



Radxa ROCK 5C

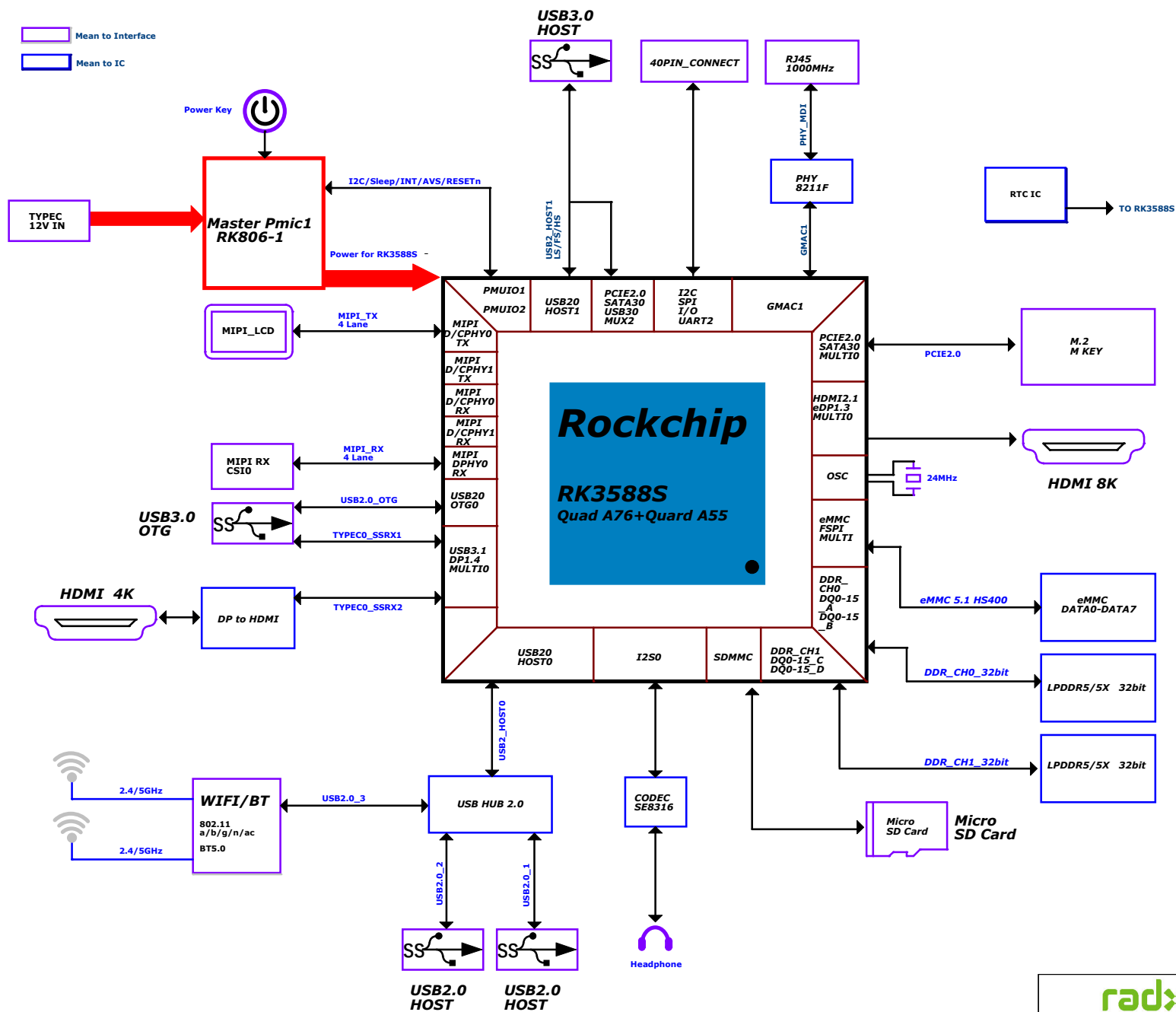
Schematic

V2.10

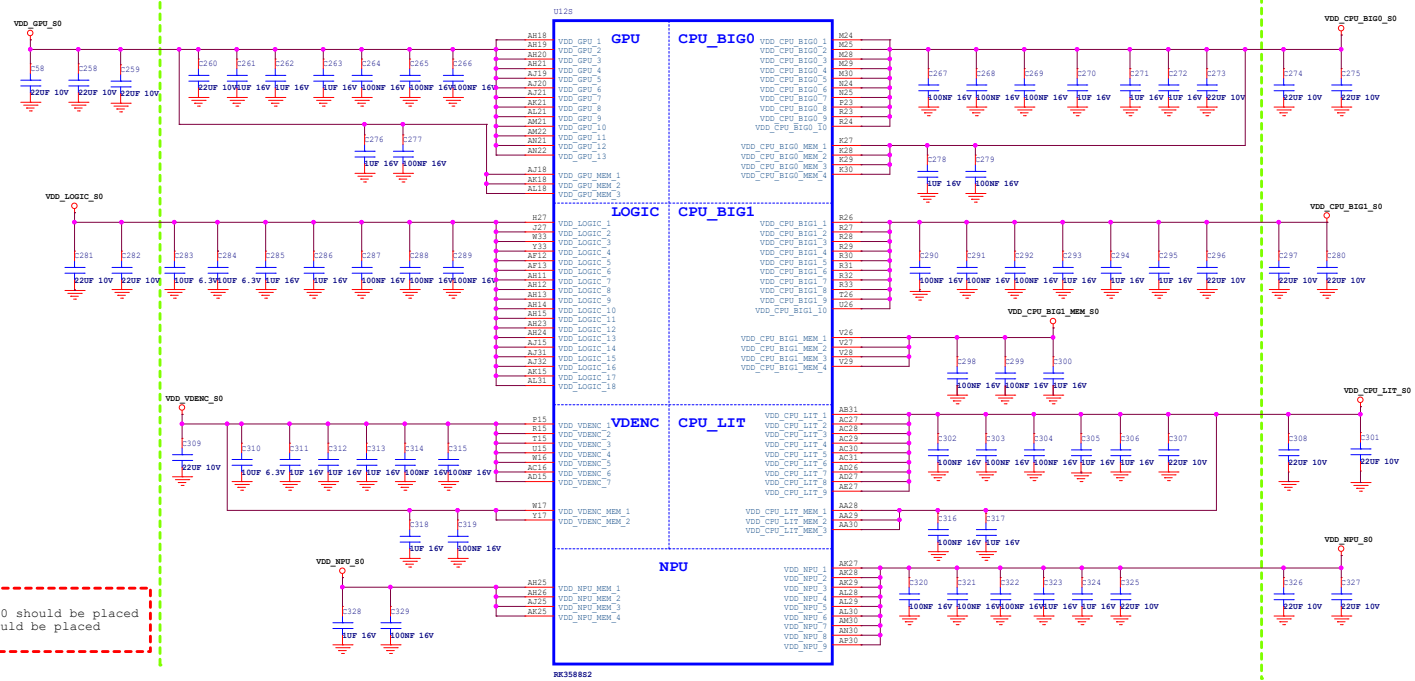
Table of Content

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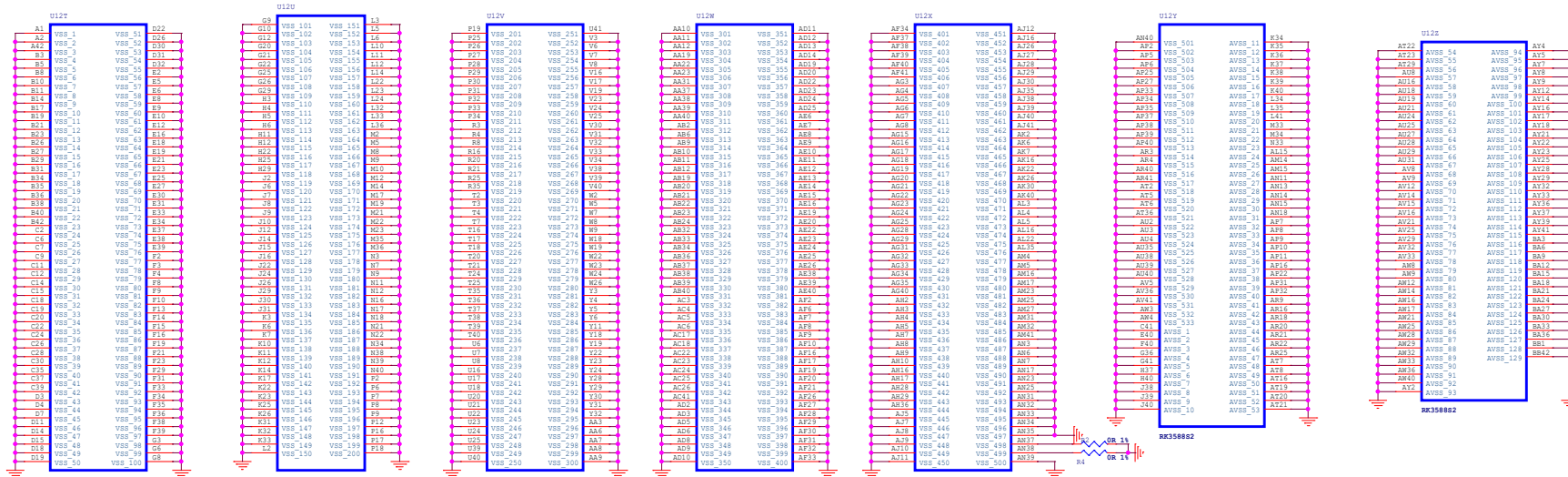
5A Tablet Ref Block Diagram



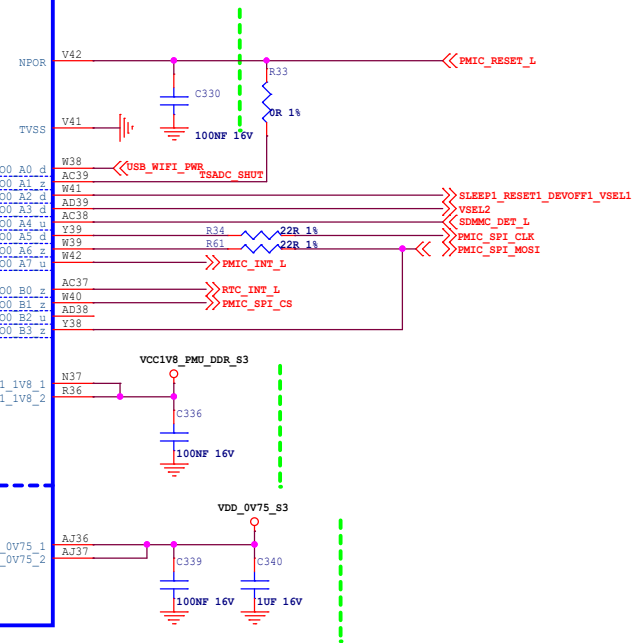
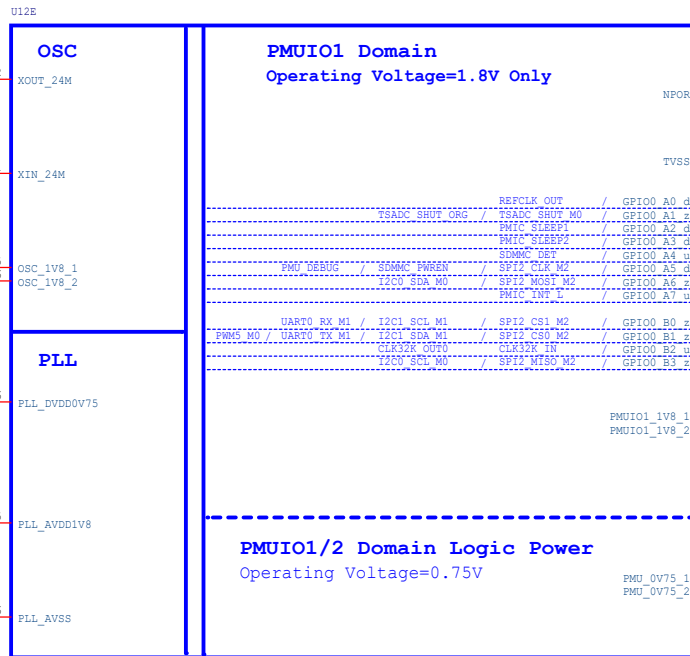
RK3588S (Power&Gnd)



