



Radxa ROCK CM4

Schematic

V1.20

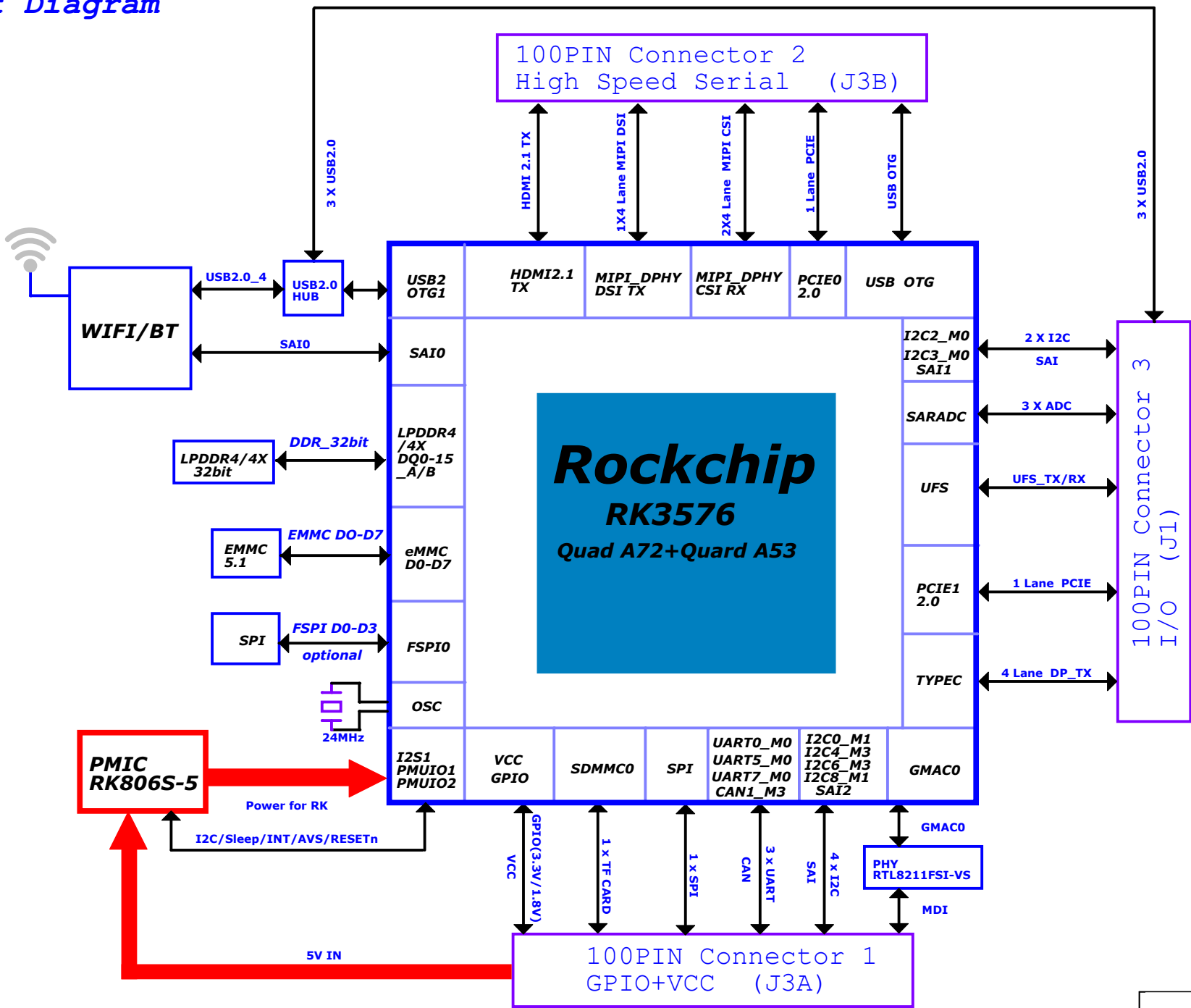
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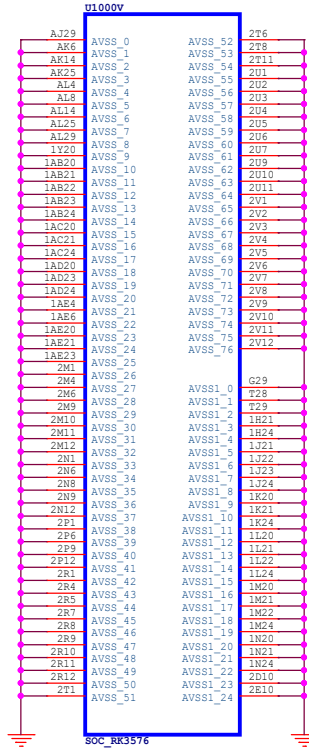
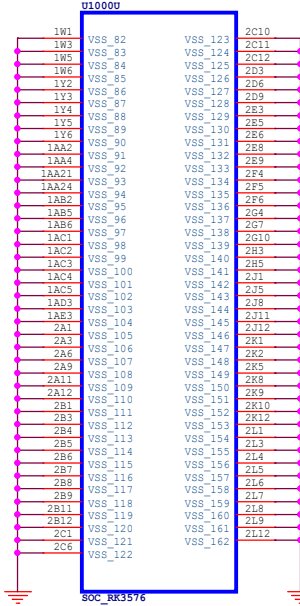
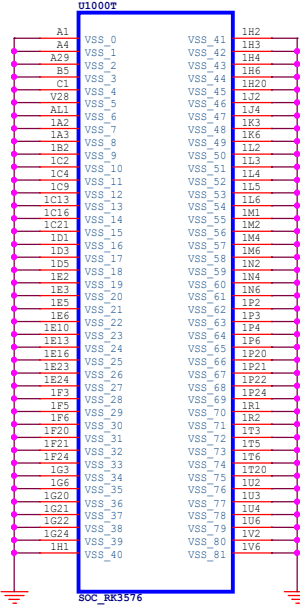
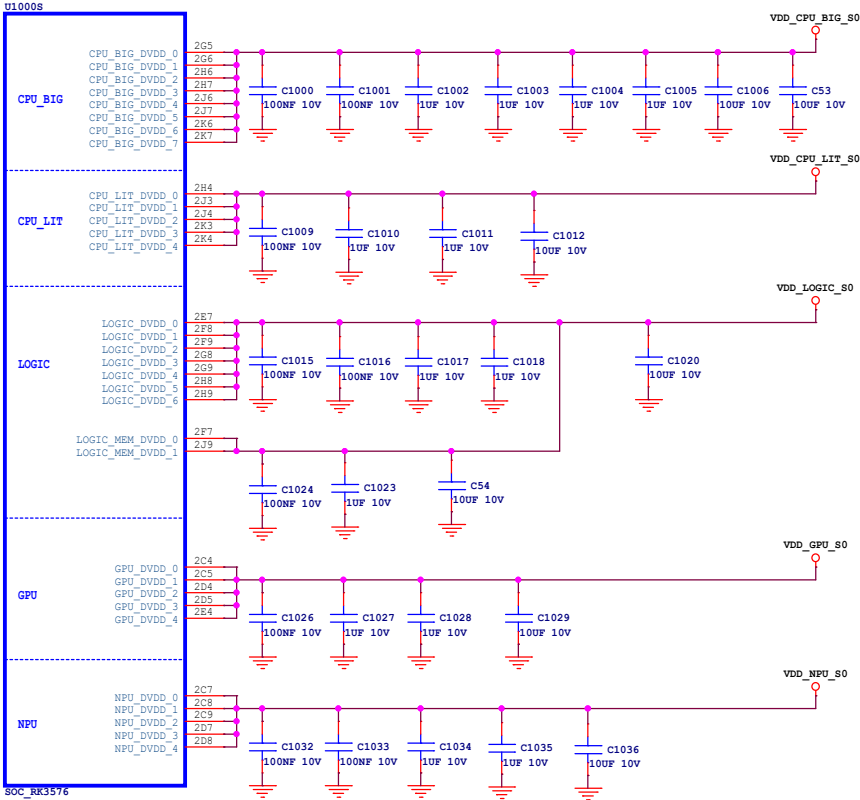
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A4	Page Name: Index and Notes	V1.20
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Block Diagram

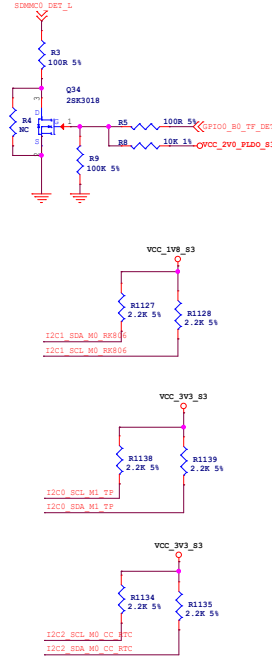


RK3576_S (Power)

RK3576_T/U/V (GND)



A

[illegible]

