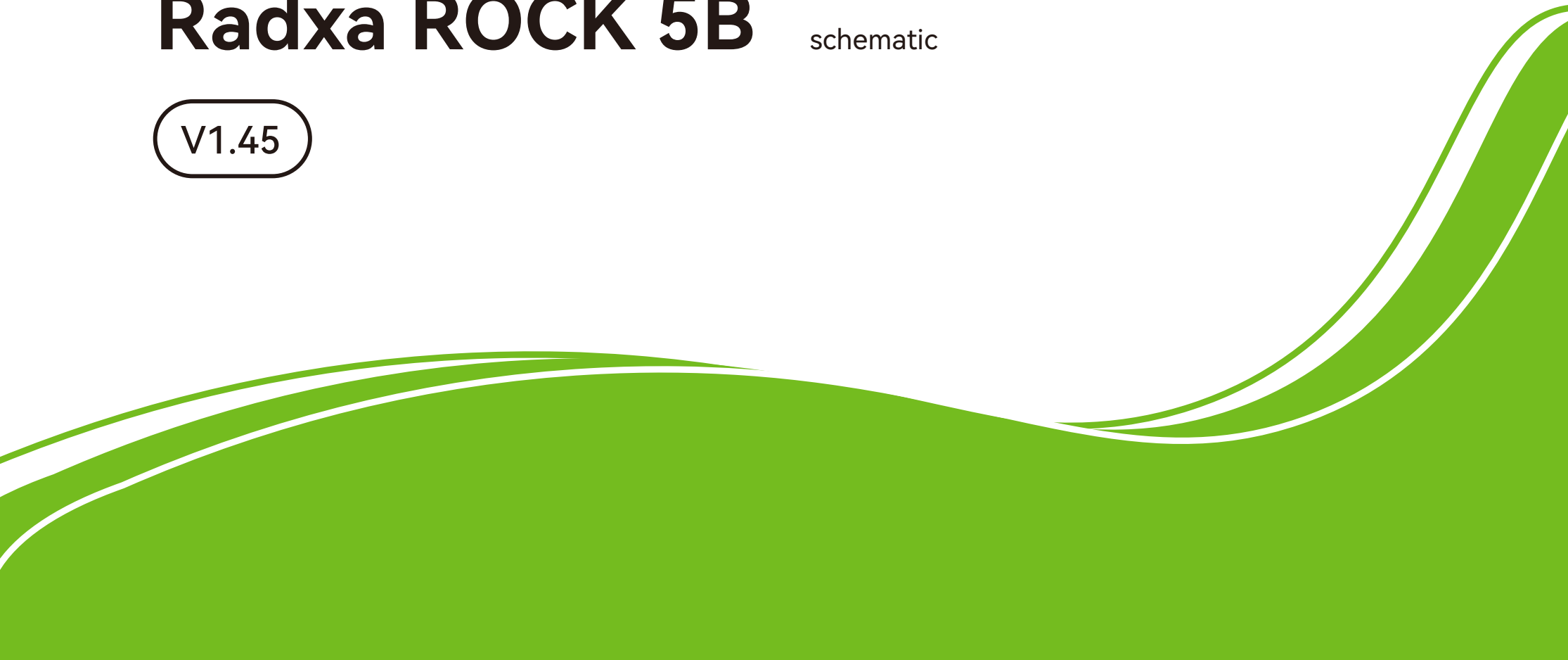




# Radxa ROCK 5B

schematic

V1.45

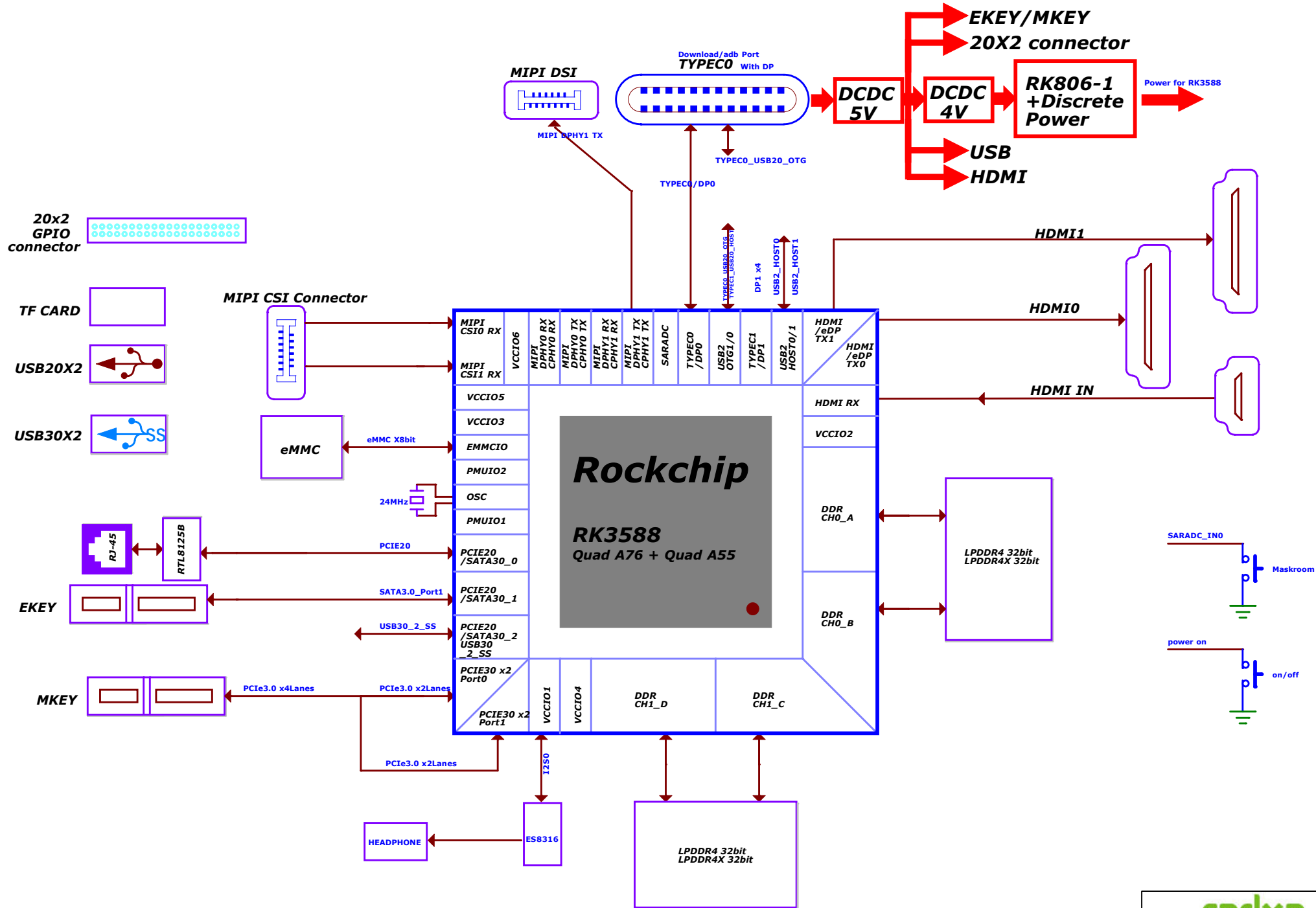


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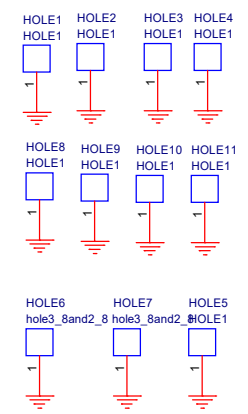
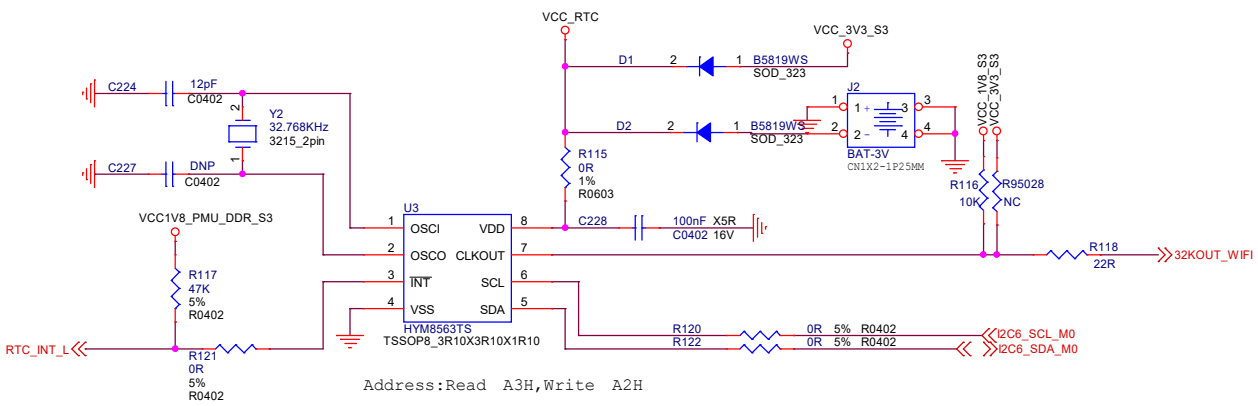
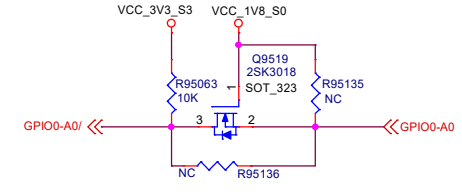
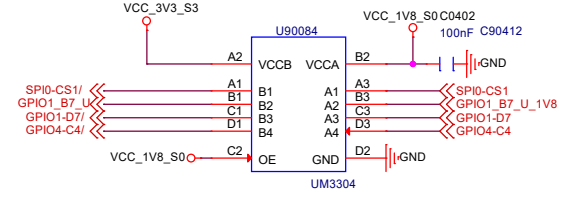
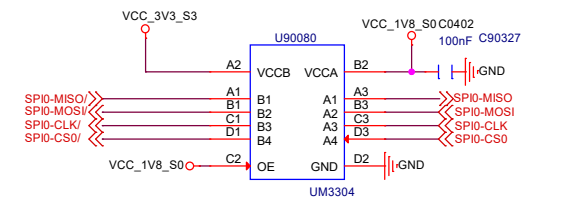
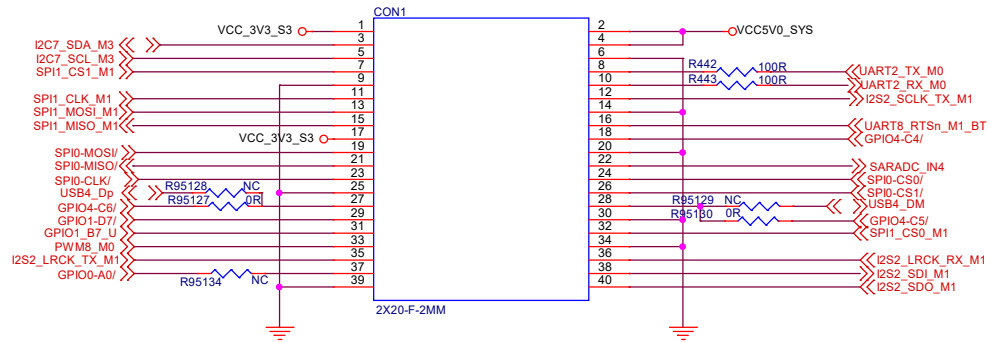


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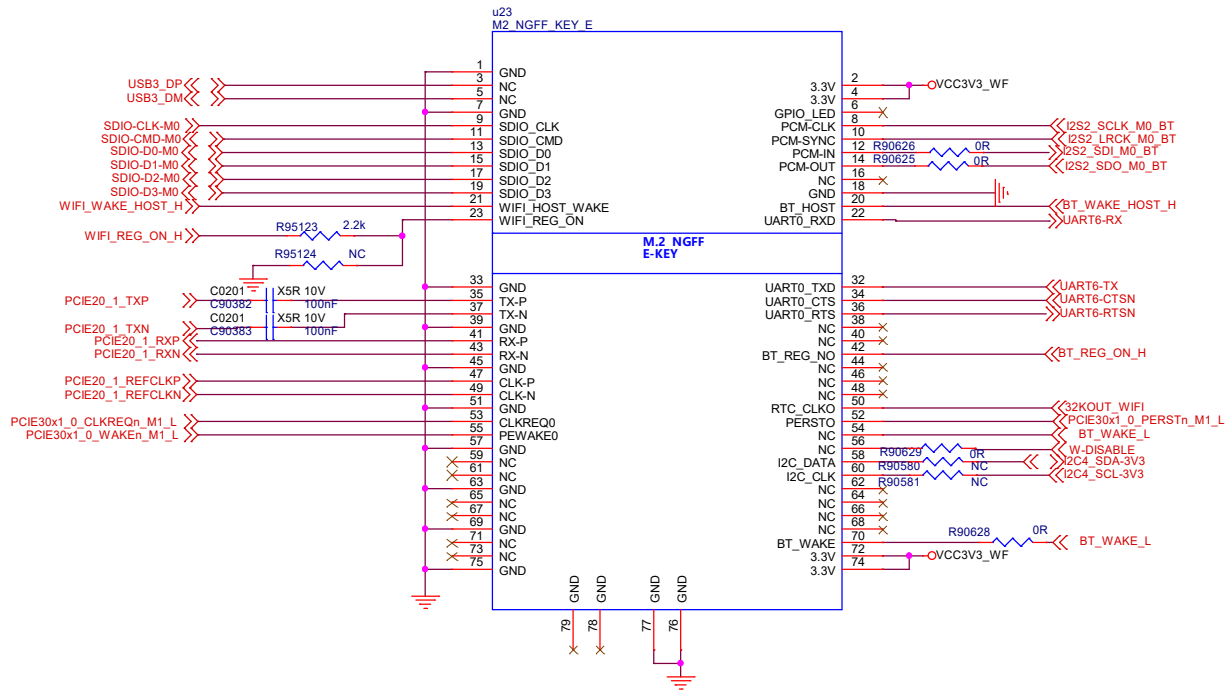
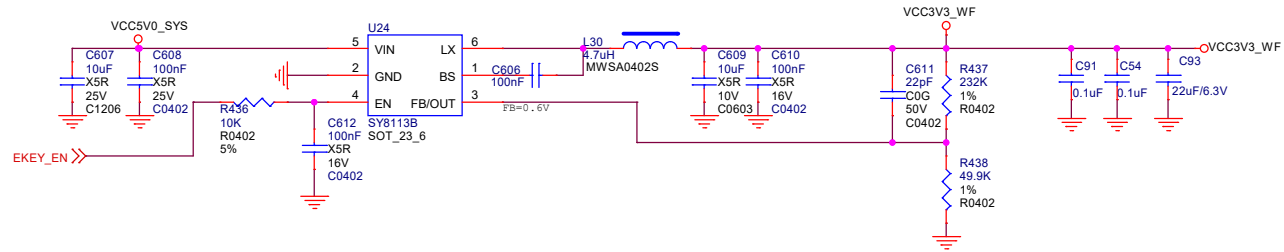




