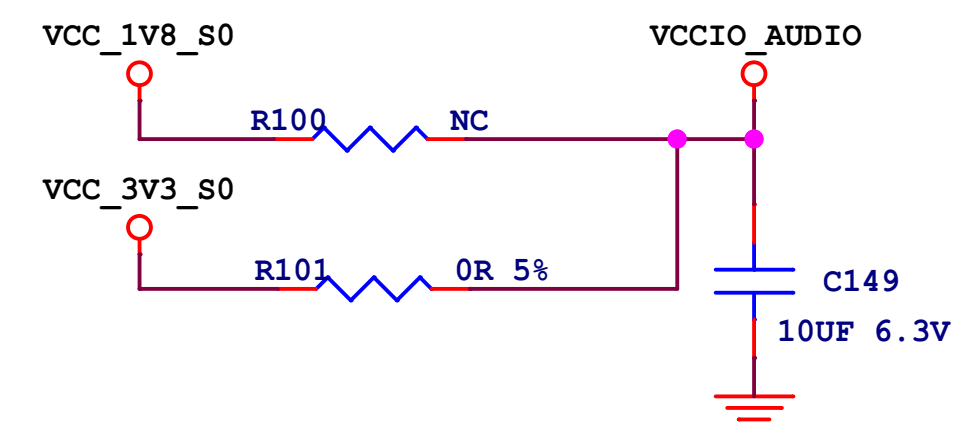
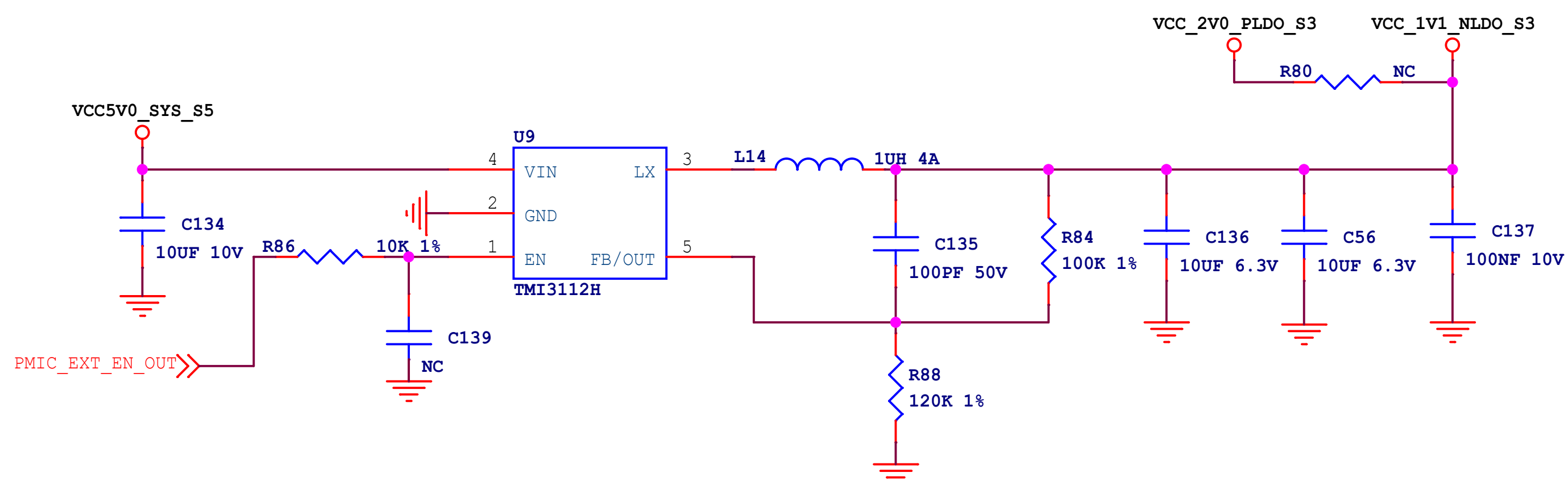