Item	Rup	Rdown	ADC Value	Boot Mode
Config1	NC	10K	0	USB (Master mode)
Config2	10K	1.13K	416	FFFD0->USB
Config3	10K	2.49K	816	FFFD1_M0->EMMC->USB
Config4	10K	4.3K	1231	FFFD1_M1->EMMC->USB
Config5	10K	6.8K	1658	FFFD0->UFS->USB
Config6	10K	10K	2048	FFFD0_M0->UFS->USB
Config7	10K	14.7K	2437	UFS->USB
Config8	10K	23.2K	2862	UFS->SDMMC0->USB
Config9	10K	40.2K	3279	RPU
Config10	10K	88.7K	3680	SDMMC0->SDMMC0->USB
Config11	10K	NC	4095	EMMC->USB

MASKROM Key

YCCA1V8 PLD02_80

R102
10K 1%

SARAD VIND B00T6

R103
100K 1%

22K 5%

MASKROM

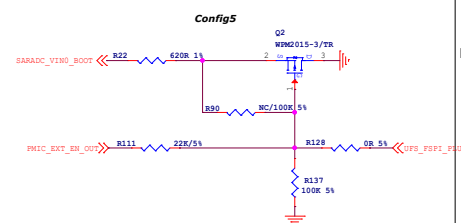
SW1

TD 1183

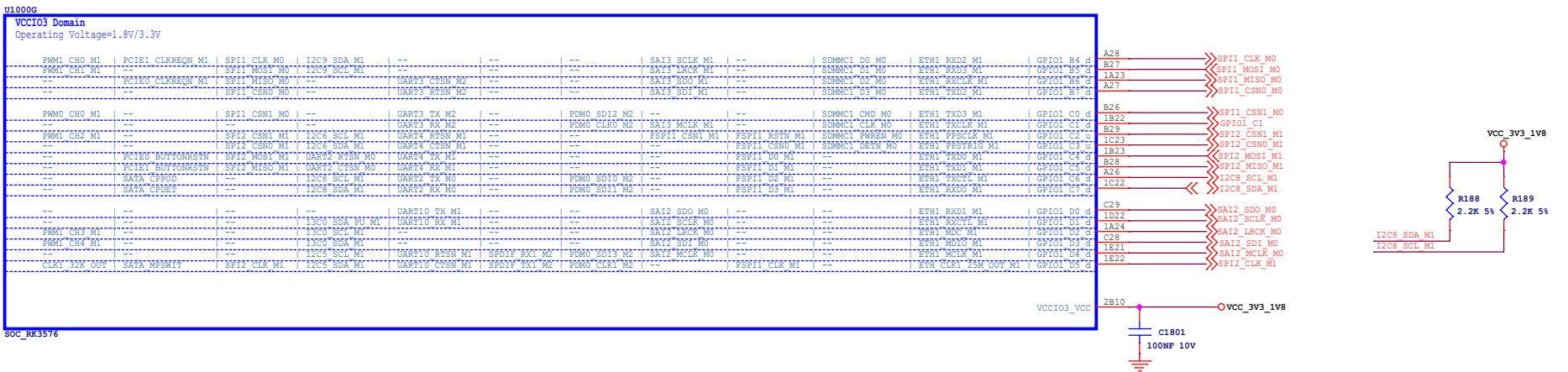
ED1

BTRO4002

Config10



RK3576_G (VCCIO3)



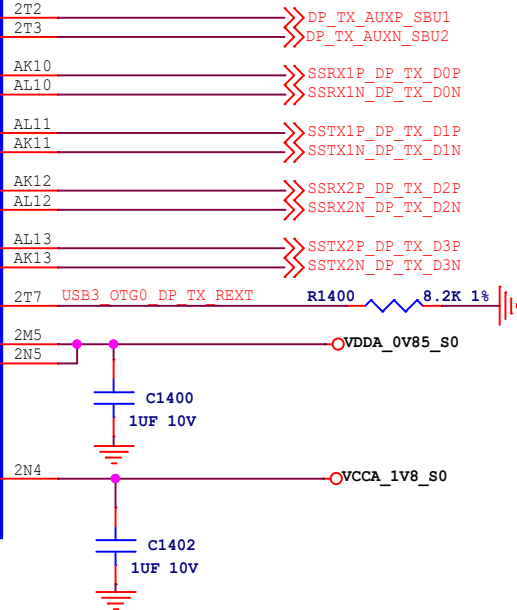
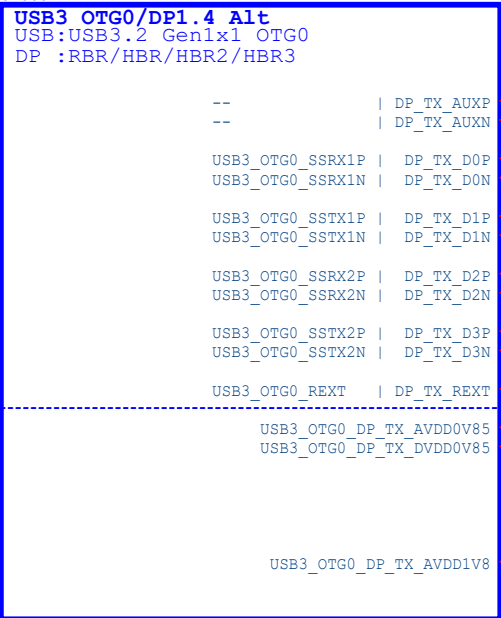
SOC RK3576



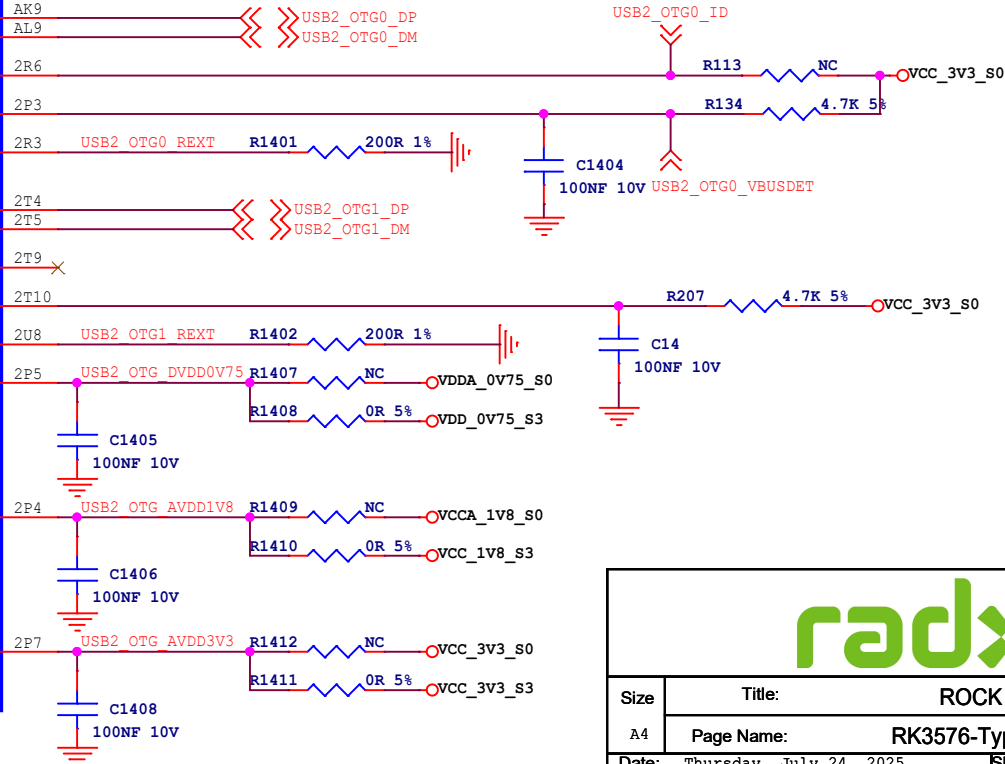
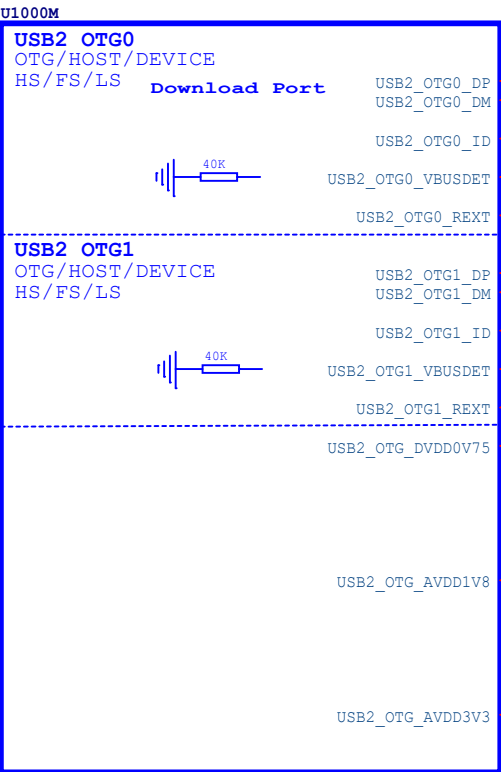
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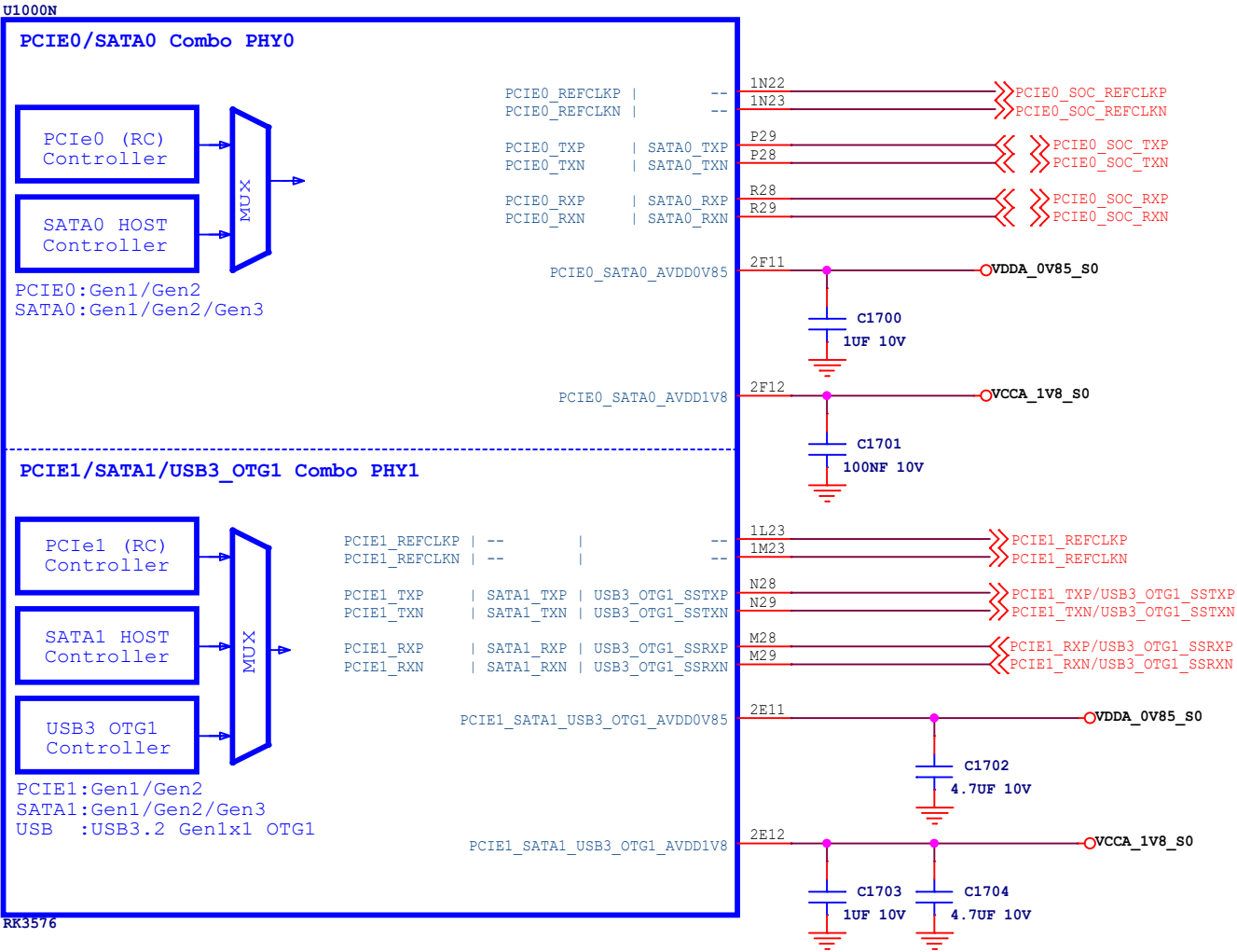
RK3576_L
(USB3/DP)



