



ROCK 5A

schematic

V1.1



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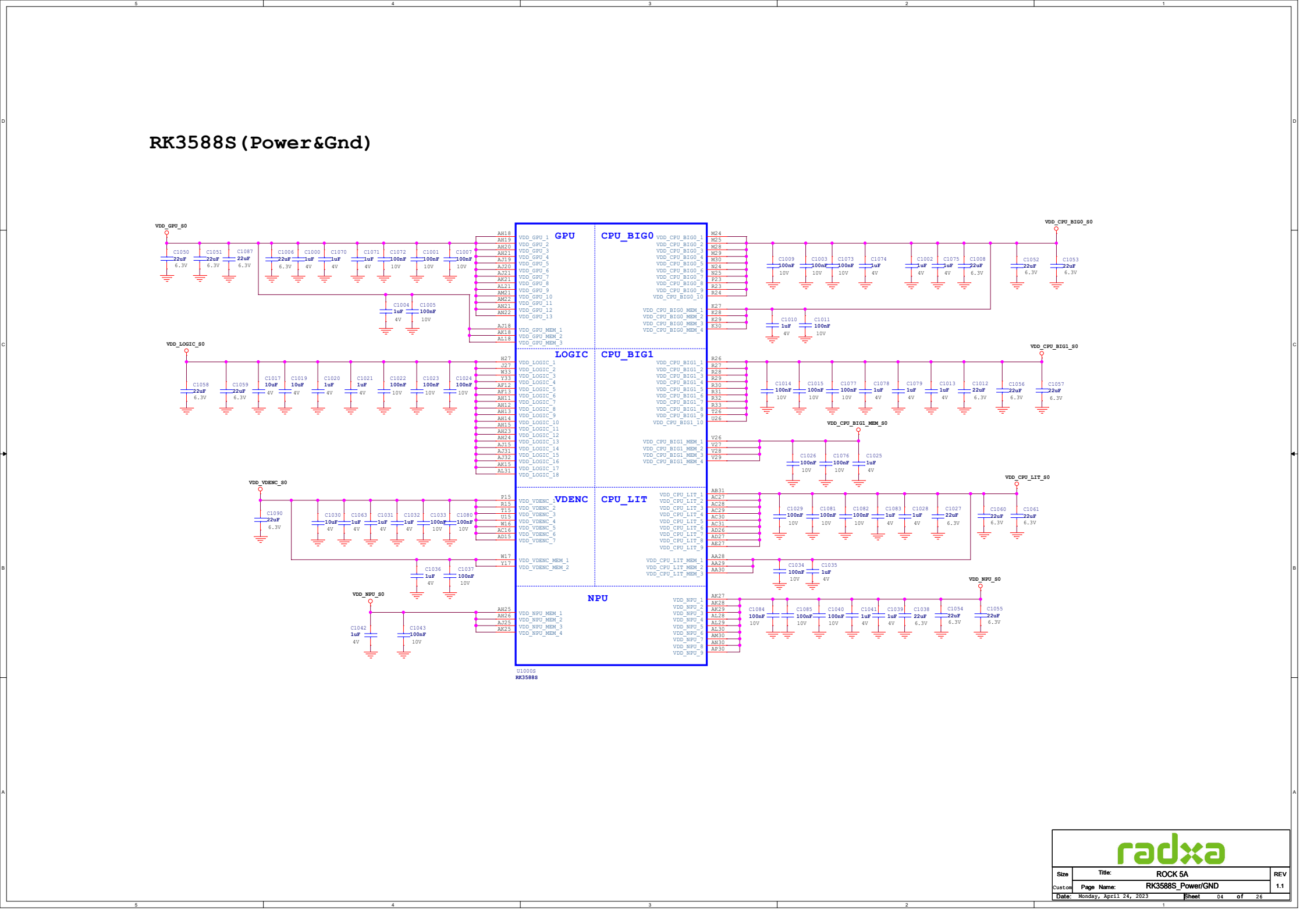
A

RK3588S (Power&Gnd)

U10008
RK3588S

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	ROCK 5A	
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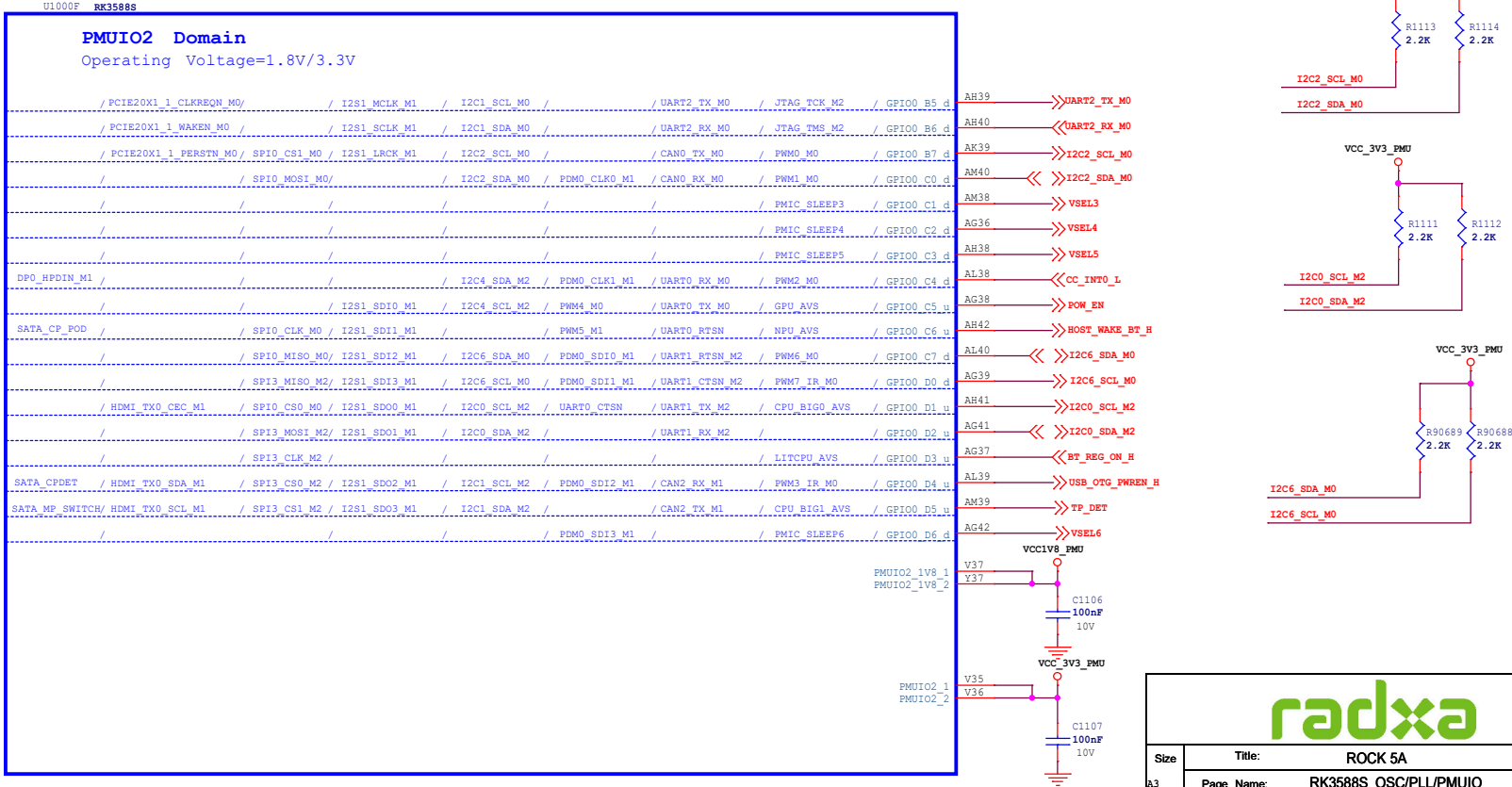
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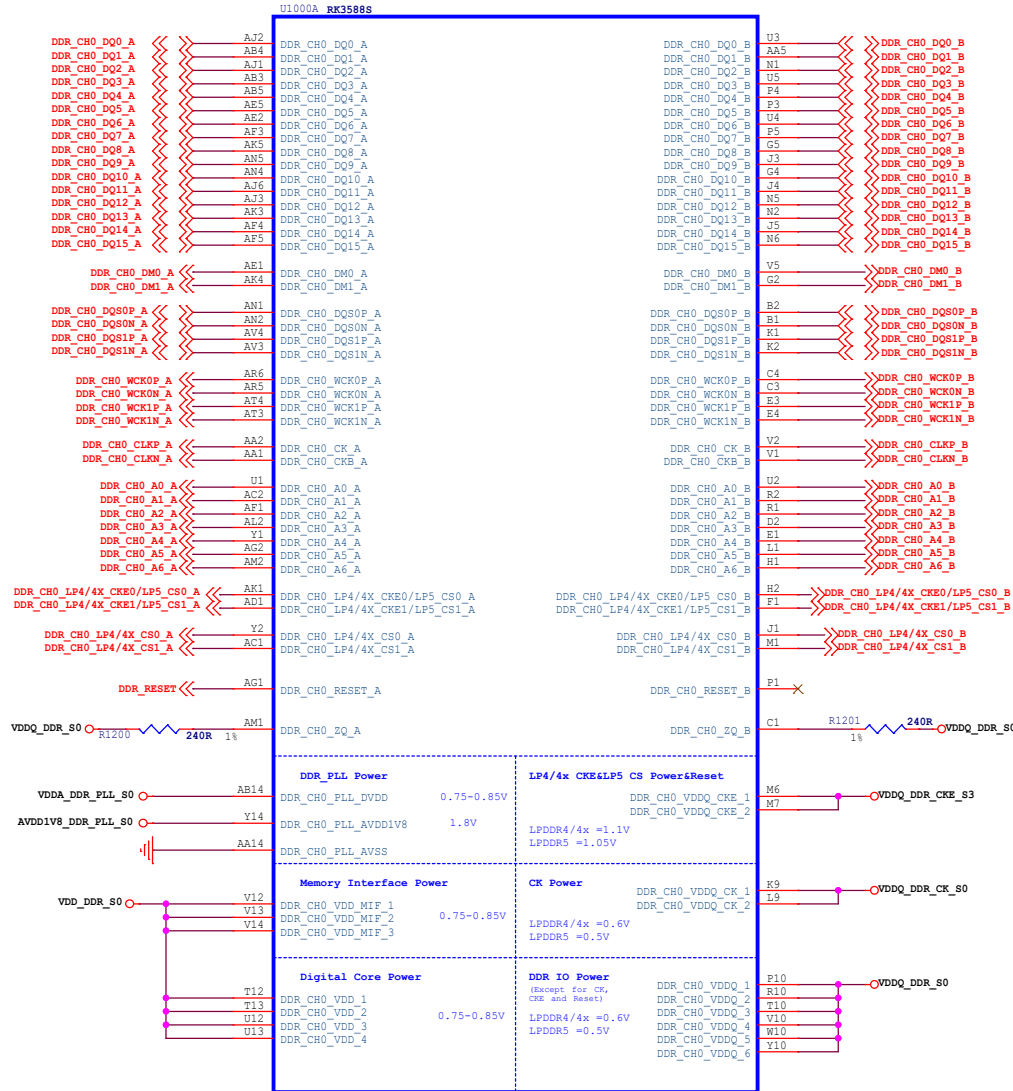
RK3588S (OSC/PLL/PMUIO1)



RK3588S (PMUIO2)



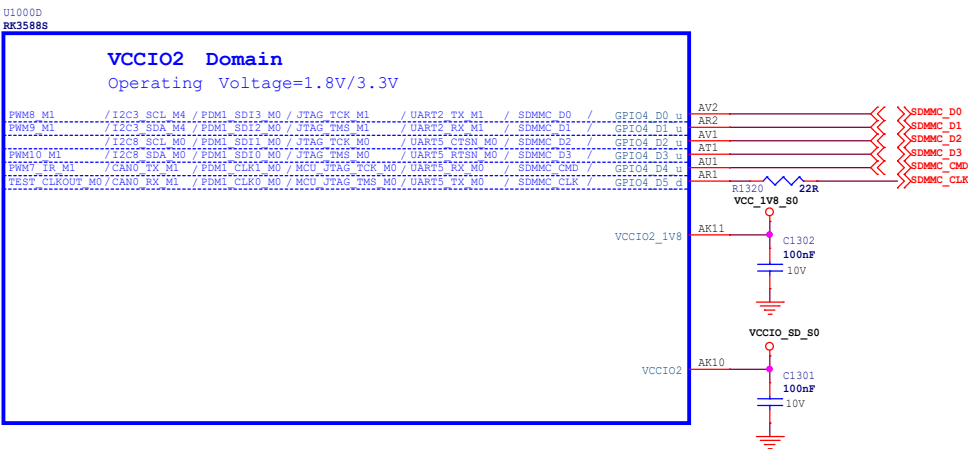
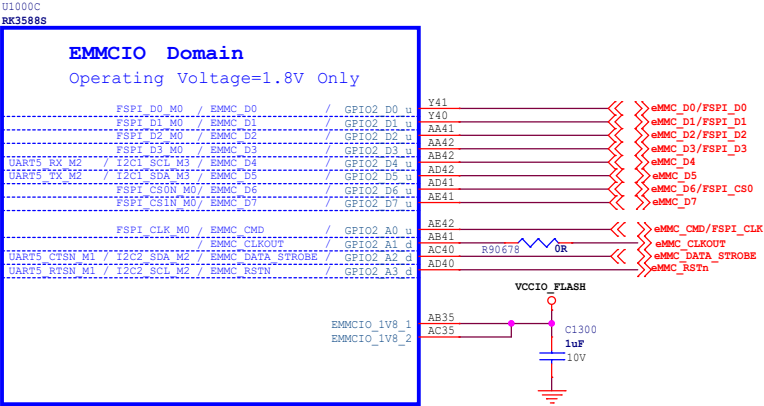
RK3588S (DDR PHY)



