

Revision History

A	Version	Date	By	Change Description	A
	V1.0	2024-04-23	zuozhongkai	1:Initial release version	
B					B
C					C
D					D

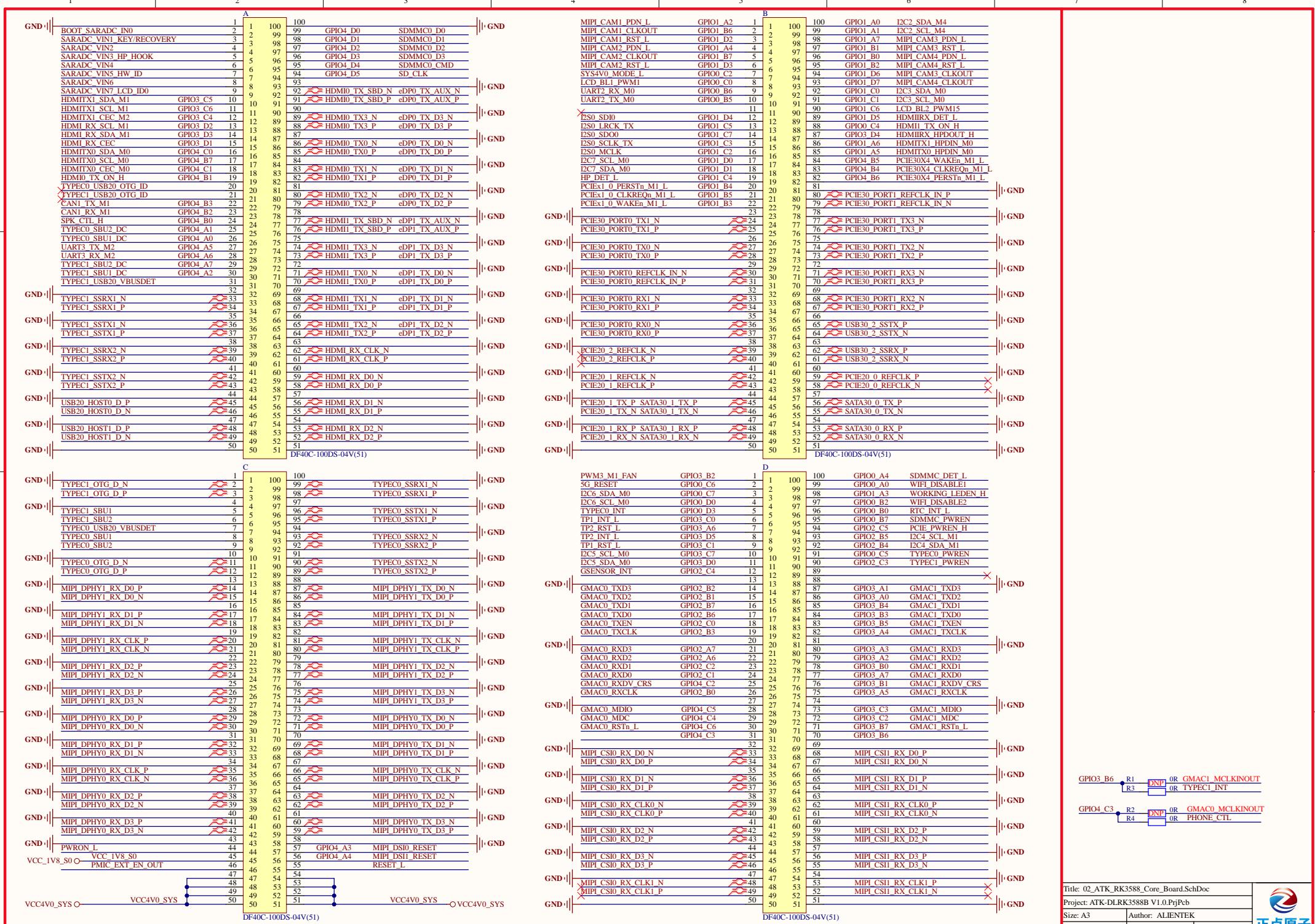
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Project: ATK-DLRK3588B V1.0.PrjPcb

Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 1 of 17





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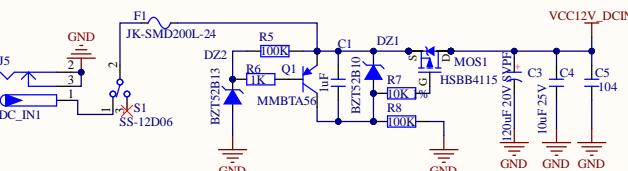
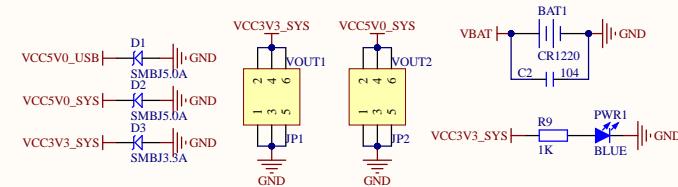
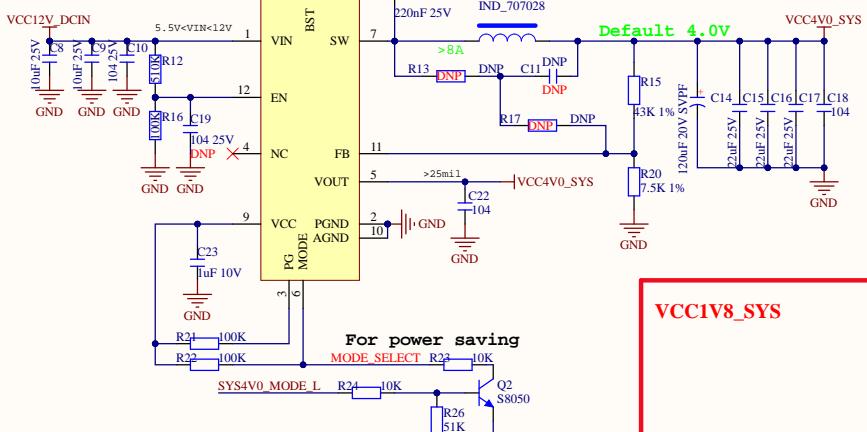
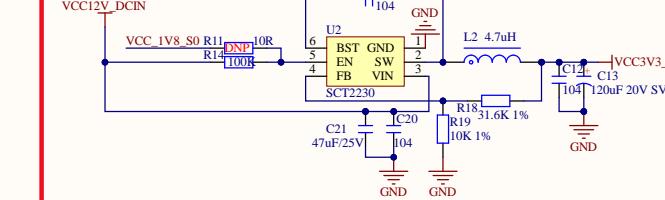
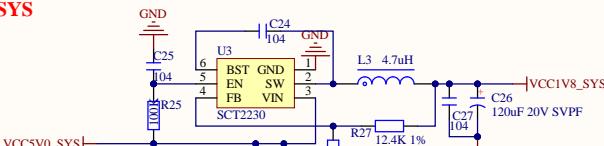
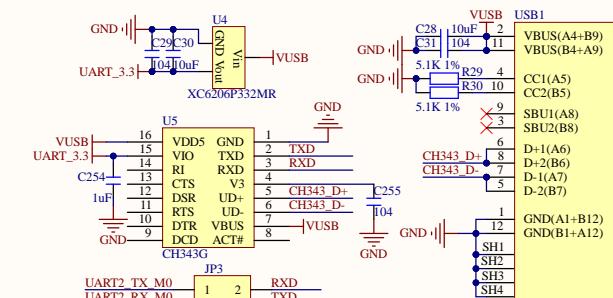
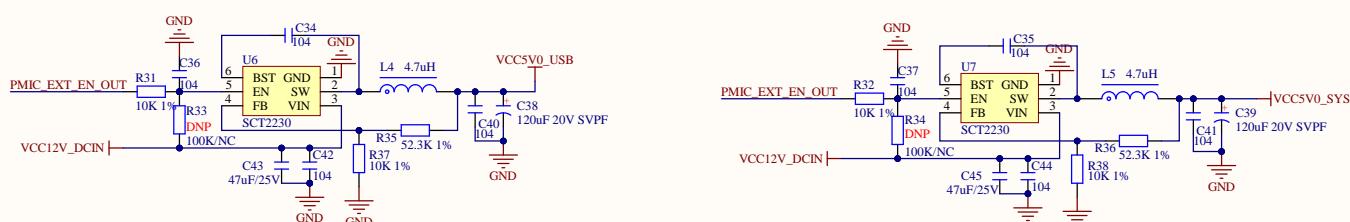
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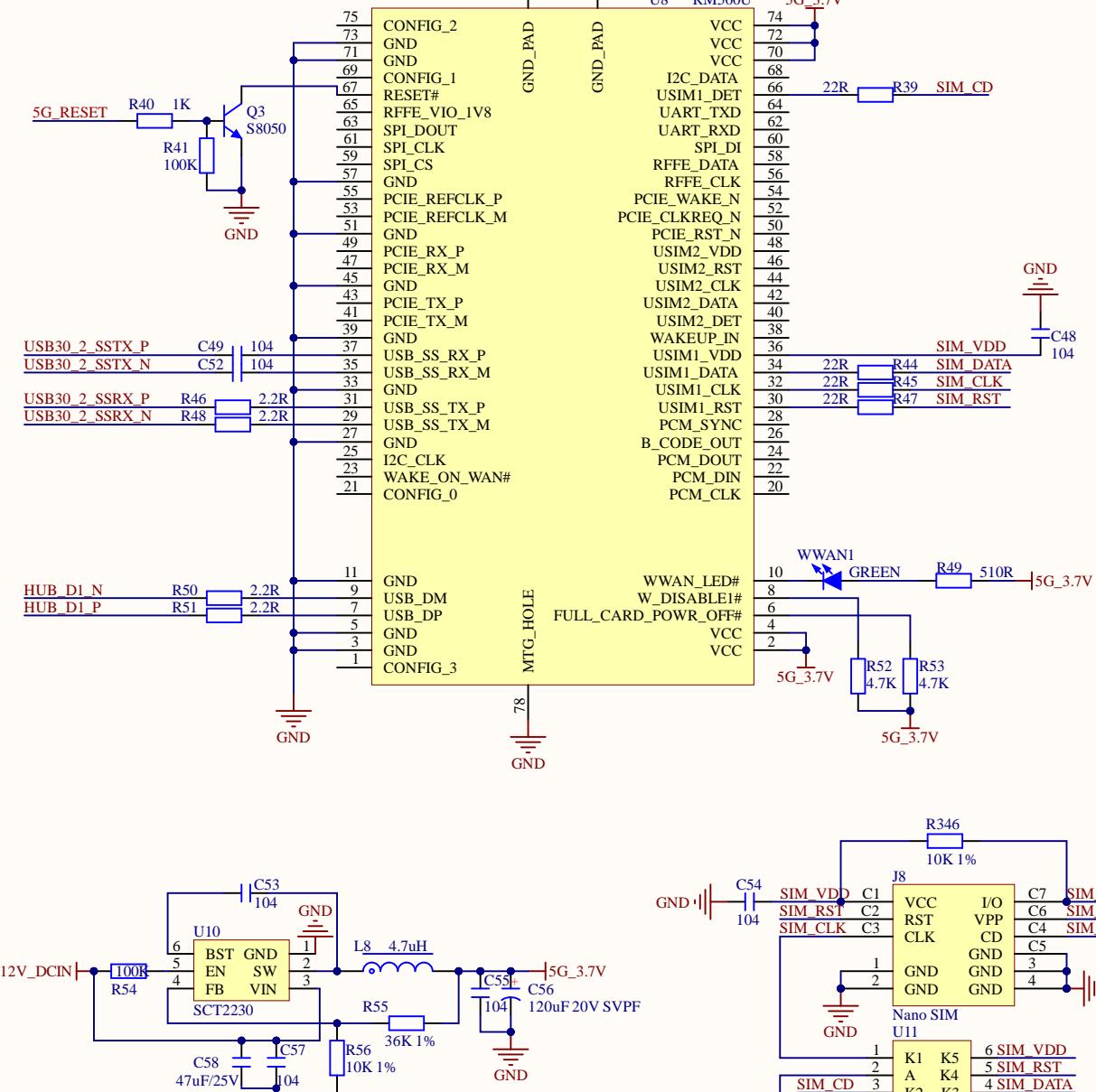
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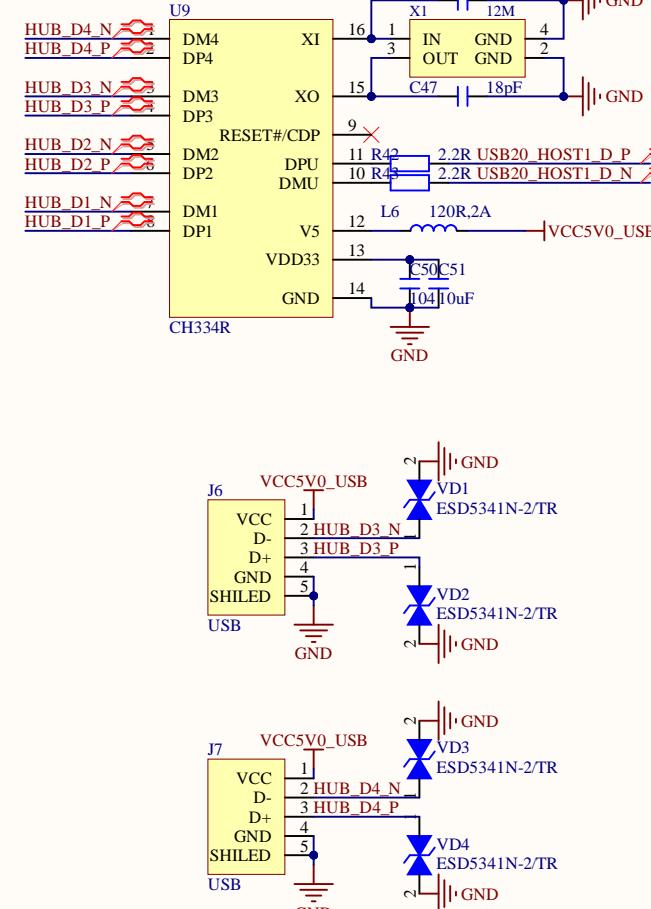
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12V DCIN**POWER IO****VCC4V0_SYS****VCC3V3_SYS****VCC1V8_SYS****USB USART(TYPEC)****VCC5V0**

