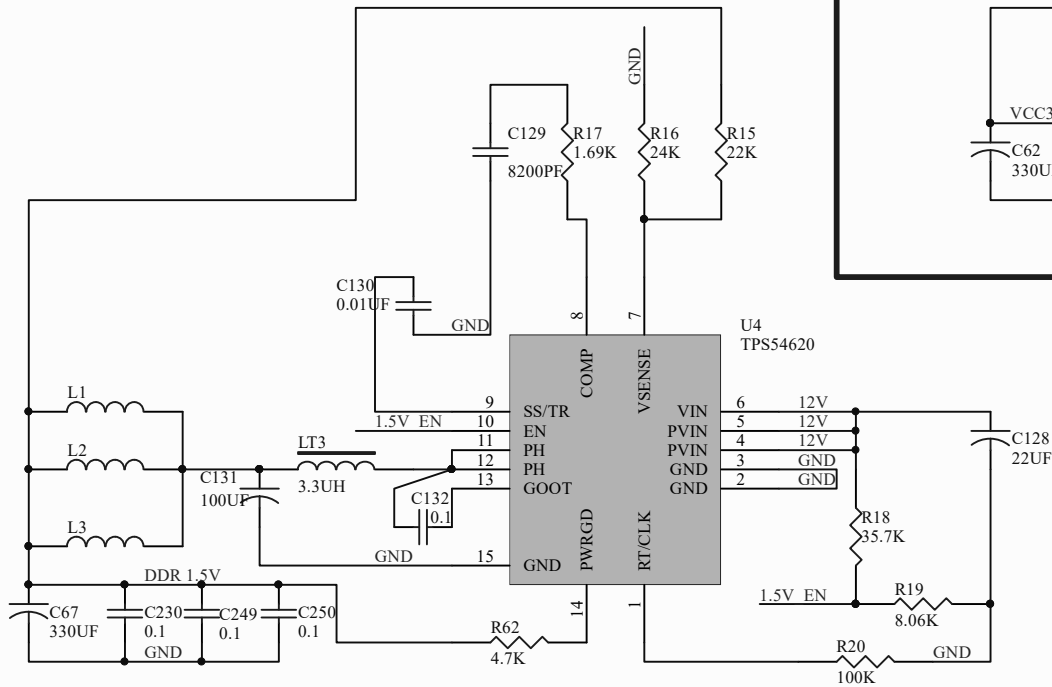
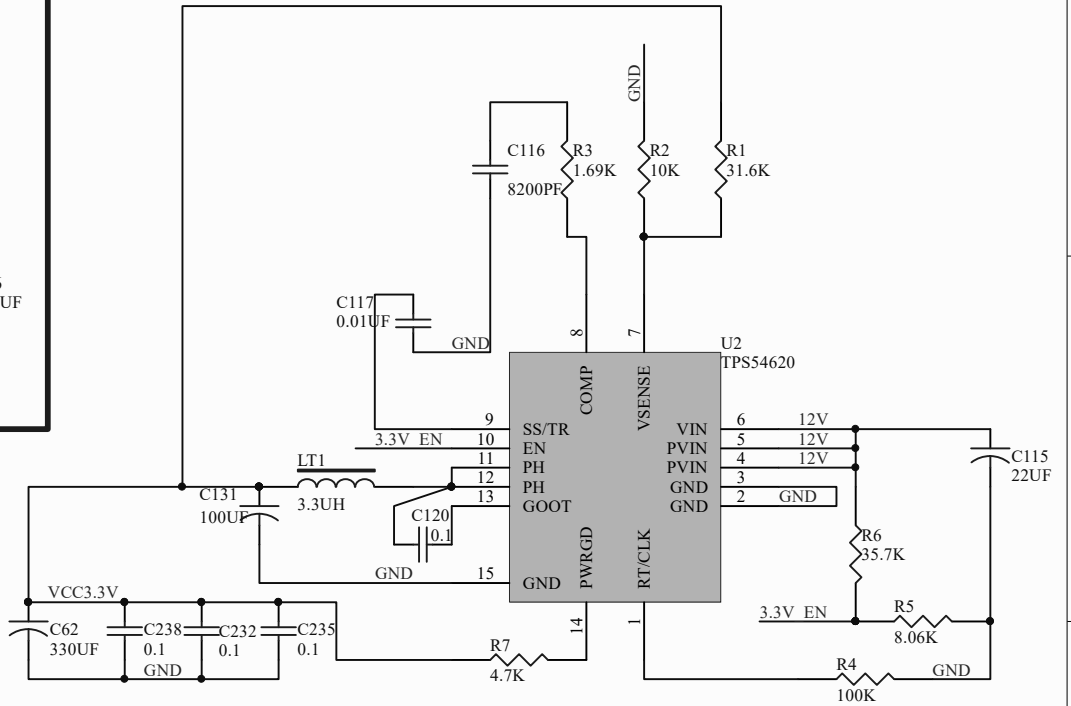
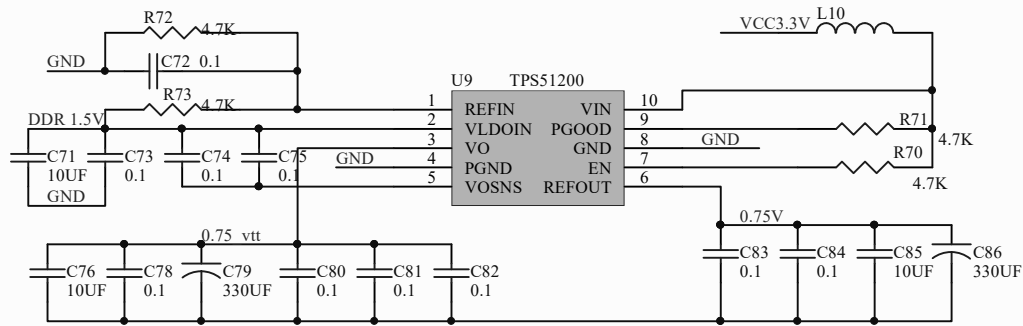
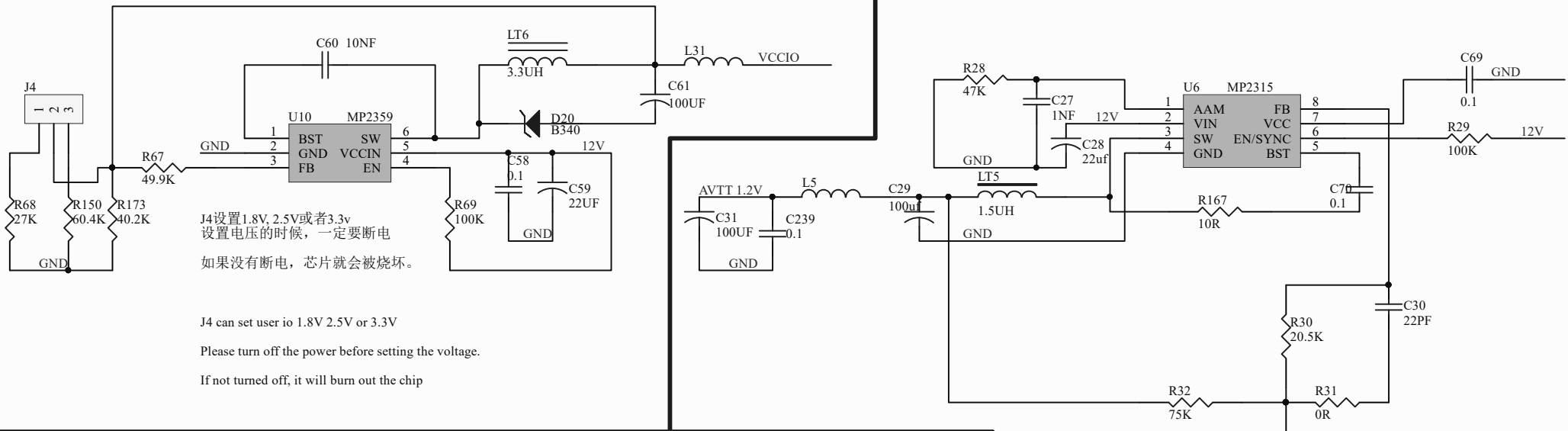


Title		
Size	Number	Revision
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Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\..1.0VOK.Sc	Drawn By:

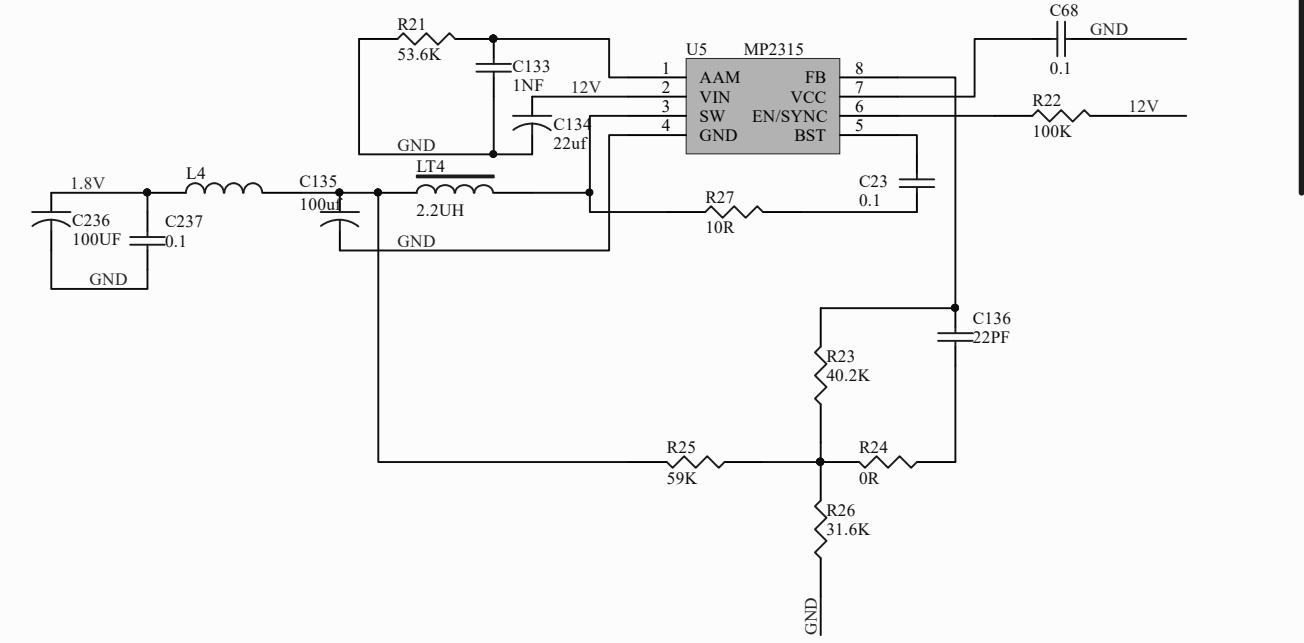


Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\1.5V 3.3V	By:



J4设置1.8V, 2.5V或者3.3v  
设置电压的时候, 一定要断电  
如果没有断电, 芯片就会被烧坏。

J4 can set user io 1.8V 2.5V or 3.3V  
Please turn off the power before setting the voltage.  
If not turned off, it will burn out the chip



Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\...\1.2V 1.8V	OKcach By:

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A

B

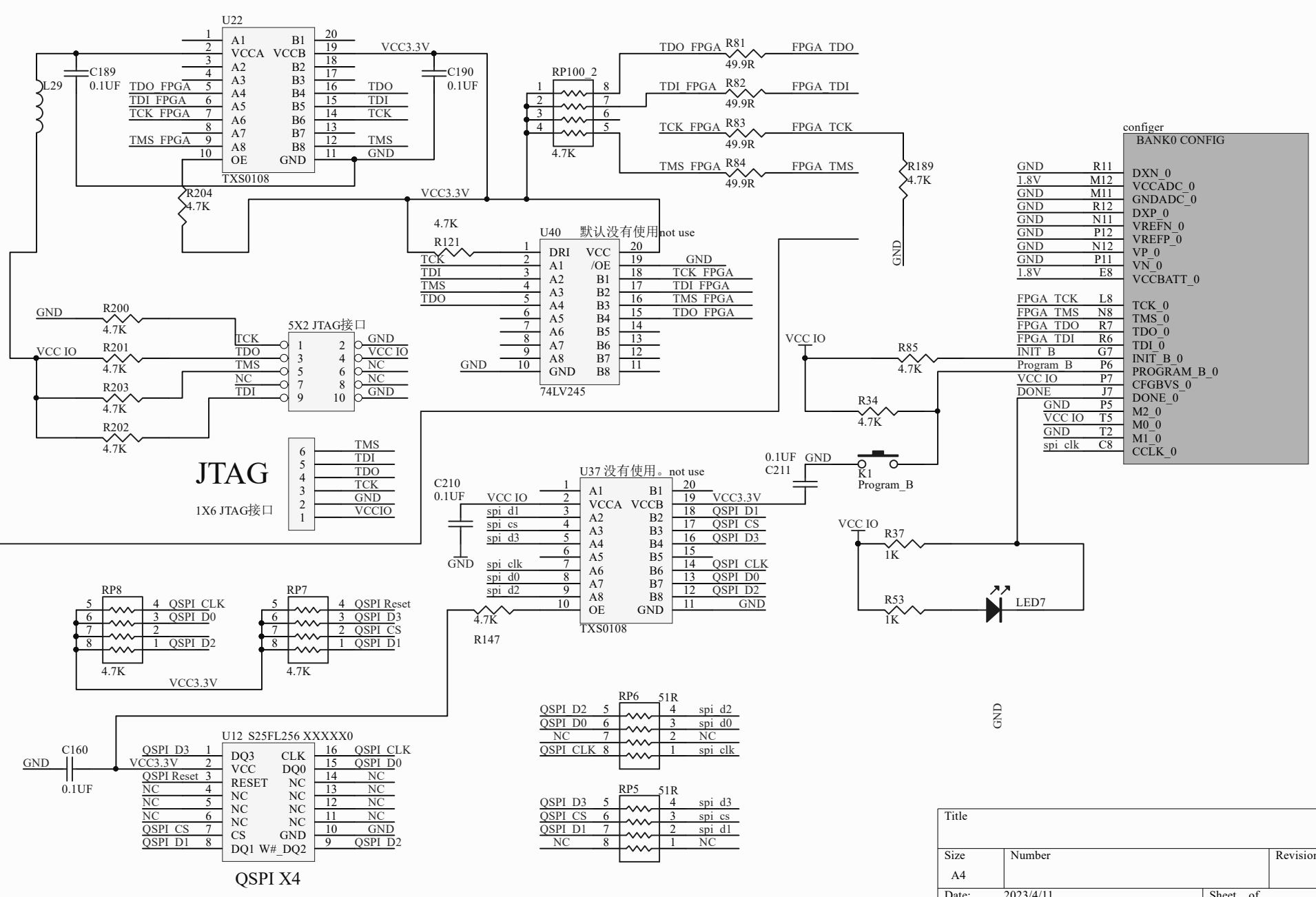
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C

C

D

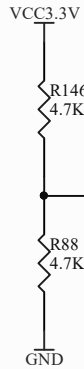
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Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\..\configerok	Drawn By:

U1  
XC7K325T676 BANK16

out HDMI D2P	H9	IO_L1P_T0	IO_L13P_T2_MRCC	C12	A-RX_CLK
out HDMI D2N	H8	IO_L1N_T0	IO_L13N_T2_MRCC	C11	B-TXD3
out HDMI D1P	G10	IO_L2P_T0	IO_L14P_T2_SRCC	E11	SPI_MISO
out HDMI D1N	G9	IO_L2N_T0	IO_L14N_T2_SRCC	D11	A-TX_CLK
in HDMI D0P	J13	IO_L3P_T0_DQS	IO_L15P_T2_DQS	F14	out HDMI_CLKP
in HDMI D0N	H13	IO_L3N_T0_DQS	IO_L15N_T2_DQ	F13	out HDMI_CLKP
in HDMI D1P	J11	IO_L4P_T0	IO_L16P_T2	G12	out HDMI_D0P
in HDMI D1N	J10	IO_L4N_T0	IO_L16N_T2	F12	out HDMI_D0N
in HDMI D2P	H14	IO_L5P_T0	IO_L17P_T2	D14	A-TXD3
in HDMI D2N	G14	IO_L5N_T0	IO_L17N_T2	D13	A-TXD1
SPI_CS	H12	IO_L6P_T0	IO_L18P_T2	E13	SPI_CLK
A-MDIO	H11	IO_L6N_T0_VREF	IO_L18N_T2	E12	A-TXD0
A-MDC	F9	IO_L7P_T1	IO_L19P_T3	C14	A-TX_CTL
A-RX_CTL	F8	IO_L7N_T1	IO_L19N_T3_VREF	C13	A-TXD2
A-RXD1	D9	IO_L8P_T	IO_L20P_T3	B11	B-TXD0
A-RXD0	D8	IO_L8N_T1	IO_L20N_T3	B11	B-TX_CLK
B-RXD1	A9	IO_L9P_T1_DQS	IO_L21P_T3_DQS	B14	B-RESET
B-RX_CTL	A8	IO_L9N_T1_DQS	IO_L21N_T3_DQS	A14	B-TX_CTL
A-RXD2	C9	IO_L10P_T1	IO_L22P_T3	B10	B-RXD2
B-RXD0	B9	IO_L10N_T1	IO_L22N_T3	A10	B-RXD3
in HDMI_CLKP	G11	IO_L11P_T1_SRCC	IO_L23P_T3	B15	B-MDIO
in HDMI_CLKN	F10	IO_L11N_T1_SRCC	IO_L23N_T3	A15	B-MDC
B-RX_CLK	E10	IO_L12P_T1_MRCC	IO_L24P_T3	A13	B-TXD2
A-RXD3	D10	IO_L12N_T1_MRCC	IO_L24N_T3	A12	B-TXD1
A-RESET	J8	IO_0_16	IO_25_16	J14	SPI_MOSI



U1  
XC7K325T676 BANK14

spi_d0	B24
spi_d1	A25
spi_d2	B22
spi_d3	A22
	B25
PIN B26	B26
PIN A23	A23
PIN A24	A24
PIN D26	D26
PIN C26	C26
spi_cs	C23
key3	C24
PIN D21	D21
PIN C22	C22
PIN B20	B20
PIN A20	A20
PIN E21	E21
PIN E22	E22
PIN C21	C21
PIN B21	B21
PIN D23	D23
PIN D24	D24
PIN F22	F22
PIN E23	E23
COM TTL TX	K21

IO_L1P_T0_D00_MOSI		IO_L13P_T2_MRCC	G22	PIN G22
IO_L1N_T0_D01_DIN		IO_L13N_T2_MRCC	F23	PIN F23
IO_L2P_T0_D02		IO_L14P_T2_SRCC	G24	PIN G24
IO_L2N_T0_D03		IO_L14N_T2_SRCC	F24	PIN F24
IO_L3P_T0_DQS_PUDC_B		IO_L15P_T2_DQS_RDWR_B	E25	PIN E25
IO_L4P_T0_D04		IO_L15N_T2_DQS_DOUT_CSO_B	D25	PIN D25
IO_L4N_T0_D05		IO_L16P_T2_CSI_B	G25	PIN G25
IO_L5P_T0_D06		IO_L16N_T2_A15_D31	G26	PIN G26
IO_L5N_T0_D07		IO_L17P_T2_A14_D30	F25	PIN F25
IO_L6P_T0_FCS_B		IO_L17N_T2_A13_D29	E26	PIN E26
IO_L6N_T0_D08_VREF		IO_L18P_T2_A12_D28	J26	PIN J26
IO_L7P_T1_D09		IO_L18N_T2_A11_D27	H26	PIN H26
IO_L7N_T1_D10		IO_L19P_T3_A10_D26	H21	PIN H21
IO_L8P_T1_D11		IO_L19N_T3_A09_D25_VREF	G21	PIN G21
IO_L8N_T1_D12		IO_L20P_T3_A08_D24	H23	PIN H23
IO_L9P_T1_DQS		IO_L20N_T3_A07_D23	H24	PIN H24
IO_L9N_T1_DQS_D13		IO_L21P_T3_DQS	J21	PIN J21
IO_L10P_T1_D14		IO_L21N_T3_DQS_A06_D22	H22	PIN H22
IO_L10N_T1_D15		IO_L22P_T3_A05_D21	J24	PIN J24
IO_L11P_T1_SRCC		IO_L22N_T3_A04_D20	J25	PIN J25
IO_L11N_T1_SRCC		IO_L23P_T3_A03_D19	L22	PIN L22
IO_L12P_T1_MRCC		IO_L23N_T3_A02_D18	K22	PIN K22
IO_L12N_T1_MRCC		IO_L24P_T3_A01_D17	K23	PIN K23
IO_0_14		IO_L24N_T3_A00_D16	J23	PIN J23
		IO_25_14	L23	COM TTL RX

U1  
XC7K325T676 BANK15

PIN C16	C16	IO_L1P_T0_AD0P	IO_L13P_T2_MRCC	E18	PIN E18
PIN B16	B16	IO_L1N_T0_AD0N	IO_L13N_T2_MRCC	D18	PIN D18
PIN A18	A18	IO_L2P_T0_AD8P	IO_L14P_T2_SRCC	H17	PIN H17
PIN A19	A19	IO_L2N_T0_AD8N	IO_L14N_T2_SRCC	H18	PIN H18
PIN B17	B17	IO_L3P_T0_DQS_AD1P	IO_L15P_T2_DQS	D19	PIN D19
PIN A17	A17	IO_L3N_T0_DQS_AD1N	IO_L15N_T2_DQS_ADV_B	D20	PIN D20
PIN C19	C19	IO_L4P_T0_AD9P	IO_L16P_T2_A28	G19	PIN G19
PIN B19	B19	IO_L4N_T0_AD9N	IO_L16N_T2_A27	F20	PIN F20
PIN C17	C17	IO_L5P_T0_AD2P	IO_L17P_T2_A26	F19	PIN F19
PIN C18	C18	IO_L5N_T0_AD2N	IO_L17N_T2_A25	E20	PIN E20
PIN D15	D15	IO_L6P_T0	IO_L18P_T2_A24	H19	PIN H19
PIN D16	D16	IO_L6N_T0_VREF	IO_L18N_T2_A23	G20	PIN G20
PIN H16	H16	IO_L7P_T1_AD10P	IO_L19P_T3	K20	PIN K20
PIN G16	G16	IO_L7N_T1_AD10N	IO_L19N_T3_A21_VREF	J20	PIN J20
PIN G15	G15	IO_L8P_T1_AD3P	IO_L20P_T3_A20	J18	PIN J18
PIN F15	F15	IO_L8N_T1_AD3N	IO_L20N_T3_A19	J19	PIN J19
PIN FJ15	J15	IO_L9P_T1_DQS_AD11P	IO_L21P_T3_DQS	L19	PIN L19
PIN FJ16	J16	IO_L9N_T1_DQS_AD11N	IO_L21N_T3_DQS_A18	L20	PIN L20
PIN E15	E15	IO_L10P_T1_AD4P	IO_L22P_T3_A17	K16	PIN K16
PIN E16	E16	IO_L10N_T1_AD4N	IO_L22N_T3_A16	K17	PIN K17
PIN G17	G17	IO_L11P_T1_SRCC_AD12P	IO_L23P_T3_FOE_B	M17	PIN M17
PIN F18	F18	IO_L11N_T1_SRCC_AD12N	IO_L23N_T3_FWE_B	L18	PIN L18
CLK50M	F17	IO_L12P_T1_MRCC_AD5P	IO_L24P_T3_RS1	L17	PIN L17
PIN E17	E17	IO_L12N_T1_MRCC_AD5N	IO_L24N_T3_RS0	K18	PIN K18
PIN K15	K15	IO_0_15	IO_25_15	M16	PIN M16

Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of 4
File:	D:\BaiduNetdiskDownload\...\FPGA_RJ45_HDMI_Sch	

U1  
XC7K325T676 BANK12

DATA0_SD	U22	IO_L1P_T0	IO_L13P_T2_MRCC	Y22	PIN Y22
CLK_SD	V22	IO_L1N_T0	IO_L13N_T2_MRCC	AA22	PIN AA22
PIN_U24	U24	IO_L2P_T0	IO_L14P_T2_SRCC	AC23	PIN AC23
PIN_U25	U25	IO_L2N_T0	IO_L14N_T2_SRCC	AC24	PIN AC24
PIN_V23	V23	IO_L3P_T0_DQS	IO_L15P_T2_DQS	W20	PIN W20
PIN_V24	V24	IO_L3N_T0_DQS	IO_L15N_T2_DQ	Y21	PIN Y21
fpga_scl	U26	IO_L4P_T0	IO_L16P_T2	AD23	PIN AD23
fpga_sda	V26	IO_L4N_T0	IO_L16N_T2	AD24	PIN AD24
PIN_W25	W25	IO_L5P_T0	IO_L17P_T2	AB22	PIN AB22
PIN_W26	W26	IO_L5N_T0	IO_L17N_T2	AC22	PIN AC22
DATA1_SD	V21	IO_L6P_T0	IO_L18P_T2	AB21	PIN AB21
DATA2_SD	W21	IO_L6N_T0_VREF	IO_L18N_T2	AC21	PIN AC21
PIN_AA25	AA25	IO_L7P_T1	IO_L19P_T3	AD21	PIN AD21
PIN_AB25	AB25	IO_L7N_T1	IO_L19N_T3_VREF	AE21	PIN AE21
DATA3_SD	W23	IO_L8P_T	IO_L20P_T3	AF24	PIN AF24
CMD_SD	W24	IO_L8N_T1	IO_L20N_T3	AF25	PIN AF25
PIN_AB26	AB26	IO_L9P_T1_DQS	IO_L21P_T3_DQS	AD26	PIN AD26
PIN_AC26	AC26	IO_L9N_T1_DQS	IO_L21N_T3_DQS	AE26	PIN AE26
PIN_Y25	Y25	IO_L10P_T1	IO_L22P_T3	AE23	PIN AE23
PIN_Y26	Y26	IO_L10N_T1	IO_L22N_T3	AF23	PIN AF23
PIN_AA23	AA23	IO_L11P_T1_SRCC	IO_L23P_T3	AD25	PIN AD25
PIN_AB24	AB24	IO_L11N_T1_SRCC	IO_L23N_T3	AE25	PIN AE25
PIN_Y23	Y23	IO_L12P_T1_MRCC	IO_L24P_T3	AE22	PIN AE22
PIN_AA24	AA24	IO_L12N_T1_MRCC	IO_L24N_T3	AF22	PIN AF22
HDMI_SCL_in	U21	IO_0_12	IO_25_12	Y20	HDMI_SDA_in

U1  
XC7K325T676 BANK13

PIN_K25	K25	IO_L1P_T0	IO_L13P_T2_MRCC	R21	RISCV_TCK
PIN_K26	K26	IO_L1N_T0	IO_L13N_T2_MRCC	P21	RISCV_TDI
PIN_R26	R26	IO_L2P_T0	IO_L14P_T2_SRCC	R22	PIN_R22
PIN_P26	P26	IO_L2N_T0	IO_L14N_T2_SRCC	R23	PIN_R23
PIN_M25	M25	IO_L3P_T0_DQS	IO_L15P_T2_DQS	T24	PIN_T24
PIN_L25	L25	IO_L3N_T0_DQS	IO_L15N_T2_DQ	T25	PIN_T25
PIN_P24	P24	IO_L4P_T0	IO_L16P_T2	T20	PIN_T20
PIN_N24	N24	IO_L4N_T0	IO_L16N_T2	R20	PIN_R20
PIN_N26	N26	IO_L5P_T0	IO_L17P_T2	T22	PIN_T22
PIN_M26	M26	IO_L5N_T0	IO_L17N_T2	T23	PIN_T23
PIN_R25	R25	IO_L6P_T0	IO_L18P_T2	U19	PIN_U19
PIN_P25	P25	IO_L6N_T0_VREF	IO_L18N_T2	U20	PIN_U20
PIN_N19	N19	IO_L7P_T1	IO_L19P_T3	T18	PIN_T18
PIN_M20	M20	IO_L7N_T1	IO_L19N_T3_VREF	T19	PIN_T19
PIN_M24	M24	IO_L8P_T	IO_L20P_T3	P16	PIN_P16
PIN_L24	L24	IO_L8N_T1	IO_L20N_T3	N17	PIN_N17
PIN_P19	P19	IO_L9P_T1_DQS	IO_L21P_T3_DQS	R16	PIN_R16
PIN_P20	P20	IO_L9N_T1_DQS	IO_L21N_T3_DQS	R17	PIN_R17
PIN_M21	M21	IO_L10P_T1	IO_L22P_T3	N18	PIN_N18
PIN_M22	M22	IO_L10N_T1	IO_L22N_T3	M19	PIN_M19
PIN_P23	P23	IO_L11P_T1_SRCC	IO_L23P_T3	U17	PIN_U17
PIN_N23	N23	IO_L11N_T1_SRCC	IO_L23N_T3	T17	PIN_T17
PIN_N21	N21	IO_L12P_T1_MRCC	IO_L24P_T3	R18	PIN_R18
PIN_N22	N22	IO_L12N_T1_MRCC	IO_L24N_T3	P18	PIN_P18
RISCV_TDO	N16	IO_0_13	IO_25_13	U16	RISCV_TMS

Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\...\FPGA FMCI	

A

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B

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C

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U1  
XC7K325T676 BANK32

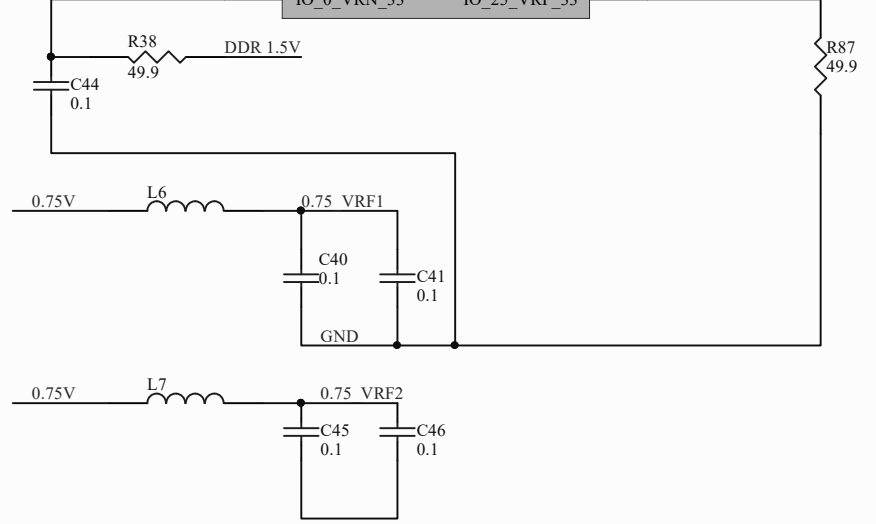
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ddr3-B dq0	AF17	IO_L1N_T0	IO_L13N_T2_MRCC	AD18	ddr3-B dq17
ddr3-B dq3	AF14	IO_L2P_T0	IO_L14P_T2_SRCC	AB17	ddr3-B dq18
ddr3-B dq2	AF15	IO_L2N_T0	IO_L14N_T2_SRCC	AC17	ddr3-B dq19
ddr3-B dqs0 p	AE18	IO_L3P_T0_DQS	IO_L15P_T2_DQS	AD20	ddr3-B dqs2 p
ddr3-B dqs0 n	AF18	IO_L3N_T0_DQS	IO_L15N_T2_DQ	AE20	ddr3-B dqs2 n
ddr3-B dq5	AD15	IO_L4P_T0	IO_L16P_T2	AA19	ddr3-B dq21
ddr3-B dq4	AE15	IO_L4N_T0	IO_L16N_T2	AA20	ddr3-B dq20
ddr3-B dq7	AF19	IO_L5P_T0	IO_L17P_T2	AC19	ddr3-B dq23
ddr3-B dq6	AF20	IO_L5N_T0	IO_L17N_T2	AD19	ddr3-B dq22
ddr3-B dm0	AD16	IO_L6P_T0	IO_L18P_T2	AB19	ddr3-B dm2
0.75 VRF2	AE16	IO_L6N_T0_VREF	IO_L18N_T2	AB20	ddr3-B reset
ddr3-B dq9	AA14	IO_L7P_T1	IO_L19P_T3	Y17	ddr3-B dq31
ddr3-B dq8	AA15	IO_L7N_T1	IO_L19N_T3_VREF	Y18	0.75 VRF2
ddr3-B dq10	AC14	IO_L8P_T	IO_L20P_T3	V16	ddr3-B dq28
ddr3-B dq11	AD14	IO_L8N_T1	IO_L20N_T3	V17	ddr3-B dm3
ddr3-B dqs1 p	Y15	IO_L9P_T1_DQS	IO_L21P_T3_DQS	W18	ddr3-B dqs3 p
ddr3-B dqs1 n	Y16	IO_L9N_T1_DQS	IO_L21N_T3_DQS	W19	ddr3-B dqs3 n
ddr3-B dq12	AB14	IO_L10P_T1	IO_L22P_T3	W15	ddr3-B dq29
ddr3-B dq13	AB15	IO_L10N_T1	IO_L22N_T3	W16	ddr3-B dq30
ddr3-B dq15	AA17	IO_L11P_T1_SRCC	IO_L23P_T3	V18	ddr3-B dq27
ddr3-B dq14	AA18	IO_L11N_T1_SRCC	IO_L23N_T3	V19	ddr3-B dq26
ddr3-B dml	AB16	IO_L12P_T1_MRCC	IO_L24P_T3	V14	ddr3-B dq25
key2	AC16	IO_L12N_T1_MRCC	IO_L24N_T3	W14	ddr3-B dq24
	V13	IO_0_VRN_32	IO_25_VRP_32	W13	