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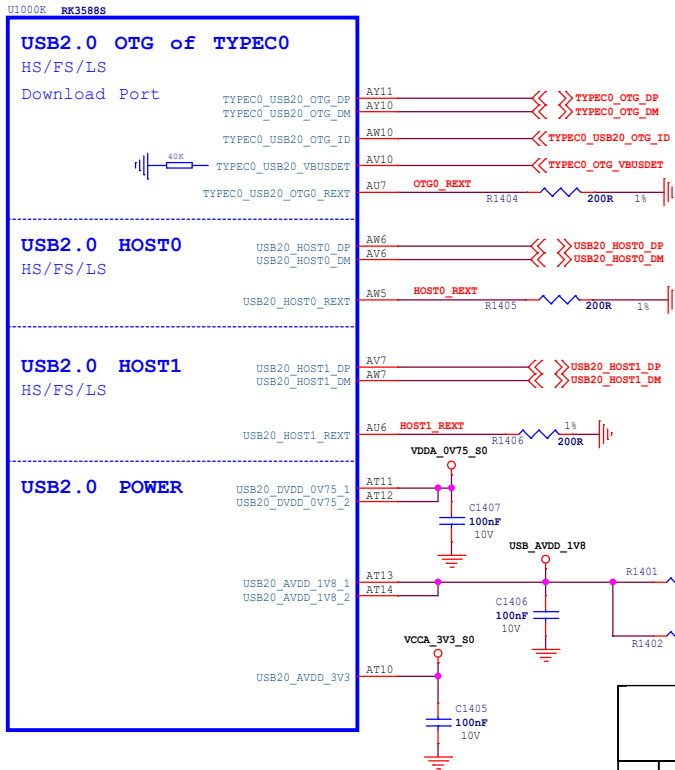
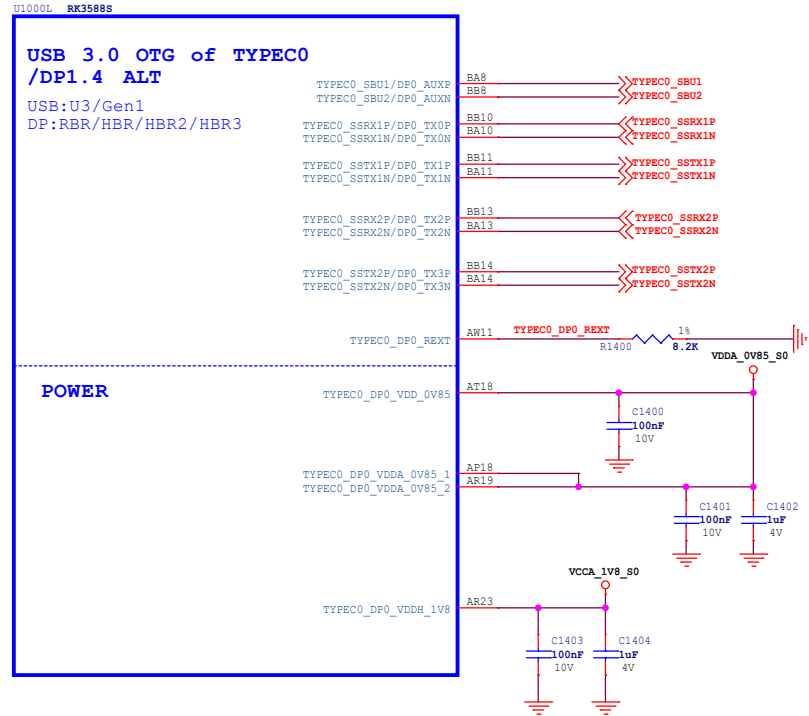
RK3588S (EMMCIO Domain)

RK3588S (VCCIO2 Domain)



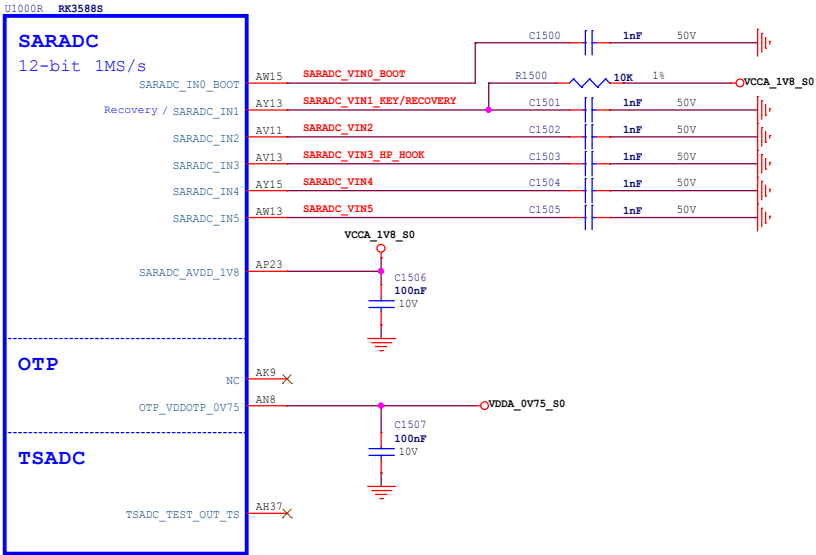
RK3588S (USB3.0/DP1.4)

RK3588S (USB2.0)

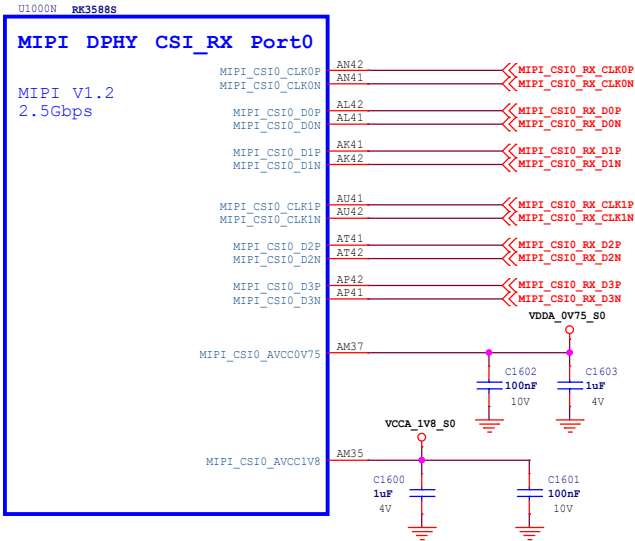


RK3588S (SARADC/OTP/TSADC)

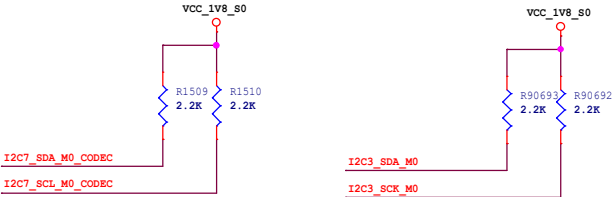
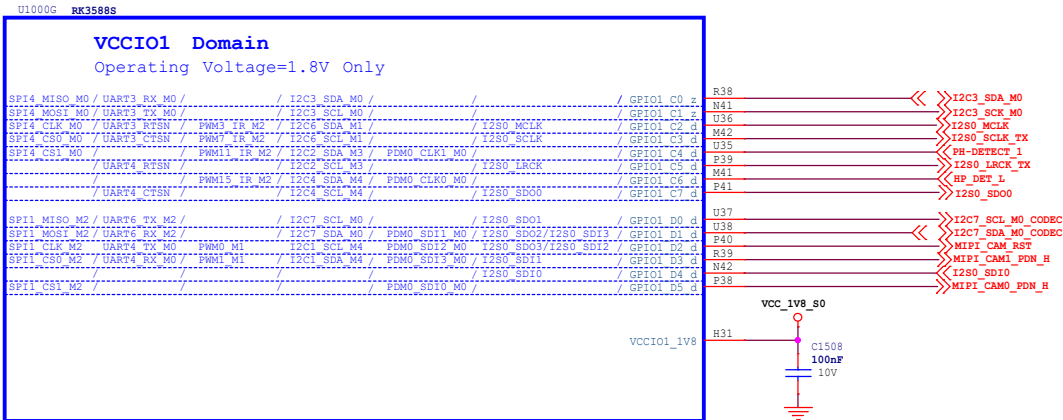
- SARADC_VIN1_KEY/RECOVERY
- SARADC_VIN2
- SARADC_VIN3_HP_HOOK
- SARADC_VIN4
- SARADC_VIN0_BOOT



RK3588S (MIPI_DPHY CSI0 RX)



RK3588S (VCCIO1 Domain)



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RK3588S (MIPI_D/C PHY0)

U10000 RK3588S

MIPI D/C-PHY DSI_TX Port0

D-PHY:V2.0
4.5Gbps/Lane
C-PHY:V1.1
5.7Gbps/Trio

MIPI_DPHY0_TX_CLKP/MIPI_CPHY0_TX_TRIO1_C
MIPI_DPHY0_TX_CLKN/MIPI_CPHY0_TX_TRIO1_B
MIPI_DPHY0_TX_D0P/MIPI_CPHY0_TX_TRIO0_B
MIPI_DPHY0_TX_D0N/MIPI_CPHY0_TX_TRIO0_A
MIPI_DPHY0_TX_D1P/MIPI_CPHY0_TX_TRIO1_A
MIPI_DPHY0_TX_D1N/MIPI_CPHY0_TX_TRIO0_C
MIPI_DPHY0_TX_D2P/MIPI_CPHY0_TX_TRIO2_B
MIPI_DPHY0_TX_D2N/MIPI_CPHY0_TX_TRIO2_A
MIPI_DPHY0_TX_D3P/NO_USE
MIPI_DPHY0_TX_D3N/MIPI_CPHY0_TX_TRIO2_C

BB34 MIPI_DPHY0_TX_CLKP/MIPI_CPHY0_TX_TRIO1_C
BA34 MIPI_DPHY0_TX_CLKN/MIPI_CPHY0_TX_TRIO1_B
BB31 MIPI_DPHY0_TX_D0P/MIPI_CPHY0_TX_TRIO0_B
BA31 MIPI_DPHY0_TX_D0N/MIPI_CPHY0_TX_TRIO0_A
BA32 MIPI_DPHY0_TX_D1P/MIPI_CPHY0_TX_TRIO1_A
BB32 MIPI_DPHY0_TX_D1N/MIPI_CPHY0_TX_TRIO0_C
BA35 MIPI_DPHY0_TX_D2P/MIPI_CPHY0_TX_TRIO2_B
BB35 MIPI_DPHY0_TX_D2N/MIPI_CPHY0_TX_TRIO2_A
BB37 MIPI_DPHY0_TX_D3P
BA37 MIPI_DPHY0_TX_D3N/MIPI_CPHY0_TX_TRIO2_C

MIPI D/C-PHY CSI_RX Port0

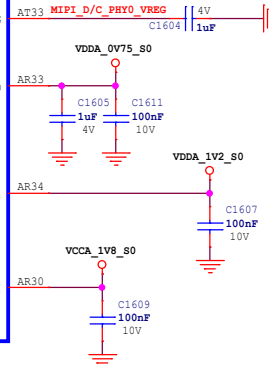
D-PHY:V2.0
4.5Gbps/Lane
C-PHY:V1.1
5.7Gbps/Trio

MIPI_DPHY0_RX_CLKP/MIPI_CPHY0_RX_TRIO1_C
MIPI_DPHY0_RX_CLKN/MIPI_CPHY0_RX_TRIO1_B
MIPI_DPHY0_RX_D0P/MIPI_CPHY0_RX_TRIO0_B
MIPI_DPHY0_RX_D0N/MIPI_CPHY0_RX_TRIO0_A
MIPI_DPHY0_RX_D1P/MIPI_CPHY0_RX_TRIO1_A
MIPI_DPHY0_RX_D1N/MIPI_CPHY0_RX_TRIO0_C
MIPI_DPHY0_RX_D2P/MIPI_CPHY0_RX_TRIO2_B
MIPI_DPHY0_RX_D2N/MIPI_CPHY0_RX_TRIO2_A
MIPI_DPHY0_RX_D3P/NO_USE
MIPI_DPHY0_RX_D3N/MIPI_CPHY0_RX_TRIO2_C