5G MODULE



USB HUB



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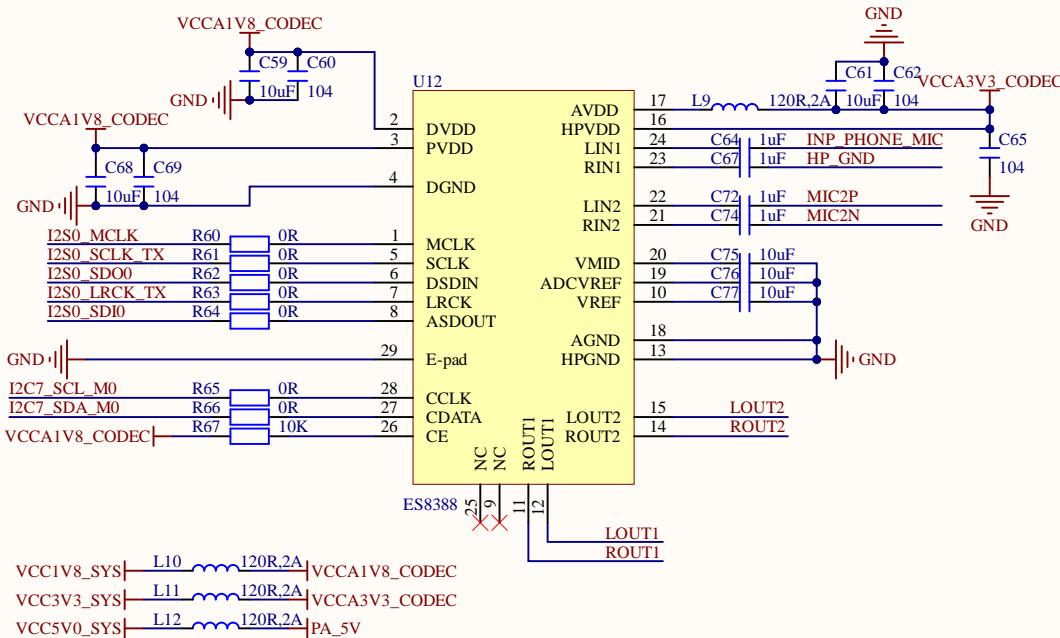
Project: ATK-DLRK3588B V1.0.PjrPcb

Size: A4 Author: ALIENTEK

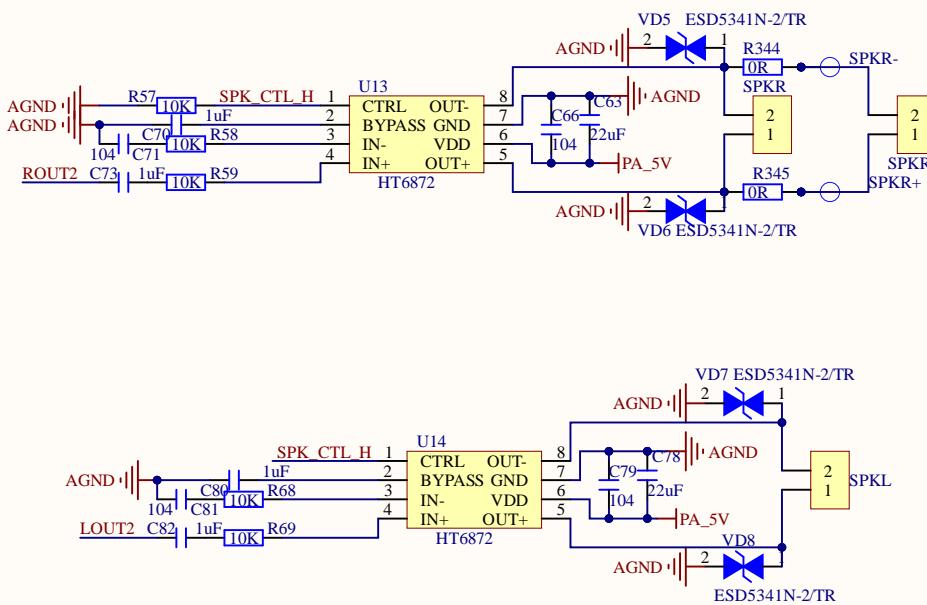
Date: 2024-05-09 Version: V1.0 Sheet: 4 of 17