U1  
XC7K325T676 BANK34

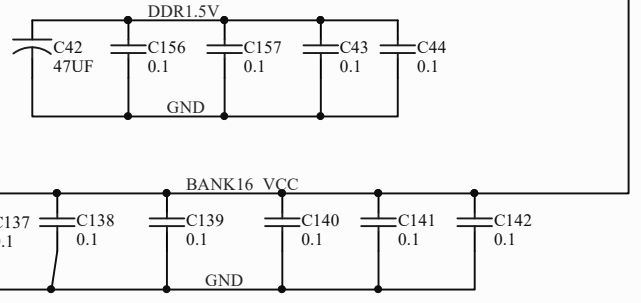
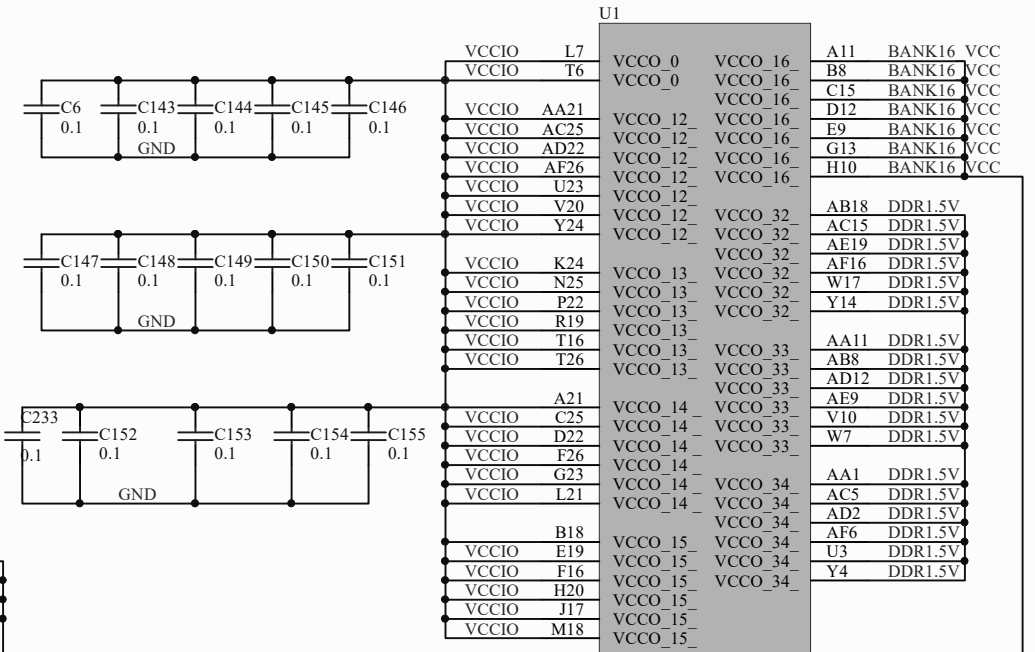
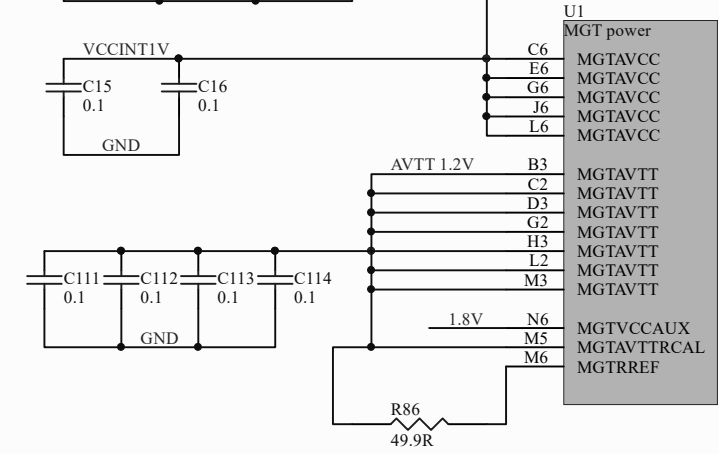
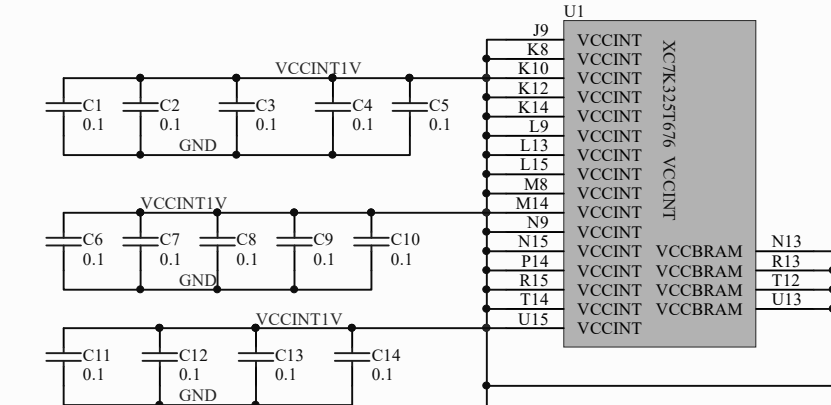
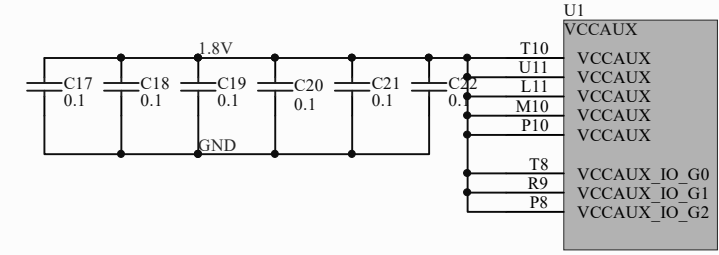
ddr3-B dq33	U6	IO_L1P_T0	IO_L13P_T2_MRCC	AA4	ddr3-B dq48
ddr3-B dq34	U5	IO_L1N_T0	IO_L13N_T2_MRCC	AB4	ddr3-B dq49
ddr3-B dq35	U2	IO_L2P_T0	IO_L14P_T2_SRCC	AC4	ddr3-B dq50
ddr3-B dm4	U1	IO_L2N_T0	IO_L14N_T2_SRCC	AC3	ddr3-B dq51
ddr3-B dqs4 p	W6	IO_L3P_T0_DQS	IO_L15P_T2_DQS	AA5	ddr3-B dqs6 p
ddr3-B dqs4 n	W5	IO_L3N_T0_DQS	IO_L15N_T2_DQ	AB5	ddr3-B dqs6 n
ddr3-B dq36	V3	IO_L4P_T0	IO_L16P_T2	AB6	ddr3-B dq53
ddr3-B dq37	W3	IO_L4N_T0	IO_L16N_T2	AC6	ddr3-B dq52
ddr3-B dq38	U7	IO_L5P_T0	IO_L17P_T2	Y6	ddr3-B dq54
ddr3-B dq39	V6	IO_L5N_T0	IO_L17N_T2	Y5	ddr3-B dq55
ddr3-B dq32	V4	IO_L6P_T0	IO_L18P_T2	AD6	ddr3-B dm6
0.75 VRF1	W4	IO_L6N_T0_VREF	IO_L18N_T2	AD5	led d1
ddr3-B dq40	Y3	IO_L7P_T1	IO_L19P_T3	AD4	ddr3-B dq56
ddr3-B dq41	Y2	IO_L7N_T1	IO_L19N_T3_VREF	AD3	0.75 VRF1
ddr3-B dq42	V2	IO_L8P_T	IO_L20P_T3	AD1	ddr3-B dq57
ddr3-B dq43	V1	IO_L8N_T1	IO_L20N_T3	AE1	ddr3-B dm7
ddr3-B dqs5 p	AB1	IO_L9P_T1_DQS	IO_L21P_T3_DQS	AF5	ddr3-B dqs7 p
ddr3-B dqs5 n	AC1	IO_L9N_T1_DQS	IO_L21N_T3_DQS	AF4	ddr3-B dqs7 n
ddr3-B dq44	W1	IO_L10P_T1	IO_L22P_T3	AE3	ddr3-B dq63
ddr3-B dq45	Y1	IO_L10N_T1	IO_L22N_T3	AE2	ddr3-B dq59
ddr3-B dq46	AB2	IO_L11P_T1_SRCC	IO_L23P_T3	AE6	ddr3-B dq60
ddr3-B dq47	AC2	IO_L11N_T1_SRCC	IO_L23N_T3	AE5	ddr3-B dq61
ddr3-B dm5	AA3	IO_L12P_T1_MRCC	IO_L24P_T3	AF3	ddr3-B dq62
led d0	AA2	IO_L12N_T1_MRCC	IO_L24N_T3	AF2	ddr3-B dq58
	U4	IO_0_VRN_34	IO_25_VRP_34	T7	

U1  
XC7K325T676 BANK33

led d6	V11	IO_L1P_T0	IO_L13P_T2_MRCC	AB11	CLK200 P
led d5	W11	IO_L1N_T0	IO_L13N_T2_MRCC	AC11	CLK200 N
ddr3-B sda	V8	IO_L2P_T0	IO_L14P_T2_SRCC	AA10	ddr3-B cke1
ddr3-B event	V7	IO_L2N_T0	IO_L14N_T2_SRCC	AB10	ddr3-B cke0
led d2	W10	IO_L3P_T0_DQS	IO_L15P_T2_DQS	AB12	ddr3-B A14
	W9	IO_L3N_T0_DQS	IO_L15N_T2_DQ	AC12	ddr3-B A15
	Y8	IO_L4P_T0	IO_L16P_T2	AA13	ddr3-B cs0
ddr3-B ras	Y7	IO_L4N_T0	IO_L16N_T2	AA12	ddr3-B odt0
	Y11	IO_L5P_T0	IO_L17P_T2	AC13	ddr3-B A8
led d3	Y10	IO_L5N_T0	IO_L17N_T2	AD13	ddr3-B cs1
	V9	IO_L6P_T0	IO_L18P_T2	Y13	ddr3-B odt1
ddr3-B scl	W8	IO_L6N_T0_VREF	IO_L18N_T2	Y12	led d7
ddr3-B cas	AE7	IO_L7P_T1	IO_L19P_T3	AD11	ddr3-B A1
ddr3-B A13	AF7	IO_L7N_T1	IO_L19N_T3_VREF	AE11	ddr3-B A5
ddr3-B A2	AA8	IO_L8P_T	IO_L20P_T3	AD10	ddr3-B A11
ddr3-B ba1	AA7	IO_L8N_T1	IO_L20N_T3	AE10	led d4
ddr3-B A6	AC8	IO_L9P_T1_DQS	IO_L21P_T3_DQS	AE12	
ddr3-B A7	AD8	IO_L9N_T1_DQS	IO_L21N_T3_DQS	AF12	ddr3-B A9
ddr3-B A0	AB7	IO_L10P_T1	IO_L22P_T3	AE8	ddr3-B ba0
ddr3-B A4	AC7	IO_L10N_T1	IO_L22N_T3	AF8	ddr3-B we
ddr3-B clk1 p	AA9	IO_L11P_T1_SRCC	IO_L23P_T3	AE13	ddr3-B A12
ddr3-B clk1 n	AB9	IO_L11N_T1_SRCC	IO_L23N_T3	AF13	ddr3-B ba2
ddr3-B clk0 p	AC9	IO_L12P_T1_MRCC	IO_L24P_T3	AF10	ddr3-B A3
ddr3-B clk0 n	AD9	IO_L12N_T1_MRCC	IO_L24N_T3	AF9	ddr3-B A10
	U9	IO_0_VRN_33	IO_25_VRP_33	V12	