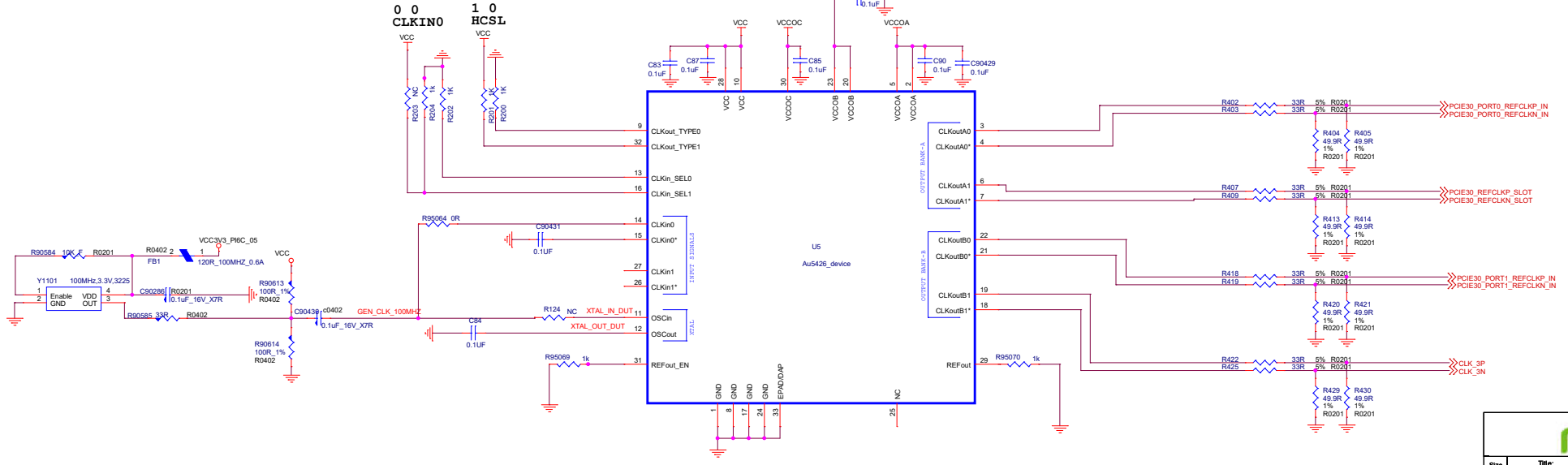
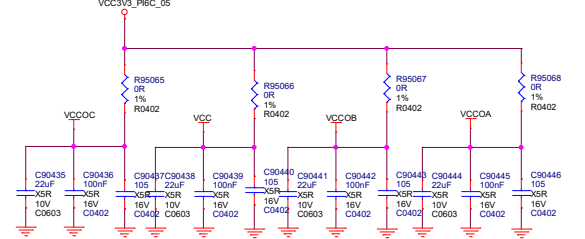
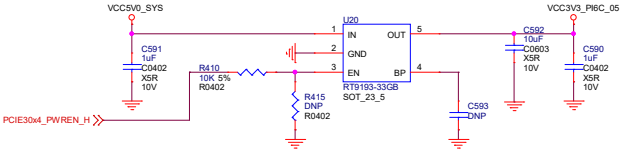
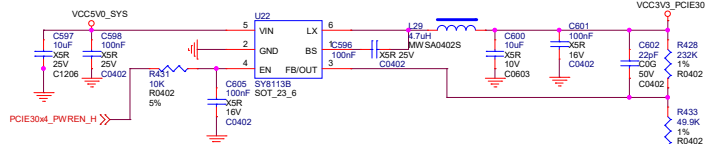
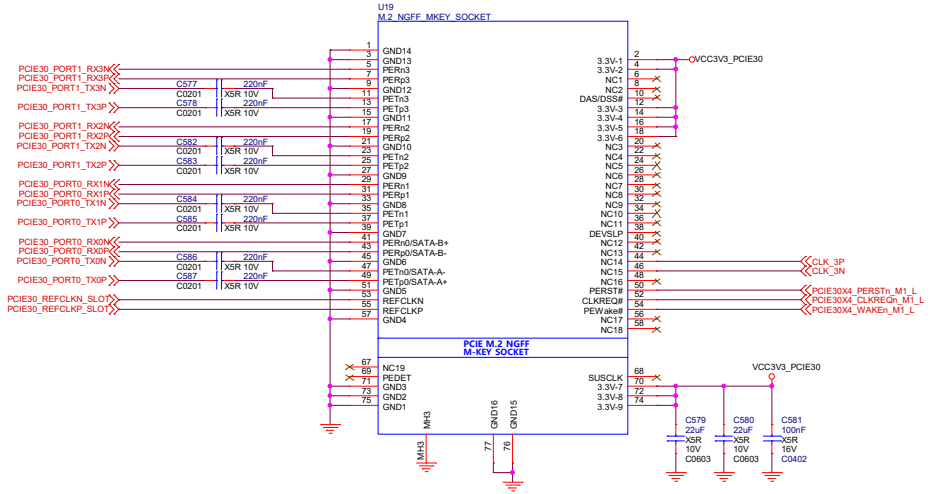
# CONNECT