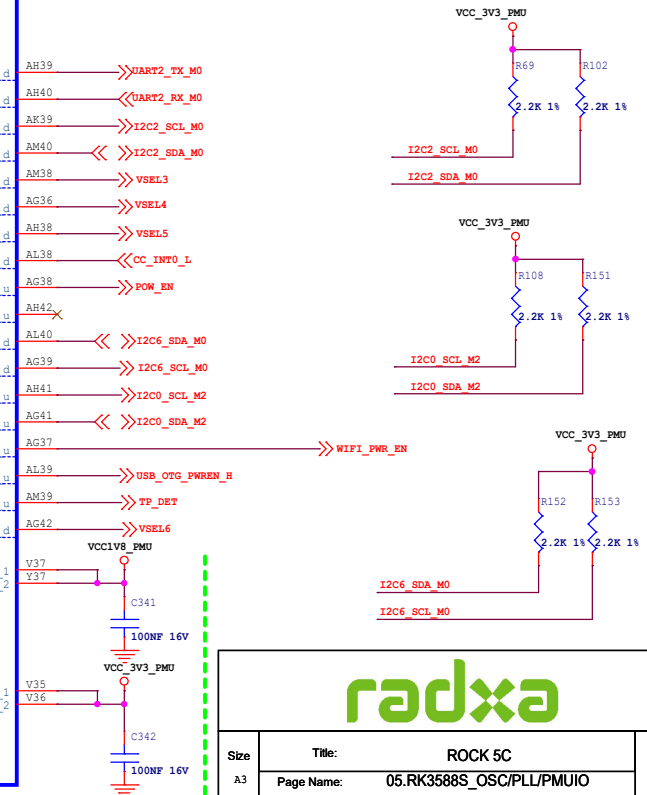
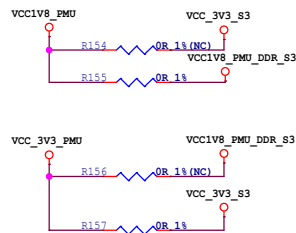
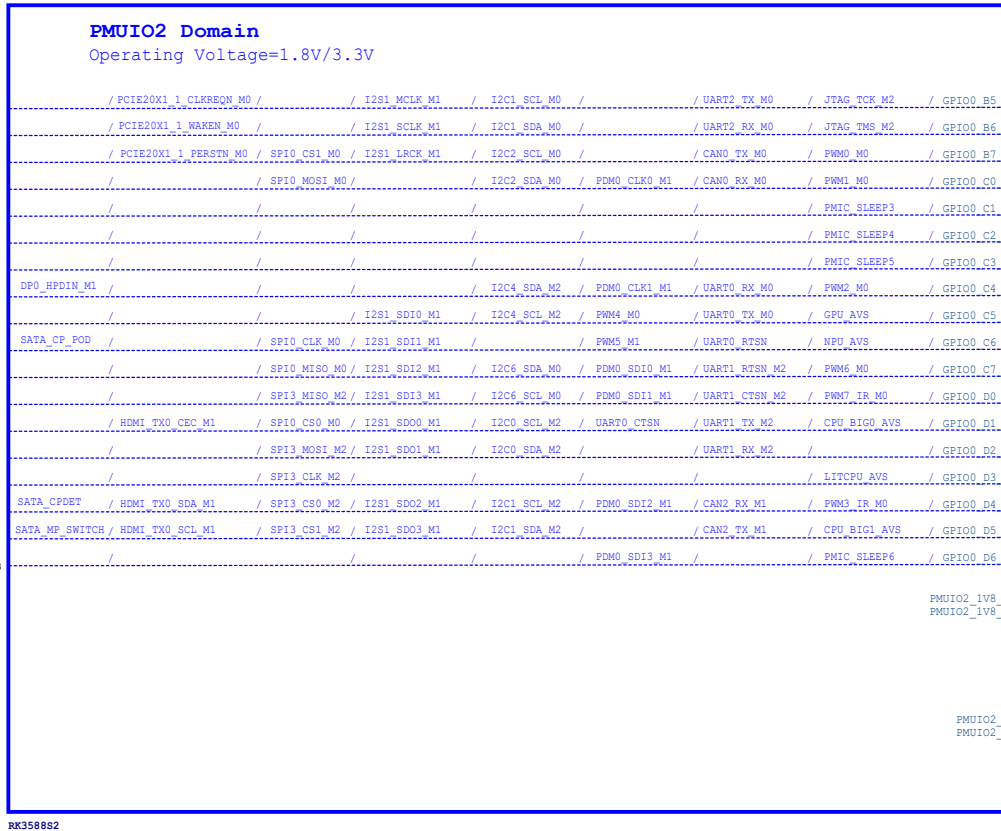
Note:
The Caps between green line and U1000 should be placed under the U1000 package. Other caps should be placed close to the U1000 package



Note:
The Caps between green line and U1000 should be placed under the U1000 package. Other caps should be placed close to the U1000 package

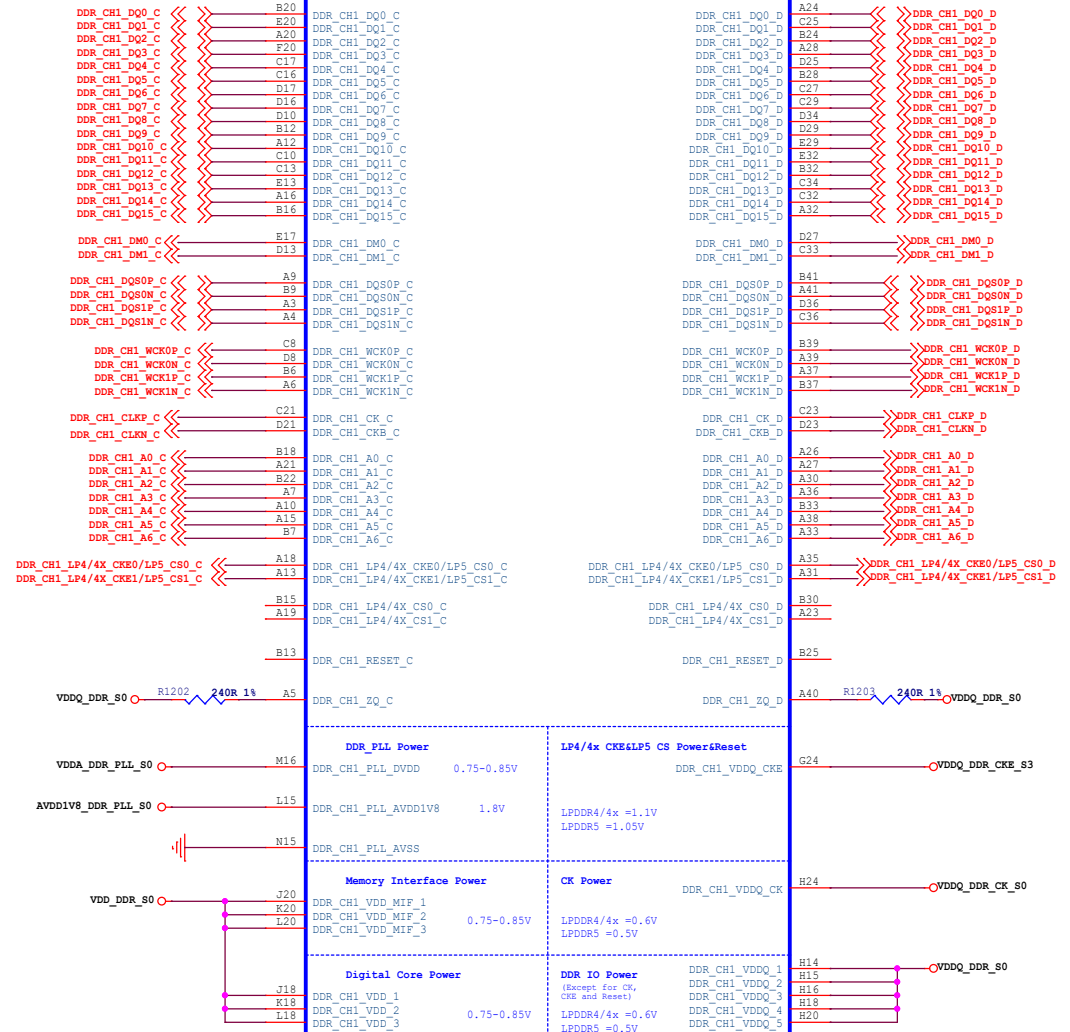
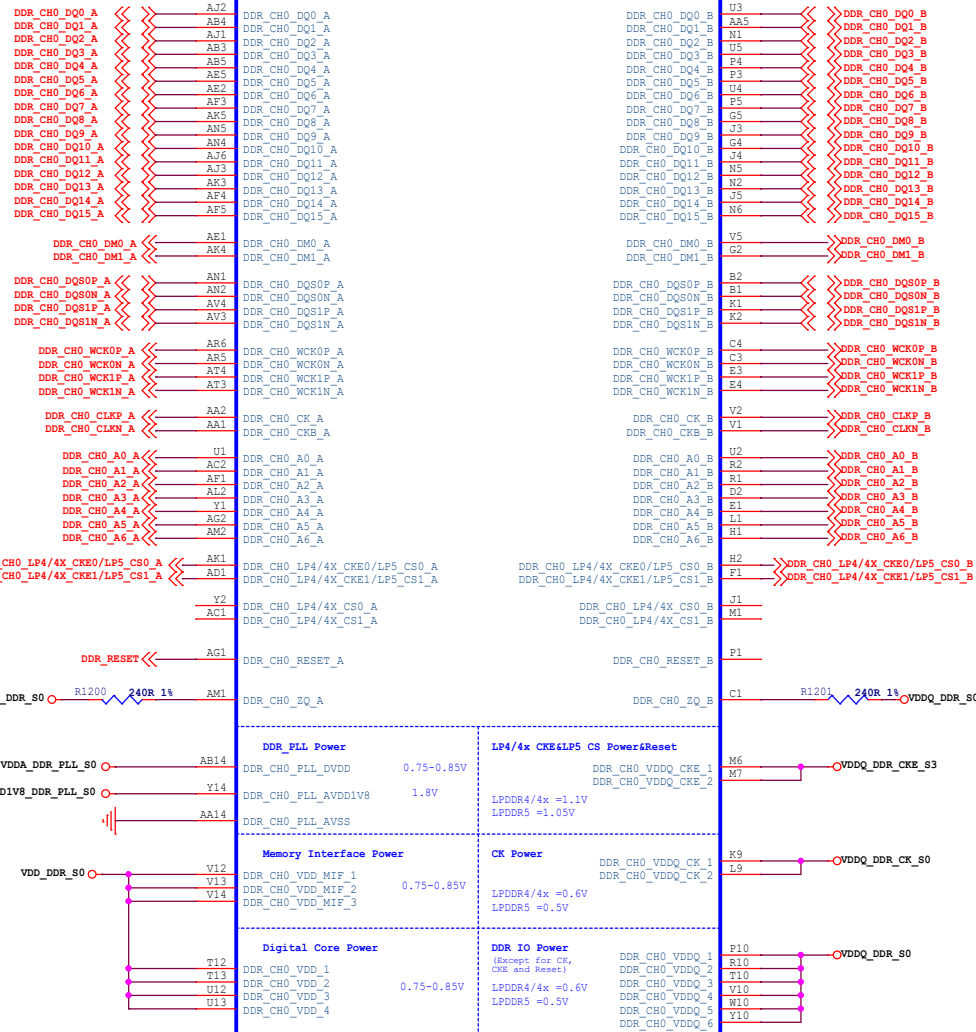


PMUIO2 Domain
Operating Voltage=1.8V/3.3V

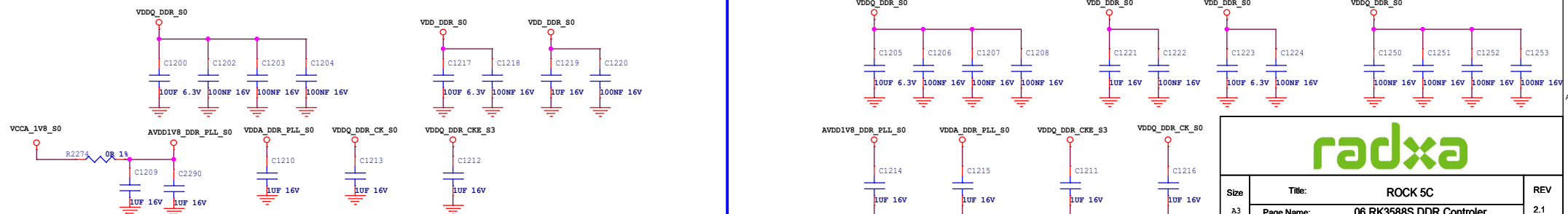


Size A3	Title: ROCK 5C	REV
	Page Name: 05.RK3588S_osc/PLL/PMUIO	2.1
Date: Friday, September 04, 2026	Sheet 5 of 25	

RK3588S (DDR PHY)



DDR FILTER

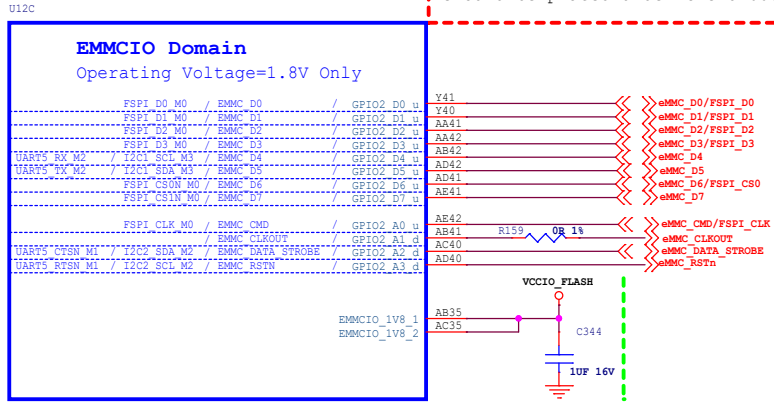


Size A3	Title: ROCK 5C	REV 2.1
	Page Name: 06.RK3588S DDR Controller	
Date: Friday, September 04, 2026	Sheet 6 of 25	

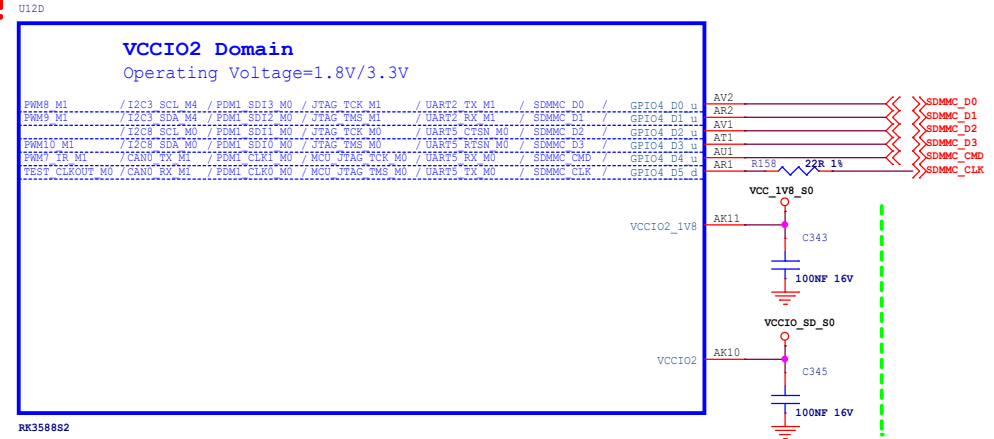
RK3588S (EMMCIO Domain)

Note:

Caps of between dashed green lines and U1000 should be placed under the U1000 package