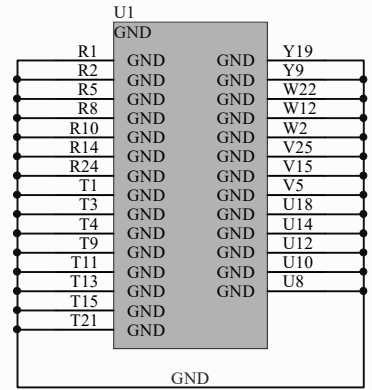
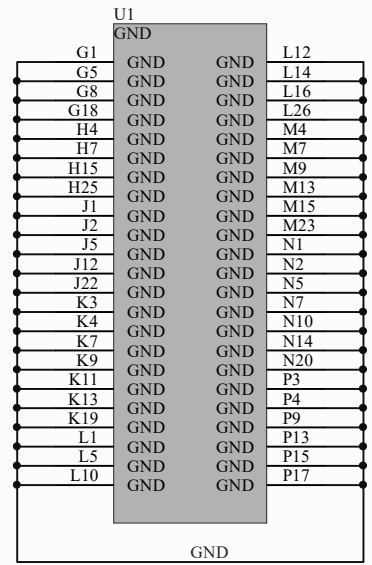
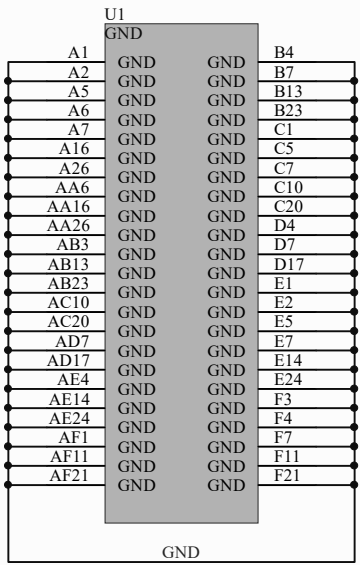


Title		
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A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\...FPGA DDR3... By:	



Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\..FPGA power	Drawn By:





Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\...\FPGA_GND_Pin By:	

U1  
XC7K325T676 MGT BANK115

sfp A tx P	H2	MGTTXTP3_115
sfp A tx n	H1	MGTXTXN3_115
sfp A rx p	J4	MGTXRX3_115
sfp A rx n	J3	MGTXRXN3_115
sfp B tx p	K2	MGTTXTP2_115
sfp B tx n	K1	MGTXTXN2_115
sfp B rx p	L4	MGTXRX2_115
sfp B rx n	L3	MGTXRXN2_115
B-SATA TX P	M2	MGTTXTP1_115
B-SATA TX N	M1	MGTXTXN1_115
B-SATA RX P	N4	MGTXRX1_115
B-SATA RX N	N3	MGTXRXN1_115
A-SATA TX P	P2	MGTTXTP0_115
A-SATA TX N	P1	MGTXTXN0_115
A-SATA RX P	R4	MGTXRX0_115
A-SATA RX N	R3	MGTXRXN0_115
CLK N	K6	MGTREFCLK1P_115
CLK P	K5	MGTREFCLK1N_115
pcie ck+	H6	MGTREFCLK0P_115
pcie ck-	H5	MGTREFCLK0N_115

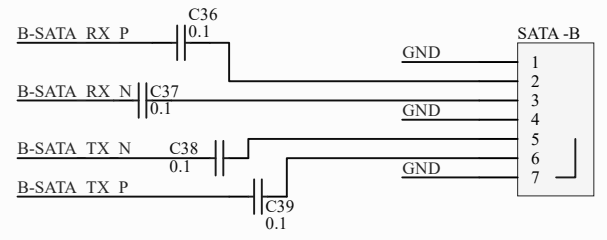
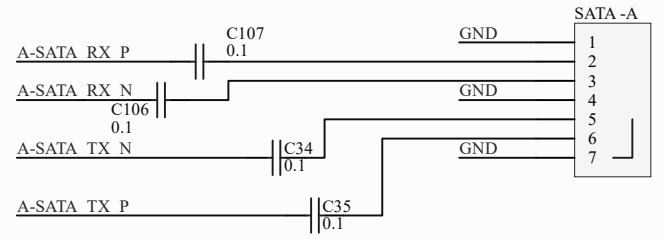
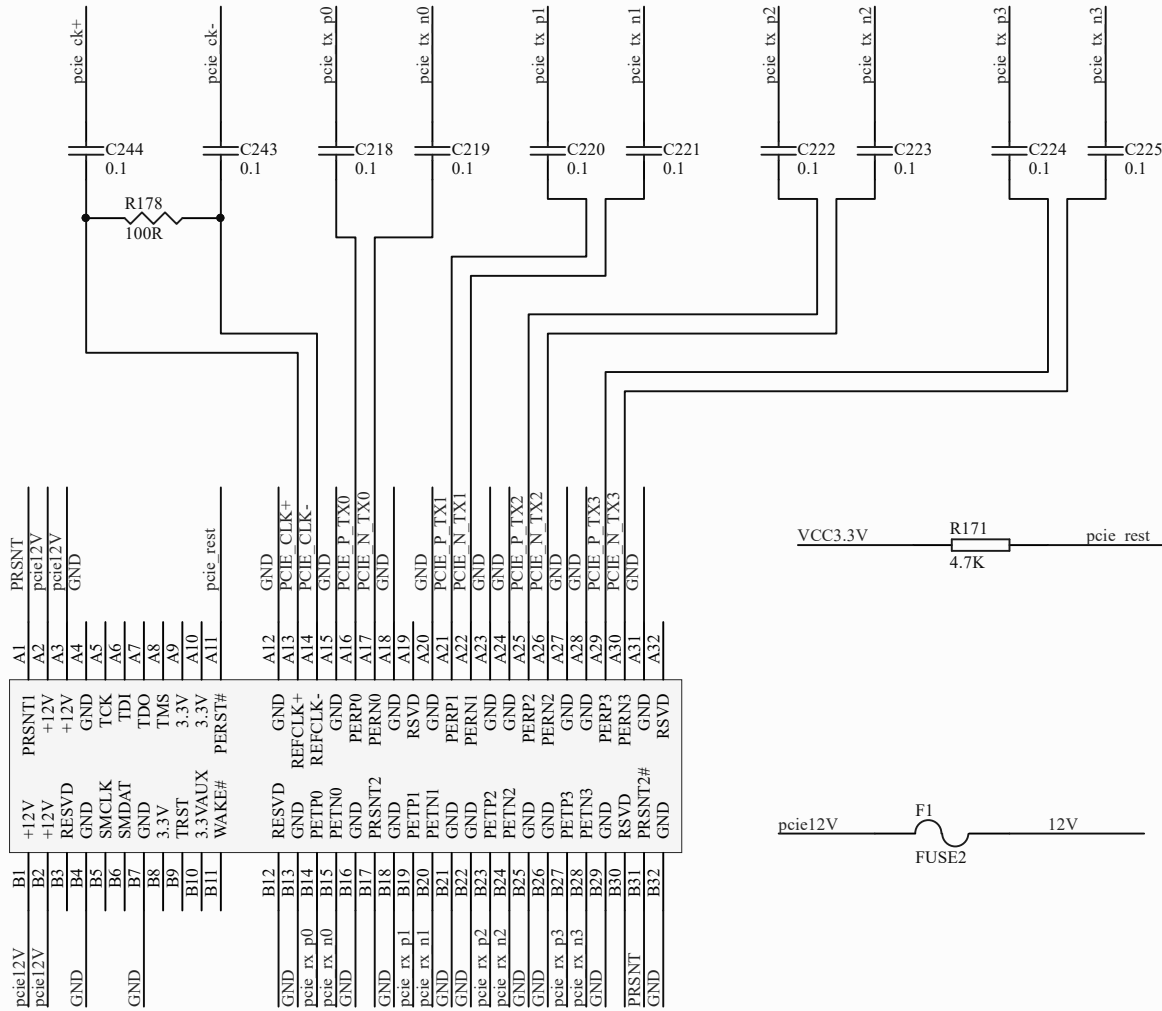
U1  
XC7K325T676 MGT BANK116

pcie tx p0	A4	MGTTXTP3_116
pcie tx n0	A3	MGTXTXN3_116
pcie rx p0	B6	MGTXRX3_116
pcie rx n0	B5	MGTXRXN3_116
pcie tx p1	B2	MGTTXTP2_116
pcie tx n1	B1	MGTXTXN2_116
pcie rx p1	C4	MGTXRX2_116
pcie rx n1	C3	MGTXRXN2_116
pcie tx p2	D2	MGTTXTP1_116
pcie tx n2	D1	MGTXTXN1_116
pcie rx p2	E4	MGTXRX1_116
pcie rx n2	E3	MGTXRXN1_116
pcie tx p3	F2	MGTTXTP0_116
pcie tx n3	F1	MGTXTXN0_116
pcie rx p3	G4	MGTXRX0_116
pcie rx n3	G3	MGTXRXN0_116
CLK150 P	F6	MGTREFCLK1P_116
CLK150 N	F5	MGTREFCLK1N_116
CLK156.25 P	D6	MGTREFCLK0P_116
CLK156.25 N	D5	MGTREFCLK0N_116

You can use Y3 input clock  
 这一路时钟默认是没有输入的。  
 可以使用Y3输入时钟

Title		
Size	Number	Revision
A4		
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File:	D:\BaiduNetdiskDownload\...\MGT.Sch	Drawn By:

PCI\_E\_X4



Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\...\PCIE SATA	Drawn By:

1

2

3

4

1

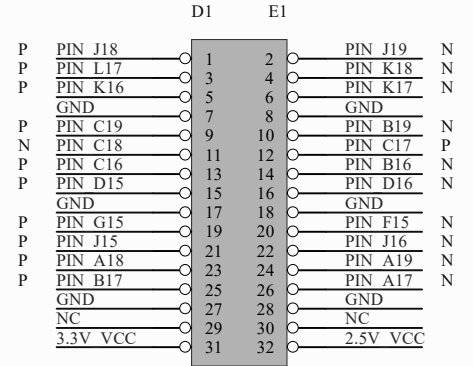
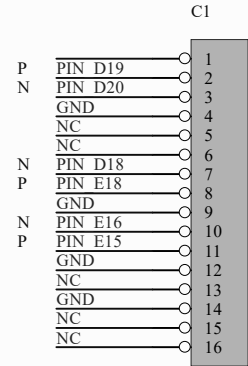
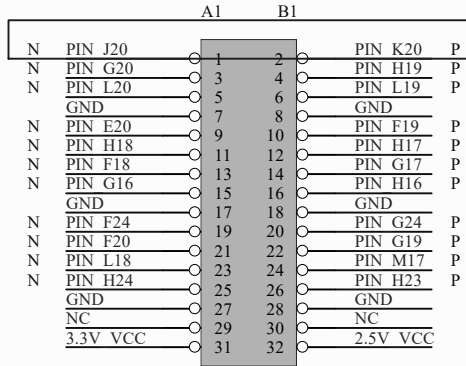
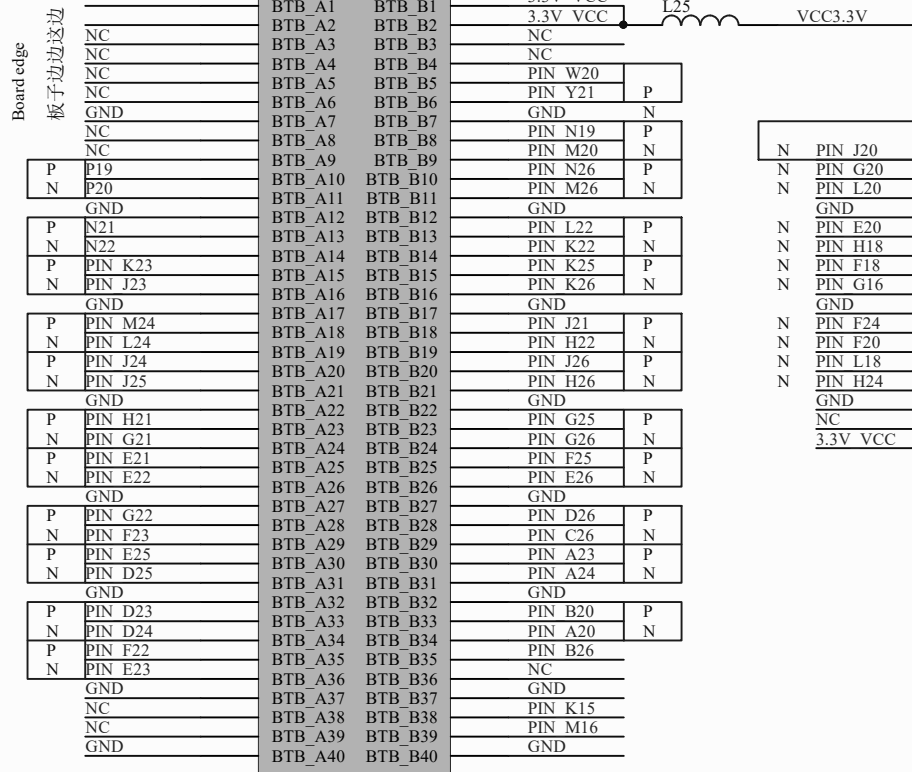
2