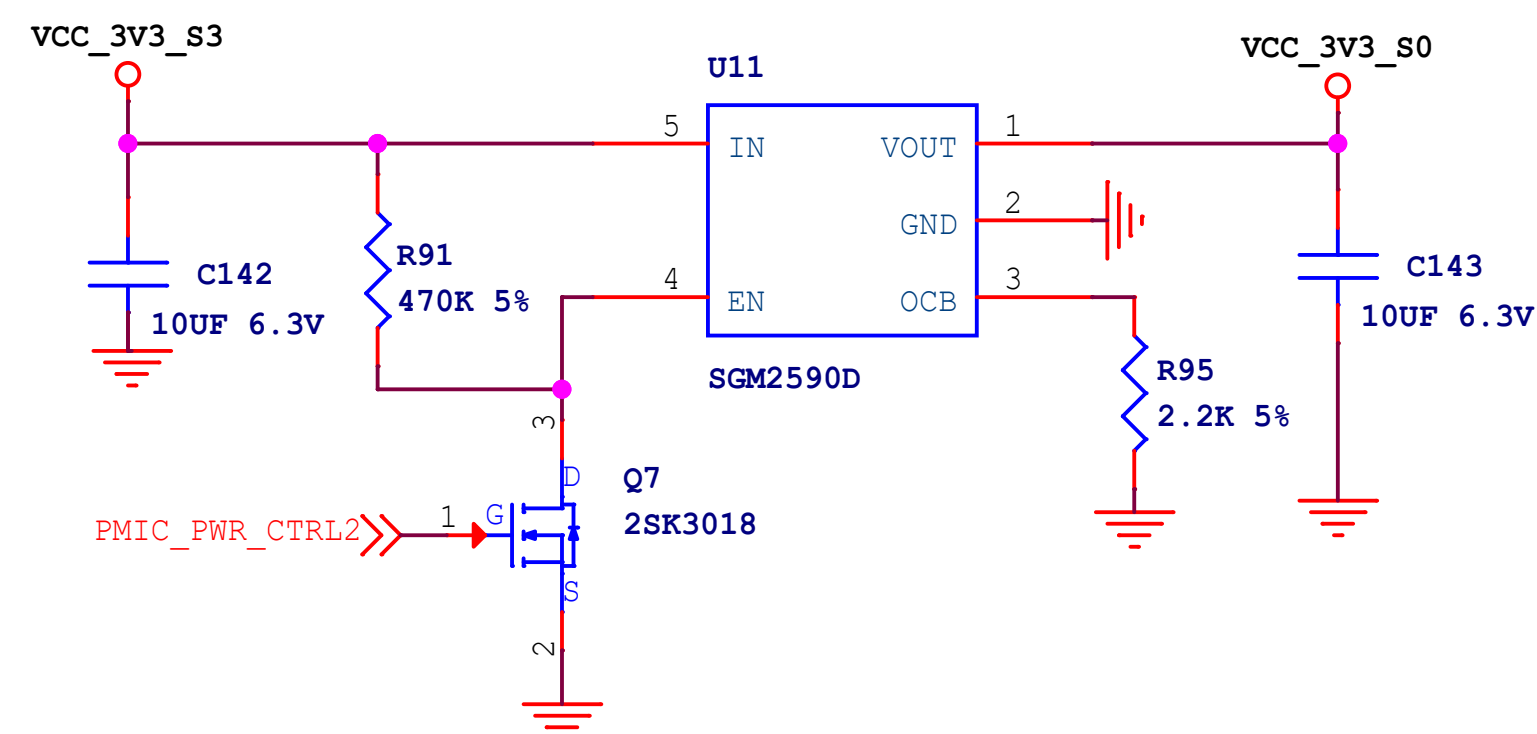
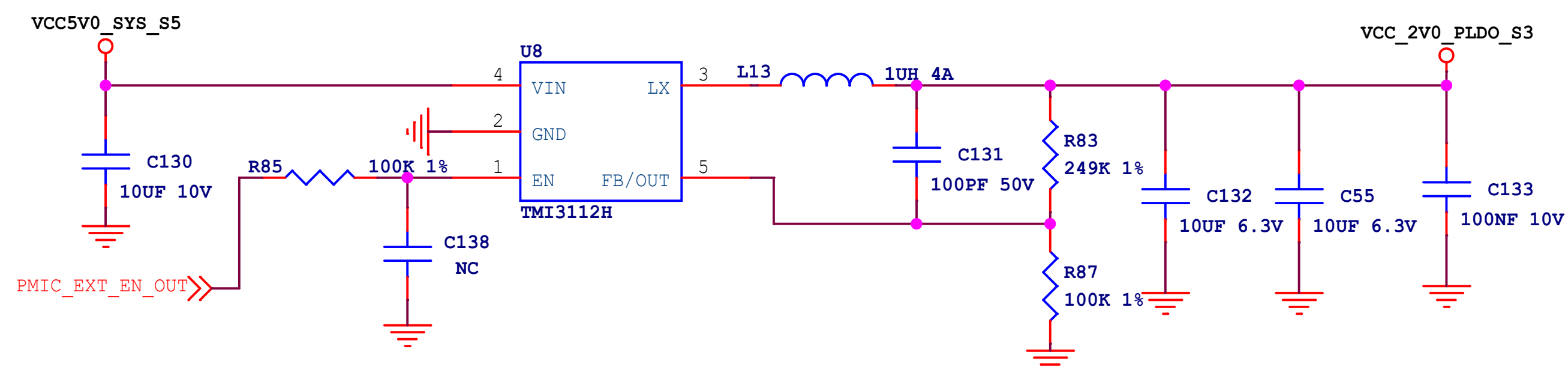




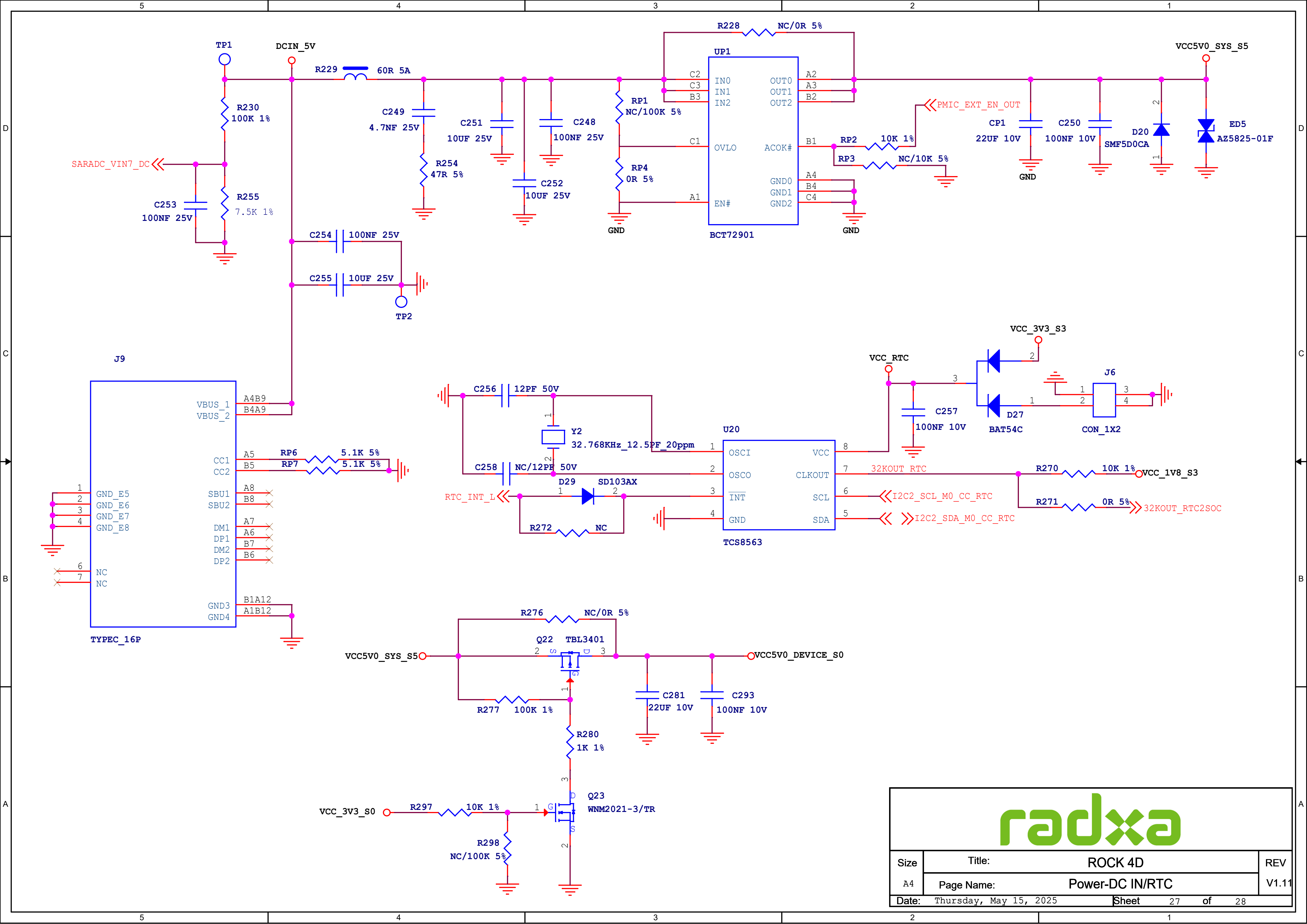
