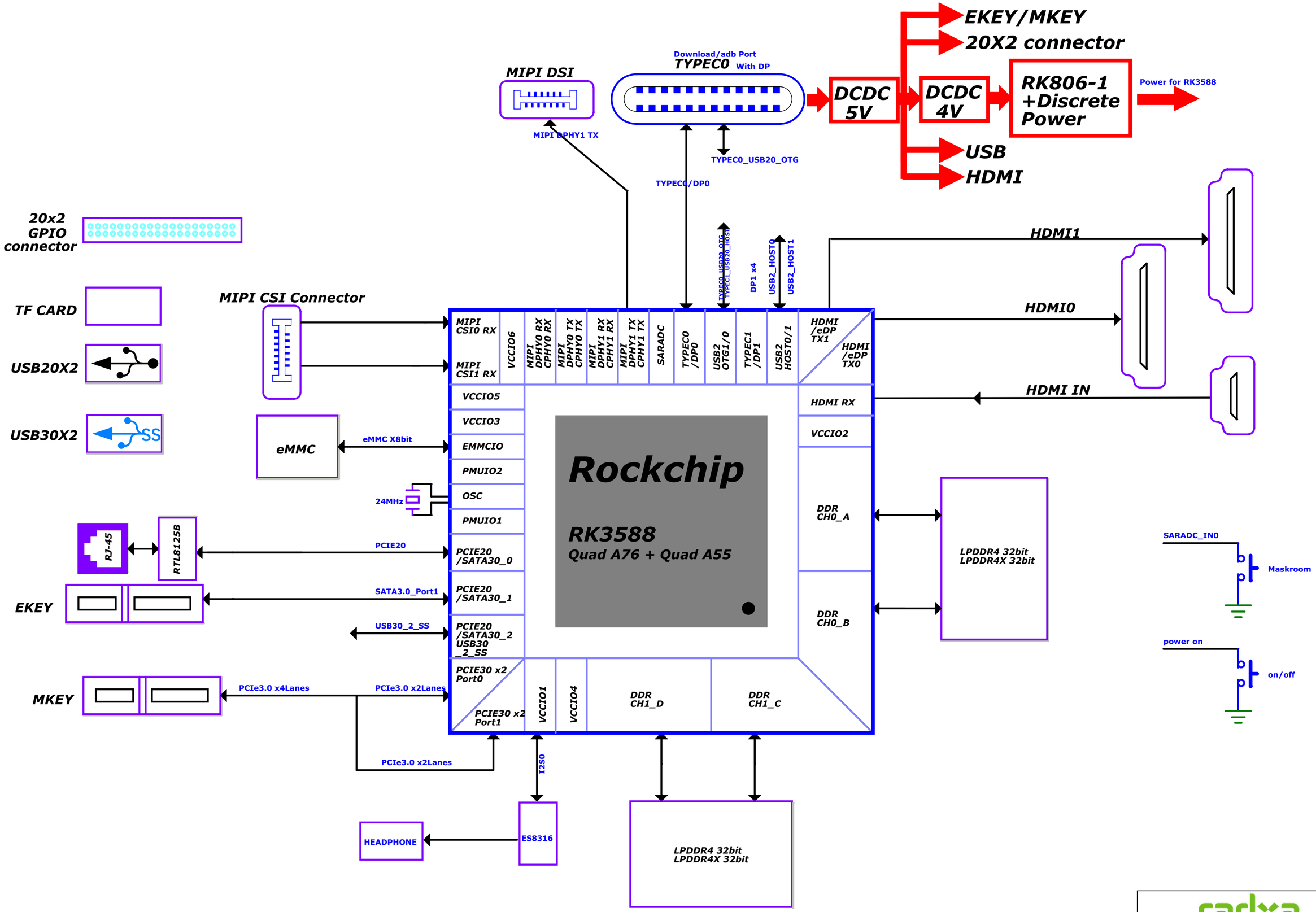
Radxa ROCK 5T schematic

V1.24

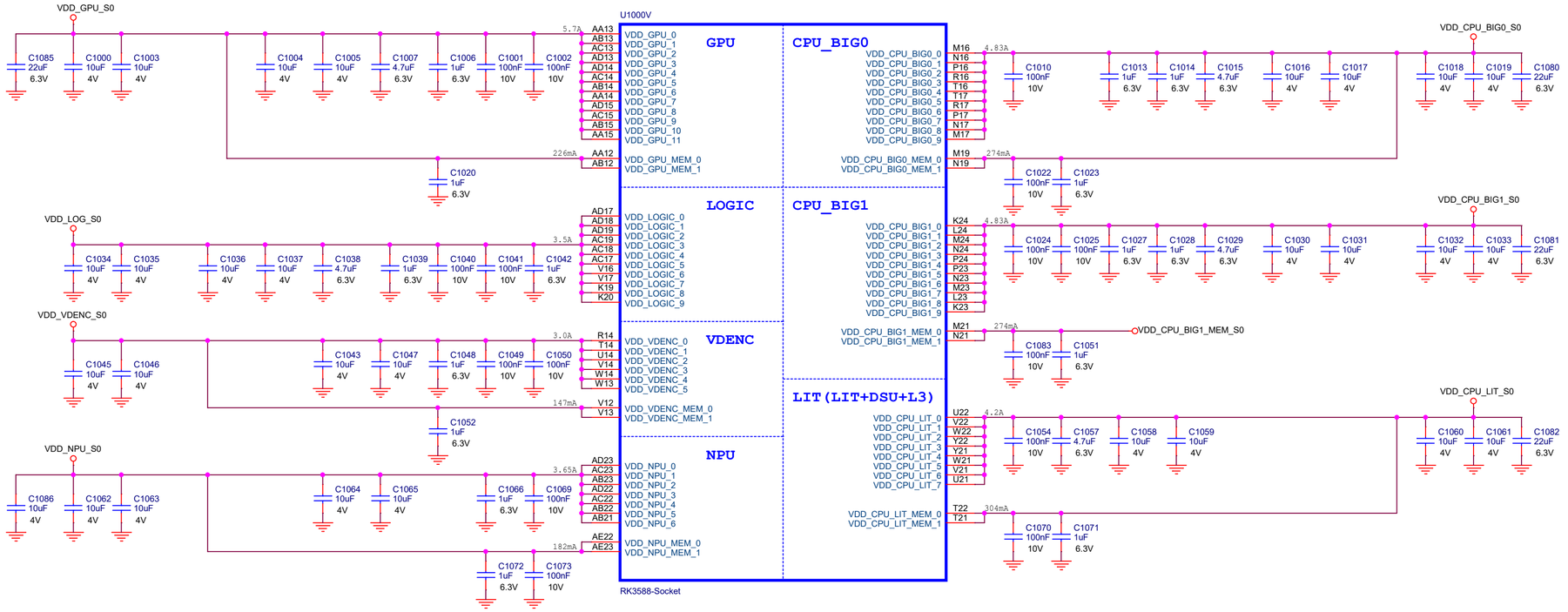
Table of Content

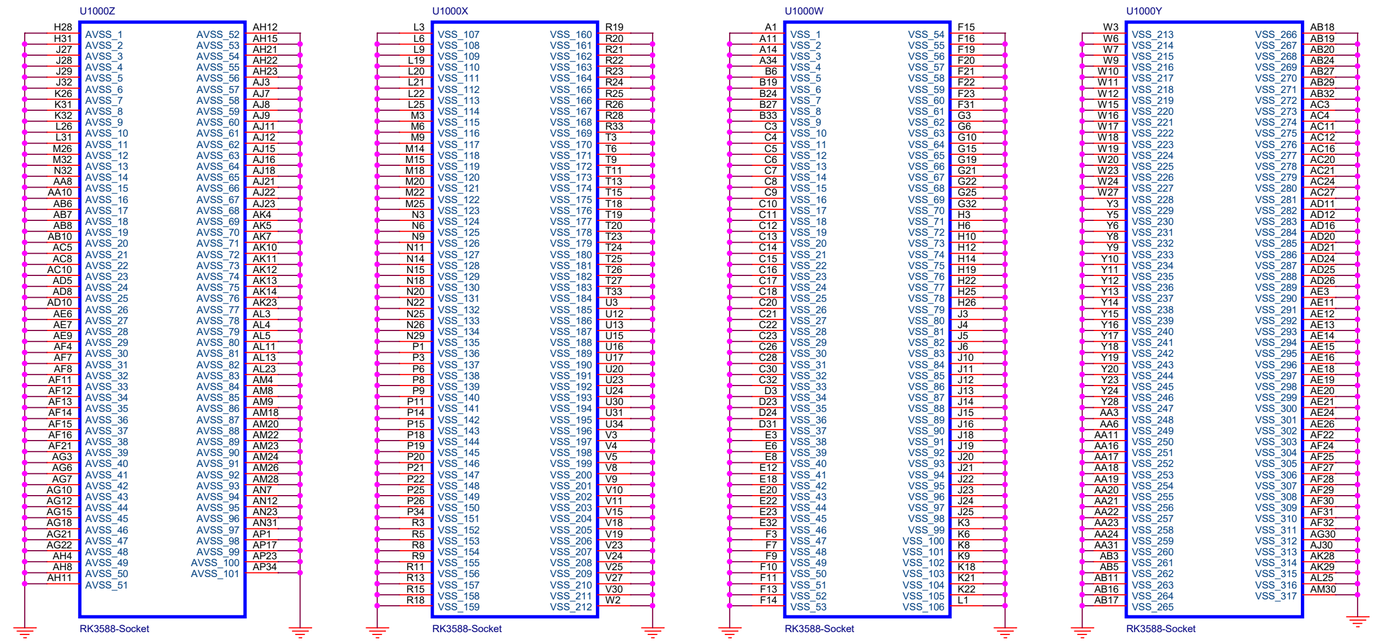
01.cover
02.Table of Content
03.Block Diagram
04.RK3588 Power/GND
05.RK3588 DDR Controler
06.RK3588 OSC/PLL/PMUIO
07.RK3588_USB30/USB20 Ctrl
08.RK3588_HDMI/eDP Interface
09.RK3588 Flash/SD Controller
10.RK3588 MIPI Interface
11.RK3588 PCIE30/PCIE20/SATA30
12.RK3588_SARADC GPIO
13.RK3588 GPIO
14.LPDDR5_315P_2X32bit
15.Flash-TF Card
16.VI-HDMI2.0 RX
17.VO-HDMI2.1 TX
18.Camera MIPI-CSI
19.VO-LCM_MIPI
20.Audio Codec
21.SPI/eMMC Flash
22.PCIE WIFI
23.M.2 B key_4G
24.PCIE3.0MkeyX2
25.PCIE TO RJ450
26.USB30/20 Port
27.USB20/30HUB
28.Type-C Port
29.CONNECT 40pin
30.Power Ext Discrete
31.Power-PMIC RK806-1
32.Power DC 5V
33.Power TYPEC IN
34.PCIE TO RJ45 1
35.POE IN

Size A3	Title: RADXA ROCK 5T	REV V1.24
	Page Name: 02.Table of Content	
Date: Wednesday, October 28, 2026	Sheet 2 of 35	

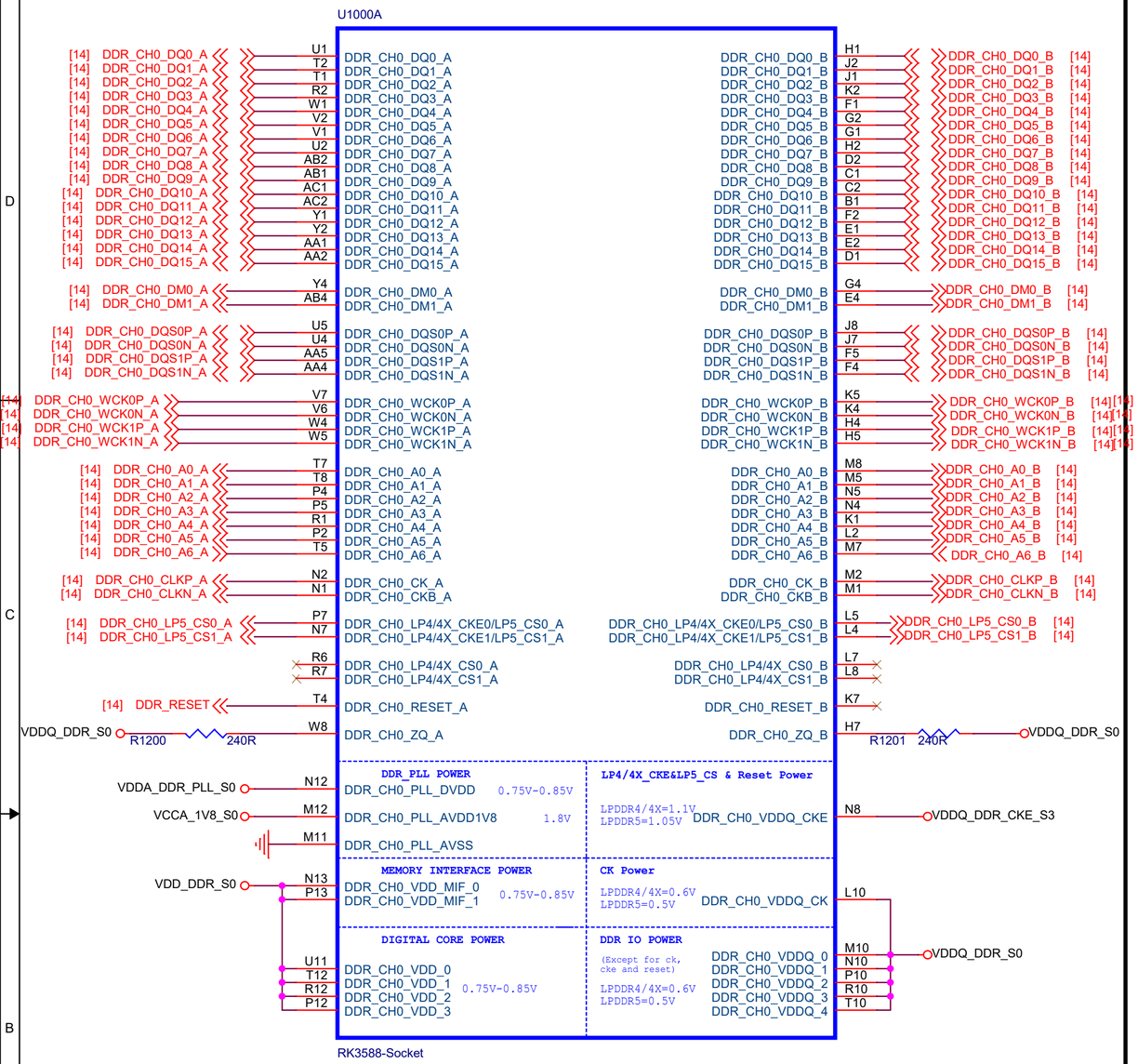


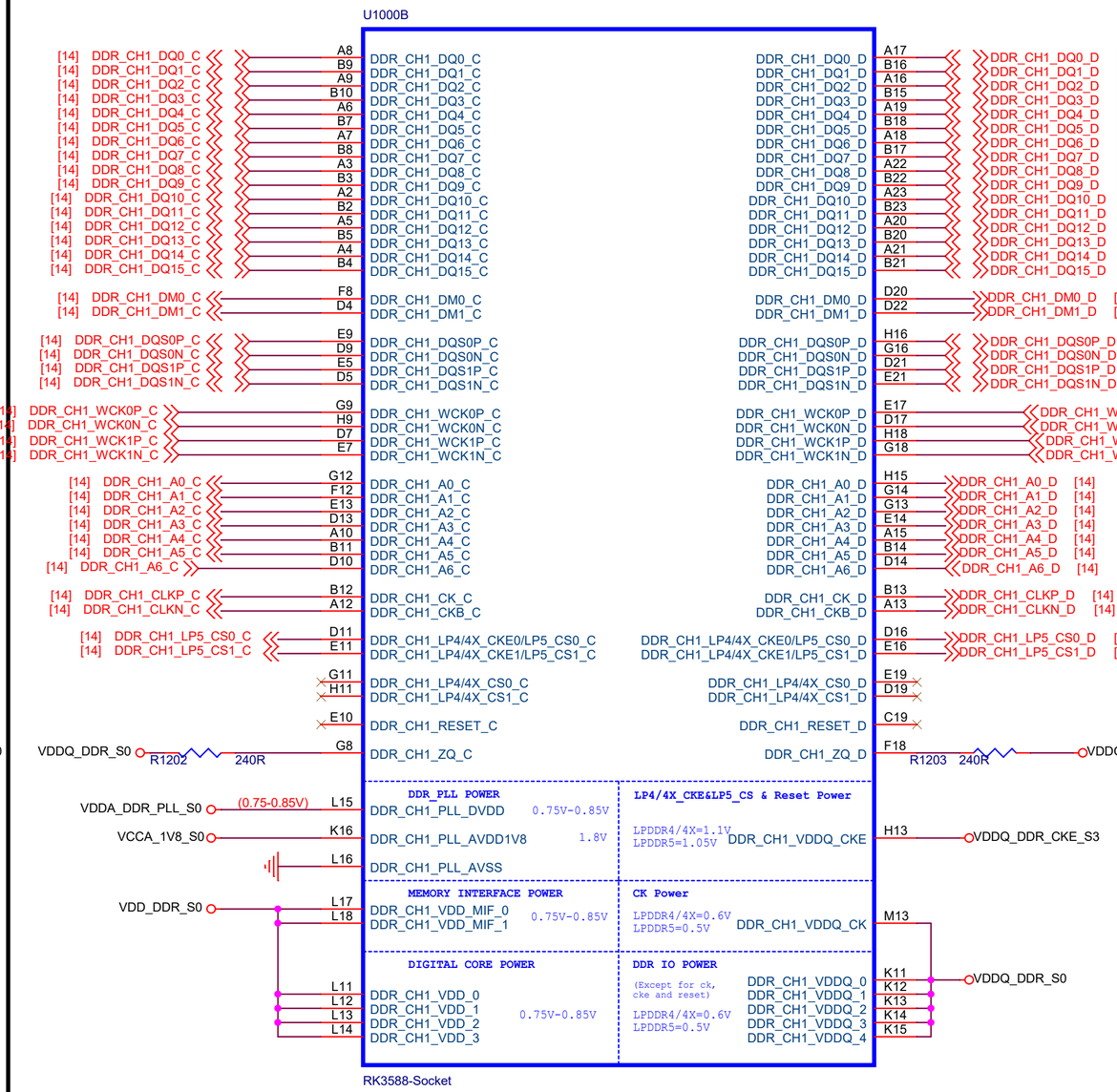
Size: A2	Title: RADXA ROCK 5T	REV: V1.24
	Page Name: 03.Block Diagram	
Date: Wednesday, October 28, 2026	Sheet 3 of 35	

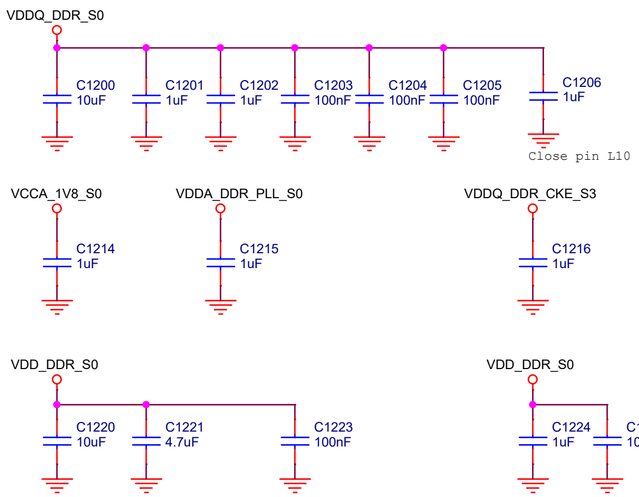


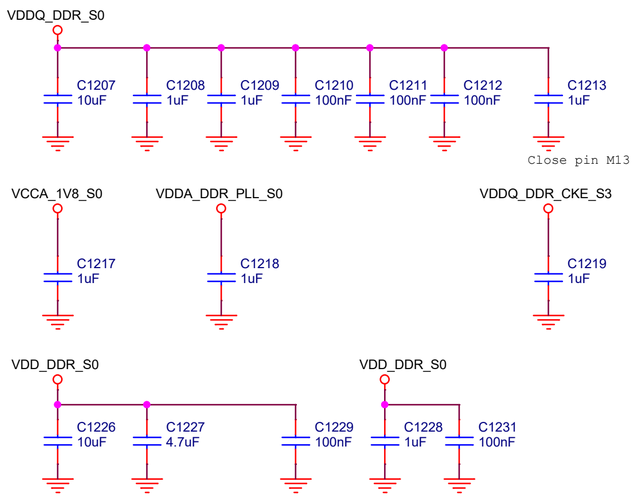


Size: A2	Title: RADXA ROCK 5T		REV: V1.24
	Page Name: 04.RK3588_Power/GND		
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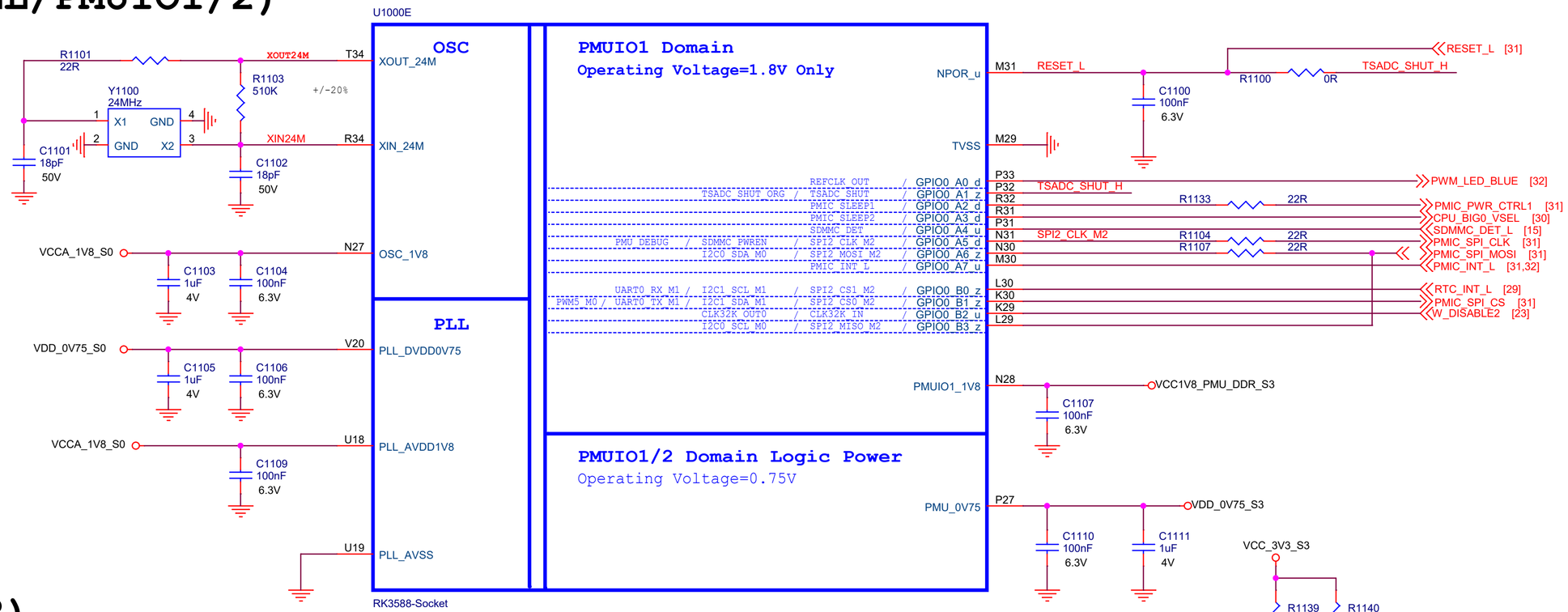