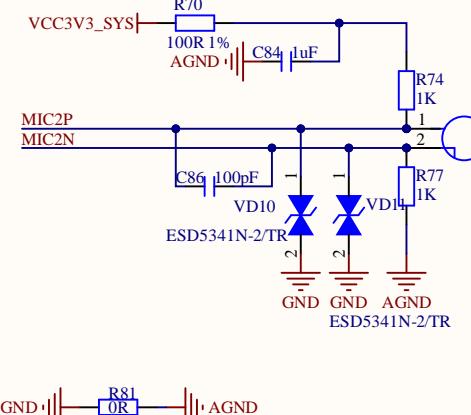
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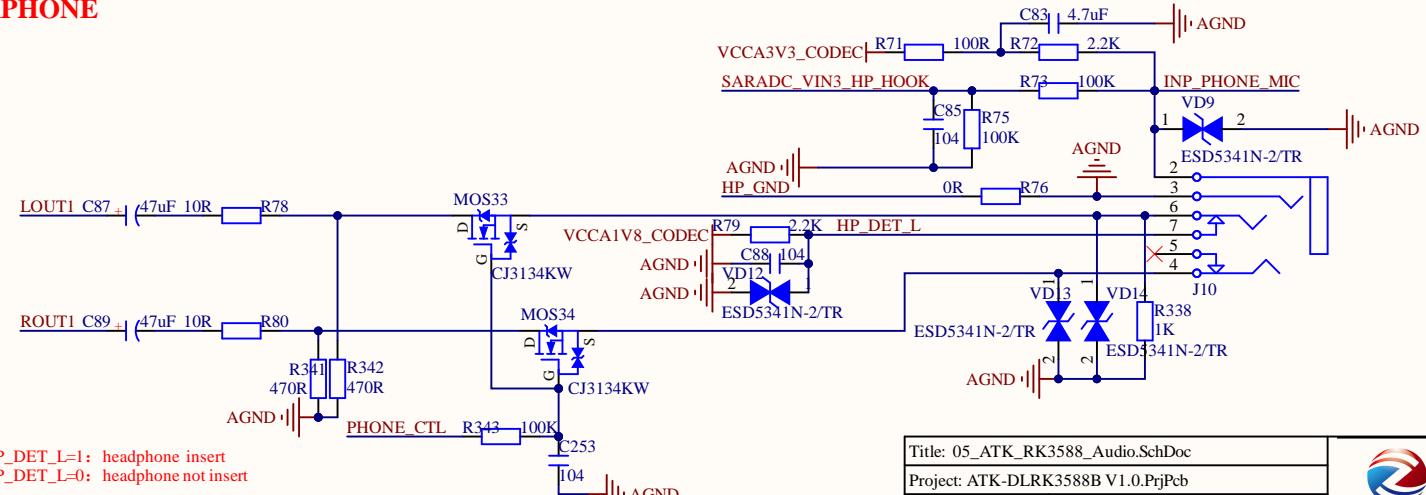
SPEAKER



MIC



EARPHONE



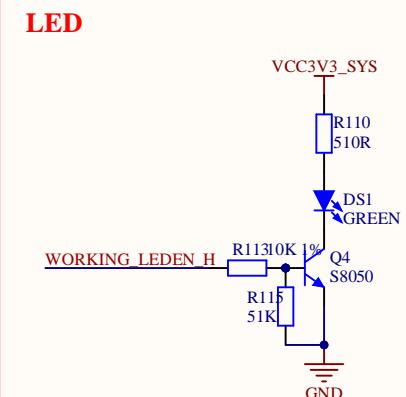
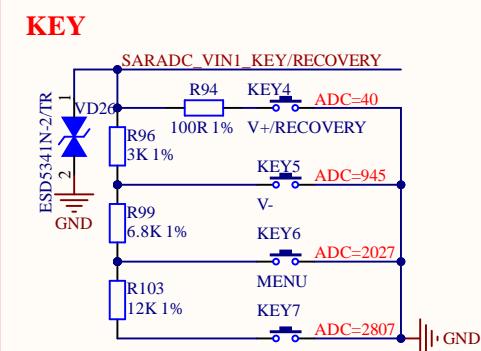
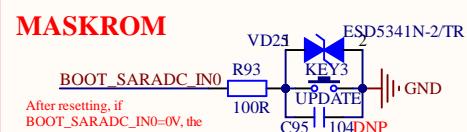
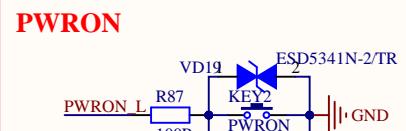
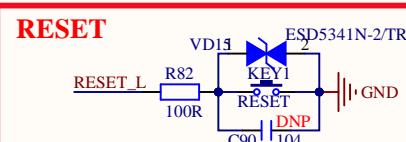
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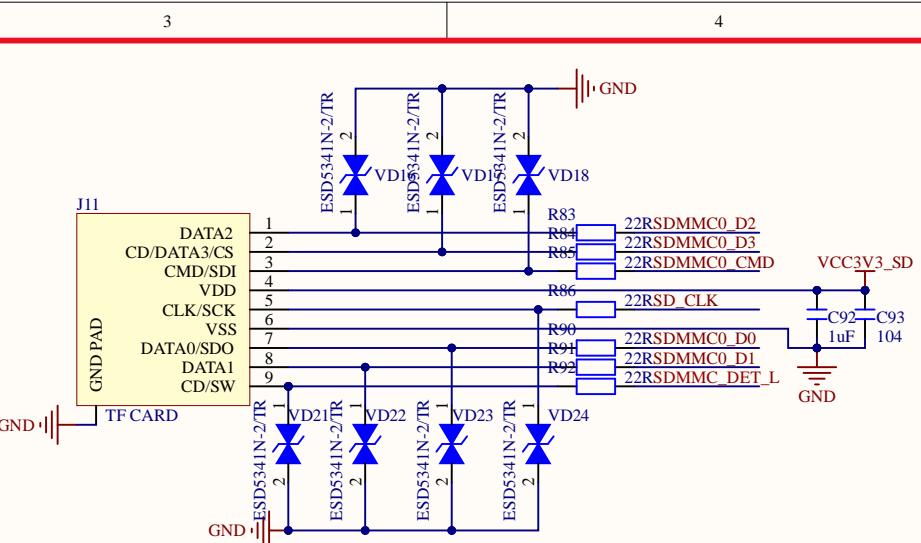
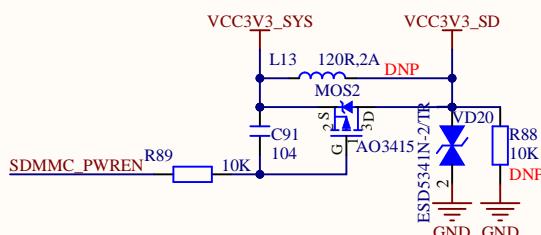
Size: A4 Author: ALIENTEK

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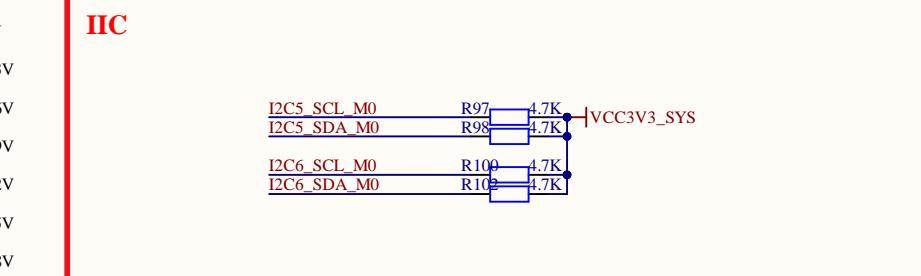
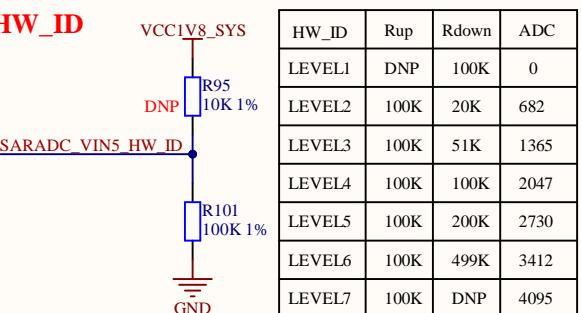




