



CM3 SODIMM

schematic

V1.51



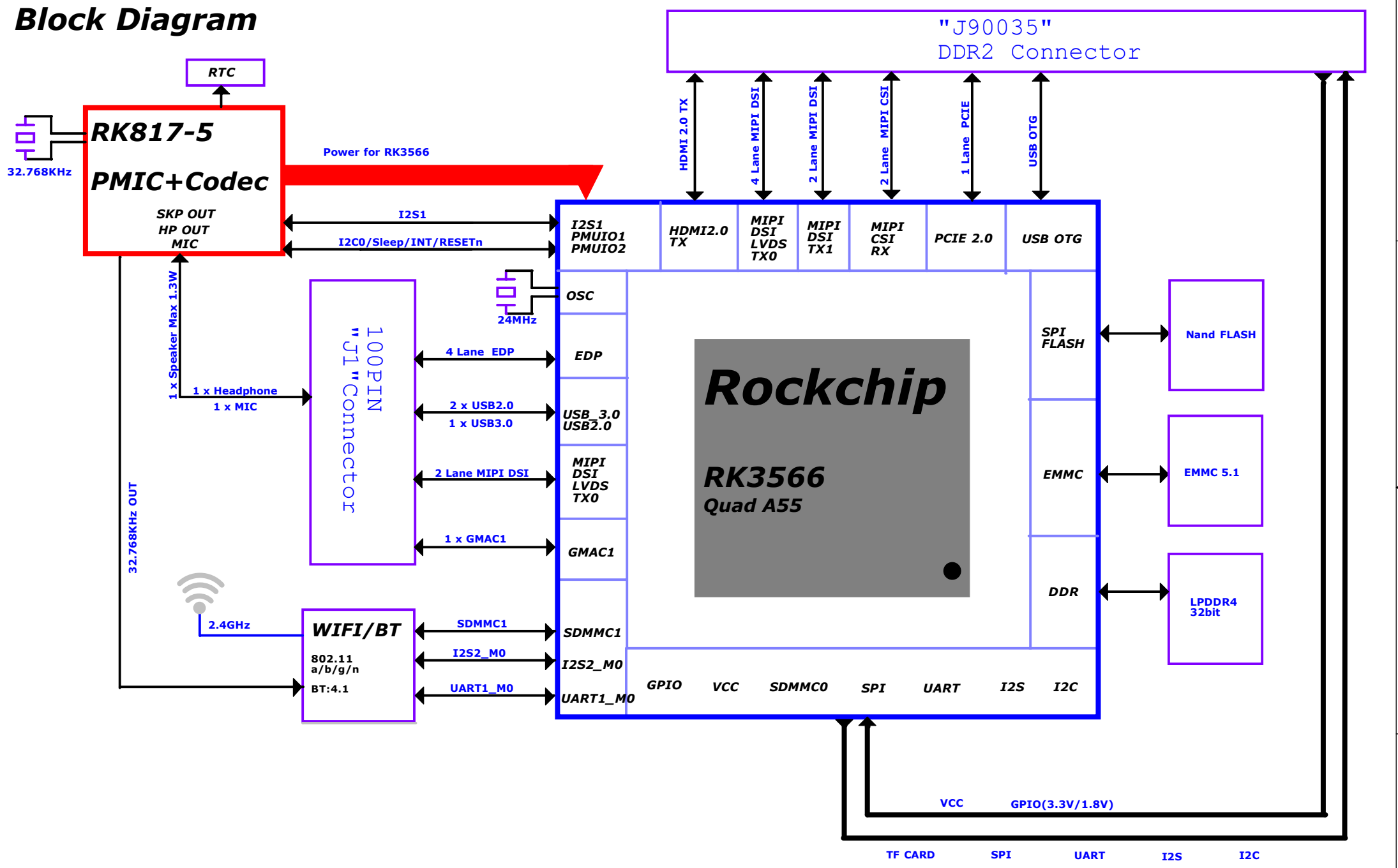
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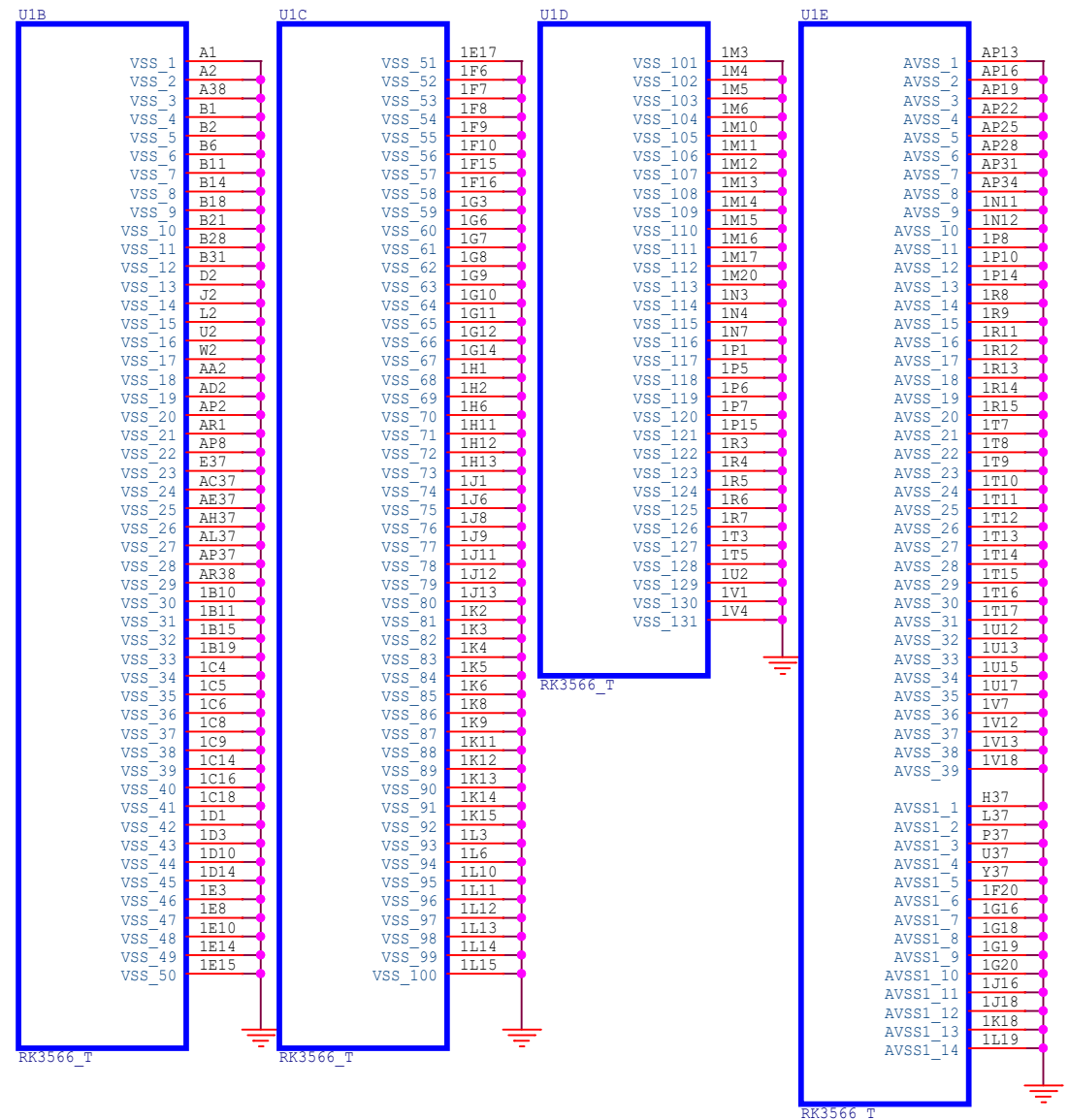
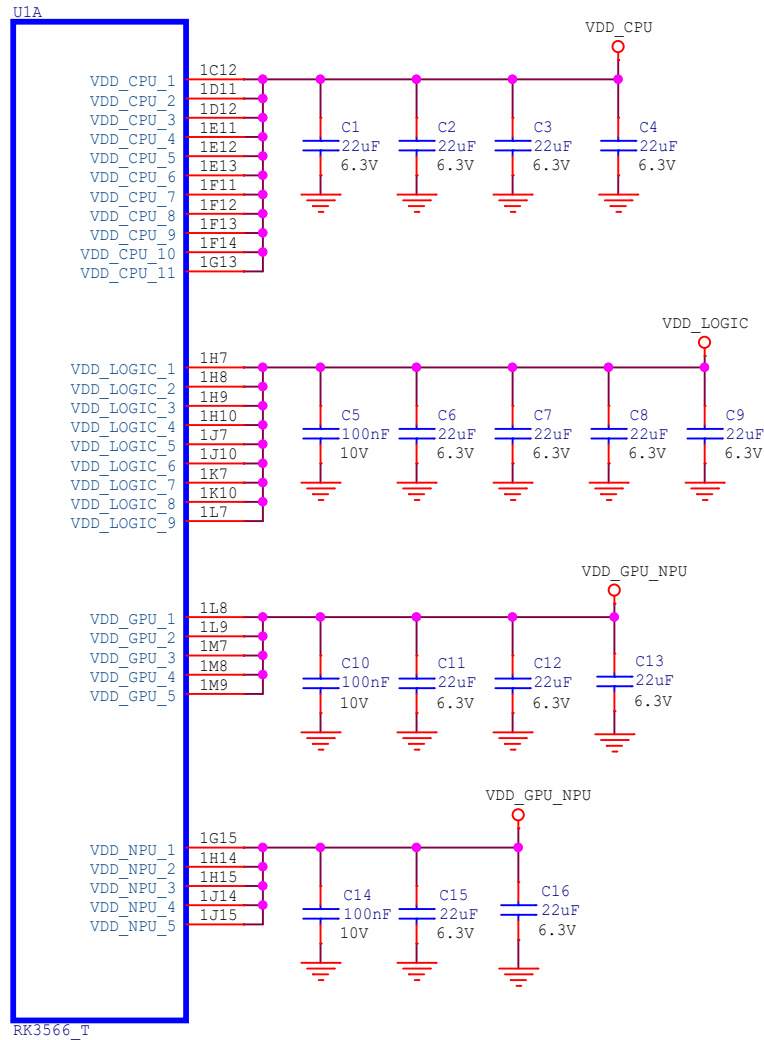


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Block Diagram



(Power&GND)