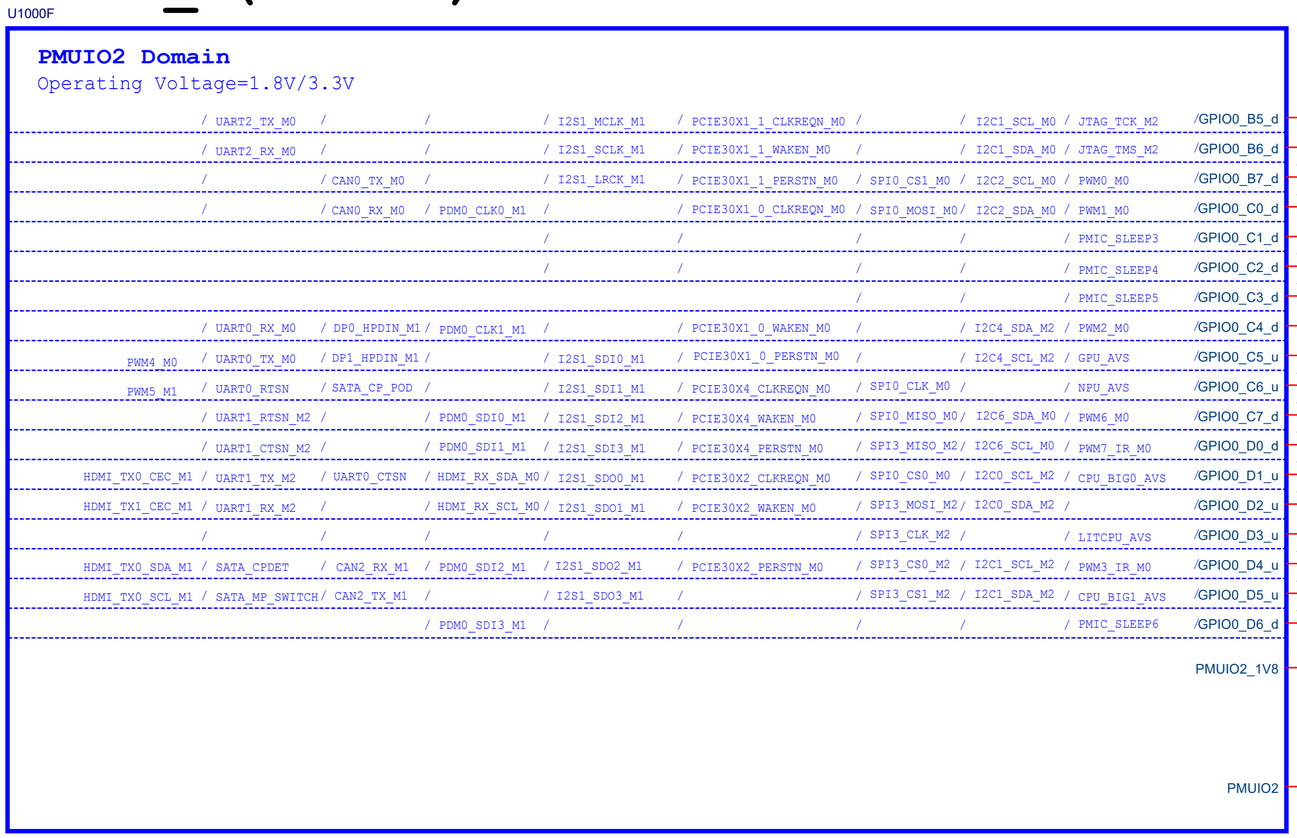


Size	Title: RADXA ROCK 5T		REV
Custom	Page Name: 05.RK3588 DDR Controler		V1.24
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RK3588_E(OSC/PLL/PMUIO1/2)



RK3588_F(PMUIO2)



Size	Title: RADXA ROCK 5T		REV
Custom	Page Name: 06.RK3588_OSC/PLL/PMUIO		V1.24
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RK3588_M(TYPEC/DP)

U1000M

USB3.0 OTG/DP1.4 Alt of TYPEC0

USB:U3/Gen1----Controller0
DP:RBR/HBR/HBR2/HBR3

TYPEC0_SBU1/DP0_AUXP — AL15 — TYPEC0_SBU1 [28]
TYPEC0_SBU2/DP0_AUXN — AM15 — TYPEC0_SBU2 [28]

TYPEC0_SSRX1P/DP0_TX0P — AN13 — TYPEC0_SSRX1P [28]
TYPEC0_SSRX1N/DP0_TX0N — AP13 — TYPEC0_SSRX1N [28]

TYPEC0_SSTX1P/DP0_TX1P — AP14 — TYPEC0_SSTX1P [28]
TYPEC0_SSTX1N/DP0_TX1N — AN14 — TYPEC0_SSTX1N [28]

TYPEC0_SSRX2P/DP0_TX2P — AN15 — TYPEC0_SSRX2P [28]
TYPEC0_SSRX2N/DP0_TX2N — AP15 — TYPEC0_SSRX2N [28]

TYPEC0_SSTX2P/DP0_TX3P — AP16 — TYPEC0_SSTX2P [28]
TYPEC0_SSTX2N/DP0_TX3N — AN16 — TYPEC0_SSTX2N [28]

TYPEC0_DP0_REXT — AH16 — TYPEC0_REXT — R1402 8.2K

TYPEC0_DP0_VDD_0V85 — AJ14
TYPEC0_DP0_VDDA_0V85 — AH14 — VDDA_0V85_S0
C1400 1uF 6.3V
C1401 100nF 6.3V

TYPEC0_DP0_VDDH_1V8 — AG14 — VCCA_1V8_S0
C1402 1uF 6.3V
C1403 100nF 6.3V

USB3.0 OTG/DP1.4 Alt of TYPEC1

USB:U3/Gen1----Controller1
DP:RBR/HBR/HBR2/HBR3

TYPEC1_SBU1/DP1_AUXP — AL10
TYPEC1_SBU2/DP1_AUXN — AM10

TYPEC1_SSRX1P/DP1_TX0P — AN8 — TYPEC1_SSRX1P [27]
TYPEC1_SSRX1N/DP1_TX0N — AP8 — TYPEC1_SSRX1N [27]

TYPEC1_SSTX1P/DP1_TX1P — AP9 — TYPEC1_SSTX1P [27]
TYPEC1_SSTX1N/DP1_TX1N — AN9 — TYPEC1_SSTX1N [27]

TYPEC1_SSRX2P/DP1_TX2P — AN10
TYPEC1_SSRX2N/DP1_TX2N — AP10

TYPEC1_SSTX2P/DP1_TX3P — AP11
TYPEC1_SSTX2N/DP1_TX3N — AN11

TYPEC1_DP1_REXT — AG16 — TYPEC1_REXT — R1410 8.2K

TYPEC1_DP1_VDD_0V85 — AH13
TYPEC1_DP1_VDDA_0V85 — AJ13 — VDDA_0V85_S0
C1404 1uF 6.3V
C1405 100nF 6.3V

TYPEC1_DP1_VDDH_1V8 — AG13 — VCCA_1V8_S0
C1406 1uF 6.3V
C1407 100nF 6.3V

RK3588-Socket

RK3588_L(USB2.0 HOST/OTG)

U1000L

USB2.0 of TYPEC0 (OTG/HOST/DEVICE)

HS/FS/LS

Download Port

TYPEC0_USB20_OTG_DP — AL12 — TYPEC0_OTG_DP [28]
TYPEC0_USB20_OTG_DM — AM12 — TYPEC0_OTG_DM [28]
TYPEC0_USB20_OTG_ID — AL14
40K — TYPEC0_USB20_VBUSDET — AM14 — TYPEC0_USB20_VBUSDET [28]
TYPEC0_USB20_OTG0_REXT — AP12 — OTG0_REXT — R1405 200R

USB2.0 of TYPEC1 (OTG/HOST/DEVICE)

HS/FS/LS

TYPEC1_USB20_OTG_DP — AK9 — TYPEC1_OTG_DP [27]
TYPEC1_USB20_OTG_DM — AL9 — TYPEC1_OTG_DM [27]
TYPEC1_USB20_OTG_ID — AK8
40K — TYPEC1_USB20_VBUSDET — AL8 — TYPEC0_OTG_VBUSDET [26]
TYPEC1_USB20_OTG1_REXT — AP7 — OTG1_REXT — R1406 200R

USB2.0 HOST0

HS/FS/LS

USB20_HOST0_DP — AK6 — USB20_HOST0_DP [27]
USB20_HOST0_DM — AL6 — USB20_HOST0_DM [27]
USB20_HOST0_REXT — AG9 — HOST0_REXT — R1400 200R

USB2.0 HOST1

HS/FS/LS

USB20_HOST1_DP — AL7 — USB20_HOST1_DP [26]
USB20_HOST1_DM — AM7 — USB20_HOST1_DM [26]
USB20_HOST1_REXT — AH9 — HOST1_REXT — R1401 200R

USB2.0 POWER

USB20_DVDD_0V75 — AH10 — VDDA_0V75_S0
C1408 100nF 6.3V

USB20_AVDD_1V8 — AG11 — VCCA_1V8_S0
C1409 100nF 6.3V

USB20_AVDD_3V3 — AJ10 — VCCA_3V3_S0
C1410 100nF 6.3V

RK3588-Socket

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RK3588_S(HDMI2.1 TX)

U1000S

HDMI TX/eDP MUX Port0

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

HDMI_TX0_SBDP/EDP_TX0_AUXP	AG2	HDMI0_TX_SBDP/eDP0_TX_AUXP	HDMI0_TX_SBDP/eDP0_TX_AUXP [17]
HDMI_TX0_SBDN/EDP_TX0_AUXN	AG1	HDMI0_TX_SBDN/eDP0_TX_AUXN	HDMI0_TX_SBDN/eDP0_TX_AUXN [17]
HDMI_TX0_D0P/EDP_TX0_D0P	AJ2	HDMI0_TX0P_PORT/eDP0_TX_D0P	HDMI0_TX0P_PORT/eDP0_TX_D0P [17]
HDMI_TX0_D0N/EDP_TX0_D0N	AJ1	HDMI0_TX0N_PORT/eDP0_TX_D0N	HDMI0_TX0N_PORT/eDP0_TX_D0N [17]
HDMI_TX0_D1P/EDP_TX0_D1P	AK3	HDMI0_TX1P_PORT/eDP0_TX_D1P	HDMI0_TX1P_PORT/eDP0_TX_D1P [17]
HDMI_TX0_D1N/EDP_TX0_D1N	AK2	HDMI0_TX1N_PORT/eDP0_TX_D1N	HDMI0_TX1N_PORT/eDP0_TX_D1N [17]
HDMI_TX0_D2P/EDP_TX0_D2P	AL2	HDMI0_TX2P_PORT/eDP0_TX_D2P	HDMI0_TX2P_PORT/eDP0_TX_D2P [17]
HDMI_TX0_D2N/EDP_TX0_D2N	AL1	HDMI0_TX2N_PORT/eDP0_TX_D2N	HDMI0_TX2N_PORT/eDP0_TX_D2N [17]
HDMI_TX0_D3P/EDP_TX0_D3P	AH3	HDMI0_TX3P_PORT/eDP0_TX_D3P	HDMI0_TX3P_PORT/eDP0_TX_D3P [17]
HDMI_TX0_D3N/EDP_TX0_D3N	AH2	HDMI0_TX3N_PORT/eDP0_TX_D3N	HDMI0_TX3N_PORT/eDP0_TX_D3N [17]
HDMI/EDP_TX0_REXT	AM2	HDMI_TX0_REXT	R1708 8.2K
HDMI/EDP_TX0_VDD_0V75	AA9	<260mA	VDDA_0V75_S0
HDMI/EDP_TX0_AVDD_0V75	AB9	<1mA	
HDMI/EDP_TX0_VDD_IO_1V8	AC7		VCC_1V8_S0
HDMI/EDP_TX0_VDD_CMN_1V8	AC6		

C1715 4.7uF 10V
C1751 4.7uF 10V
VDD_IO<77mA
VDD_CMN<71mA
C1714 1uF 6.3V
C1716 1uF 6.3V
C1717 100nF 6.3V
C1742 4.7uF 10V

HDMI TX/eDP MUX Port1

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

HDMI_TX1_SBDP/EDP_TX1_AUXP	AN2	HDMI1_TX_SBDP/eDP1_TX_AUXP	HDMI1_TX_SBDP/eDP1_TX_AUXP [17]
HDMI_TX1_SBDN/EDP_TX1_AUXN	AP2	HDMI1_TX_SBDN/eDP1_TX_AUXN	HDMI1_TX_SBDN/eDP1_TX_AUXN [17]
HDMI_TX1_D0P/EDP_TX1_D0P	AN4	HDMI1_TX0P_PORT/eDP1_TX_D0P	HDMI1_TX0P_PORT/eDP1_TX_D0P [17]
HDMI_TX1_D0N/EDP_TX1_D0N	AP4	HDMI1_TX0N_PORT/eDP1_TX_D0N	HDMI1_TX0N_PORT/eDP1_TX_D0N [17]
HDMI_TX1_D1P/EDP_TX1_D1P	AM5	HDMI1_TX1P_PORT/eDP1_TX_D1P	HDMI1_TX1P_PORT/eDP1_TX_D1P [17]
HDMI_TX1_D1N/EDP_TX1_D1N	AN5	HDMI1_TX1N_PORT/eDP1_TX_D1N	HDMI1_TX1N_PORT/eDP1_TX_D1N [17]
HDMI_TX1_D2P/EDP_TX1_D2P	AN6	HDMI1_TX2P_PORT/eDP1_TX_D2P	HDMI1_TX2P_PORT/eDP1_TX_D2P [17]
HDMI_TX1_D2N/EDP_TX1_D2N	AP6	HDMI1_TX2N_PORT/eDP1_TX_D2N	HDMI1_TX2N_PORT/eDP1_TX_D2N [17]
HDMI_TX1_D3P/EDP_TX1_D3P	AM3	HDMI1_TX3P_PORT/eDP1_TX_D3P	HDMI1_TX3P_PORT/eDP1_TX_D3P [17]
HDMI_TX1_D3N/EDP_TX1_D3N	AN3	HDMI1_TX3N_PORT/eDP1_TX_D3N	HDMI1_TX3N_PORT/eDP1_TX_D3N [17]
HDMI/EDP_TX1_REXT	AN1	HDMI_TX1_REXT	R1719 8.2K
HDMI/EDP_TX1_VDD_0V75	AD9	<260mA	VDDA_0V75_S0
HDMI/EDP_TX1_AVDD_0V75	AC9	<1mA	
HDMI/EDP_TX1_VDD_IO_1V8	AD7		VCC_1V8_S0
HDMI/EDP_TX1_VDD_CMN_1V8	AD6		

C1735 1uF 6.3V
C1752 100nF 10V
C1730 4.7uF 10V
C1729 1uF 6.3V
C1731 1uF 6.3V
C1732 100nF 6.3V
C1733 4.7uF 10V

RK3588-Socket

RK3588_T(HDMI20 RX)

U1000T

HDMI RX

HDMI:V2.0

HDMI_RX_D0P	AG5		HDMI_RX_D0P_IN [16]
HDMI_RX_D0N	AG4		HDMI_RX_D0N_IN [16]
HDMI_RX_D1P	AH6		HDMI_RX_D1P_IN [16]
HDMI_RX_D1N	AH5		HDMI_RX_D1N_IN [16]
HDMI_RX_D2P	AJ5		HDMI_RX_D2P_IN [16]
HDMI_RX_D2N	AJ4		HDMI_RX_D2N_IN [16]
HDMI_RX_CLKP	AF6		HDMI_RX_CLKP_IN [16]
HDMI_RX_CLKN	AF5		HDMI_RX_CLKN_IN [16]
HDMI_RX_REXT	AF3		R1730 200R
HDMI_RX_AVDD0V75	AE8		VDDA_0V75_S0
HDMI_RX_VPH3V3	AE4		VCCA_3V3_S0
HDMI_RX_DVDD3V3	AE5		

C1738 1uF 6.3V <40mA
C1740 100nF 6.3V
C1741 1uF 6.3V <80mA

RK3588-Socket

radxa

Size	Title:	RADXA ROCK 5T	REV
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RK3588_C(EMMCIO Domain)

U1000C

EMMCIO Domain

Operating Voltage=1.8V

FSPI_D0_M0 / EMMC_D0	/ GPIO2_D0_u	Y33
FSPI_D1_M0 / EMMC_D1	/ GPIO2_D1_u	W33
FSPI_D2_M0 / EMMC_D2	/ GPIO2_D2_u	V32
FSPI_D3_M0 / EMMC_D3	/ GPIO2_D3_u	AA33
UART5_RX_M2 / I2C1_SCL_M3 / EMMC_D4	/ GPIO2_D4_u	Y32
UART5_TX_M2 / I2C1_SDA_M3 / EMMC_D5	/ GPIO2_D5_u	AA32
FSPI_CS0N_M0 / EMMC_D6	/ GPIO2_D6_u	W32
FSPI_CS1N_M0 / EMMC_D7	/ GPIO2_D7_u	V33
FSPI_CLK_M0 / EMMC_CMD	/ GPIO2_A0_u	W34
/ EMMC_CLKOUT	/ GPIO2_A1_d	V34
UART5_CTSN_M1 / I2C2_SDA_M2 / EMMC_DATA_STROBE	/ GPIO2_A2_d	Y34
UART5_RTSN_M1 / I2C2_SCL_M2 / EMMC_RSTN	/ GPIO2_A3_d	AA34
EMMCIO_1V8		V26

RK3588-Socket

Y33 → eMMC_D0 [21]
W33 → eMMC_D1 [21]
V32 → eMMC_D2 [21]
AA33 → eMMC_D3 [21]
Y32 → eMMC_D4 [21]
AA32 → eMMC_D5 [21]
W32 → eMMC_D6 [21]
V33 → eMMC_D7 [21]
W34 → eMMC_CMD [21]
V34 → R1317 0R → eMMC_CLKOUT [21]
Y34 → eMMC_DATA_STROBE [21]
AA34 → eMMC_RSTn [21]

V26 → VCC_1V8_S3

C1300 1uF 4V

C145 NC 16V

RK3588_D(VCCIO2 Domain)

U1000D

VCCIO2 Domain

Operating Voltage=1.8V/3.3V

PWM8_M1 / I2C3_SCL_M4 / PDM1_SDI3_M0 / JTAG_TCK_M1 / UART2_TX_M1 / SDMMC_D0	/ GPIO4_D0_u	AD2
PWM9_M1 / I2C3_SDA_M4 / PDM1_SDI2_M0 / JTAG_TMS_M1 / UART2_RX_M1 / SDMMC_D1	/ GPIO4_D1_u	AD1
/ I2C8_SCL_M0 / PDM1_SDI1_M0 / JTAG_TCK_M0 / UART5_CTSN_M0 / SDMMC_D2	/ GPIO4_D2_u	AF2 SDMMC_D2/JTAG_TCK_M0
PWM10_M1 / I2C8_SDA_M0 / PDM1_SDI0_M0 / JTAG_TMS_M0 / UART5_RTSN_M0 / SDMMC_D3	/ GPIO4_D3_u	AF1 SDMMC_D3/JTAG_TMS_M0
PWM7_IR_M1 / CAN0_TX_M1 / PDM1_CLK1_M0 / MCU_JTAG_TCK_M0 / UART5_RX_M0 / SDMMC_CMD	/ GPIO4_D4_u	AE2 SDMMC_CMD/MCU_JTAG_TCK_M0
TEST_CLKOUT_M0 / CAN0_RX_M1 / PDM1_CLK0_M0 / MCU_JTAG_TMS_M0 / UART5_TX_M0 / SDMMC_CLK	/ GPIO4_D5_d	AE1 SDMMC_CLK/MCU_JTAG_TMS_M0
VCCIO2_1V8		AA7
VCCIO2		Y7

RK3588-Socket

AD2 → SDMMC0_D0 [15]
AD1 → SDMMC0_D1 [15]
AF2 SDMMC_D2/JTAG_TCK_M0 → SDMMC_D2/JTAG_TCK_M0 [15]
AF1 SDMMC_D3/JTAG_TMS_M0 → SDMMC_D3/JTAG_TMS_M0 [15]
AE2 SDMMC_CMD/MCU_JTAG_TCK_M0 → SDMMC_CMD/MCU_JTAG_TCK_M0 [15]
AE1 SDMMC_CLK/MCU_JTAG_TMS_M0 → SDMMC_CLK/MCU_JTAG_TMS_M0 [15]

AA7 → VCC_1V8_S0

C1301 100nF 6.3V

Y7 → VCCIO_SD_S0

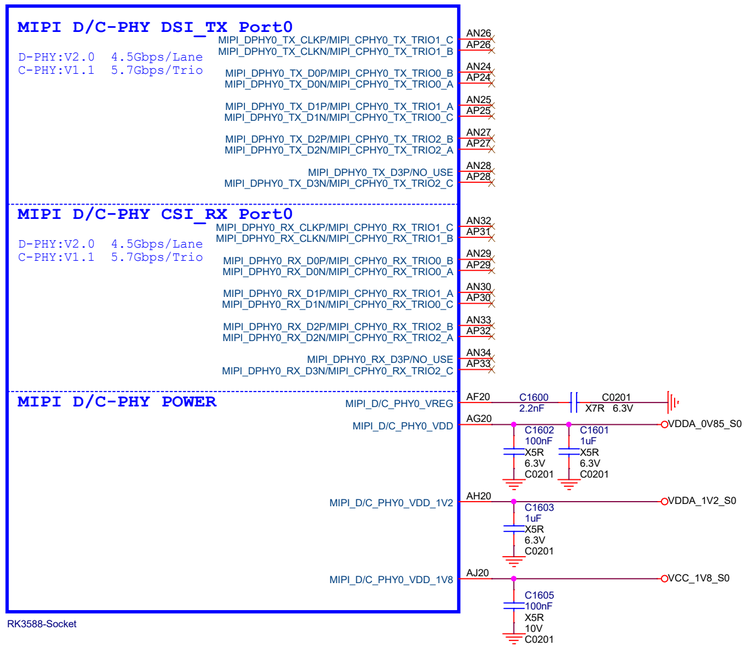
C1302 100nF 6.3V

radxa

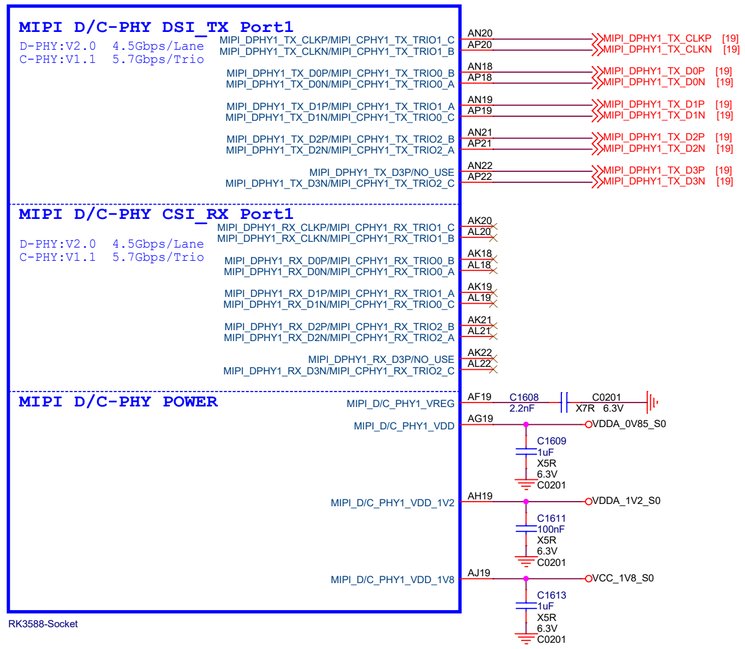
Size A4	Title: RADXA ROCK 5T	REV V1.24
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RK3588_Q/R(MIPI_D/C_PHY0/1)