BB41
BA41
BA38
BB38
BA40
AY40
AY42
BA42
AW41
AW42

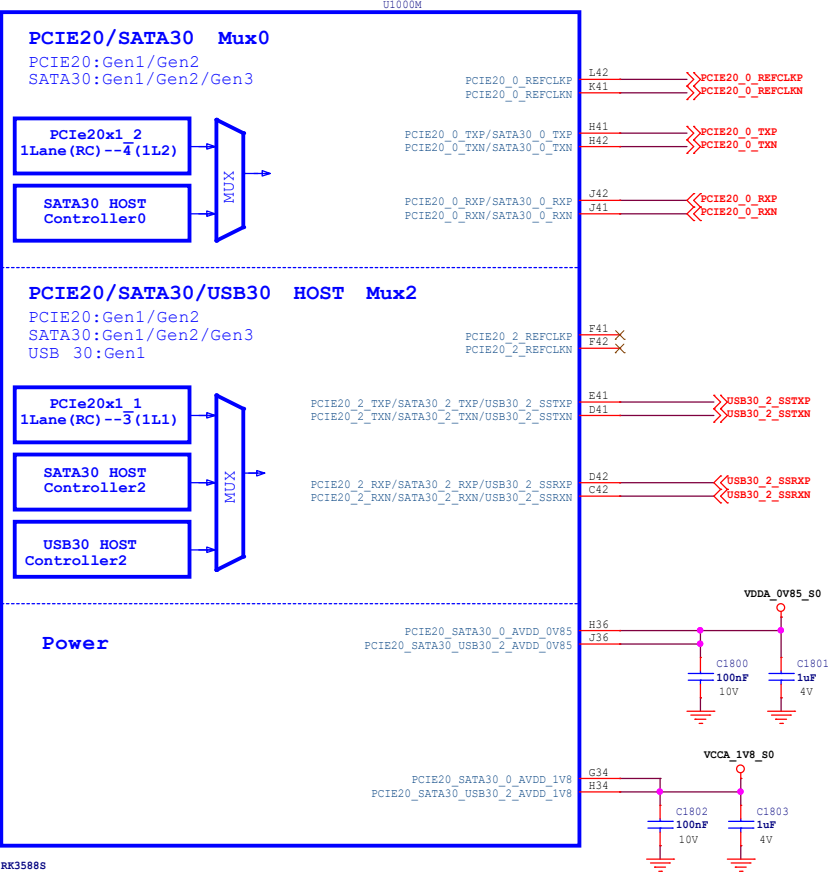
Power

MIPI_D/C_PHY0_VREG
MIPI_D/C_PHY0_VDD
MIPI_D/C_PHY_VDD_1V2_1
MIPI_D/C_PHY_VDD_1V8_1

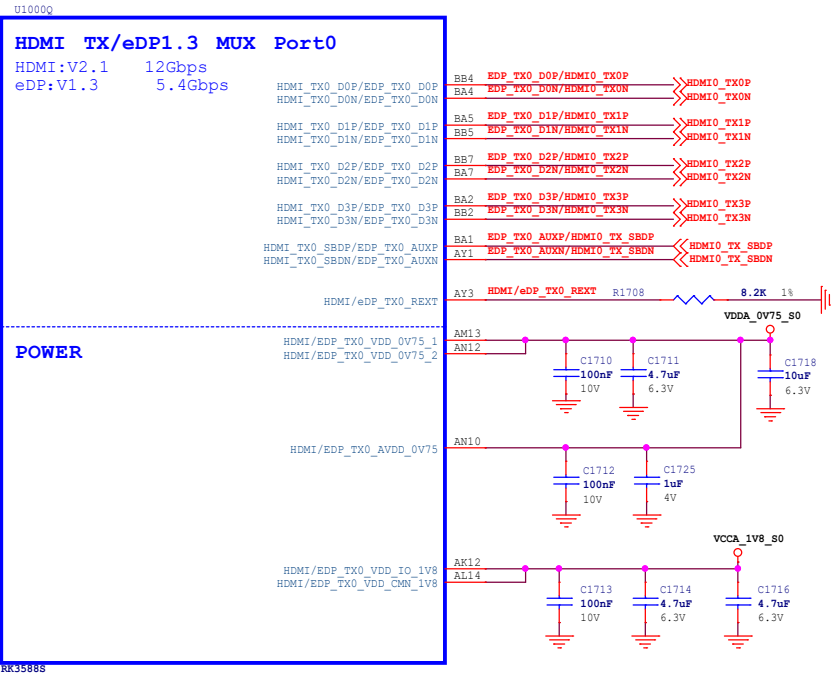


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RK3588S (PCIE20/SATA30/USB30)



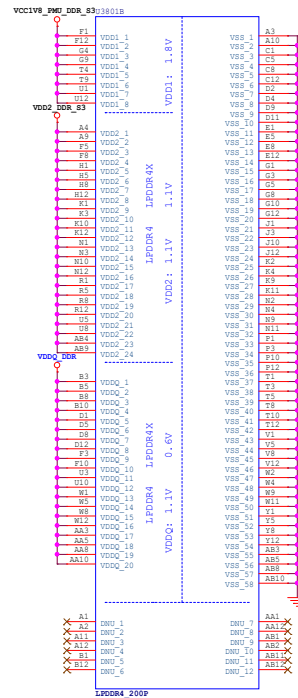
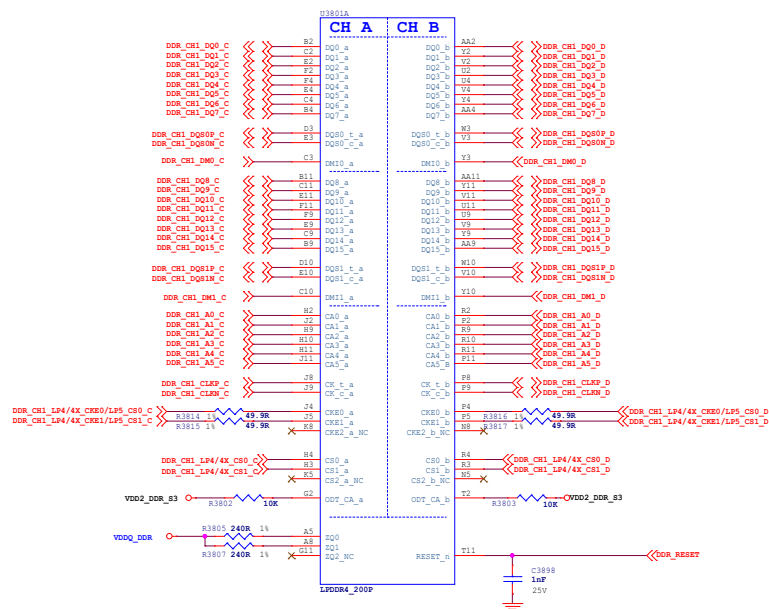
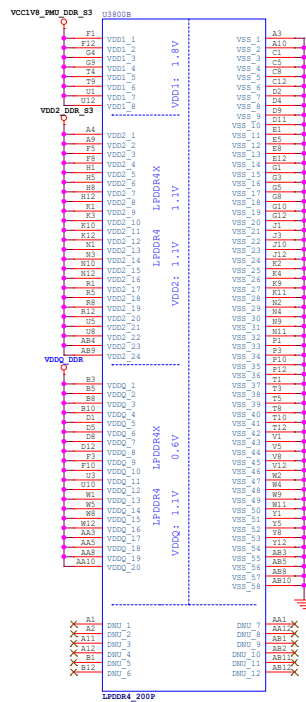
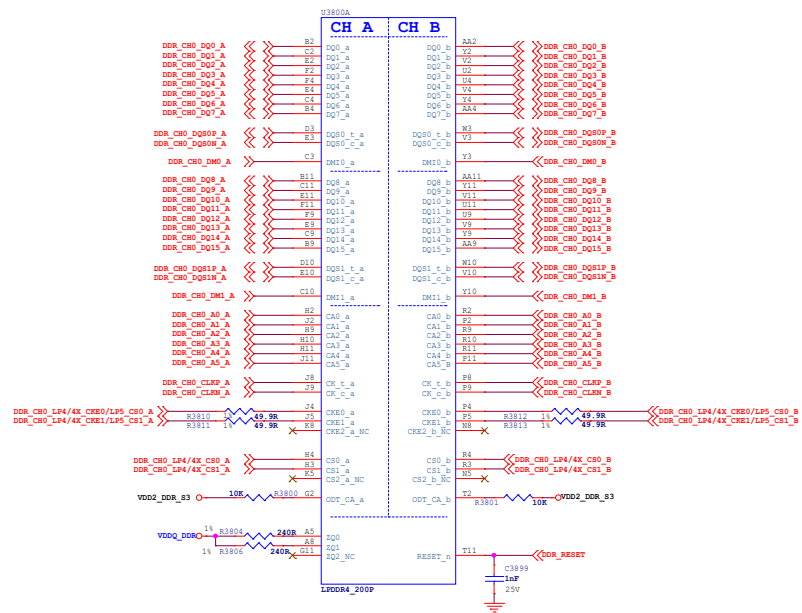
RK3588S (HDMI2.1 TX/eDP1.3 TX)



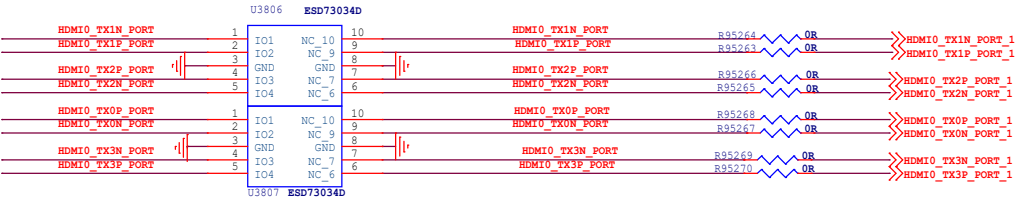
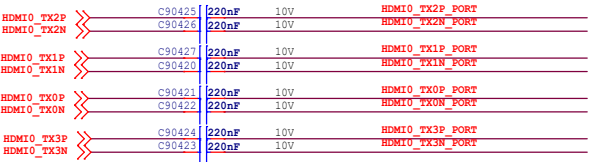
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VCCIO5 Domain
Operating Voltage=1.8V/3.3V

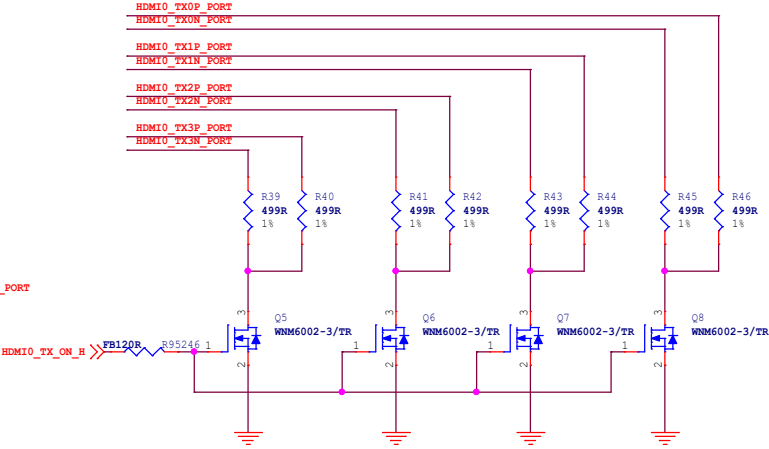
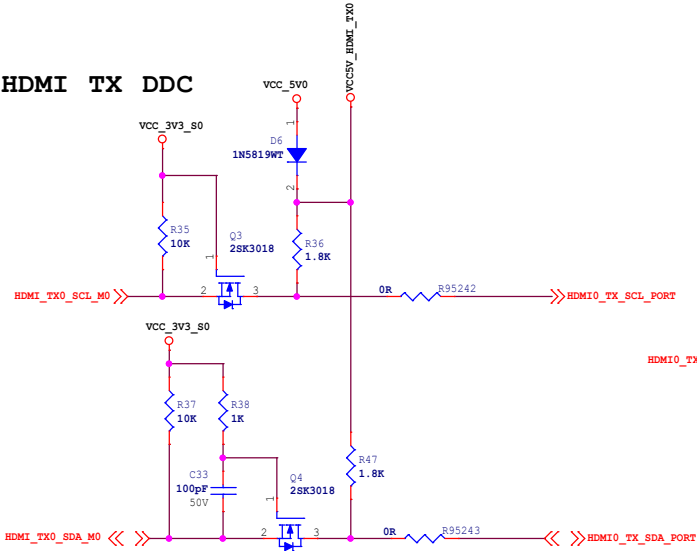
DRAM-LPDDR4/4x_2X32bit