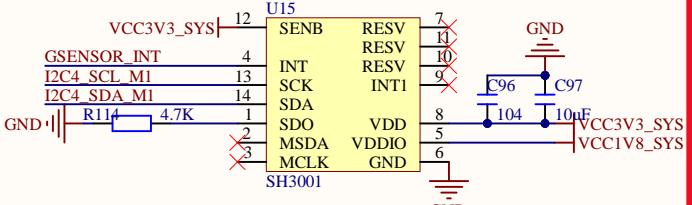
TF Card



HW_ID



6 AXIS SENSOR



SH3001 IIC Address:0X36

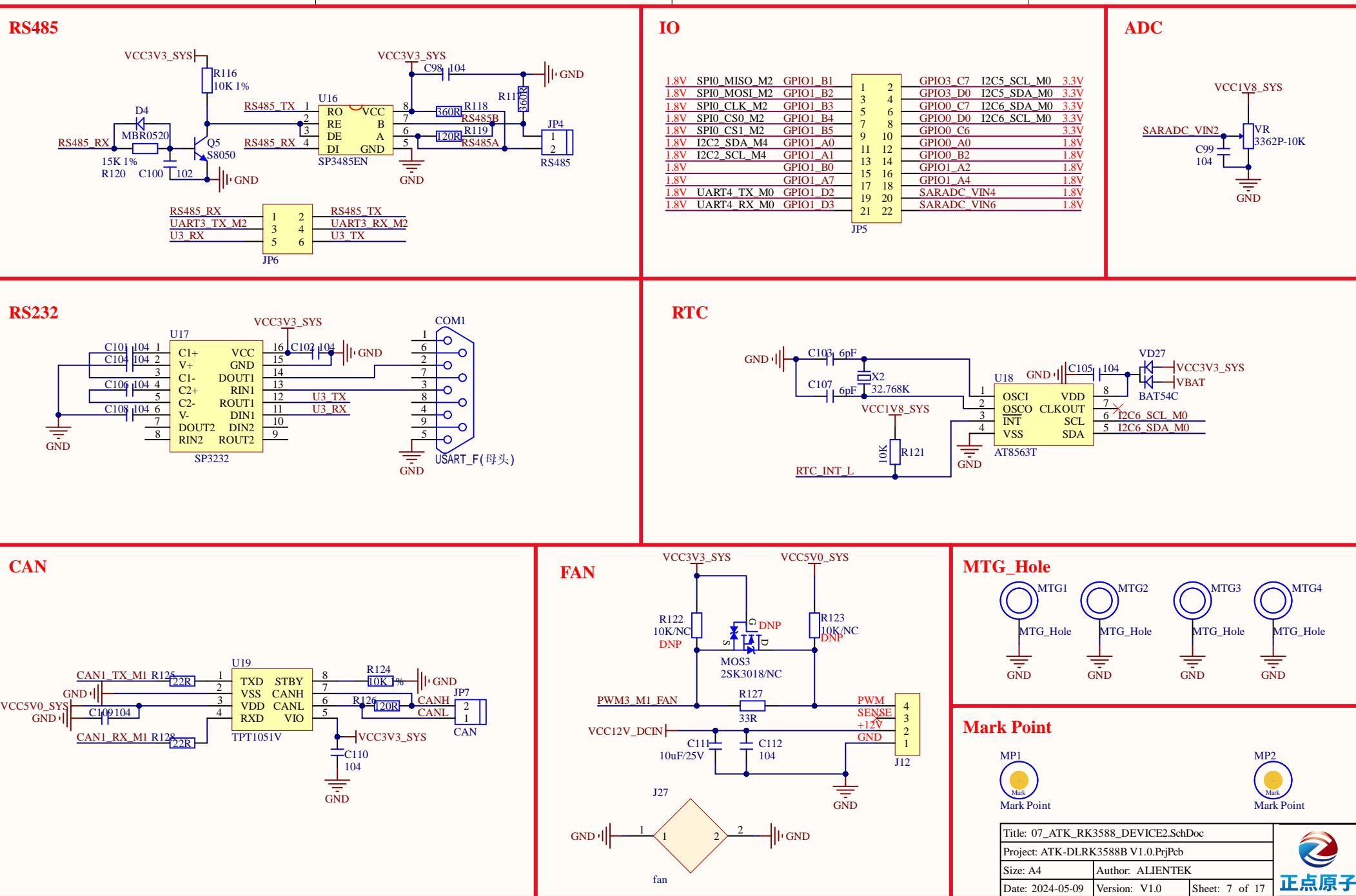
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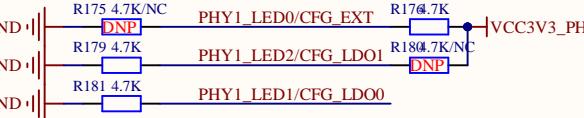
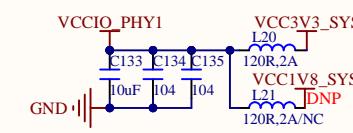
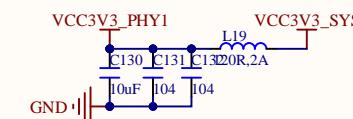
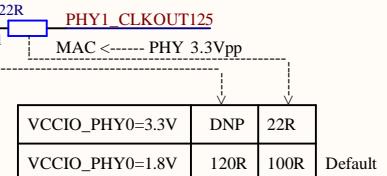
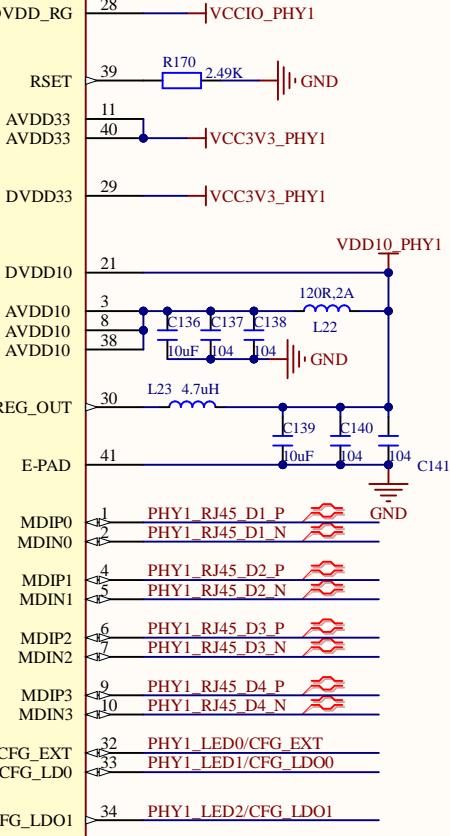
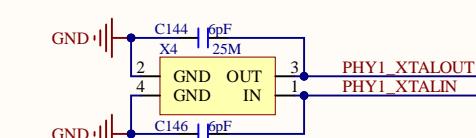
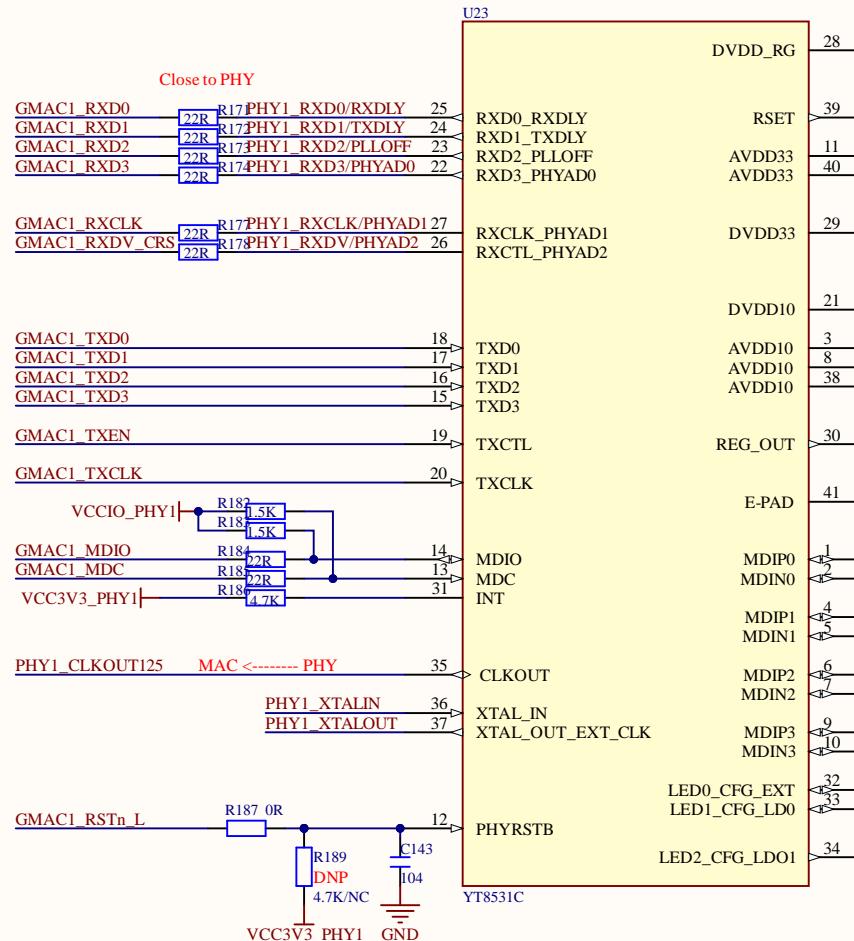
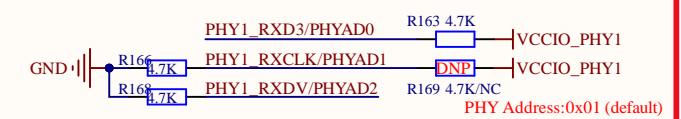
Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 6 of 17

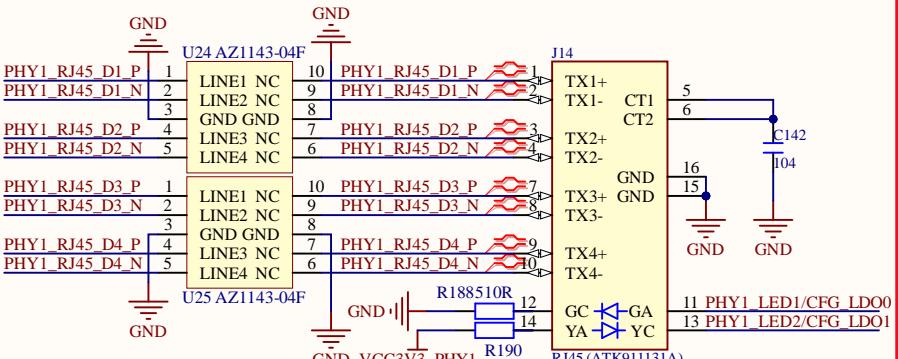




GMAC1 10/100/1000M 3.3V



RGMII Power Source	CFG_EXT	CFG_LDO[1:0]
External 3.3V (default)	1'b1	2'b00
External 1.8V	1'b1	2'b00
External 1.8V	1'b0	2'b10



Title: 00 ATK BK3588 NET1 SubD-1

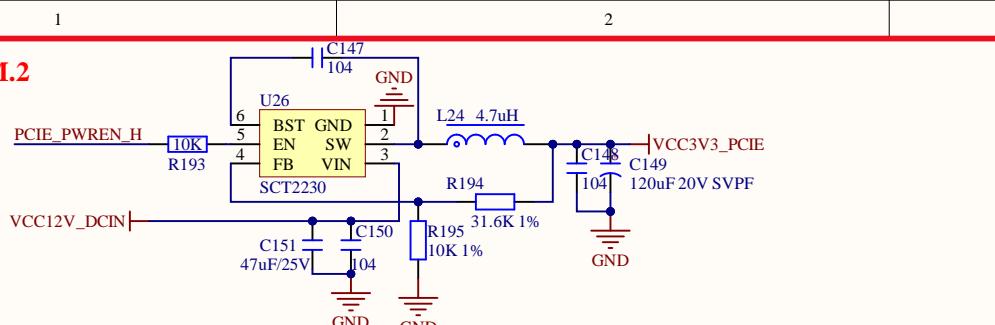
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Size: A4