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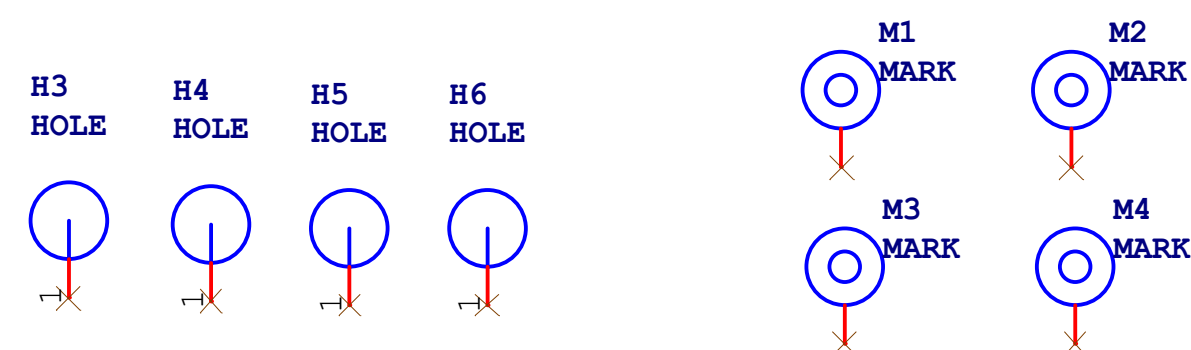