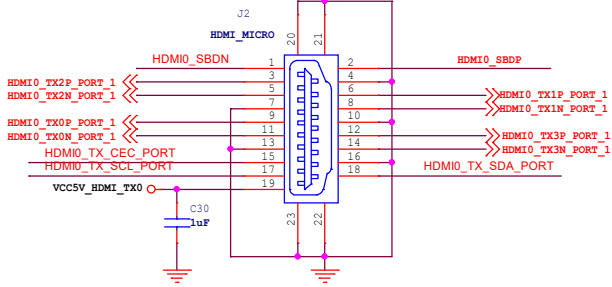
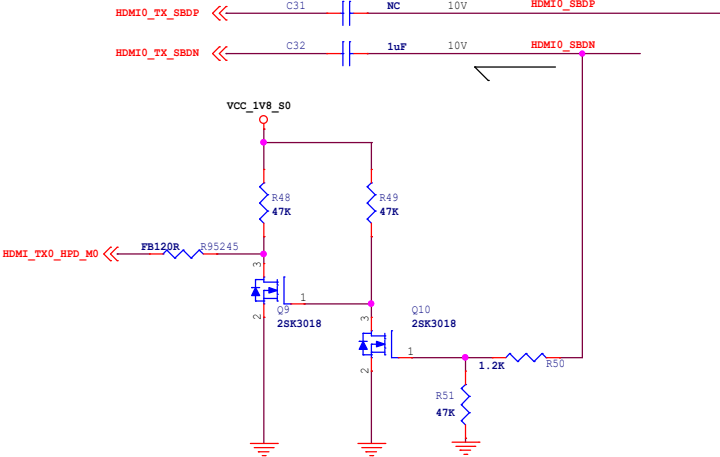
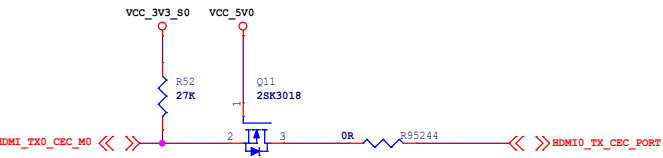
HDMI2.1 TX0

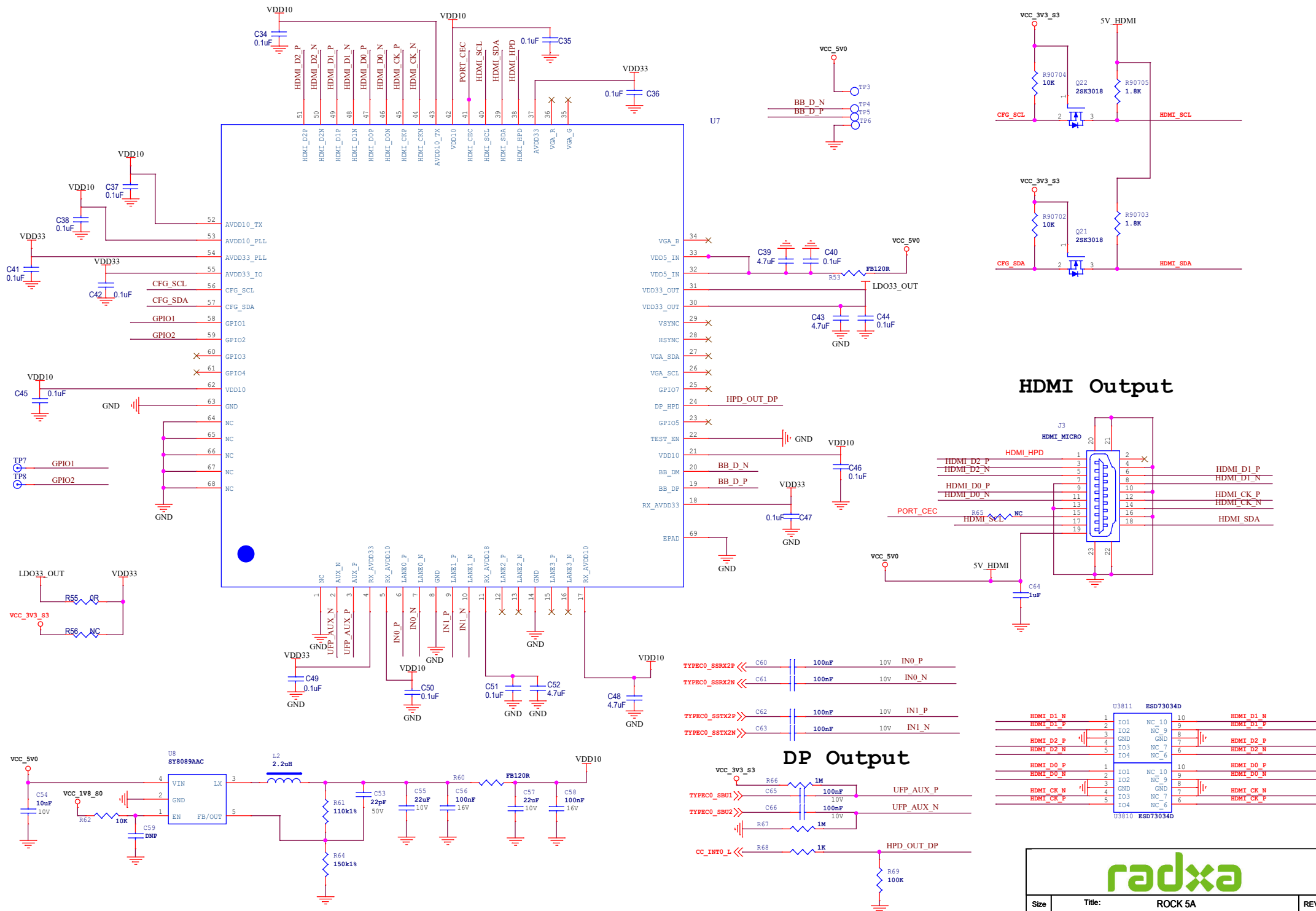


HDMI TX DDC

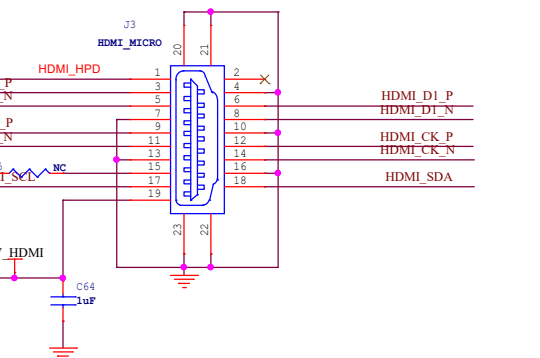


HDMI TX CEC

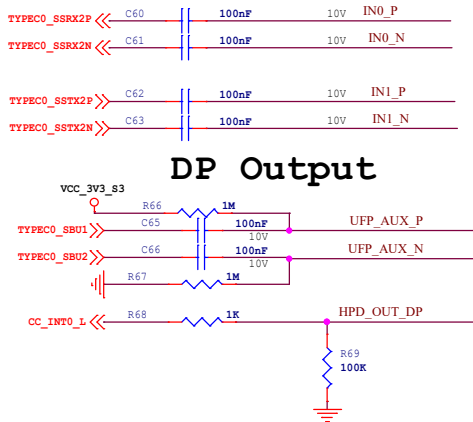




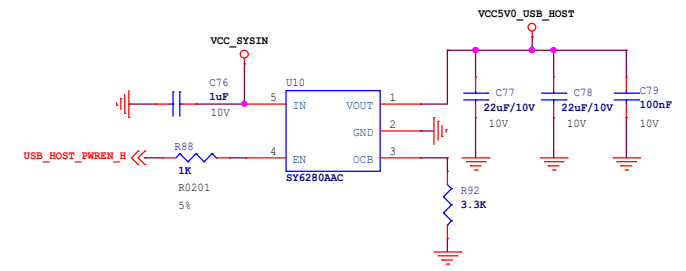
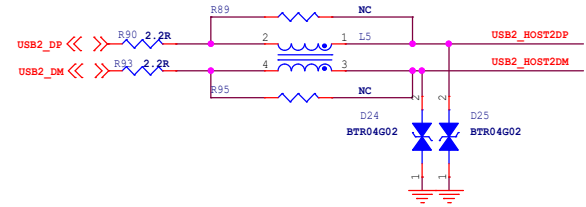
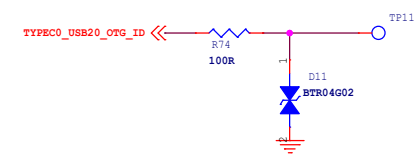
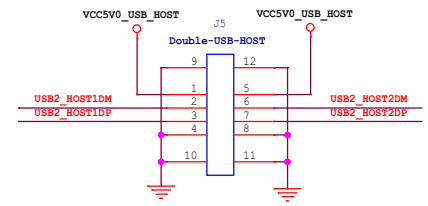
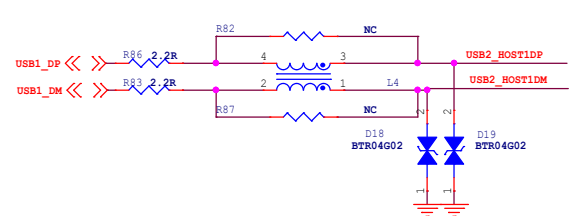
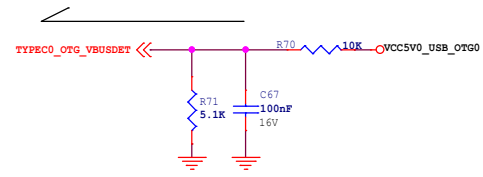
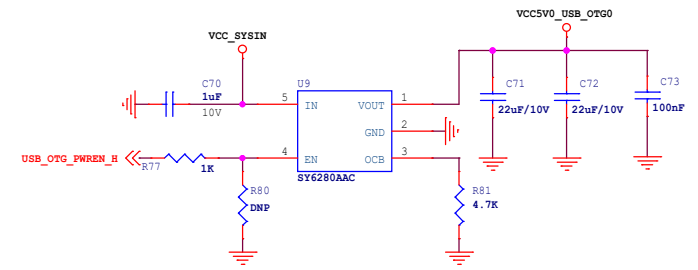
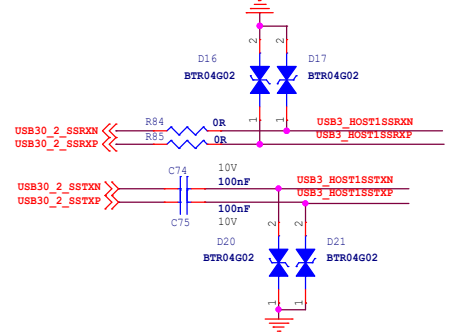
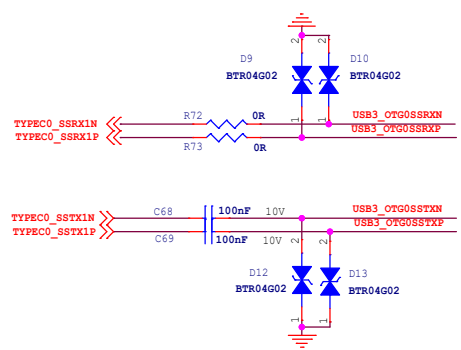
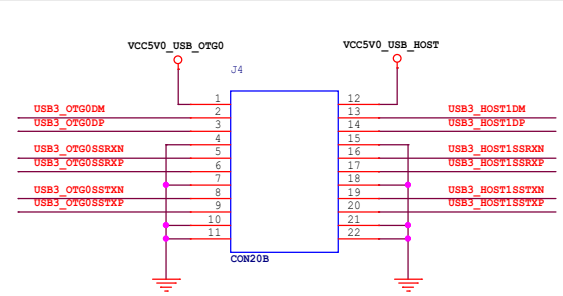
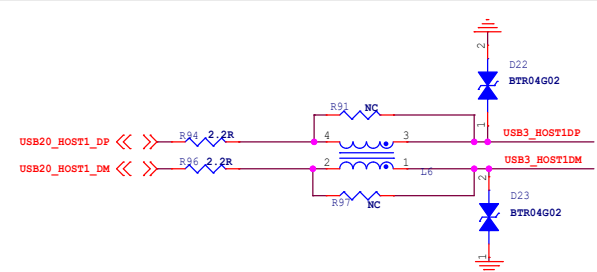
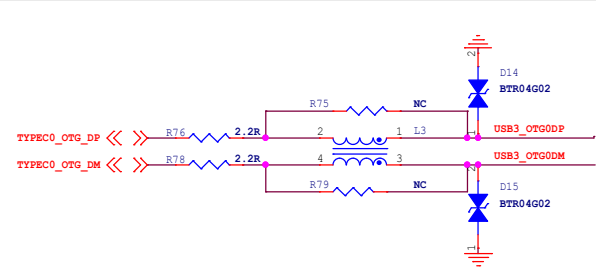
HDMI Output