Date: 2024-05-09 Version: V1.0 Sheet: 9 of 17



PCIE3.0X4 M.2



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D

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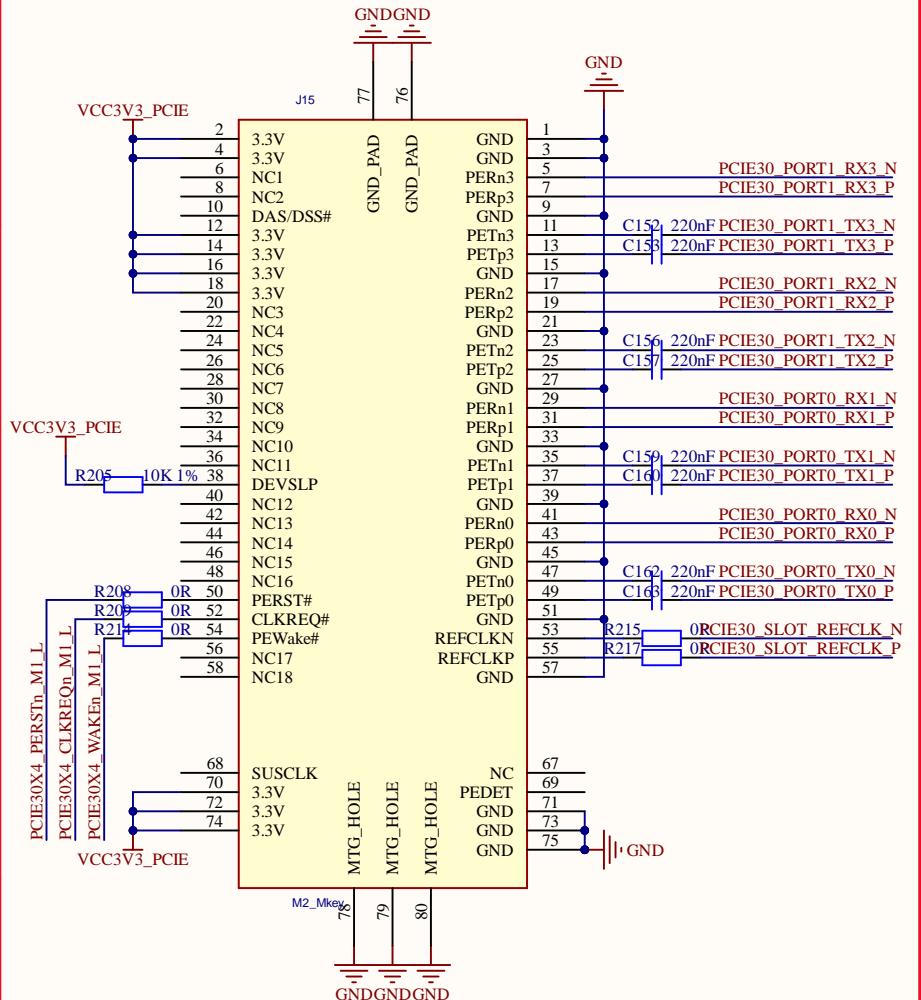
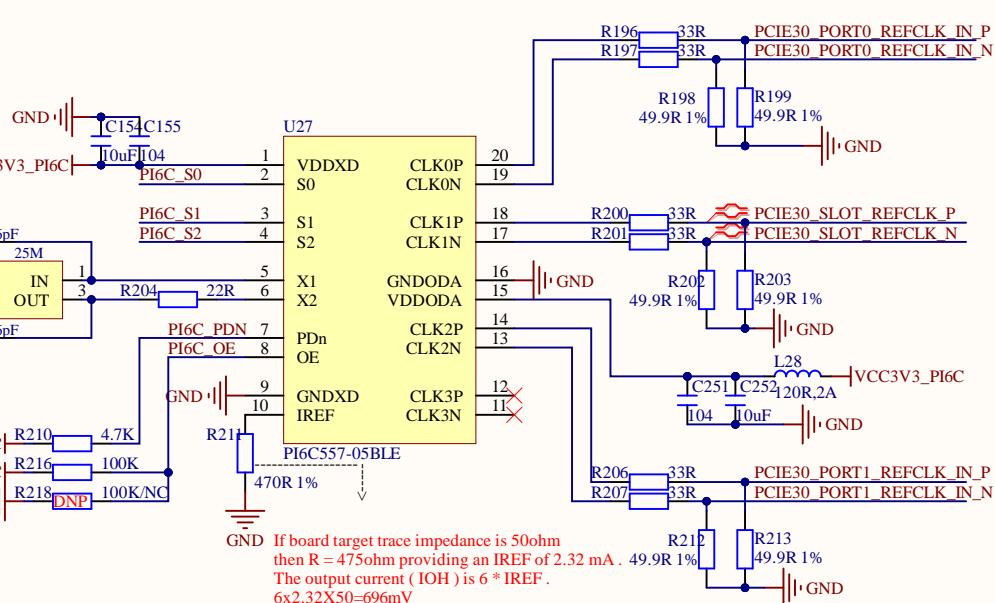
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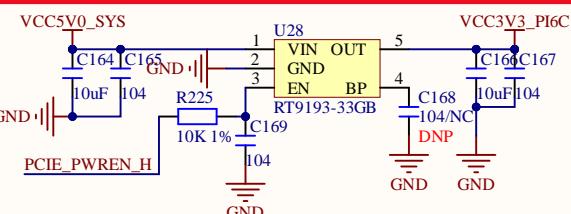
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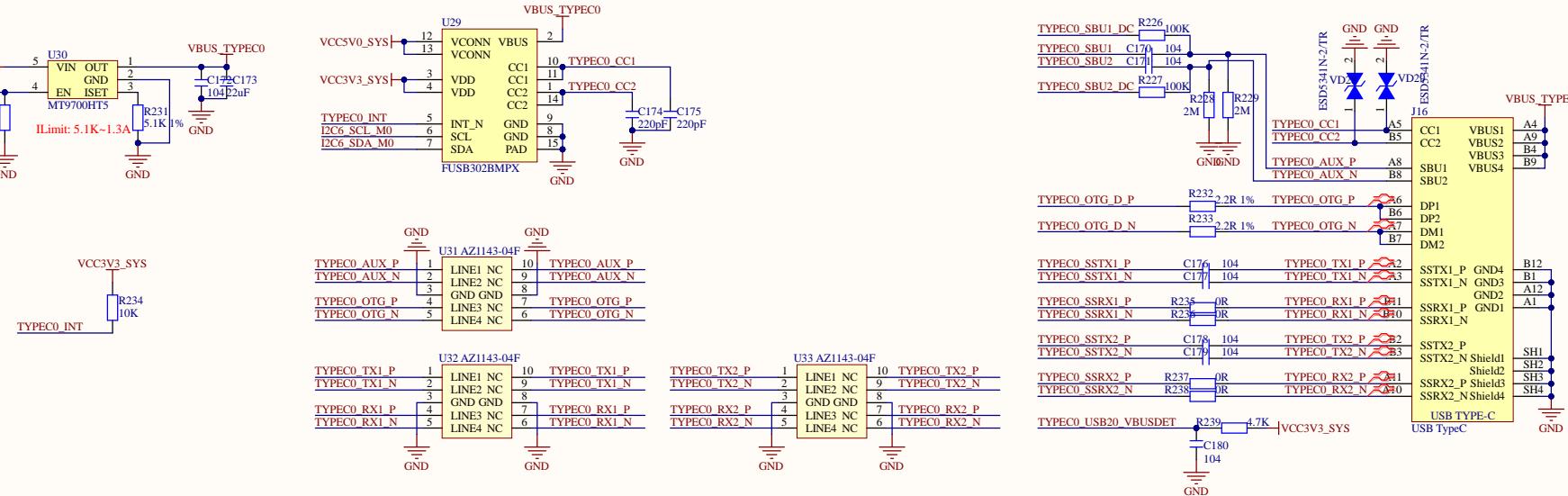
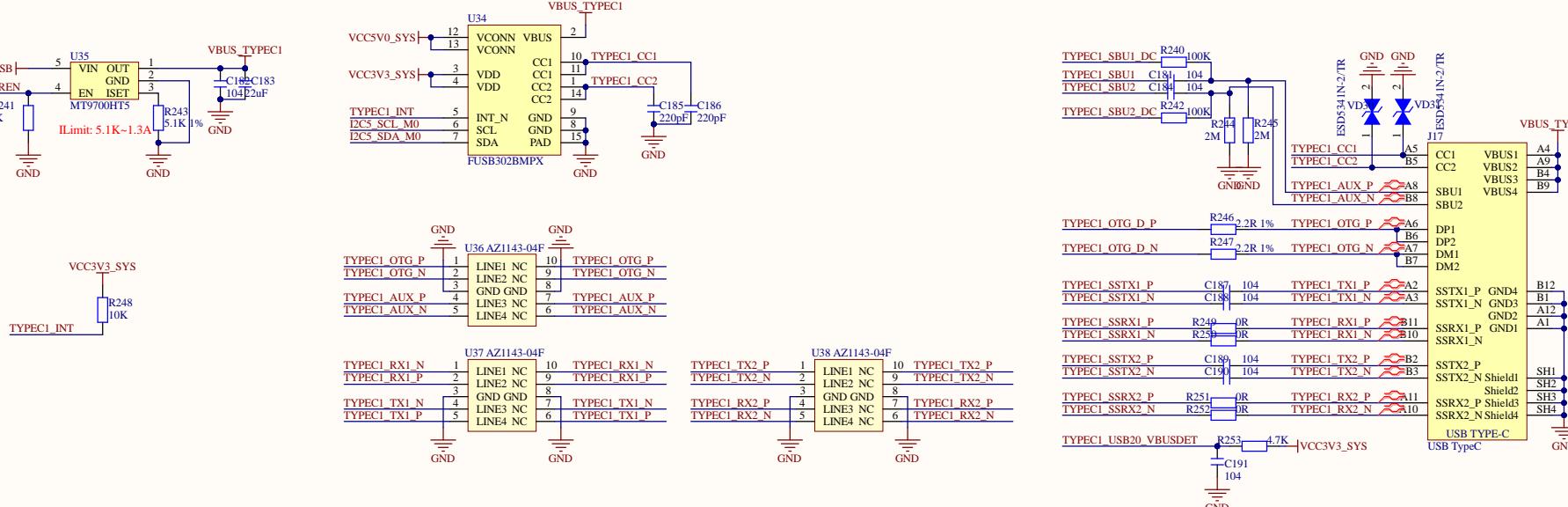