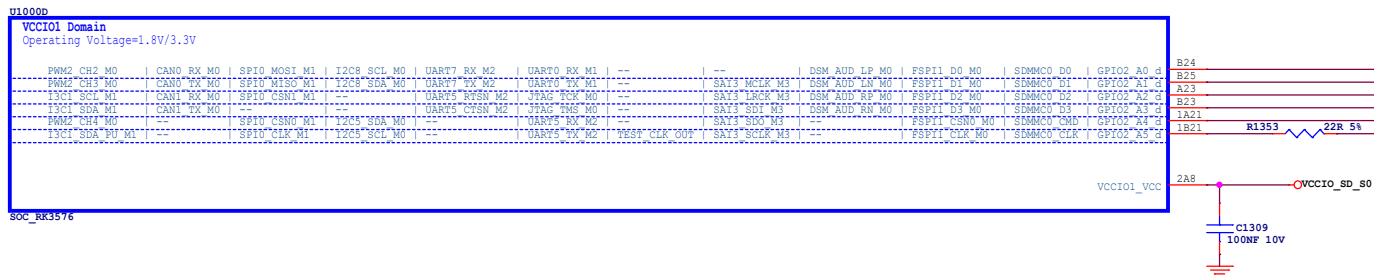
RK3576_M
(USB2)



RK3576_N (PCIe/SATA/USB3)



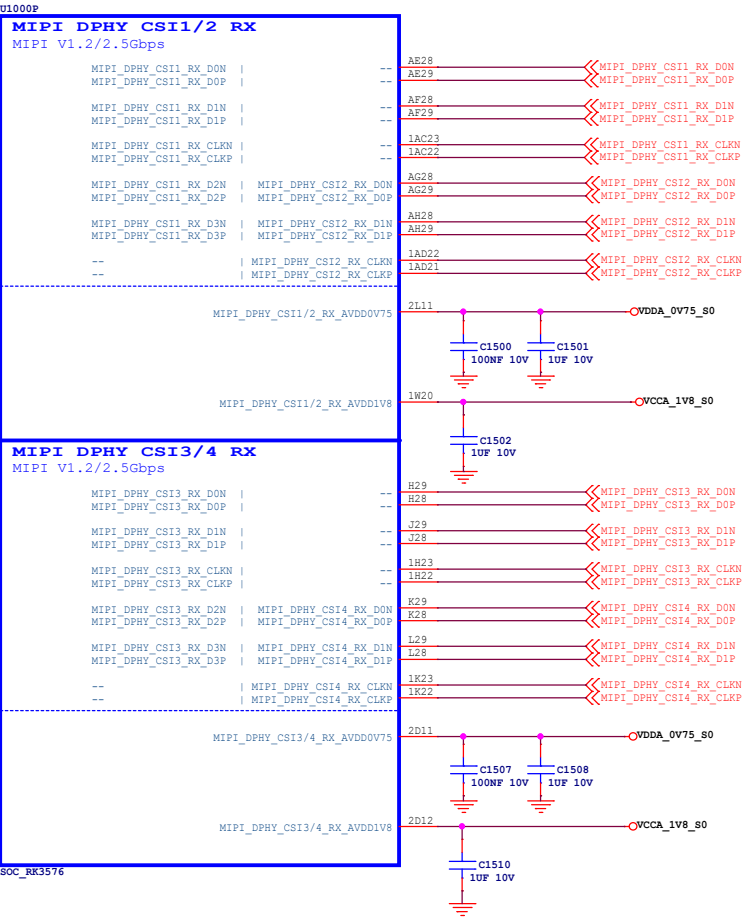
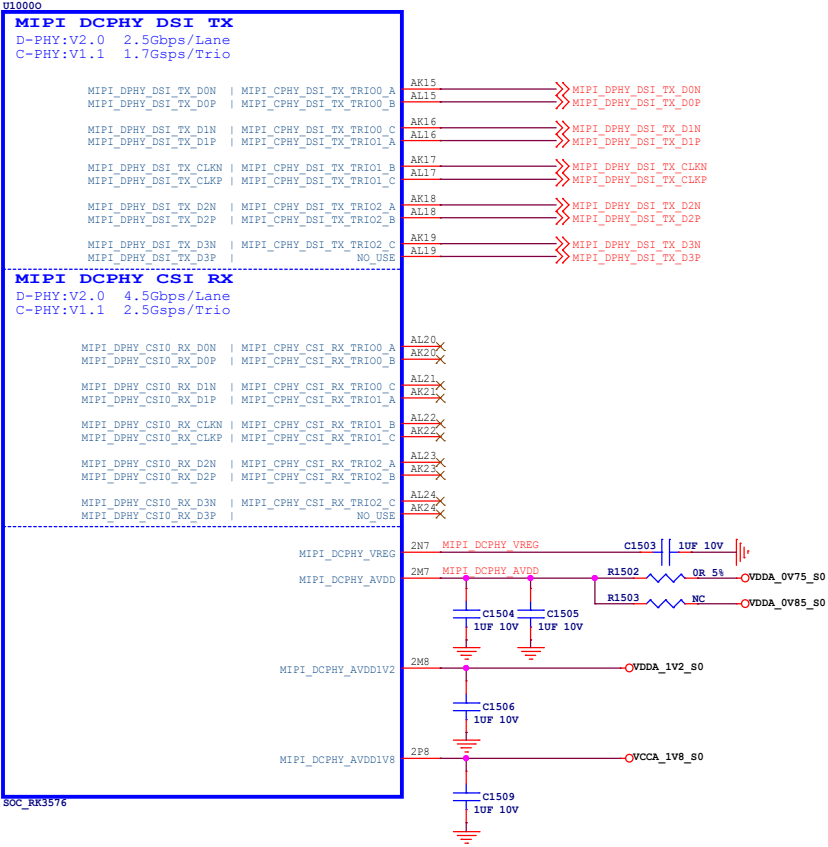
RK3576_D
(VCCI01)