3

4

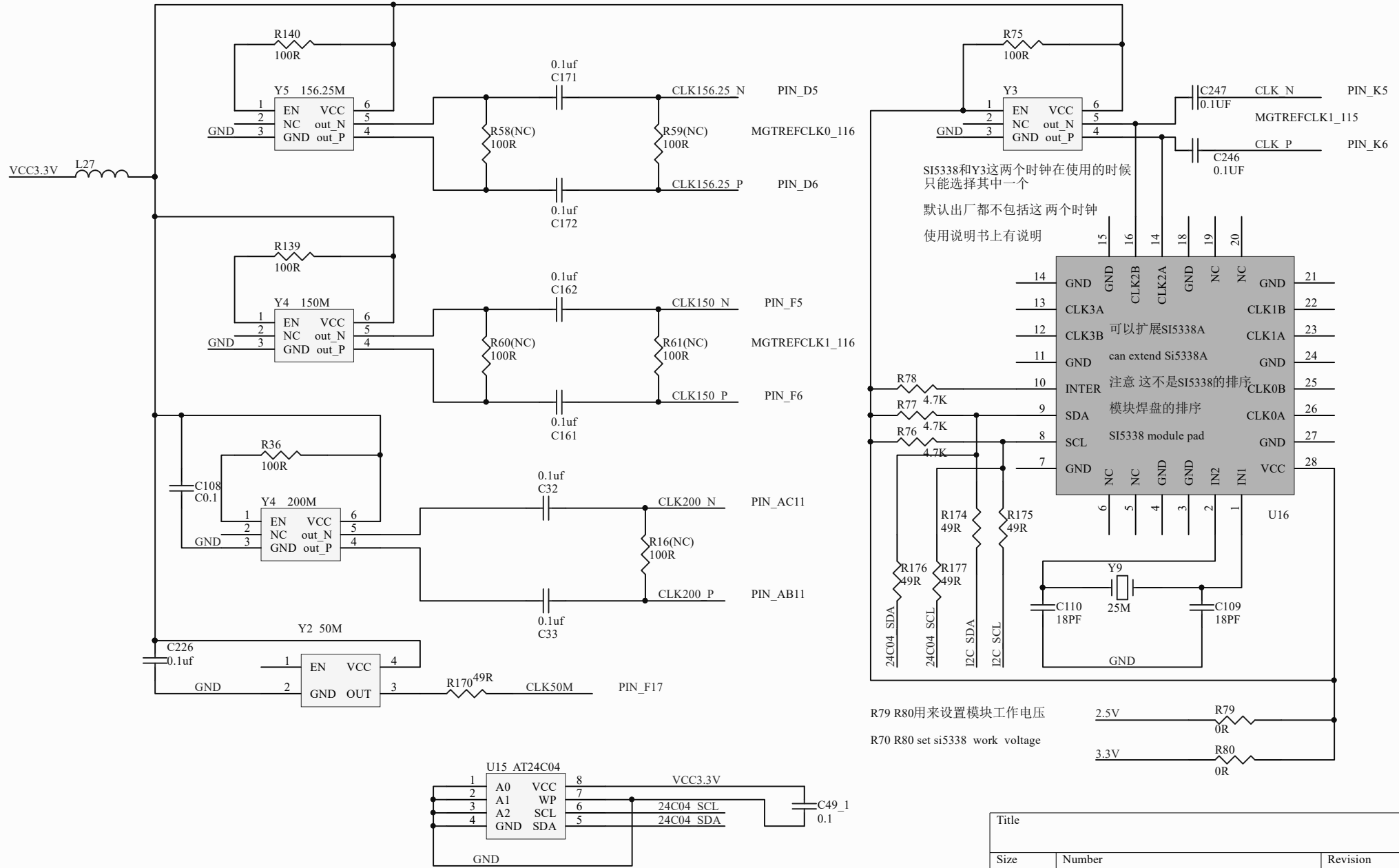
Near HDMI sides  
靠近HDMI这端

BTB\_板对板(0.8MM)



N是LVDS的N端口  
P是LVDS的P端口

Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\BTB 2.54	Drawn By:



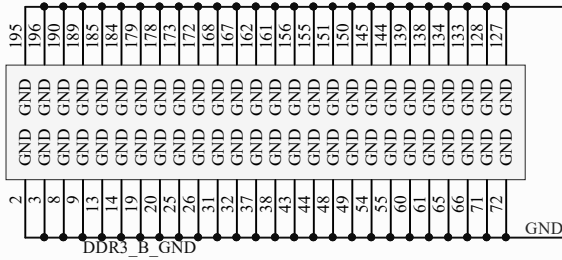
Si5338和Y3这两个时钟在使用的时候只能选择其中一个  
默认出厂都不包括这两个时钟  
使用说明书上有说明

可以扩展Si5338A  
can extend Si5338A  
注意这不是Si5338的排序  
模块焊盘的排序

R79 R80用来设置模块工作电压  
R70 R80 set si5338 work voltage

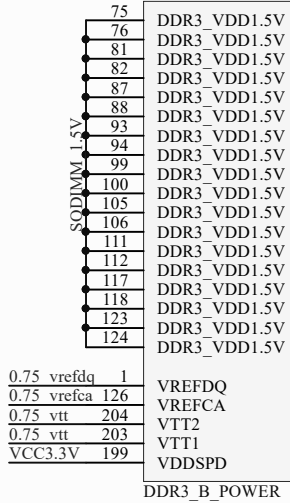
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Size	Number	Revision
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Date:	2023/4/11	Sheet of
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DDR3 B ADD	
ddr3-B A0	98
ddr3-B A1	97
ddr3-B A2	96
ddr3-B A3	95
ddr3-B A4	92
ddr3-B A5	91
ddr3-B A6	90
ddr3-B A7	86
ddr3-B A8	89
ddr3-B A9	85
ddr3-B A10	107
ddr3-B A11	84
ddr3-B A12	83
ddr3-B A13	119
ddr3-B A14	80
ddr3-B A15	78
DDR3_A0	
DDR3_A1	
DDR3_A2	
DDR3_A3	
DDR3_A4	
DDR3_A5	
DDR3_A6	
DDR3_A7	
DDR3_A8	
DDR3_A9	
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DDR3_A11	
DDR3_A12	
DDR3_A13	
DDR3_A14	
DDR3_A15	



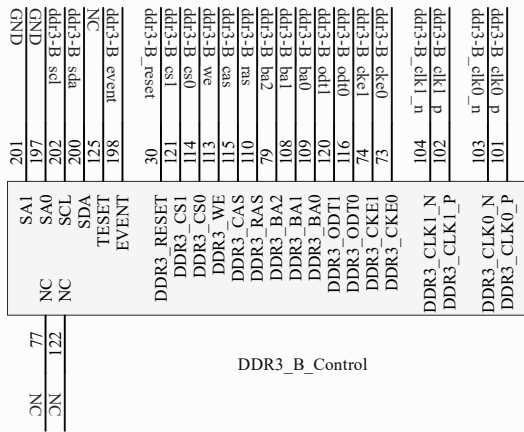
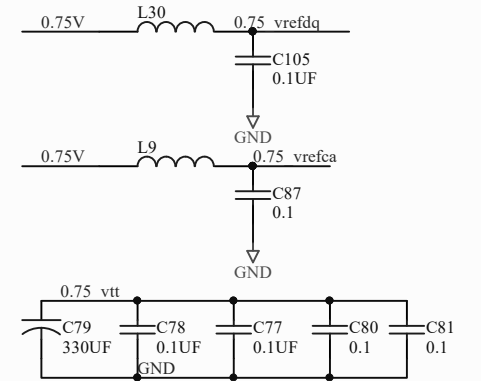
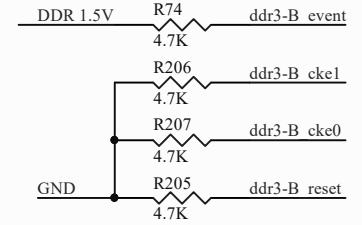
### SODIMM DDR3 B Power side 电源这边的内存条

DDR3 B DQS		DDR3 B DM	
ddr3-B dqs0 p	12	DDR3_DM0	DDR3_DM7
ddr3-B dqs0 n	10	DDR3_DM1	DDR3_DM6
ddr3-B dqs1 p	29	DDR3_DM2	DDR3_DM5
ddr3-B dqs1 n	27	DDR3_DM3	DDR3_DM4
ddr3-B dqs2 p	47		
ddr3-B dqs2 n	45		
ddr3-B dqs3 p	64		
ddr3-B dqs3 n	62		
ddr3-B dqs4 p	186	ddr3-B dm7	n
ddr3-B dqs4 n	188	ddr3-B dm6	p
ddr3-B dqs5 p	169	ddr3-B dm5	n
ddr3-B dqs5 n	171	ddr3-B dm4	p
ddr3-B dqs6 p	152		
ddr3-B dqs6 n	154		
ddr3-B dqs7 p	135		
ddr3-B dqs7 n	137		
ddr3-B dm0	11		
ddr3-B dm1	28		
ddr3-B dm2	46		
ddr3-B dm3	63		