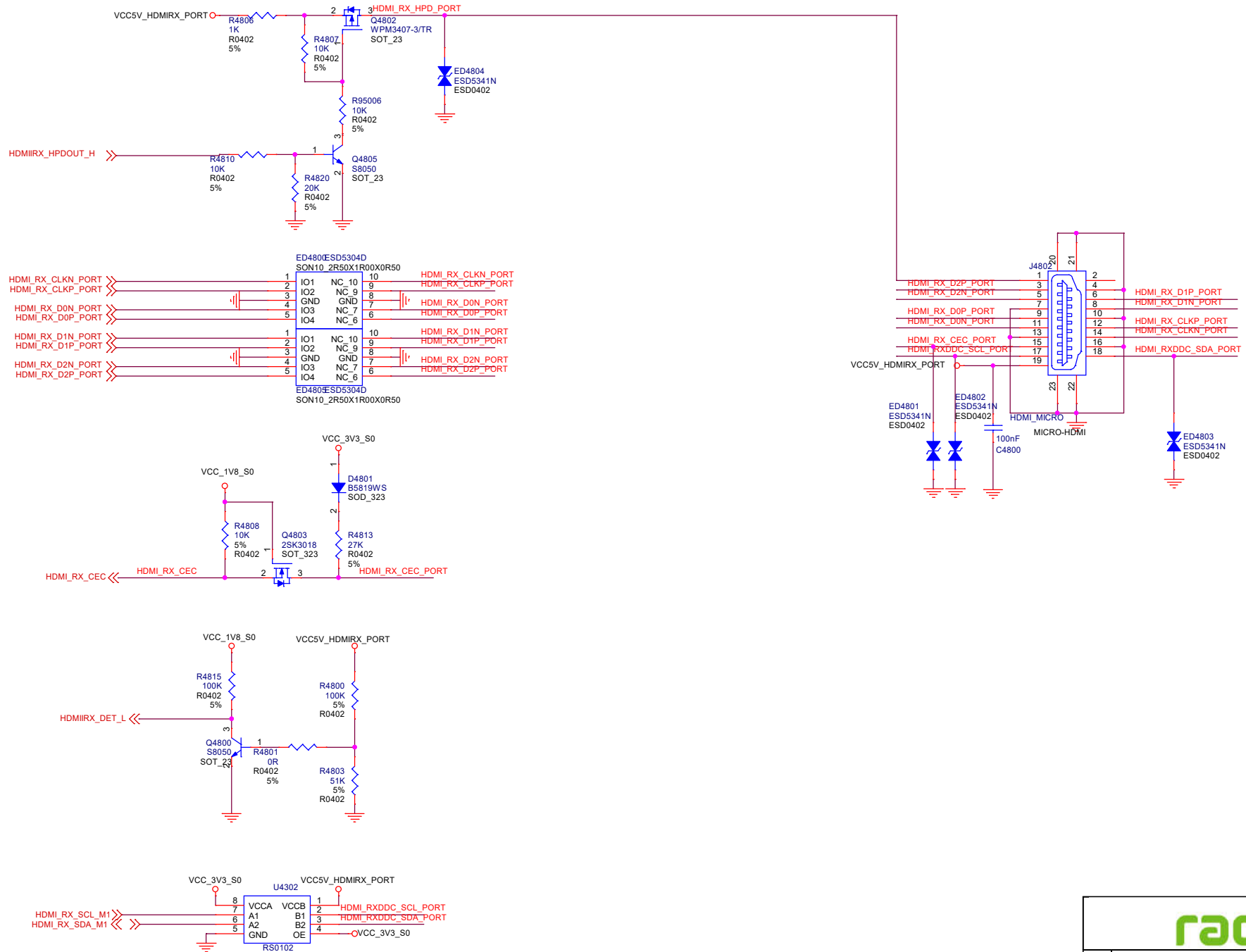
# PCIE-PCIE2.0\_Slot-Ekey



# PCIe3.0 x 4 Slot



# HDMI2.0 RX

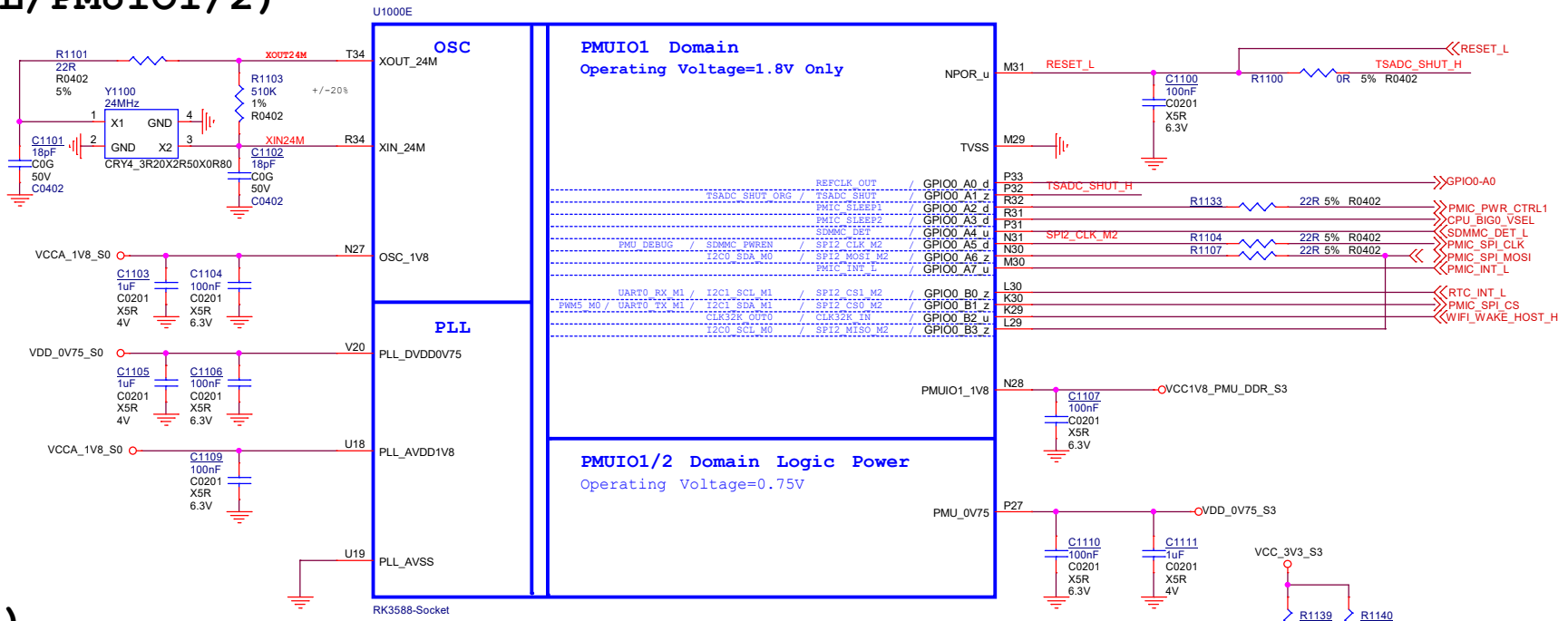




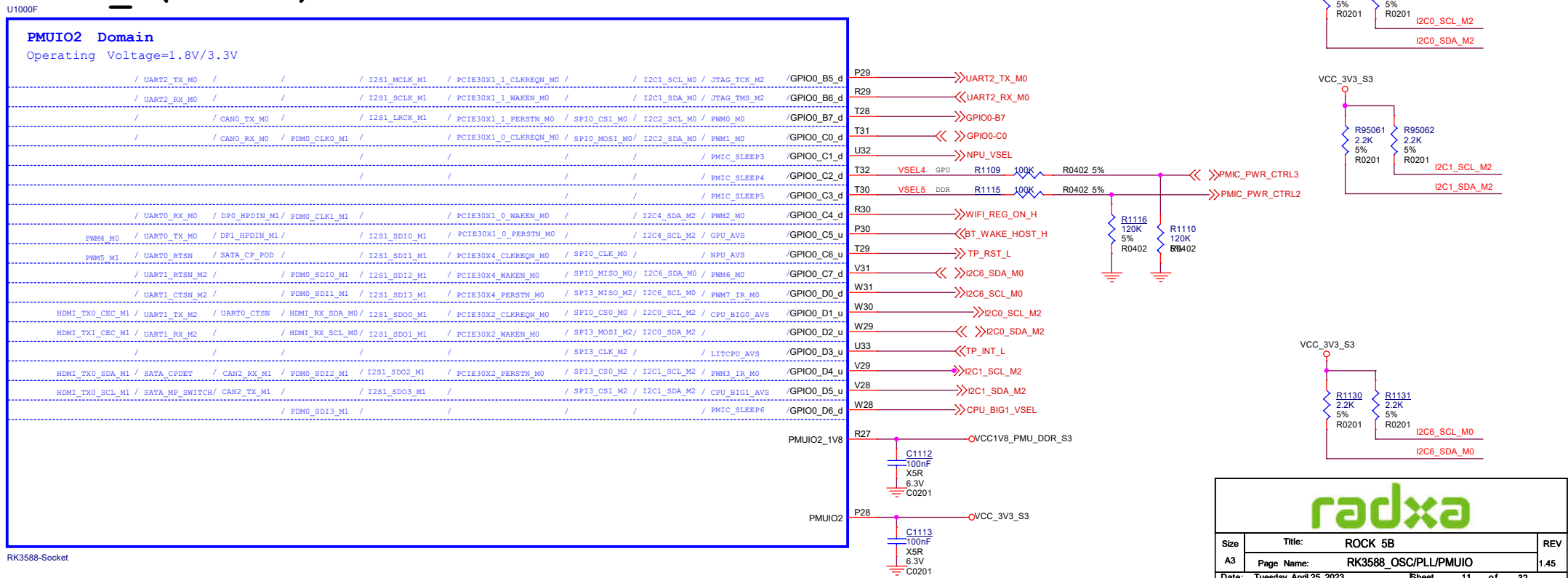





# RK3588\_E (OSC/PLL/PMUIO1/2)

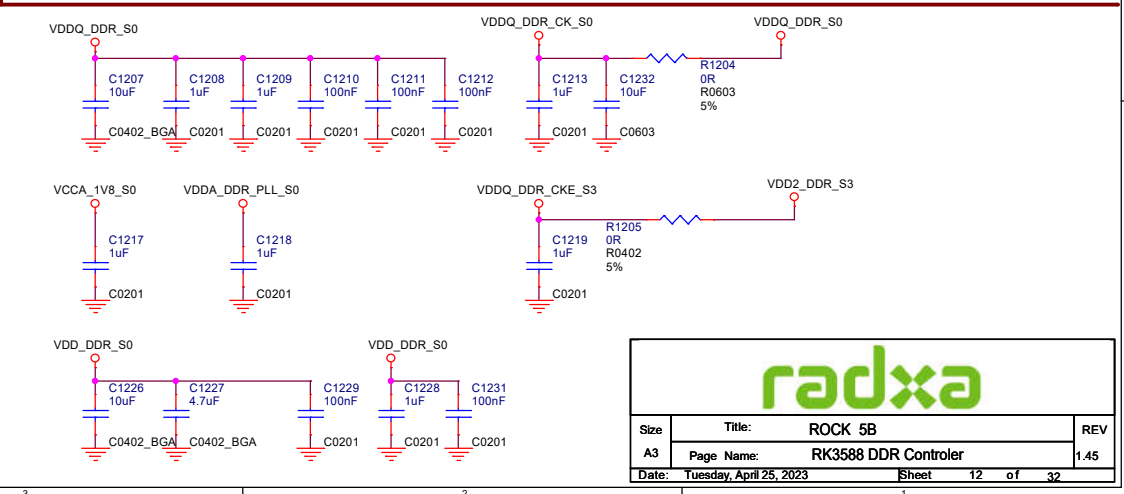
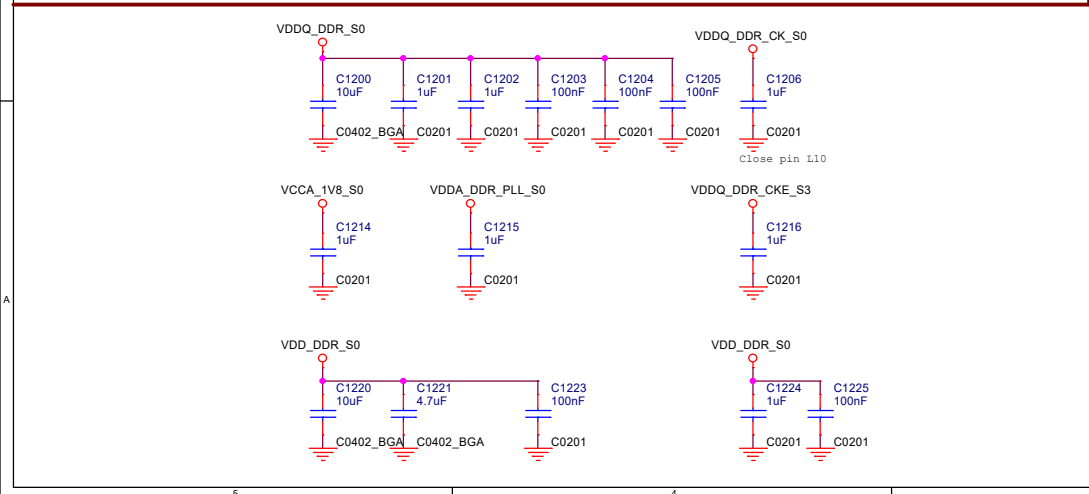
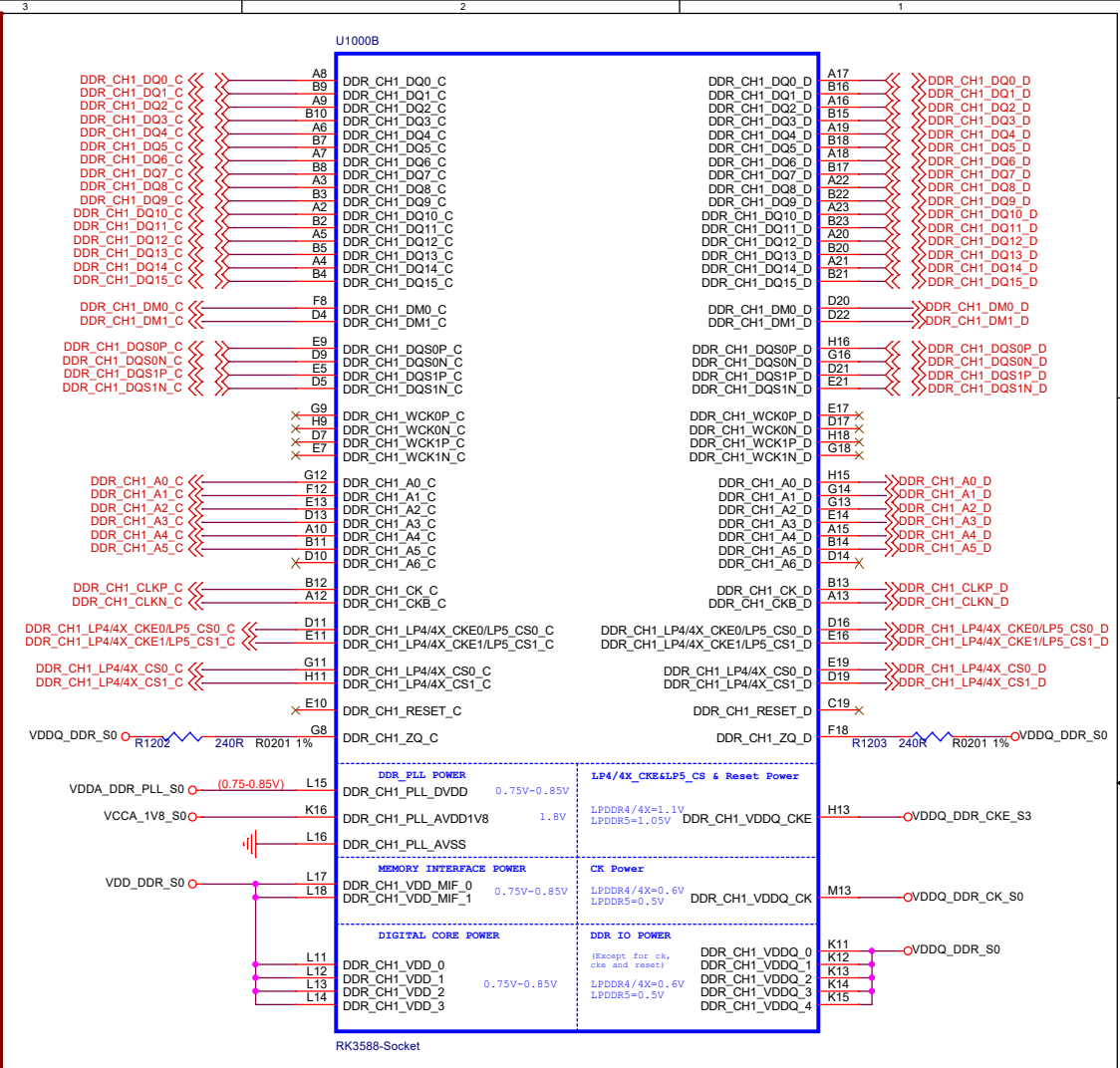
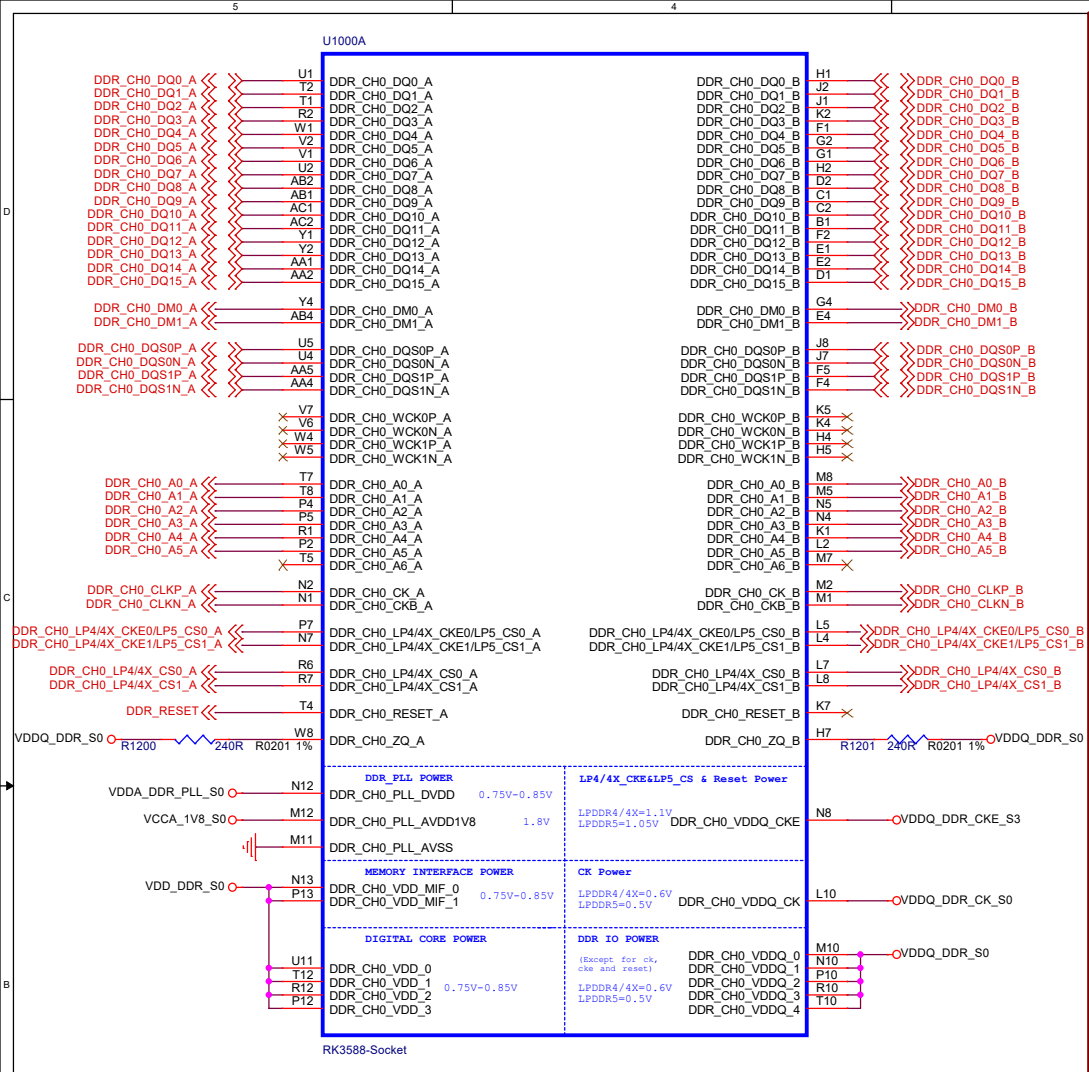


# RK3588\_F (PMUIO2)





Size	Title: <b>ROCK 5B</b>	REV
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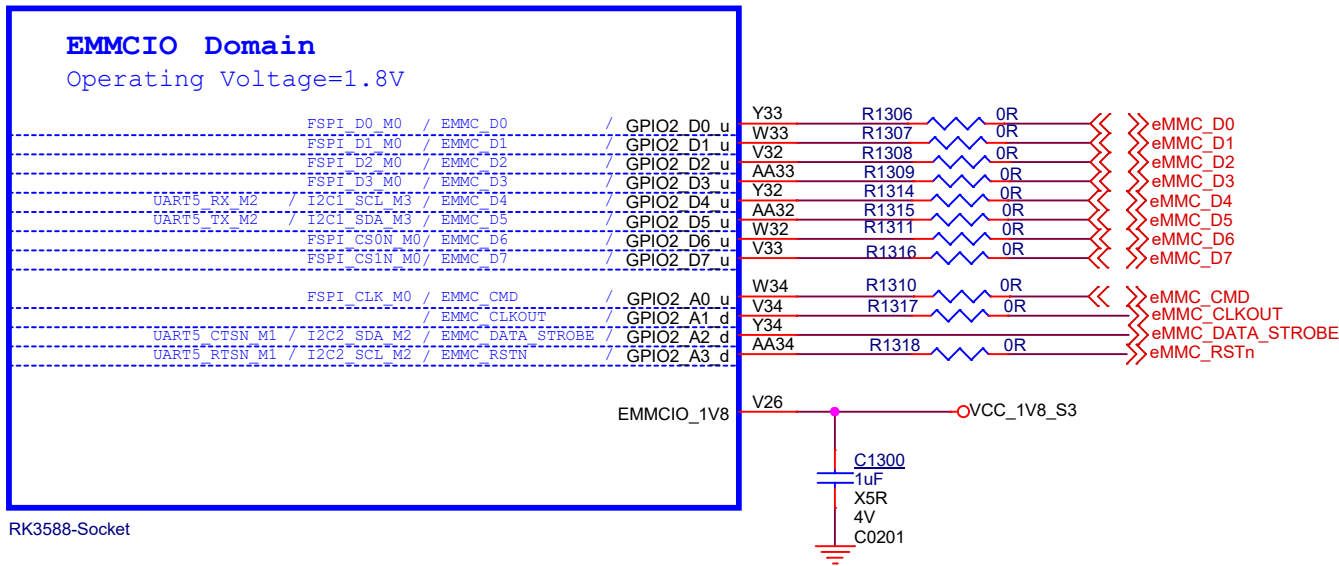


**radxa**

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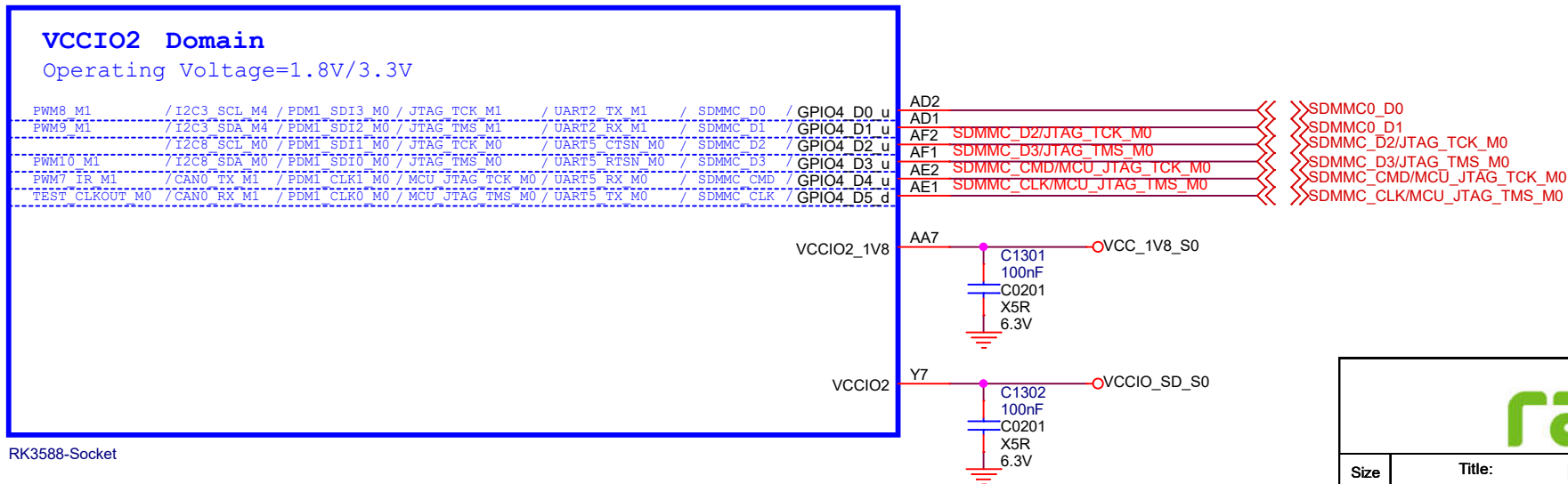
# RK3588\_C (EMMCIO Domain)

U1000C



# RK3588\_D (VCCIO2 Domain)

U1000D



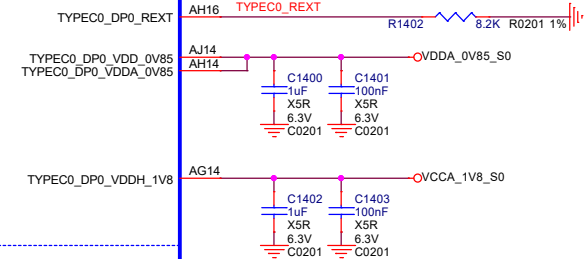
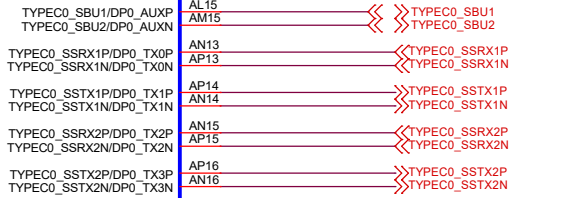
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A4	Page Name: RK3588_Flash/SD Controller	1.45
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# RK3588\_M (TYPE-C/DP)

U1000M

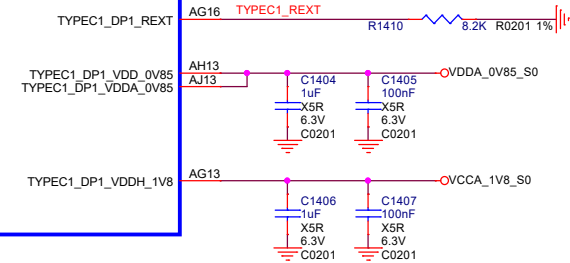
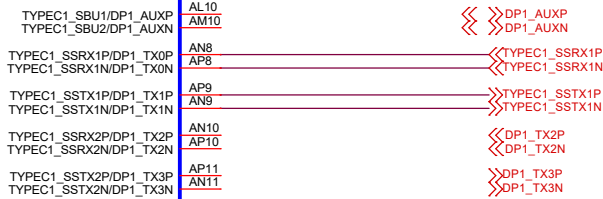
## USB3.0 OTG/DP1.4 Alt of TYPEC0

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



## USB3.0 OTG/DP1.4 Alt of TYPEC1

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



RK3588-Socket

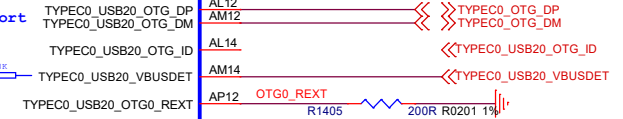
# RK3588\_L (USB2.0 HOST/OTG)