U1000Q

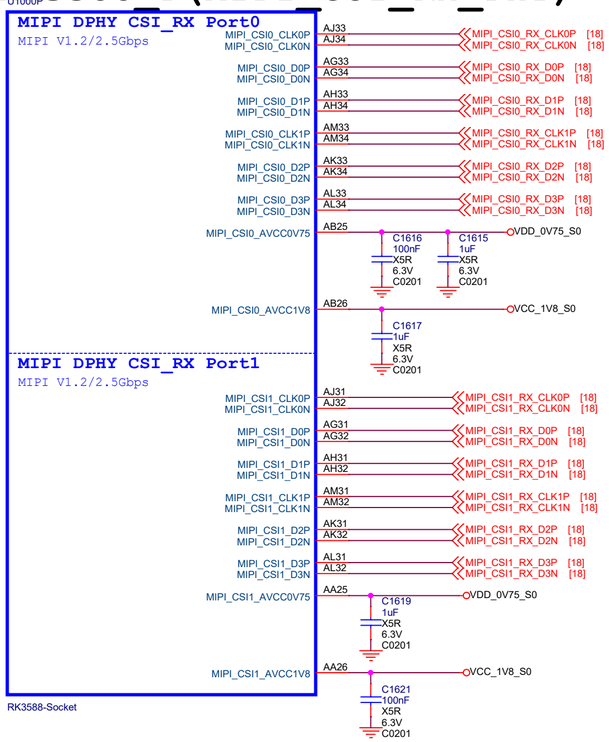


U1000R



RK3588_P(MIPI_CSI_RX_PHY)

U1000P



Size: A2	Title: RADXA ROCK 5T	REV: V1.24
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RK3588_N(PCIE20)

U1000N

PCIE20/SATA30 Mux0

PCIe20x1_2
1Lane(RC)--4(1L2)

SATA30 HOST
Controller0

MUX

input or output

PCIE20_0_REFCLKP / PCIE20_0_REFCLKN — L32 / L33 — PCIE20_0_REFCLKP [25] / PCIE20_0_REFCLKN [25]

PCIE20_0_TXP/SATA30_0_TXP / PCIE20_0_TXN/SATA30_0_TXN — M34 / M33 — PCIE20_0_TXP [25] / PCIE20_0_TXN [25]

PCIE20_0_RXP/SATA30_0_RXP / PCIE20_0_RXN/SATA30_0_RXN — N33 / N34 — PCIE20_0_RXP [25] / PCIE20_0_RXN [25]

PCIE20_SATA30_0_AVDD_0V85 — M28 — VDDA_0V85_S0 — C1810 10uF 4V

PCIE20X1_2-CTL

PCIE20_SATA30_0_AVDD_1V8 — M27 — VCCA_1V8_S0 — C1808 1uF 4V

PCIE20:Gen1/Gen2
SATA30:Gen1/Gen2/Gen3

PCIE20/SATA30 Mux1

PCIe30x1_0
1Lane(RC)--2(1L0)

SATA30 HOST
Controller1

MUX

input or output

PCIE20_1_REFCLKP / PCIE20_1_REFCLKN — H32 / H33 — PCIE20_1_REFCLKP [22] / PCIE20_1_REFCLKN [22]

PCIE20_1_TXP/SATA30_1_TXP / PCIE20_1_TXN/SATA30_1_TXN — K33 / K34 — PCIE20_1_TXP [22] / PCIE20_1_TXN [22]

PCIE20_1_RXP/SATA30_1_RXP / PCIE20_1_RXN/SATA30_1_RXN — J33 / J34 — PCIE20_1_RXP [22] / PCIE20_1_RXN [22]

PCIE20_SATA30_1_AVDD_0V85 — L28 — VDDA_0V85_S0 — C1818 100nF 6.3V

PCIE30X1_0-CTL

PCIE20_SATA30_1_AVDD_1V8 — L27 — VCCA_1V8_S0 — C1816 100nF 6.3V

PCIE20:Gen1/Gen2
SATA30:Gen1/Gen2/Gen3

PCIE20/SATA30/USB30 HOST Mux2

PCIe30x1_1
1Lane(RC)--3(1L1)

SATA30 HOST
Controller2

USB30 HOST
Controller2

MUX

input or output

PCIE20_2_REFCLKP / PCIE20_2_REFCLKN — G31 / G30 — PCIE20_2_REFCLKP [34] / PCIE20_2_REFCLKN [34]

PCIE20_2_TXP/SATA30_2_TXP/USB30_2_SSTXP / PCIE20_2_TXN/SATA30_2_TXN/USB30_2_SSTXN — H30 / H29 — PCIE20_2_TXP [34] / PCIE20_2_TXN [34]

PCIE20_2_RXP/SATA30_2_RXP/USB30_2_SSRXP / PCIE20_2_RXN/SATA30_2_RXN/USB30_2_SSRXN — J31 / J30 — PCIE20_2_RXP [34] / PCIE20_2_RXN [34]

PCIE20_SATA30_USB30_2_AVDD_0V85 — K28 — VDDA_0V85_S0 — C1806 1uF 4V

PCIE20:Gen1/Gen2
USB 30:Gen1
SATA30:Gen1/Gen2/Gen3

PCIE20_SATA30_USB30_2_AVDD_1V8 — K27 — VCCA_1V8_S0 — C1804 1uF 4V

RK3588-Socket

For RJ45

RK3588_O(PCIE30)

U1000O

PCIE30X4

PCIe30X4
4Lane(DM)--0(4L)

PCIe30x1_0
1Lane(RC)--2(1L0)

PCIE20/SATA30 MUX1

PCIE30:
PCIe1.1(2.5Gbps)
PCIe2.1(5Gbps)
PCIe3.0(8Gbps)

PCIe30x2
2Lane(RC)--1(2L)

PCIe30x1_1
1Lane(RC)--3(1L1)

PCIE20/SATA30/USB30 MUX2

PCIE30 PORT0

input

PCIE30_PORT0_REF_CLKP / PCIE30_PORT0_REF_CLKN — E33 / E34 — PCIE30_PORT0_REFCLKP_IN [24] / PCIE30_PORT0_REFCLKN_IN [24]

Lane0

PCIE30_PORT0_TX0P / PCIE30_PORT0_TX0N — D32 / D33 — PCIE30_PORT0_TX0P [24] / PCIE30_PORT0_TX0N [24]

PCIE30_PORT0_RX0P / PCIE30_PORT0_RX0N — G33 / G34 — PCIE30_PORT0_RX0P [24] / PCIE30_PORT0_RX0N [24]

Lane1

PCIE30_PORT0_TX1P / PCIE30_PORT0_TX1N — C33 / C34 — PCIE30_PORT0_TX1P [24] / PCIE30_PORT0_TX1N [24]

PCIE30_PORT0_RX1P / PCIE30_PORT0_RX1N — F32 / F33 — PCIE30_PORT0_RX1P [24] / PCIE30_PORT0_RX1N [24]

PCIE30_PORT0_RESREF — B34 — PCIE30_0_REF — R1801 200R

PCIE30_PORT0_AVDD0V75 — G24 — VDD_0V75_S0 — C1802 1uF 6.3V — C1803 4.7uF 10V

PCIE30_PORT0_AVDD1V8 — G23 — VCCA_1V8_S0 — C1800 1uF 6.3V — C1801 4.7uF 10V

PCIE30 PORT1

input

PCIE30_PORT1_REF_CLKP / PCIE30_PORT1_REF_CLKN — A28 / B28 — PCIE30_PORT1_REFCLKP_IN [24] / PCIE30_PORT1_REFCLKN_IN [24]

Lane0

PCIE30_PORT1_TX0P / PCIE30_PORT1_TX0N — B30 / A30 — PCIE30_PORT1_TX2P [24] / PCIE30_PORT1_TX2N [24]

PCIE30_PORT1_RX0P / PCIE30_PORT1_RX0N — B32 / A32 — PCIE30_PORT1_RX2P [24] / PCIE30_PORT1_RX2N [24]

Lane1

PCIE30_PORT1_TX1P / PCIE30_PORT1_TX1N — C29 / B29 — PCIE30_PORT1_TX3P [24] / PCIE30_PORT1_TX3N [24]

PCIE30_PORT1_RX1P / PCIE30_PORT1_RX1N — C31 / B31 — PCIE30_PORT1_RX3P [24] / PCIE30_PORT1_RX3N [24]

PCIE30_PORT1_RESREF — A33 — PCIE30_1_REF — R1807 200R

PCIE30_PORT1_AVDD0V75 — H24 — VDD_0V75_S0 — C1814 1uF 6.3V — C1815 4.7uF 10V

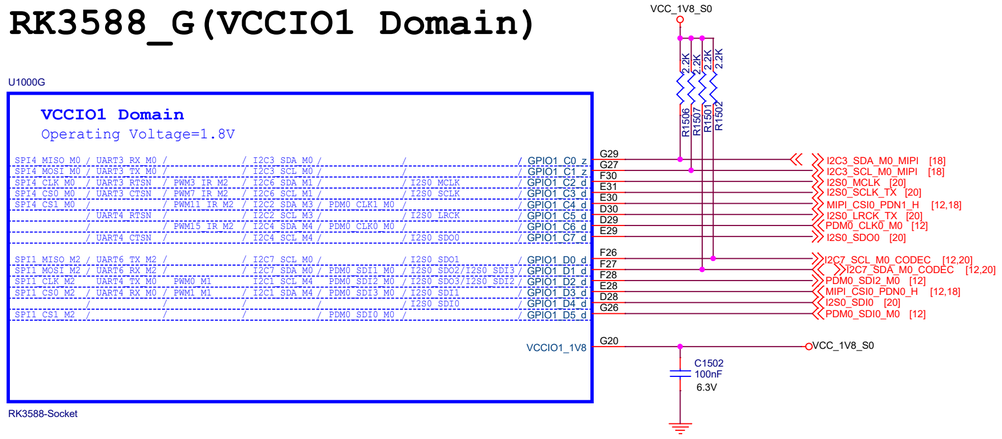
PCIE30_PORT1_AVDD1V8 — H23 — VCCA_1V8_S0 — C1812 100nF 6.3V — C1813 4.7uF 10V

RK3588-Socket

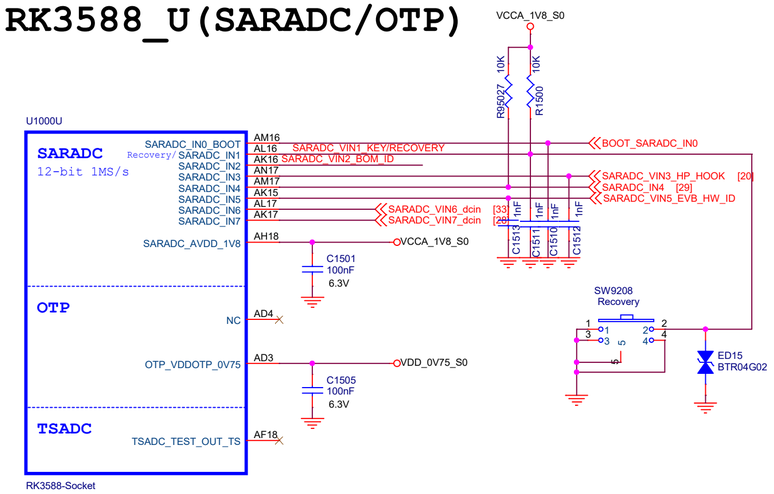
radxa

Size	Title:	REV
Custom	RADXA ROCK 5T	V1.24
	Page Name: 11.RK3588_PCIE30/PCIE20/SATA30	
Date: Wednesday, October 28, 2026	Sheet 11 of 35	

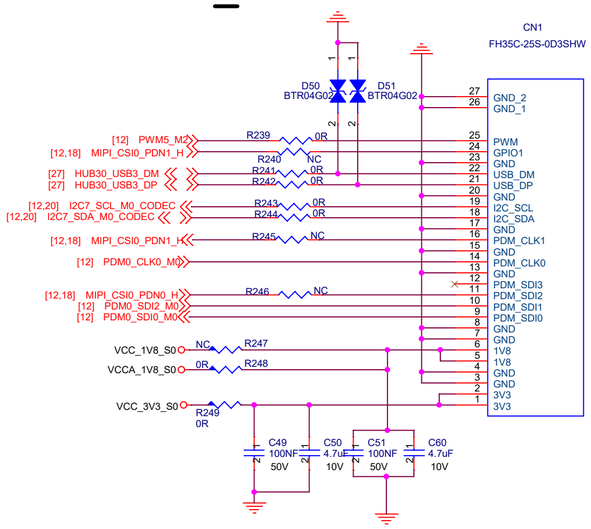
RK3588_G(VCCIO1 Domain)



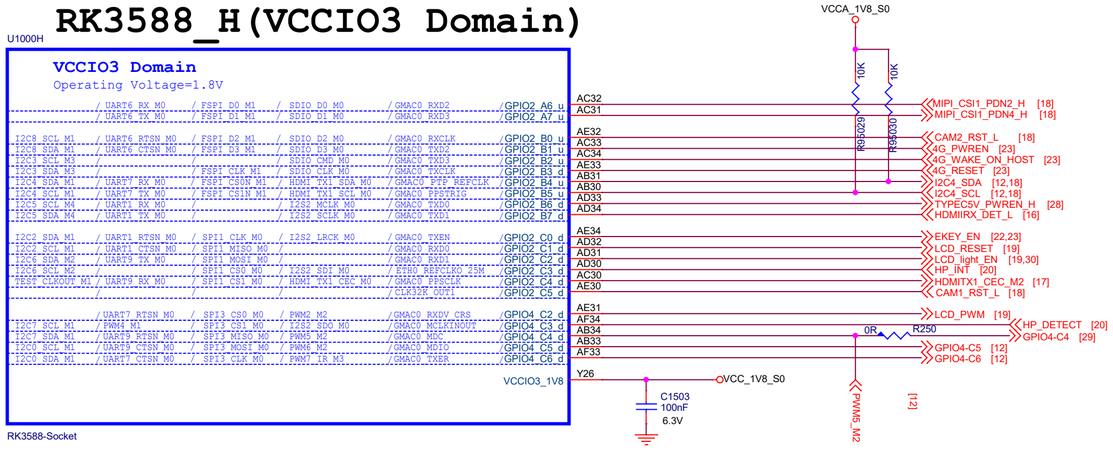
RK3588_U(SARADC/OTP)



PDM_DMIC & USB



RK3588_H(VCCIO3 Domain)



BOOT MODE CONFIG

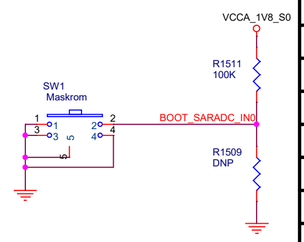


TABLE 1

Item	Rup	Rdown	ADC	VOL	BOOT MODE
LEVEL1	DNP	100K	0	0V	USB (Maskrom mode)
LEVEL2	100K	20K	682	0.3V	SD Card-USB
LEVEL3	100K	51K	1365	0.6V	EMMC-USB
LEVEL4	100K	100K	2047	0.9V	FSPI M0-USB
LEVEL5	100K	200K	2730	1.2V	FSPI M1-USB
LEVEL6	100K	499K	3412	1.5V	FSPI M2-USB
LEVEL7	100K	DNP	4095	1.8V	FSPI_M2-FSPI_M1-FSPI_M0 -EMMC-SD Card-USB

BOARD ID CONFIG

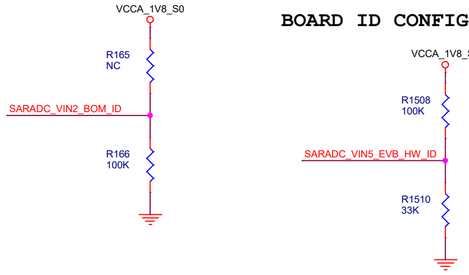


TABLE 2

Item	Rup	Rdown	ADC	VOL	VERSION
LEVEL1	DNP	100K	0	0V	A
LEVEL2	100K	20K	682	0.3V	B
LEVEL3	100K	51K	1365	0.6V	C
LEVEL4	100K	100K	2047	0.9V	D
LEVEL5	100K	200K	2730	1.2V	E
LEVEL6	100K	499K	3412	1.5V	F
LEVEL7	100K	DNP	4095	1.8V	H

radxa

Size	Title:	REV
A2	RADXA ROCK 5T	
	Page Name: 12.RK3588_SARADC_GPIO	V1.24
Date: Wednesday, October 28, 2026	Sheet 12 of 35	

RK3588_J(VCCIO5 Domain)

U1000J

VCCIO5 Domain

Operating Voltage=1.8V/3.3V

PWM10_M0	SPI4_MISO_M1		I2C6_SDA_M4	FSPI_D0_M2	I2S3_MCLK	SDIO_D0_M1	GMAC1_TXD2	GPIO3_A0_u	AA29
AUDDSM_LN	SPI4_MOSI_M1	PWM11_IR_M0	I2C6_SCL_M4	FSPI_D1_M2	I2S3_SCLK	SDIO_D1_M1	GMAC1_TXD3	GPIO3_A1_u	AA30
AUDDSM_LP	SPI4_CLK_M1	UART8_TX_M1		FSPI_D2_M2	I2S3_LRCK	SDIO_D2_M1	GMAC1_RXD2	GPIO3_A2_u	AD27
AUDDSM_RN	SPI4_CS0_M1	UART8_RX_M1		FSPI_D3_M2	I2S3_SDO	SDIO_D3_M1	GMAC1_RXD3	GPIO3_A3_u	AE27
AUDDSM_RP	SPI4_CS1_M1	UART8_RTSN_M1			I2S3_SDI	SDIO_CMD_M1	GMAC1_TXCLK	GPIO3_A4_d	AD28
	MIPI_CAMERA0_CLK_M1	UART8_CTSN_M1	I2C4_SDA_M0	FSPI_CLK_M2		SDIO_CLK_M1	GMAC1_RXCLK	GPIO3_A5_d	AH30
	MIPI_CAMERA1_CLK_M1		I2C4_SCL_M0				ETH1_REFCLKO_25M	GPIO3_A6_d	AH27
PWM8_M0	MIPI_CAMERA2_CLK_M1						GMAC1_RXD0	GPIO3_A7_u	AG29
PWM9_M0	MIPI_CAMERA3_CLK_M1						GMAC1_RXD1	GPIO3_B0_u	AG28
PWM2_M1	MIPI_CAMERA4_CLK_M1	UART2_TX_M2					GMAC1_RXDV_CRS	GPIO3_B1_d	AH29
PWM3_IR_M1		UART2_RX_M2			I2S2_SDI_M1		GMAC1_TXER	GPIO3_B2_d	AE28
		UART2_RTSN			I2S2_SDO_M1		GMAC1_TXD0	GPIO3_B3_u	AC28
		UART2_CTSN			I2S2_MCLK_M1		GMAC1_TXD1	GPIO3_B4_u	AC29
PWM12_M0	CAN1_RX_M0	UART3_TX_M1			I2S2_SCLK_M1		GMAC1_TXEN	GPIO3_B5_u	AD29
PWM13_M0	CAN1_TX_M0	UART3_RX_M1			I2S2_LRCK_M1		GMAC1_MCLKINOUT	GPIO3_B6_d	AE29
			I2C3_SCL_M1	SPI1_MOSI_M1	HDMI_TX1_HPD_M1		GMAC1_PTP_REF_CLK	GPIO3_B7_d	AA28
		UART7_TX_M1	I2C3_SDA_M1	SPI1_MISO_M1			GMAC1_PPSTRIG	GPIO3_C0_d	Y29
	PCIE30X2_BUTTON_RSTN	UART7_RX_M1		SPI1_CLK_M1			GMAC1_PPSCLK	GPIO3_C1_d	Y27
PWM14_M0		UART7_RTSN_M1	I2C8_SCL_M4	SPI1_CS0_M1		MIPI_TE0	GMAC1_MDC	GPIO3_C2_d	Y31
PWM15_IR_M0		UART7_CTSN_M1	I2C8_SDA_M4	SPI1_CS1_M1		MIPI_TE1	GMAC1_MDIO	GPIO3_C3_d	Y30
CAN2_RX_M0	PCIE30X4_CLKREQN_M2	UART5_TX_M1	FSPI_CS0N_M2	SPI3_CS0_M3	HDMI_TX1_CEC_M2		CIF_D8	GPIO3_C4_u	AH26
CAN2_TX_M0	PCIE30X4_WAKEN_M2	UART5_RX_M1	FSPI_CS1N_M2	SPI3_CS1_M3	HDMI_TX1_SDA_M1		CIF_D9	GPIO3_C5_u	AH25
	PCIE30X4_PERSTN_M2			SPI3_MISO_M3	HDMI_TX1_SCL_M1		CIF_D10	GPIO3_C6_u	AG26
	PCIE20X1_2_CLKREQN_M0		I2C5_SCL_M0	SPI3_MOSI_M3	HDMI_TX0_SCL_M2		CIF_D11	GPIO3_C7_u	AJ24
PWM8_M2	PCIE20X1_2_WAKEN_M0	UART4_RX_M1	I2C5_SDA_M0	SPI3_CLK_M3	HDMI_TX0_SDA_M2		CIF_D12	GPIO3_D0_u	AH24
PWM9_M2	PCIE20X1_2_PERSTN_M0	UART4_TX_M1		SPI0_MISO_M3	HDMI_RX_CEC_M1		CIF_D13	GPIO3_D1_d	AG23
	PCIE30X2_CLKREQN_M2	UART9_RTSN_M2	I2C7_SCL_M2	SPI0_MOSI_M3	HDMI_RX_SCL_M1		CIF_D14	GPIO3_D2_d	AG25
PWM10_M2	PCIE30X2_WAKEN_M2	UART9_CTSN_M2	I2C7_SDA_M2	SPI0_CLK_M3	HDMI_RX_SDA_M1		CIF_D15	GPIO3_D3_d	AG24
	PCIE30X2_PERSTN_M2	UART9_RX_M2		SPI0_CS0_M3	HDMI_RX_HPDOUT_M1	HDMI_TX0_HPD_M1	MCU_JTAG_TCK_M1	GPIO3_D4_d	AA27
PWM11_IR_M3	PCIE30X4_BUTTON_RSTN	UART9_TX_M2		SPI0_CS1_M3	DP1_HPDIN_M0		MCU_JTAG_TMS_M1	GPIO3_D5_d	AB28