Size	Title: ROCK CM4	REV
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RK3576_O (MIPI DCPHY)

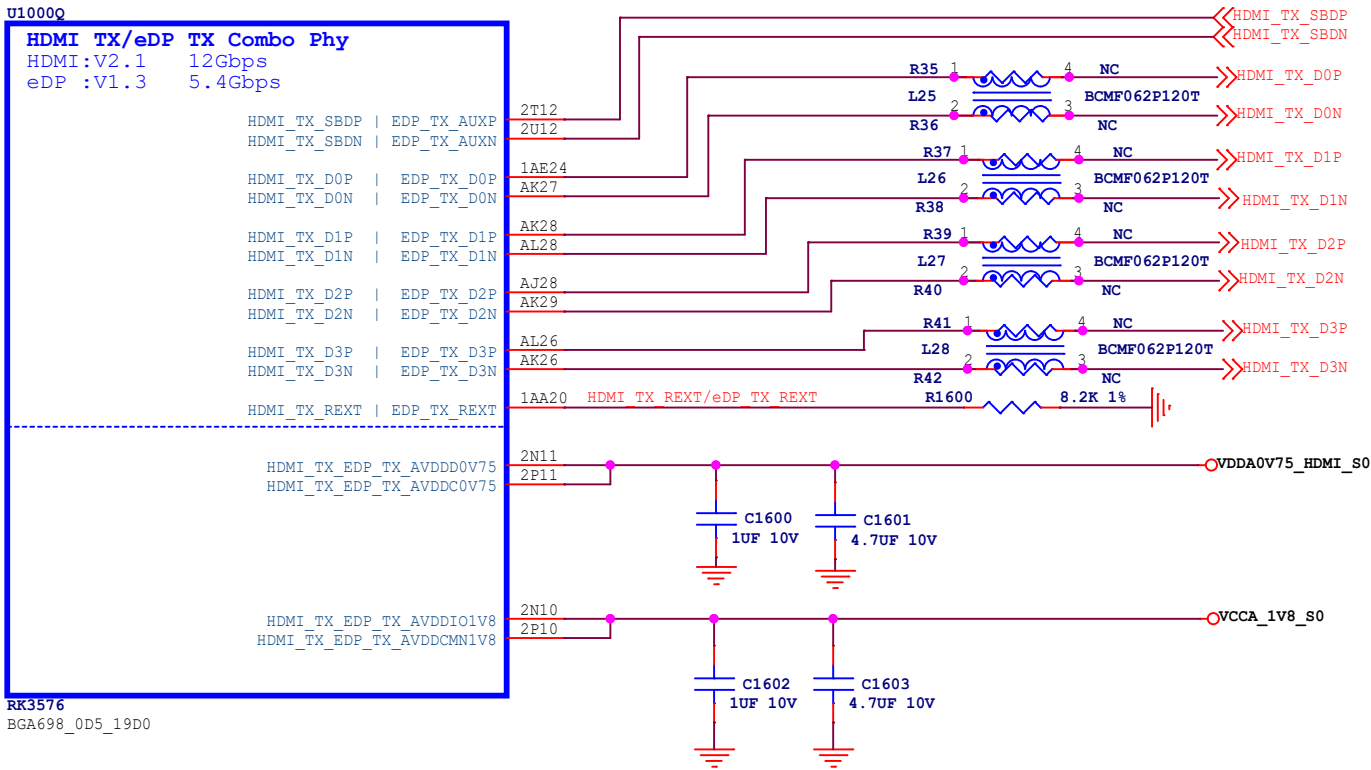
RK3576_P (MIPI DPHY CSI RX)



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RK3576_Q (HDMI/eDP)

Note:
HDMI 2.1 supports up to 4Kx2K@120Hz



RK3576_A (DDRPHY)

U1000A

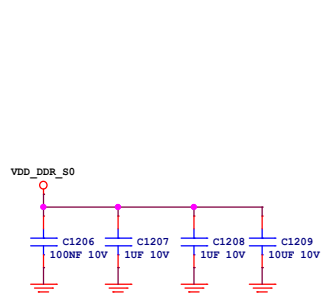
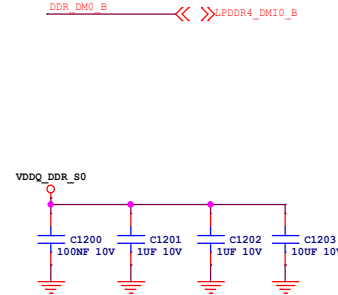
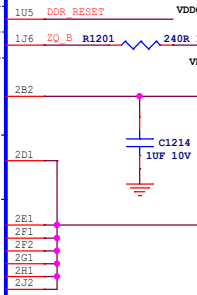
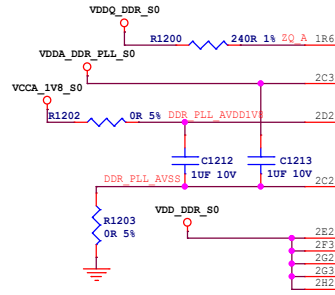
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LP4_CKE1_A	LP4X_CKE1_A	LP5_CSN1_A				LP4_RESET	LP4X_RESET	LP5_RESET				
EQ_A						EQ_B						
DDR_FLL Power						LP4/4X_CKE&LP5_CS & Reset Power						
LPDDR4/4X=1.1V						DDRPHY_CKE_VDDQ						
LPDDR5=1.05V												
DDRPHY_FLL_AVDD1V8						CK Power						
LPDDR4/4X=0.6V						DDRPHY_CK_VDDQ						
LPDDR5=0.5V												
DDRPHY_FLL_AVSS						DDR IO Power						
(except for ck, cke and csn0)						DDRPHY_VDDQ_0						
LPDDR4/4X=0.6V						DDRPHY_VDDQ_1						
LPDDR5=0.5V						DDRPHY_VDDQ_2						
DDRPHY_VDDQ_0						DDRPHY_VDDQ_3						
DDRPHY_VDDQ_1						DDRPHY_VDDQ_4						
DDRPHY_VDDQ_2						DDRPHY_VDDQ_5						