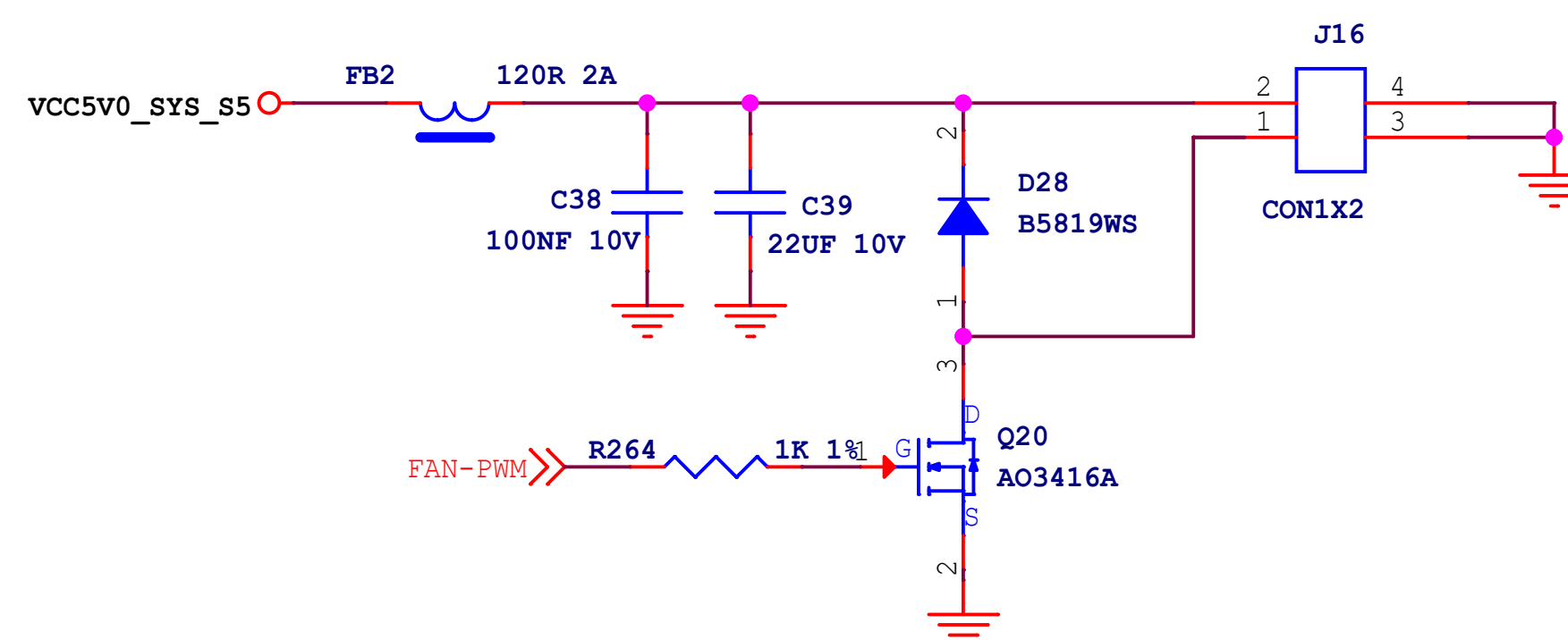
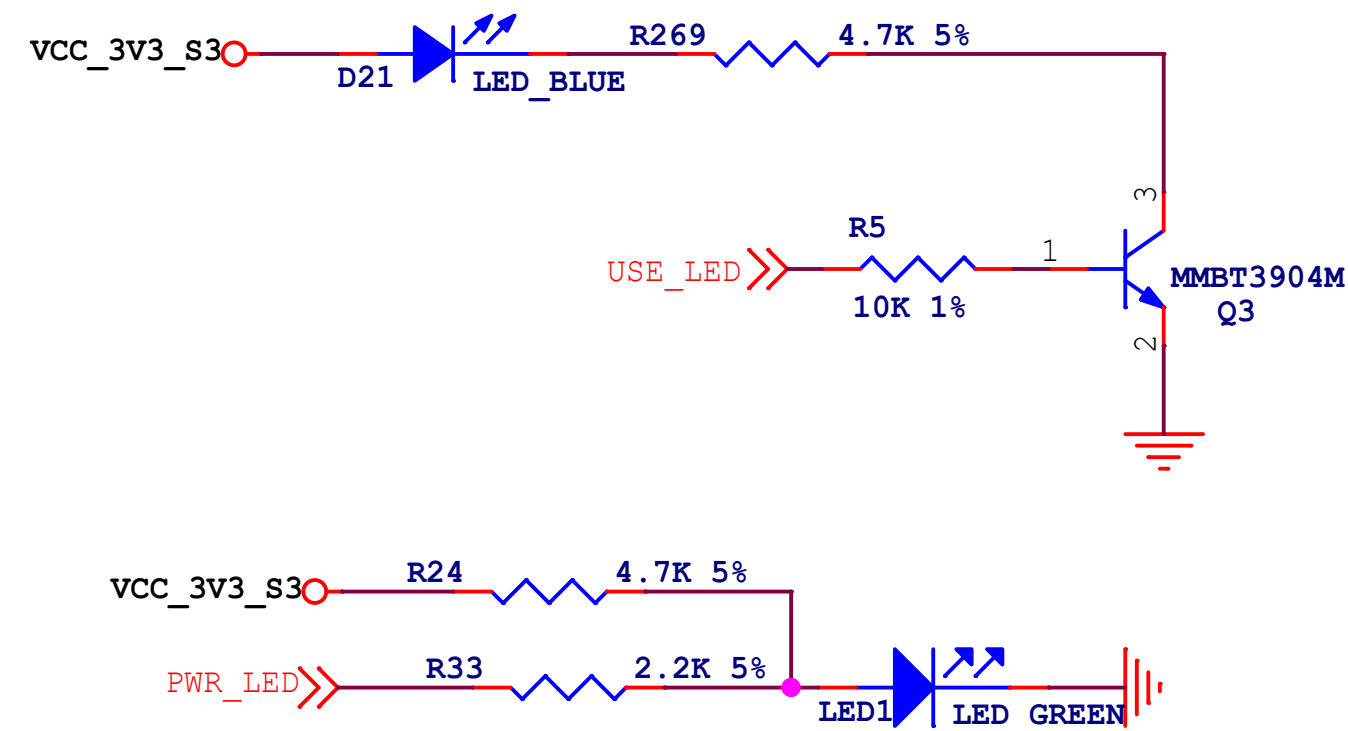
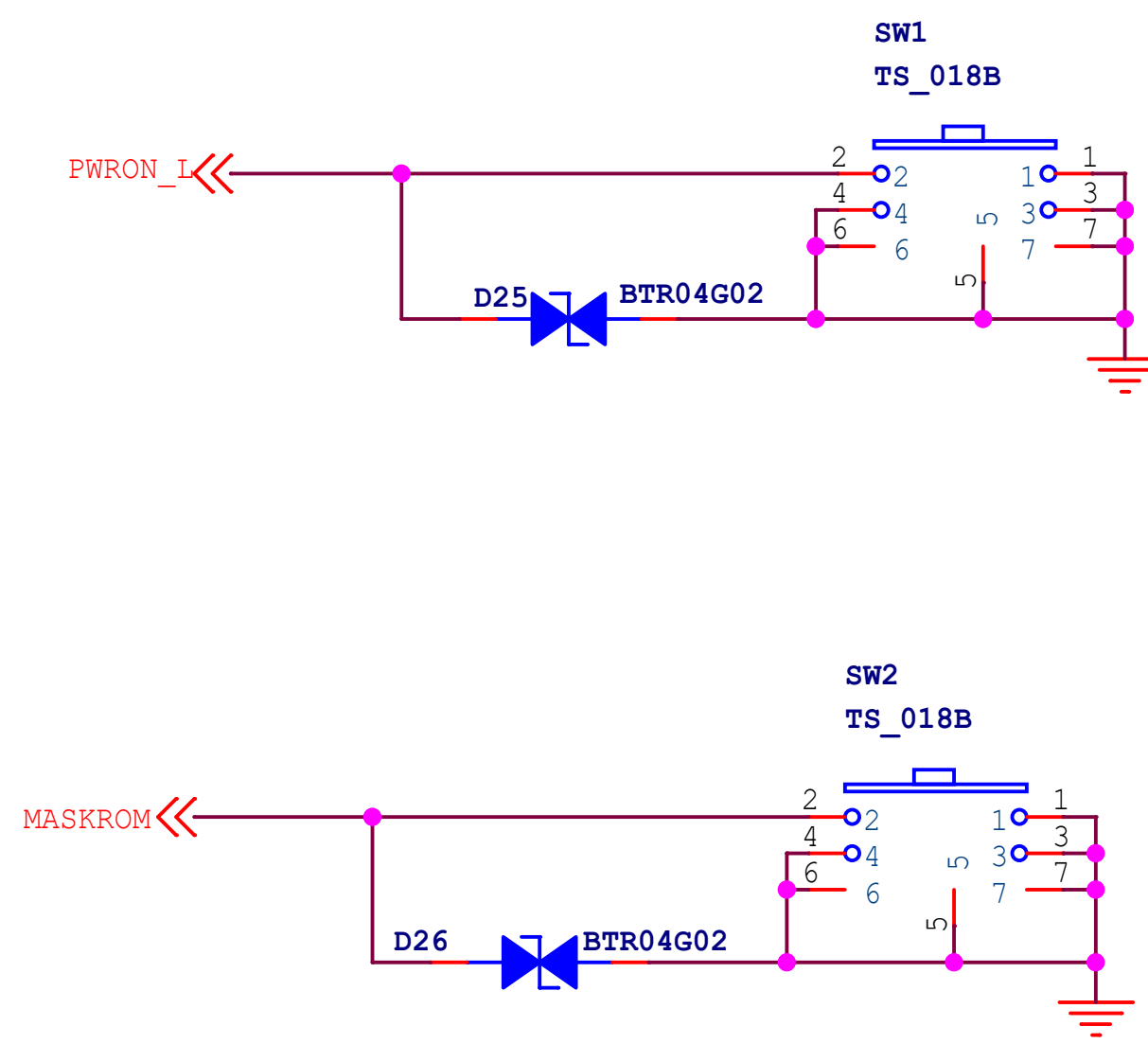