U1000L

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

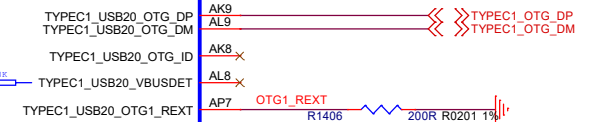
HS/FS/LS

Download Port



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

HS/FS/LS



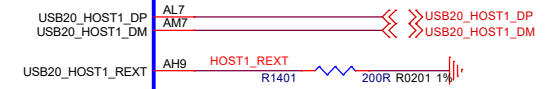
## USB2.0 HOST0

HS/FS/LS

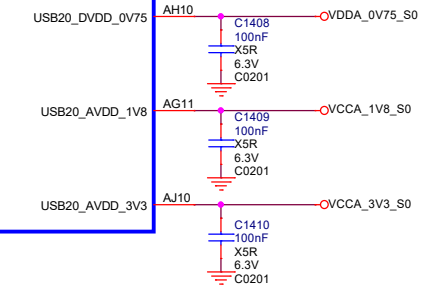


## USB2.0 HOST1

HS/FS/LS



## USB2.0 POWER

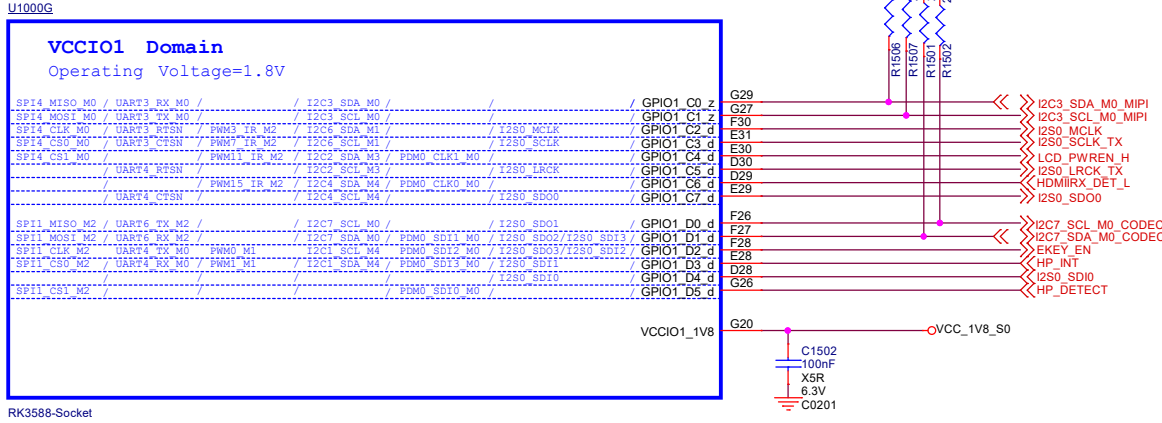


RK3588-Socket

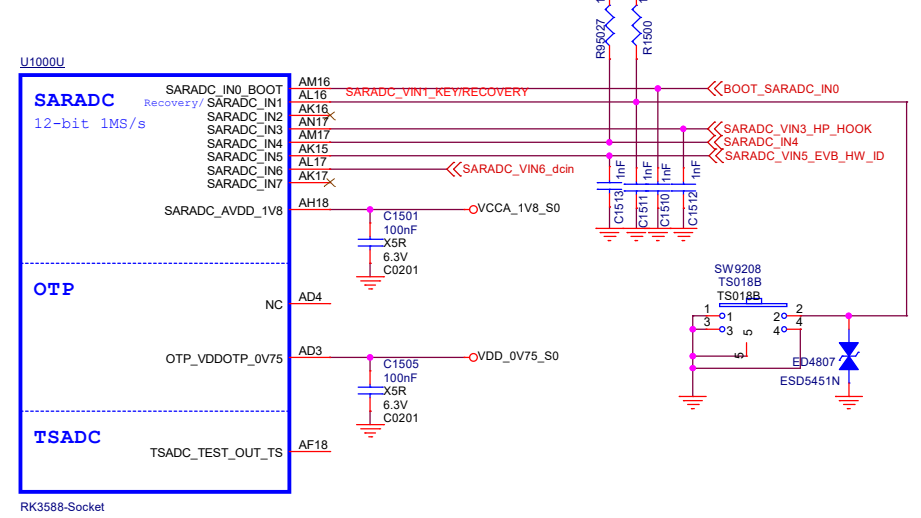


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A3	Page Name: RK3588_USB30/USB20_Ctrl	1.45
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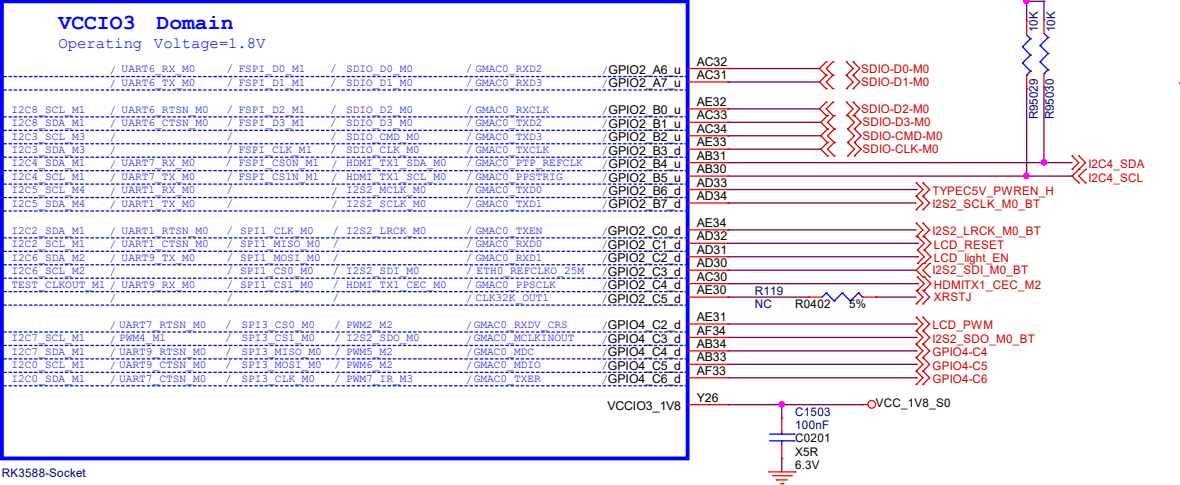
# RK3588\_G (VCCIO1 Domain)