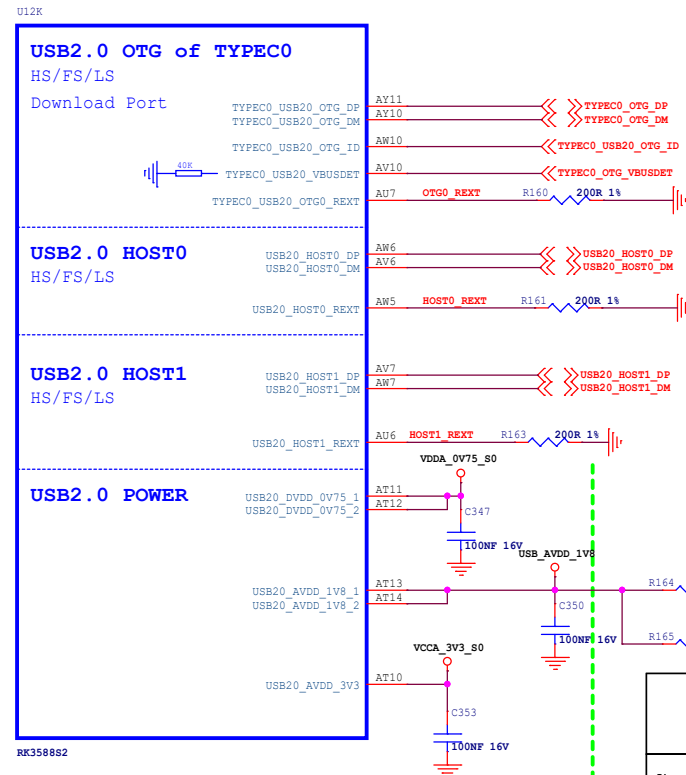
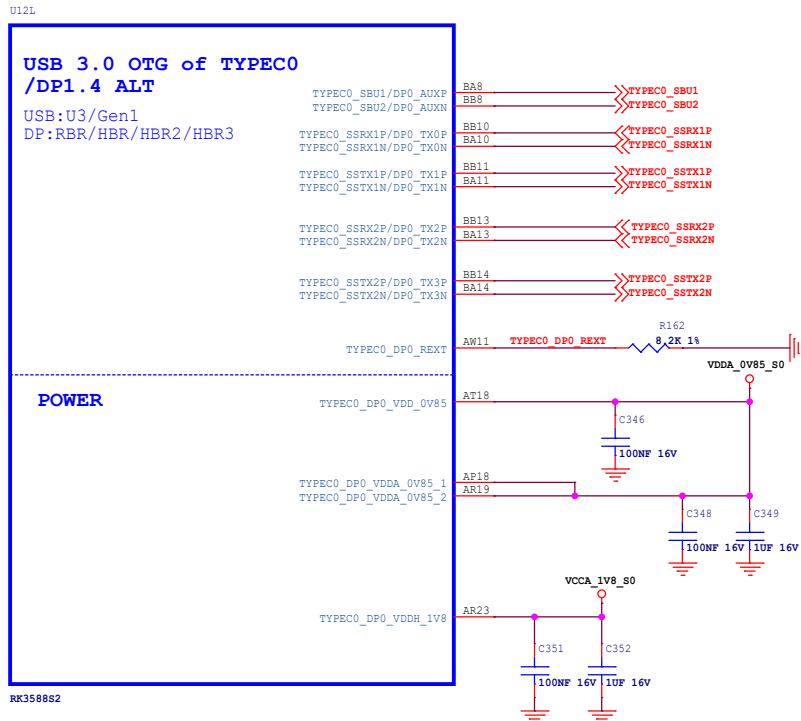


RK3588S (VCCIO2 Domain)



RK3588S (USB3.0/DP1.4)

RK3588S (USB2.0)



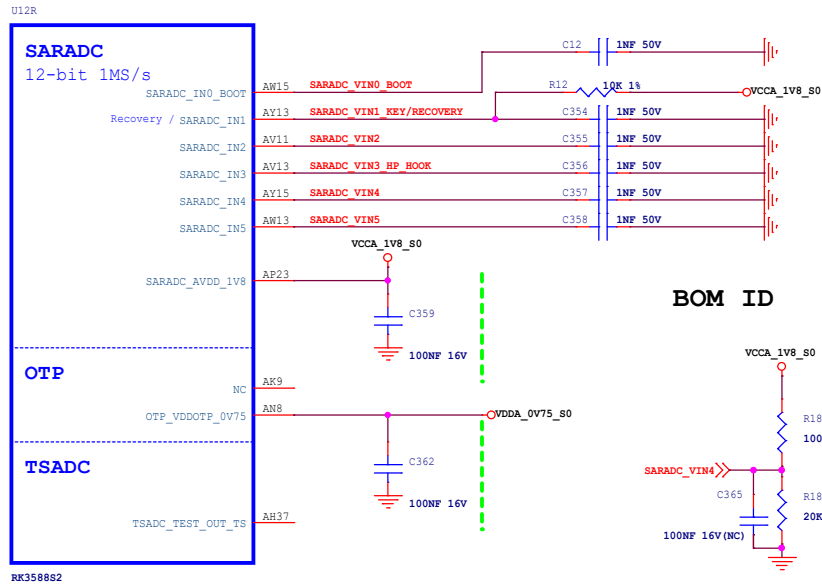
radxa

Size	Title:	ROCK 5C	REV
A3	Page Name:	07.RK3588S Flash/SD Controller	2.1
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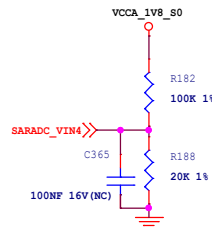
RK3588S (SARADC/OTP/TSADC)

SARADC_VIN1_KEY/RECOVERY
 SARADC_VIN2
 SARADC_VIN3_HP_HOOK
 SARADC_VIN0_BOOT

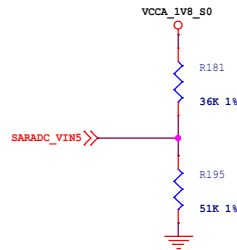
BOOT MODE CONFIG



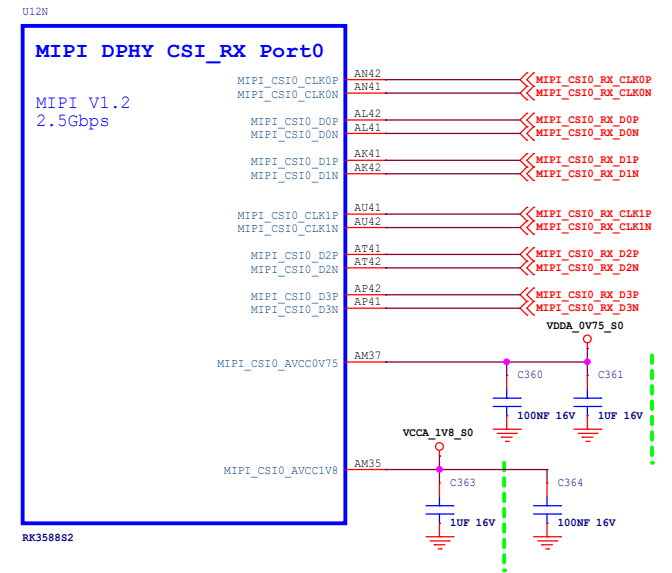
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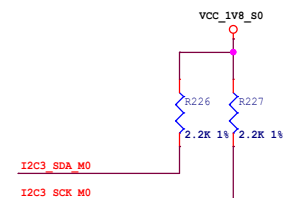
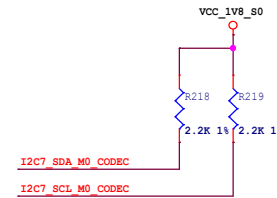
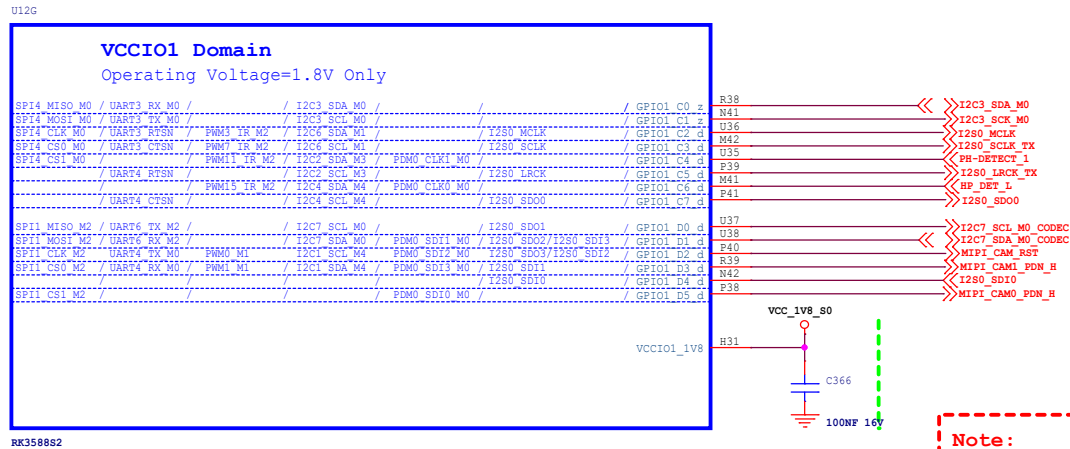
BOARD ID



RK3588S (MIPI_DPHY CSI0 RX)



RK3588S (VCCIO1 Domain)



Note:

Caps of between dashed green lines and U1000 should be placed under the U1000 package

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Size	Title:	ROCK 5C	REV
A3	Page Name:	08.RK3588S_SARADC/1.8V GPIO	2.1
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RK3588S (MIPI_D/C PHY1)

U12P

MIPI D/C-PHY DSI_TX Port1

D-PHY:V2.0
4.5Gbps/Lane

C-PHY:V1.1
5.7Gbps/Trio

MIPI_DPHY1_TX_CLKP/MIPI_CPHY1_TX_TRIO1_C
MIPI_DPHY1_TX_CLKN/MIPI_CPHY1_TX_TRIO1_B
MIPI_DPHY1_TX_D0P/MIPI_CPHY1_TX_TRIO0_B
MIPI_DPHY1_TX_D0N/MIPI_CPHY1_TX_TRIO0_A
MIPI_DPHY1_TX_D1P/MIPI_CPHY1_TX_TRIO1_A
MIPI_DPHY1_TX_D1N/MIPI_CPHY1_TX_TRIO0_C
MIPI_DPHY1_TX_D2P/MIPI_CPHY1_TX_TRIO2_B
MIPI_DPHY1_TX_D2N/MIPI_CPHY1_TX_TRIO2_A
MIPI_DPHY1_TX_D3P/NO_USE
MIPI_DPHY1_TX_D3N/MIPI_CPHY1_TX_TRIO2_C

BB19
BA19
BB16
BA16
BA17
BB17
BA20
BB20
BB22
BA22

MIPI D/C-PHY CSI_RX Port1

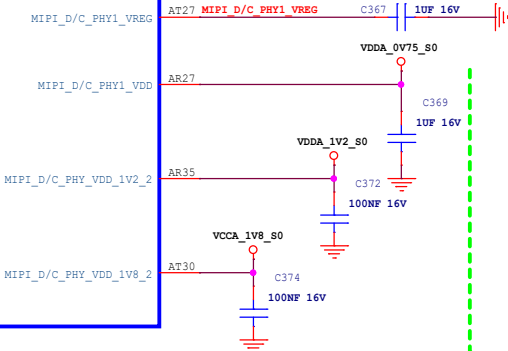
D-PHY:V2.0
4.5Gbps/Lane

C-PHY:V1.1
5.7Gbps/Trio

MIPI_DPHY1_RX_CLKP/MIPI_CPHY1_RX_TRIO1_C
MIPI_DPHY1_RX_CLKN/MIPI_CPHY1_RX_TRIO1_B
MIPI_DPHY1_RX_D0P/MIPI_CPHY1_RX_TRIO0_B
MIPI_DPHY1_RX_D0N/MIPI_CPHY1_RX_TRIO0_A
MIPI_DPHY1_RX_D1P/MIPI_CPHY1_RX_TRIO1_A
MIPI_DPHY1_RX_D1N/MIPI_CPHY1_RX_TRIO0_C
MIPI_DPHY1_RX_D2P/MIPI_CPHY1_RX_TRIO2_B
MIPI_DPHY1_RX_D2N/MIPI_CPHY1_RX_TRIO2_A
MIPI_DPHY1_RX_D3P/NO_USE
MIPI_DPHY1_RX_D3N/MIPI_CPHY1_RX_TRIO2_C

BA26
BB26
BA23
BB23
BB25
BA25
BB28
BA28
BA29
BB29

Power



RK3588S2

RK3588S (MIPI_D/C PHY0)