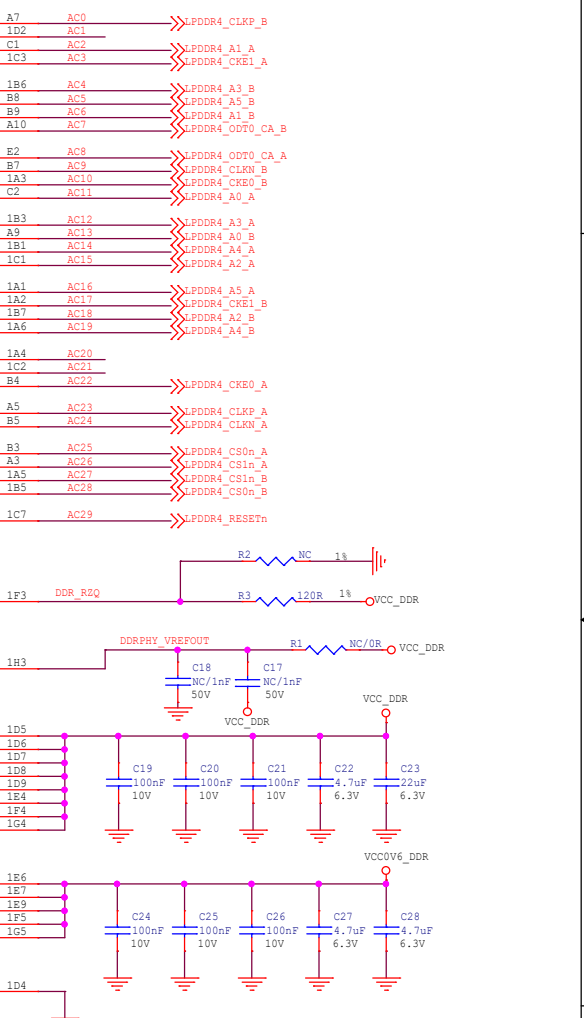


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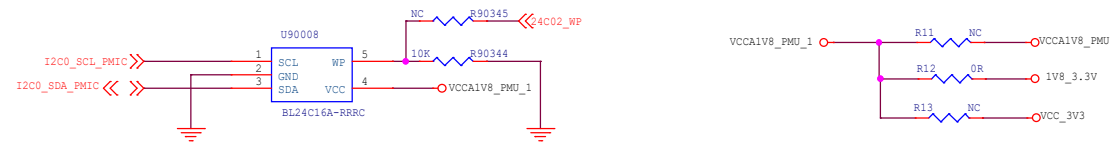
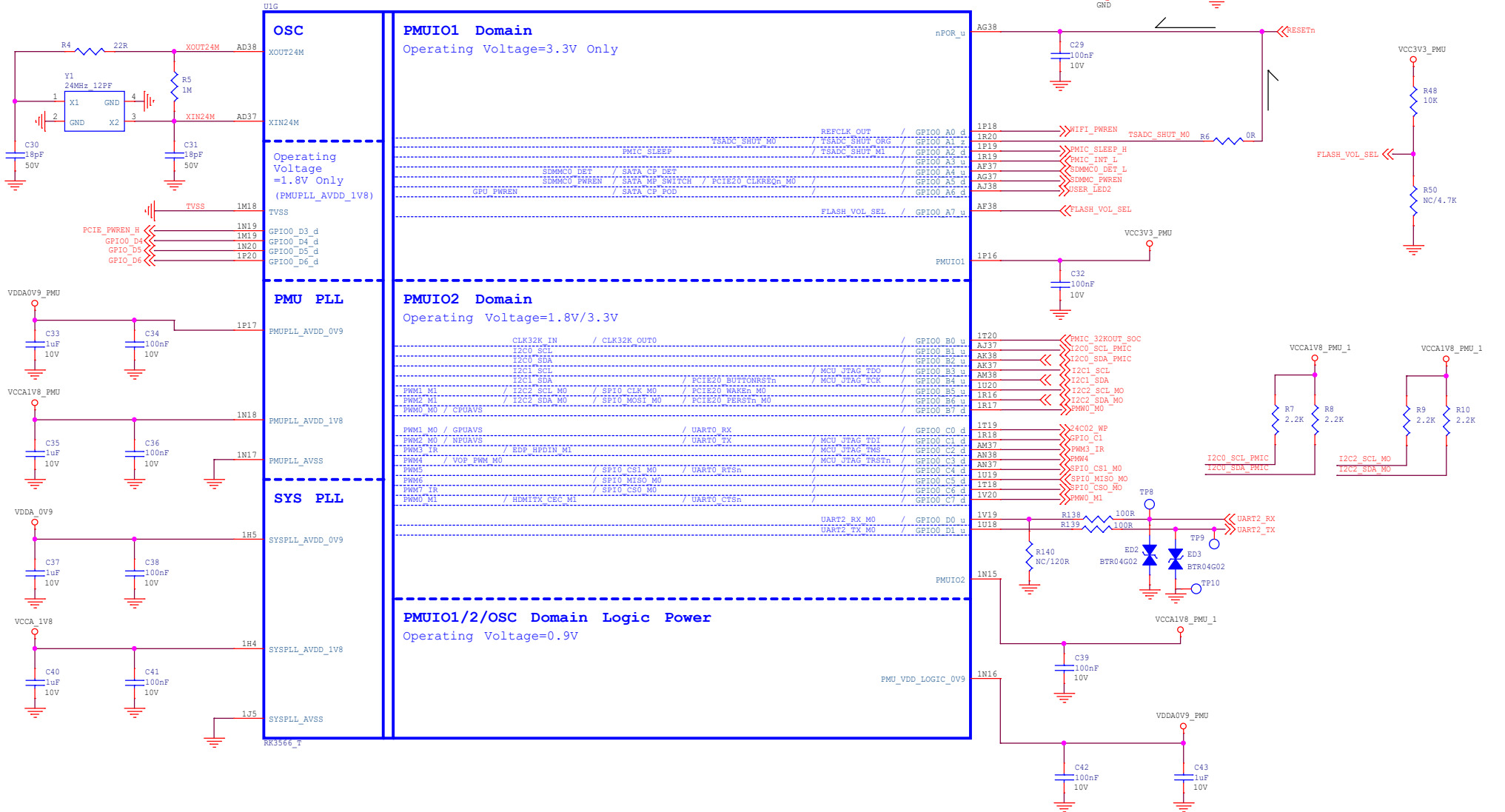
DDR PHY

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LPDDR4_DQ0_A	DDR DQ0 A	G2	DDR DQ0 A / DDR4 DQ0 A / LPDDR4 DQ0 A / DDR3 DQ0 / LPDDR3 DQ15	DDR4 A0 / LPDDR4 CLKP B / DDR3 A9 / --- / AC0	A7	AC0	LPDDR4_CLKP_B		
LPDDR4_DQ1_A	DDR DQ1 A	F2	DDR DQ1 A / DDR4 DQ1 A / LPDDR4 DQ1 A / DDR3 DQ1 / LPDDR3 DQ14	DDR4 A1 / LPDDR4 CLKP B / DDR3 A8 / --- / AC1	1D2	AC1	LPDDR4_CLKP_B		
LPDDR4_DQ2_A	DDR DQ2 A	F1	DDR DQ2 A / DDR4 DQ2 A / LPDDR4 DQ2 A / DDR3 DQ2 / LPDDR3 DQ14	DDR4 A2 / LPDDR4 A1 A / DDR3 A4 / LPDDR3 A6 / AC2	C1	AC2	LPDDR4_A1_A		
LPDDR4_DQ3_A	DDR DQ3 A	E1	DDR DQ3 A / DDR4 DQ3 A / LPDDR4 DQ3 A / DDR3 DQ3 / LPDDR3 DQ9	DDR4 A3 / LPDDR4 CKE1 A / DDR3 A3 / --- / AC3	1C3	AC3	LPDDR4_CKE1_A		
LPDDR4_DQ4_A	DDR DQ4 A	M2	DDR DQ4 A / DDR4 DQ4 A / LPDDR4 DQ4 A / DDR3 DQ4 / LPDDR3 DQ13	DDR4 A4 / LPDDR4 A3 B / DDR3 BA1 / LPDDR3 A3 / AC4	1B6	AC4	LPDDR4_A3_B		
LPDDR4_DQ5_A	DDR DQ5 A	K1	DDR DQ5 A / DDR4 DQ5 A / LPDDR4 DQ5 A / DDR3 DQ5 / LPDDR3 DQ12	DDR4 A5 / LPDDR4 A5 B / DDR3 A11 / LPDDR3 A2 / AC5	B8	AC5	LPDDR4_A5_B		
LPDDR4_DQ6_A	DDR DQ6 A	K2	DDR DQ6 A / DDR4 DQ6 A / LPDDR4 DQ6 A / DDR3 DQ6 / LPDDR3 DQ11	DDR4 A6 / LPDDR4 A1 A / DDR3 A13 / LPDDR3 A3 / AC6	B9	AC6	LPDDR4_A1_B		
LPDDR4_DQ7_A	DDR DQ7 A	1E1	DDR DQ7 A / DDR4 DQ7 A / LPDDR4 DQ7 A / DDR3 DQ7 / LPDDR3 DQ11	DDR4 A7 / LPDDR4 DQ7 CA B / DDR3 A8 / --- / AC7	A10	AC7	LPDDR4_ODT0_CA_B		
LPDDR4_DM0_A	DDR DM0 A	1E2	DDR DM0 A / DDR4 DML A / LPDDR4 DM0 A / DDR3 DM0 / LPDDR3 DM1	DDR4 A8 / LPDDR4 DQ7 CA A / DDR3 A6 / LPDDR3 A9 / AC8	E2	AC8	LPDDR4_ODT0_CA_A		
LPDDR4_DQS0P_A	DDR DQS0P A	H2	DDR DQS0P A / DDR4 DQSL P A / LPDDR4 DQS0P A / DDR3 DQS0P / LPDDR3 DQS1P	DDR4 A9 / LPDDR4 CLKN B / DDR3 A5 / --- / AC9	B7	AC9	LPDDR4_CLKN_B		
LPDDR4_DQSIN_A	DDR DQSIN A	H1	DDR DQSIN A / DDR4 DQSL N A / LPDDR4 DQSIN A / DDR3 DQSIN / LPDDR3 DQSIN	DDR4 A10 / LPDDR4 CKE0 B / DDR3 A10 / LPDDR3 A3 / AC10	1A3	AC10	LPDDR4_CKE0_B		
LPDDR4_DQ8_A	DDR DQ8 A	F2	DDR DQ8 A / DDR4 DQ8 A / LPDDR4 DQ8 A / DDR3 DQ8 / LPDDR3 DQ25	DDR4 A11 / LPDDR4 A5 A / DDR3 A7 / LPDDR3 A3 / AC11	C2	AC11	LPDDR4_A0_A		
LPDDR4_DQ9_A	DDR DQ9 A	R1	DDR DQ9 A / DDR4 DQ9 A / LPDDR4 DQ9 A / DDR3 DQ9 / LPDDR3 DQ24	DDR4 A12 / LPDDR4 A3 A / DDR3 BA2 / --- / AC12	1B3	AC12	LPDDR4_A3_A		
LPDDR4_DQ10_A	DDR DQ10 A	R2	DDR DQ10 A / DDR4 DQ10 A / LPDDR4 DQ10 A / DDR3 DQ10 / LPDDR3 DQ28	DDR4 A13 / LPDDR4 A0 B / DDR3 A14 / LPDDR3 A0 / AC13	A9	AC13	LPDDR4_A0_B		
LPDDR4_DQ11_A	DDR DQ11 A	E2	DDR DQ11 A / DDR4 DQ11 A / LPDDR4 DQ11 A / DDR3 DQ11 / LPDDR3 DQ28	DDR4 A14 WEN / LPDDR4 A4 A / DDR3 A15 / LPDDR3 A5 / AC14	1B1	AC14	LPDDR4_A0_B		
LPDDR4_DQ12_A	DDR DQ12 A	M1	DDR DQ12 A / DDR4 DQ12 A / LPDDR4 DQ12 A / DDR3 DQ12 / LPDDR3 DQ29	DDR4 A15 CAS# / LPDDR4 A2 A / DDR3 A0 / --- / AC15	1C1	AC15	LPDDR4_A4_A		
LPDDR4_DQ13_A	DDR DQ13 A	1F2	DDR DQ13 A / DDR4 DQ13 A / LPDDR4 DQ13 A / DDR3 DQ13 / LPDDR3 DQ31	DDR4 A16 RAS# / LPDDR4 A5 A / DDR3 RAS# / LPDDR3 A7 / AC16	1A1	AC16	LPDDR4_A5_A		
LPDDR4_DQ14_A	DDR DQ14 A	1F1	DDR DQ14 A / DDR4 DQ14 A / LPDDR4 DQ14 A / DDR3 DQ14 / LPDDR3 DQ30	DDR4 A17 / LPDDR4 CKE1 B / DDR3 CAS# / --- / AC17	1A2	AC17	LPDDR4_CKE1_B		
LPDDR4_DQ15_A	DDR DQ15 A	1G2	DDR DQ15 A / DDR4 DQ15 A / LPDDR4 DQ15 A / DDR3 DQ15 / LPDDR3 DQ27	DDR4 BA0 / LPDDR4 A2 B / DDR3 A1 / --- / AC18	1B7	AC18	LPDDR4_A2_B		
LPDDR4_DM1_A	DDR DM1 A	1G1	DDR DM1 A / DDR4 DMU A / LPDDR4 DM1 A / DDR3 DM1 / LPDDR3 DM3	DDR4 BA1 / LPDDR4 A4 B / DDR3 A12 / LPDDR3 A4 / AC19	1A6	AC19	LPDDR4_A4_B		
LPDDR4_DQS1P_A	DDR DQS1P A	N1	DDR DQS1P A / DDR4 DQSU P A / LPDDR4 DQS1P A / DDR3 DQS1P / LPDDR3 DQS3P	DDR4 B00 / LPDDR4 DQ7 CA B / DDR3 WEN / --- / AC20	1A4	AC20	LPDDR4_A4_B		
LPDDR4_DQSIN_A	DDR DQSIN A	N2	DDR DQSIN A / DDR4 DQSU N A / LPDDR4 DQSIN A / DDR3 DQSIN / LPDDR3 DQS3N	DDR4 B01 / LPDDR4 DQ7 CA A / DDR3 BA0 / --- / AC21	1C2	AC21	LPDDR4_CKE0_A		
LPDDR4_DQ0_B	DDR DQ0 B	B12	DDR DQ0 B / DDR4 DQ0 B / LPDDR4 DQ0 B / DDR3 DQ16 / LPDDR3 DQ1	DDR4 B02 / LPDDR4 CKE0 A / DDR3 DQ1 / LPDDR3 CKE / AC22	B4	AC22	LPDDR4_CKE0_A		
LPDDR4_DQ1_B	DDR DQ1 B	B10	DDR DQ1 B / DDR4 DQ1 B / LPDDR4 DQ1 B / DDR3 DQ17 / LPDDR3 DQ5	DDR4 CLKP / LPDDR4 CLKP A / DDR3 CLKP / LPDDR3 CLKP / AC23	A5	AC23	LPDDR4_CLKP_A		
LPDDR4_DQ2_B	DDR DQ2 B	1A8	DDR DQ2 B / DDR4 DQ2 B / LPDDR4 DQ2 B / DDR3 DQ17 / LPDDR3 DQ5	DDR4 CLKN / LPDDR4 CLKN A / DDR3 CLKN / LPDDR3 CLKN / AC24	B5	AC24	LPDDR4_CLKN_A		
LPDDR4_DQ3_B	DDR DQ3 B	1A7	DDR DQ3 B / DDR4 DQ3 B / LPDDR4 DQ3 B / DDR3 DQ18 / LPDDR3 DQ6	DDR4 CS0n / LPDDR4 CS0n A / DDR3 DQ71 / LPDDR3 DQ7 / AC25	B3	AC25	LPDDR4_CS0n_A		
LPDDR4_DQ4_B	DDR DQ4 B	B13	DDR DQ4 B / DDR4 DQ4 B / LPDDR4 DQ4 B / DDR3 DQ19 / LPDDR3 DQ6	DDR4 CS1n / LPDDR4 CS1n A / DDR3 DQ71 / LPDDR3 DQ7 / AC26	A3	AC26	LPDDR4_CS1n_A		
LPDDR4_DQ5_B	DDR DQ5 B	1A10	DDR DQ5 B / DDR4 DQ5 B / LPDDR4 DQ5 B / DDR3 DQ20 / LPDDR3 DQ7	DDR4 CS2n / LPDDR4 CS1n B / DDR3 DQ70 / LPDDR3 CS11 / AC27	1A5	AC27	LPDDR4_CS1n_B		
LPDDR4_DQ6_B	DDR DQ6 B	1B9	DDR DQ6 B / DDR4 DQ6 B / LPDDR4 DQ6 B / DDR3 DQ21 / LPDDR3 DQ8	DDR4 DQ7 / LPDDR4 CS0n B / DDR3 DQ70 / LPDDR3 CS0n / AC28	1B5	AC28	LPDDR4_CS0n_B		
LPDDR4_DQ7_B	DDR DQ7 B	1A9	DDR DQ7 B / DDR4 DQ7 B / LPDDR4 DQ7 B / DDR3 DQ22 / LPDDR3 DQ7	DDR4 RESETn / LPDDR4 RESETn / DDR3 RESETn / --- / AC29	1C7	AC29	LPDDR4_RESETn		
LPDDR4_DM0_B	DDR DM0 B	1B8	DDR DM0 B / DDR4 DMU B / LPDDR4 DM0 B / DDR3 DM2 / LPDDR3 DM0	Note: Sequences can not be swap					
LPDDR4_DQS0P_B	DDR DQS0P B	A13	DDR DQS0P B / DDR4 DQSU P B / LPDDR4 DQS0P B / DDR3 DQS2P / LPDDR3 DQS0P						
LPDDR4_DQSIN_B	DDR DQSIN B	A12	DDR DQSIN B / DDR4 DQSU N B / LPDDR4 DQSIN B / DDR3 DQS2N / LPDDR3 DQS0N						
LPDDR4_DQ8_B	DDR DQ8 B	B19	DDR DQ8 B / DDR4 DQ8 B / LPDDR4 DQ8 B / DDR3 DQ24 / LPDDR3 DQ18						
LPDDR4_DQ9_B	DDR DQ9 B	A19	DDR DQ9 B / DDR4 DQ9 B / LPDDR4 DQ9 B / DDR3 DQ25 / LPDDR3 DQ19						
LPDDR4_DQ10_B	DDR DQ10 B	A20	DDR DQ10 B / DDR4 DQ10 B / LPDDR4 DQ10 B / DDR3 DQ26 / LPDDR3 DQ22						
LPDDR4_DQ11_B	DDR DQ11 B	B20	DDR DQ11 B / DDR4 DQ11 B / LPDDR4 DQ11 B / DDR3 DQ26 / LPDDR3 DQ22						
LPDDR4_DQ12_B	DDR DQ12 B	B15	DDR DQ12 B / DDR4 DQ12 B / LPDDR4 DQ12 B / DDR3 DQ27 / LPDDR3 DQ23						
LPDDR4_DQ13_B	DDR DQ13 B	A15	DDR DQ13 B / DDR4 DQ13 B / LPDDR4 DQ13 B / DDR3 DQ28 / LPDDR3 DQ16						
LPDDR4_DQ14_B	DDR DQ14 B	1C10	DDR DQ14 B / DDR4 DQ14 B / LPDDR4 DQ14 B / DDR3 DQ29 / LPDDR3 DQ17						
LPDDR4_DQ15_B	DDR DQ15 B	B16	DDR DQ15 B / DDR4 DQ15 B / LPDDR4 DQ15 B / DDR3 DQ30 / LPDDR3 DQ20						
LPDDR4_DM1_B	DDR DM1 B	1A11	DDR DM1 B / DDR4 DML B / LPDDR4 DM1 B / DDR3 DM3 / LPDDR3 DM2						
LPDDR4_DQS1P_B	DDR DQS1P B	A17	DDR DQS1P B / DDR4 DQSL P B / LPDDR4 DQS1P B / DDR3 DQS3P / LPDDR3 DQS2P						
LPDDR4_DQSIN_B	DDR DQSIN B	B17	DDR DQSIN B / DDR4 DQSL N B / LPDDR4 DQSIN B / DDR3 DQS3N / LPDDR3 DQS2N						