SOC_RK3576

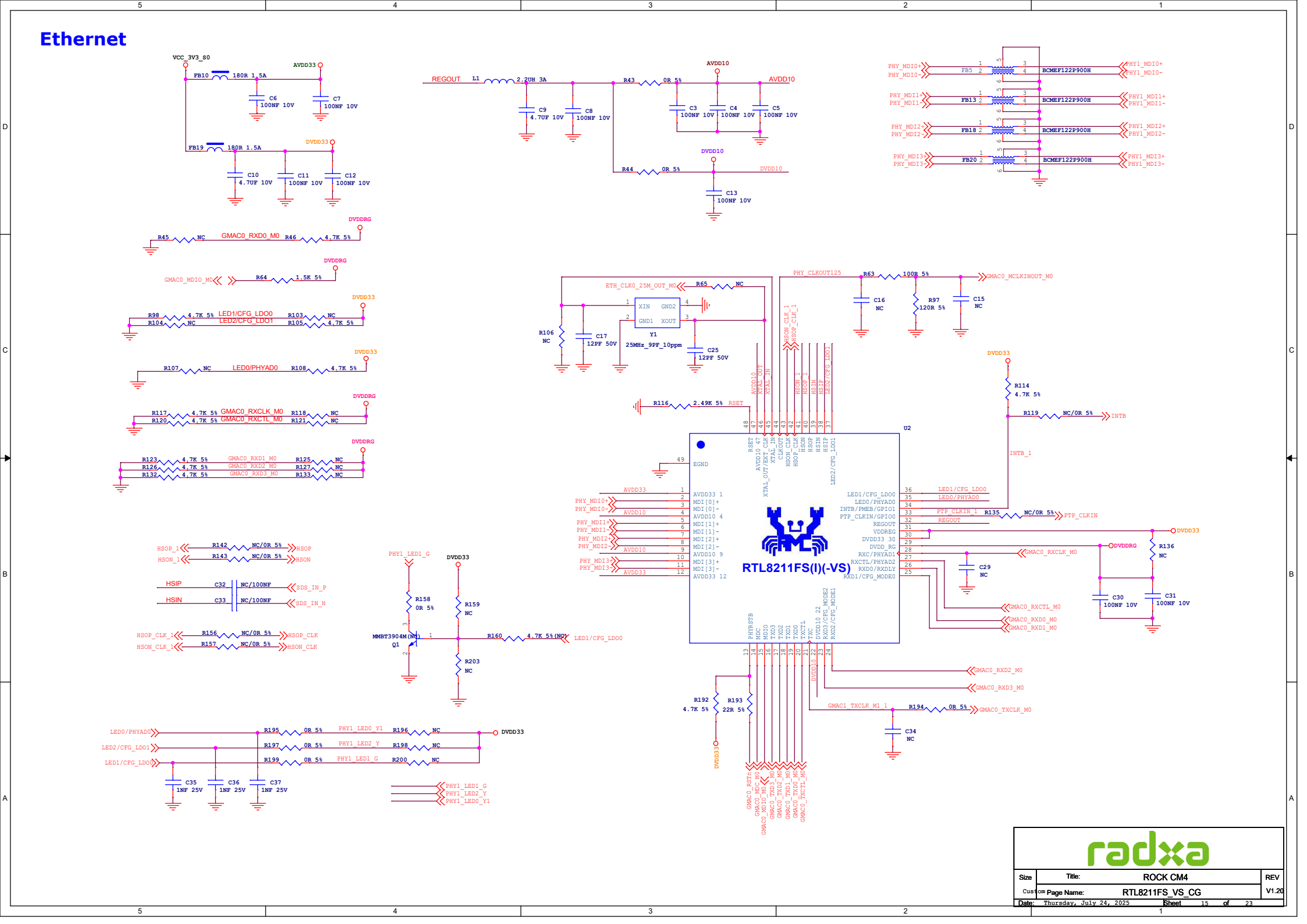
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DDR DQ5 A	LPDDR4_DQ5_A
DDR DQ6 A	LPDDR4_DQ6_A
DDR DQ7 A	LPDDR4_DQ7_A
DDR DQ8 A	LPDDR4_DQ8_A
DDR DQ9 A	LPDDR4_DQ9_A
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DDR DQ11 A	LPDDR4_DQ11_A
DDR DQ12 A	LPDDR4_DQ12_A
DDR DQ13 A	LPDDR4_DQ13_A
DDR DQ14 A	LPDDR4_DQ14_A
DDR DQ15 A	LPDDR4_DQ15_A
DDR DQS1P A	LPDDR4_DQS1P_A
DDR DQSIN A	LPDDR4_DQSIN_A
DDR DM1 A	LPDDR4_DM11_A
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DDR A2 A	LPDDR4_A2_A
DDR A3 A	LPDDR4_A3_A
DDR A4 A	LPDDR4_A4_A
DDR A5 A	LPDDR4_A5_A
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DDR CLKN A	LPDDR4_CLKN_A
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DDR DQ2 B	LPDDR4_DQ2_B
DDR DQ3 B	LPDDR4_DQ3_B
DDR DQ4 B	LPDDR4_DQ4_B
DDR DQ5 B	LPDDR4_DQ5_B
DDR DQ6 B	LPDDR4_DQ6_B
DDR DQ7 B	LPDDR4_DQ7_B
DDR DQ8 B	LPDDR4_DQ8_B
DDR DQ9 B	LPDDR4_DQ9_B
DDR DQ10 B	LPDDR4_DQ10_B
DDR DQ11 B	LPDDR4_DQ11_B
DDR DQ12 B	LPDDR4_DQ12_B
DDR DQ13 B	LPDDR4_DQ13_B
DDR DQ14 B	LPDDR4_DQ14_B
DDR DQ15 B	LPDDR4_DQ15_B
DDR DQSOP B	LPDDR4_DQSOP_B
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DDR DM0 B	LPDDR4_DM10_B

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DDR DM1 B	LPDDR4_DM11_B
DDR A0 B	LPDDR4_A0_B
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DDR A5 B	LPDDR4_A5_B

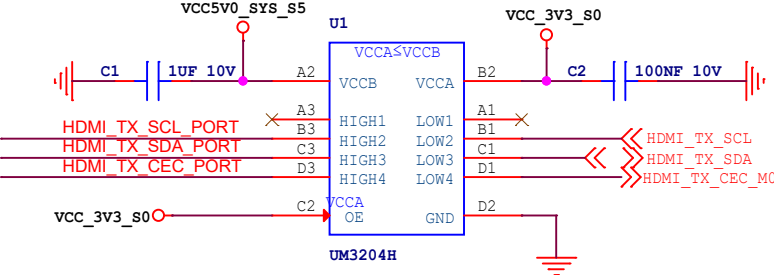
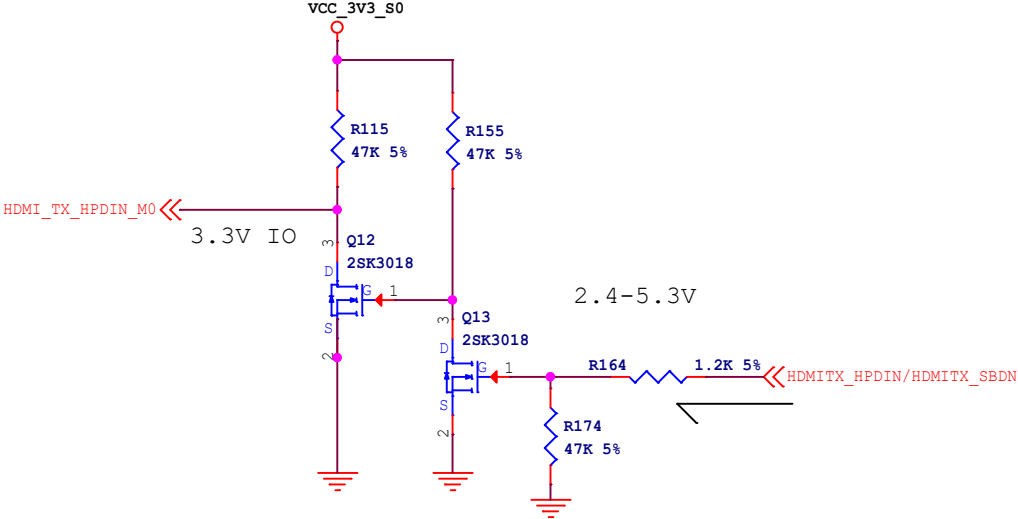
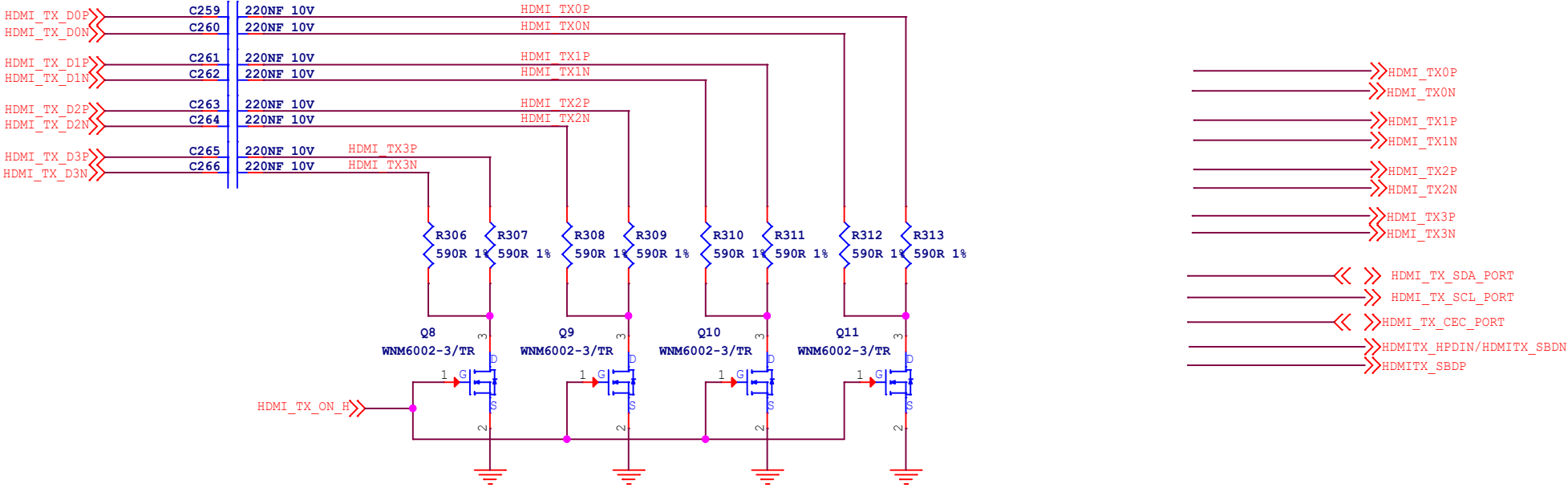
DDR CLKP B	LPDDR4_CLKP_B
DDR CLKN B	LPDDR4_CLKN_B
LPDDR4 CKE0/LPDDR5 CS0 A	LPDDR4_CKE0_A
LPDDR4 CKE1/LPDDR5 CS1 A	LPDDR4_CKE1_A
LPDDR4 CKE0/LPDDR5 CS0 B	LPDDR4_CKE0_B
LPDDR4 CKE1/LPDDR5 CS1 B	LPDDR4_CKE1_B
DDR RESET	LPDDR4_RESET
LPDDR4 CSN0 A	LPDDR4_CSN0_A
LPDDR4 CSN1 A	LPDDR4_CSN1_A
LPDDR4 CSN0 B	LPDDR4_CSN0_B
LPDDR4 CSN1 B	LPDDR4_CSN1_B