VCC3V3_PI6C	R210 100K	PI6C_S0	R220 10K/NC	PI6C_S2	Out Freq 100MHz
VCC3V3_PI6C	R221 100K	PI6C_S1	R222 10K/NC	PI6C_S0	Spread %
VCC3V3_PI6C	R223 10K/NC	PI6C_S2	R224 0R	PI6C_S1	0 0 -0.5



Title: 10_ATK_RK3588_PCIE3.0X4_M.2.SchDoc	Project: ATK-DLRK3588B V1.0.PrbPcb	Author: ALIENTEK
Size: A4	Date: 2024-05-09	Version: V1.0
		Sheet: 10 of 17



TYPEC PORT0**TYPEC PORT1**

1

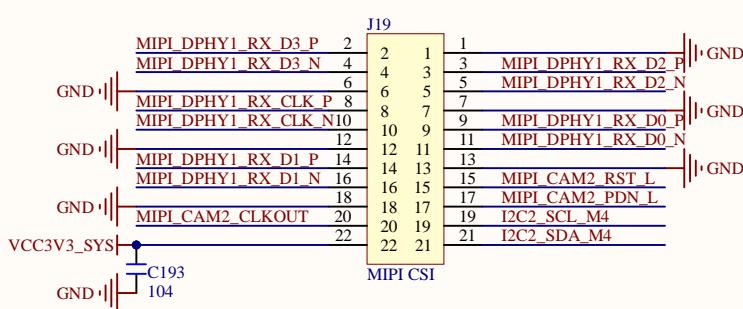
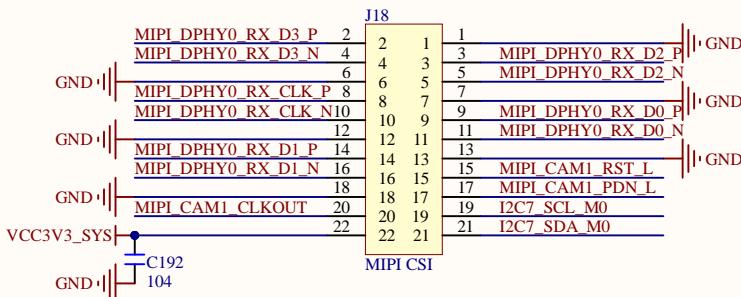
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MIPI CSI1**MIPI CSI2**

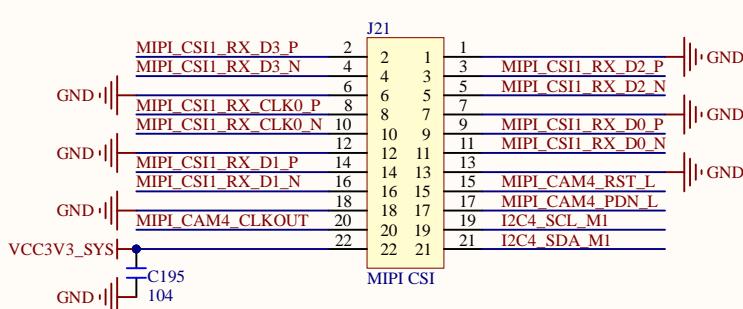
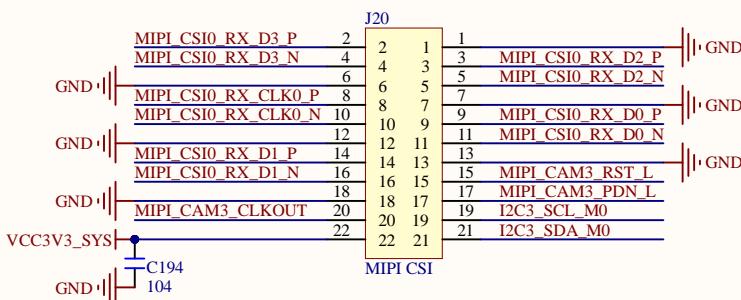
A



B

MIPI CSI3**MIPI CSI4**

C



D

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Project: ATK-DLRK3588B V1.0.PnjPcb

Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 12 of 17



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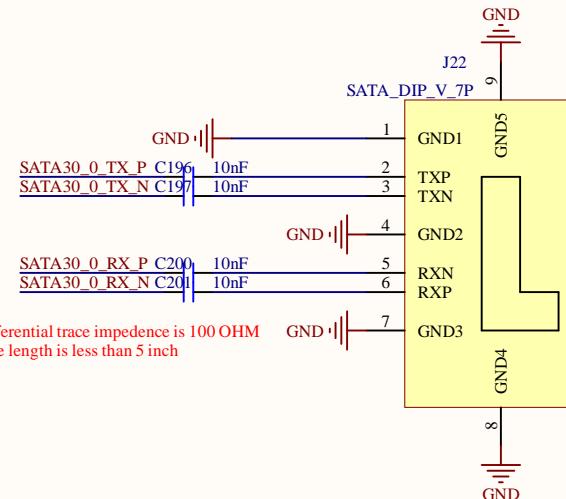
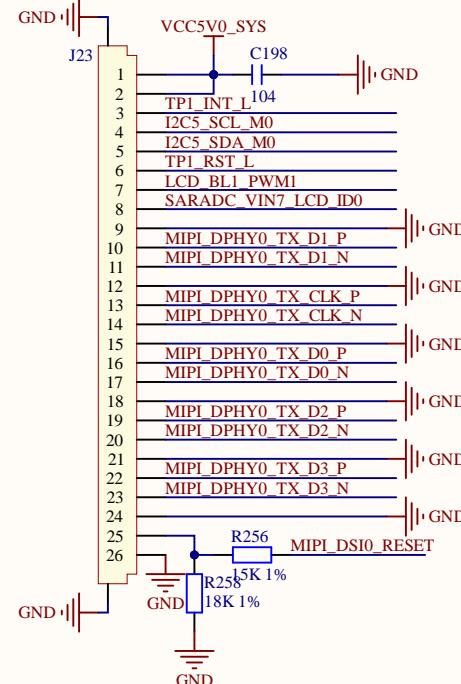
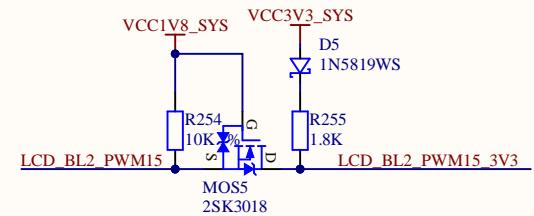
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4

SATA3.0**MIPI DSI1****MIPI DSI2**

A

A

B

B

C

C

D

D

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Project: ATK-DLRK3588B V1.0.PrbPcb

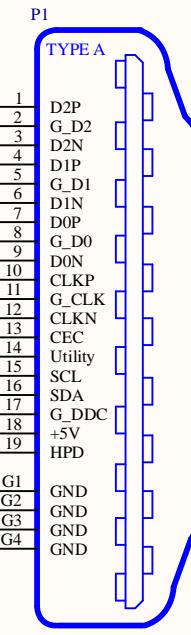
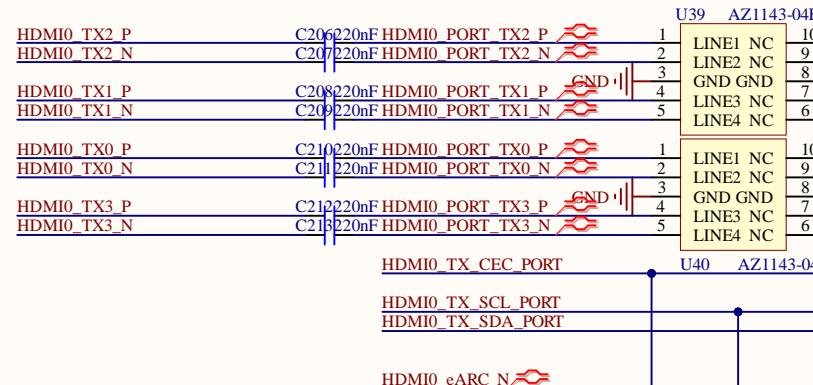
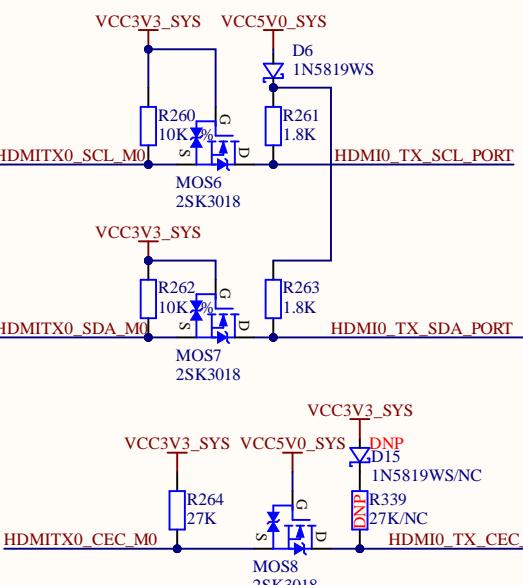
Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 13 of 17