Note:
Except DDR3, other DQ sequences
can not be swap

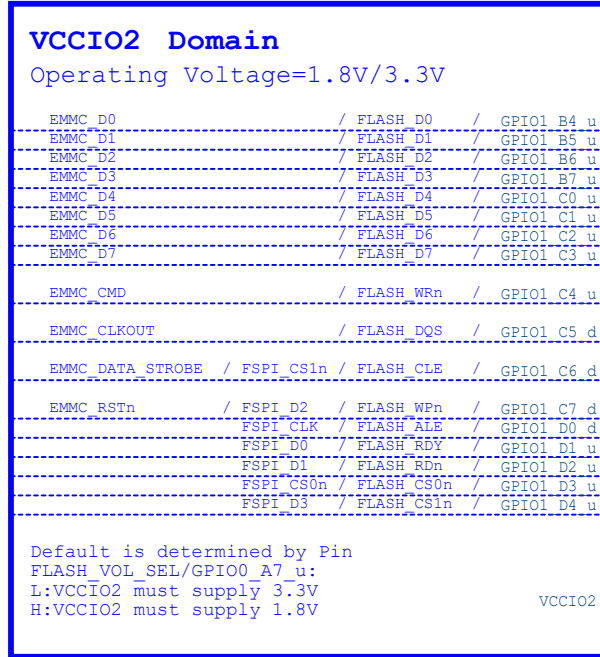


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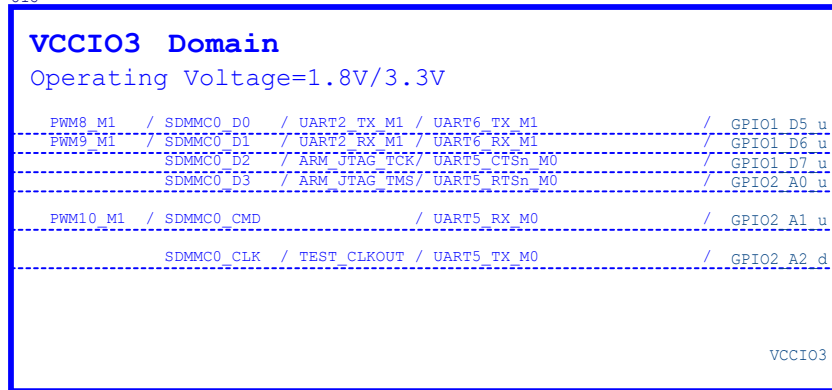
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U1I




RK3566_T

U1J

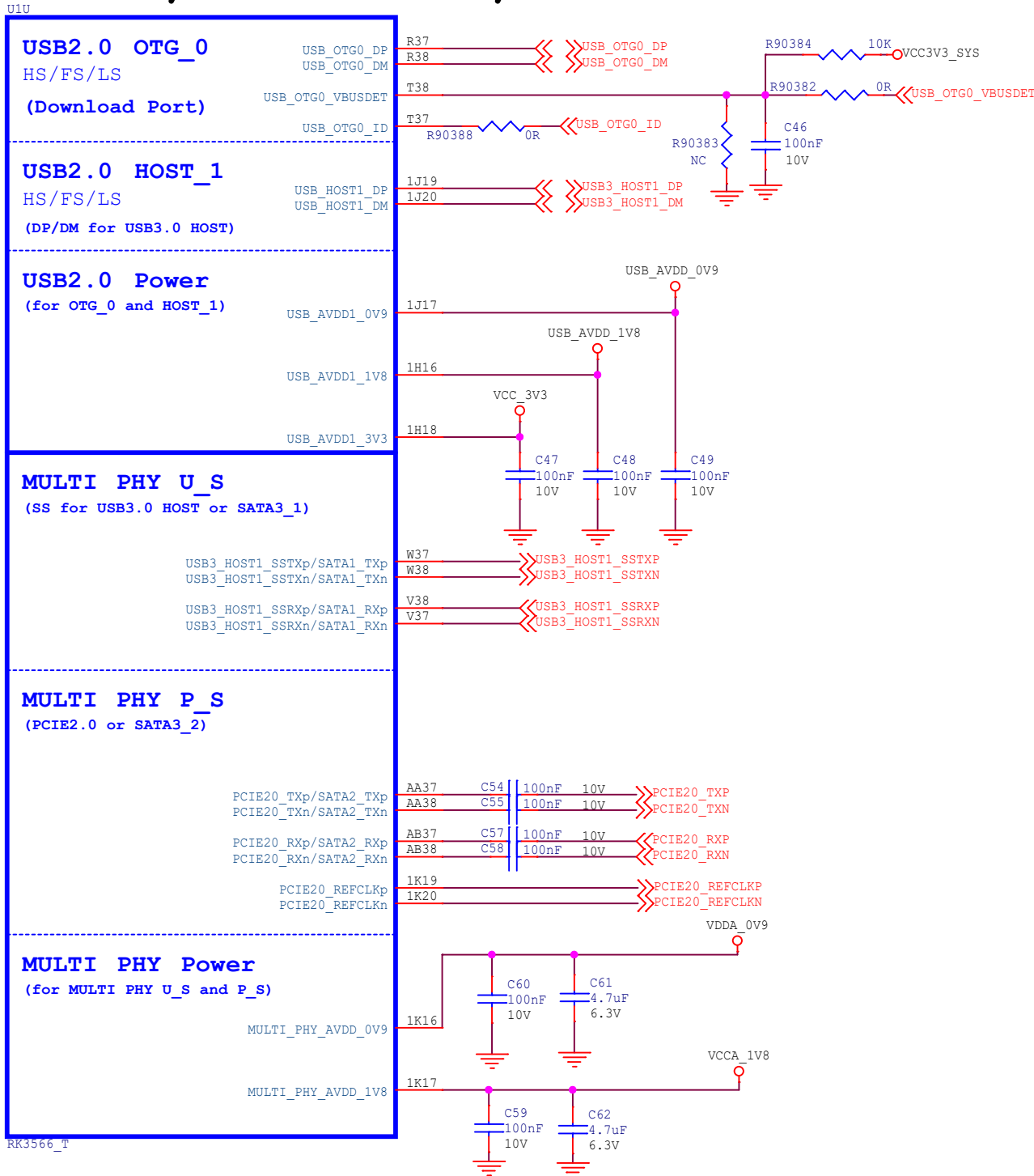


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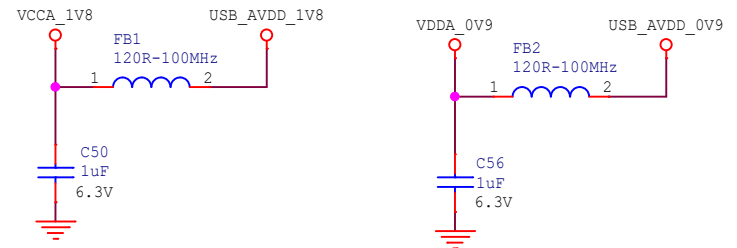
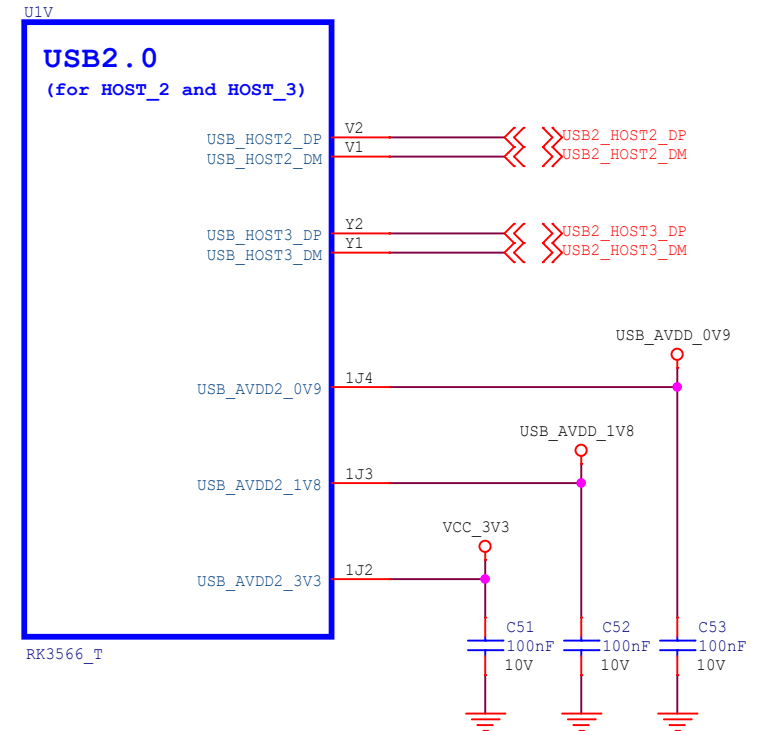