# RK3588\_U (SARADC/OTP)



# RK3588\_H (VCCIO3 Domain)



## BOOT MODE CONFIG

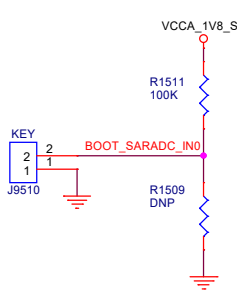


TABLE 1

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

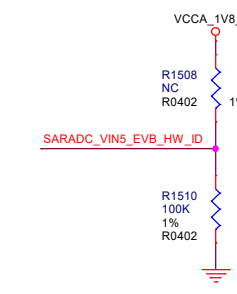


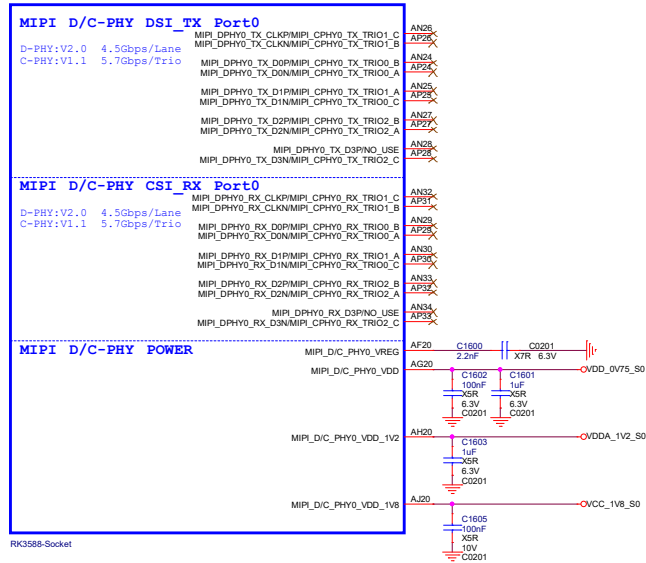
TABLE 2

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

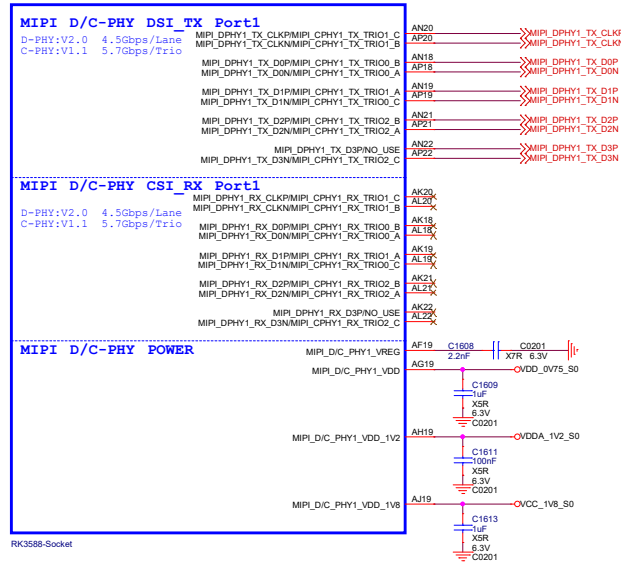


# RK3588\_Q/R(MIPI\_D/C\_PHY0/1)

U1000Q

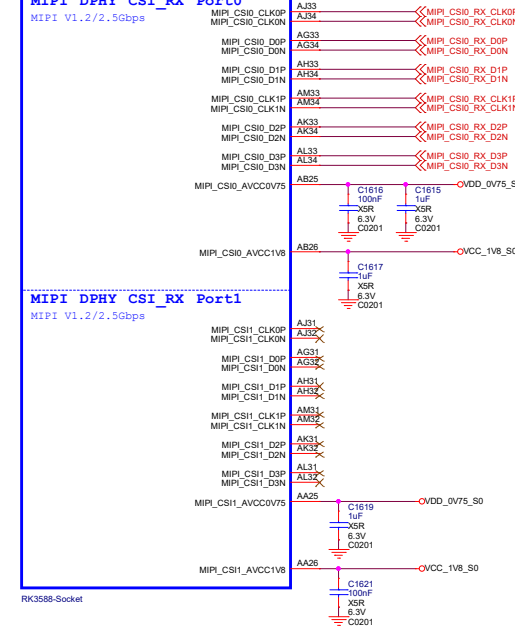


U1000R



# RK3588\_P(MIPI\_CSI\_RX\_PHY)

U1000P



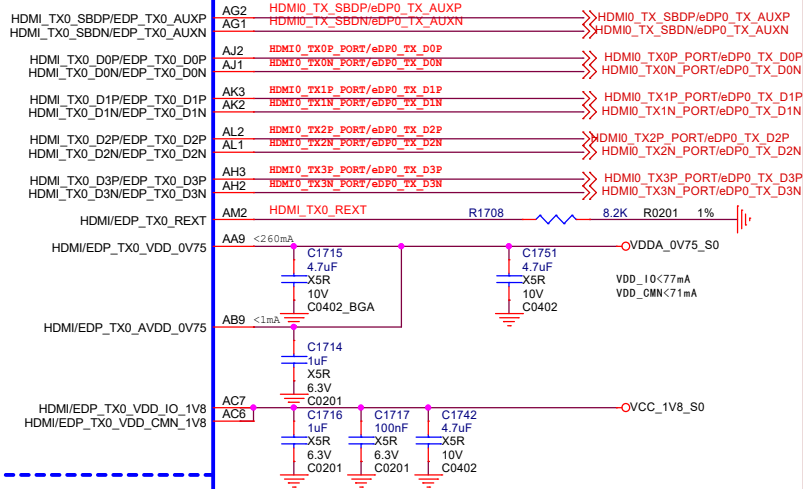


# RK3588\_S (HDMI2.1 TX)

U1000S

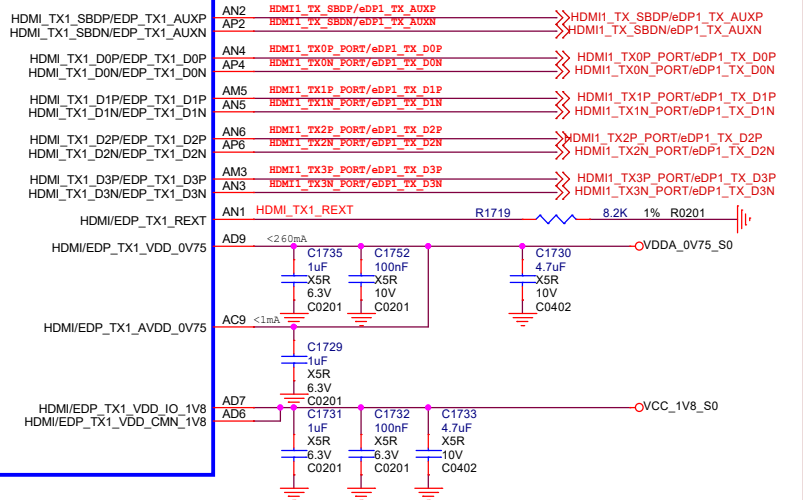
## HDMI TX/eDP MUX Port0

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



## HDMI TX/eDP MUX Port1

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



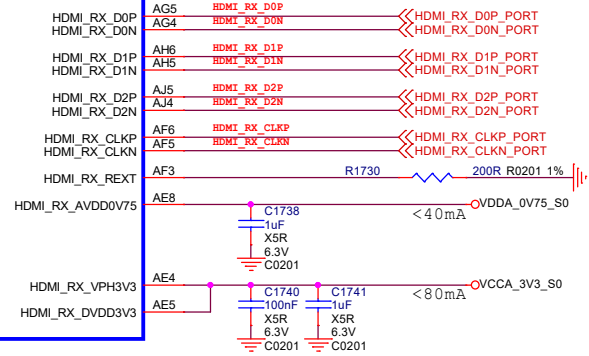
RK3588-Socket

# RK3588 T (HDMI20 RX)

J1000T

## HDMI RX

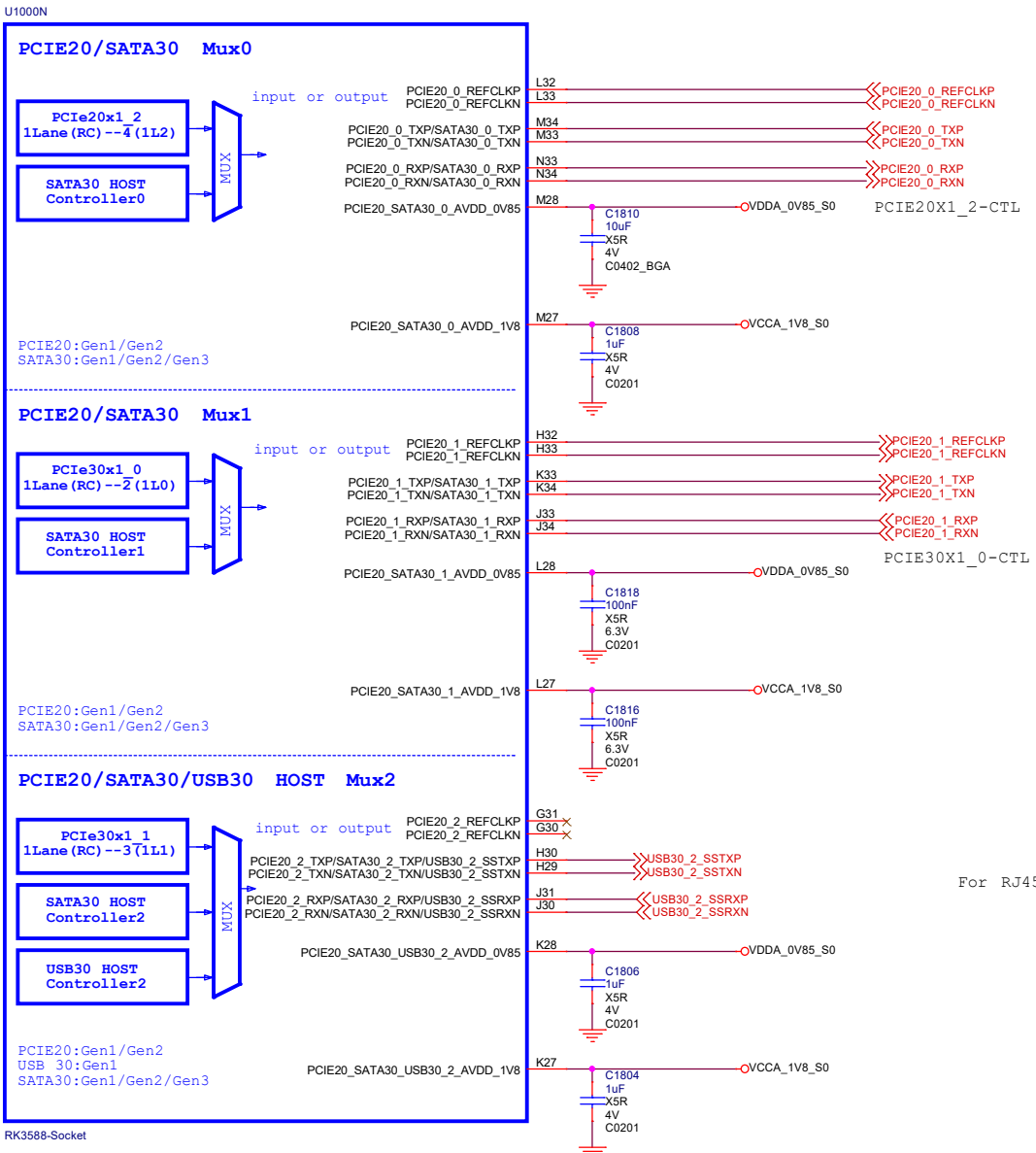
HDMI: V2.0



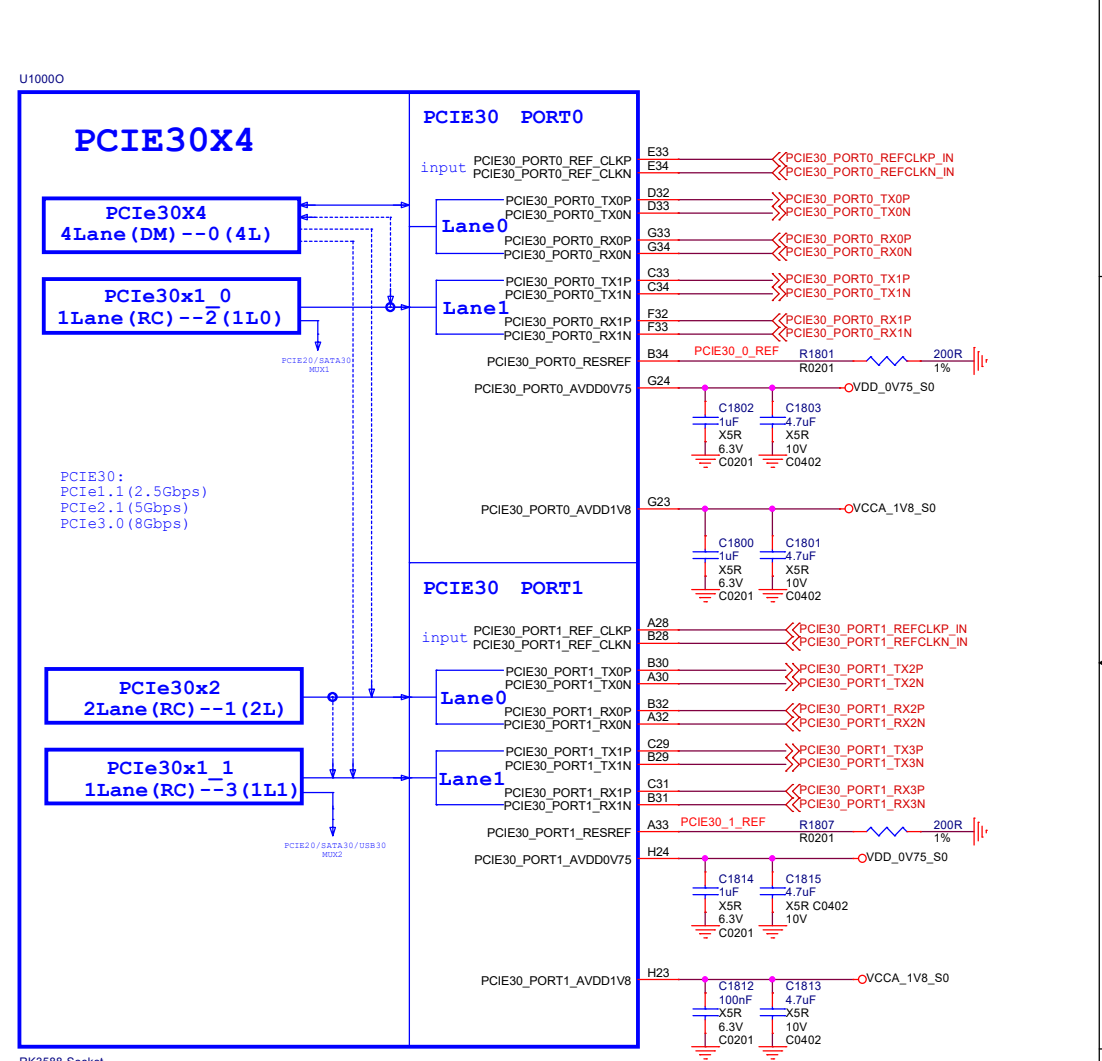
RK3588-Socket



# RK3588\_N (PCIE20)



# RK3588\_O (PCIE30)



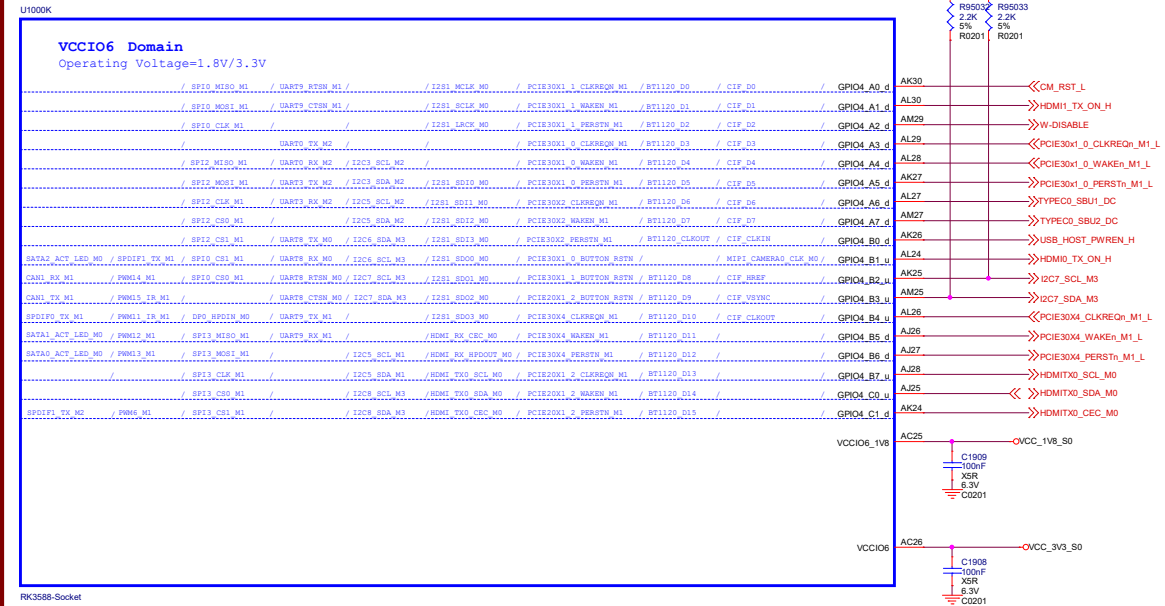
**radxa**

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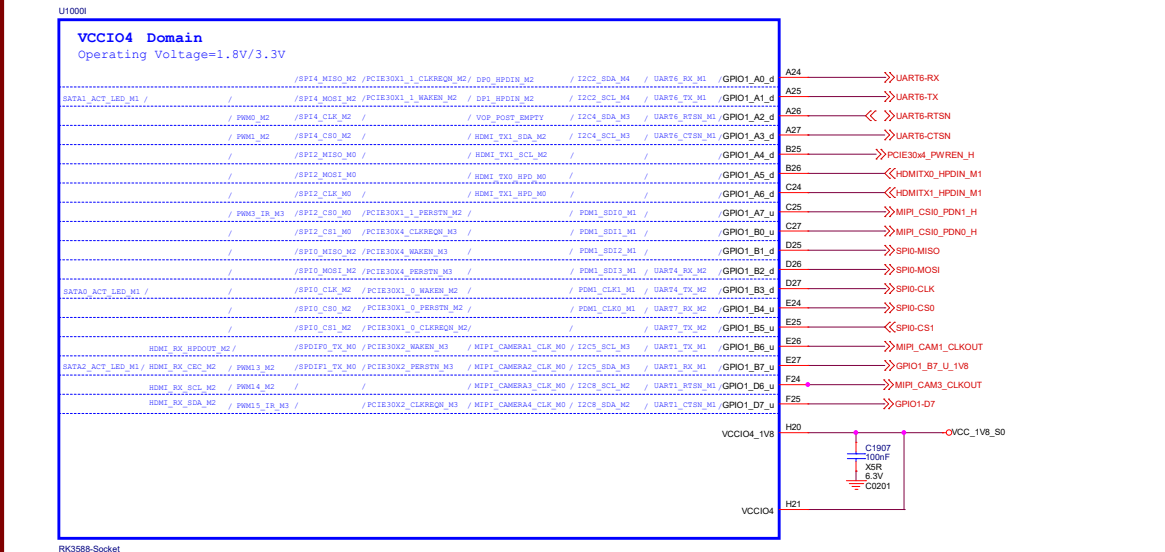
# RK3588\_J (VCCIO5 Domain)

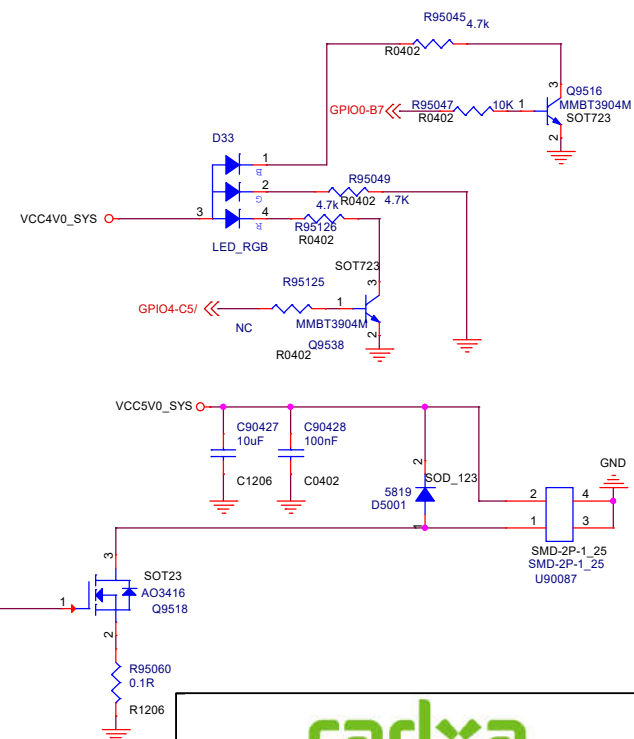
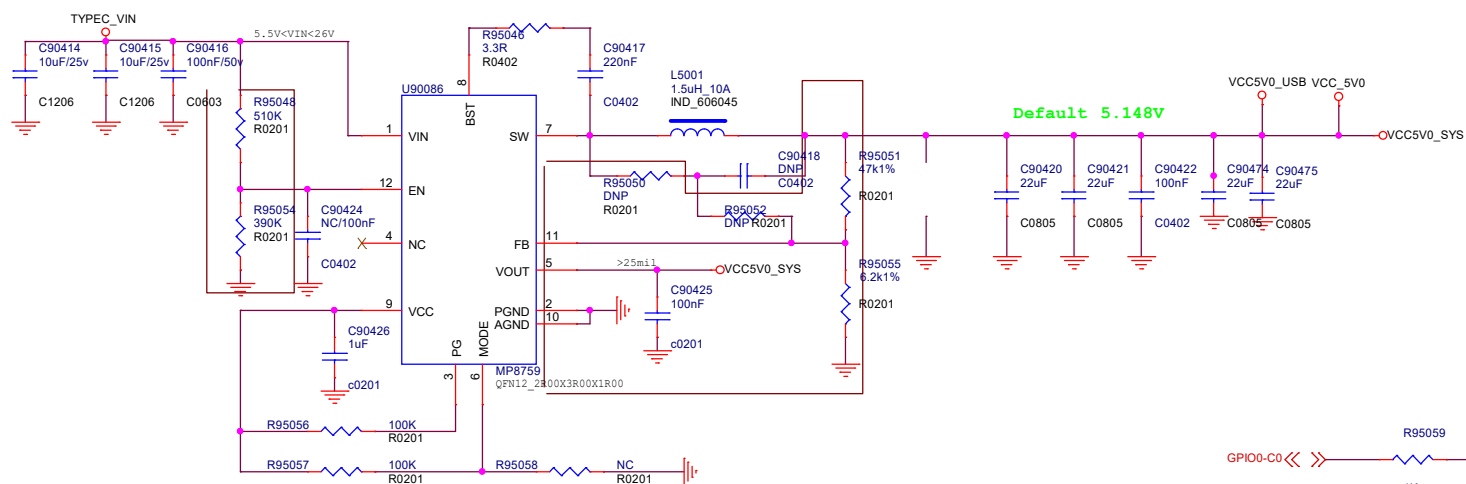
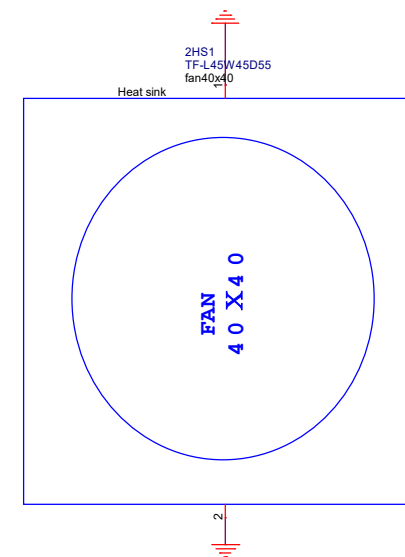
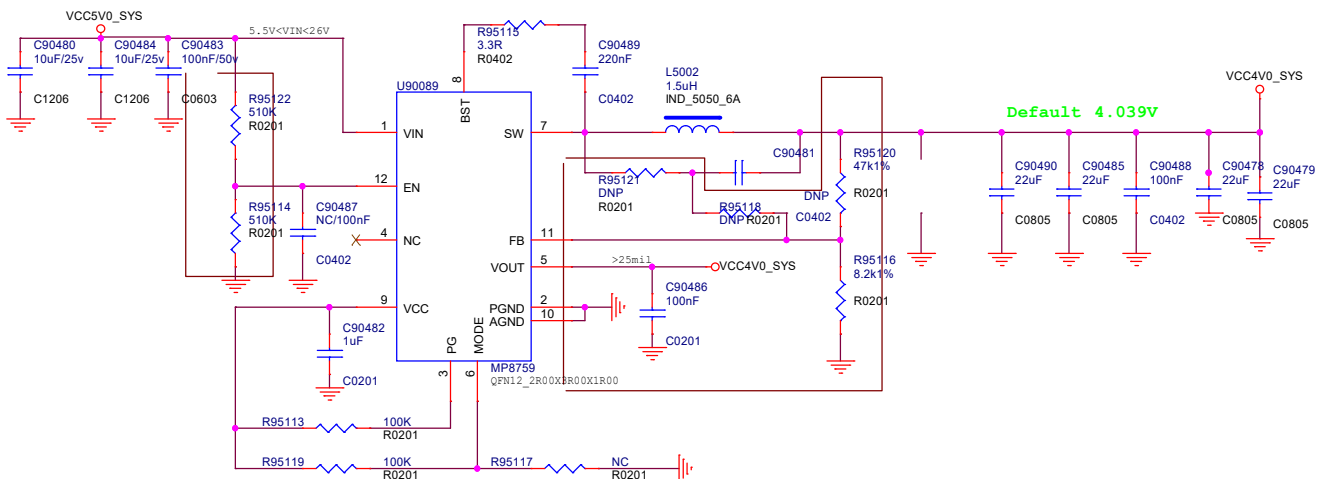
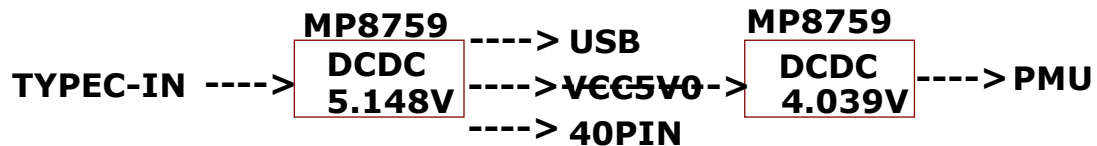