U12O

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

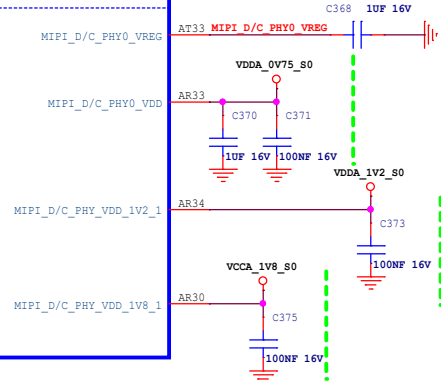
D-PHY:V2.0
4.5Gbps/Lane

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

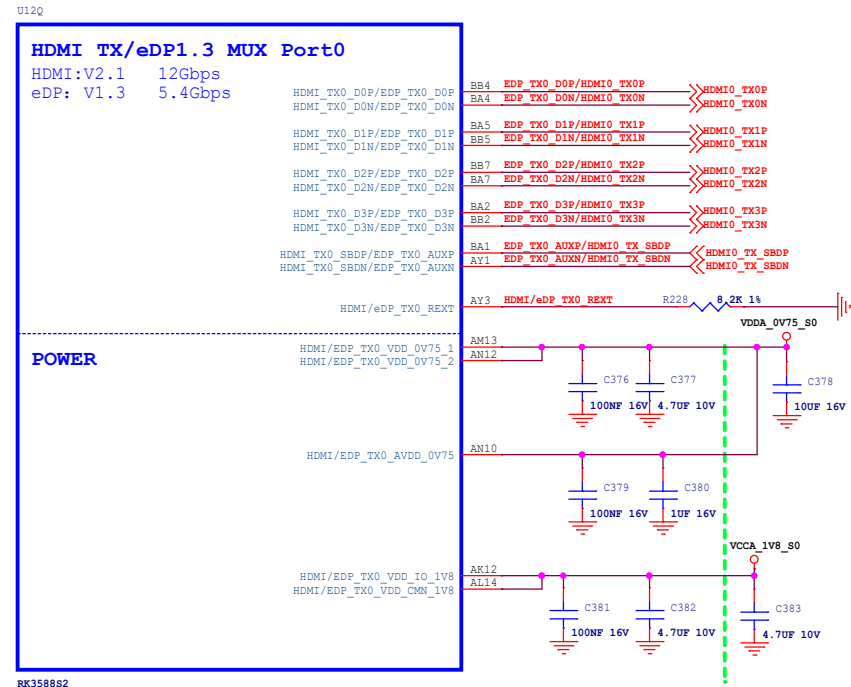
Power



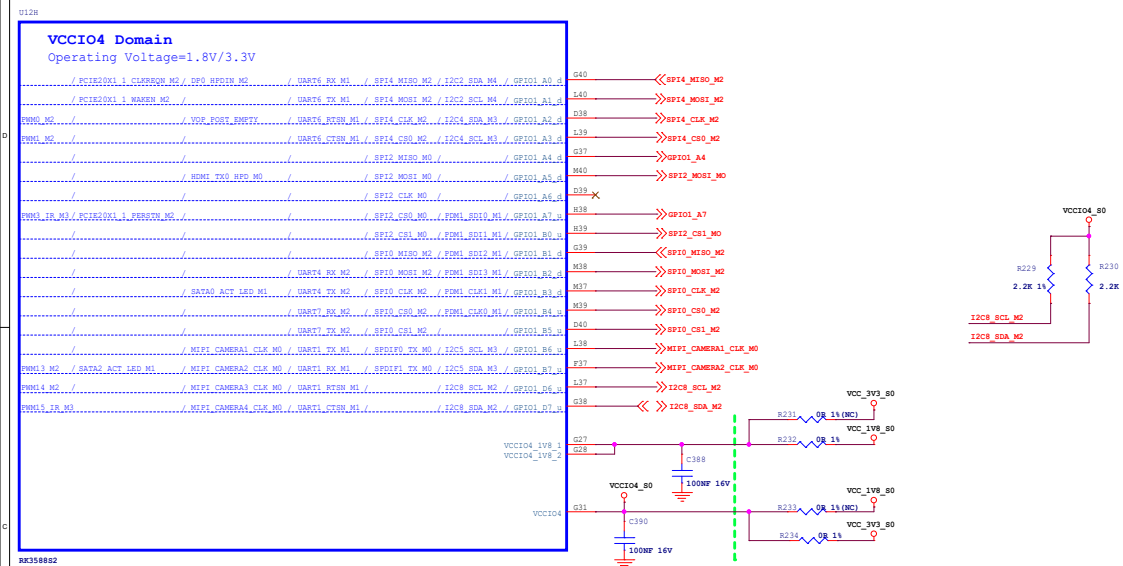
RK3588S2



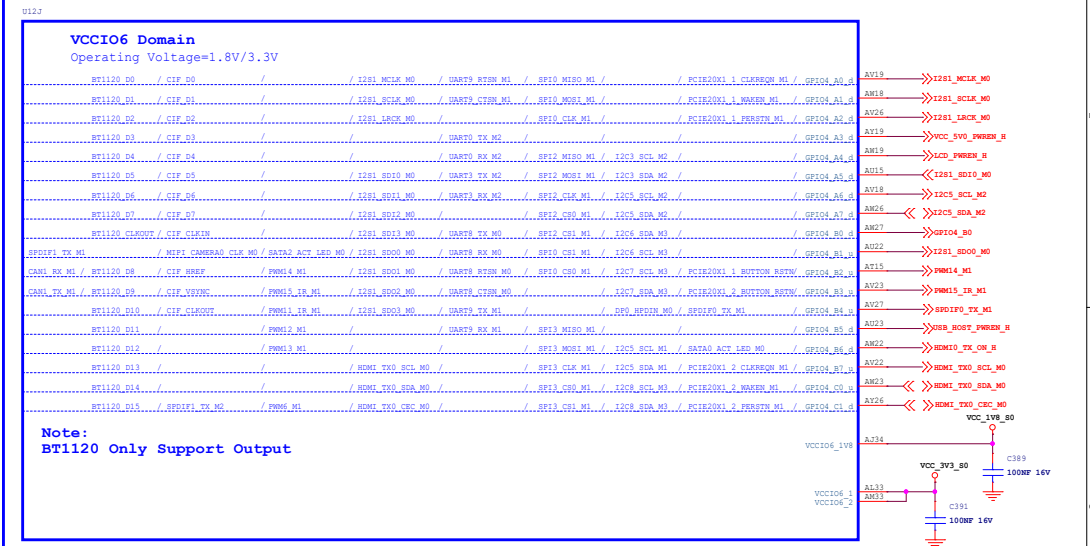
RK3588S (HDMI2.1 TX/eDP1.3 TX)



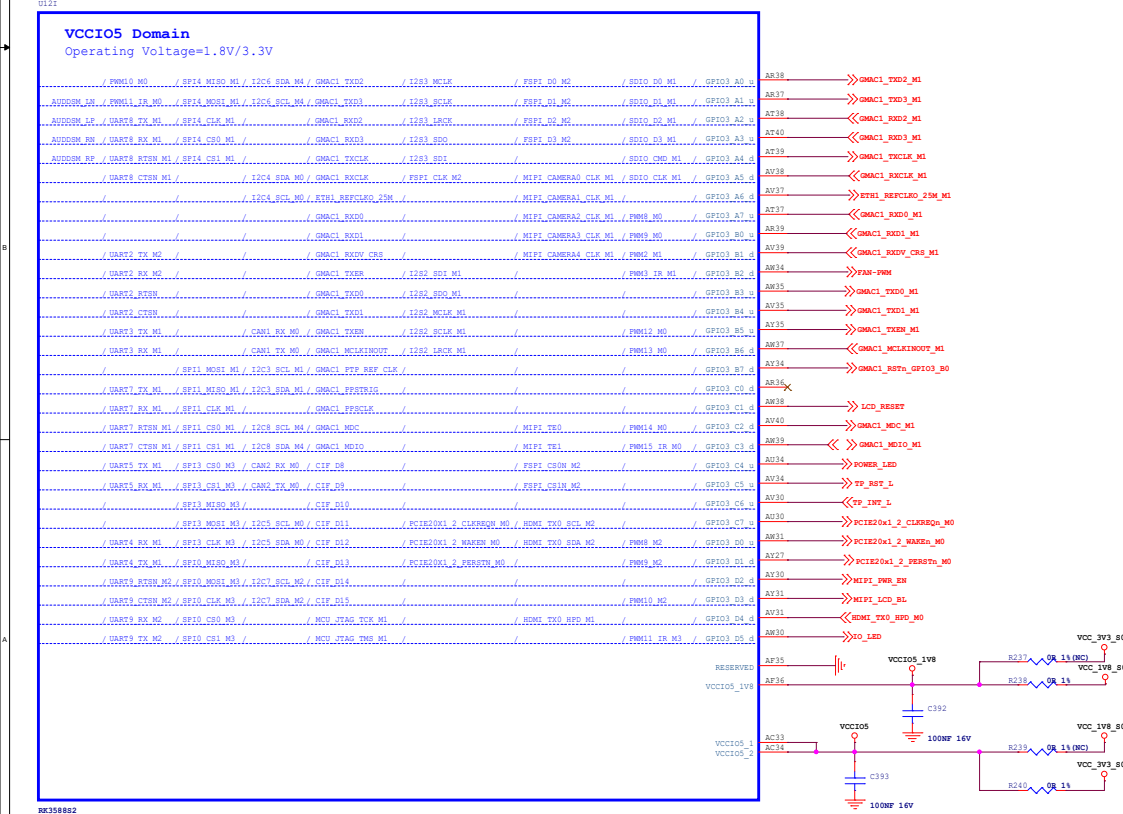
RK3588S (VCCIO4 Domain)



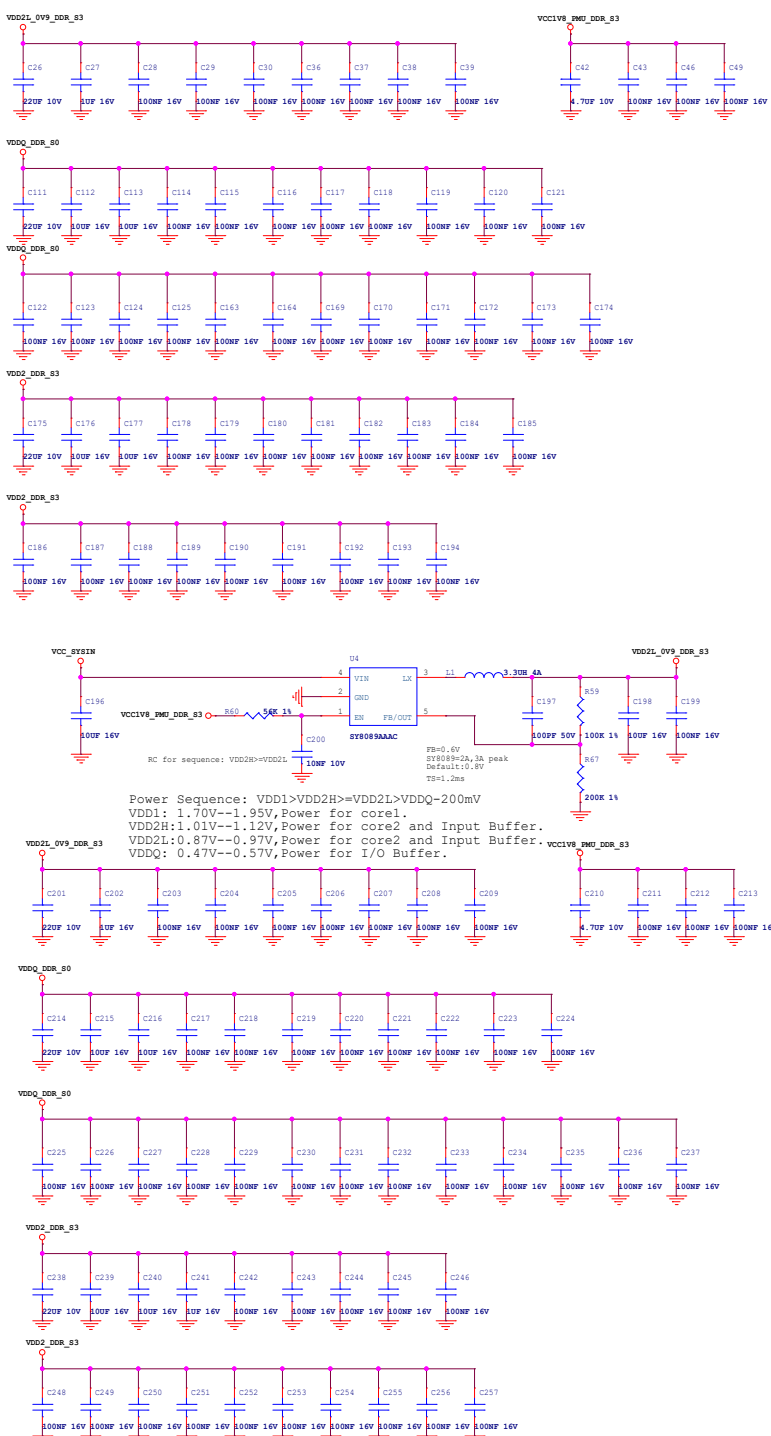
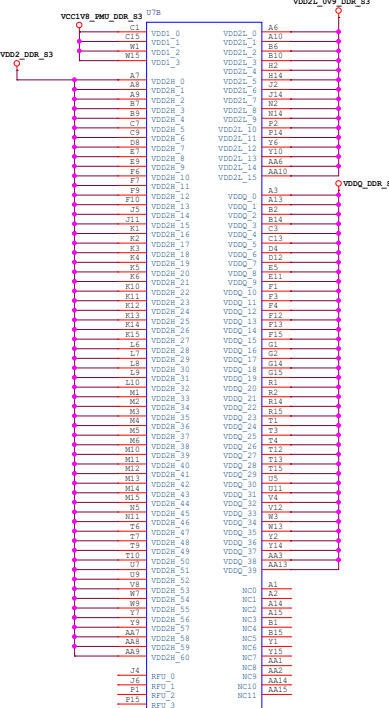
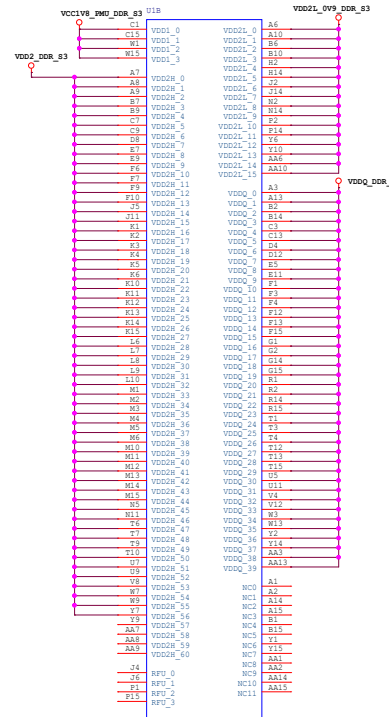
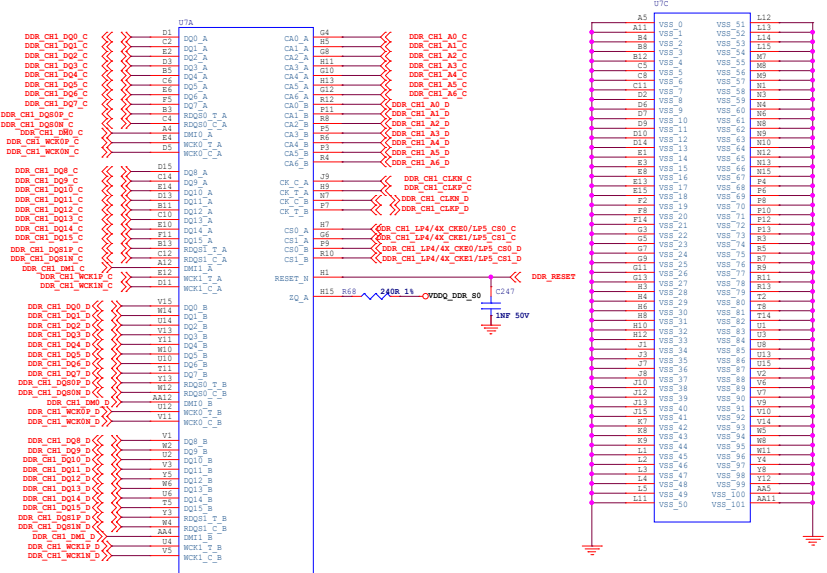
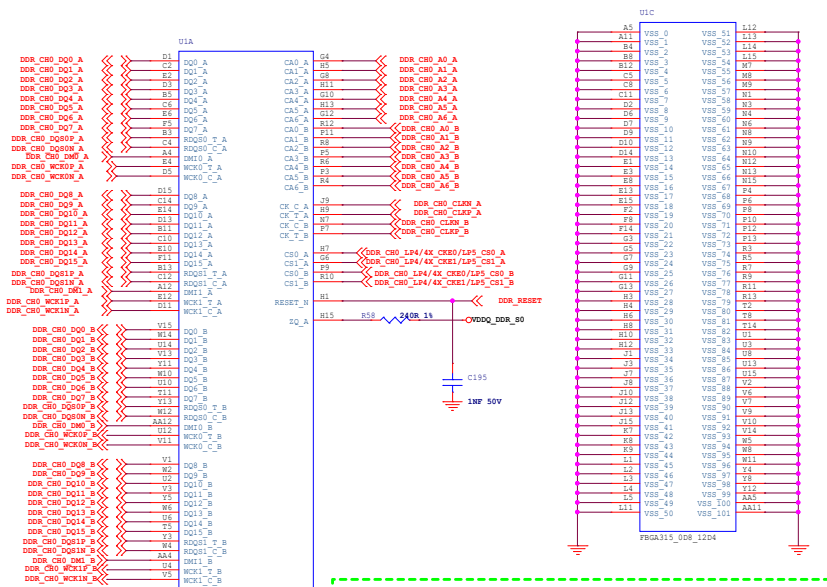
RK3588S (VCCIO6 Domain)