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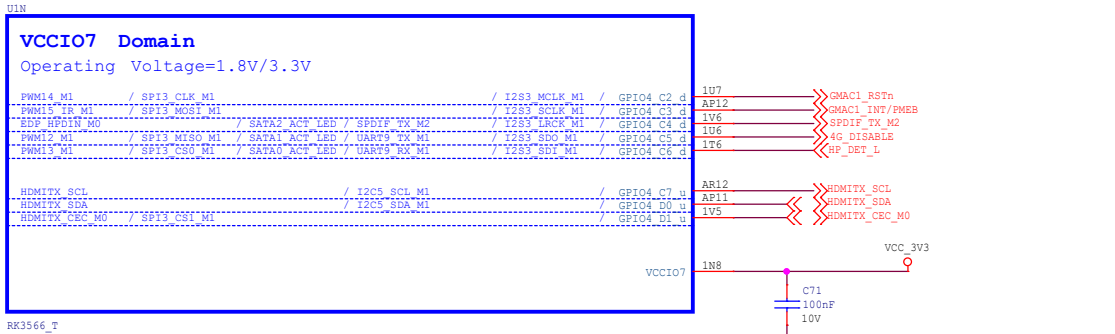
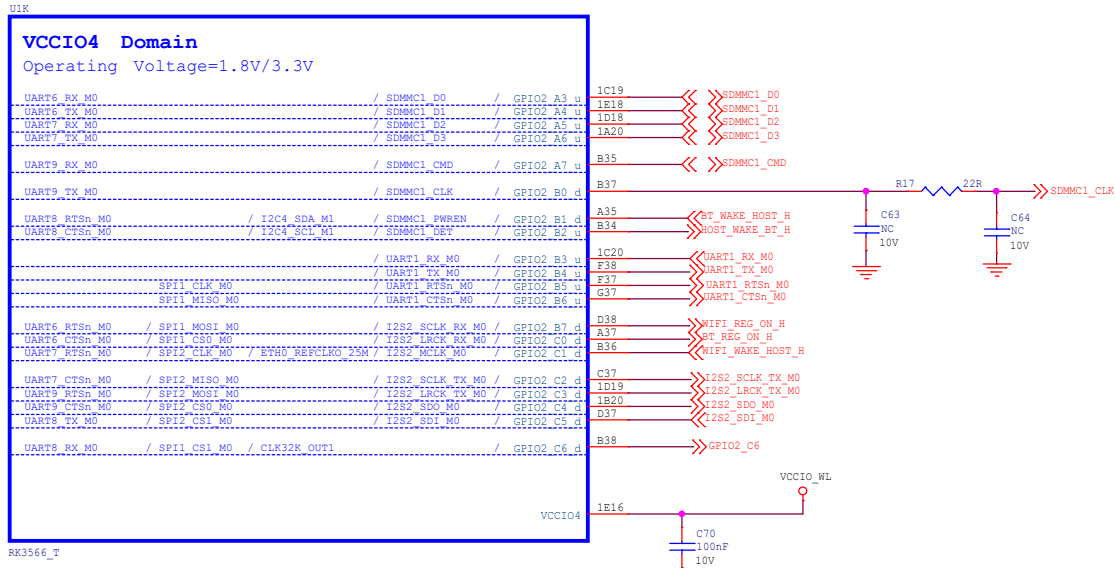
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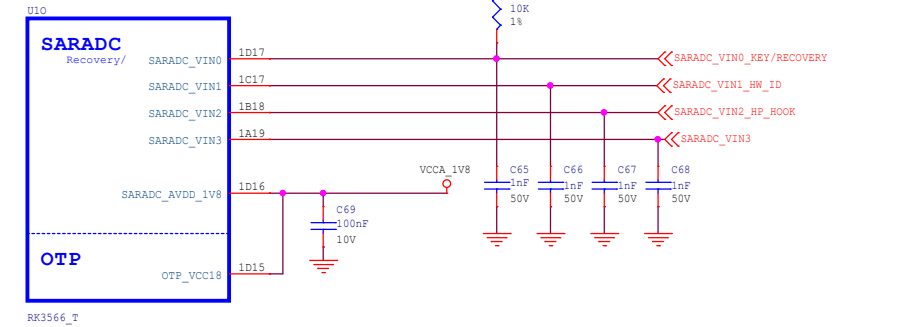
USB2.0 HOST



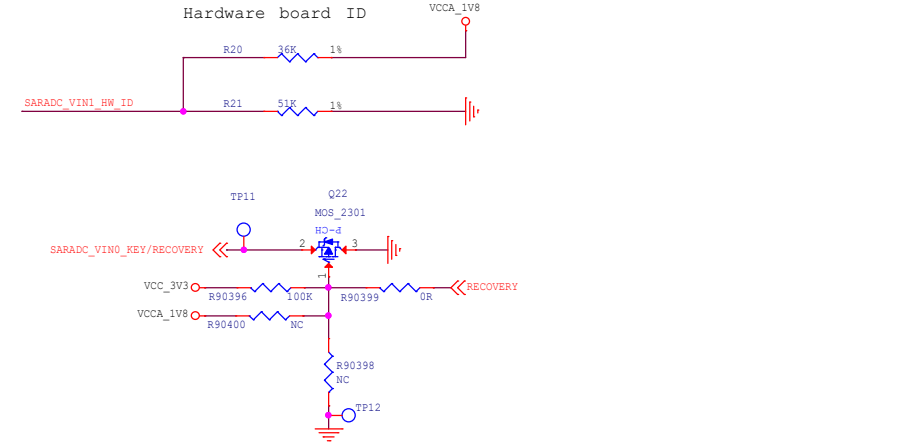
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SARADC/OTP



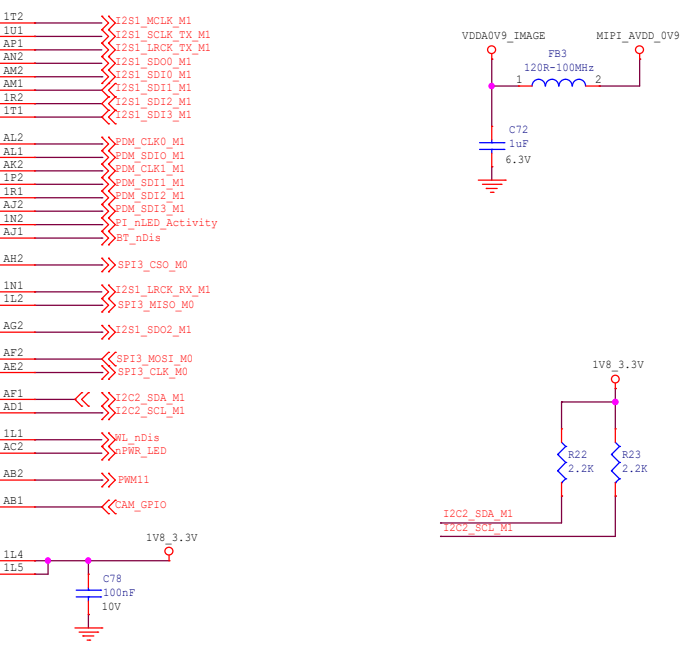
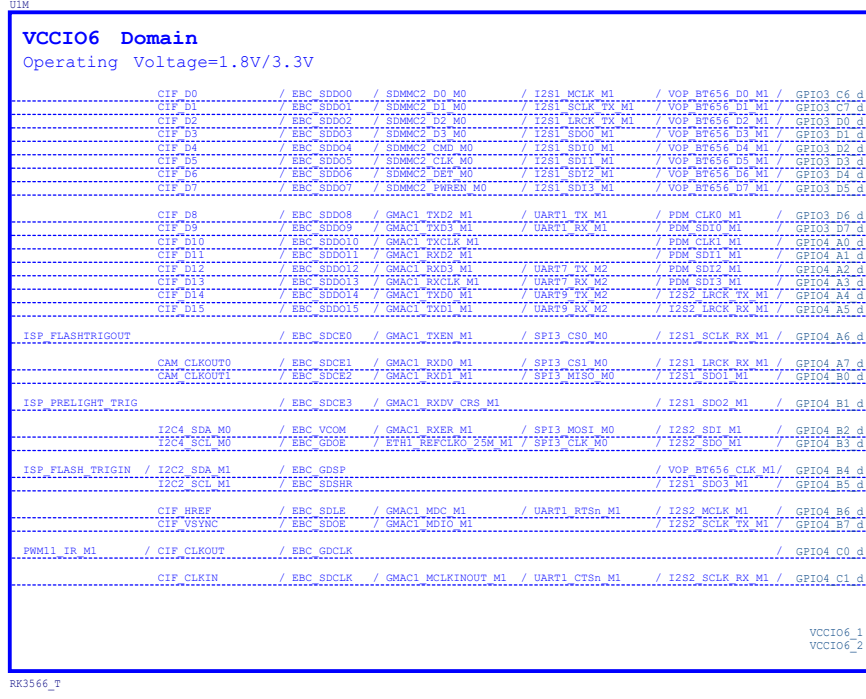
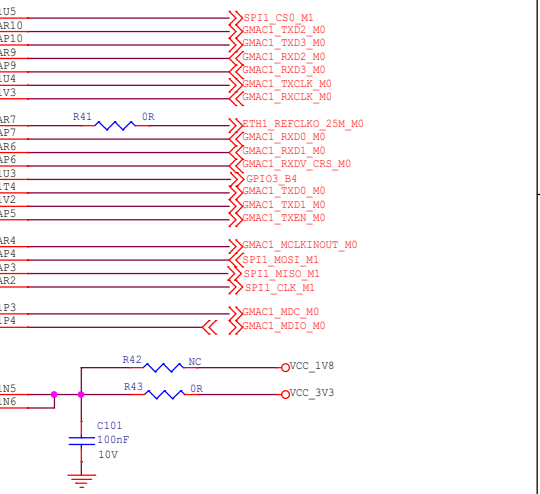
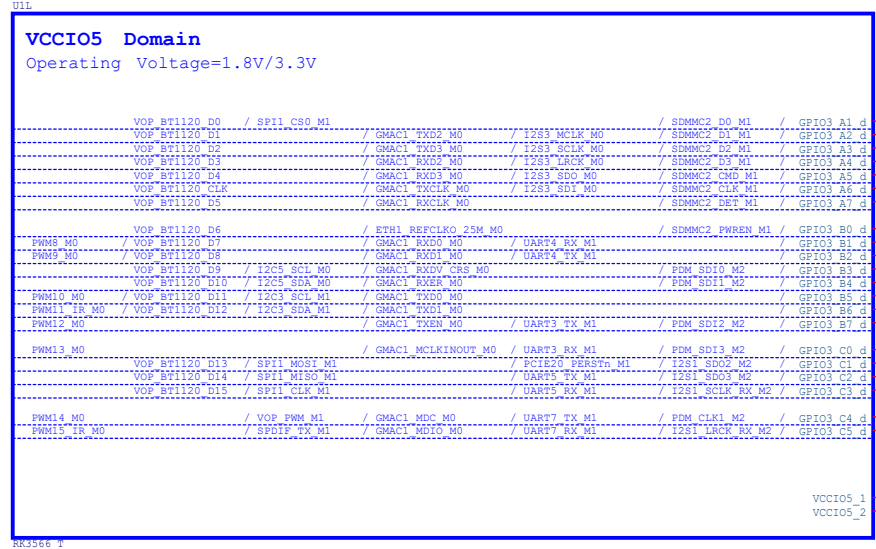
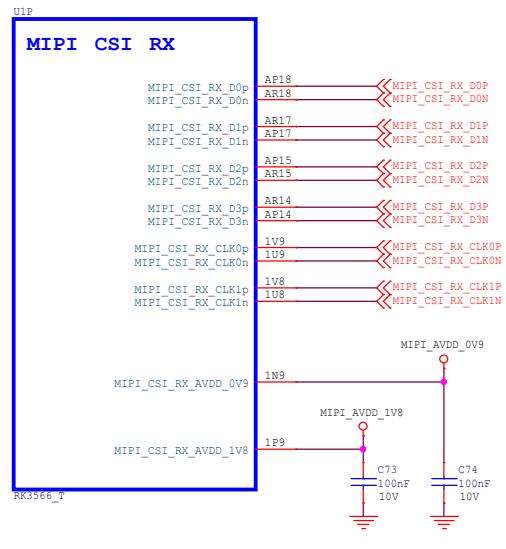
SARADC_VIN1_HW_ID	Rup	Rdown	ADC	
Version 1	10K	DNP	1023	1.8V
Version 2	20K	100K	852	1.5V
Version 3	18K	36K	681	1.2V
Version 4	51K	51K	512	0.9V
Version 5	36K	18K	340	0.6V
Version 6	100K	20K	170	0.3V
Version 7	DNP	10K	0	0V