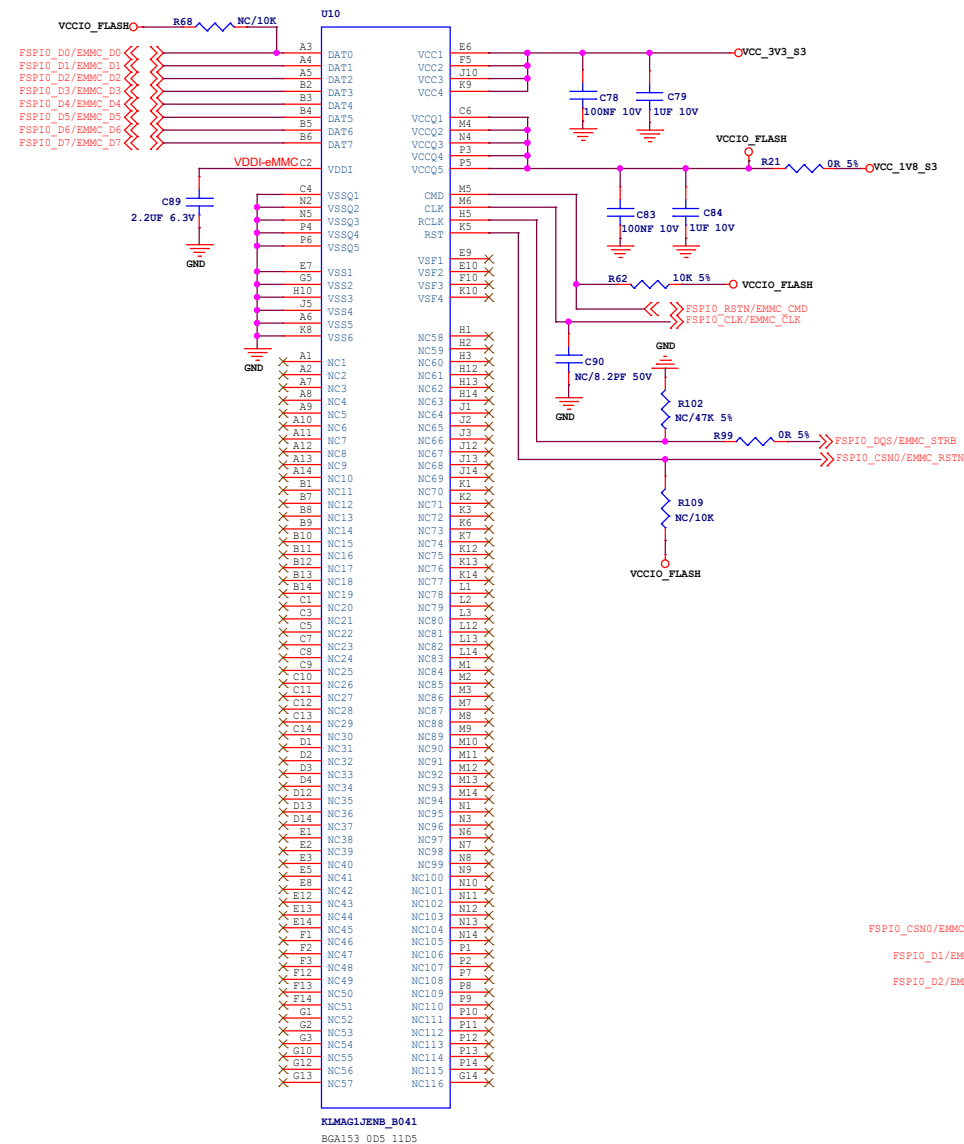
radxa

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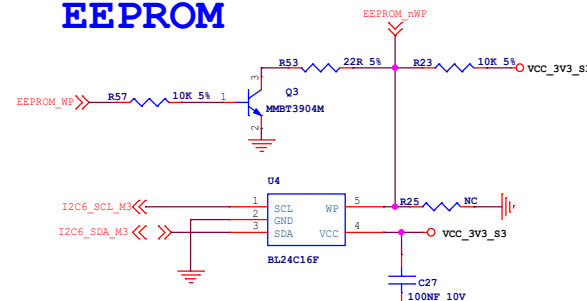
HDMI 2.1



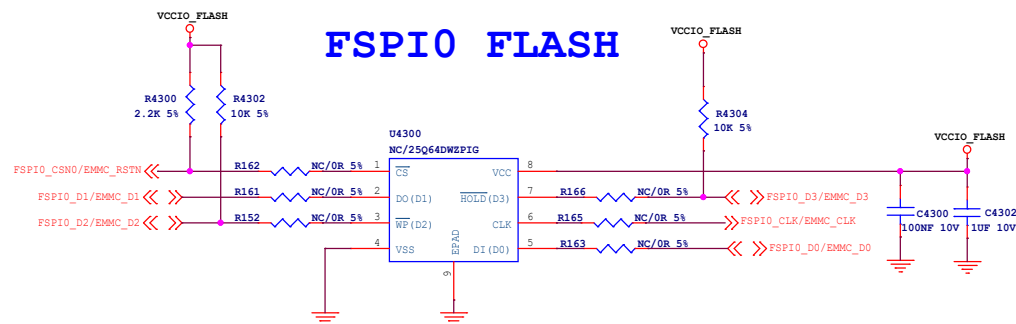
eMMC FLASH



EEPROM

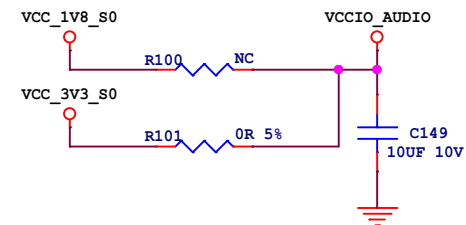
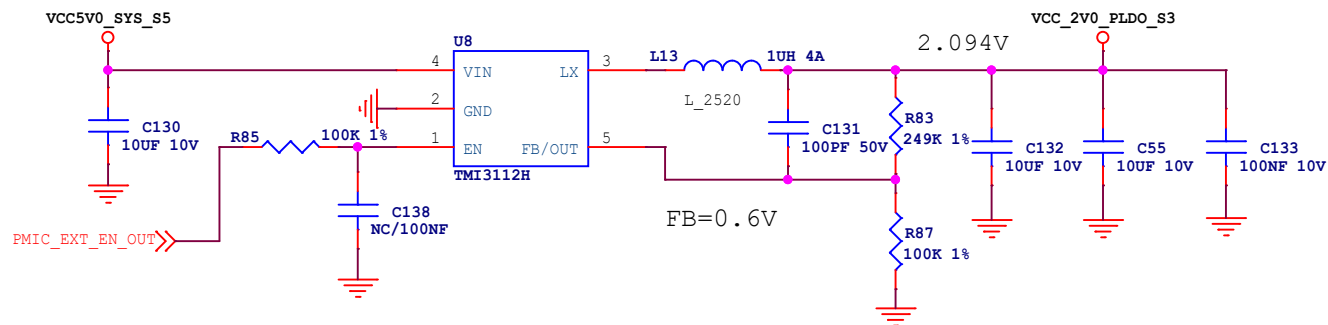