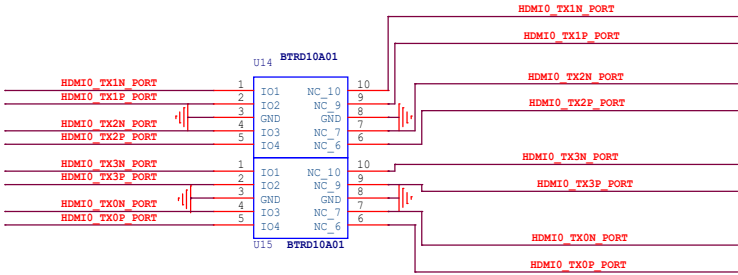
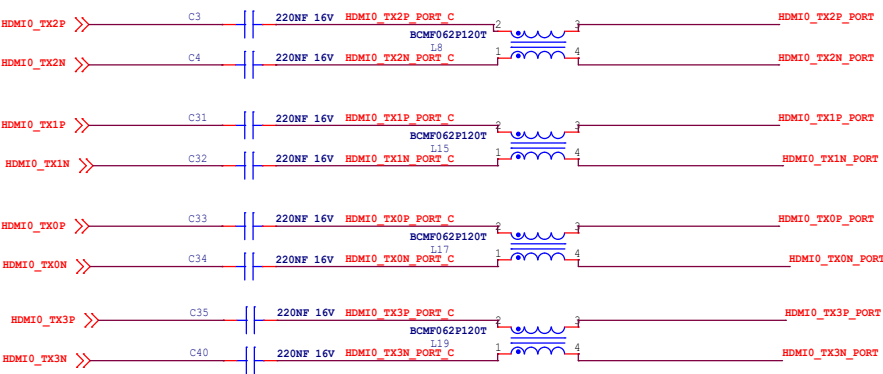
RK3588S (VCCIO5 Domain)



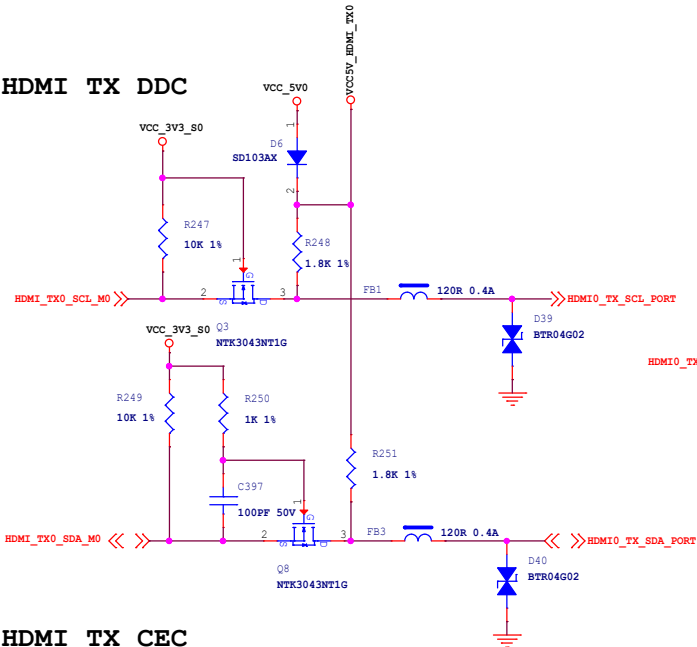
Note:
Caps of between dashed green lines and U1000 should be placed under the U1000 package

DRAM-LPDDR5_2X32bit

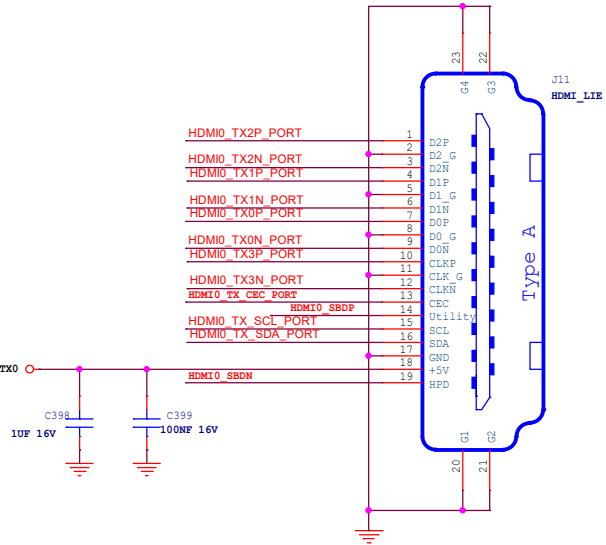
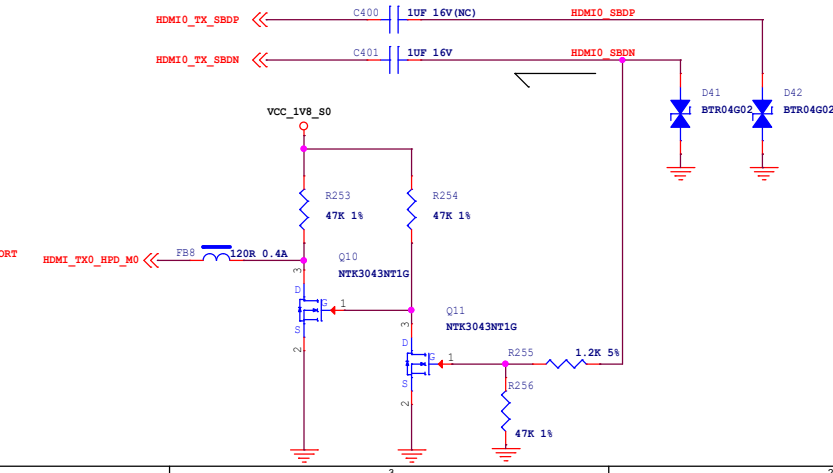
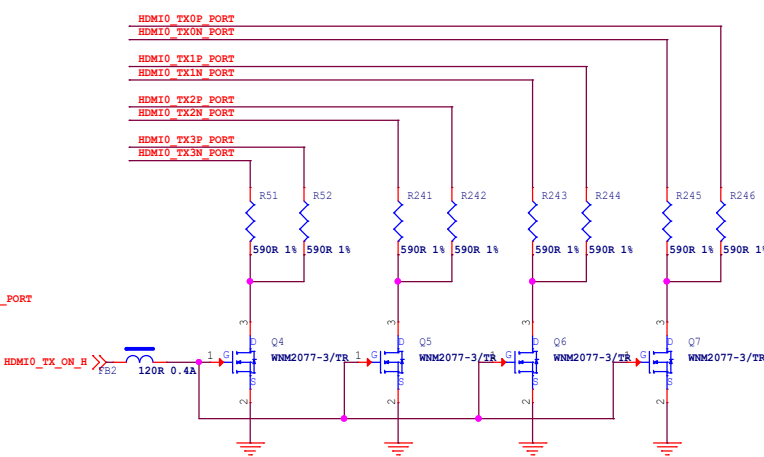
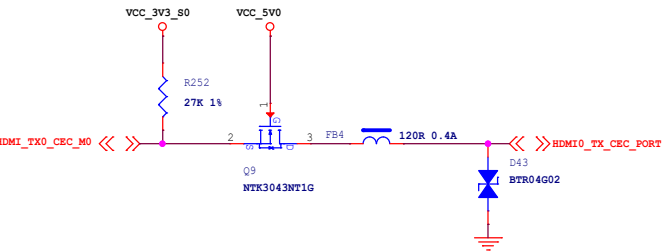
HDMI2.1 TX0

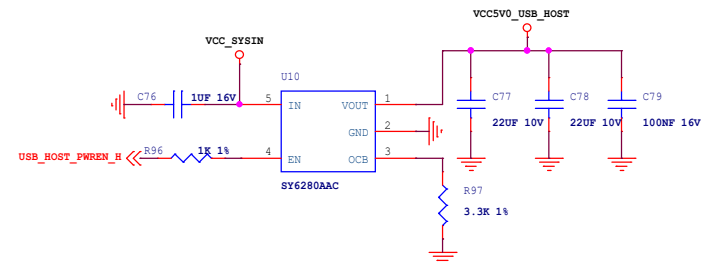
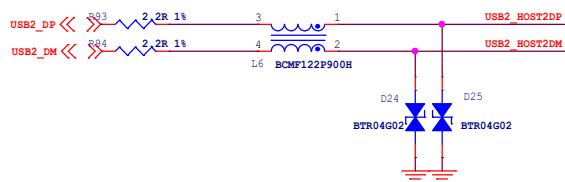
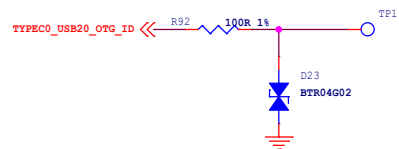
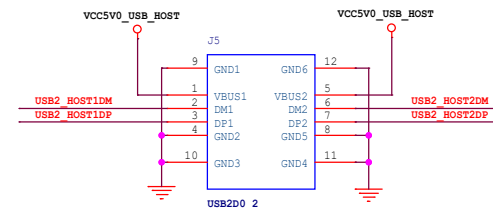
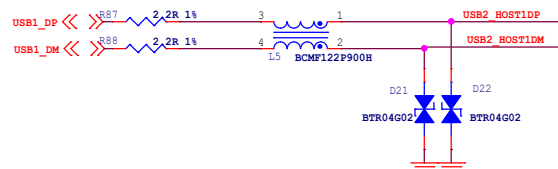
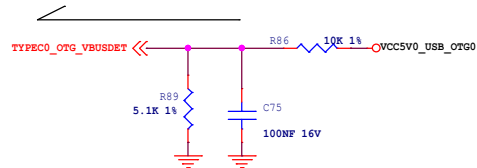
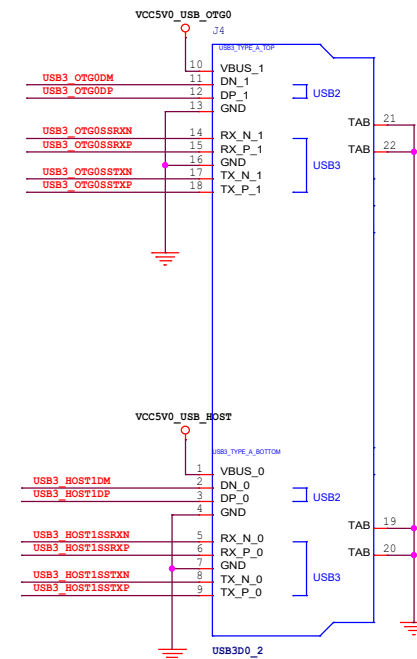
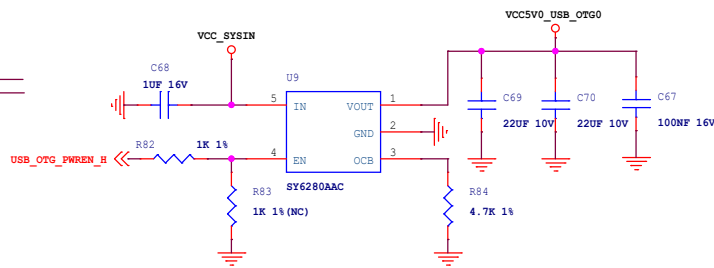
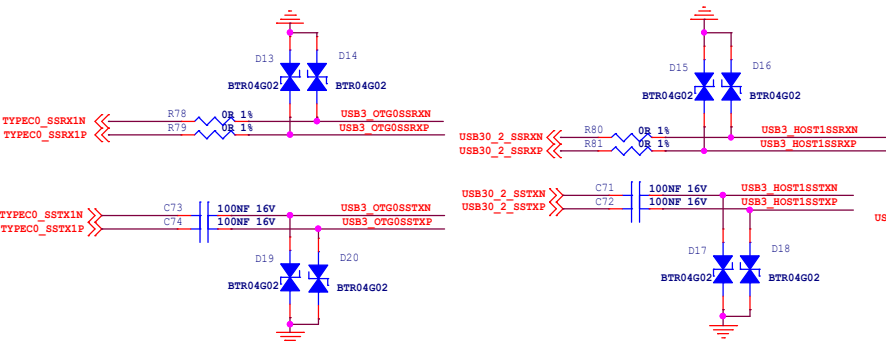
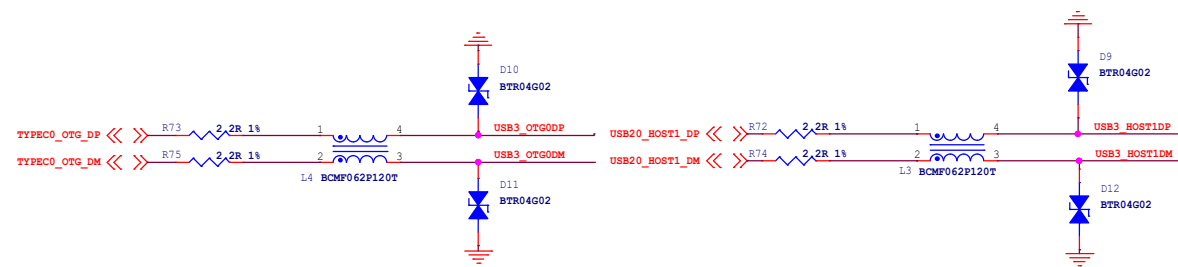