radxa

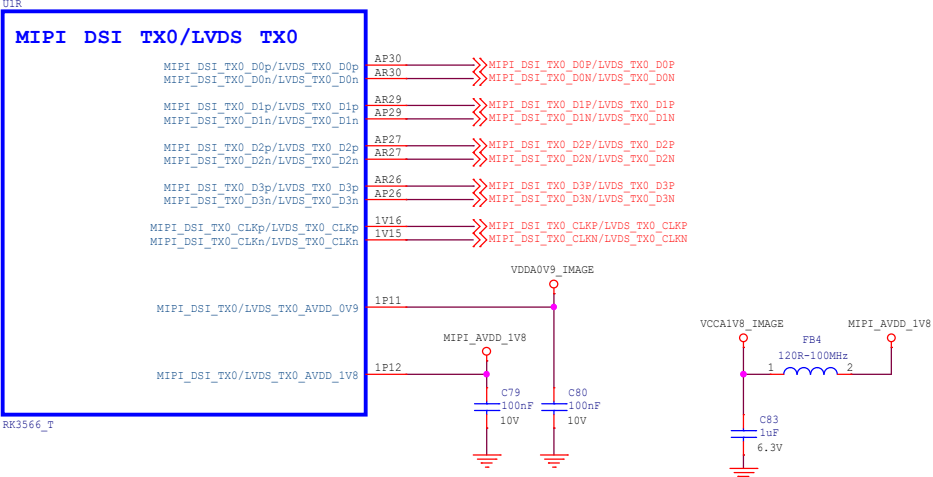
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MIPI_CSI_RX

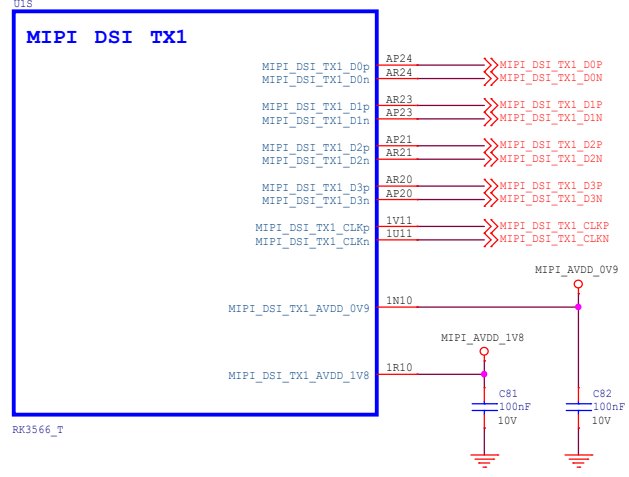


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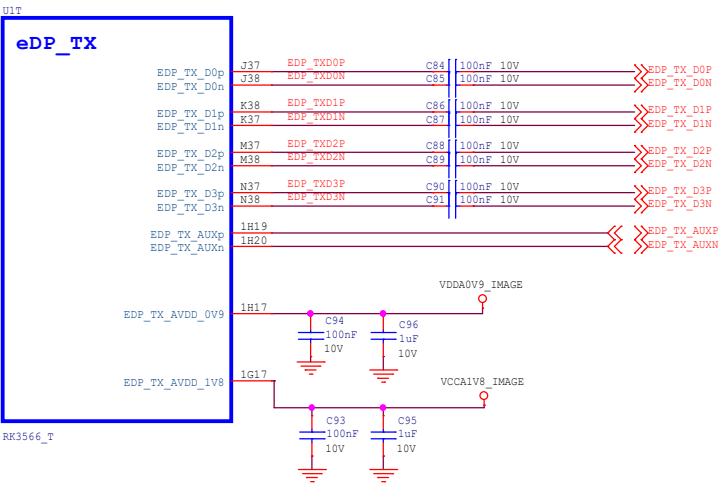
MIPI_DSI_TX0/LVDS_TX0



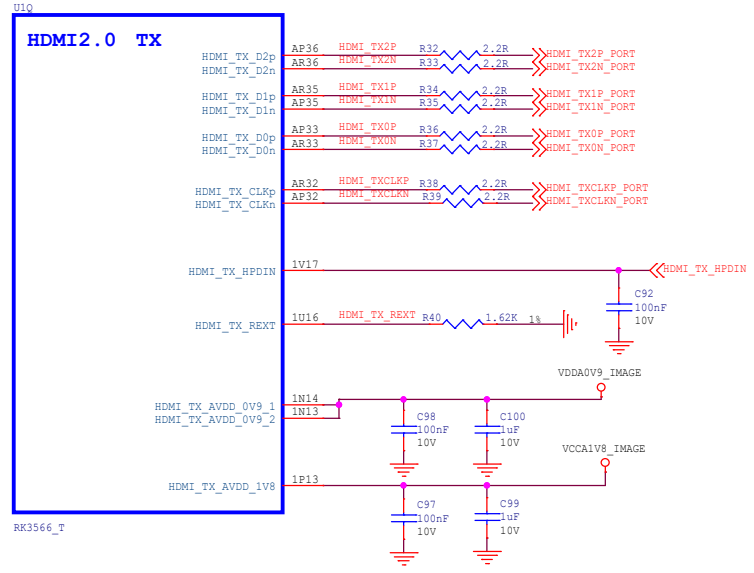
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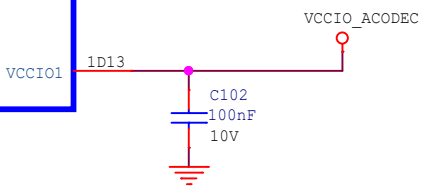
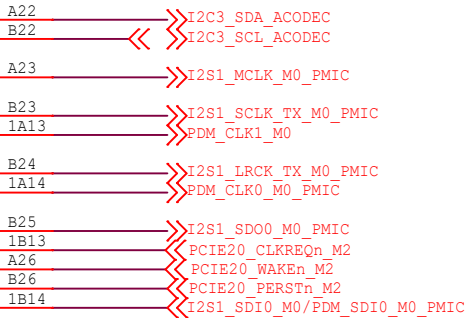
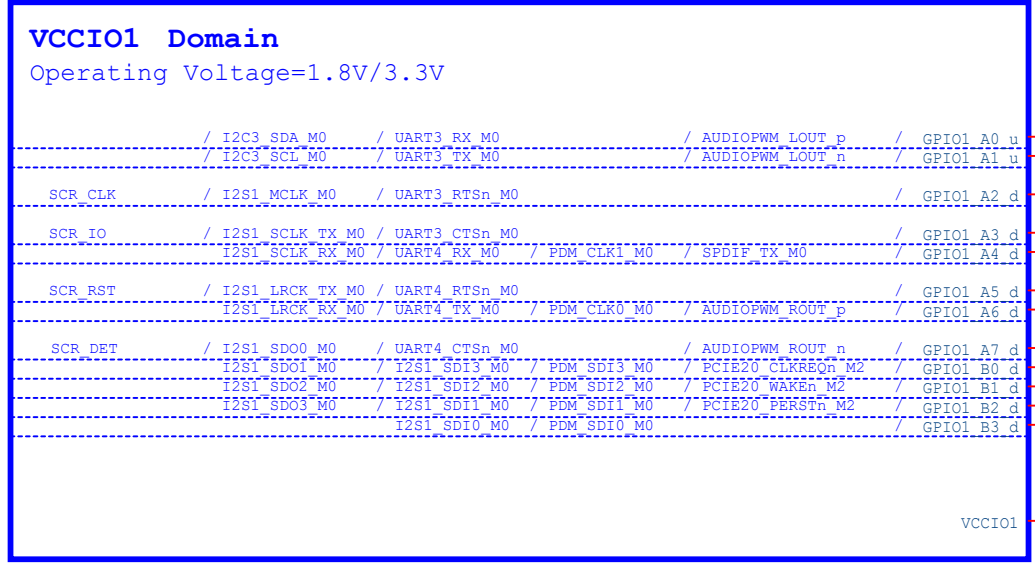
eDP TX