AA29 FSPI-D0 [21]
AA30 FSPI-D1 [21]
AD27 FSPI-D2 [21]
AE27 FSPI-D3 [21]
AD28 UART8_RTSn_M1_BT [29]
AH30 FSPI-CLK [21]
AH27 4G_DISABLE [23]
AG29 PWM8_M0 [29]
AG28 PCIE_PERST_L [25]
AH29 I2S2_LRCK_RX_M1 [29]
AE28 I2S2_SDI_M1 [29]
AC28 I2S2_SDO_M1 [29]
AC29 CC_INT_L [28]
AD29 I2S2_SCLK_TX_M1 [29]
AE29 I2S2_LRCK_TX_M1 [29]
AA28 SPI1_MOSI_M1 [29]
Y29 SPI1_MISO_M1 [29]
Y27 SPI1_CLK_M1 [29]
Y31 SPI1_CS0_M1 [29]
Y30 SPI1_CS1_M1 [29]
AH26 FSPI-CS0 [21]
AH25 HDMITX1_SDA_M1 [17]
AG26 HDMITX1_SCL_M1 [17]
AJ24 PCIE20_1_2_CLKREQn_M1_L [25]
AH24 PCIE20_1_2_WAKEn_M1_L [25]
AG23 HDMI_RX_CEC [16]
AG25 HDMI_RX_SCL_M1 [16]
AG24 HDMI_RX_SDA_M1 [16]
AA27 HDMIIRX_HPDOUT_H [16]
AB28 BT_WAKE_L [22]

VCCIO5_1V8 W25 VCC_1V8_S0
C1903 100nF 6.3V

VCCIO5 W26 VCC_3V3_S0
C1902 100nF 6.3V

RK3588-Socket

RK3588_K(VCCIO6 Domain)

U1000K

VCCIO6 Domain

Operating Voltage=1.8V/3.3V

	SPI0_MISO_M1	UART9_RTSN_M1			I2S1_MCLK_M0	PCIE30X1_1_CLKREQN_M1	BT1120_D0	CIF_D0	GPIO4_A0_d	AK30
	SPI0_MOSI_M1	UART9_CTSN_M1			I2S1_SCLK_M0	PCIE30X1_1_WAKEN_M1	BT1120_D1	CIF_D1	GPIO4_A1_d	AL30
	SPI0_CLK_M1				I2S1_LRCK_M0	PCIE30X1_1_PERSTN_M1	BT1120_D2	CIF_D2	GPIO4_A2_d	AM29
		UART0_TX_M2				PCIE30X1_0_CLKREQN_M1	BT1120_D3	CIF_D3	GPIO4_A3_d	AL29
	SPI2_MISO_M1	UART0_RX_M2	I2C3_SCL_M2			PCIE30X1_0_WAKEN_M1	BT1120_D4	CIF_D4	GPIO4_A4_d	AL28
	SPI2_MOSI_M1	UART3_TX_M2	I2C3_SDA_M2		I2S1_SDI0_M0	PCIE30X1_0_PERSTN_M1	BT1120_D5	CIF_D5	GPIO4_A5_d	AK27
	SPI2_CLK_M1	UART3_RX_M2	I2C5_SCL_M2		I2S1_SDI1_M0	PCIE30X2_CLKREQN_M1	BT1120_D6	CIF_D6	GPIO4_A6_d	AL27
	SPI2_CS0_M1		I2C5_SDA_M2		I2S1_SDI2_M0	PCIE30X2_WAKEN_M1	BT1120_D7	CIF_D7	GPIO4_A7_d	AM27
	SPI2_CS1_M1	UART8_TX_M0	I2C6_SDA_M3		I2S1_SDI3_M0	PCIE30X2_PERSTN_M1	BT1120_CLKOUT	CIF_CLKIN	GPIO4_B0_d	AK26
SATA2_ACT_LED_M0	SPDIF1_TX_M1	SPI0_CS1_M1	UART8_RX_M0	I2C6_SCL_M3	I2S1_SDO0_M0	PCIE30X1_0_BUTTON_RSTN		MIPI_CAMERA0_CLK_M0	GPIO4_B1_u	AL24
CAN1_RX_M1	PWM14_M1	SPI0_CS0_M1	UART8_RTSN_M0	I2C7_SCL_M3	I2S1_SDO1_M0	PCIE30X1_1_BUTTON_RSTN	BT1120_D8	CIF_HREF	GPIO4_B2_u	AK25
CAN1_TX_M1	PWM15_IR_M1		UART8_CTSN_M0	I2C7_SDA_M3	I2S1_SDO2_M0	PCIE20X1_2_BUTTON_RSTN	BT1120_D9	CIF_VSYNC	GPIO4_B3_u	AM25
SPDIF0_TX_M1	PWM11_IR_M1	DP0_HPDIN_M0	UART9_TX_M1		I2S1_SDO3_M0	PCIE30X4_CLKREQN_M1	BT1120_D10	CIF_CLKOUT	GPIO4_B4_u	AL26
SATA1_ACT_LED_M0	PWM12_M1	SPI3_MISO_M1	UART9_RX_M1		HDMI_RX_CEC_M0	PCIE30X4_WAKEN_M1	BT1120_D11		GPIO4_B5_d	AJ26
SATA0_ACT_LED_M0	PWM13_M1	SPI3_MOSI_M1		I2C5_SCL_M1	HDMI_RX_HPDOUT_M0	PCIE30X4_PERSTN_M1	BT1120_D12		GPIO4_B6_d	AJ27
		SPI3_CLK_M1		I2C5_SDA_M1	HDMI_TX0_SCL_M0	PCIE20X1_2_CLKREQN_M1	BT1120_D13		GPIO4_B7_u	AJ28
		SPI3_CS0_M1		I2C8_SCL_M3	HDMI_TX0_SDA_M0	PCIE20X1_2_WAKEN_M1	BT1120_D14		GPIO4_C0_u	AJ25
SPDIF1_TX_M2	PWM6_M1	SPI3_CS1_M1		I2C8_SDA_M3	HDMI_TX0_CEC_M0	PCIE20X1_2_PERSTN_M1	BT1120_D15		GPIO4_C1_d	AK24

VCC_3V3_S0
R95032 2.2K R95033 2.2K

AK30 PCIE30X1_1_CLKREQN_M1 [34]
AL30 PCIE30X1_1_WAKEN_M1 [34]
AM29 PCIE30X1_1_PERSTN_M1 [34]
AL29 PCIE30x1_0_CLKREQn_M1_L [22]
AL28 PCIE30x1_0_WAKEn_M1_L [22]
AK27 PCIE30x1_0_PERSTn_M1_L [22]
AL27 PCIE30x2_CLKREQn_M1 [24]
AM27 PCIE30x2_WAKEn_M1 [24]
AK26 PCIE30x2_PERSTn_M1 [24]
AL24 HDMI0_TX_ON_H [17]
AK25 I2C7_SCL_M3 [29]
AM25 I2C7_SDA_M3 [29]
AL26 PCIE30X4_CLKREQn_M1_L [24]
AJ26 PCIE30X4_WAKEn_M1_L [24]
AJ27 PCIE30X4_PERSTn_M1_L [24]
AJ28 HDMITX0_SCL_M0 [17]
AJ25 HDMITX0_SDA_M0 [17]
AK24 HDMITX0_CEC_M0 [17]

VCCIO6_1V8 AC25 VCC_1V8_S0
C1909 100nF 6.3V

VCCIO6 AC26 VCC_3V3_S0
C1908 100nF 6.3V

RK3588-Socket

RK3588_I(VCCIO4 Domain)

U1000I

VCCIO4 Domain

Operating Voltage=1.8V/3.3V

	SPI4_MISO_M2	PCIE30X1_1_CLKREQN_M2	DP0_HPDIN_M2	I2C2_SDA_M4	UART6_RX_M1	GPIO1_A0_d	A24	HUB_RST_1V8 [27]
SATA1_ACT_LED_M1	SPI4_MOSI_M2	PCIE30X1_1_WAKEN_M2	DP1_HPDIN_M2	I2C2_SCL_M4	UART6_TX_M1	GPIO1_A1_d	A25	USB_HOST_PWREN_H [26]
PWM0_M2	SPI4_CLK_M2		VOP_POST_EMPTY	I2C4_SDA_M3	UART6_RTSN_M1	GPIO1_A2_d	A26	GPIO1_A2 [29]
PWM1_M2	SPI4_CS0_M2		HDMI_TX1_SDA_M2	I2C4_SCL_M3	UART6_CTSN_M1	GPIO1_A3_d	A27	GPIO1_A3 [29]
	SPI2_MISO_M0		HDMI_TX1_SCL_M2			GPIO1_A4_d	B25	PCIE30x4_PWREN_H [24]
	SPI2_MOSI_M0		HDMI_TX0_HPD_M0			GPIO1_A5_d	B26	HDMITX0_HPDIN_M1 [17]
	SPI2_CLK_M0		HDMI_TX1_HPD_M0			GPIO1_A6_d	C24	HDMITX1_HPDIN_M1 [17]
PWM3_IR_M3	SPI2_CS0_M0	PCIE30X1_1_PERSTN_M2		PDM1_SDI0_M1		GPIO1_A7_u	C25	GPIO1_A7 [29]
	SPI2_CS1_M0	PCIE30X4_CLKREQN_M3		PDM1_SDI1_M1		GPIO1_B0_u	C27	W-DISABLE [22]
	SPI0_MISO_M2	PCIE30X4_WAKEN_M3		PDM1_SDI2_M1		GPIO1_B1_d	D25	SPI0-MISO [29]
	SPI0_MOSI_M2	PCIE30X4_PERSTN_M3		PDM1_SDI3_M1	UART4_RX_M2	GPIO1_B2_d	D26	SPI0-MOSI [29]
SATA0_ACT_LED_M1	SPI0_CLK_M2	PCIE30X1_0_WAKEN_M2		PDM1_CLK1_M1	UART4_TX_M2	GPIO1_B3_d	D27	SPI0-CLK [29]
	SPI0_CS0_M2	PCIE30X1_0_PERSTN_M2		PDM1_CLK0_M1	UART7_RX_M2	GPIO1_B4_u	E24	SPI0-CS0 [29]
	SPI0_CS1_M2	PCIE30X1_0_CLKREQN_M2			UART7_TX_M2	GPIO1_B5_u	E25	SPI0-CS1 [29]
HDMI_RX_HPDOUT_M2	SPDIF0_TX_M0	PCIE30X2_WAKEN_M3	MIPI_CAMERA1_CLK_M0	I2C5_SCL_M3	UART1_TX_M1	GPIO1_B6_u	E26	MIPI_CAM1_CLKOUT [18]
SATA2_ACT_LED_M1 HDMI_RX_CEC_M2	PWM13_M2 SPDIF1_TX_M0	PCIE30X2_PERSTN_M3	MIPI_CAMERA2_CLK_M0	I2C5_SDA_M3	UART1_RX_M1	GPIO1_B7_u	E27	MIPI_CAM2_CLKOUT [18]
HDMI_RX_SCL_M2	PWM14_M2		MIPI_CAMERA3_CLK_M0	I2C8_SCL_M2	UART1_RTSN_M1	GPIO1_D6_u	F24	MIPI_CAM3_CLKOUT [18]
HDMI_RX_SDA_M2	PWM15_IR_M3	PCIE30X2_CLKREQN_M3	MIPI_CAMERA4_CLK_M0	I2C8_SDA_M2	UART1_CTSN_M1	GPIO1_D7_u	F25	MIPI_CAM4_CLKOUT [18]

VCCIO4_1V8 H20 VCC_1V8_S0
C1907 100nF 6.3V

VCCIO4 H21

RK3588-Socket

Size	Title:	RADXA ROCK 5T	REV
A2	Page Name:	13.RK3588 GPIO	V1.24
Date:	Wednesday, October 28, 2026	Sheet 13 of 35	

LPDDR5

U3902A

LPDDR5_2X32_315Pin

MT62F1G32D4DS-031 WT 4GB

U3902B

LPDDR5_2X32_315Pin

U3902C

LPDDR5_2X32_315Pin

FB2 120R-100M

C106 100nF 6.3V

R3900 240R 1% R0201

U3901A

LPDDR5_2X32_315Pin

U3901B

LPDDR5_2X32_315Pin

U3901C

LPDDR5_2X32_315Pin

R3901 240R 1% R0201

U28 SY8089AAAC

L43 2.2uH

C101 10uF 10V

R211 56K

C105 10nF 25V

RC for sequence: VDD2H>=VDD2L

C102 100pF 50V

R209 100K

C103 10uF 4V

C104 100nF 16V

R215 200K

2.10A 0.04ohm

FB=0.6V
SY8089=2A,3A peak
Default:0.8V
TS=1.2ms

Power Sequence: VDD1>VDD2H>=VDD2L>VDDQ-200mV
VDD1: 1.70V--1.95V,Power for core1.
VDD2H:1.01V--1.12V,Power for core2 and Input Buffer.
VDD2L:0.87V--0.97V,Power for core2 and Input Buffer.
VDDQ: 0.47V--0.57V,Power for I/O Buffer.

Size	Title:	RADXA ROCK 5T	REV
A2	Page Name:	14.LPDDR5_315P_2X32bit	V1.24
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TF CARD

SDMMC0_D0 [9]
SDMMC0_D1 [9]
SDMMC_D2/JTAG_TCK_M0 [9]
SDMMC_D3/JTAG_TMS_M0 [9]
SDMMC_CMD/MCU_JTAG_TCK_M0 [9]
SDMMC_CLK/MCU_JTAG_TMS_M0 [9]
SDMMC_DET_L [6,15]

SDMMC_DET_L — R346 100K — VCC1V8_PMU_DDR_S3

VCC_3V3_S3 — R13 FB120R

C546 10uF 10V

C547 100nF 10V

SDMMC_D2/JTAG_TCK_M0
SDMMC_D3/JTAG_TMS_M0
SDMMC_CMD/MCU_JTAG_TCK_M0
SDMMC_CLK/MCU_JTAG_TMS_M0 — R12 0R
SDMMC0_D0
SDMMC0_D1

C185 NC

D9 BTR04G02
D8 BTR04G02
D7 BTR04G02
D6 BTR04G02
D5 BTR04G02
D4 BTR04G02
D11 BTR04G02

J4
SMD_TF-008

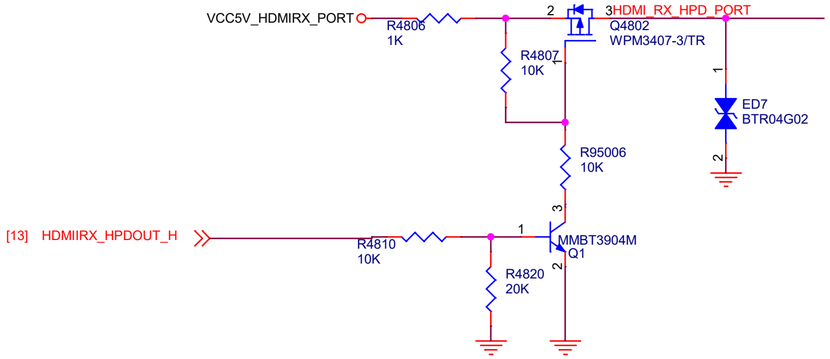
1	DATA2
2	CD/DATA3
3	CMD
4	VDD
5	CLK
6	VSS
7	DATA0
8	DATA1
9	D1
10	D2

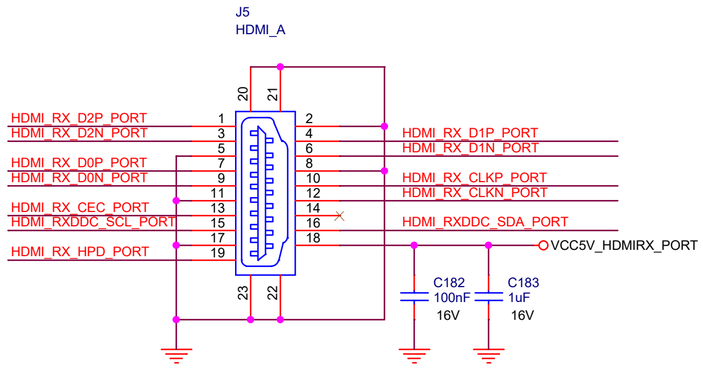
C G H D
G4 G7 G8 G3
G1 G5 G6 G2
A E F B

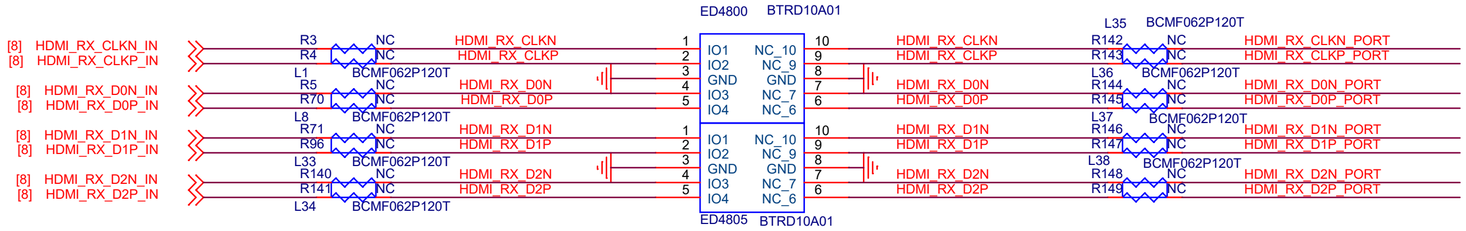
VCC_3V3_S3
R9 10K
[6,15] SDMMC_DET_L
MMBT3904M Q5
R76 22R
R77 10K

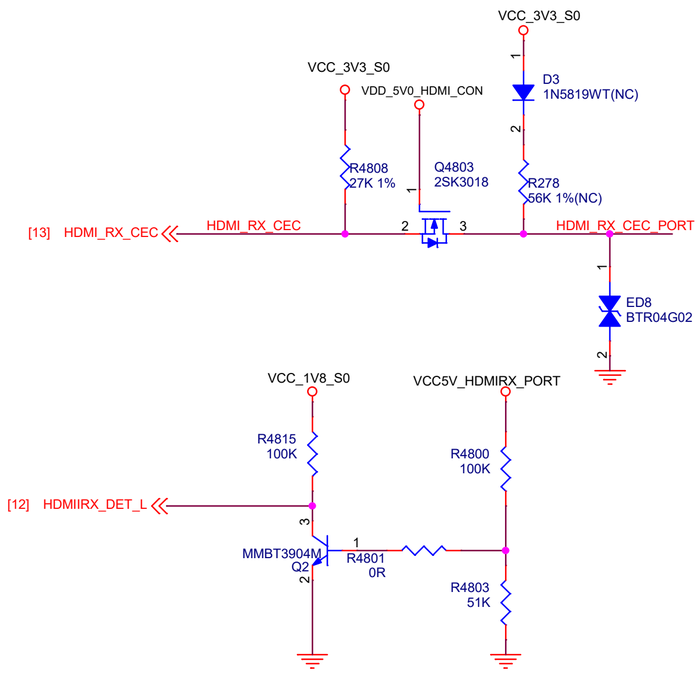
Size	Title:	RADXA ROCK 5T	REV
A4	Page Name:	15.Flash-TF Card	V1.24
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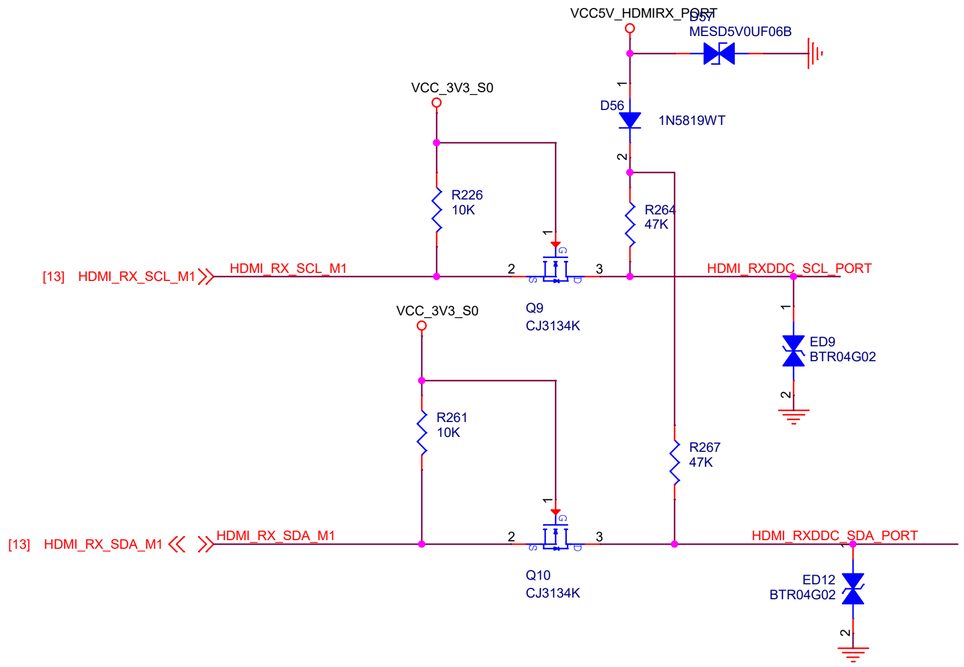
HDMI2.0 RX







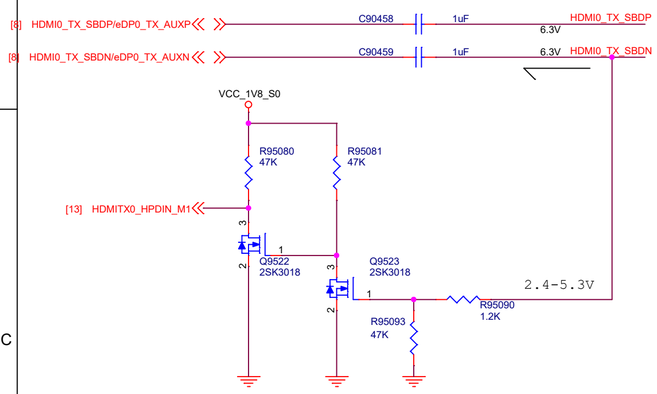




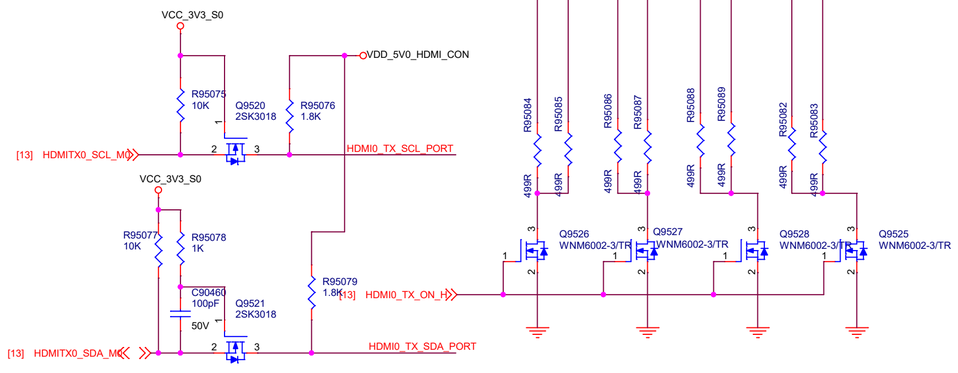
Size	Title: RADXA ROCK 5T		REV
Custom	Page Name: 16.VI-HDMI2.0 RX		V1.24
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HDMI 1