# RK3588\_K (VCCIO6 Domain)



# RK3588\_I (VCCIO4 Domain)

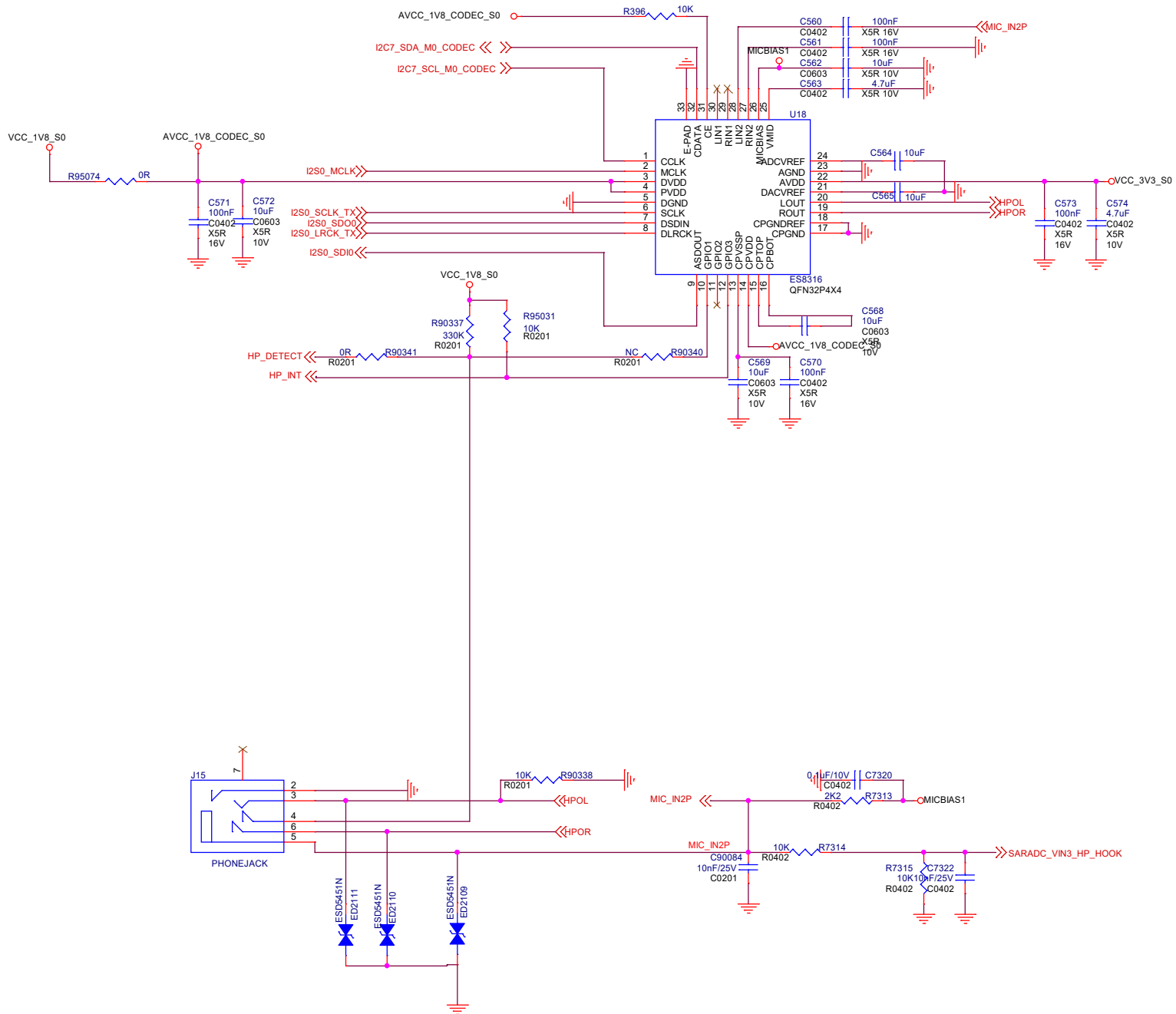




**radxa**

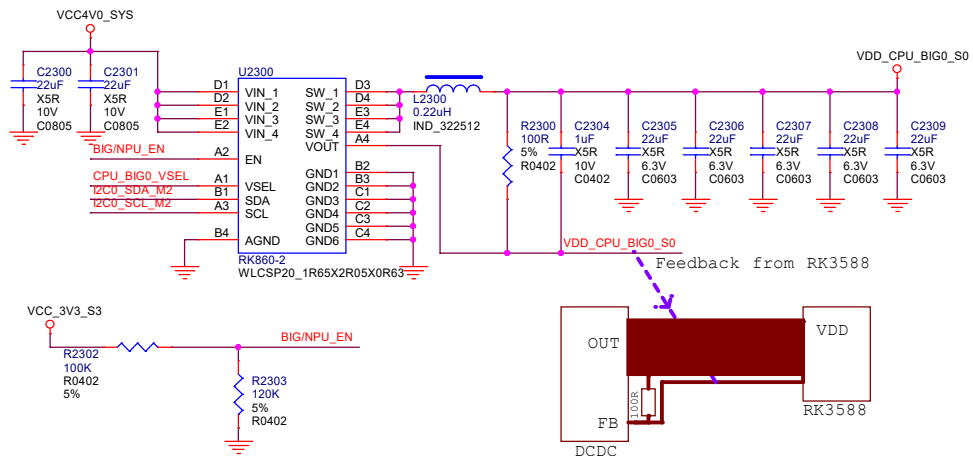
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# CODEC ES8316

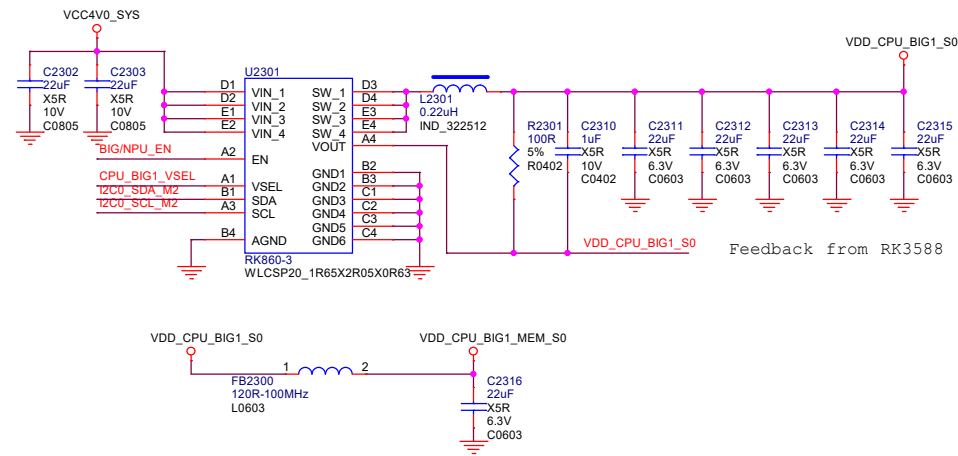




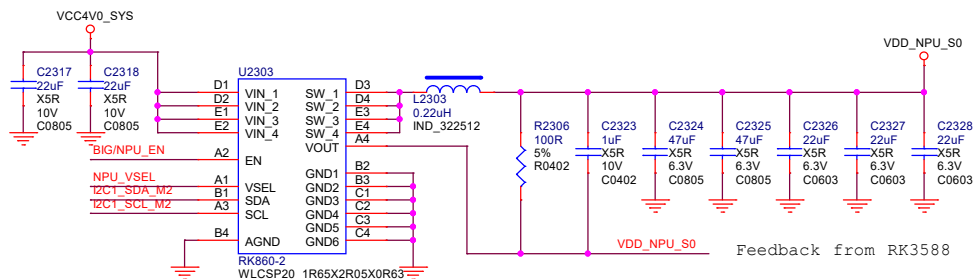
## VDD\_CPU\_BIG0



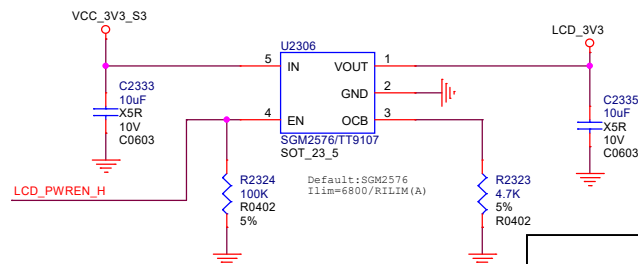
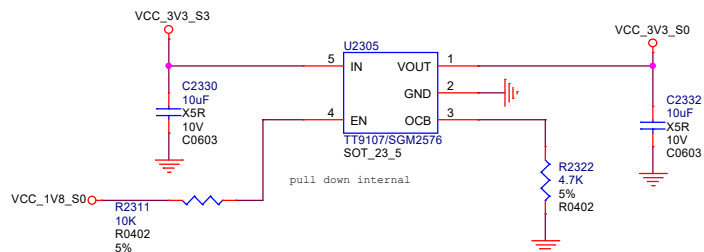
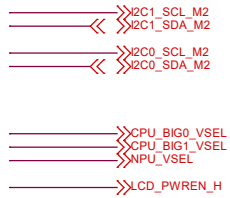
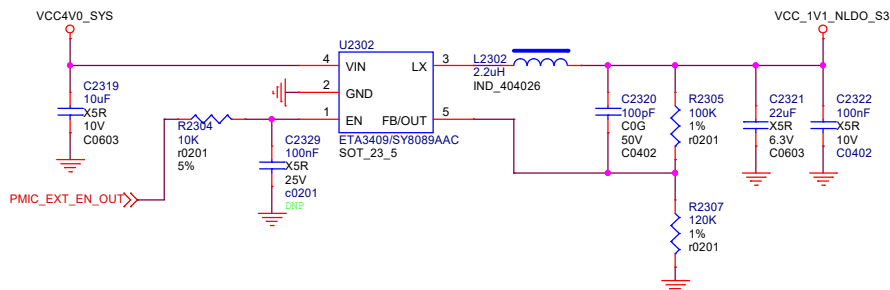
## VDD\_CPU\_BIG1