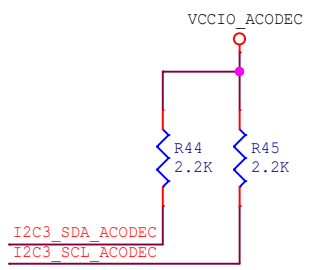
HDMI2.0 TX



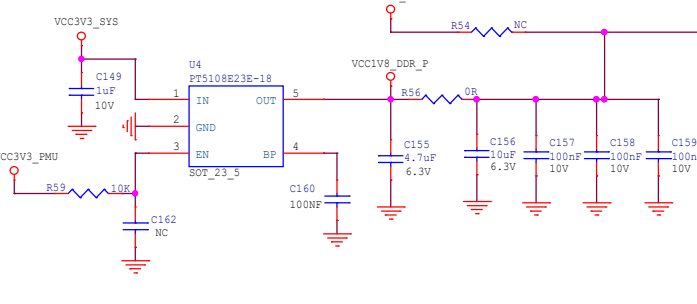
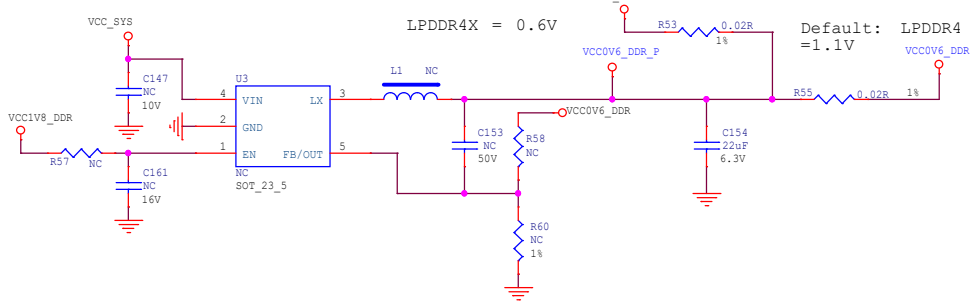
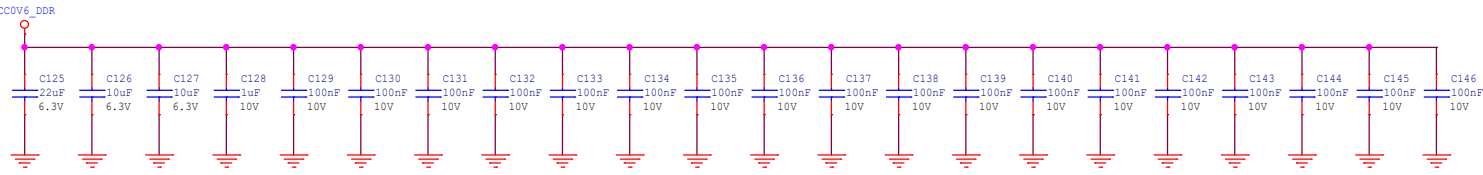
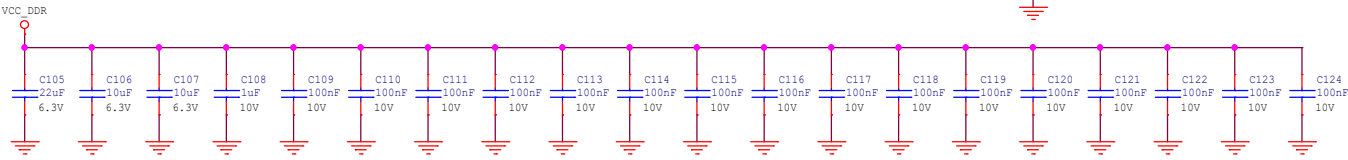
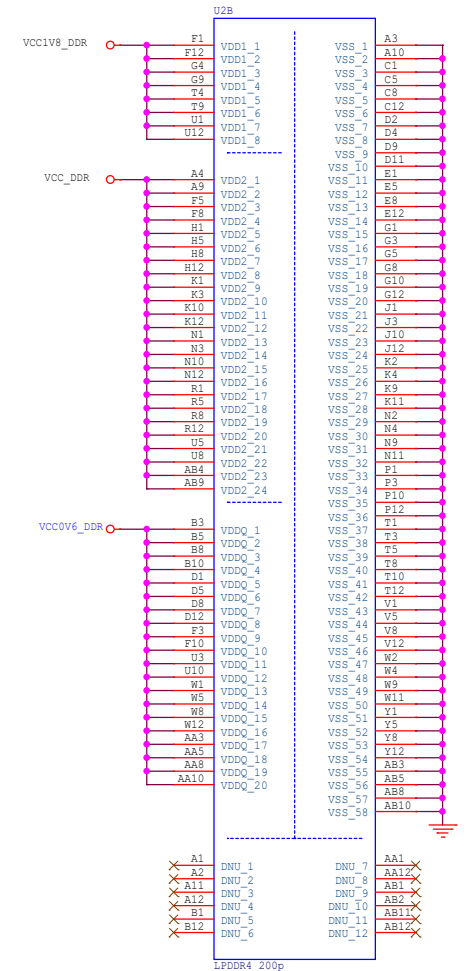
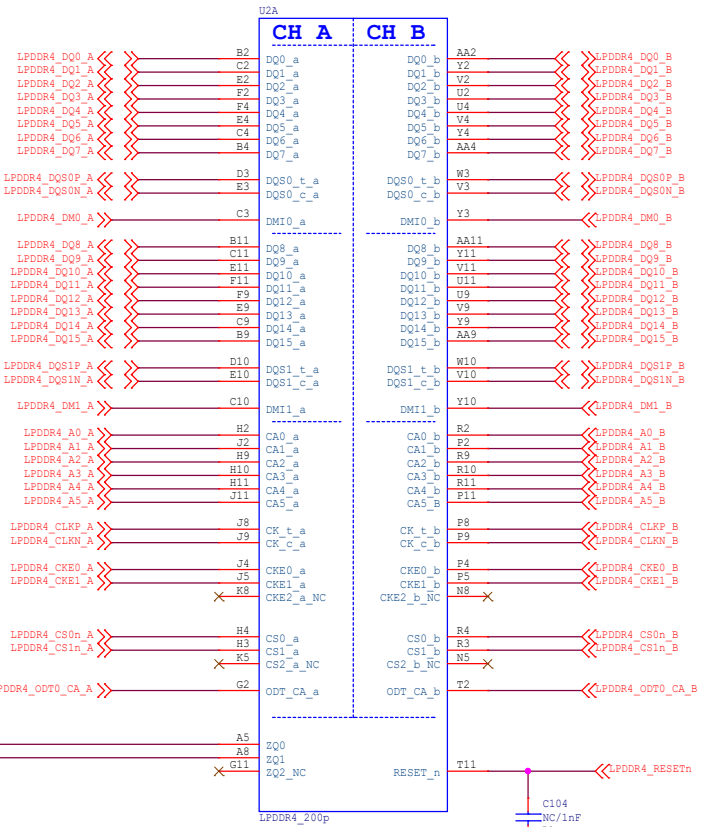
U1H



RK3566_T

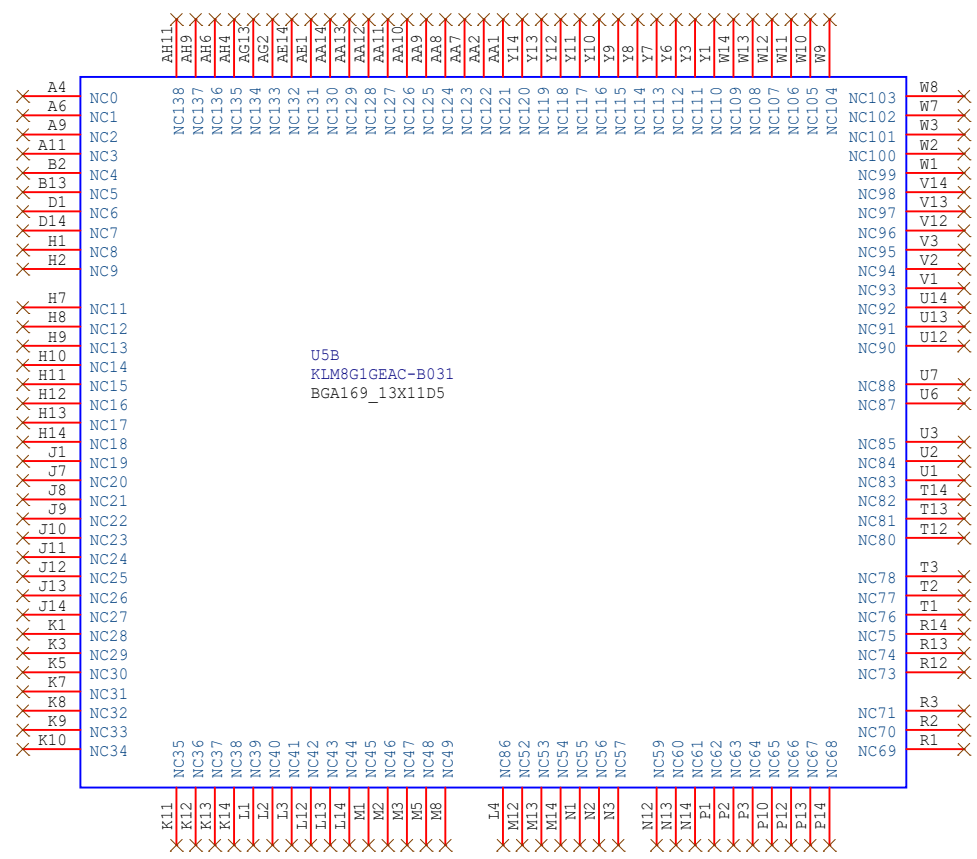
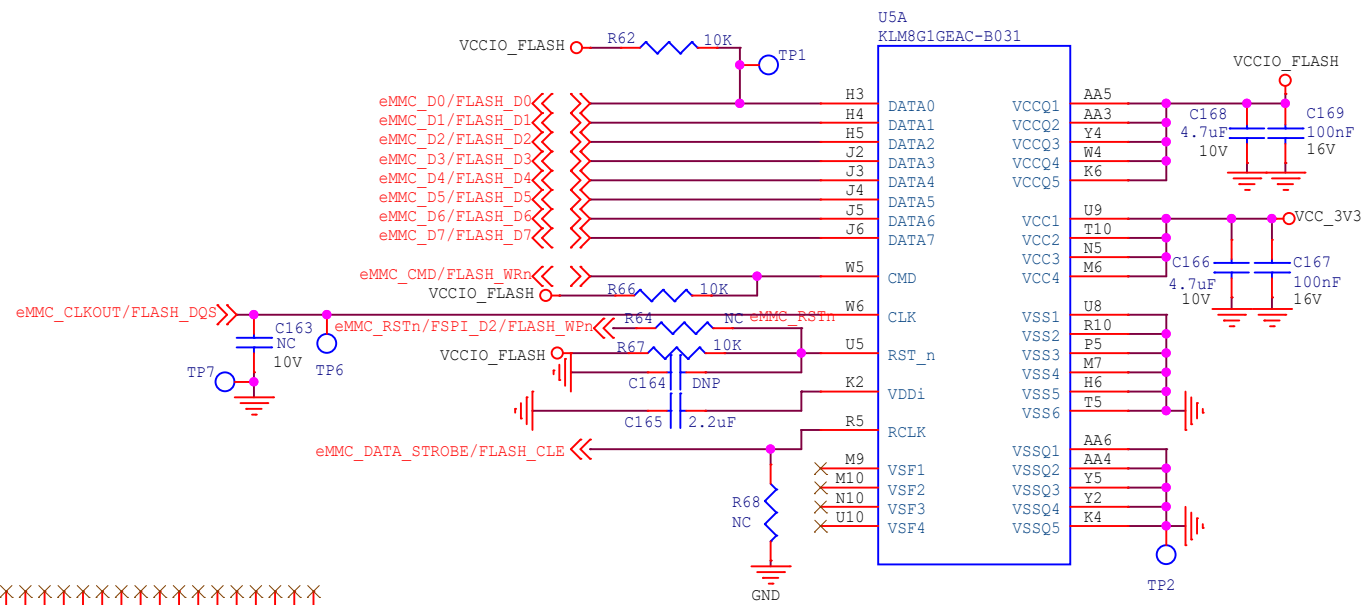


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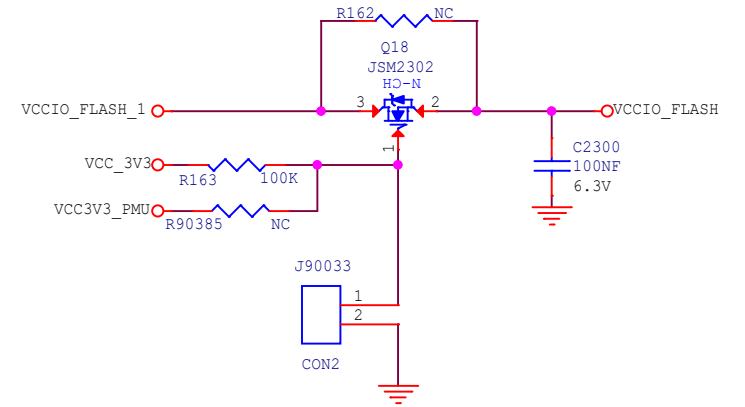
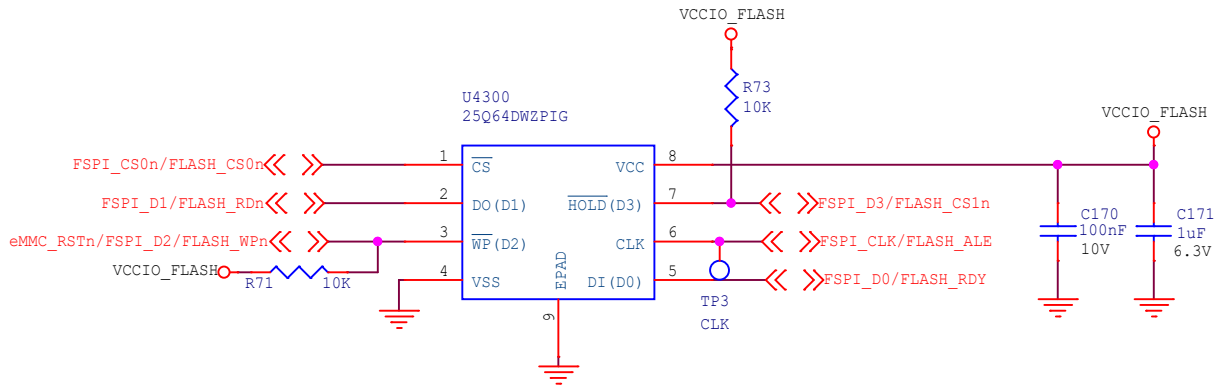
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eMMC FLASH