HDMI TX DDC



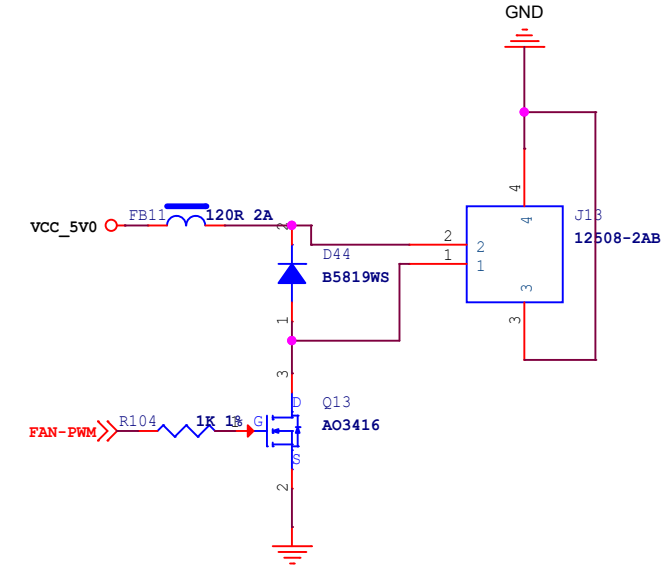
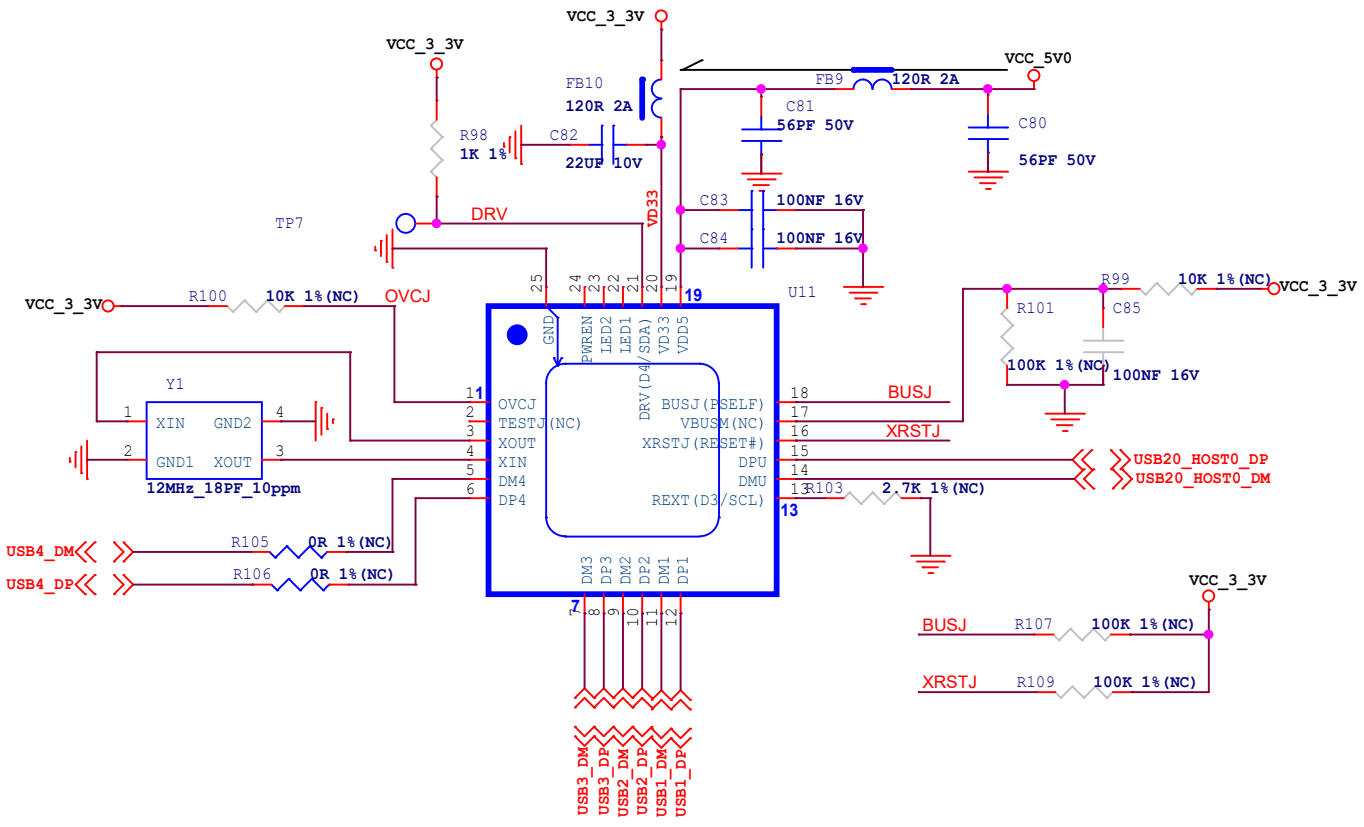
HDMI TX CEC





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Size A3	Title:	ROCK 5C	REV 2.1
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>>> GMAC1_TXD0_M1
>>> GMAC1_TXD1_M1
>>> GMAC1_TXD2_M1
>>> GMAC1_TXD3_M1
>>> GMAC1_TXEN_M1

>>> GMAC1_TXCLK_M1

>>> GMAC1_RXD0_M1
>>> GMAC1_RXD1_M1
>>> GMAC1_RXD2_M1
>>> GMAC1_RXD3_M1
>>> GMAC1_RXDV_CRS_M1

>>> GMAC1_RXCLK_M1

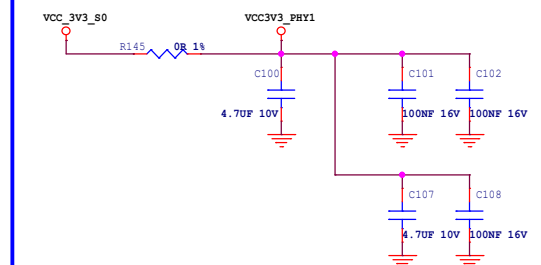
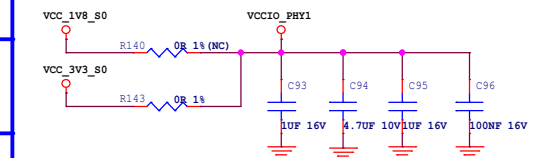
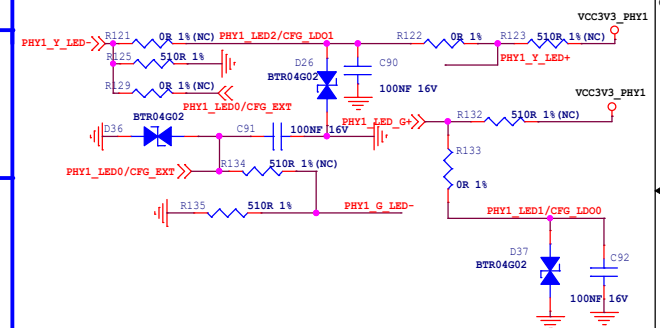
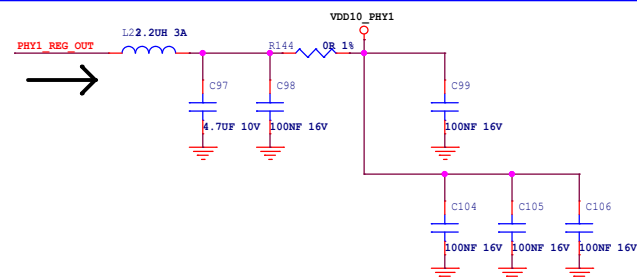
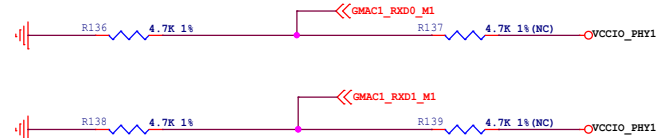
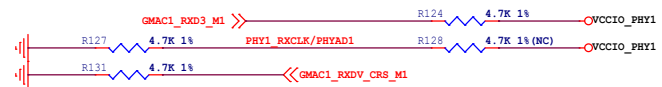
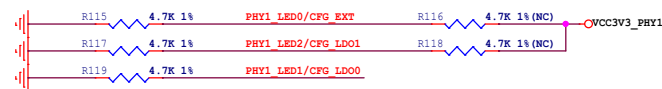
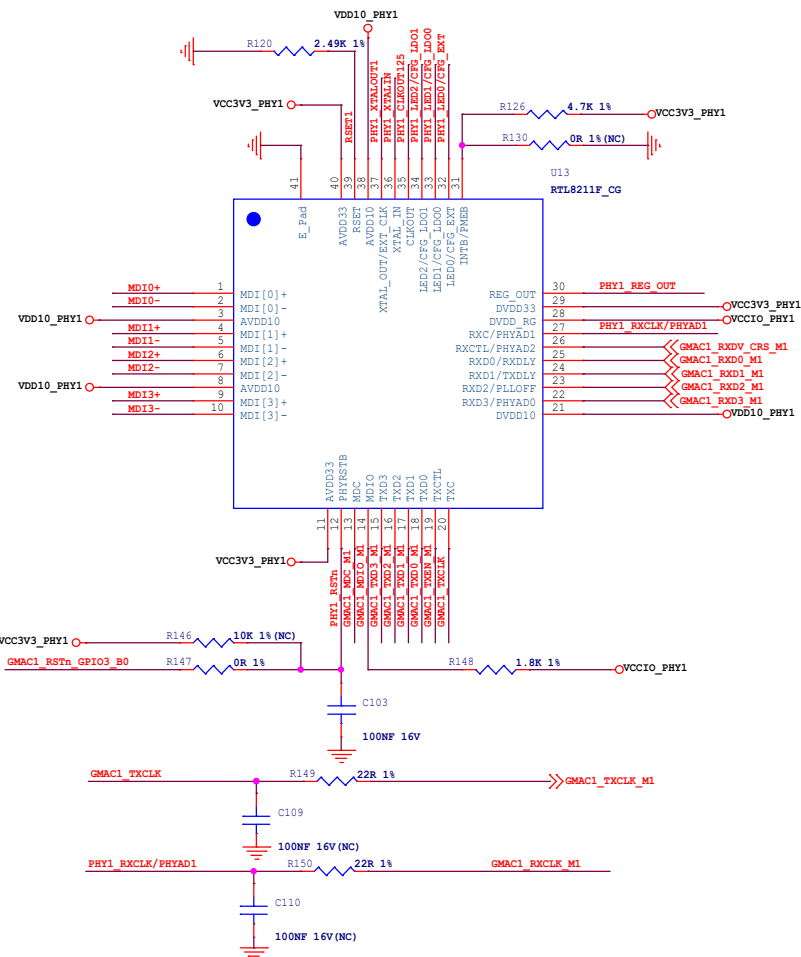
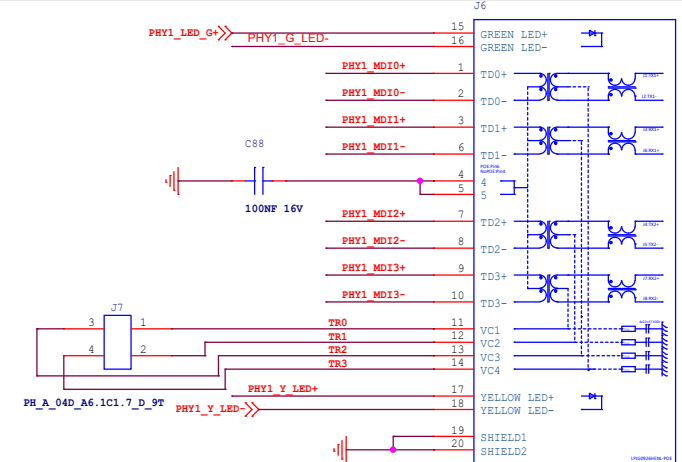
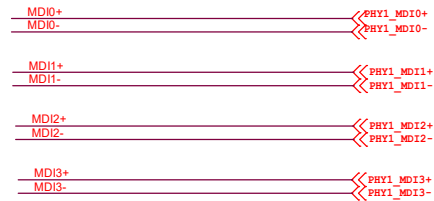
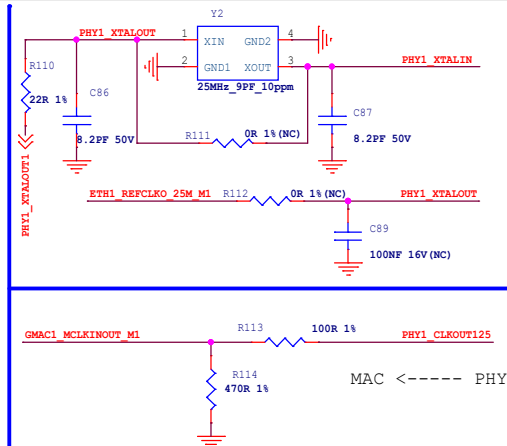
>>> ETH1_REFCLOCK_25M_M1