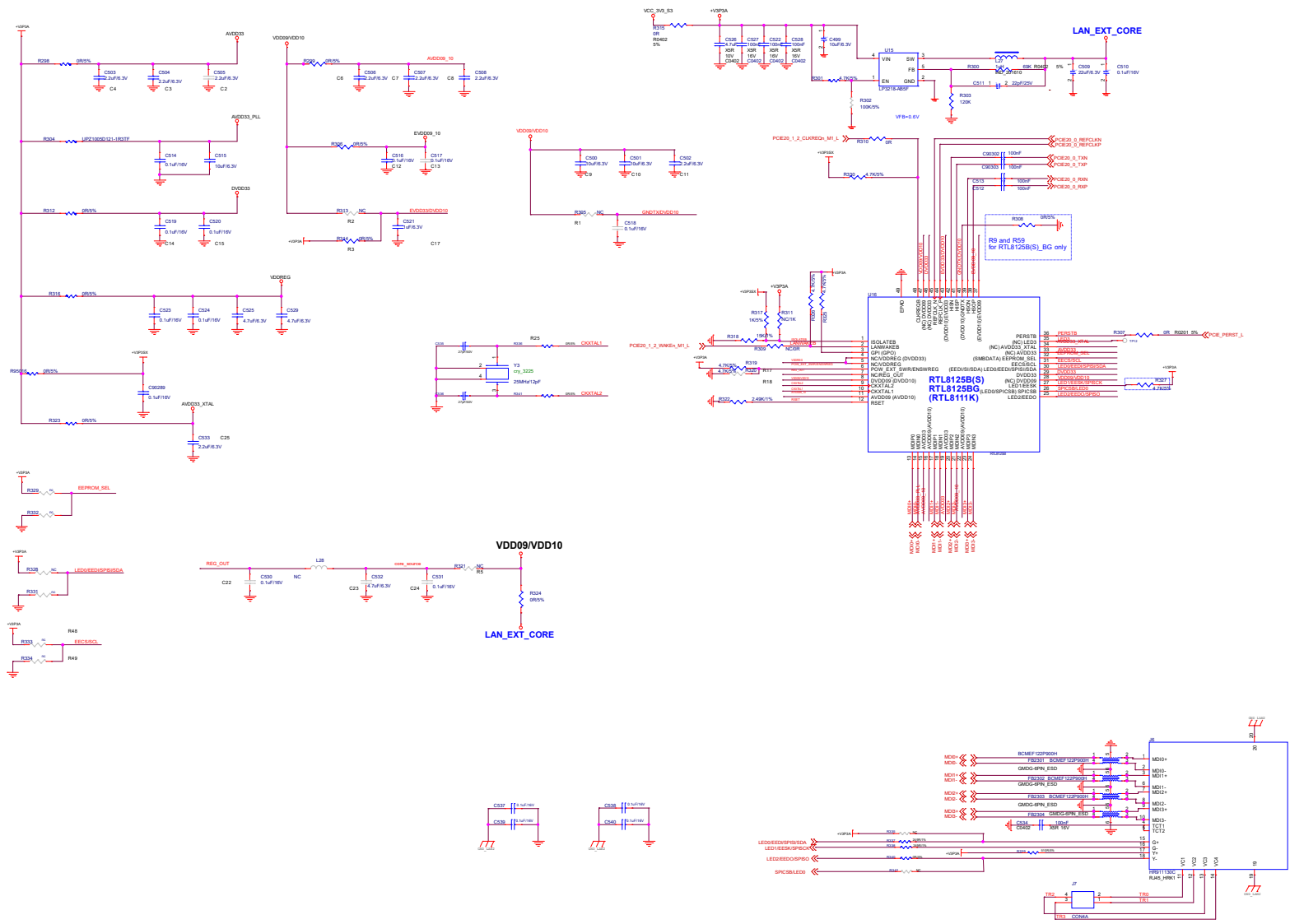
## VDD\_NPU



## VCC\_1V1\_NLDO\_S3

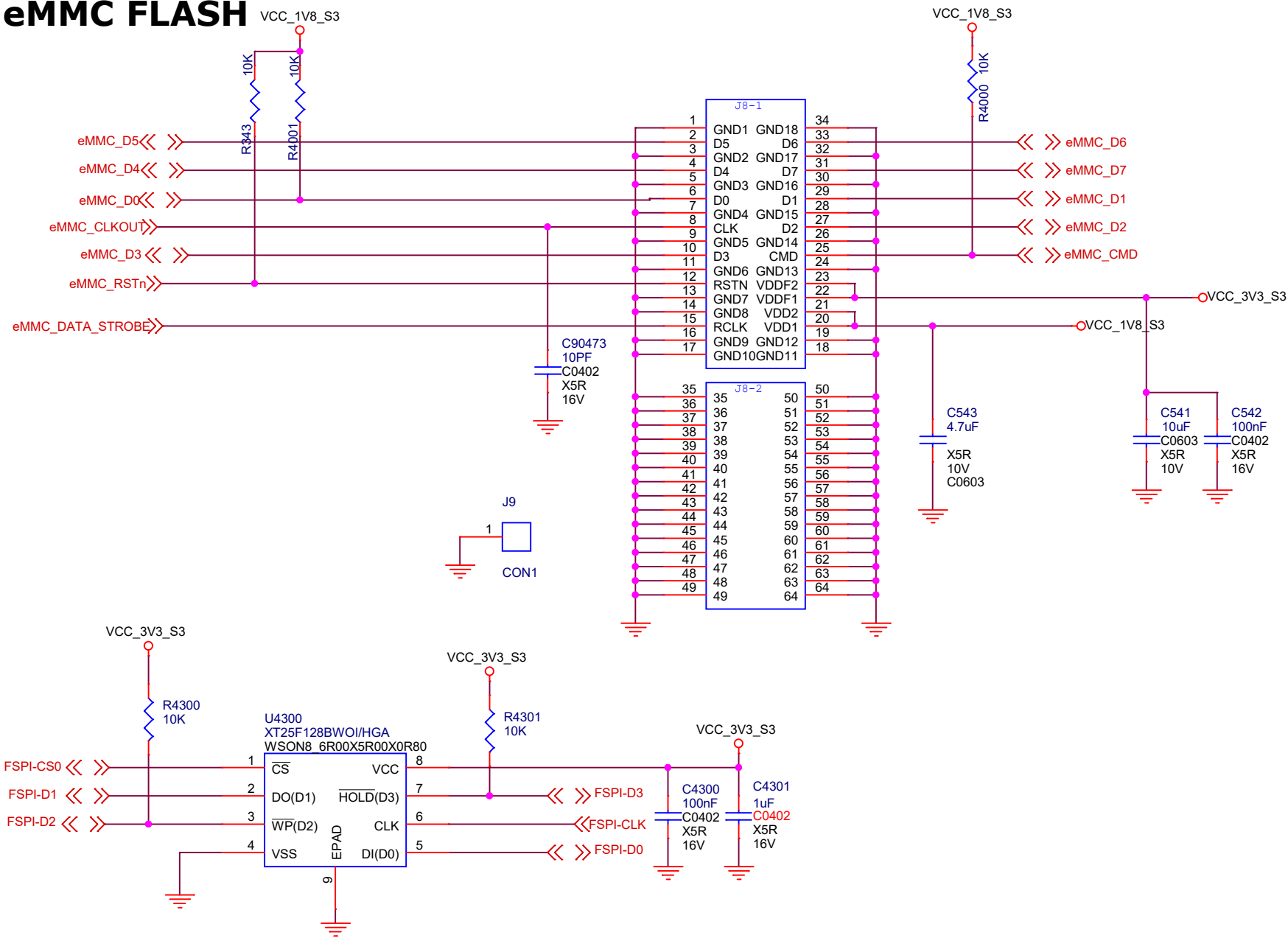


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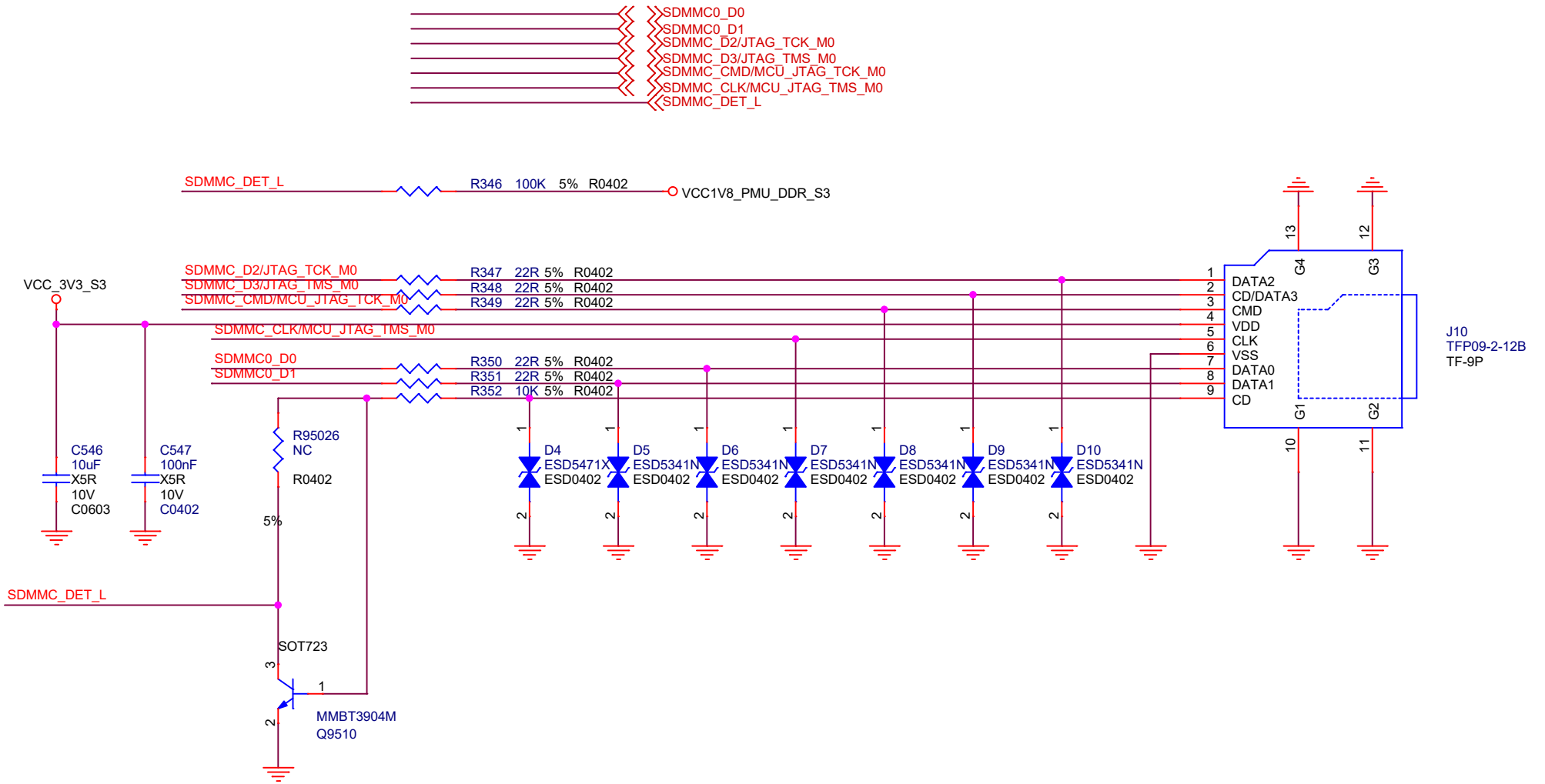


# eMMC FLASH



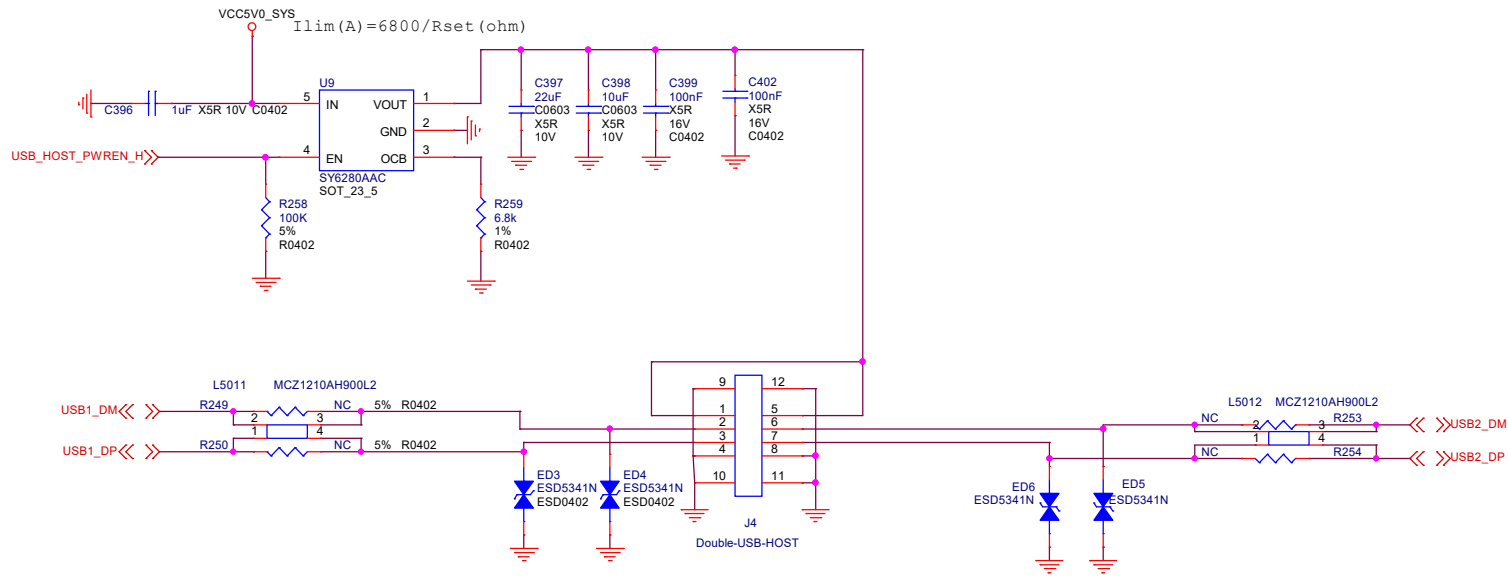
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# TF CARD

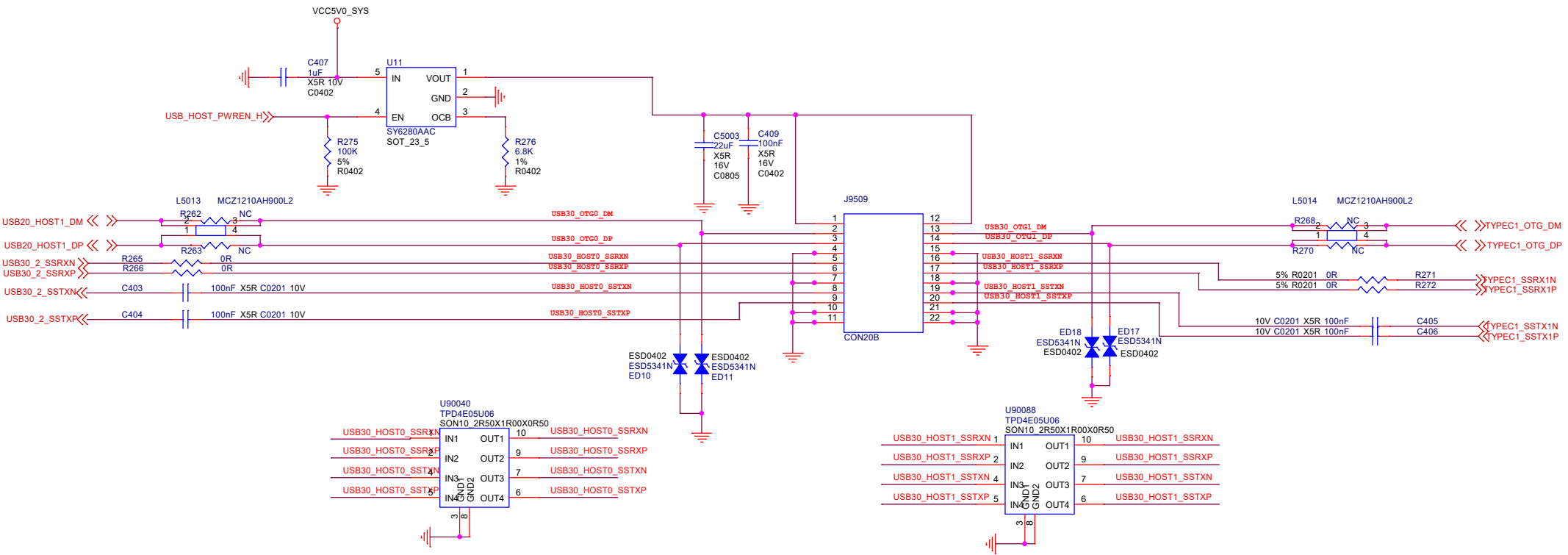


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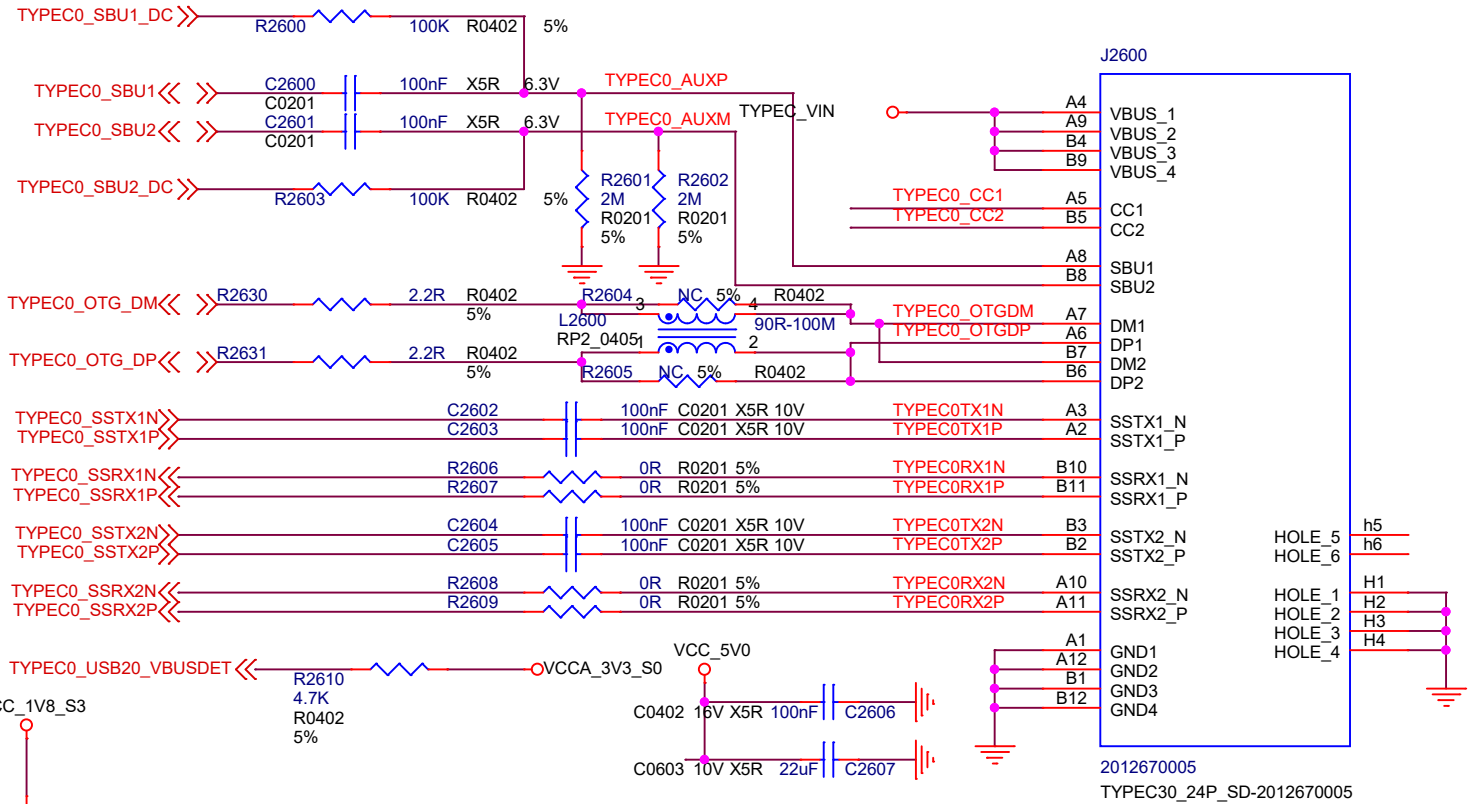
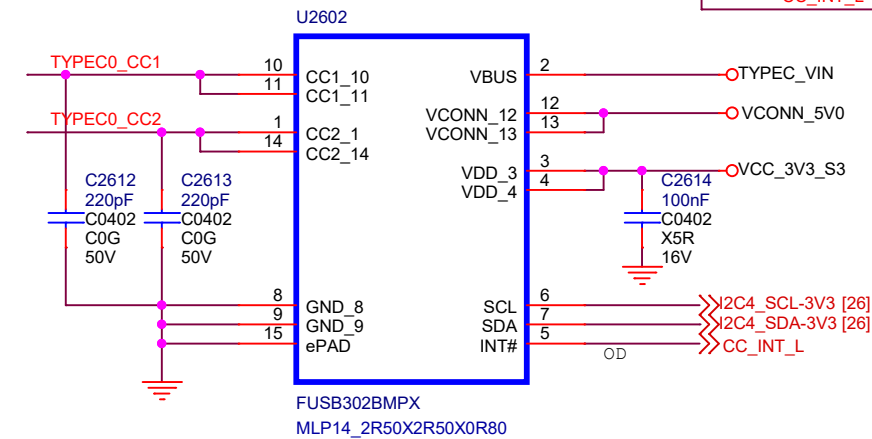
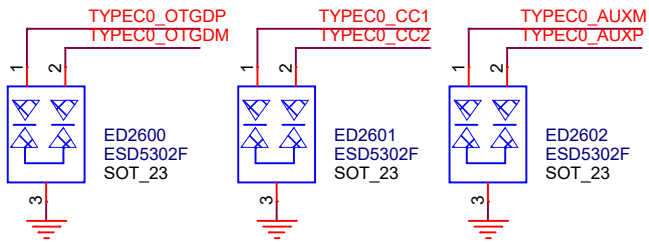
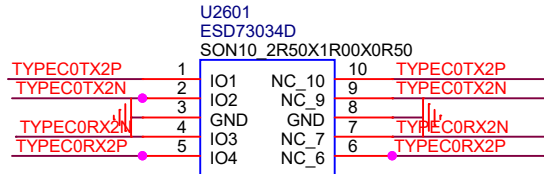
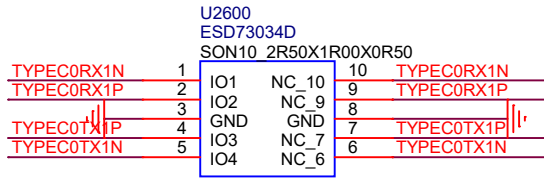
# USB2.0