FSPIO FLASH

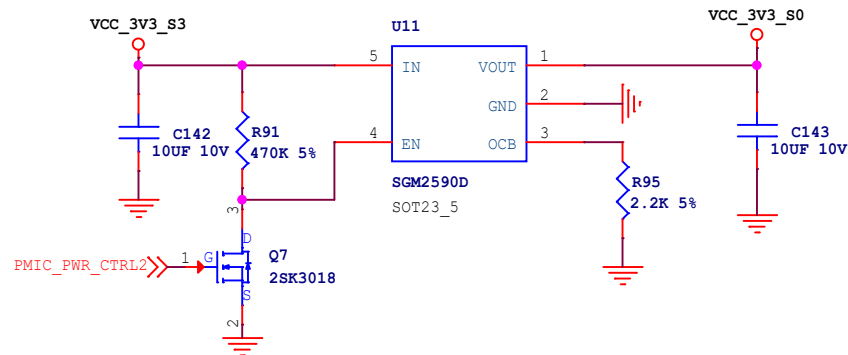
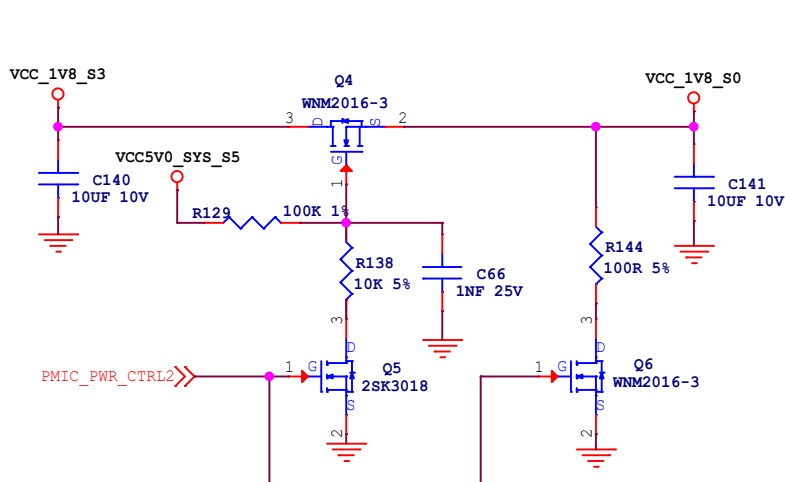
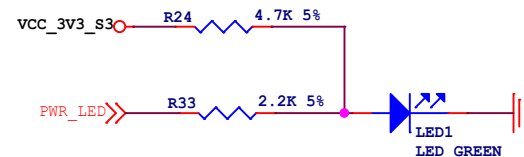
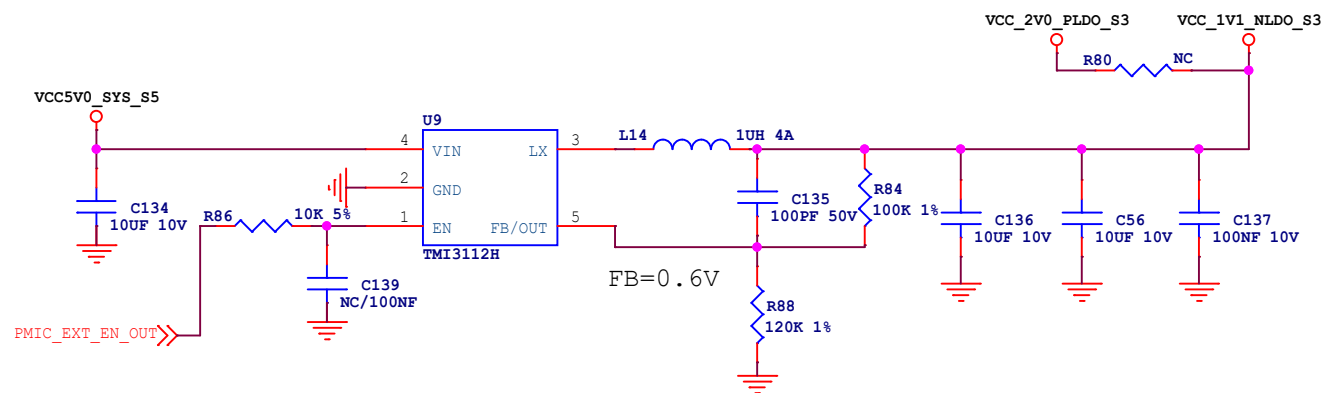


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POWER_EXT



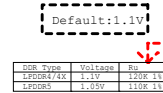
LED



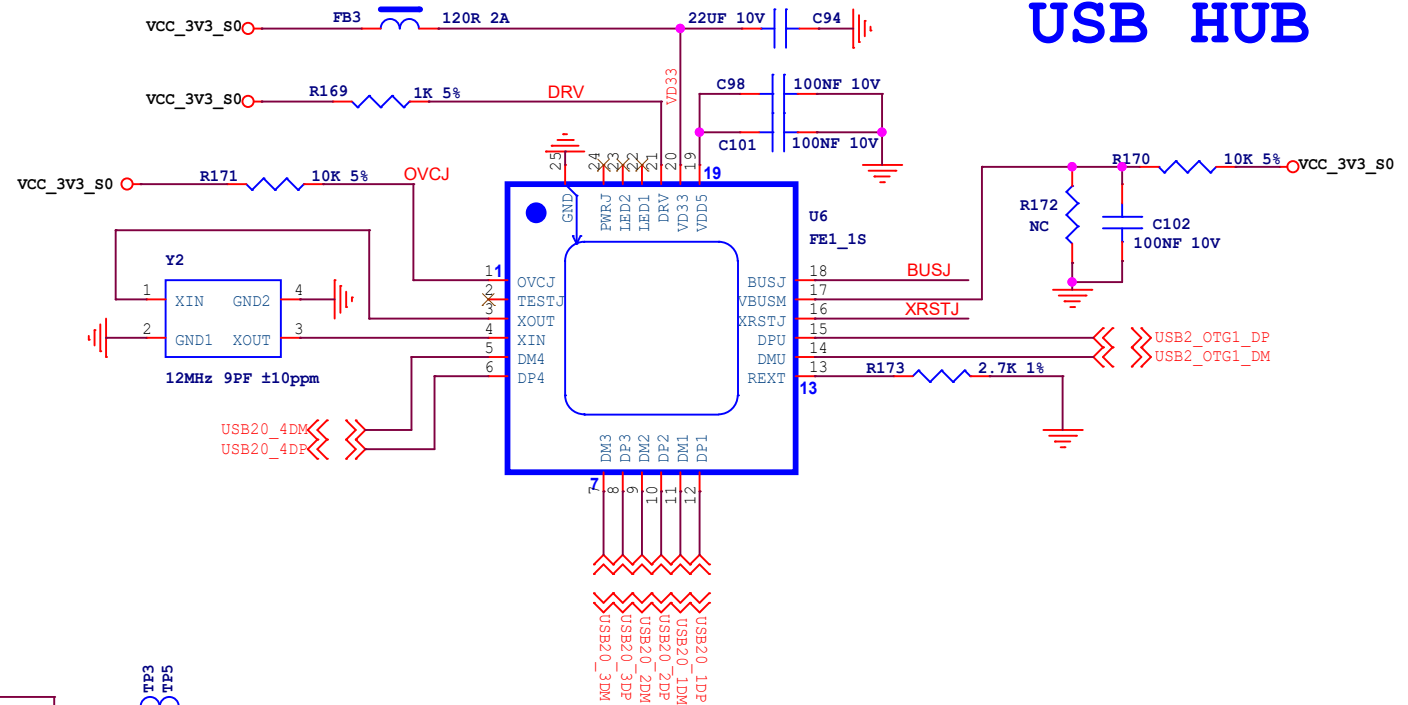
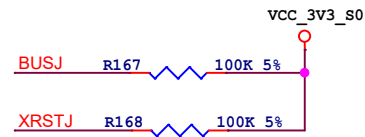
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Size	Title: ROCK CM4	REV
A4	Page Name: Power-Ext/LED	V1.20
Date: Thursday, July 24, 2025	Sheet 18 of 23	