>>> GMAC1_MCLKINOUT_M1

>>> GMAC1_MDC_M1
>>> GMAC1_MIO0_M1

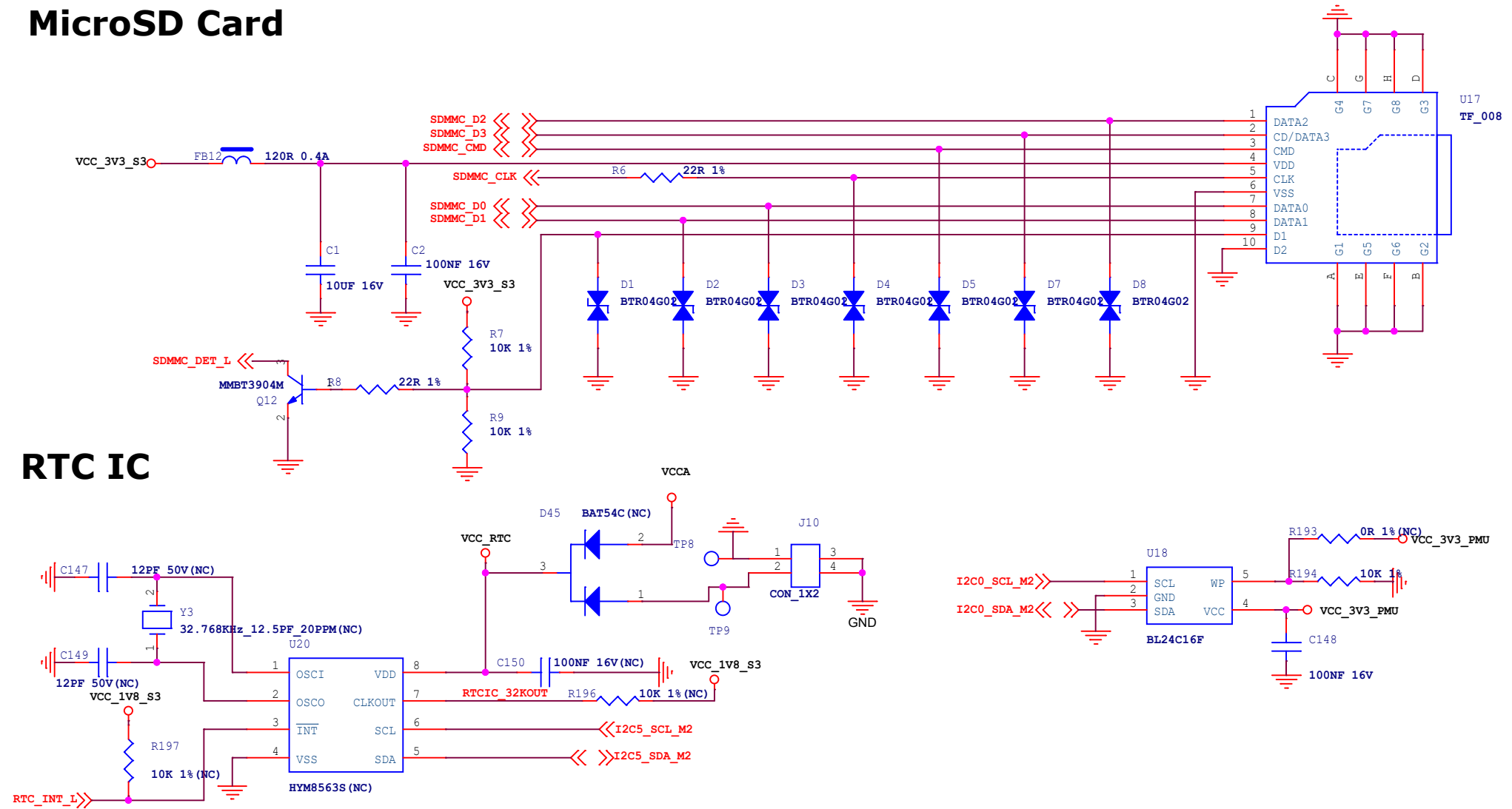
>>> GMAC1_RSTN_GPIO3_B0

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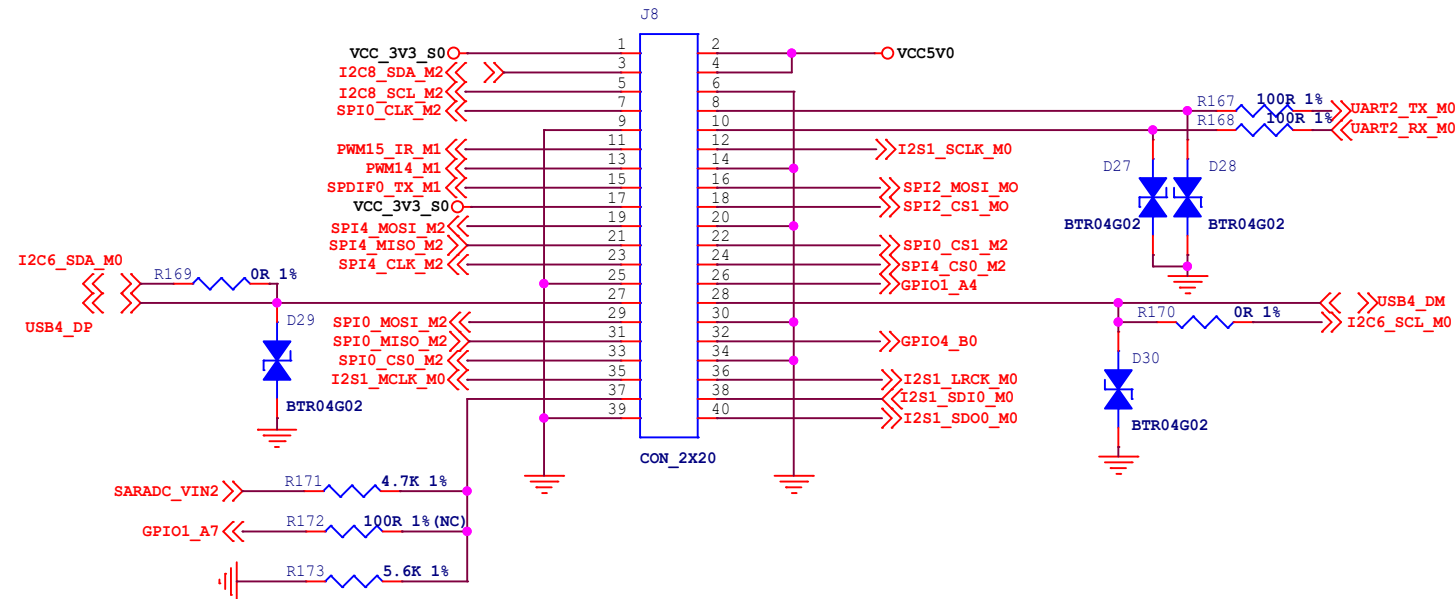


Size A3	Title: ROCK 5C	REV 2.1
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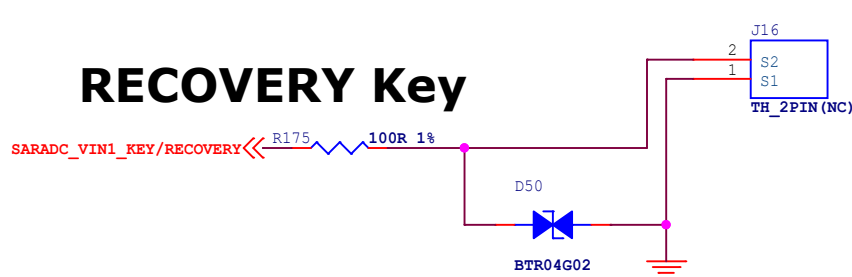
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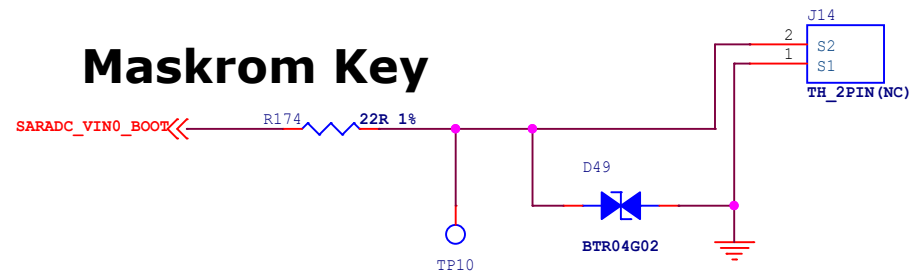
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	Page Name: 18.MicroSD Card	
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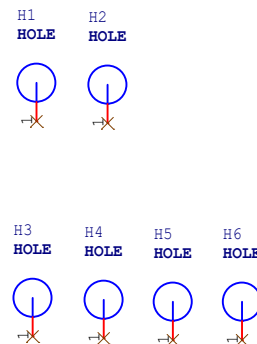
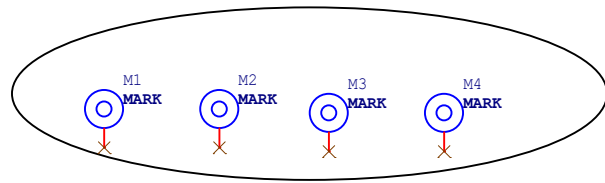
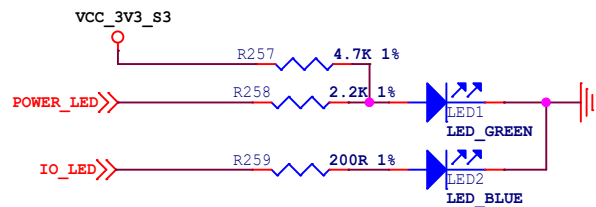
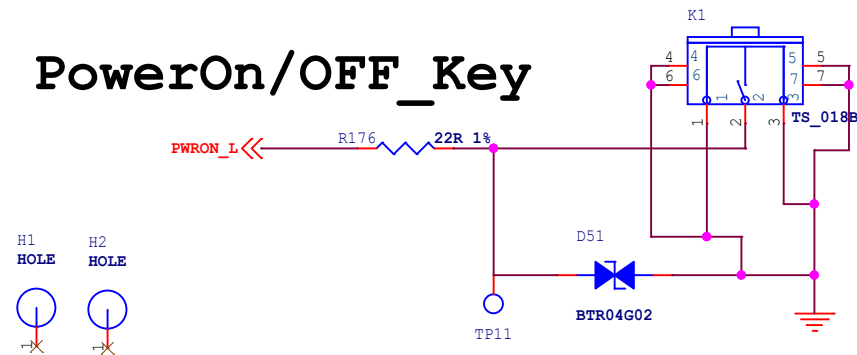
RECOVERY Key



Maskrom Key



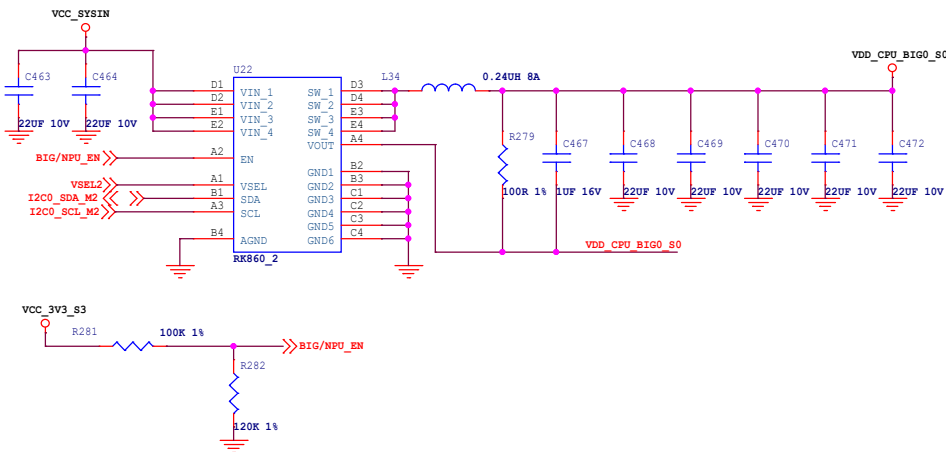
PowerOn/OFF_Key



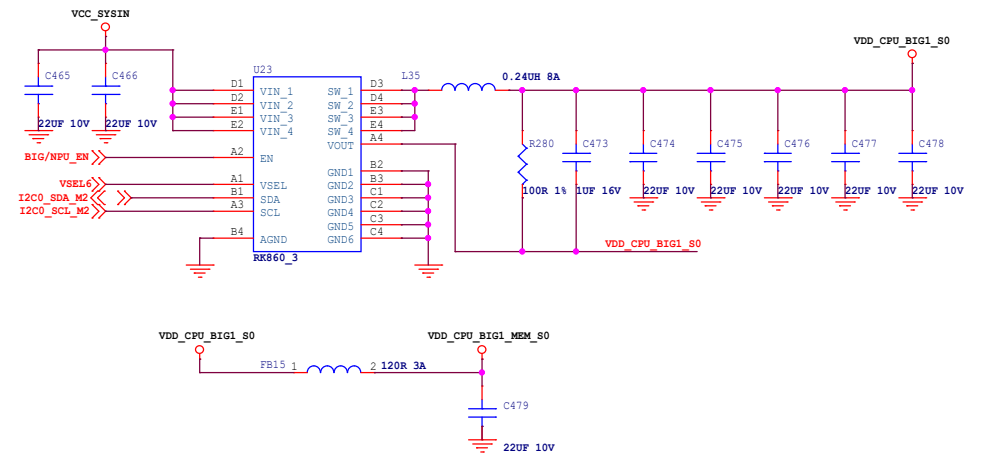
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Size A4	Title: ROCK 5C	REV 2.1
	Page Name: 20.40PIN_CONNECT	
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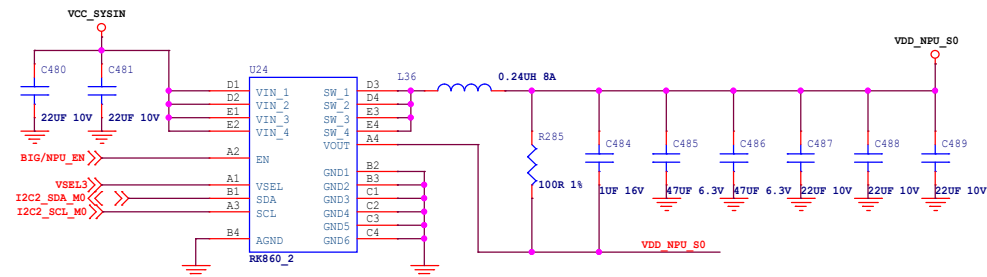
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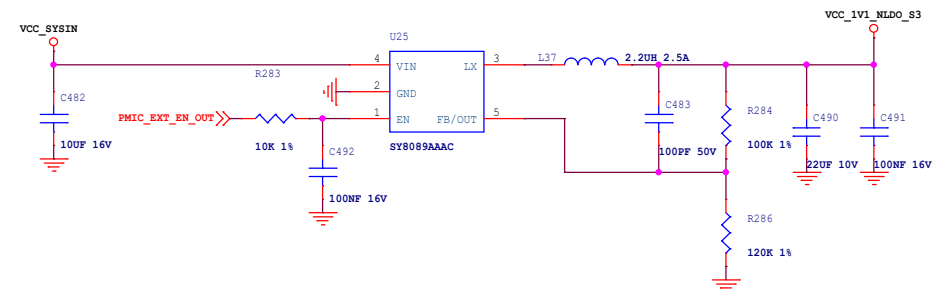
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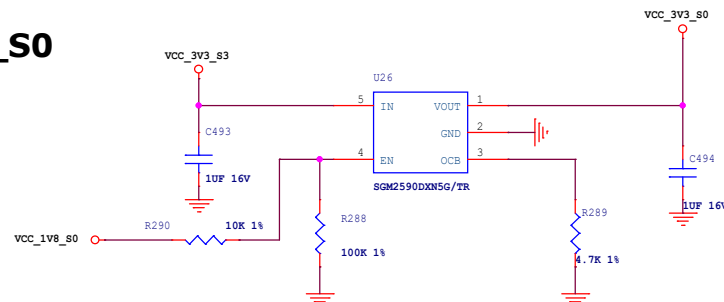
VDD_NPU