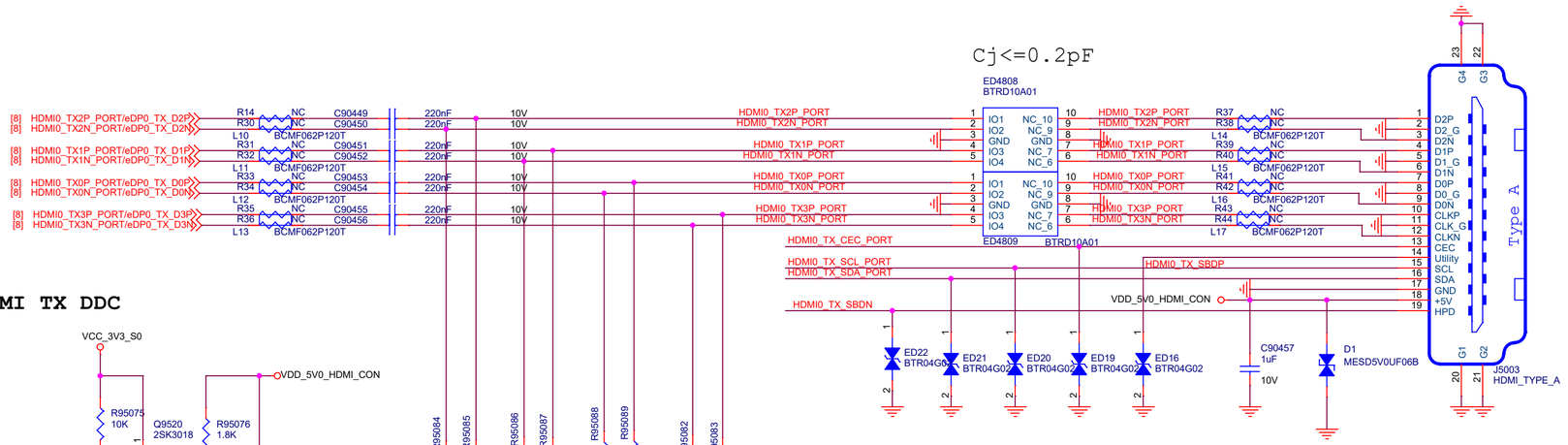
HDMI TX eARC



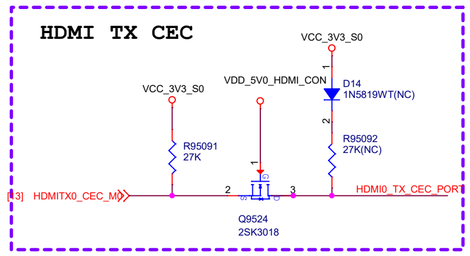
HDMI TX DDC



Cj<=0.2pF

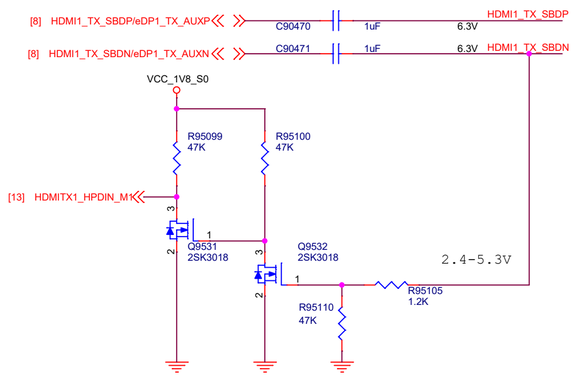


HDMI TX CEC

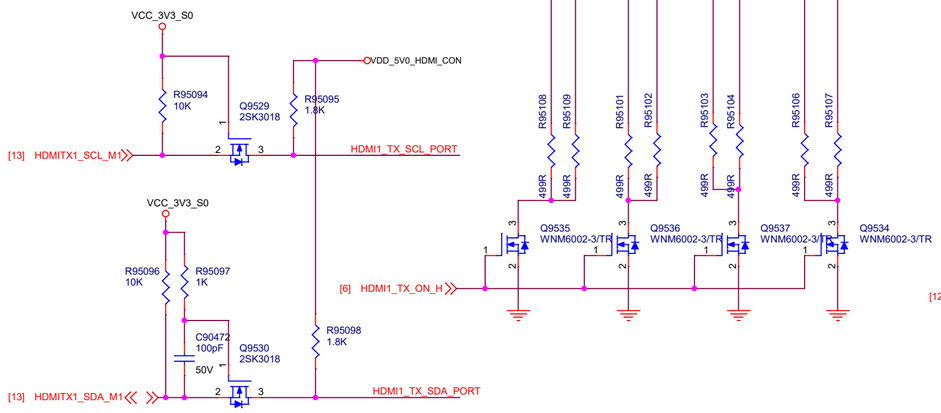


HDMI 2

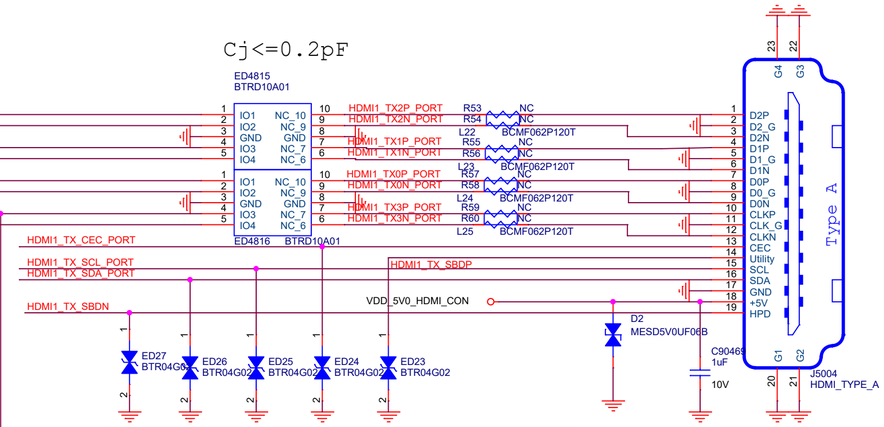
HDMI TX eARC



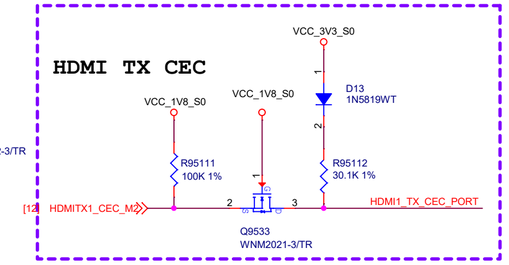
HDMI TX DDC

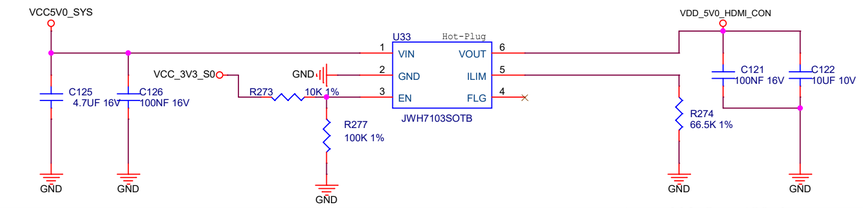


Cj<=0.2pF



HDMI TX CEC

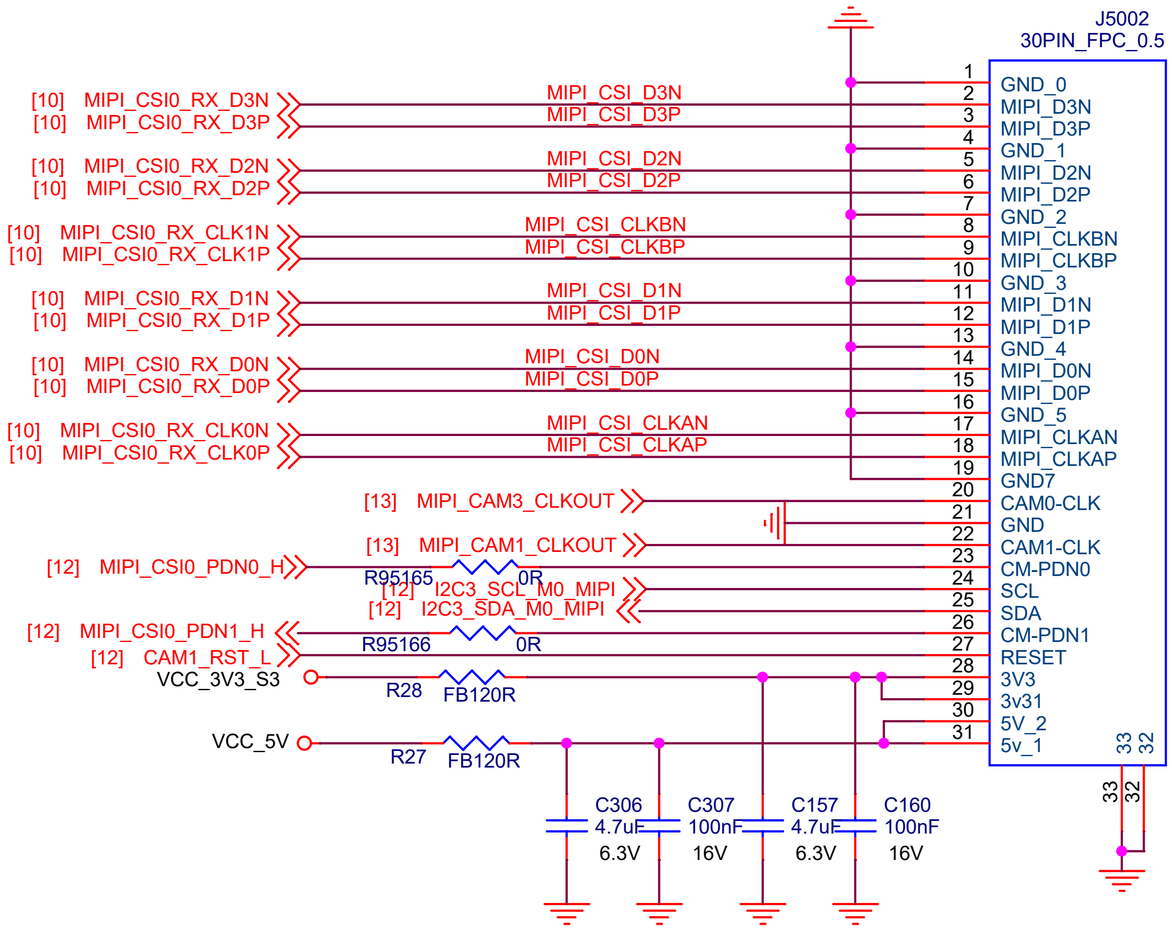




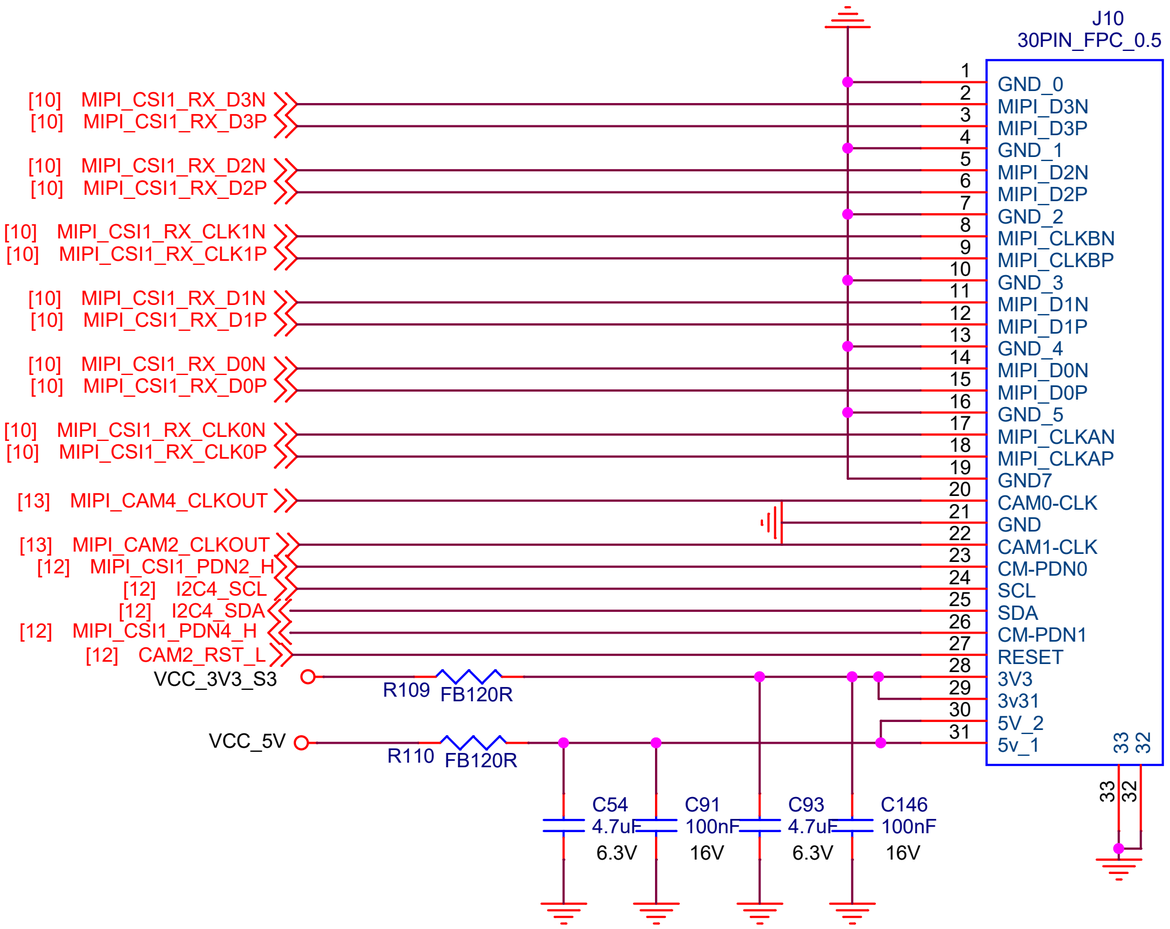
Limit 333.7 - 475.9 mA

Size A2	Title: RADXA ROCK 5T		REV V1.24
	Page Name: 17.VO-HDMI2.1 TX		
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CAM1

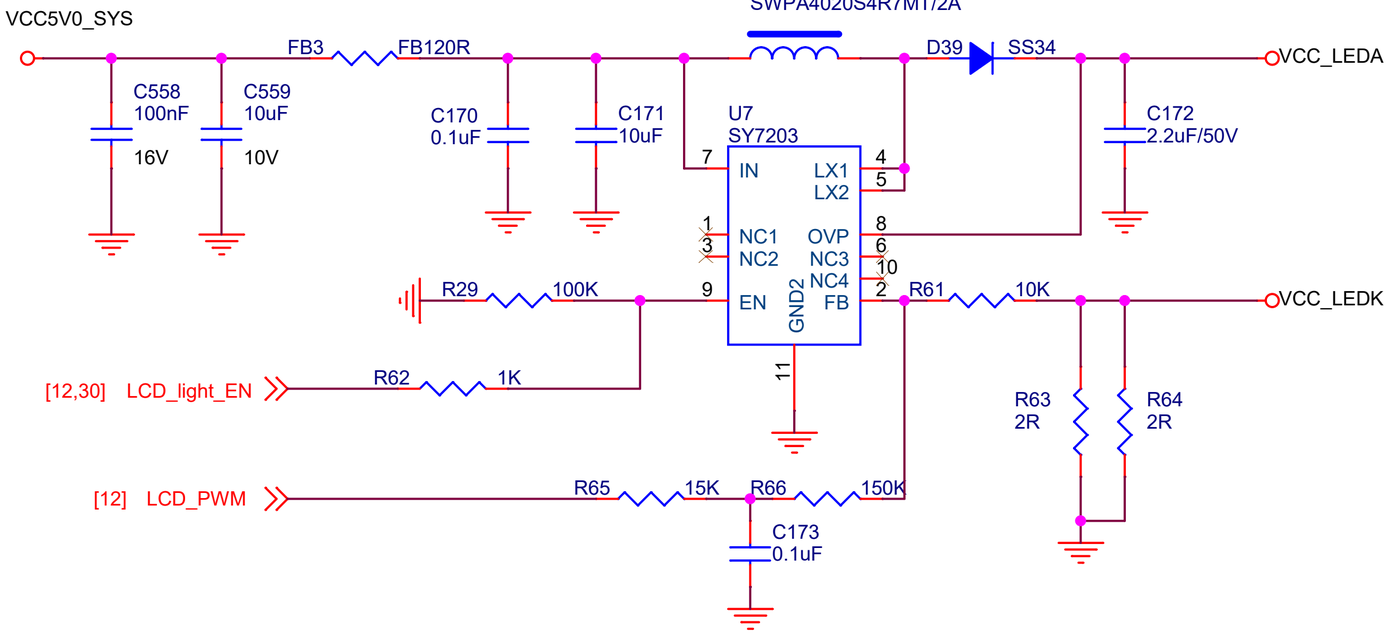


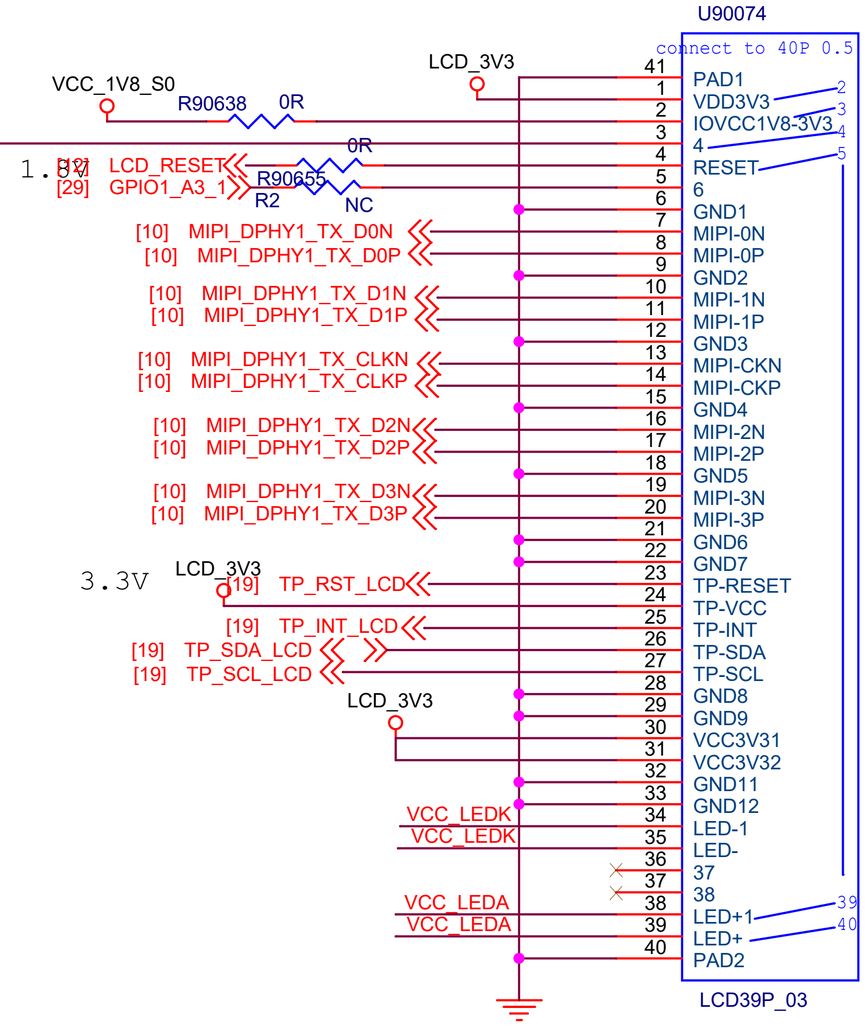
CAM2



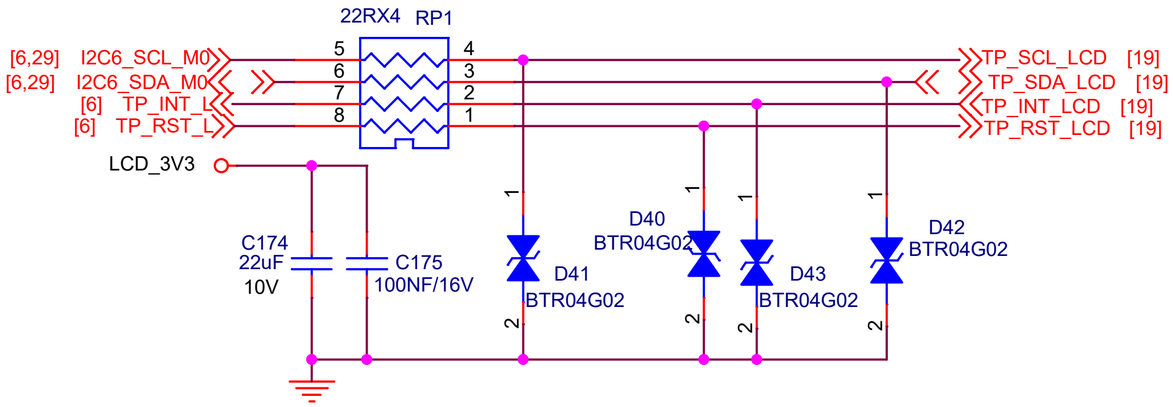
Size A4	Title: RADXA ROCK 5T	REV V1.24
	Page Name: 18.Camera_MIPI-CSI	
	Date: Wednesday, October 28, 2026	Sheet 18 of 35

MIPI DPHY1 TX





LCD_TP



Size A4	Title: RADXA ROCK 5T	REV V1.24
	Page Name: 19.VO-LCM_MIPI	
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CODEC ES8316

AVCC_1V8_CODEC_S0
R396 10K
[12] I2C7_SDA_M0_CODEC
[12] I2C7_SCL_M0_CODEC
C560 100nF 16V
C561 100nF 16V
C562 10uF 10V
C563 4.7uF 10V
MIC_IN2P [20]
MICBIAS1
U18
E-PAD CDATA CE LIN1 RIN1 LIN2 RIN2 MICBIAS VMID
33 32 31 30 29 28 27 26 25
1 CCLK
2 MCLK
3 DVDD
4 PVDD
5 DGND
6 SCLK
7 DSDIN
8 DLRCK
ADCVREF 24
AGND 23
AVDD 22
DACVREF 21
LOUT 20
ROUT 19
CPGNDREF 18
CPGND 17
ASDOUT GPIO1 GPIO2 GPIO3 CPVSSP CPVDD CPTOP CPBOT
9 10 11 12 13 14 15 16
ES8316
C564 10uF
C565 10uF
HPOL [20]
HPOR [20]
VCC_3V3_S0
C573 100nF 16V
C574 4.7uF 10V
VCC_1V8_S0
AVCC_1V8_CODEC_S0
R95074 0R
C571 100nF 16V
C572 10uF 10V
[12] I2S0_MCLK
[12] I2S0_SCLK_TX
[12] I2S0_SDO0
[12] I2S0_LRCK_TX
[12] I2S0_SDI0
VCC_1V8_S0
R90337 330K
R95031 10K
C568 10uF 10V
AVCC_1V8_CODEC_S0
[12] HP_DETECT
[12] HP_INT
0R R90341
NC R90340
C569 10uF 10V
C570 100nF 16V

J15
PHONEJACK
FB120R R20
FB120R R21
FB120R R19
FB120R R18
10K R90338
HPOL [20]
HPOR [20]
MIC_IN2P [20]
0.1uF/10V C7320
2K2 R7313
MICBIAS1
MIC_IN2P
C90084 10nF
10K R7314
SARADC_VIN3_HP_HOOK [12]
R7315 10K
C7322 10nF
ED31 BTR04G02
ED29 BTR04G02
ED30 BTR04G02
ED28 BTR04G02
C150 82PF 16V
C152 82PF 16V