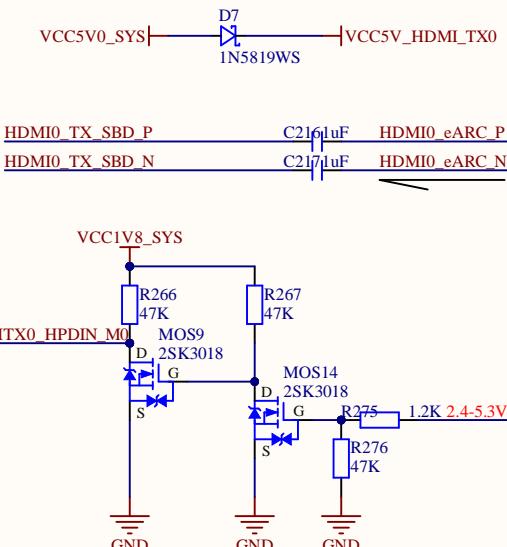


正点原子

HDMI TX0



HDMI A



Note:
The controller only support AC coupled link
In order to backward compatibility or to meet
HDMI2.0(1.4b) DC common mode spec and
Voff, need do R based level-shift

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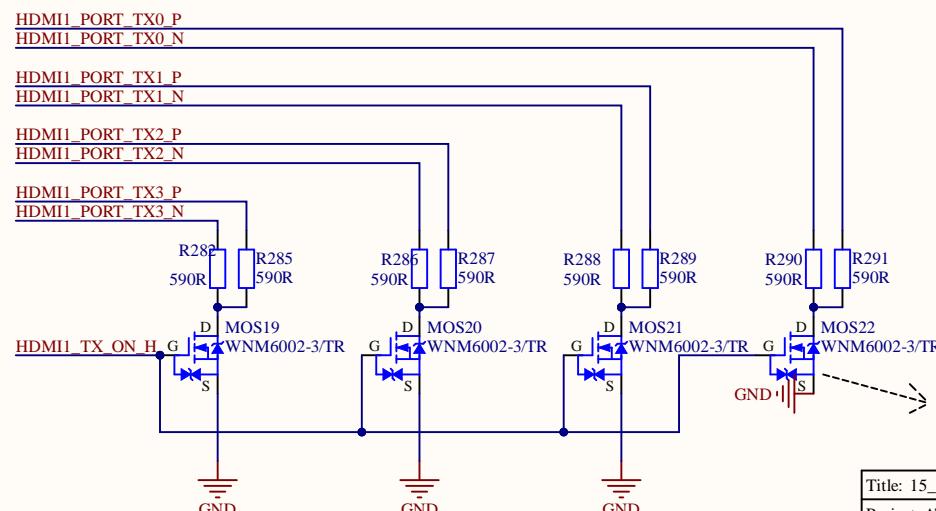
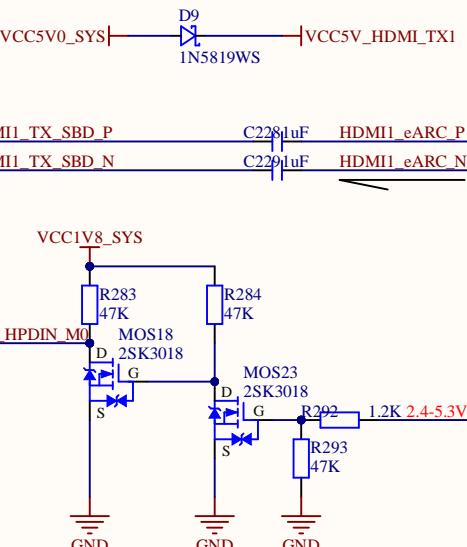
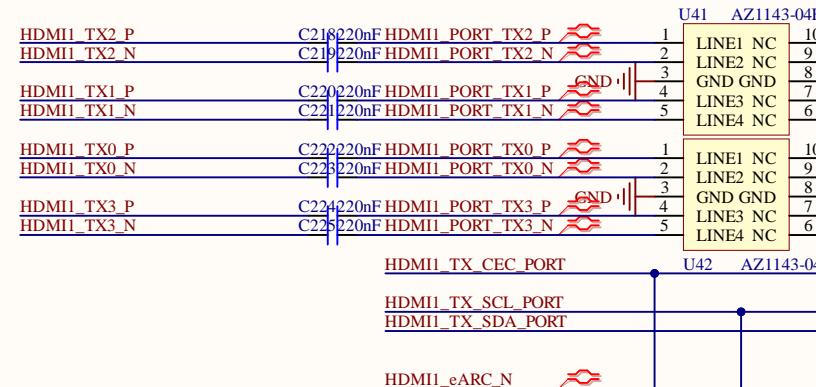
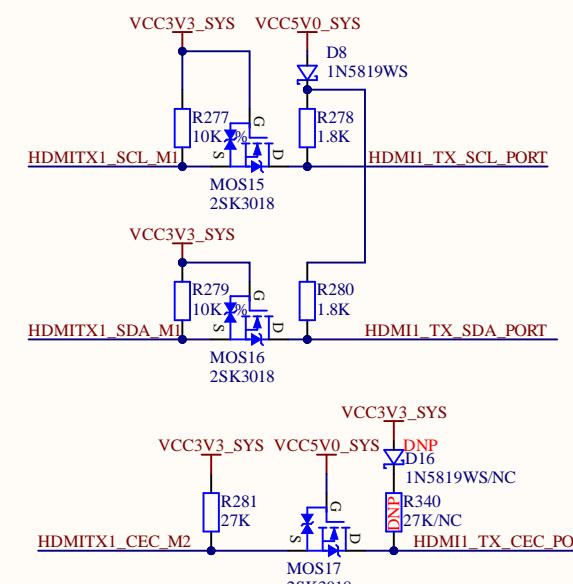
Project: ATK-DLRK3588B V1.0.PrbPcb

Size: A4 Author: ALIENTEK

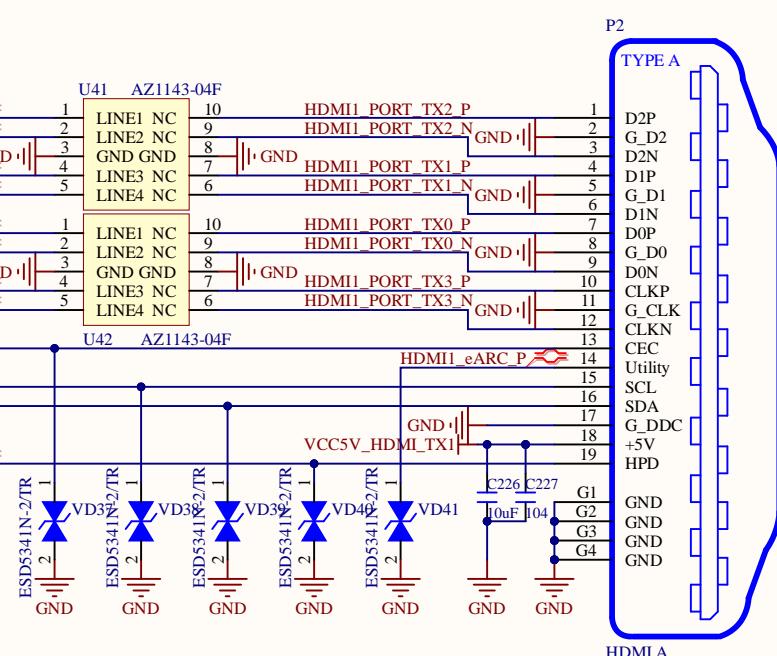
Date: 2024-05-09 Version: V1.0 Sheet: 14 of 17



HDMI TX1



Note:
The controller only support AC coupled link
In order to backward compatibility or to meet
HDMI2.0(1.4b) DC common mode spec and
Voff, need do R based level-shift