DDR3 DQ		DDR3 B DATA	
ddr3-B dq0	5	DDR3_DQ0	DDR3_DQ32
ddr3-B dq1	7	DDR3_DQ1	DDR3_DQ33
ddr3-B dq2	15	DDR3_DQ2	DDR3_DQ34
ddr3-B dq3	17	DDR3_DQ3	DDR3_DQ35
ddr3-B dq4	4	DDR3_DQ4	DDR3_DQ36
ddr3-B dq5	6	DDR3_DQ5	DDR3_DQ37
ddr3-B dq6	16	DDR3_DQ6	DDR3_DQ38
ddr3-B dq7	18	DDR3_DQ7	DDR3_DQ39
ddr3-B dq8	21	DDR3_DQ8	DDR3_DQ40
ddr3-B dq9	23	DDR3_DQ9	DDR3_DQ41
ddr3-B dq10	33	DDR3_DQ10	DDR3_DQ42
ddr3-B dq11	35	DDR3_DQ11	DDR3_DQ43
ddr3-B dq12	22	DDR3_DQ12	DDR3_DQ44
ddr3-B dq13	24	DDR3_DQ13	DDR3_DQ45
ddr3-B dq14	34	DDR3_DQ14	DDR3_DQ46
ddr3-B dq15	36	DDR3_DQ15	DDR3_DQ47
ddr3-B dq16	39	DDR3_DQ16	DDR3_DQ48
ddr3-B dq17	41	DDR3_DQ17	DDR3_DQ49
ddr3-B dq18	51	DDR3_DQ18	DDR3_DQ50
ddr3-B dq19	53	DDR3_DQ19	DDR3_DQ51
ddr3-B dq20	40	DDR3_DQ20	DDR3_DQ52
ddr3-B dq21	41	DDR3_DQ21	DDR3_DQ53
ddr3-B dq22	50	DDR3_DQ22	DDR3_DQ54
ddr3-B dq23	52	DDR3_DQ23	DDR3_DQ55
ddr3-B dq24	57	DDR3_DQ24	DDR3_DQ56
ddr3-B dq25	59	DDR3_DQ25	DDR3_DQ57
ddr3-B dq26	67	DDR3_DQ26	DDR3_DQ58
ddr3-B dq27	69	DDR3_DQ27	DDR3_DQ59
ddr3-B dq28	56	DDR3_DQ28	DDR3_DQ60
ddr3-B dq29	58	DDR3_DQ29	DDR3_DQ61
ddr3-B dq30	68	DDR3_DQ30	DDR3_DQ62
ddr3-B dq31	70	DDR3_DQ31	DDR3_DQ63

129	ddr3-B dq32
131	ddr3-B dq33
141	ddr3-B dq34
143	ddr3-B dq35
130	ddr3-B dq36
132	ddr3-B dq37
140	ddr3-B dq38
142	ddr3-B dq39
147	ddr3-B dq40
149	ddr3-B dq41
157	ddr3-B dq42
159	ddr3-B dq43
146	ddr3-B dq44
148	ddr3-B dq45
158	ddr3-B dq46
160	ddr3-B dq47
163	ddr3-B dq48
165	ddr3-B dq49
175	ddr3-B dq50
177	ddr3-B dq51
164	ddr3-B dq52
166	ddr3-B dq53
174	ddr3-B dq54
176	ddr3-B dq55
181	ddr3-B dq56
183	ddr3-B dq57
191	ddr3-B dq58
193	ddr3-B dq59
180	ddr3-B dq60
182	ddr3-B dq61
192	ddr3-B dq62
194	ddr3-B dq63



DDR3\_B\_Control

Title		
Size	Number	Revision
A4		
Date:	2023/4/11	Sheet of
File:	D:\BaiduNetdiskDownload\..DDR3 ok\Drawn By:	

第一个版本H4接的PIN\_Y22  
第一个版本H5接的PIN\_AA22

First version

第一个版本G6接的PIN\_AC23  
第一个版本G7接的PIN\_AC24

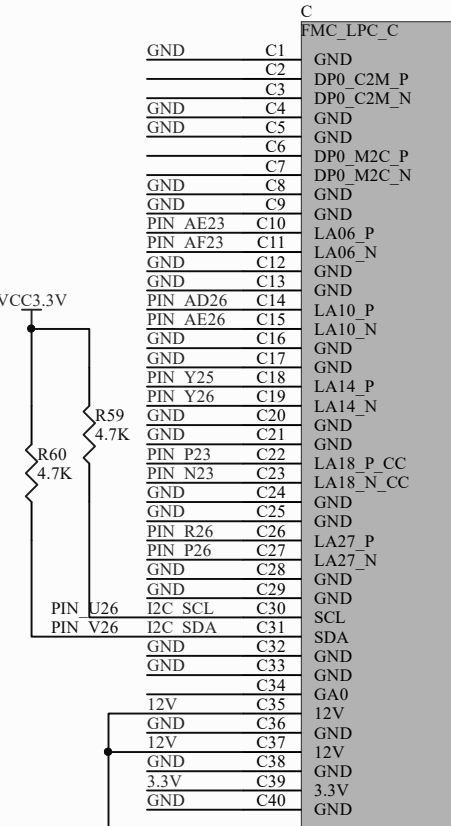
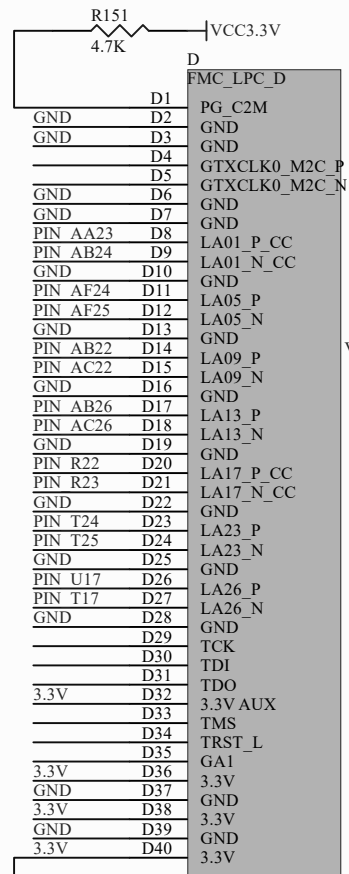
第二个版本H4接的PIN\_AC23  
第二个版本H5接的PIN\_AC24

Second version

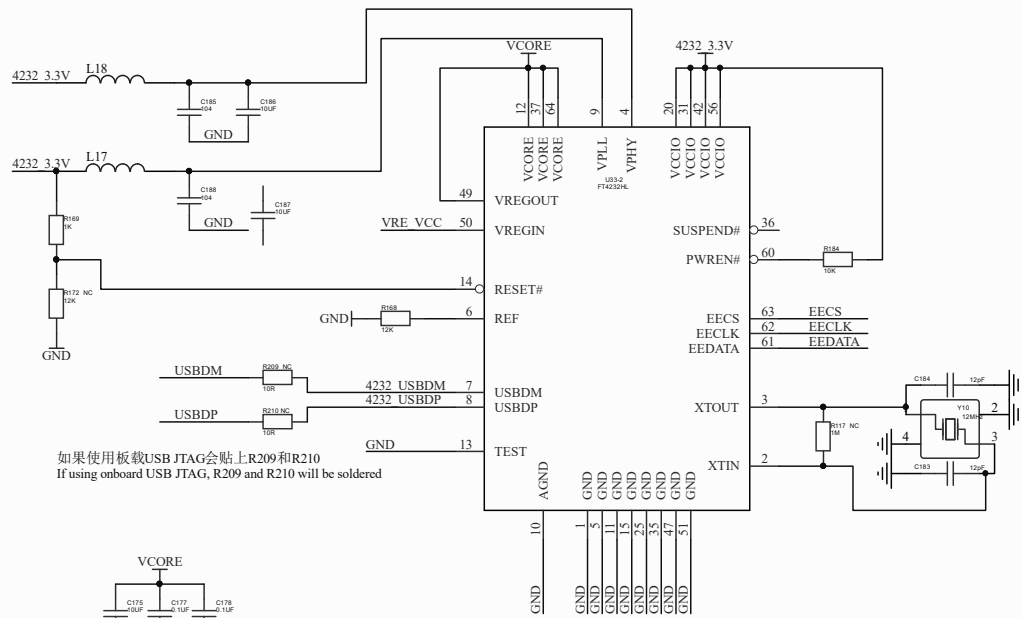
第二个版本G6接的PIN\_Y22  
第二个版本G7接的PIN\_AA22

H		FMC_LPC_H
H1	VREF_A_M2C	
H2	PRSNM2C_L	
GND	H3	GND
PIN AC23	H4	GND
PIN AC24	H5	CLK0_M2C_P
GND	H6	CLK0_M2C_N
PIN V23	H7	GND
PIN V24	H8	LA02_P
GND	H9	LA02_N
PIN AD21	H10	GND
PIN AE21	H11	LA04_P
GND	H12	LA04_N
PIN AB21	H13	GND
PIN AC21	H14	LA07_P
GND	H15	LA07_N
PIN AD23	H16	GND
PIN AD24	H17	LA11_P
GND	H18	LA11_N
PIN AD25	H19	GND
PIN AE25	H20	LA15_P
GND	H21	LA15_N
PIN R25	H22	GND
PIN P25	H23	LA19_P
GND	H24	LA19_N
PIN U19	H25	GND
PIN U20	H26	LA21_P
GND	H27	LA21_N
PIN T18	H28	GND
PIN T19	H29	LA24_P
GND	H30	LA24_N
PIN R18	H31	GND
PIN P18	H32	LA28_P
GND	H33	LA28_N
PIN N18	H34	GND
PIN M19	H35	LA30_P
GND	H36	LA30_N
PIN T20	H37	GND
PIN R20	H38	LA32_P
GND	H39	LA32_N
VCCIO	H40	GND
		VADJ

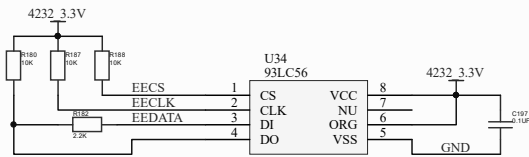
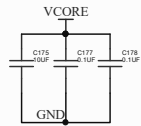
G		FMC_LPC_G
GND	G1	GND
PIN Y23	G2	CLK1_M2C_P
PIN AA24	G3	CLK1_M2C_N
GND	G4	GND
GND	G5	GND
PIN Y22	G6	LA00_P_CC
PIN AA22	G7	LA00_N_CC
GND	G8	GND
PIN U24	G9	GND
PIN U25	G10	LA03_P
GND	G11	LA03_N
PIN AE22	G12	GND
PIN AF22	G13	LA08_P
GND	G14	LA08_N
PIN W25	G15	GND
PIN W26	G16	LA12_P
GND	G17	LA12_N
PIN AA25	G18	GND
PIN AB25	G19	LA16_P
GND	G20	LA16_N
PIN P24	G21	GND
PIN N24	G22	LA20_P
GND	G23	LA20_N
PIN M21	G24	GND
PIN M22	G25	LA22_P
GND	G26	LA22_N
PIN M25	G27	GND
PIN L25	G28	LA25_P
GND	G29	LA25_N
PIN R16	G30	GND
PIN R17	G31	LA29_P
GND	G32	LA29_N
PIN P16	G33	GND
PIN N17	G34	LA31_P
GND	G35	LA31_N
PIN T22	G36	GND
PIN T23	G37	LA33_P
GND	G38	LA33_N
VCCIO	G39	GND
GND	G40	VADJ
		GND



Title		
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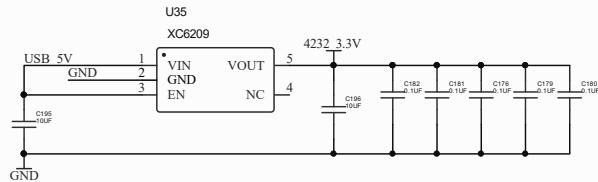


如果使用板载USB JTAG会贴上R209和R210  
If using onboard USB JTAG, R209 and R210 will be soldered