Size A4	Title: RADXA ROCK 5T	REV V1.24
	Page Name: 20.Audio Codec	
Date: Wednesday, October 28, 2026	Sheet 20 of 35	

eMMC FLASH

Default:7.2mA

U13B

EMMC_B153_2L

U13A

EMMC_B153_2L

U4300
XT25F128BWOI/HGA

J3
2P_2.0

MMBT3904M
Q7

ED6
BTR04G02

Size A4	Title: RADXA ROCK 5T		REV V1.24
	Page Name: 21.SPI/eMMC Flash		
Date: Wednesday, October 28, 2026	Sheet 21 of 35		

PCIE WIFI

VCC5V0_SYS

U26
SY8113B
VIN
GND
EN
LX
BS
FB/OUT

C225 22uF 16V
C73 100nF 25V
R130 10K
C229 100nF 16V
C3 100nF 25V
L30 4.7uH
C111 22uF 10V
C32 100nF 16V
C226 22pF 50V
R128 232K
R134 49.9K
R137 FB120R
C232 22uF 10V
C231 22uF 10V
C230 100nF 25V
C184 10nF 25V
VCC3V3_WF

[12,23] EKEY_EN

U17B
AW-XM548NF

3P3V_4 4
3P3V_5 5
3P3V_72 72
3P3V_73 73

7 RESERVED_7
16 RESERVED_16
18 RESERVED_18
19 RESERVED_19
21 RESERVED_21
22 RESERVED_22
24 RESERVED_24
25 RESERVED_25
66 RESERVED_66
67 RESERVED_67

6 GND_6
17 GND_17
20 GND_20
23 GND_23
26 GND_26
32 GND_32
35 GND_35
38 GND_38
41 GND_41
62 GND_62
68 GND_68
71 GND_71
74 GND_74
75 GND_75
76 GND_76

GND 77
GND 78
GND 79
GND 80
GND 81
GND 82
GND 83
GND 84
GND 85
GND 86
GND 87
GND 88
GND 89 [13]
GND 90 [13]
GND 91 [13]
GND 92
GND 93
GND 94
GND 95
GND 96
GND 97
GND 98
GND 99
GND 100
GND 101
GND 102
GND 103
GND 104
GND 105
GND 106
GND 107
GND 108

2 OF 2
IC

U17A
AW-CM548NF /8852

1 UIM_POWER_SRC_GPIO1
2 UIM_POWER_SNK
3 UIM_SWP
8 ALERT_N
9 I2C CLK
10 I2C DATA
11 COEX1
12 COEX2
13 COEX3
14 SYSCLK_GNSS0
15 TX_BLANKING_GNSS1
27 SUSCLK_32KHZ
28 W_DISABLE1_N
29 PEWAKE_N
30 CLKREQ_N
31 PERST_N
33 REFCLKN0
34 REFCLKP0
36 PETN0
37 PETP0
39 PERN0
40 PERP0
65 LED1_N

VEN_DEF_42 42
VEN_DEF_43 43
VEN_DEF_44 44
SDIO_RESET_N 45
SDIO_WAKE_N 46
SDIO_DATA3 47
SDIO_DATA2 48
SDIO_DATA1 49
SDIO_DATA0 50
SDIO_CMD 51
SDIO_CLK 52
UART_WAKE_N 53
UART_CTS 54
UART_TX 55
UART_RX 56
UART_RTS 57
PCMFR1 58
PCMIN 59
PCMOUT 60
PCMCLK 61
W_DISABLE2_N 63
USB_D_N 69
USB_D_P 70
LED2_N 64

1 OF 2
IC

VCC3V3_WF
R107 10K
R106 NC
R108 0R
[29] 32KOUT_WIFI
[22] W-DISABLE_3V3
[13] PCIE30x1_0_WAKEn_M1_L
PCIE30x1_0_CLKREQn_M1_L
PCIE30x1_0_PERSTn_M1_L
[11] PCIE20_1_REFCLKN
[11] PCIE20_1_REFCLKP
[11] PCIE20_1_RXN
[11] PCIE20_1_RXP
[11] PCIE20_1_TXN
[11] PCIE20_1_TXP
C202 100nF 10V
C203 100nF

BT_WAKE_L [13]
USB3_DM [27]
USB3_DP [27]
R127 0R
R129 0R
R131 0R

VCC3V3_WF
VCC_1V8_S0
Q6 2SK3018
R78 10K
R79 NC
[22] W-DISABLE_3V3
W-DISABLE [13]
NC
R81

Size	Title: RADXA ROCK 5T	REV
A4	Page Name: 22.PCIE_WIFI	V1.24
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KEY B

U12
M2-KEY-B

PCIE M.2 NGFF
B-KEY SOCKET

	1	CONFIG_3			
	3	GND13			
	5	GND14			
[27] USB4_Dp	7	USB_D+			
[27] USB4_DM	9	USB_D-			
	11	GND20			
	2	VBAT1			3V3_4G
	4	VBAT2			
	6	FULL_CARD_PWR_OFF#			4G_PWREN [33]
	8	W_DISABLE1#			4G_DISABLE [33]
	10	LED1#			
1.8v	21	CONFIG_0			
[12] 4G_WAKE_ON_HOST	23	WoWWAN#			
	25	DPR			
	27	GND9			
	29	U3_TX-			
	31	U3_TX+			
	33	GND8			
	35	U3_RX-			
	37	U3_RX+			
	39	GND7			
	41	PERn0/SATA-B+			
	43	PERp0/SATA-B-			
	45	GND6			
	47	PETn0/SATA-A-			
	49	PETp0/SATA-A+			
	51	GND5			
	53	REFCLKN			
	55	REFCLKP			
	57	GND4			
	59	ANTCTL0			
	61	ANTCTL1			
	63	LAA_TX_EN			
	65	WL_TX_EN			
1.8v 4G_RESET [12]	67	RESET#			
	69	CONFIG_1			
	71	GND3			
	73	GND2			
	75	CONFIG_2			
	20	I2S_CLK			
	22	I2S_TXD			
	24	I2S_RXD			
	26	W_DISABLE2#			W_DISABLE2 [6]
	28	I2S_WA			
	30	SIM1_RESET			SIM1_RESET
	32	SIM1_CLK			SIM1_CLK
	34	SIM1_DATA			SIM1_DATA
	36	SIM1_PWR			SIM1_PWR
	38	I2C_SCL			
	40	SIM2_DET			
	42	SIM2_DATA			
	44	SIM2_CLK			
	46	SIM2_RESET			
	48	SIM2_PWR			
	50	PERST#			
	52	CLKREQ#			
	54	PEWAKE#			
	56	RFFE_SCLK			
	58	RFFE_SDATA			
	60	I2S_MCLK			
	62	COEX2			
	64	COEX1			
	66	SIM1_DET			SIM1_DET
	68	I2C_SDA			
	70	VBAT3			
	72	VBAT4			
	74	VBAT5			
	80				
	79				
	hole				
	GND16				
	GND15				

R104 0R
R105 0R

C189 10uF 10V 3V3_4G

SIM1_PWR
R84 15K

SIM1_CLK	R87	0R	SIM-CLK	U14 CLK 3
SIM1_DATA	R90	0R	SIM-DATA	IO 7
SIM1_RESET	R91	0R	SIM-RESET	RST 2
SIM1_PWR	R92	0R	SIM-PWR	VPP 6
SIM1_DET	R93	0R	SIM-DET	VCC 1
				GND 5
				SW SW

U14 SMN-305-ARP7: CLK 3, IO 7, RST 2, VPP 6, VCC 1, GND 5, SW SW; 13, 12, 11

ED4 ED5 ED10

C188 4.7uF/10V

VCC5V0_SYS

C209 22uF 10V
C210 100nF 25V
R136 NC
[12,22] EKEY_EN
>8V---> ON
VENH min=1.5V
R132 1K
C215 100nF 10V

U23
SY8113B/SM8103ADC
VIN 5, GND 2, EN 4, LX 6, BS 1, FB/OUT 3

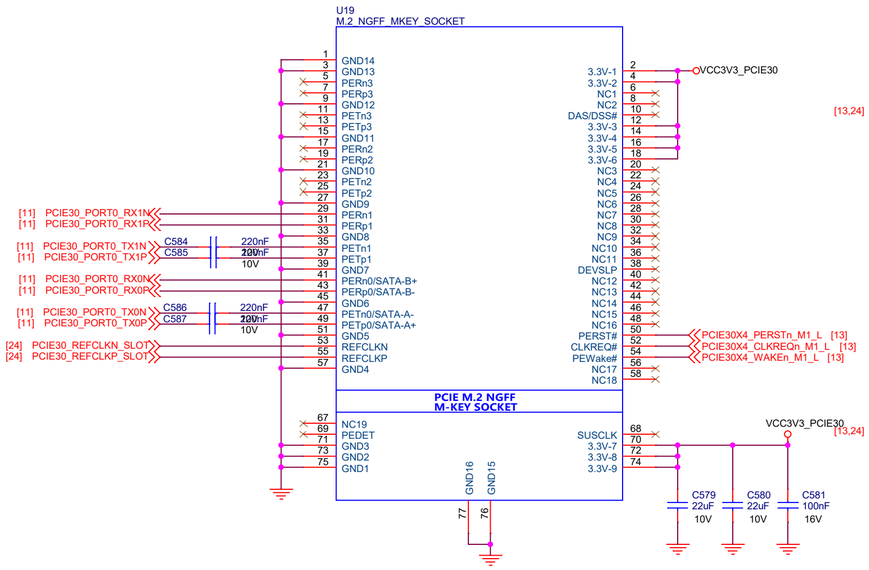
C208 100nF 25V
L26 RXWHJ3015-2R2MT
FB=0.6V

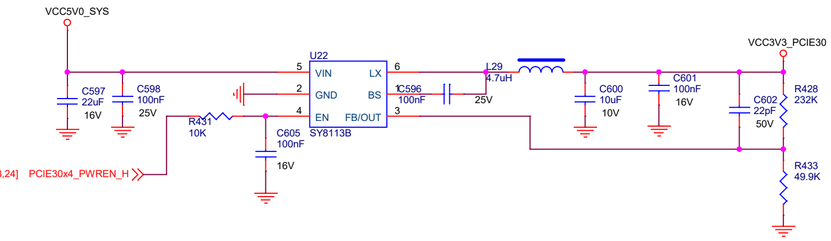
C212 22pF 50V
R133 232K
R135 49.9K
C211 22uF 10V
C213 22uF 10V
C214 100nF 10V

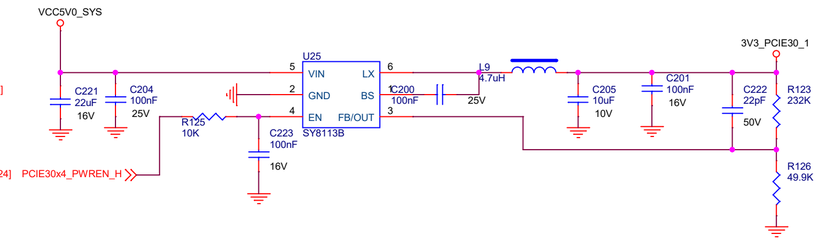
Default 3.39V
3V3_4G

radxa			
Size A4	Title: RADXA ROCK 5T		REV V1.24
	Page Name: 23.M.2 B key_4G		
Date: Wednesday, October 28, 2026		Sheet 23 of 35	

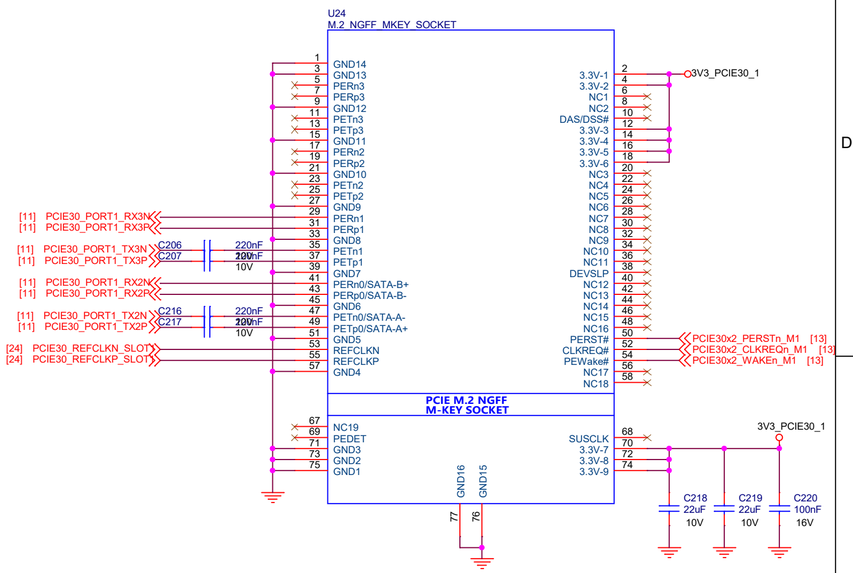
PCIe3.0 x 2 Lane_1

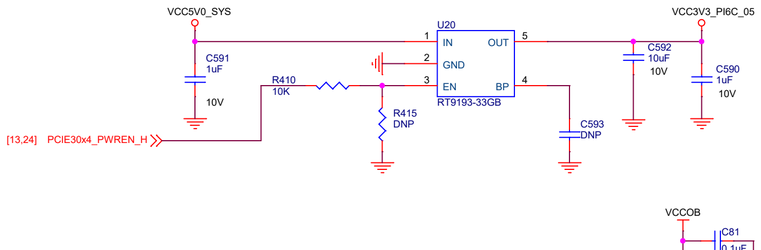


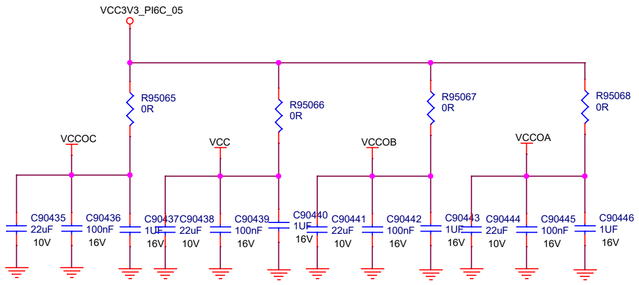


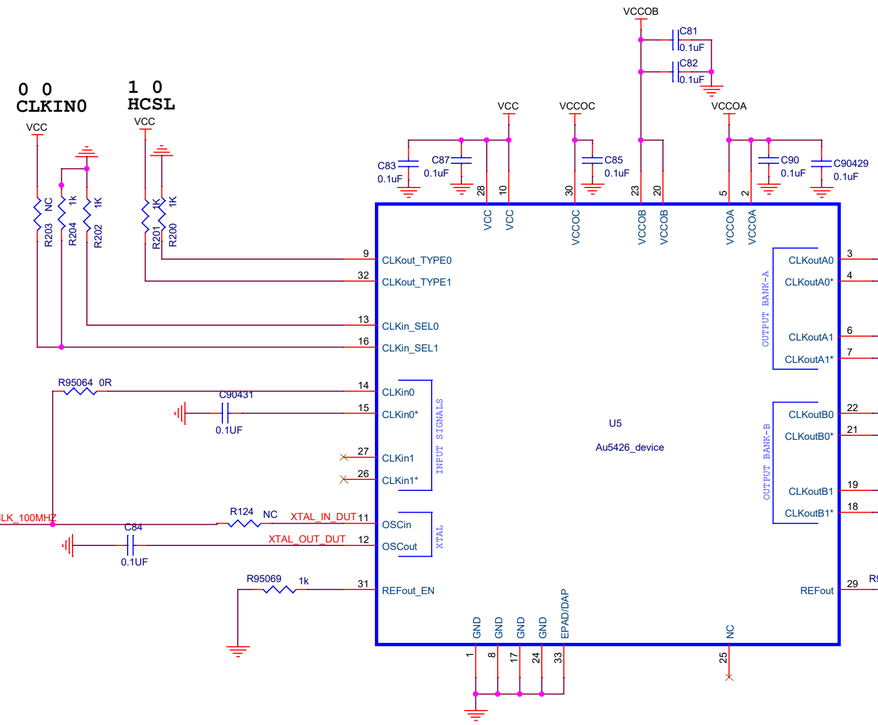


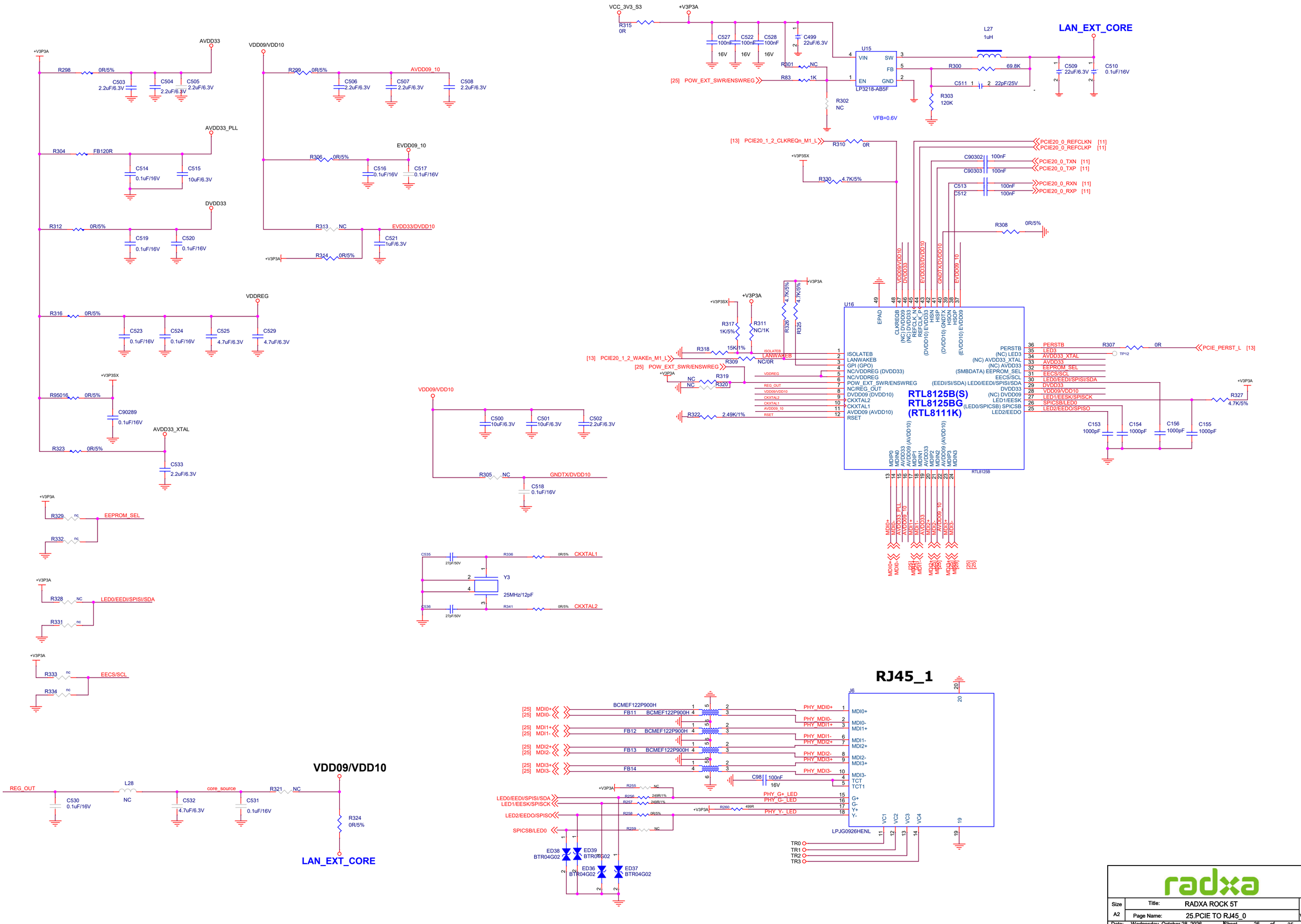
PCIe3.0 x 2 Lane_2





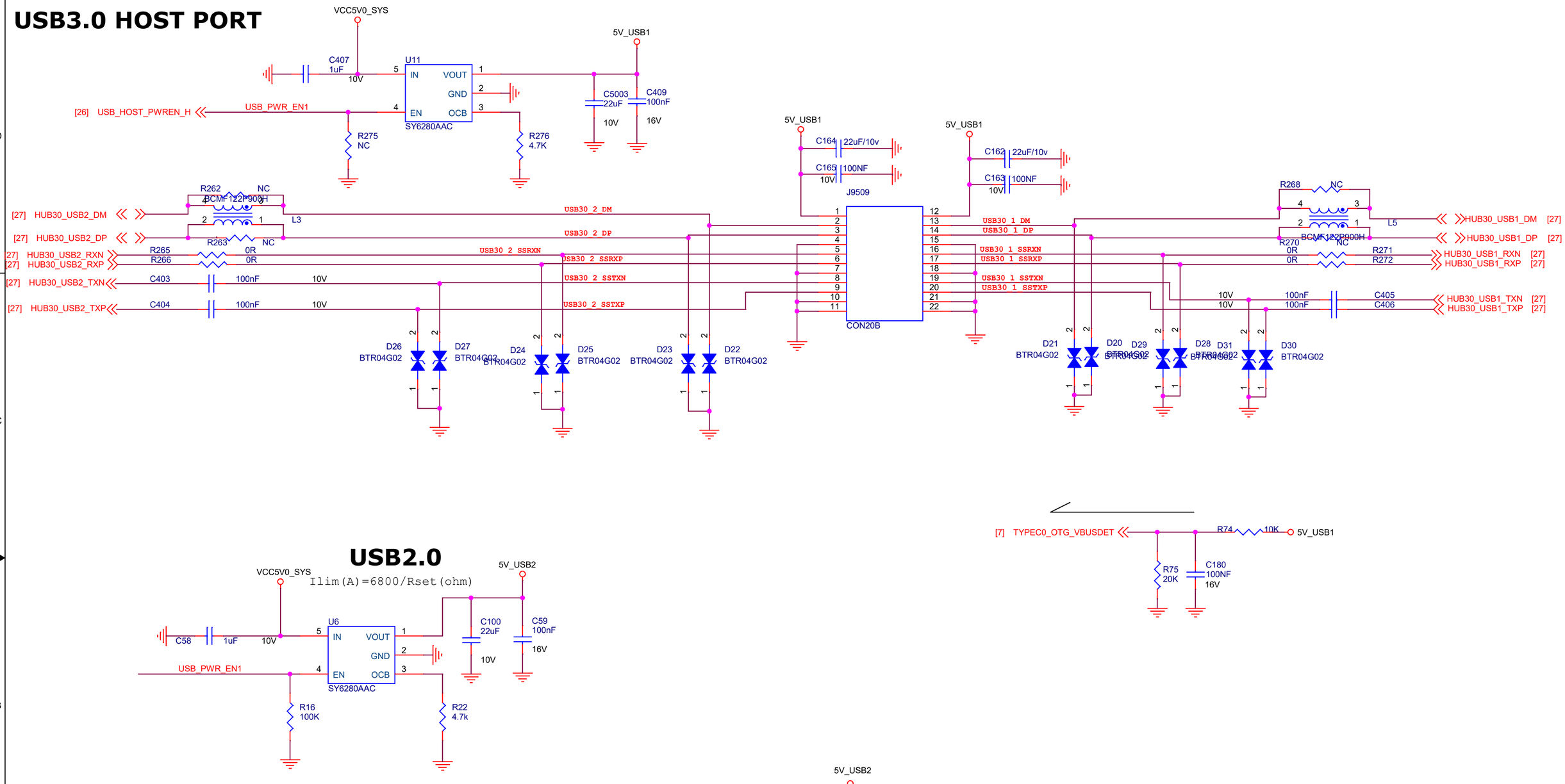




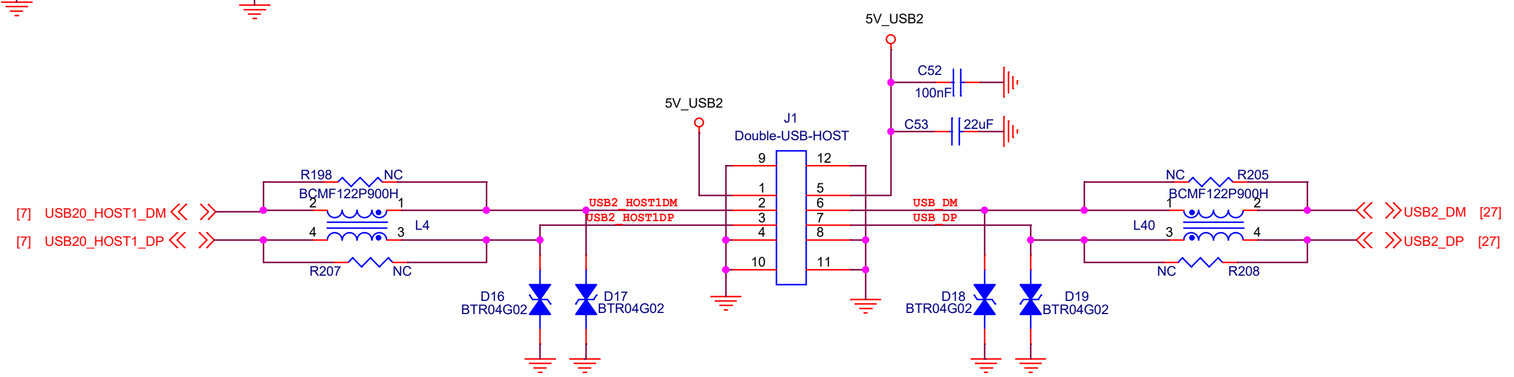


Size: A2	Title: RADXA ROCK 5T	REV: V1.24
	Page Name: 25.PCIE TO RJ45_0	
Date: Wednesday, October 28, 2026	Sheet 25 of 35	