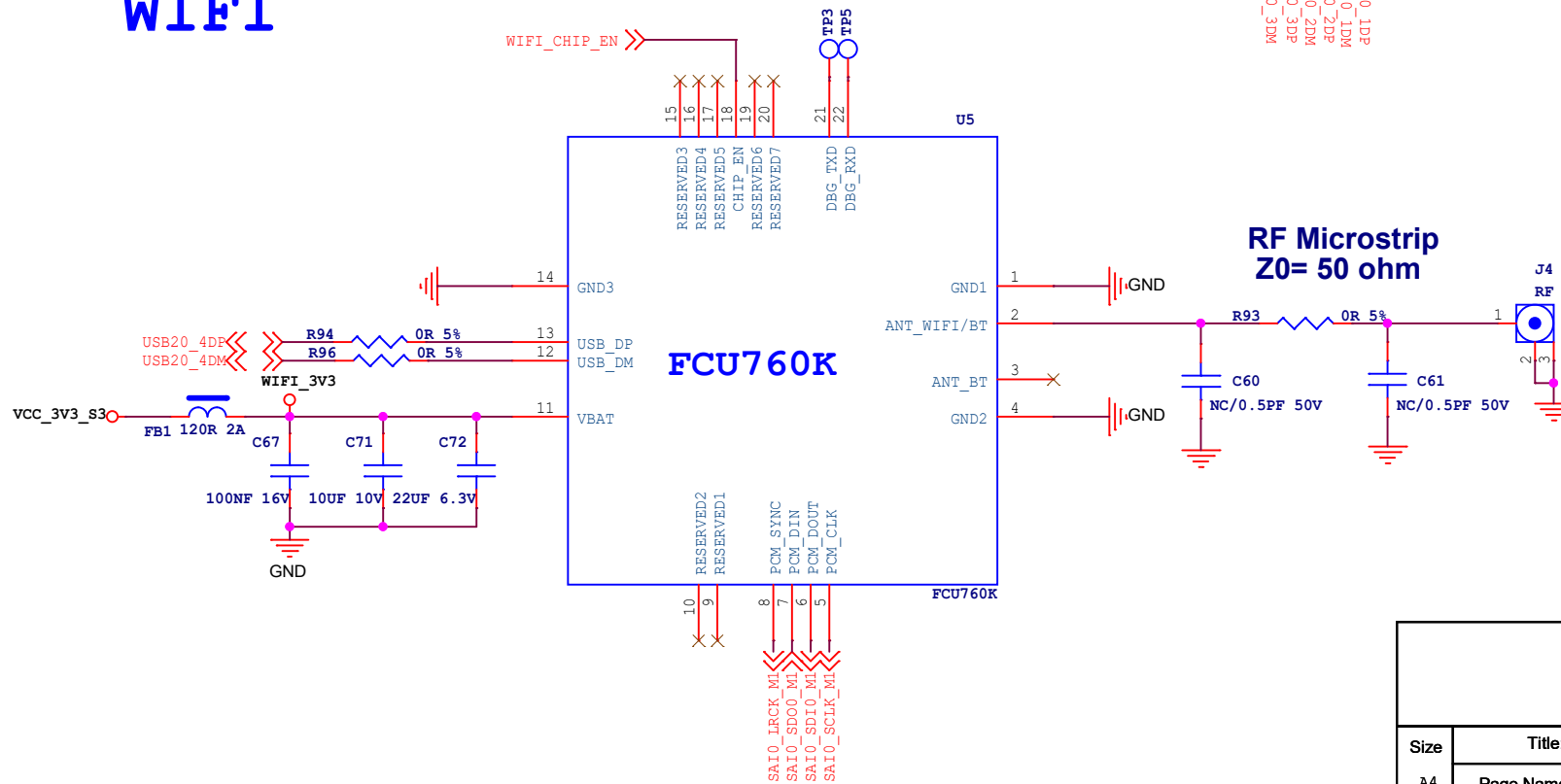
5V_IN



USB HUB



WIFI

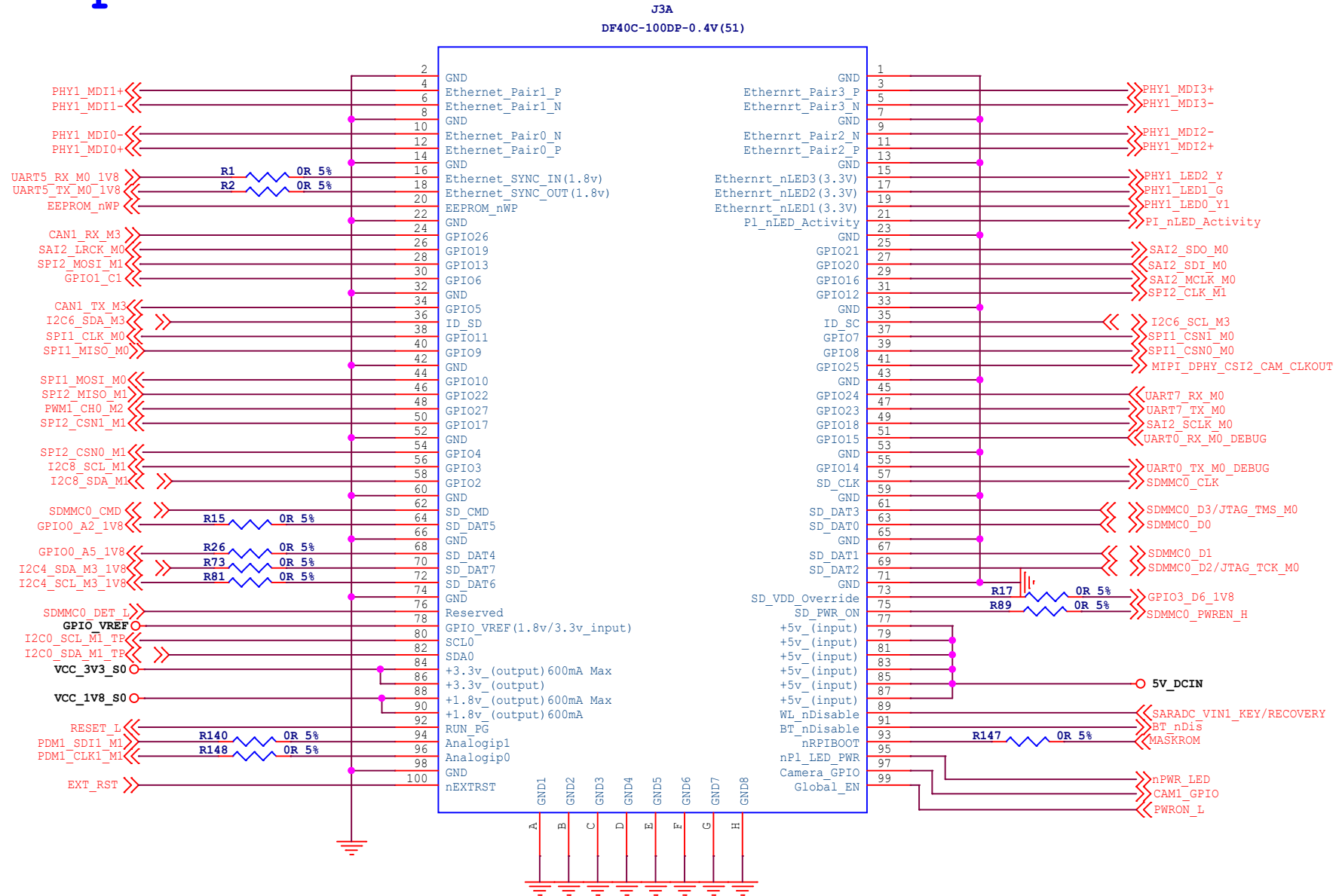


RF Microstrip
Z0= 50 ohm

radxa

Size	Title: ROCK CM4	REV
A4	Page Name: USB_WIFI/HUB	V1.20
Date: Thursday, July 24, 2025	Sheet 20	of 23

LOW Speed

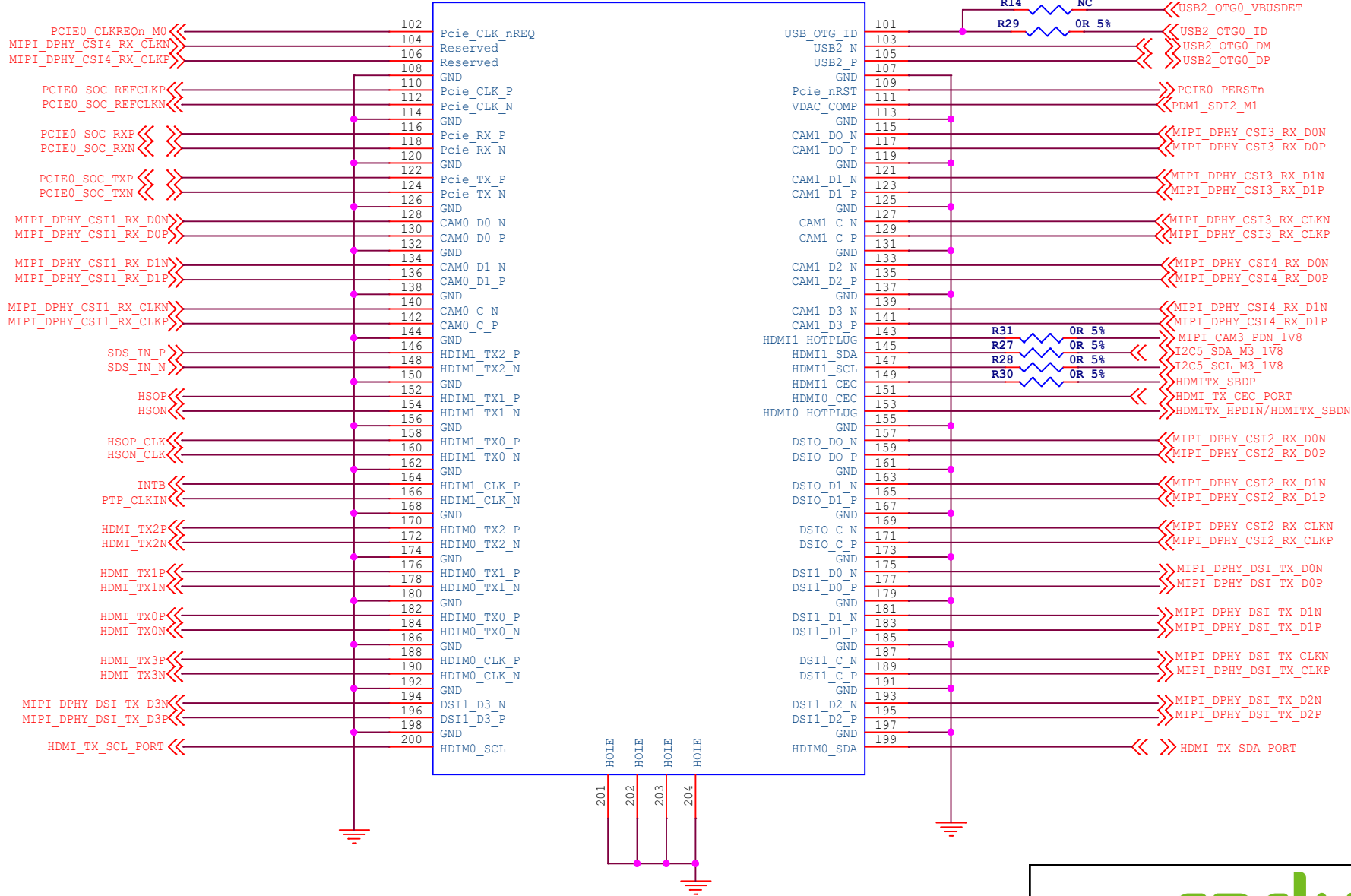


radxa

Size	Title: ROCK CM4	REV
A4	Page Name: Low Speed-Connector	V1.20
Date: Thursday, July 24, 2025	Sheet 21	of 23

High Speed

J3B
DF40C-100DP-0.4V(51)



I/O

J1
DF40C_100DP