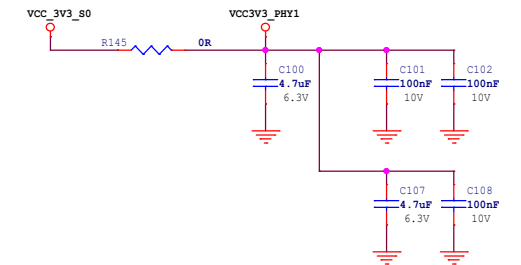
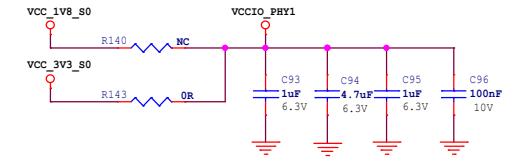
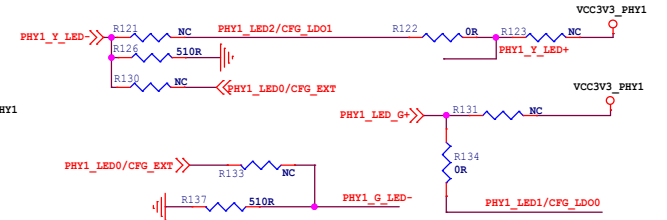
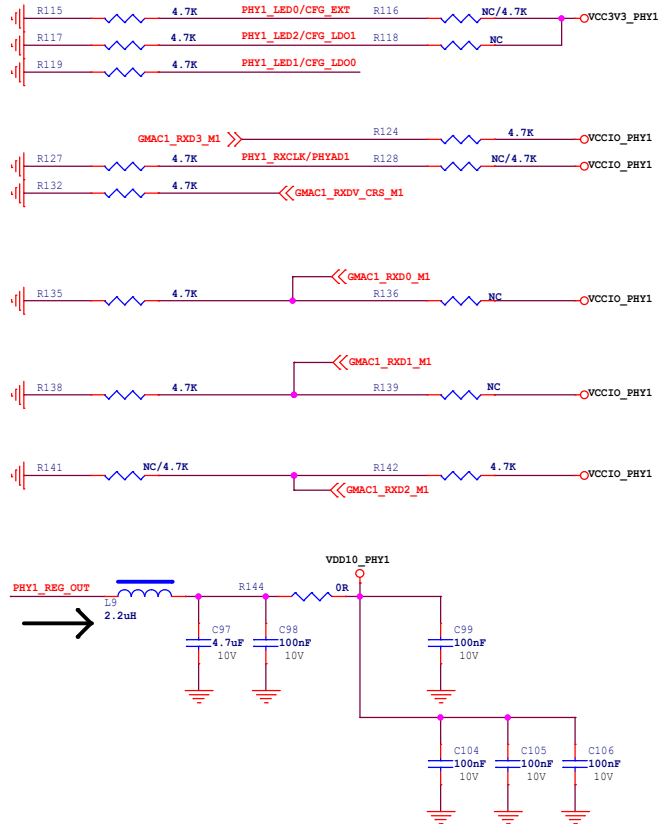
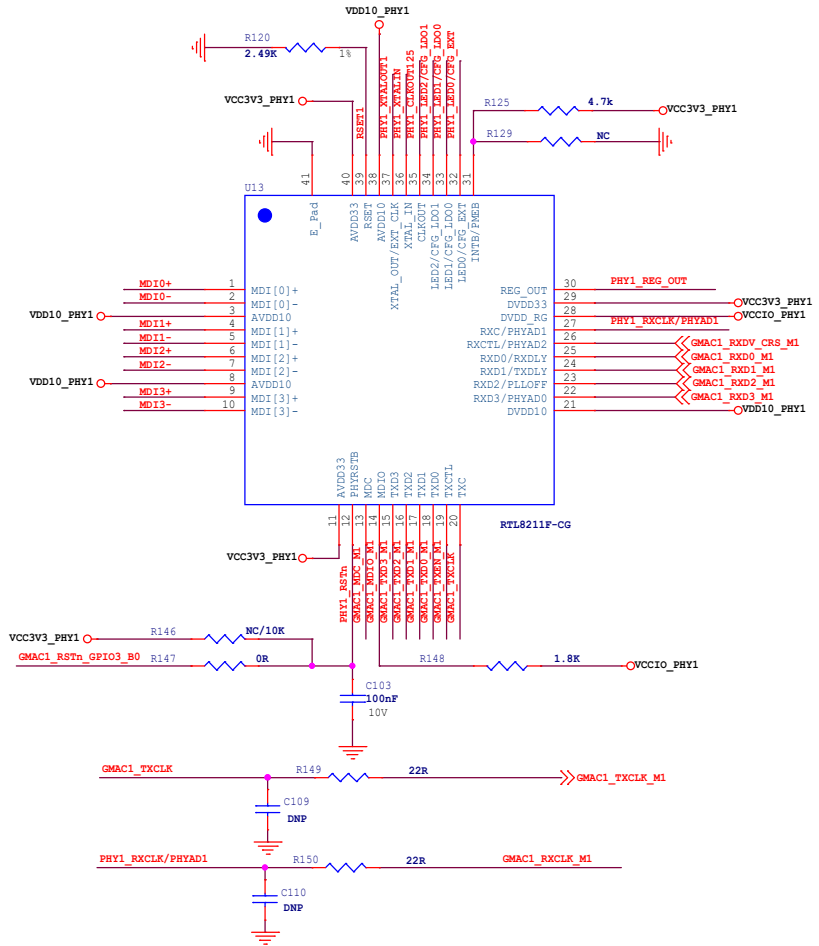
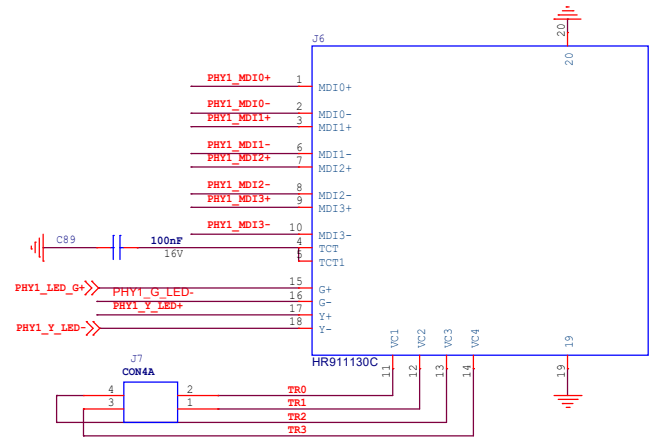
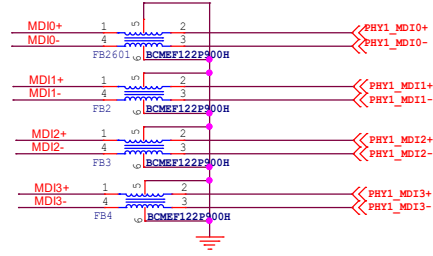
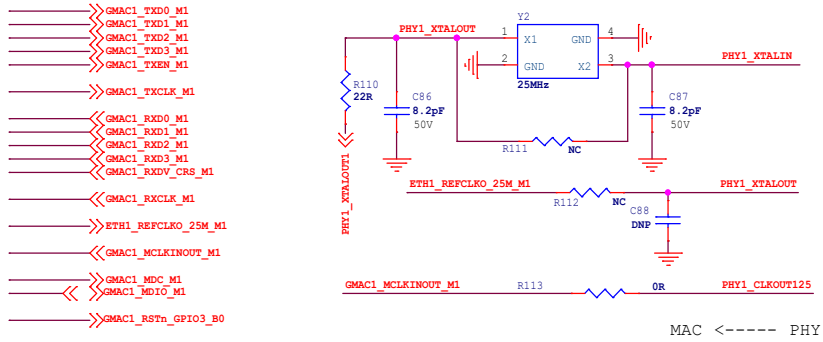
DP Output



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HDMI_D1_N	1	IO1	NC 10
HDMI_D1_P	2	IO2	NC 9
HDMI_D2_P	3	GND	NC 9
HDMI_D2_N	4	IO3	NC 7
HDMI_D0_P	5	IO4	NC 6
HDMI_D0_N	1	IO1	NC 10
HDMI_D0_N	2	IO2	NC 9
HDMI_CK_N	3	GND	NC 9
HDMI_CK_P	4	IO3	NC 7
HDMI_CK_P	5	IO4	NC 6

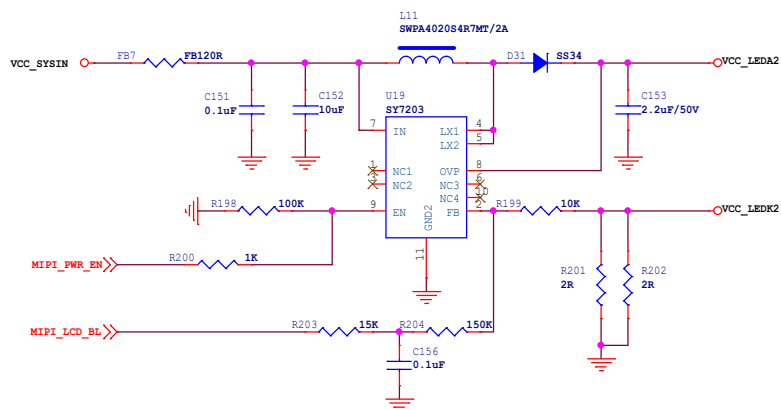


Giga PHY1



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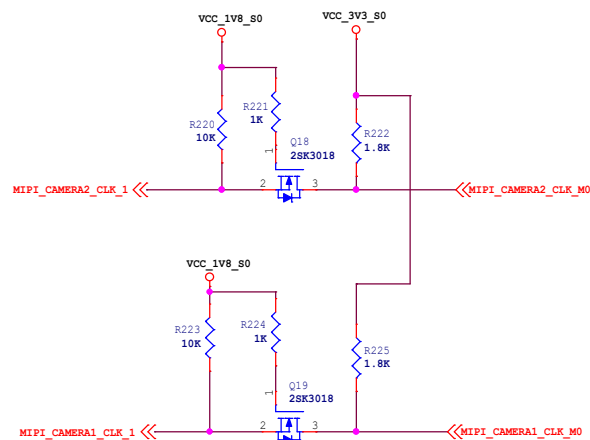
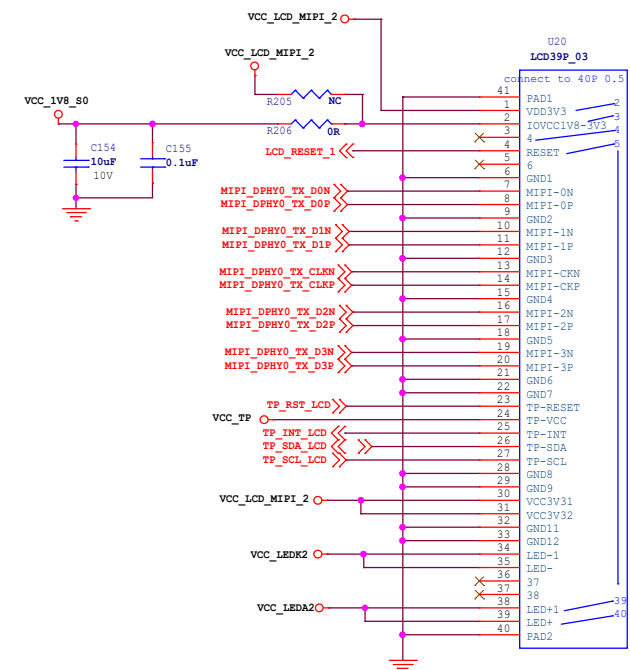
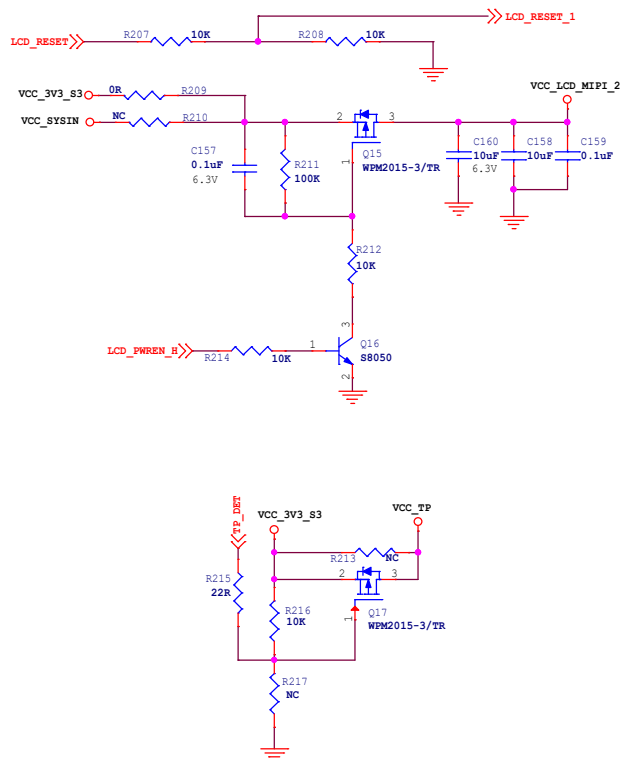
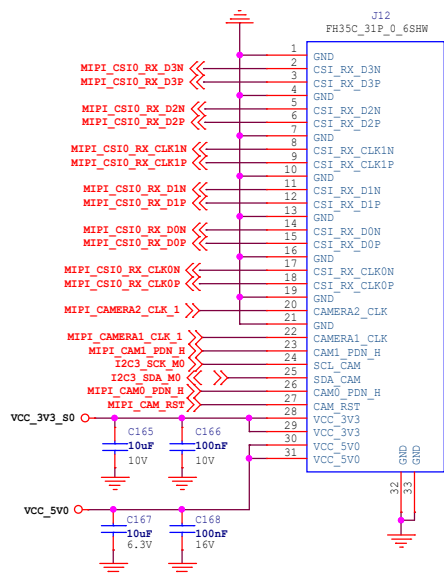
MIPI LCD TX1