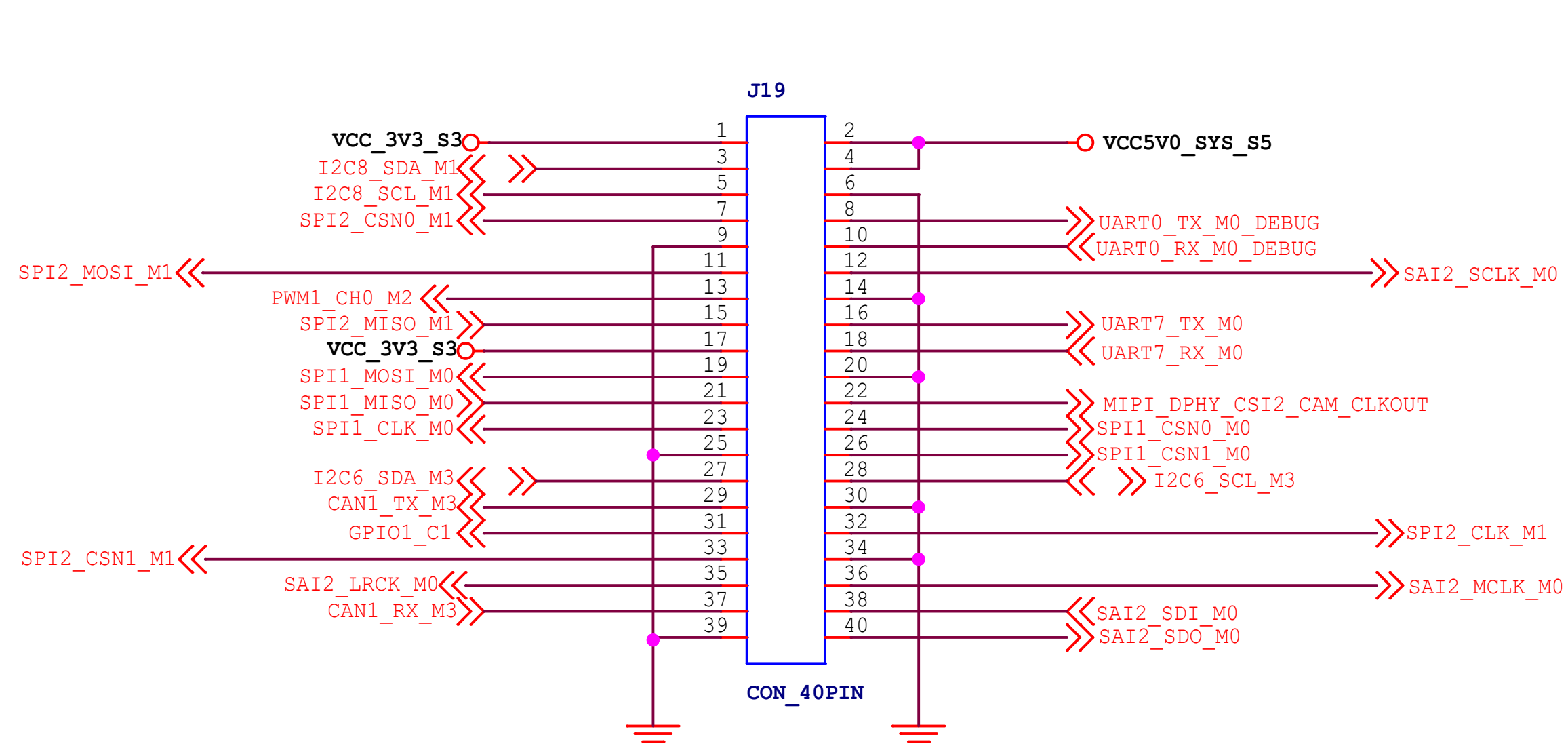






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A4	Page Name: Power-Ext	V1.11
Date:	Thursday, May 15, 2025	Sheet 26 of 28





Size:	Title: ROCK 4D			REV
A4	Page Name: 40PIN/FAN/LED/KEY			V1.1
Date:	Thursday, May 15, 2025	Sheet	28	of 28