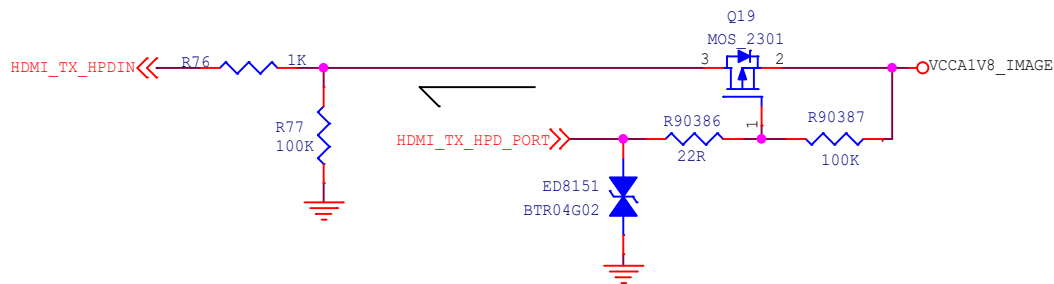
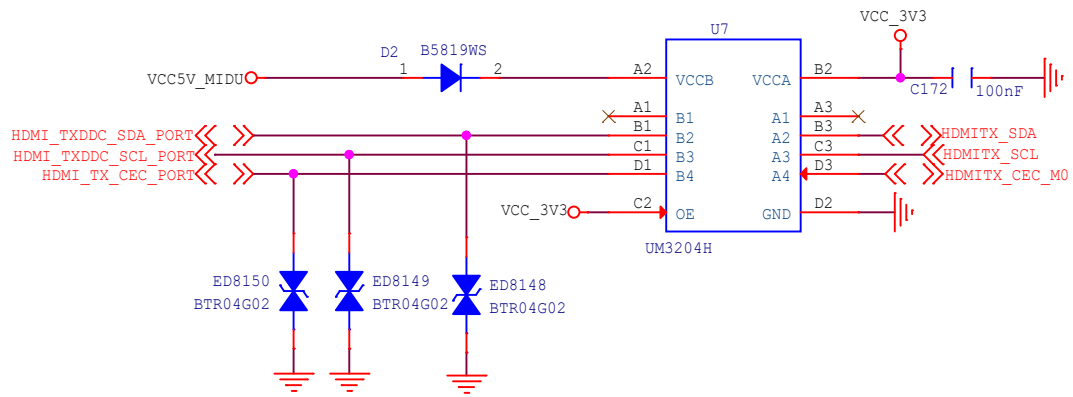


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Size	Title: CM3 SODIMM	REV
A4	Page Name: Memory_eMMC/SPI	1.51
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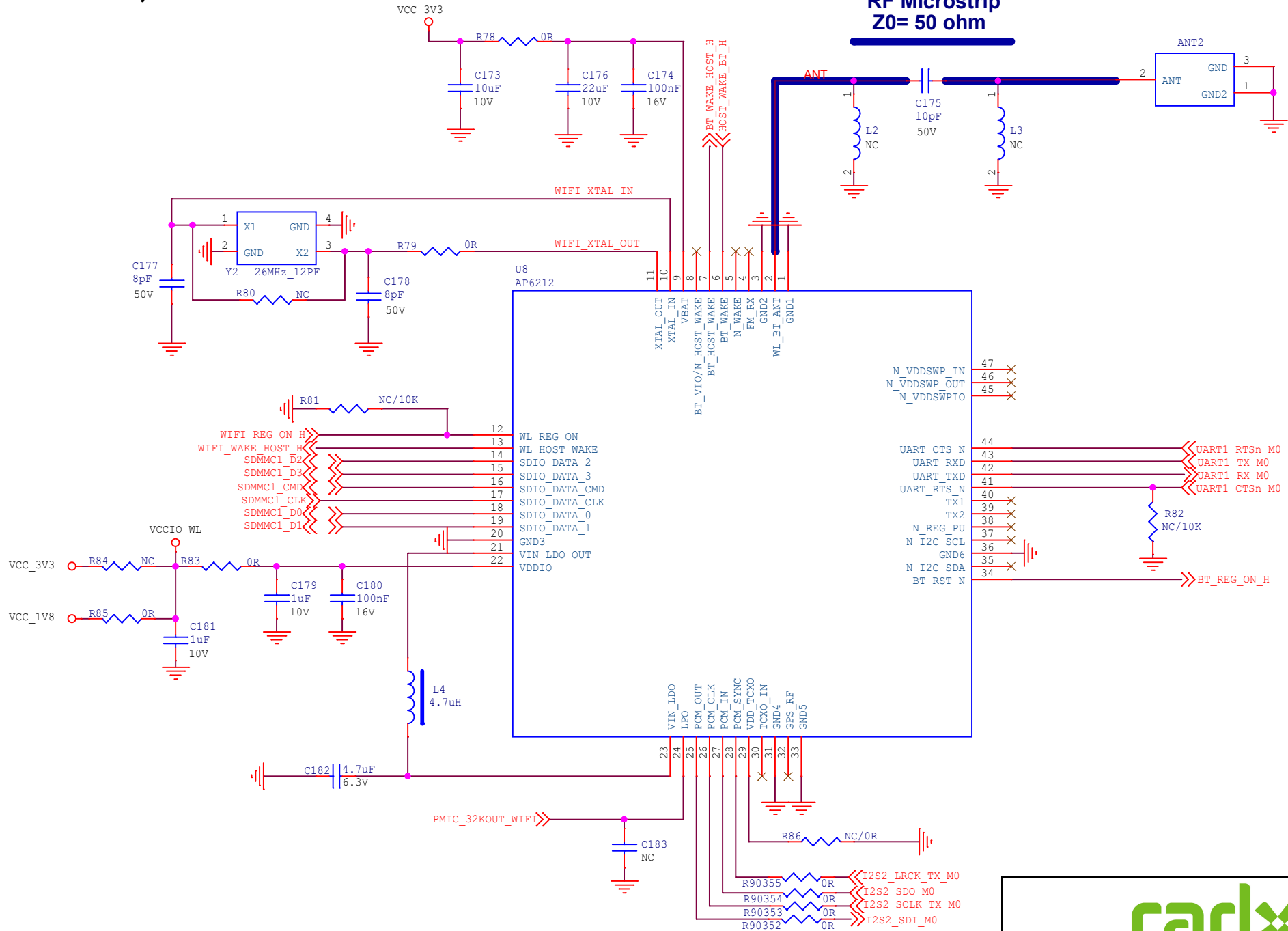



HDMI



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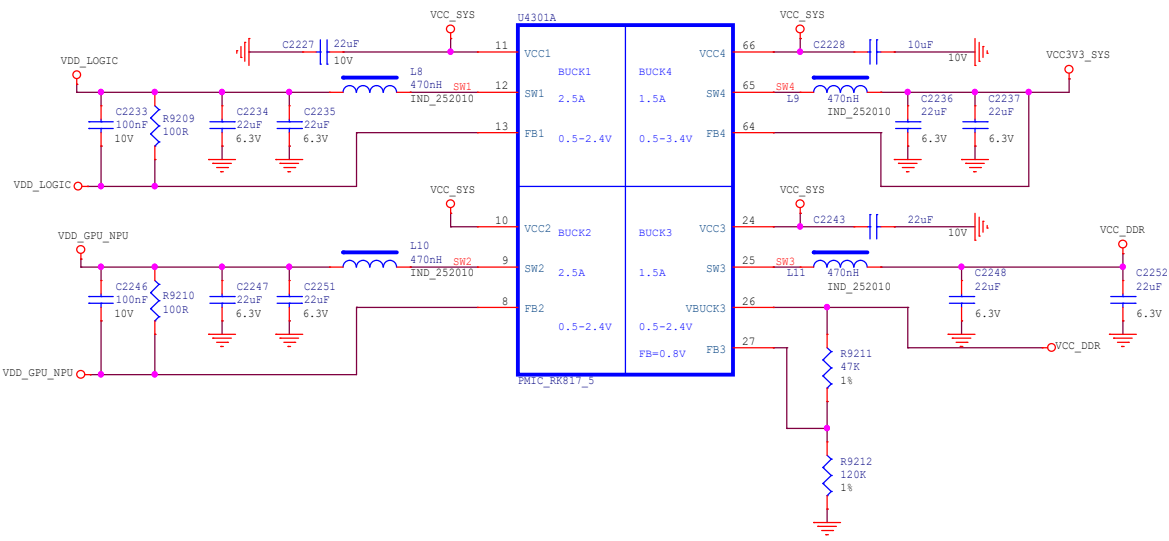
SDIO WIFI/BT



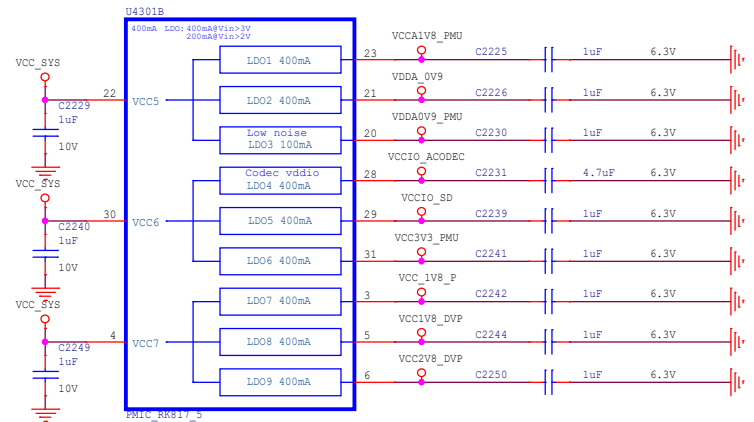


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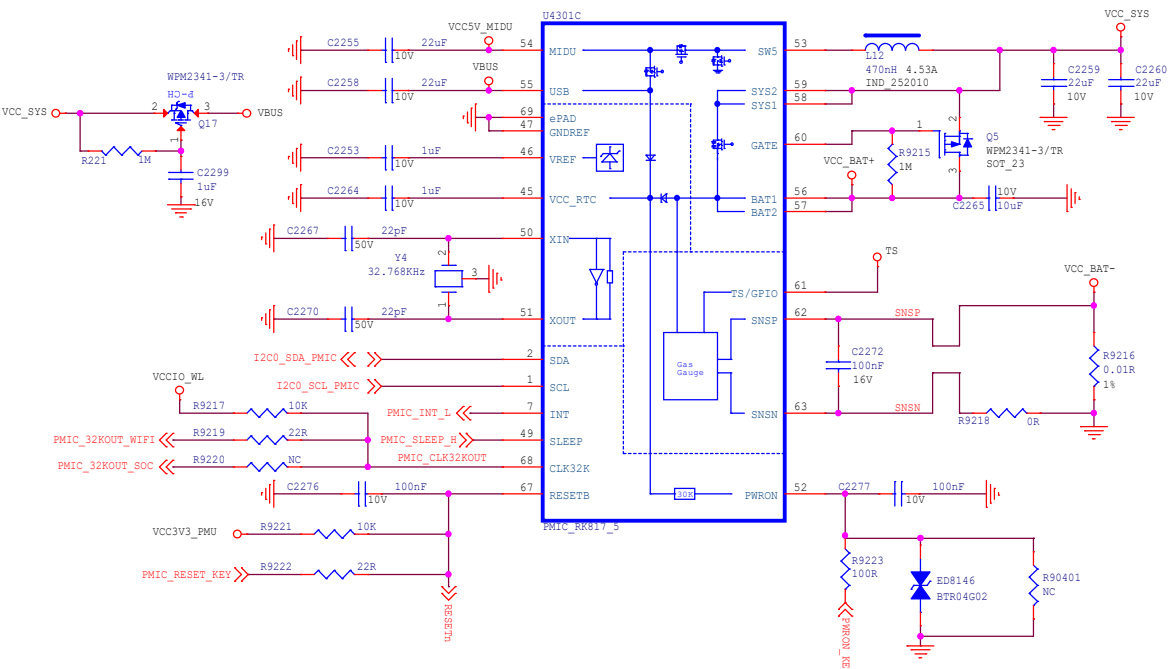
PMIC RK817 DCDC