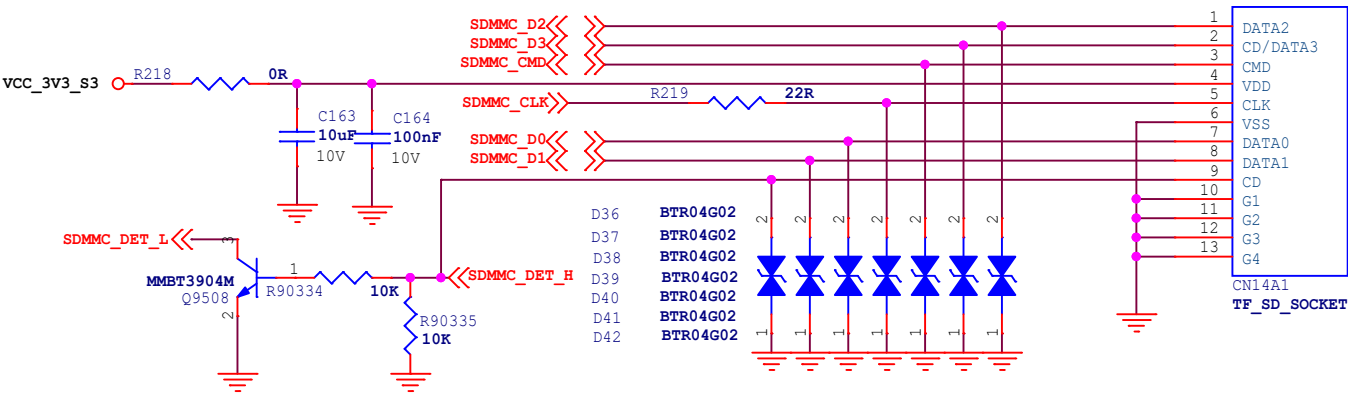
LCD TP



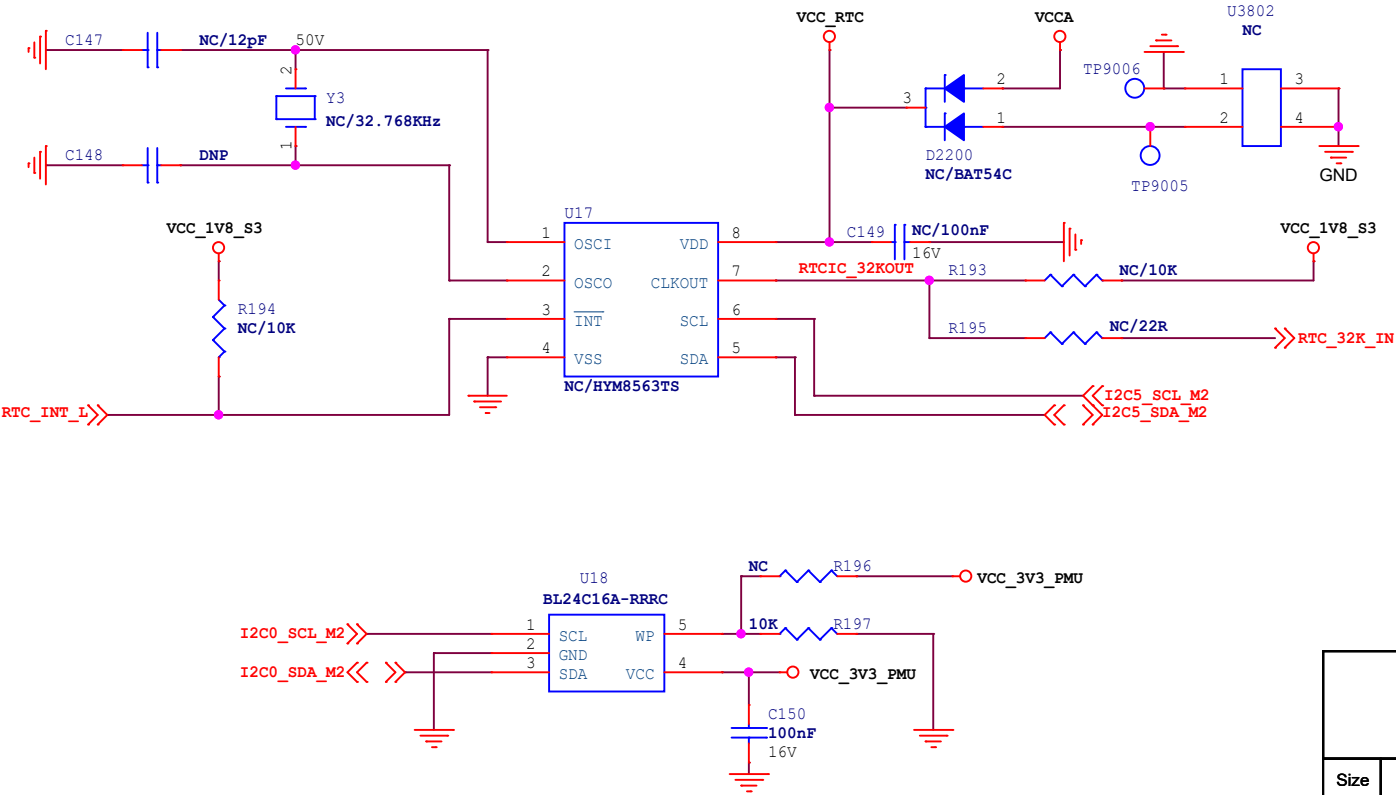
MIPI_RX



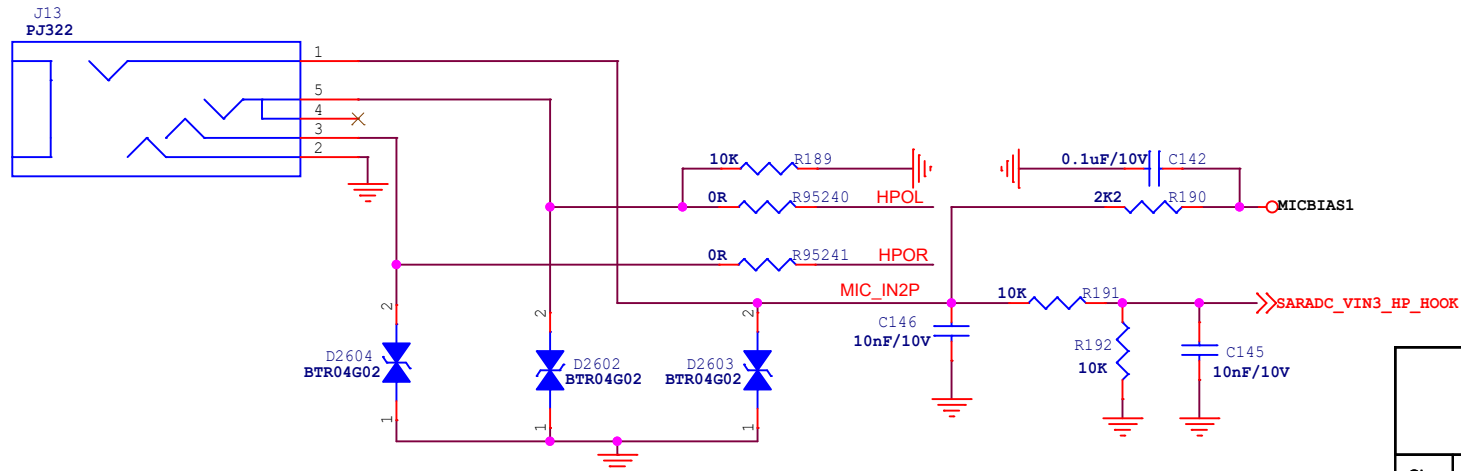
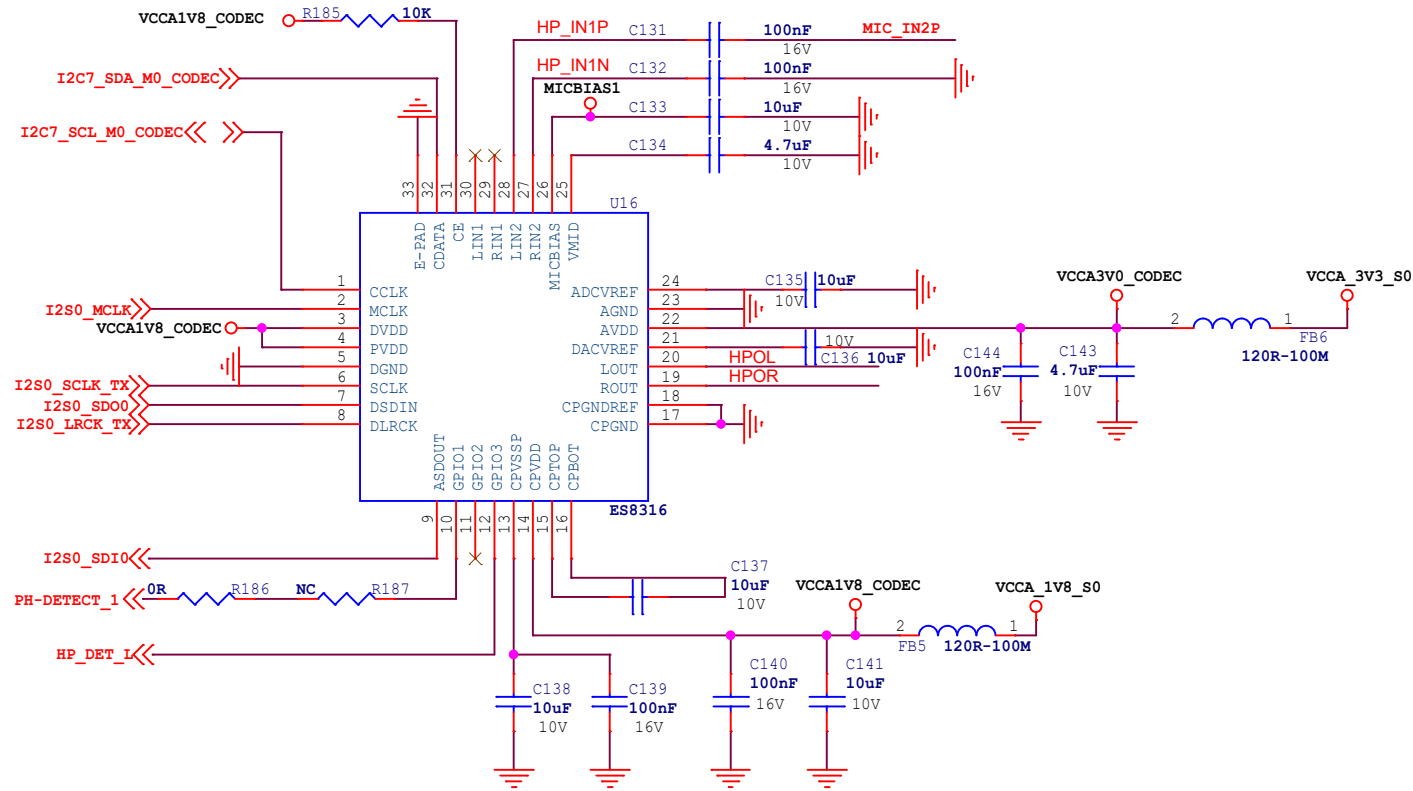
MicroSD Card