VCC_1V1_NLDO



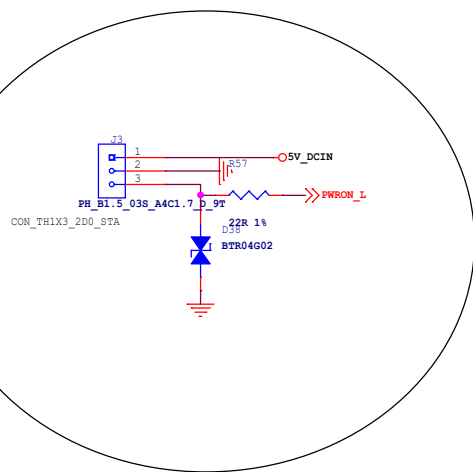
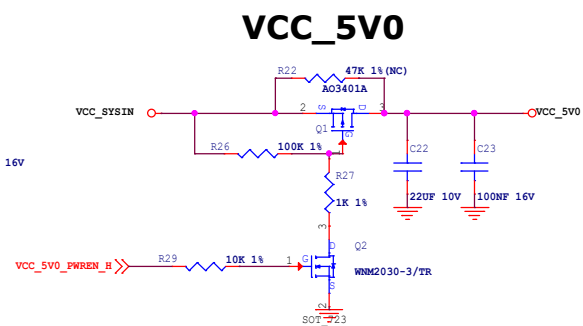
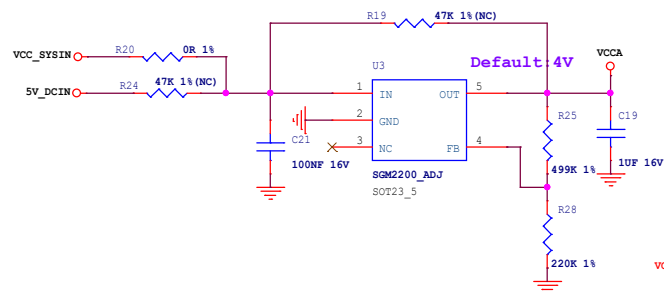
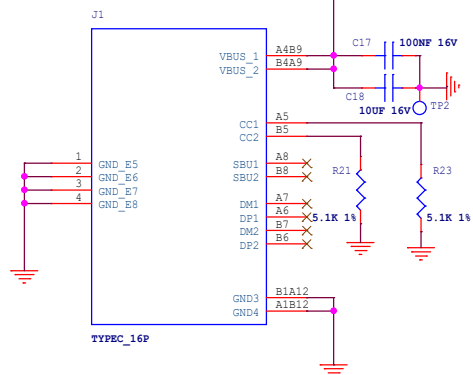
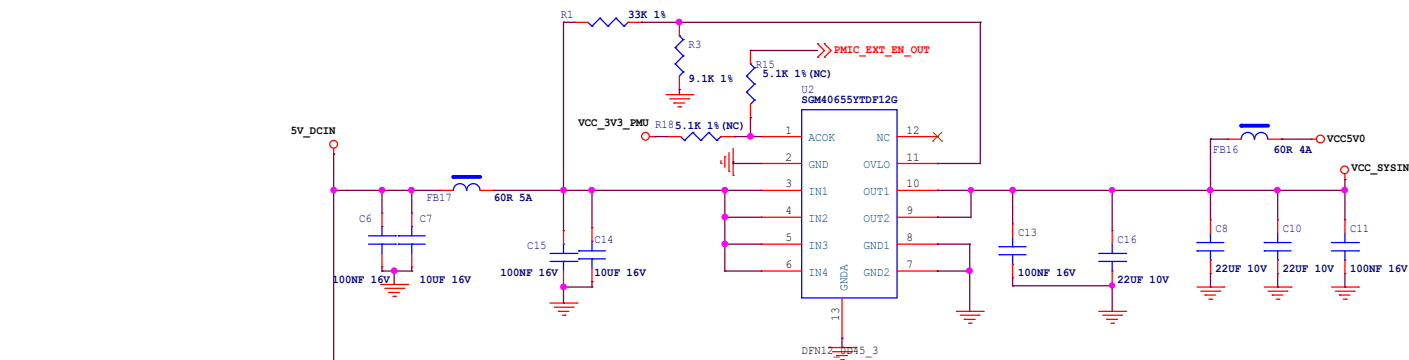
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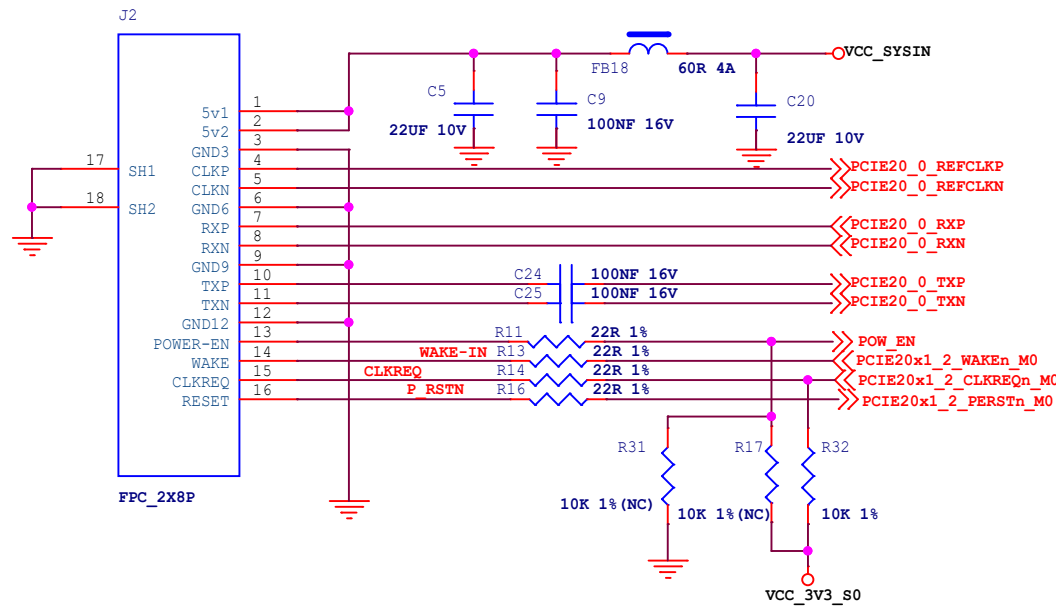
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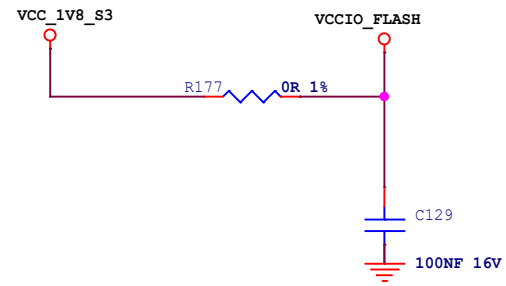
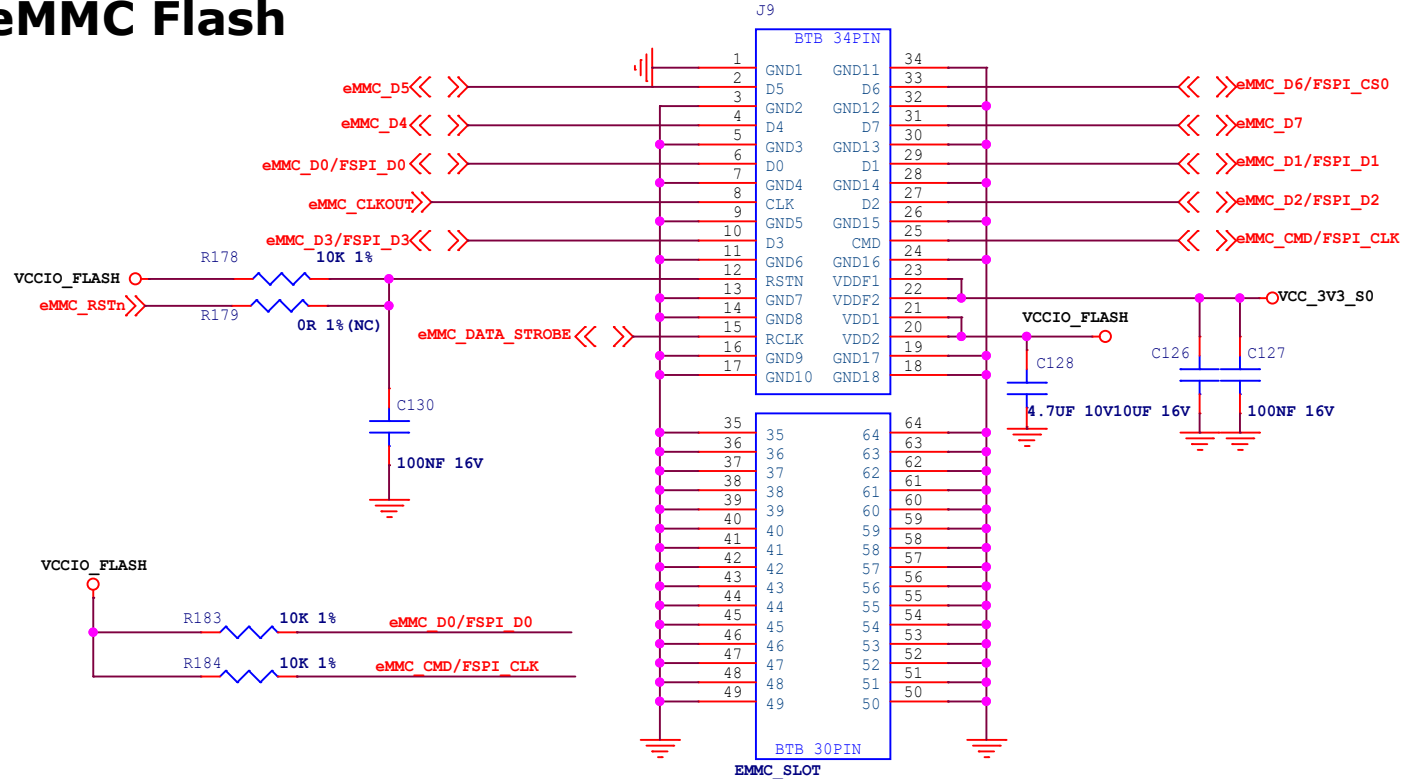
DC IN



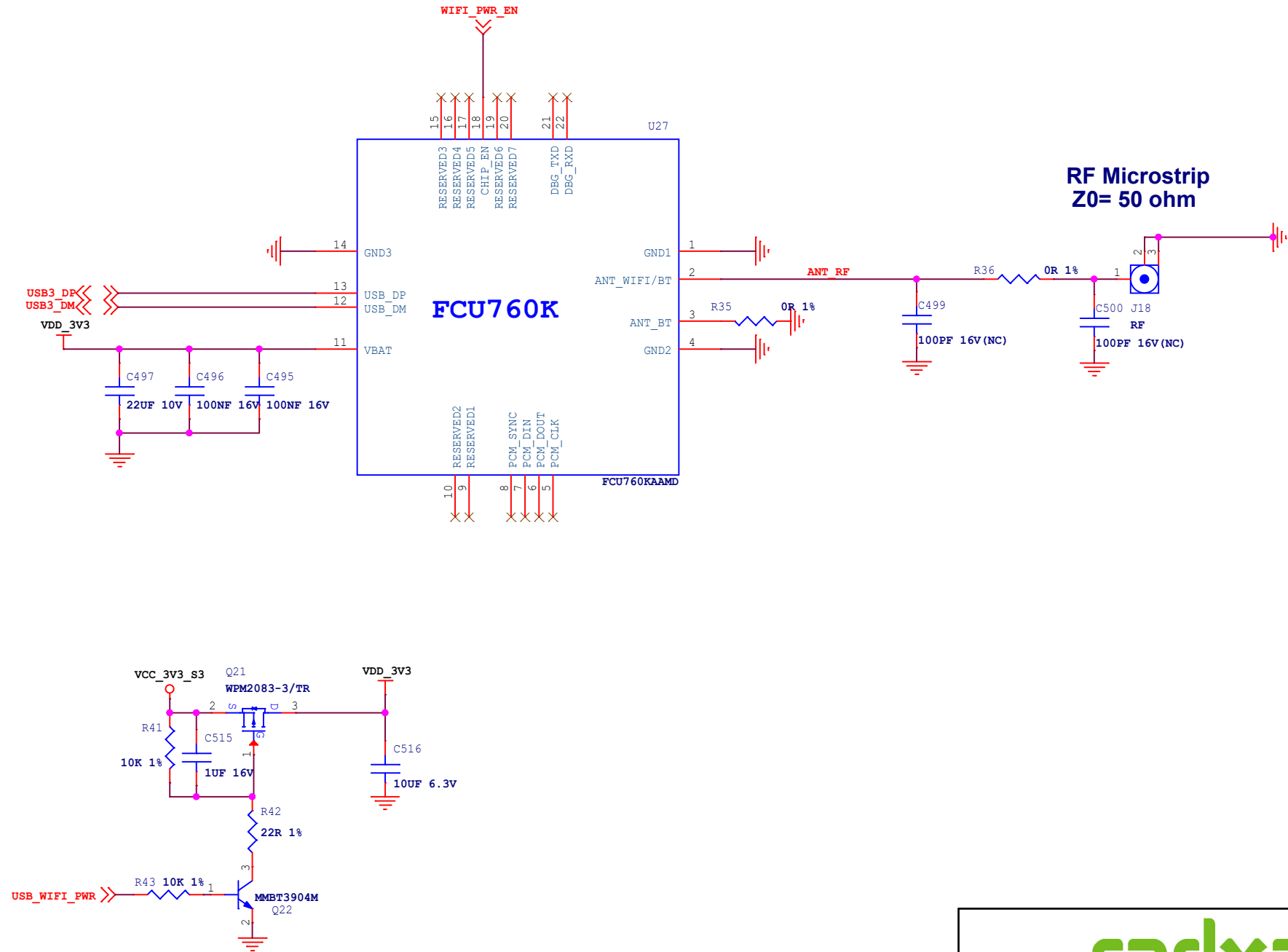
PCIE



eMMC Flash



			
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