USB3.0 HOST PORT

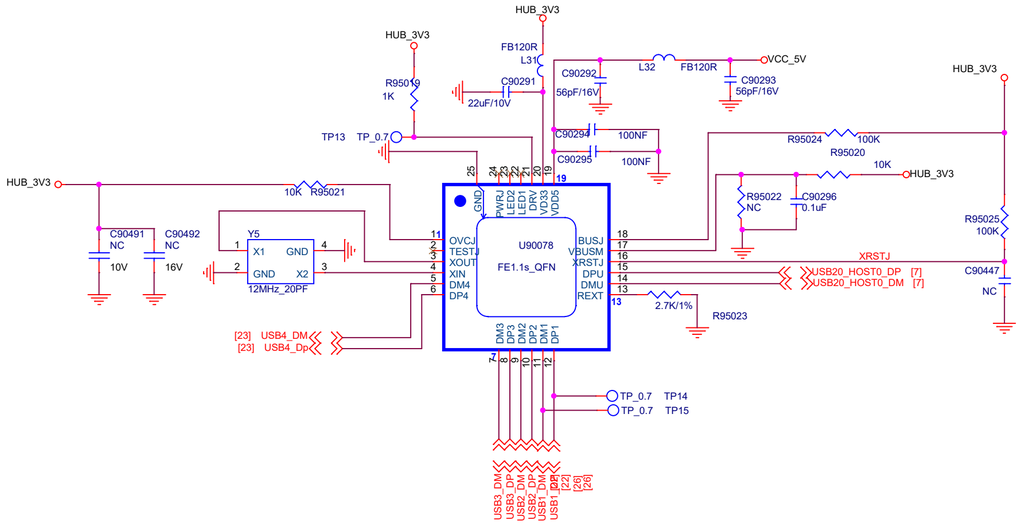


USB2.0

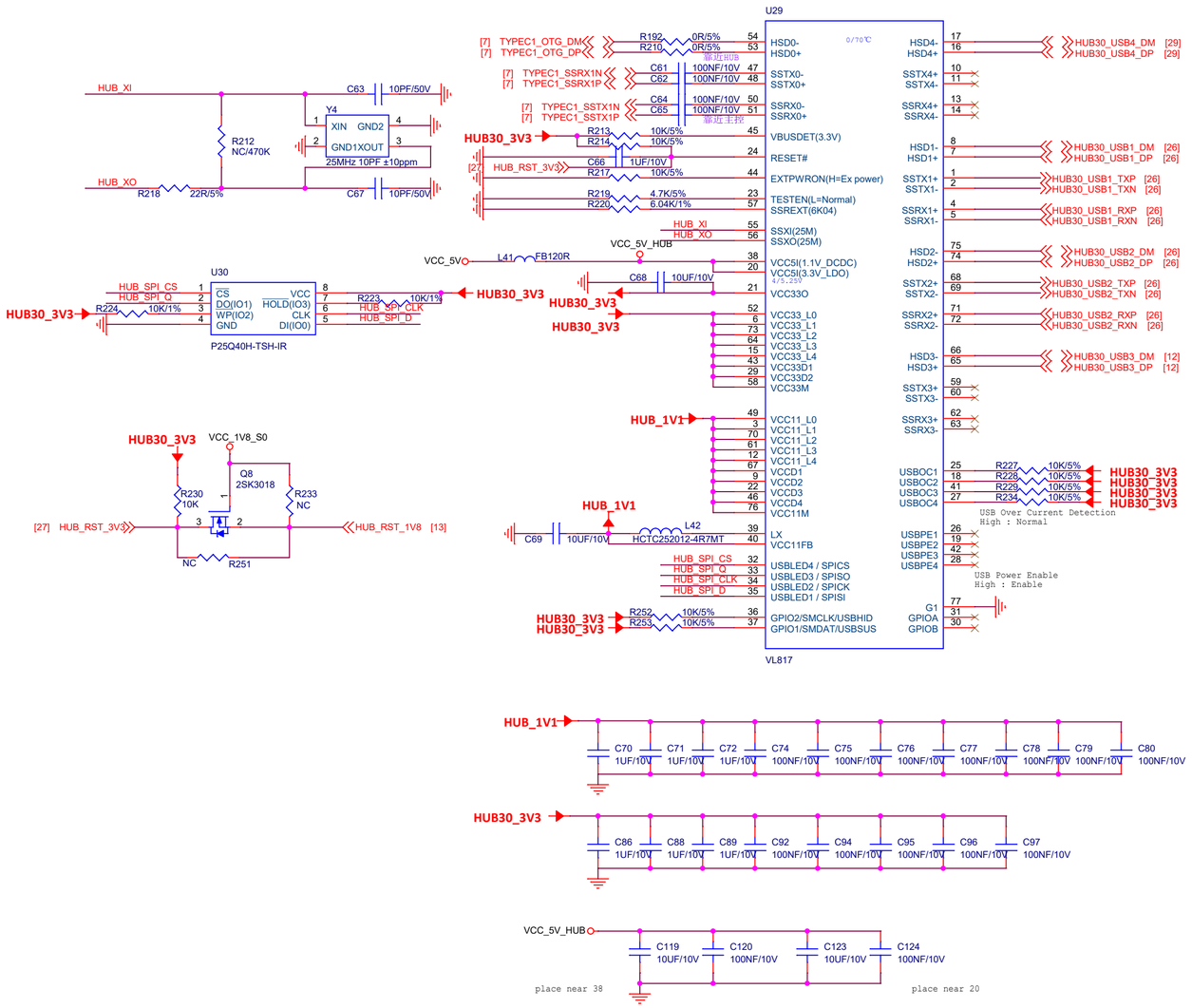


Size: Custom	Title: RADXA ROCK 5T	REV: V1.24
	Page Name: 26.USB30/20 Port	
Date: Wednesday, October 28, 2026	Sheet 26 of 35	

USB2.0 HUB



USB3.0 HUB



Size: A2	Title: RADXA ROCK 5T	REV: V1.24
	Page Name: 27.USB20/30 HUB	
Date: Wednesday, October 28, 2026	Sheet 27 of 35	

Type-C PORT

U2600
BTRD10A01

TYPEC0RX1N 1 — IO1 — NC_10 — 10 TYPEC0RX1N
TYPEC0RX1P 2 — IO2 — NC_9 — 9 TYPEC0RX1P
3 — GND — GND — 8
TYPEC0TX1P 4 — IO3 — NC_7 — 7 TYPEC0TX1P
TYPEC0TX1N 5 — IO4 — NC_6 — 6 TYPEC0TX1N

U2601
BTRD10A01

TYPEC0RX2N 1 — IO1 — NC_10 — 10 TYPEC0RX2N
TYPEC0RX2P 2 — IO2 — NC_9 — 9 TYPEC0RX2P
3 — GND — GND — 8
TYPEC0TX2P 4 — IO3 — NC_7 — 7 TYPEC0TX2P
TYPEC0TX2N 5 — IO4 — NC_6 — 6 TYPEC0TX2N

[6] TYPEC0_SBU1_DC — R2600 100K
[7] TYPEC0_SBU1 — C2600 100nF — 6.3V — TYPEC0_AUXP
[7] TYPEC0_SBU2 — C2601 100nF — 6.3V — TYPEC0_AUXM
[6] TYPEC0_SBU2_DC — R2603 100K
R2601 2M
R2602 2M

[7] TYPEC0_OTG_DM — R2630 2.2R — R2604 NC — BCMF122P900H — L6
[7] TYPEC0_OTG_DP — R2631 2.2R — R2605 NC

[7] TYPEC0_SSTX1N — C2602 100nF 10V — TYPEC0TX1N A3 — SSTX1_N
[7] TYPEC0_SSTX1P — C2603 100nF 10V — TYPEC0TX1P A2 — SSTX1_P
[7] TYPEC0_SSRX1N — R2606 0R — TYPEC0RX1N B10 — SSRX1_N
[7] TYPEC0_SSRX1P — R2607 0R — TYPEC0RX1P B11 — SSRX1_P
[7] TYPEC0_SSTX2N — C2604 100nF 10V — TYPEC0TX2N B3 — SSTX2_N
[7] TYPEC0_SSTX2P — C2605 100nF 10V — TYPEC0TX2P B2 — SSTX2_P
[7] TYPEC0_SSRX2N — R2608 0R — TYPEC0RX2N A10 — SSRX2_N
[7] TYPEC0_SSRX2P — R2609 0R — TYPEC0RX2P A11 — SSRX2_P

[7] TYPEC0_USB20_VBUSDET — R2610 4.7K — VCCA_3V3_S0

VCC_1V8_S3
R2613 10K
CC_INT_L

J11
USB_TYPEC_115H0

VBUS_TYPEC0
A4 VBUS_1
A9 VBUS_2
B4 VBUS_3
B9 VBUS_4
TYPEC0_CC1 A5 CC1
TYPEC0_CC2 B5 CC2
A8 SBU1
B8 SBU2
TYPEC0_OTGDM A7 DM1
TYPEC0_OTGDP A6 DP1
B7 DM2
B6 DP2
A1 GND1
A12 GND2
B1 GND3
B12 GND4
HOLE_1 H1
HOLE_2 H2
GND_E1 E1
GND_E2 E2
GND_E3 E3
GND_E4 E4
GND_E5 E5
GND_E6 E6

TYPEC0_OTGDP
TYPEC0_OTGDM
D38 D35 BTR04G02
TYPEC0_CC1
TYPEC0_CC2
D36 D34 BTR04G02
TYPEC0_AUXM
TYPEC0_AUXP
D32 BTR04G02

U2602

TYPEC0_CC1 — 10 CC1_10, 11 CC1_11
TYPEC0_CC2 — 1 CC2_1, 14 CC2_14
C2612 220pF 50V
C2613 220pF 50V
8 GND_8, 9 GND_9, 15 ePAD
VBUS 2 — VBUS_TYPEC0
VCONN_12 12, VCONN_13 13 — VCC5V0_SYS
VDD_3 3, VDD_4 4 — C2614 100nF 16V — VCC_3V3_S3
C2608 1uF 16V
C2609 100nF 16V
SCL 6 — I2C4_SCL-3V3 [12]
SDA 7 — I2C4_SDA-3V3 [12]
INT# 5 OD — CC_INT_L [13]
FUSB302BMPX

R95144 NC
VBUS_TYPEC0
VCC5V0_SYS
U4
FPF2595UCX
C1 22uF/6.3V
A1 VIN, B1 VIN, C1 VIN
VONT A3, VONT B3, VONT C3
C7 10uF/25V
R161 NC
[12] TYPEC5V_PWREN_H — D3 ON
D1 OC
GND GND GND
ISET D2
R163 100K
R162 340R/1%
A2 B2 C2

TYPEC IN	12bit ADC	ADC-IN7
5V	35e	0.37V
9V	610	0.68V
12V	815	0.9V
15V	a1a	1.136V
20V	d79	1.51V

VBUS_TYPEC0
R150 NC/100k1%
[12] SARADC_VIN7_dcin
R160 NC/8.2k1%
D48 NC/BTRD06G220A
R154 NC
R156 NC/0R
R158 NC/100K
TYPEC_P_12V — R159 NC/100K

U2
NC/WS4684C
B2 VBUS1, C2 VBUS2, D2 VBUS3, E2 VBUS4, E1 VBUS5
B3 OVLO
A3 EN_
VINT1 A1, VINT2 B1, VINT3 C1, VINT4 D1
ACK A2
GND3 E3, GND2 D3, GND1 C3

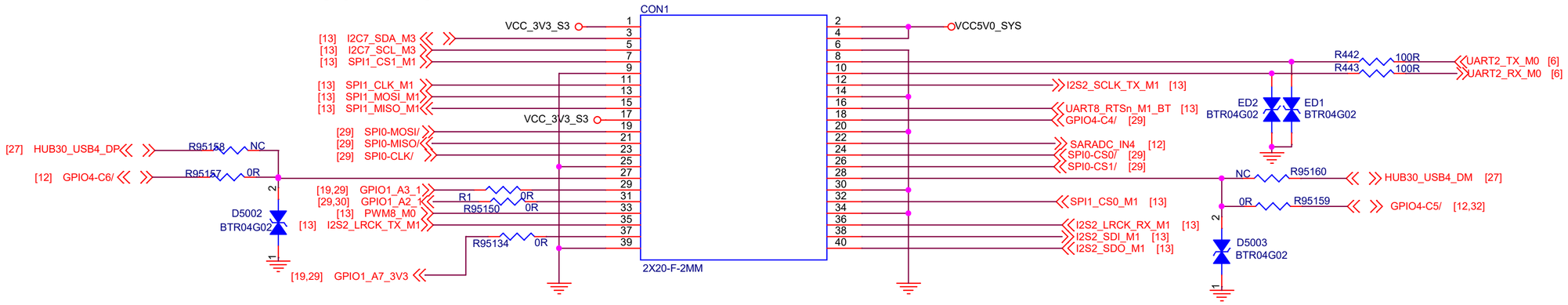
TYPEC_VIN
C5 NC/100nF/25v
C6 NC/10UF/25v
R157 NC/10K — VCC_3V3_S3

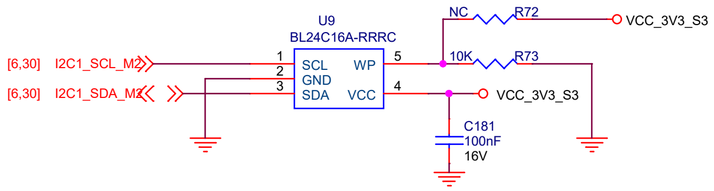
TYPEC_POW1>VBUS_TYPEC0

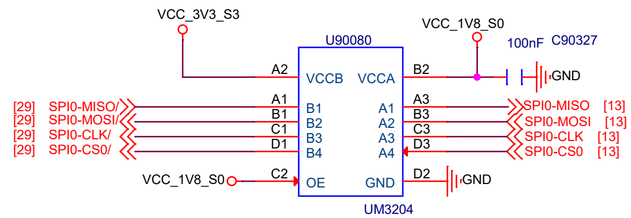
radxa

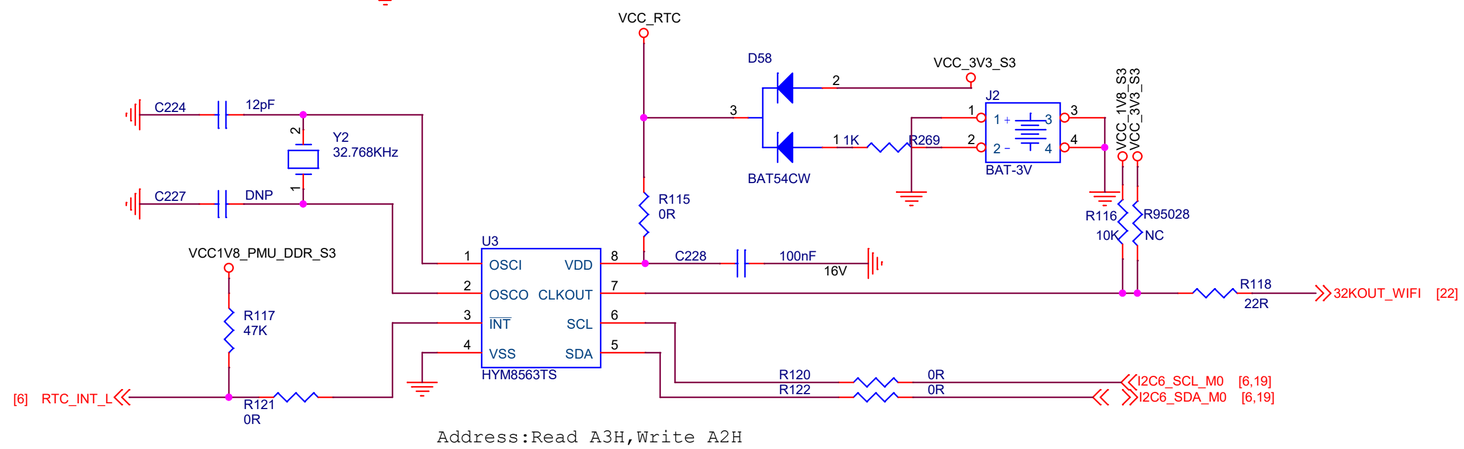
Size	Title:	REV
Custom	RADXA ROCK 5T	V1.24
	Page Name: 28.Type-C Port	
Date: Wednesday, October 28, 2026	Sheet 28 of 35	

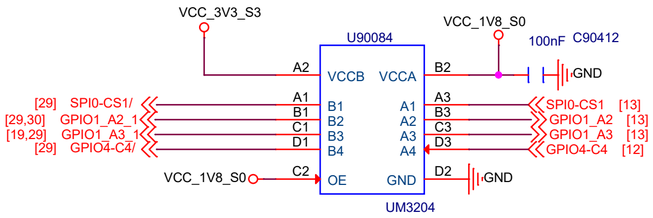
CONNECT

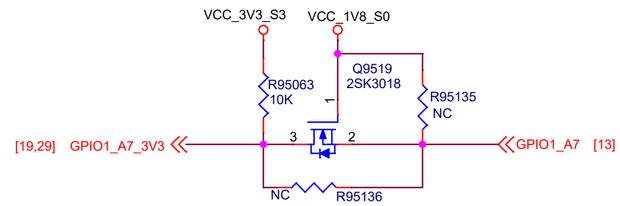








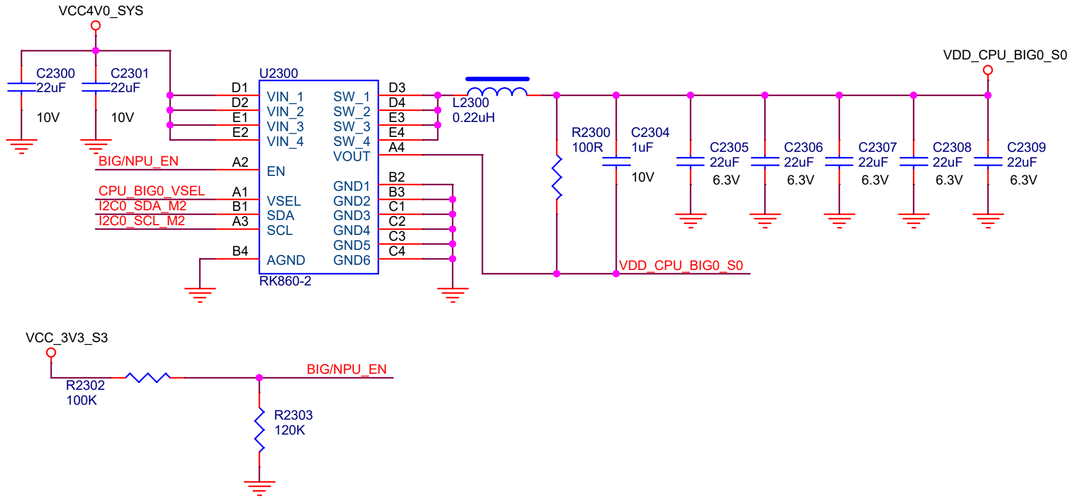




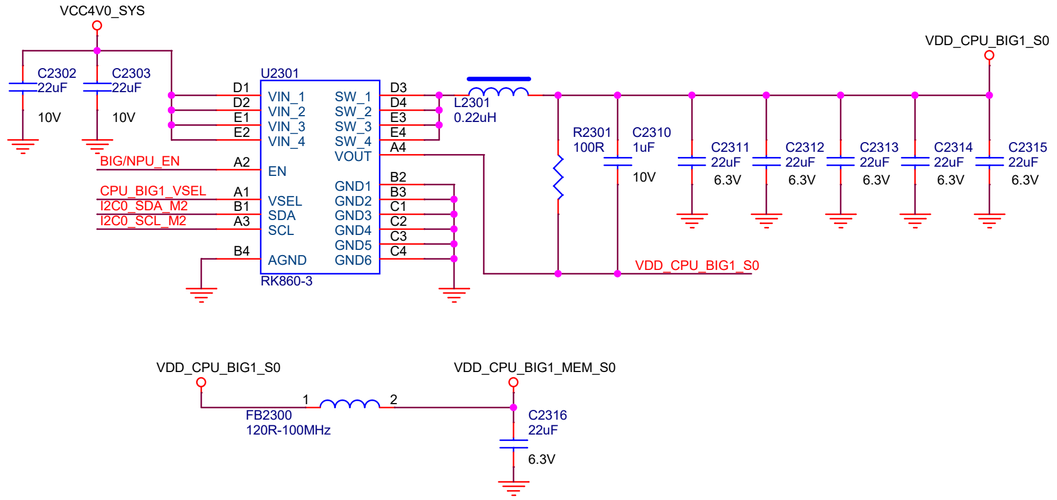
HOLE1 HOLE1
HOLE2 HOLE1
HOLE3 HOLE1
HOLE4 HOLE1
HOLE5 HOLE1
HOLE6 HOLE_5_2D7
HOLE7 HOLE_5_2D7

Size	Title: RADXA ROCK 5T		REV
Custom	Page Name: 29.CONNECT 40pin		V1.24
Date: Wednesday, October 28, 2026		Sheet 29 of 35	