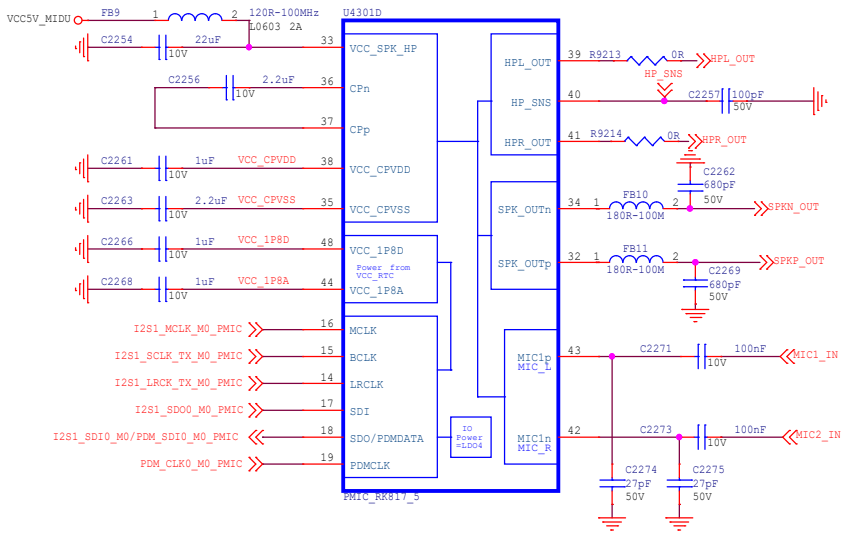
PMIC RK817 LDO




PMIC RK817 Management

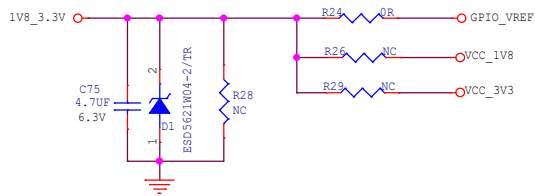
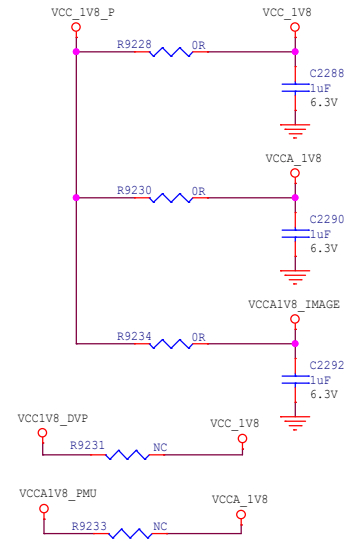
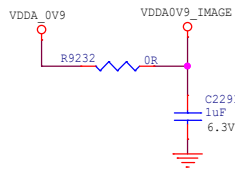
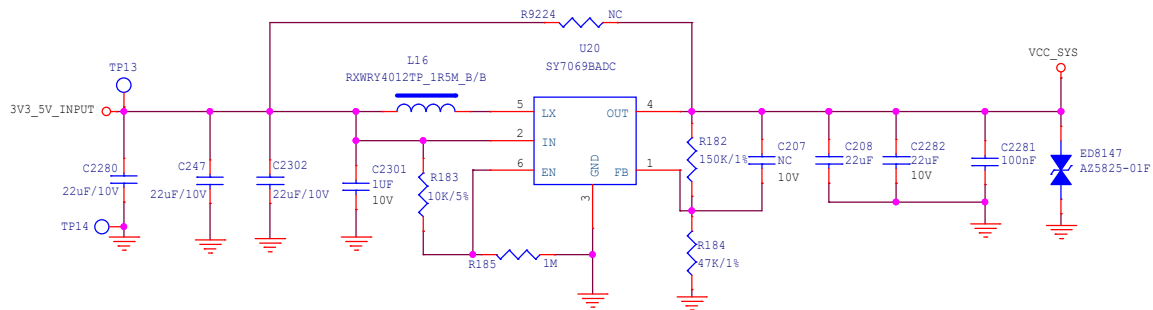


PMIC RK817 CODEC

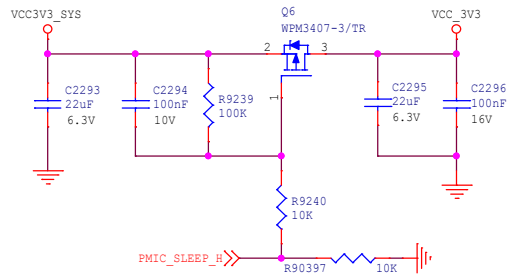
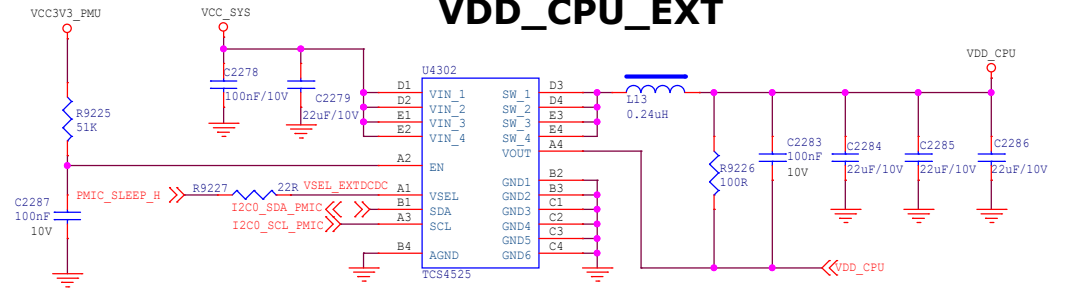




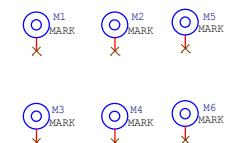
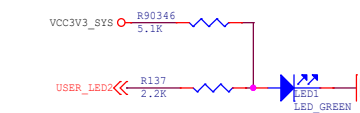
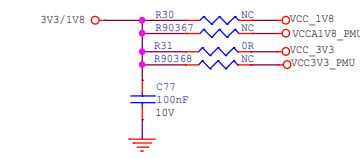
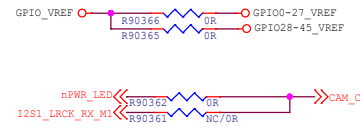
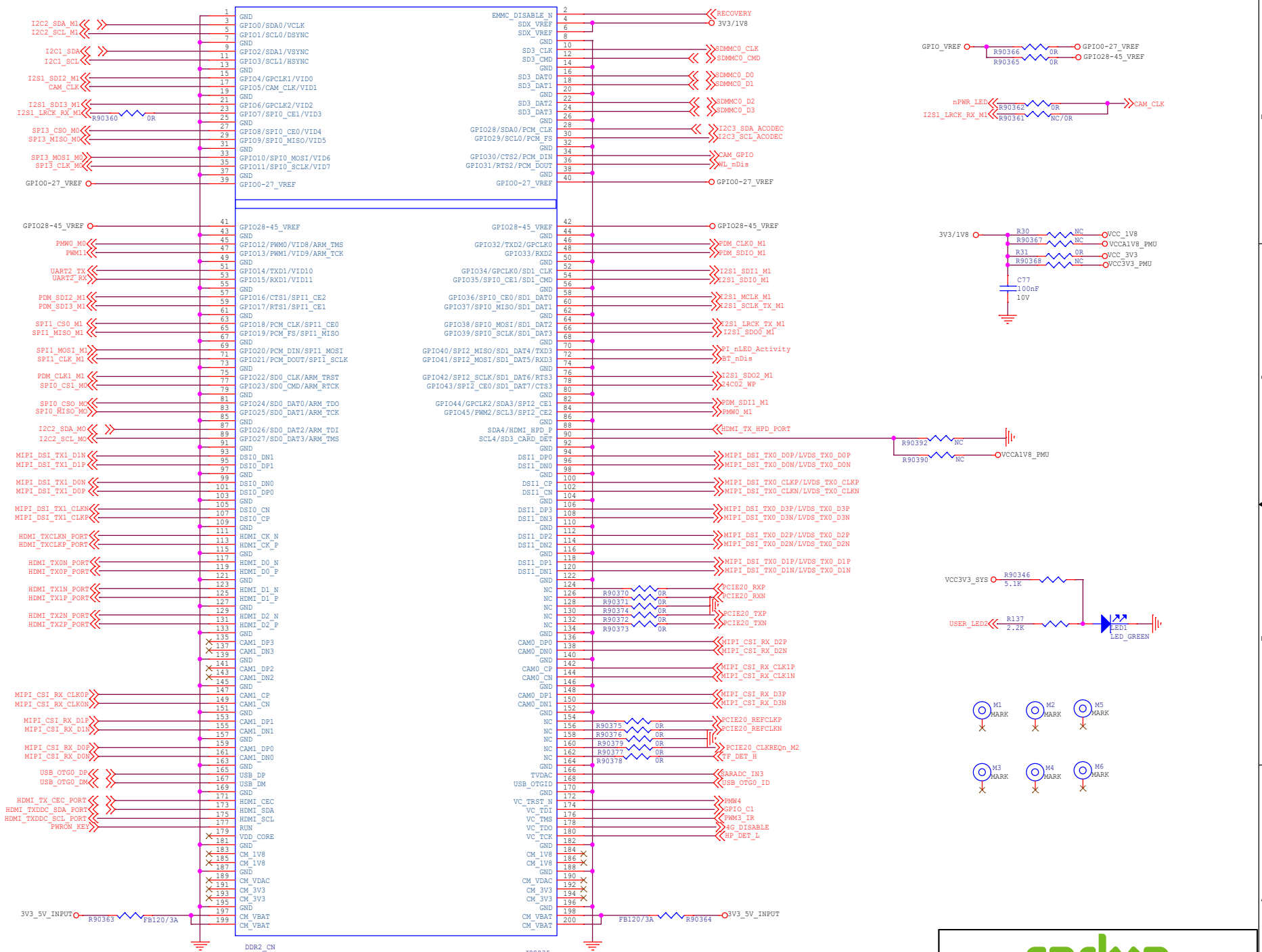
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VCC_3V3 (Power OFF under SLEEP)

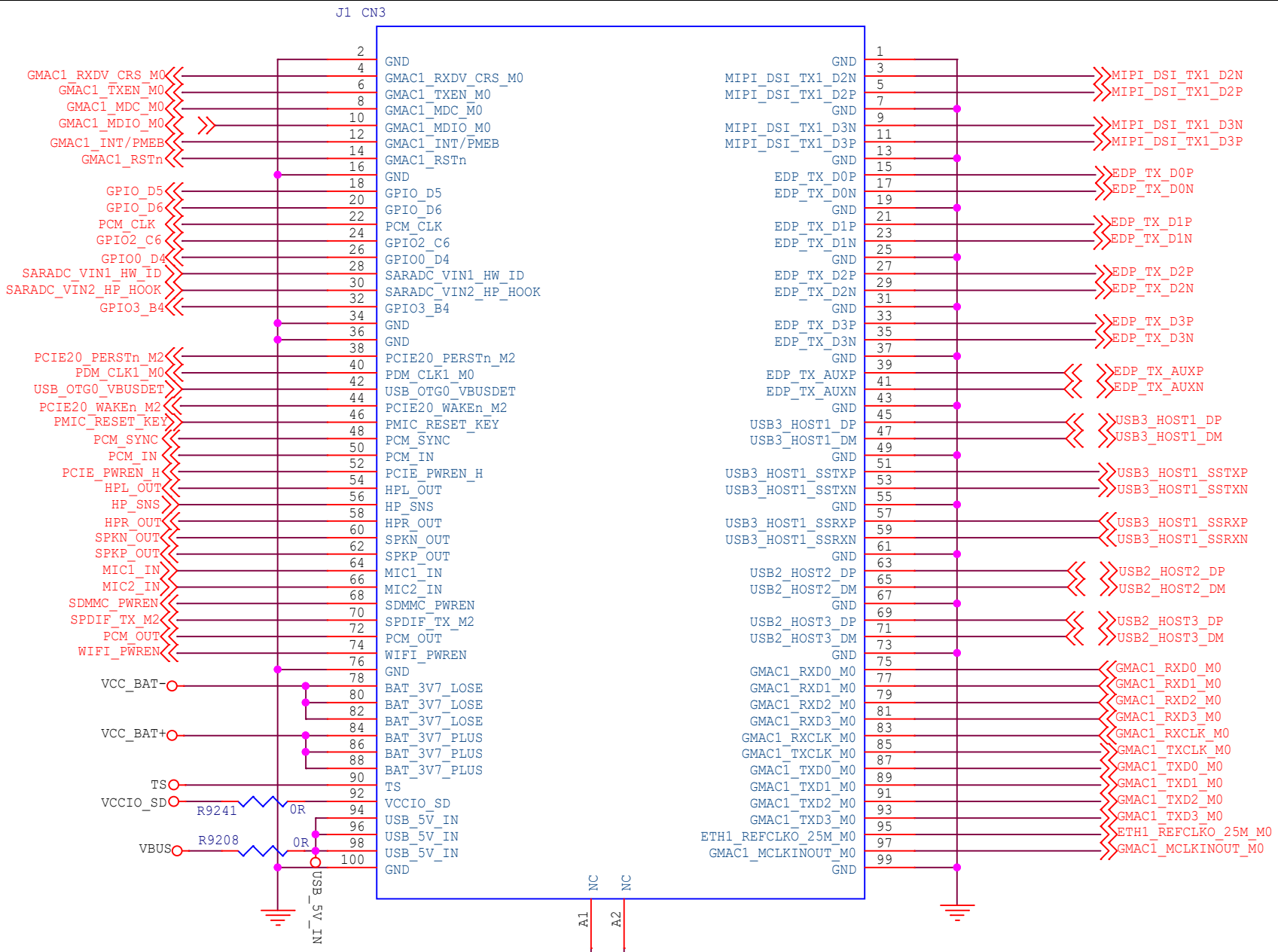


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A	Page Name: IO_Connector	1.51
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