Title: 15_ATK_RK3588_HDMITX1.SchDoc

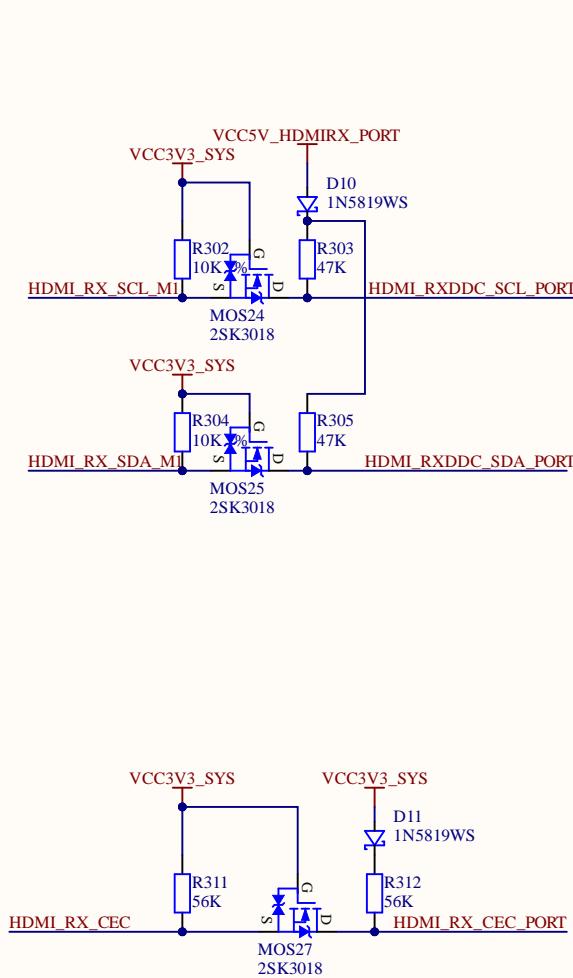
Project: ATK-DLRK3588B V1.0.PrbPcb

Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 15 of 17



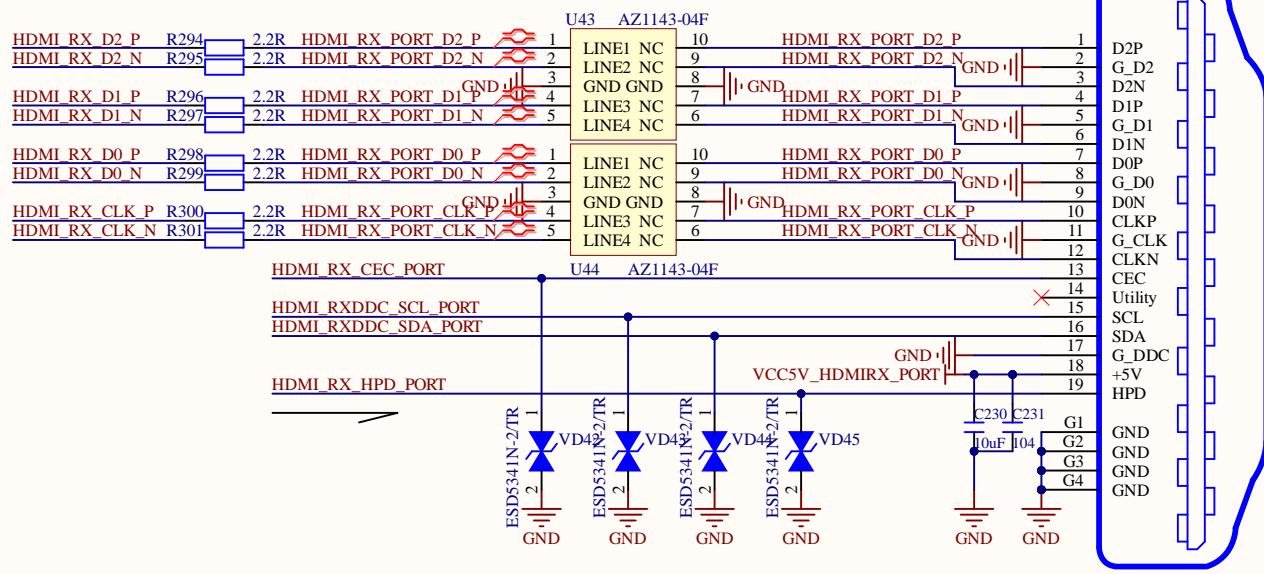
HDMI RX



Note:

HPD:

Sink Side: Require output, Min 2.4V; Max 5.3V
 Source Side: Require input and Detection.
 Min 2.0V, Max:5.3V



Title: 16_ATK_RK3588_HDMIRX.SchDoc

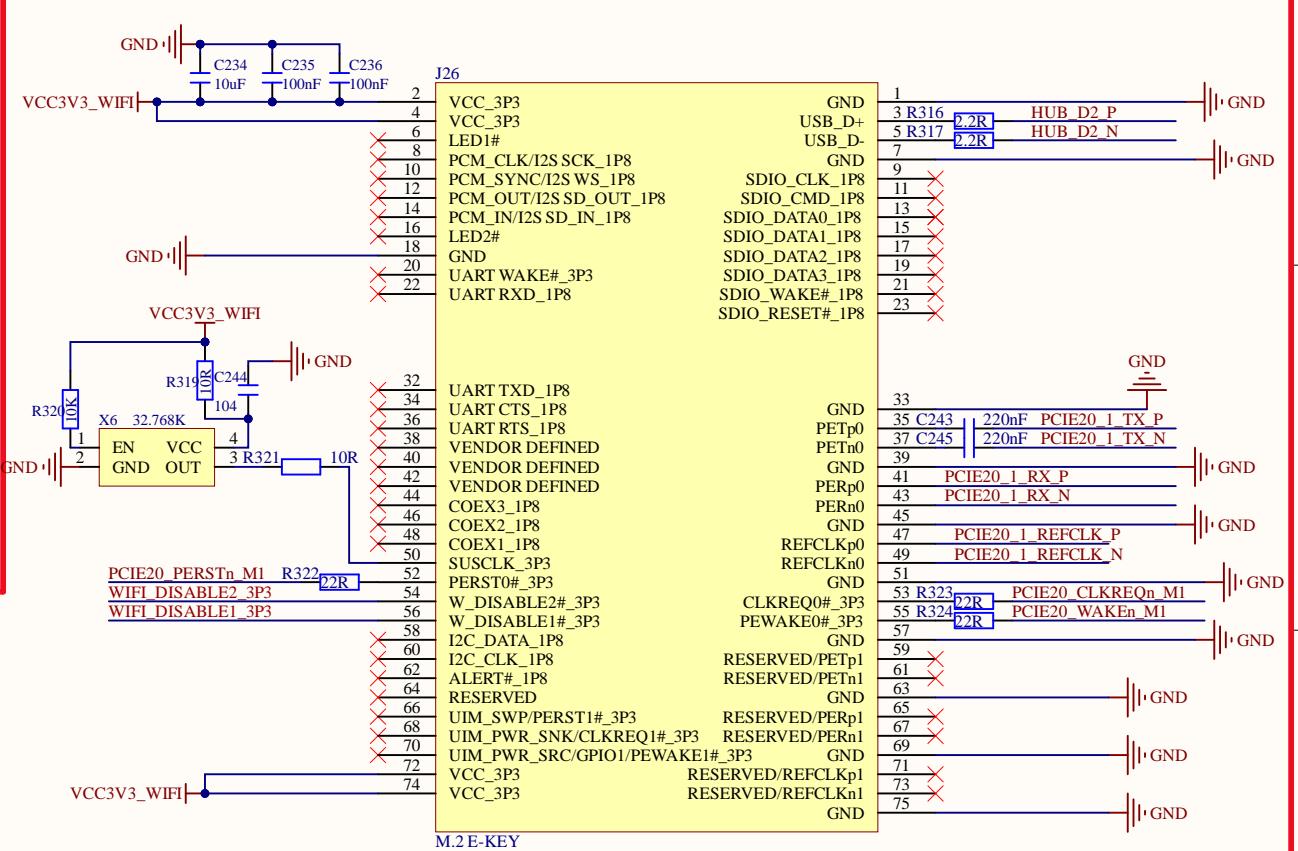
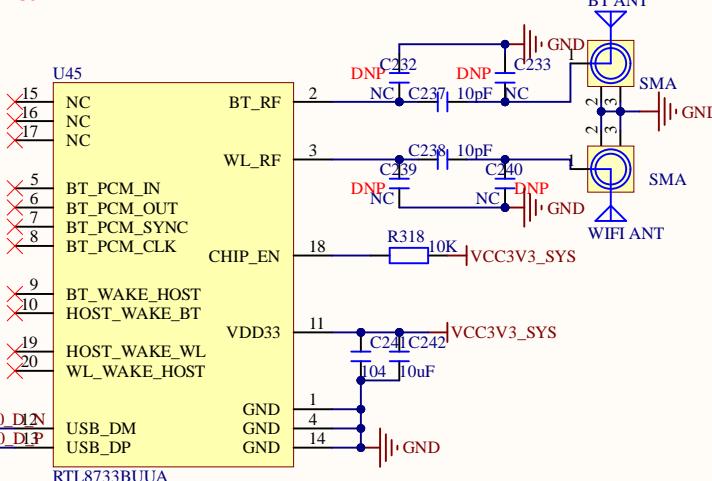
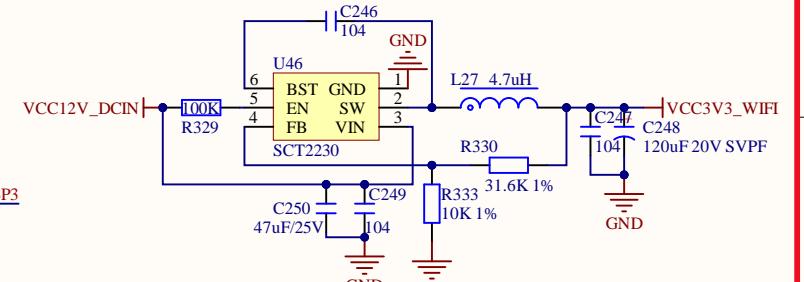
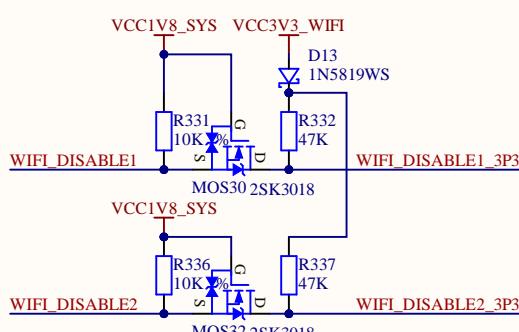
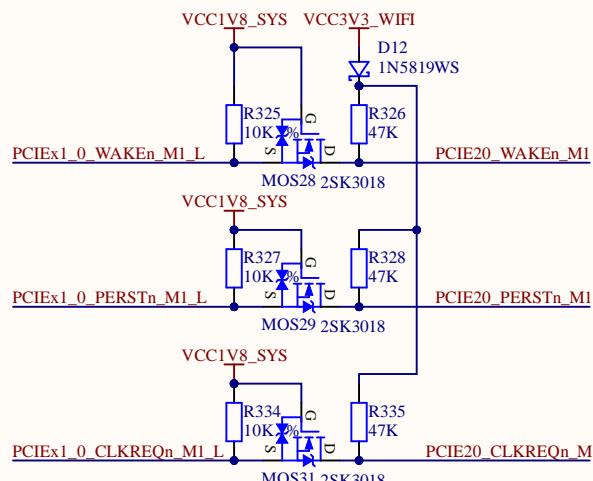
Project: ATK-DLRK3588B V1.0.PrbPcb

Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 16 of 17



1 2 3 4

USB WIFI&BT**PCIE WIFI&BT**

Title: 17_ATK_RK3588_WIFI.SchDoc

Project: ATK-DLRK3588B V1.0.PnjPcb

Size: A4 Author: ALIENTEK

Date: 2024-05-09 Version: V1.0 Sheet: 17 of 17