# USB3.0 HOST PORT



# Type-C PORT



TYPEC_IN	12bit ADC	ADC-IN6
5V	35e	0.37V
9V	610	0.68V
12V	815	0.9V
15V	a1a	1.136V
20V	d79	1.51V



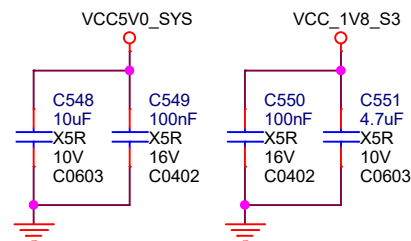
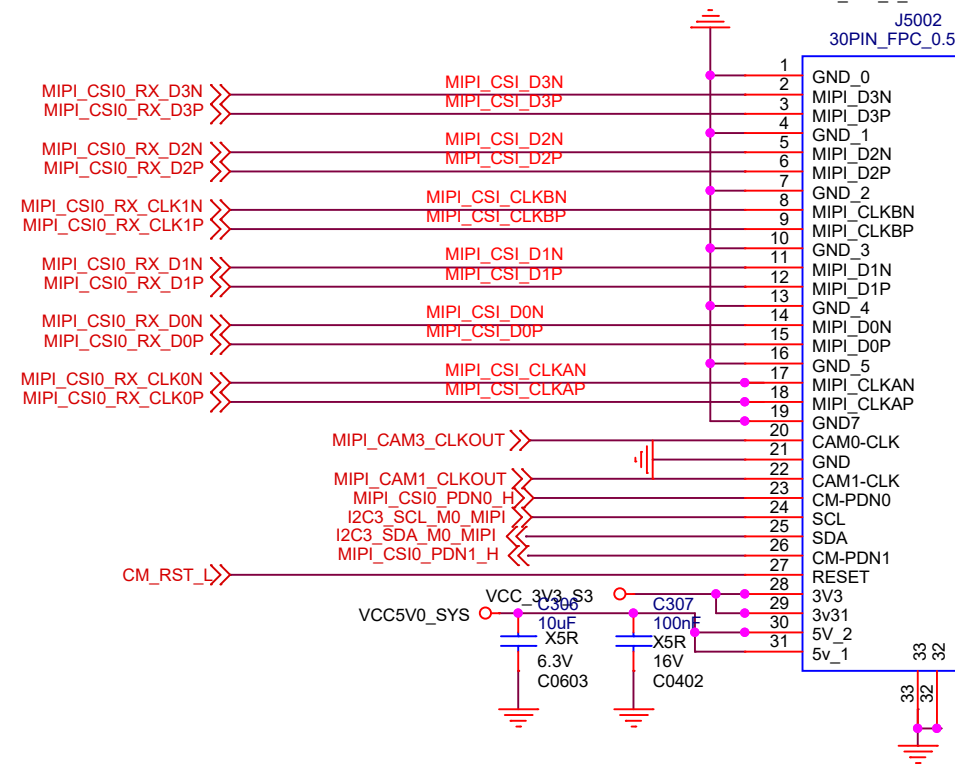
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A4	Page Name:	Type-C PORT	1.45
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# CAM

FH35C\_31P\_0\_6SHW

J5002

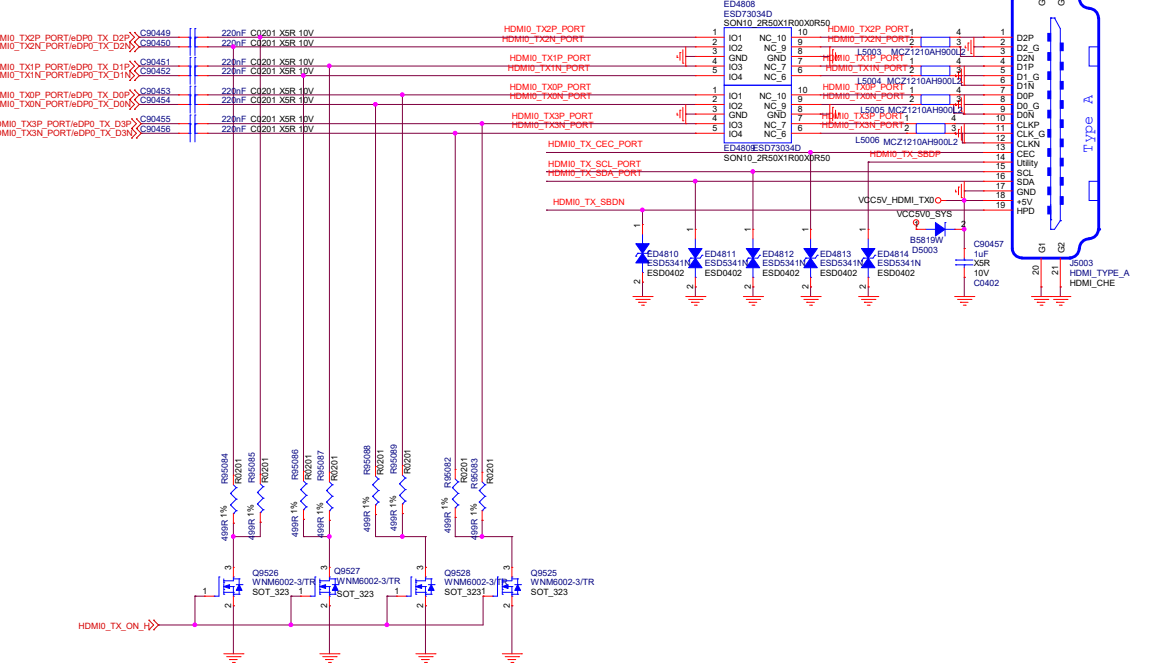
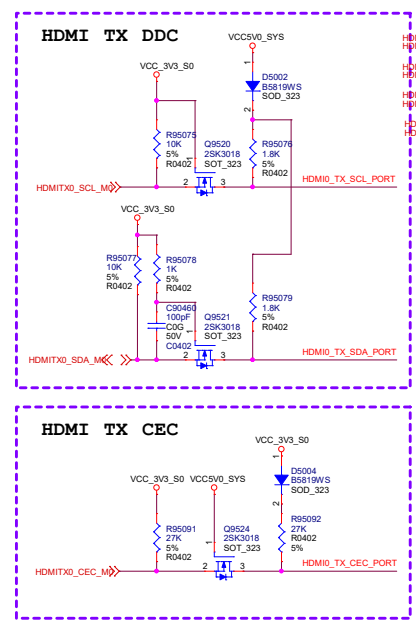
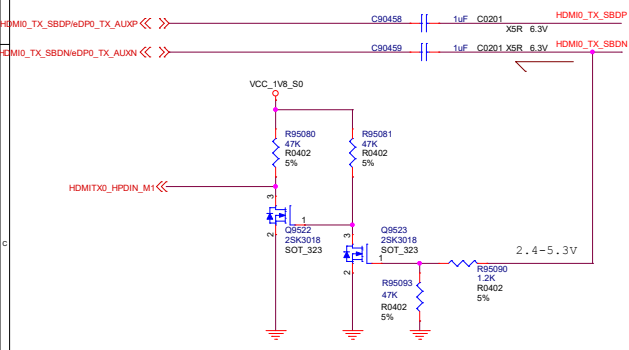
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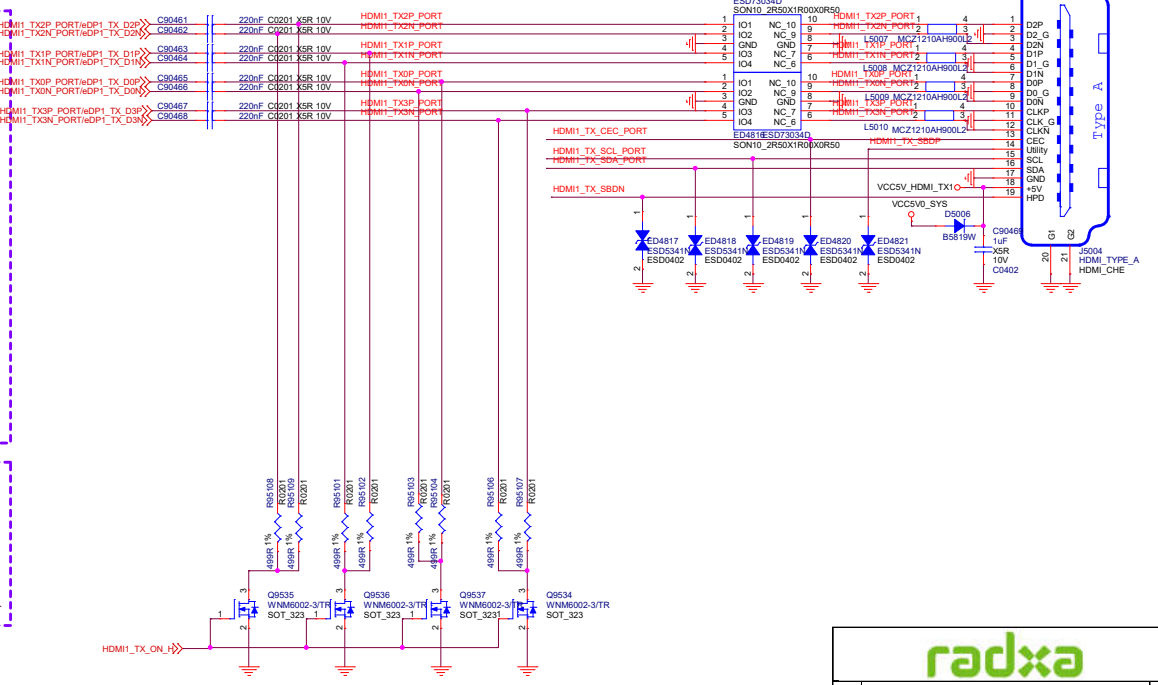
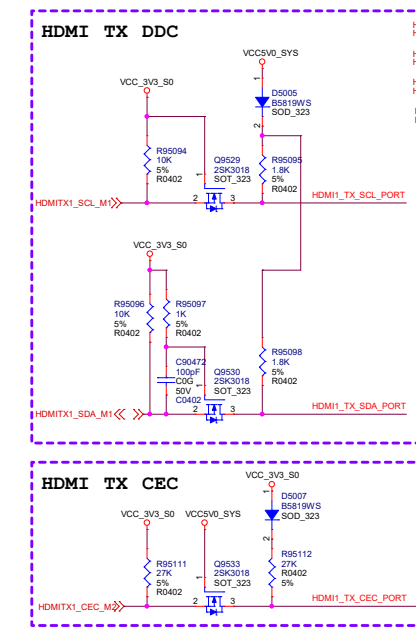
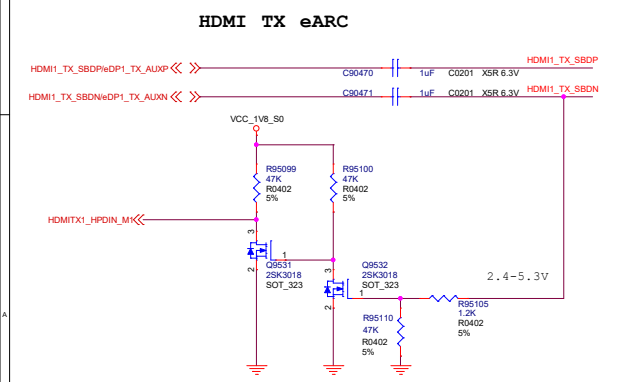


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A4	Page Name: <b>CAM</b>	1.45
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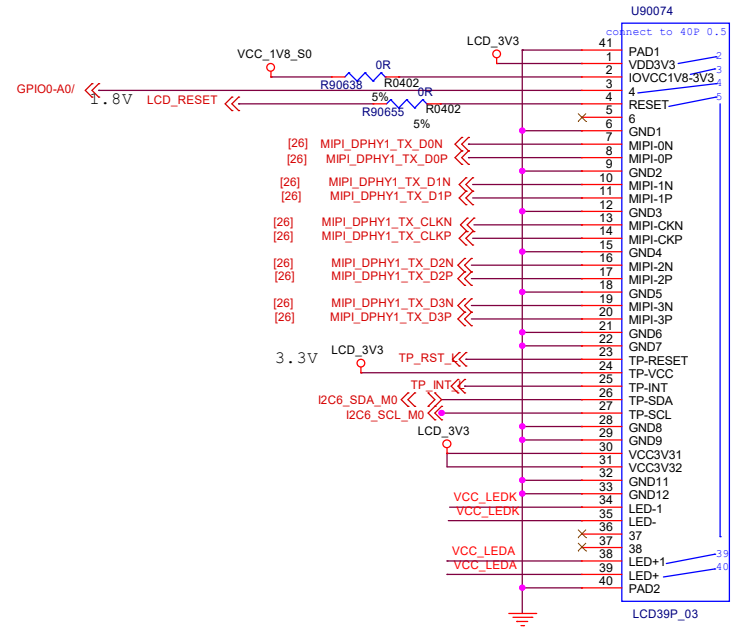
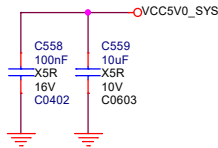
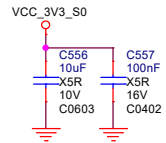
# HDMI 1



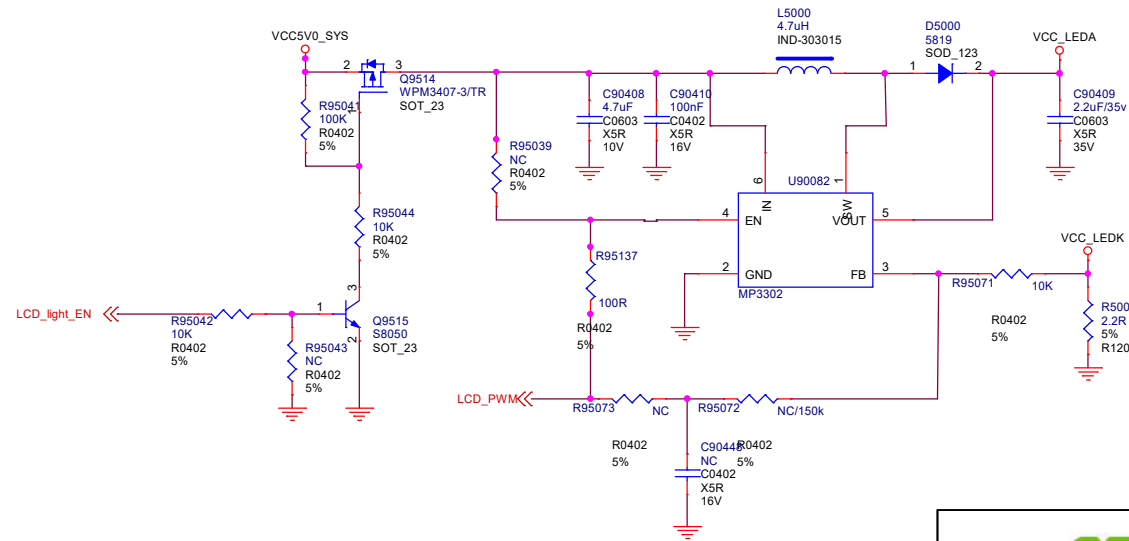

# HDMI 2



# MIPI DPHY1 TX



# LCD

Size	Title: ROCK 5B	REV
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