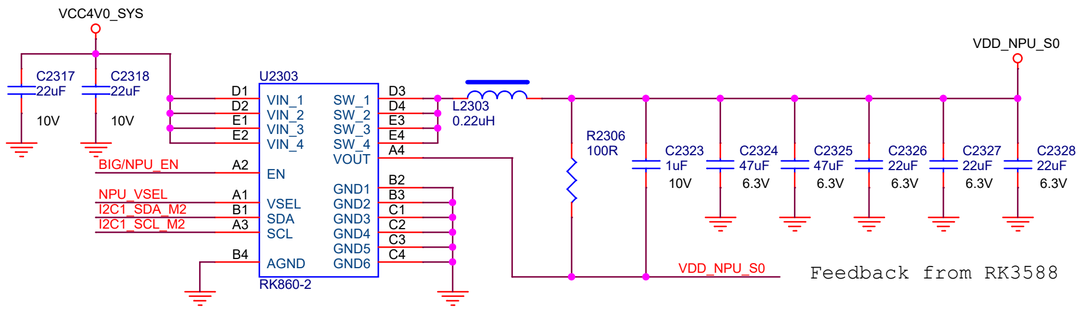
VDD_CPU_BIG0



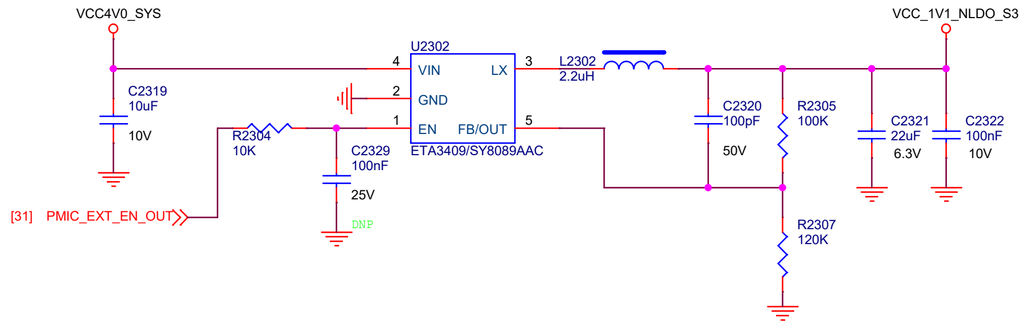
VDD_CPU_BIG1

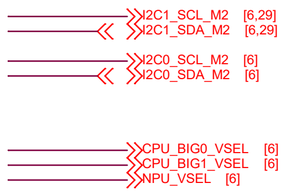


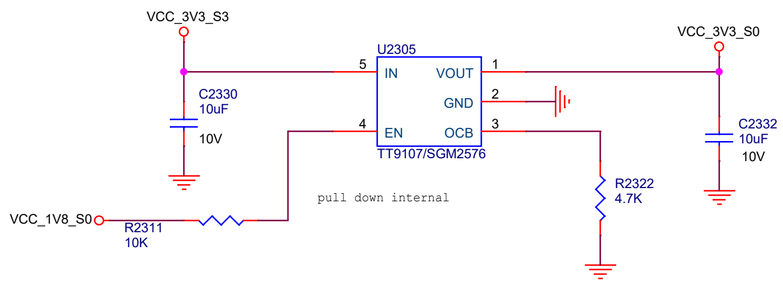
VDD_NPU

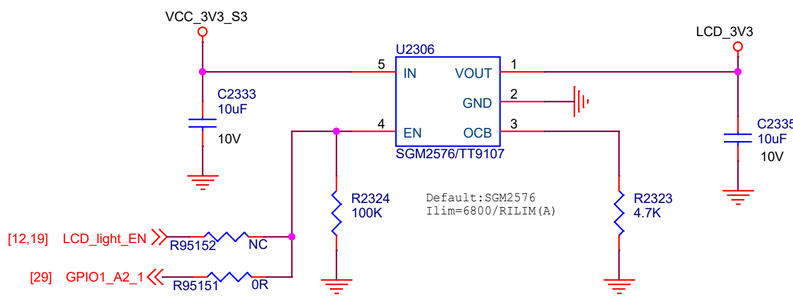


VCC_1V1_NLDO_S3









Size	Title: RADXA ROCK 5T		REV
Custom	Page Name: 30.Power_Ext Discrete		V1.24
Date: Wednesday, October 28, 2026	Sheet 30 of 35		

PMIC RK806-1 BUCK

PMIC_SPI_CS [6]
PMIC_SPI_MOSI [6]
PMIC_SPI_CLK [6]
PMIC_PWR_CTRL1 [6]
PMIC_PWR_CTRL2 [6]
PMIC_PWR_CTRL3 [6]
PMIC_INT_L [6,32]
RESET_L [6]
PMIC_EXT_EN_OUT [30]
PWRON_L

U2200A

BUCK5 2.5A

VCC4V0_SYS
VDD_DDR_S0
C2200 10uF 10V
C2202 22uF 6.3V
C2203 22uF 6.3V
C2204 10uF 6.3V
R2200 100R
C2205 1uF 10V
L2200 0.47uH
PMIC_SW5
VCC5 44
SW5 45
VOUT5 46
FB5 47 (FB=0.5V)
Default:0.85V
Low frequency:
0.85V-->0.75V
VDD_DDR_S0
Feedback from RK3588

BUCK6 2.5A

VCC4V0_SYS
VDD2H_DDR_S3
C2210 10uF 10V
C2213 22uF 6.3V
C2214 22uF 6.3V
C2215 10uF 6.3V
R2202 110K
C2216 100pF 50V
L2202 0.47uH
PMIC_SW6
R2204 100K
PMIC_FB6
VCC6 28
SW6 29
VOUT6 30
FB6 31 (FB=0.5V)
Default:1.1V

LPDDR4/4x=1.1V	120K
LPDDR5=1.05V	110K

BUCK9 2.5A

VCC4V0_SYS
VDDQ_DDR_S0
C2222 10uF 10V
C2224 22uF 6.3V
C2225 22uF 6.3V
C2226 10uF 6.3V
R2207 0R
C2233 100pF 50V
L2204 0.47uH
PMIC_SW9
R2208 NC
PMIC_FB9
VCC9 1
SW9 68
VOUT9 67
FB9 66 (FB=0.5V)
Default:0.6V

LPDDR4/4x=0.6V	20K	100K
LPDDR5=0.5V	0R	DNP

BUCK8 2.5A

VCC4V0_SYS
VCC_3V3_S3
C2234 10uF 10V
C2236 22uF 6.3V
C2237 22uF 6.3V
L2206 0.47uH
PMIC_SW8
VCC8 7
SW8 6
VOUT8 5
Default:3.3V

BUCK10 2.5A

VCC4V0_SYS
VCC_1V8_S3
C2244 10uF 10V
C2246 22uF 6.3V
C2247 22uF 6.3V
L2208 0.47uH
PMIC_SW10
VCC10 27
SW10 26
VOUT10 25
Default:1.8V

VCC1V8_PMU_DDR_S3
VCC_1V8_S3_PLDO6
R2210 NC
R2211 0R

RK806-1

BUCK1 6.5A

VCC4V0_SYS
VDD_GPU_S0
C2201 22uF 10V
C2206 1uF 10V
C2207 47uF 6.3V
C2208 47uF 6.3V
C2211 22uF 6.3V
C2209 22uF 6.3V
L2201 RHP0318T-R22M
R2201 100R
PMIC_SW1
VCC1_1 52
VCC1_2 53
SW1_1 50
SW1_2 51
VOUT1 49
VDD_GPU_S0
Feedback from RK3588

BUCK2 5A

VCC4V0_SYS
VDD_CPU_LIT_S0
C2212 22uF 10V
C2217 1uF 10V
C2218 22uF 6.3V
C2219 22uF 6.3V
C2220 22uF 6.3V
C2221 22uF 6.3V
L2203 RHP0318T-R22M
R2203 100R
PMIC_SW2
VCC2_1 33
VCC2_2 34
SW2_1 35
SW2_2 36
VOUT2 37
VDD_CPU_LIT_S0
Feedback from RK3588
(FB=0.5V) FB2 38

VCC4V0_SYS
ED2200
AZ5825-01F

BUCK3 5A

VCC4V0_SYS
VDD_LOG_S0
C2223 22uF 10V
C2228 1uF 10V
C2229 22uF 6.3V
C2230 22uF 6.3V
C2231 22uF 6.3V
C2232 22uF 6.3V
L2205 RHP0318T-R22M
R2206 100R
PMIC_SW3
VCC3 54
SW3 55
VOUT3 56
VDD_LOG_S0
Feedback from RK3588

BUCK4 5A

VCC4V0_SYS
VDD_VDENC_S0
C2235 22uF 10V
C2239 1uF 10V
C2240 22uF 6.3V
C2241 22uF 6.3V
C2242 22uF 6.3V
C2243 22uF 6.3V
L2207 RHP0318T-R22M
R2209 100R
PMIC_SW4
VCC4 22
SW4 23
VOUT4 24
VDD_VDENC_S0
Feedback from RK3588

BUCK7 2.5A

VCC4V0_SYS
VCC_2V0_PLDO_S3
C2245 10uF 10V
C2249 22uF 6.3V
C2250 22uF 6.3V
L2209 0.47uH
PMIC_SW7
VCC7 43
SW7 42
VOUT7 41
Default:2.0V

RK806-1

PMIC RK806-1 Managerment

VCC_1V8_S3_PLDO6
C2256 1uF 6.3V
U2200C
VCCIO 20
VCCA 21
SYNC_CLK 3
SYNC 2
VDC 32
PWRON 4
RK806-1

VCCIO
(IIC/SPI)CS 18 PMIC_SPI_CS R2212 1 2 100K
(SDA)MOSI 15 PMIC_SPI_MOSI R2213 1 2 100K
(SCL)CLK 17 PMIC_SPI_CLK
(PWRCTRL3)SO 16 PMIC_PWR_CTRL3
PWRCTRL2 61 PMIC_PWR_CTRL2
PWRCTRL1 62 PMIC_PWR_CTRL1

VCCA
(M/S)EXT_EN 39 PMIC_EXT_EN_OUT
INT 19 PMIC_INT_L
RESETB 40 RESET_L
ePAD 69

VCC4V0_SYS
C2261 4.7uF 10V
C2260 1uF 10V
PMIC_VDC
R2216 200K
R2217 200K
C2265 1nF 25V
C2268 1nF 25V
PWRON_L
D15 1N5819WT

VCC_1V8_S3
R2214 10K
R2215 10K
C2266 10nF 25V

PWRON_L
SW9207 Power_KEY
ED32 BTR04G02

PMIC RK806-1 LDO

VCC_2V0_PLDO_S3
C2252 1uF 6.3V
U2200B
VCC11 59
VCC12 64
VCC13 13
VCC14 9
PLDO
NLDO
RK806-1

PLDO1	0.5A	60	VCCA_1V8_S0	C2253 1uF 6.3V	Default:1.8V
PLDO2	0.3A	58	VCC_1V8_S0	C2254 1uF 6.3V	Default:1.8V
PLDO3	0.3A	57	VDDA_1V2_S0	C2255 1uF 6.3V	Default:1.2V
PLDO4	0.5A	63	VCCA_3V3_S0	C2257 1uF 6.3V	Default:3.3V
PLDO5	0.3A	65	VCCIO_SD_S0	C2259 1uF 6.3V	Default:3.3V
NLDO1	0.3A	14	VDD_0V75_S3	C2262 2.2uF 6.3V	Default:0.75V
NLDO2	0.3A	12	VDDA_DDR_PLL_S0	C2264 2.2uF 6.3V	Default:0.85V; Low frequency:0.85V-->0.75V
NLDO3	0.5A	11	VDDA_0V75_S0	C2267 2.2uF 6.3V	Default:0.75V
NLDO4	0.5A	10	VDDA_0V85_S0	C2269 2.2uF 6.3V	Default:0.85V
NLDO5	0.3A	8	VDD_0V75_S0	C2271 2.2uF 6.3V	Default:0.75V

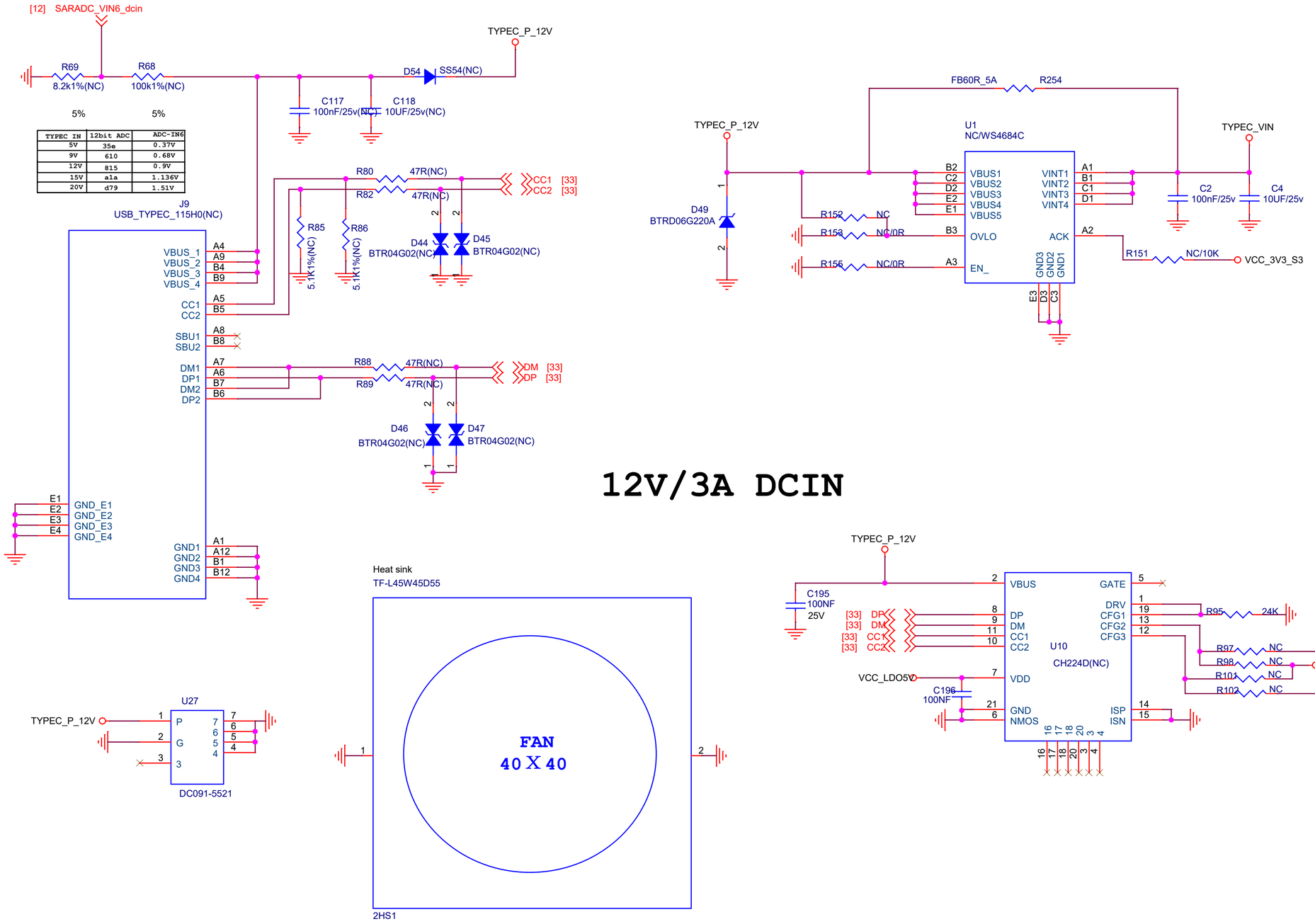
VCC4V0_SYS
C2258 1uF 10V
VCC_1V1_NLDO_S3
C2263 1uF 6.3V
VCC_1V1_NLDO_S3
C2270 1uF 6.3V

radxa

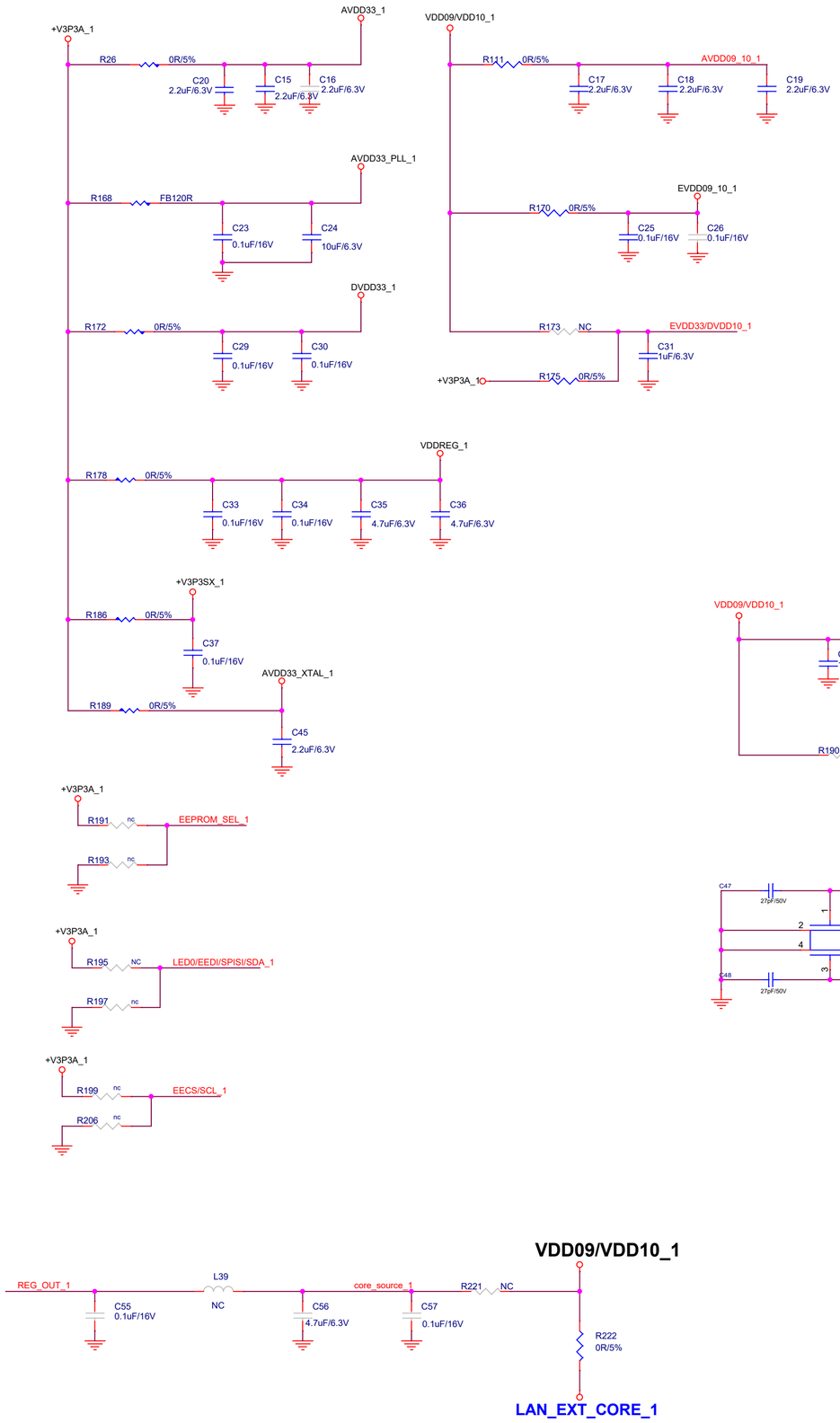
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VCC5V0_SYS
C90480 22uF/10v
C90484 22uF/10v
C90483 100nF
5.5V<VIN<26V
R95122 510K
R95114 510K
C90487 NC/100nF
C90482 1uF
R95113 100K
R95119 100K
U90089
MP8759
VIN
EN
NC
VCC
BST
SW
FB
VOUT
PGND
AGND
PG
MODE
R95115 3.3R
C90489 220nF
L5002 1.5uH
R95121 DNP
C90481
R95118 DNP
R95120 47k1%
R95116 8.2k1%
>25mil
VCC4V0_SYS
C90486 100nF
R95117 NC
Default 4.039V
C90490 22uF/10v
C90485 22uF/10v
C90488 100nF
C90478 22uF/10v
C90479 22uF/10v
D33
LED_RGB
R95049 13K
4.7k
R95126
R95045 1.5k
[6] PWM_LED_BLUE
R95047 10K 1
Q9516 MMBT3904M
R95125
[12,29] GPIO4-C5/
NC
MMBT3904M
Q9538
VCC5V0_SYS
C90427 22uF
C90428 100nF
5819 D5001
GND
SMD-2P-1_25 U90087
R95059 1K
[6] GPIO0-C0
BL8810 Q9518
R95060 0.1R
TYPEC_VIN
C147 22uF/25v
C148 22uF/25v
C149 100nF/25v
FB60R_5A R15
C151 4.7NF/25V
R17 47R
C90414 22uF/25v
C90415 22uF/25v
C90416 100nF/25v
5.5V<VIN<26V
R95048 510K
R95054 390K
C90424 NC/100nF
C90426 1uF
R95056 100K
R95057 100K
U90086
MP8759
R95046 3.3R
C90417 220nF
L5001 RXWSHC0630-1R5M
R95050 DNP
C90418 DNP
R95052 DNP
R95051 47k1%
R95055 6.2k1%
C176 220PF
R67 20R
C90425 100nF
Default 5.148V
C90420 22uF/10v
C90421 22uF/10v
C90422 100nF
C90474 22uF/10v
C90475 22uF/10v
D55 SMF5.0CA
VCC5V0_SYS
VCC_5V0
R6 NC
P-CH
Q3 TBL3401
R7 100K
R8 1K
C143 22uF 10V
C144 100nF 16V
[6,31] PMIC_INT_L
R94 NC
VCC_3V3_S3
R10 10K
N-CH
Q4 WNM2021-3/TR
R11 4.7UF 6.3V
M2
M3
M1
M4

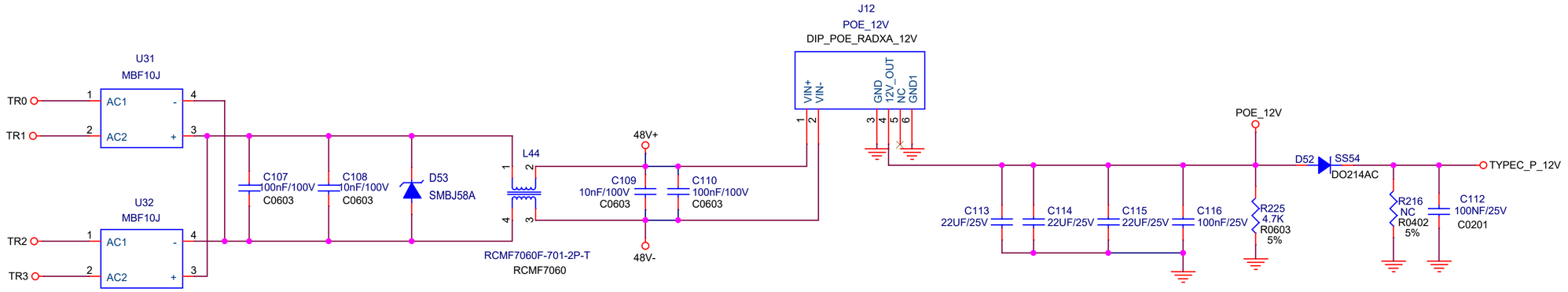
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	Page Name: 32.Power_DC 5V	
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Size: Custom	Title: RADXA ROCK 5T Page Name: 35.POE IN	REV: V1.24
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