RTC IC

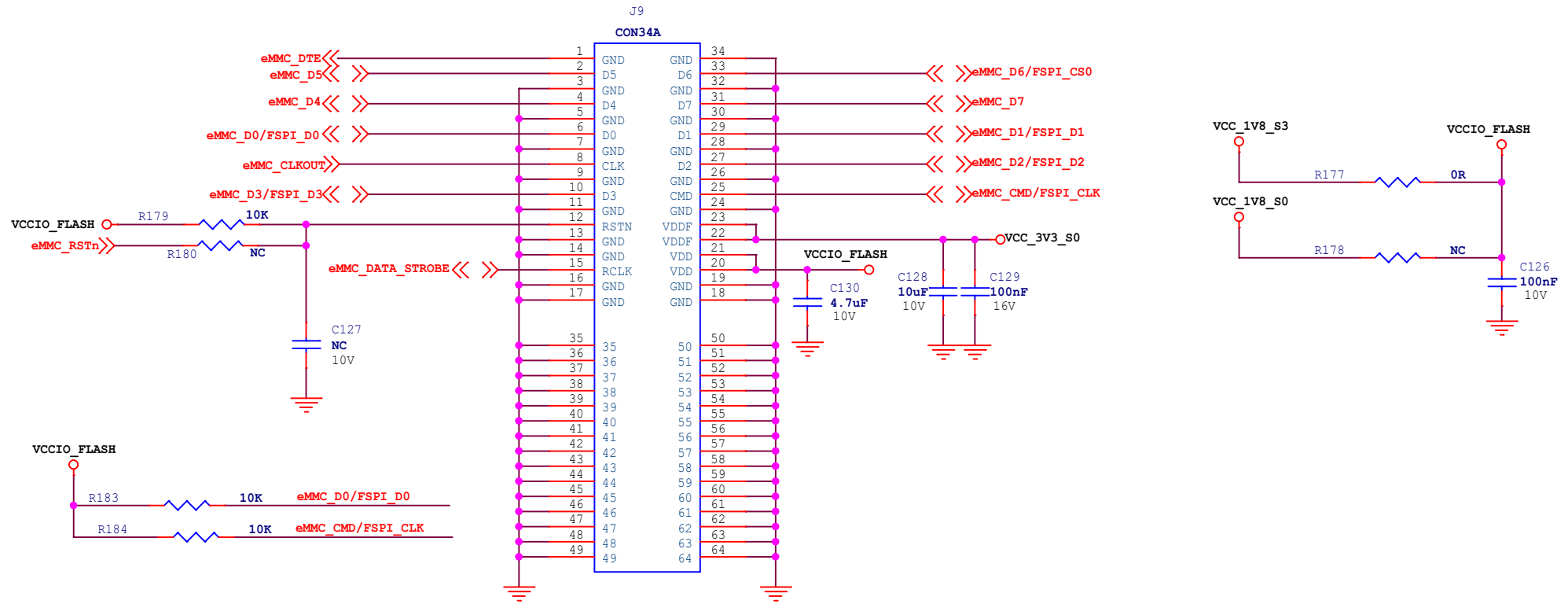


CODEC ES8316



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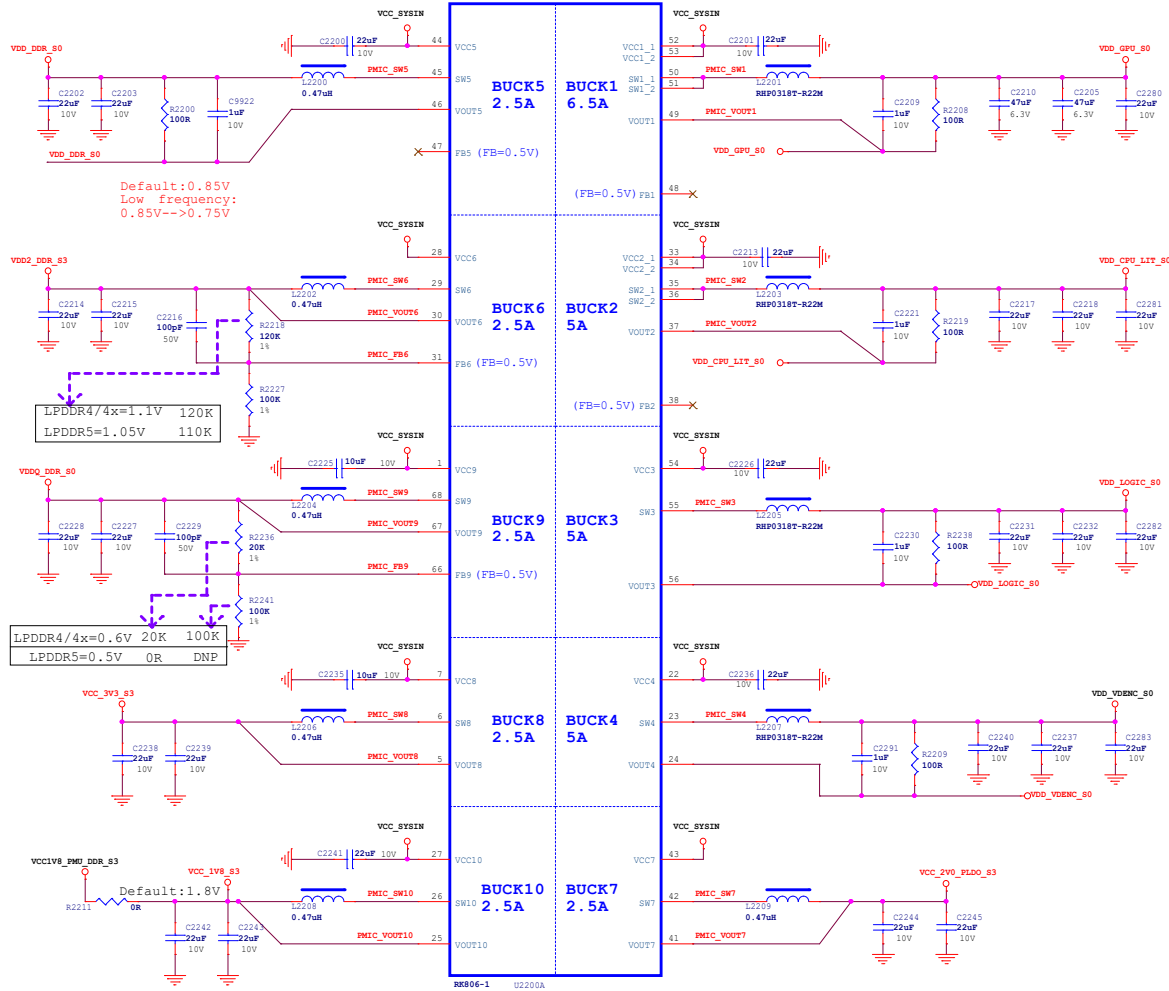
eMMC Flash



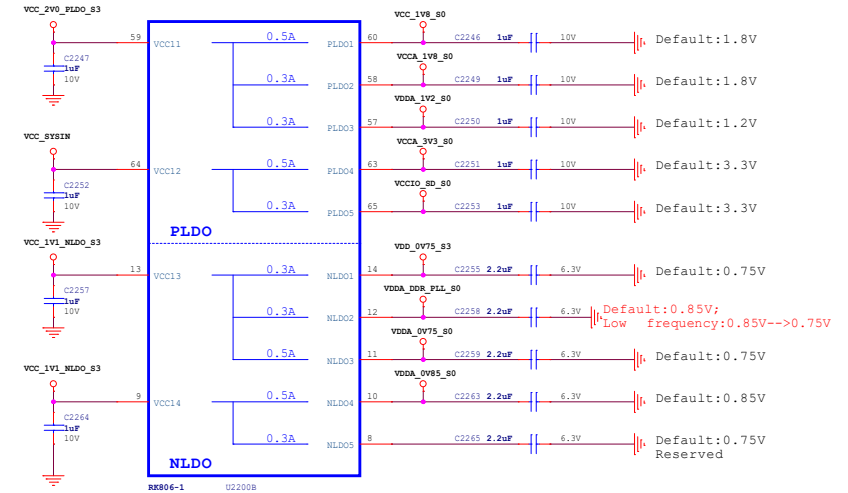
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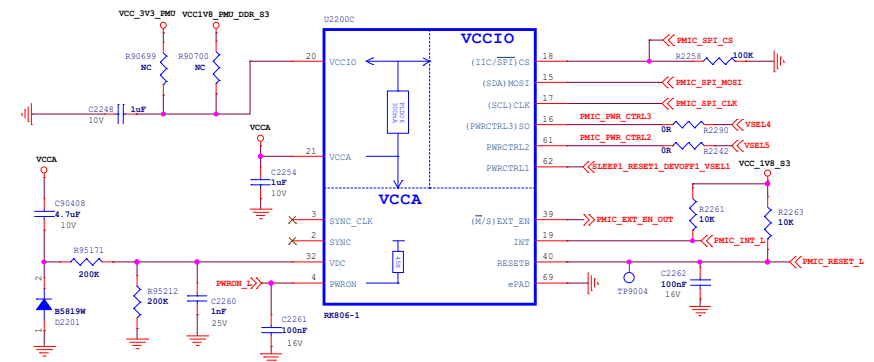
PMIC RK806-1 BUCK



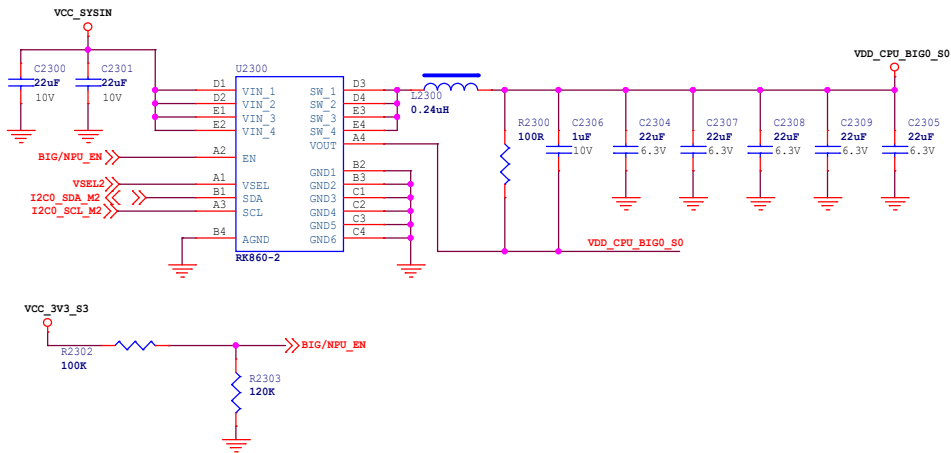
PMIC RK806-1 LDO



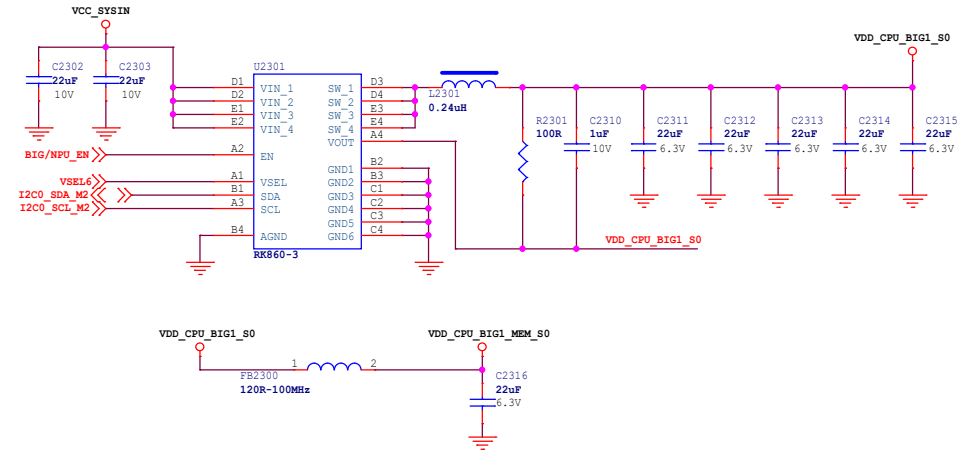
PMIC RK806-1 Managerment



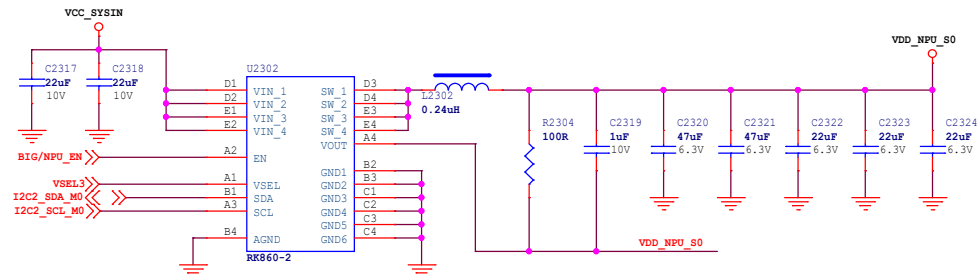
VDD_CPU_BIG0



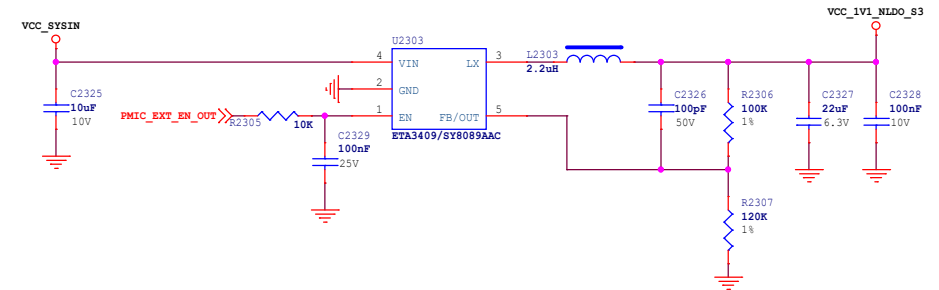
VDD_CPU_BIG1



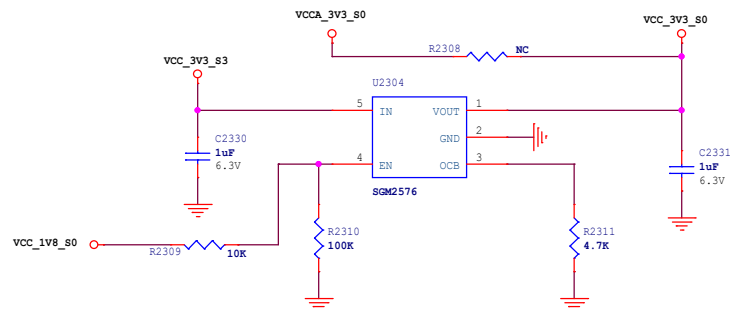
VDD_NPU



VCC_1V1_NLDO



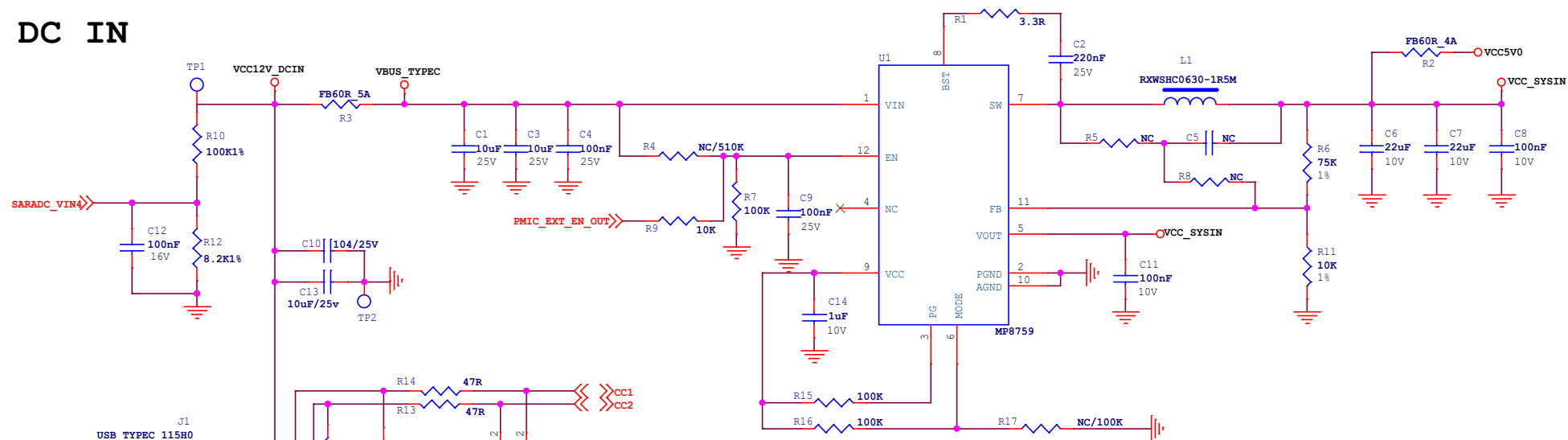
VCC_3V3_S0



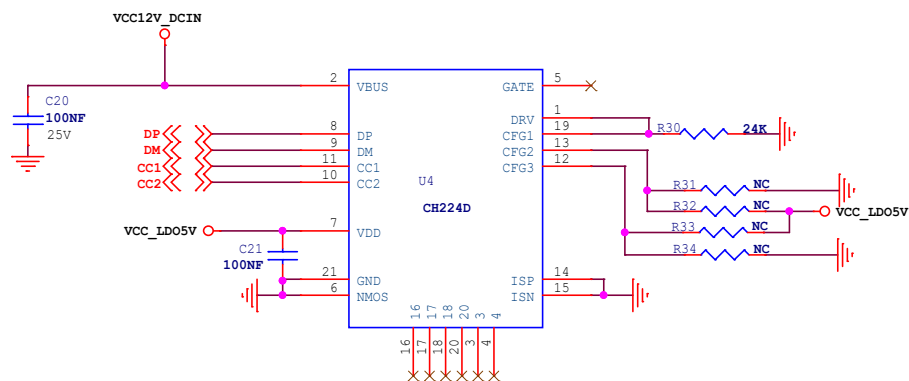
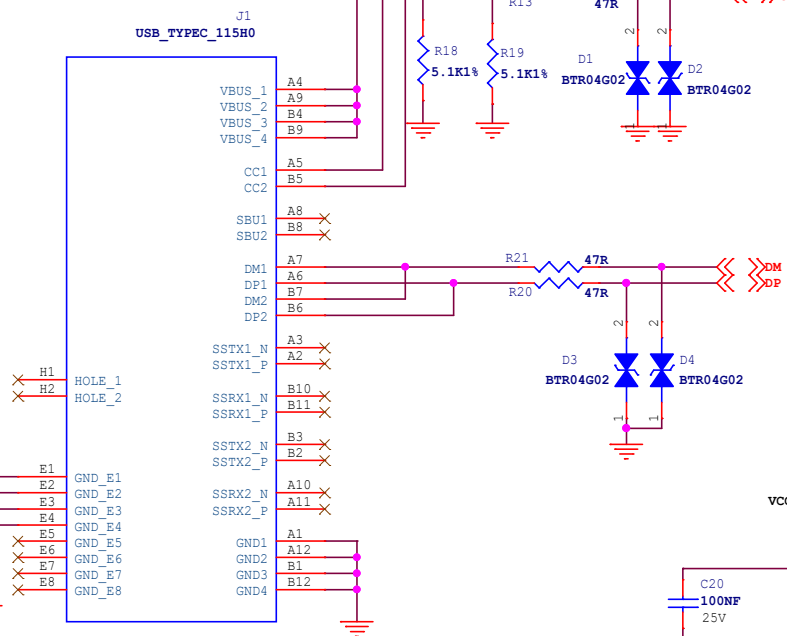
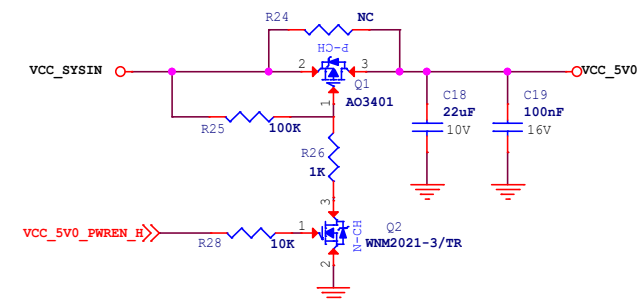
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A3	Page Name:	Power Ext	1.1
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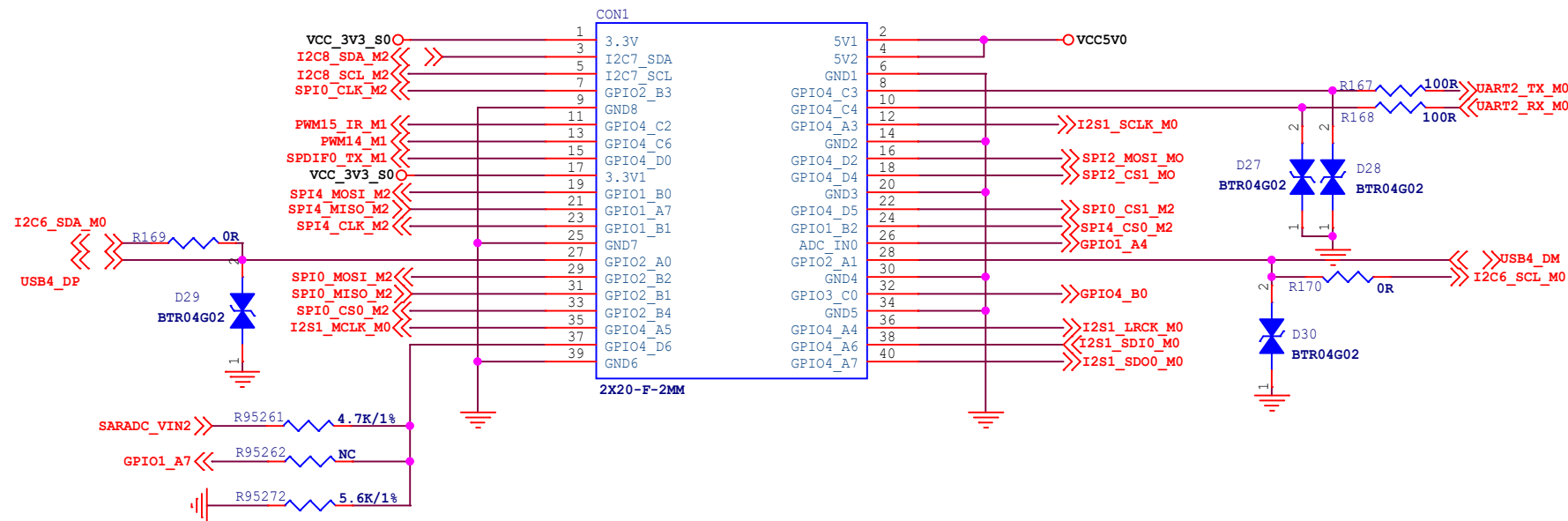
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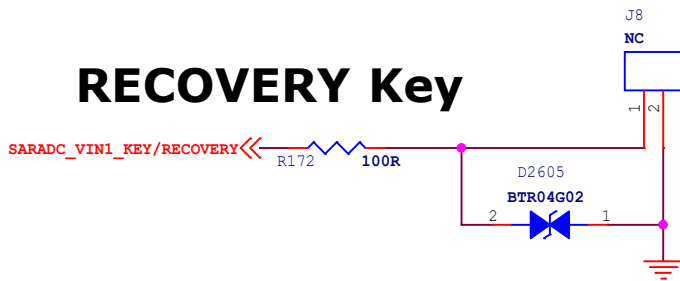
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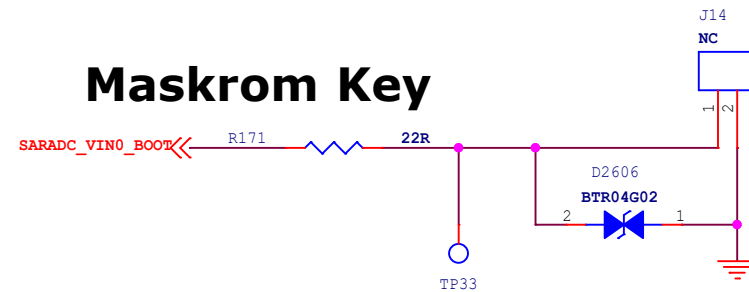
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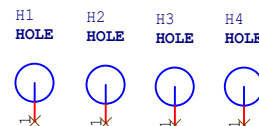
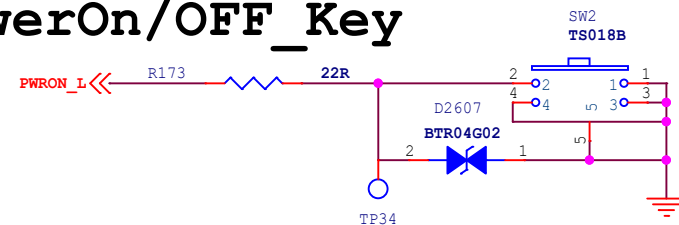
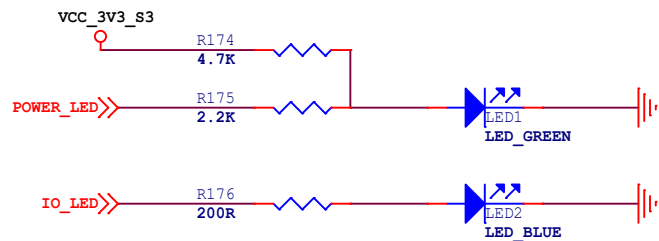
RECOVERY Key



Maskrom Key



PowerOn/OFF_Key



radxa

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