板载USB JTAG 和USB串口使用的同一个USB typec接口，通过电阻来选择

The same USB typec interface used for onboard USB JTAG and USB serial port, selected through resistance



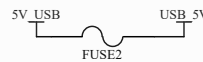
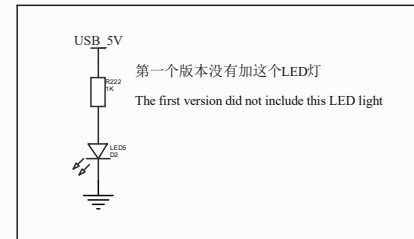
FT4232

DB0TXD	16	232	TCK
DB1RXD	17	232	TDI
DB2RTS	18	232	TDO
DB3CTS	19	232	TMS
DB4DTR	21		
DB5DSR	22		
DB6DCD	23		
DB7RI	24		

DB0TXD	38
DB1RXD	39
DB2RTS	40
DB3CTS	41
DB4DTR	43
DB5DSR	44
DB6DCD	45
DB7RI	46

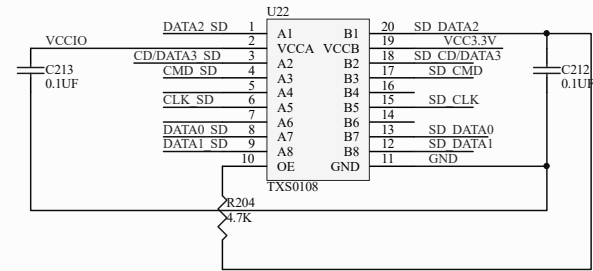
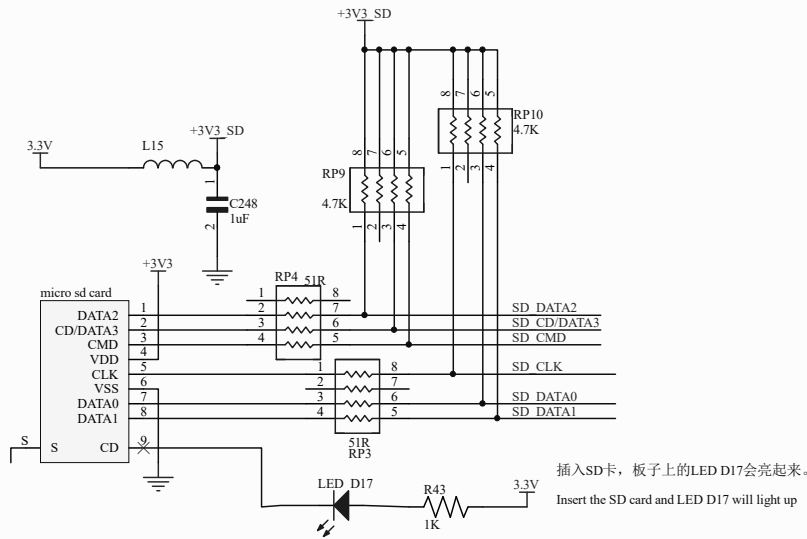
DB0TXD	26	R116	COM TTL TX
DB1RXD	27	R116	COM TTL RX
DB2RTS	28		
DB3CTS	29		
DB4DTR	30		
DB5DSR	32		
DB6DCD	33		
DB7RI	34		

DB0TXD	48
DB1RXD	52
DB2RTS	53
DB3CTS	54
DB4DTR	55
DB5DSR	57
DB6DCD	58
DB7RI	59



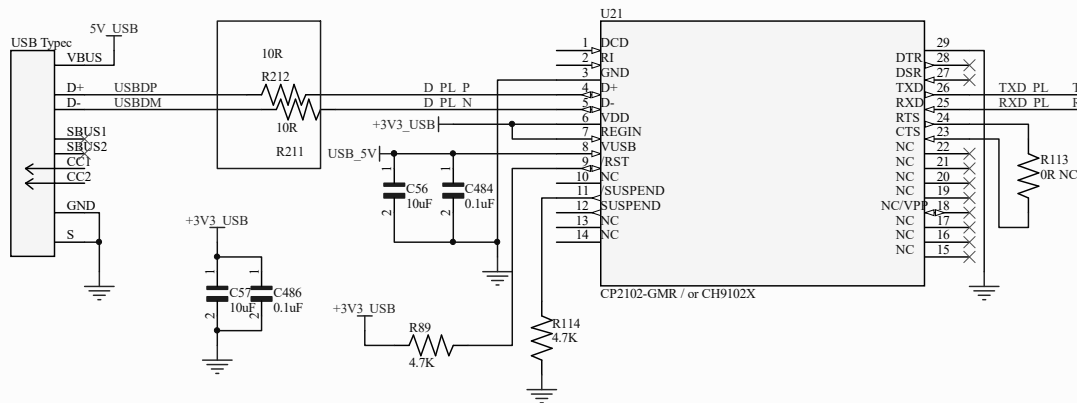
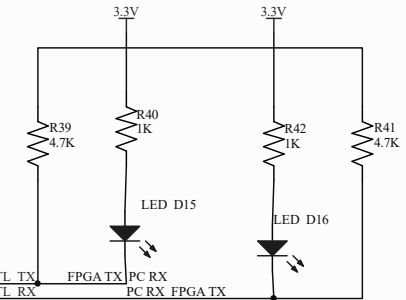
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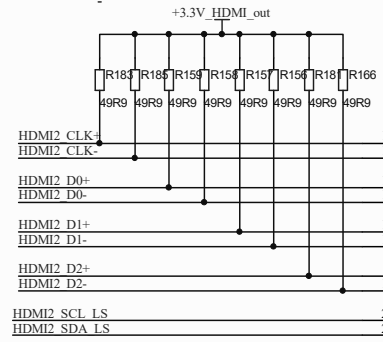
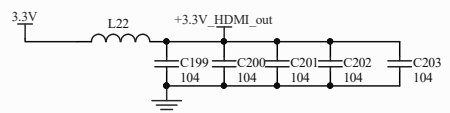


板载USB JTAG 和USB串口使用的同一个USB typec接口，通过电阻来选择  
The same USB typec interface used for onboard USB JTAG and USB serial port, selected through resistance

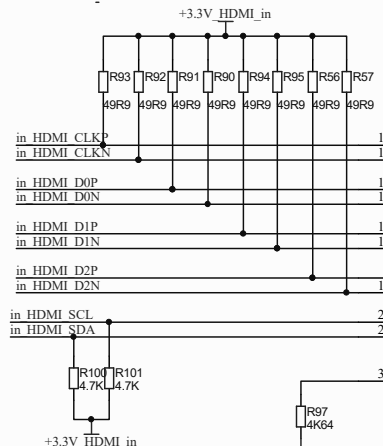
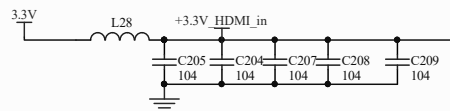
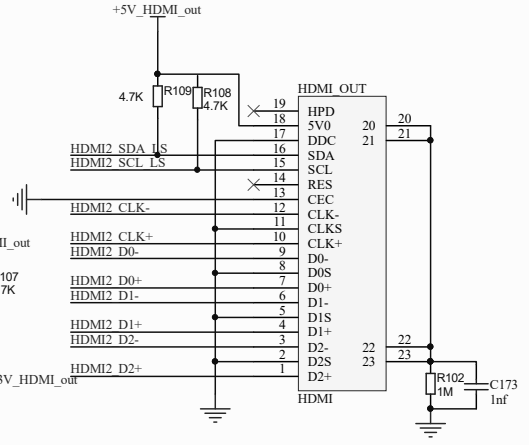
如果使用USB串口，不使用板载USB JTAG，R211和R212要贴上去  
If using a USB serial port and not using an onboard USB JTAG, R211 and R212 need to be soldered together



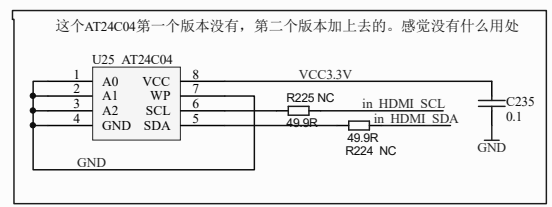
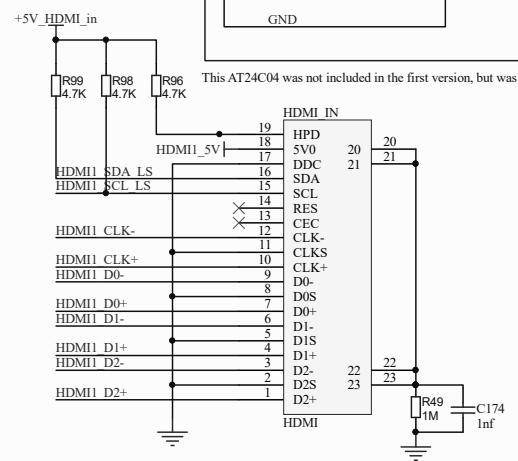
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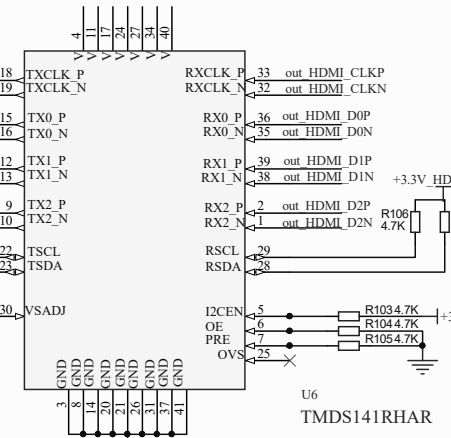
# HDMI OUT



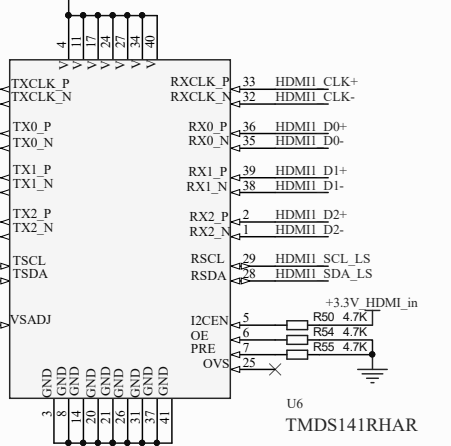
# HDMI IN



This AT24C04 was not included in the first version, but was added in the second version. Feeling useless

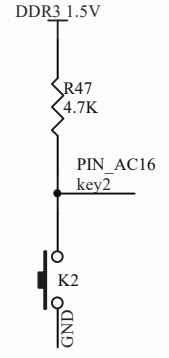
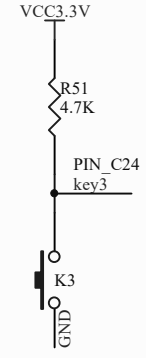
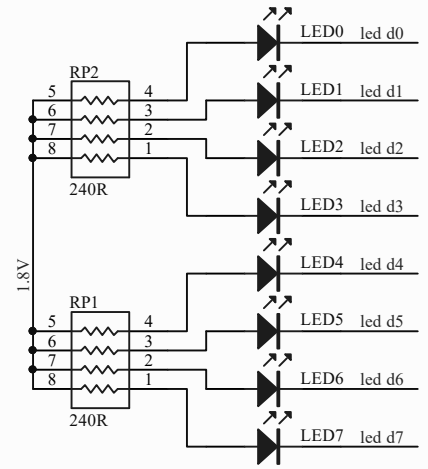


U6  
TMDS141RHAR

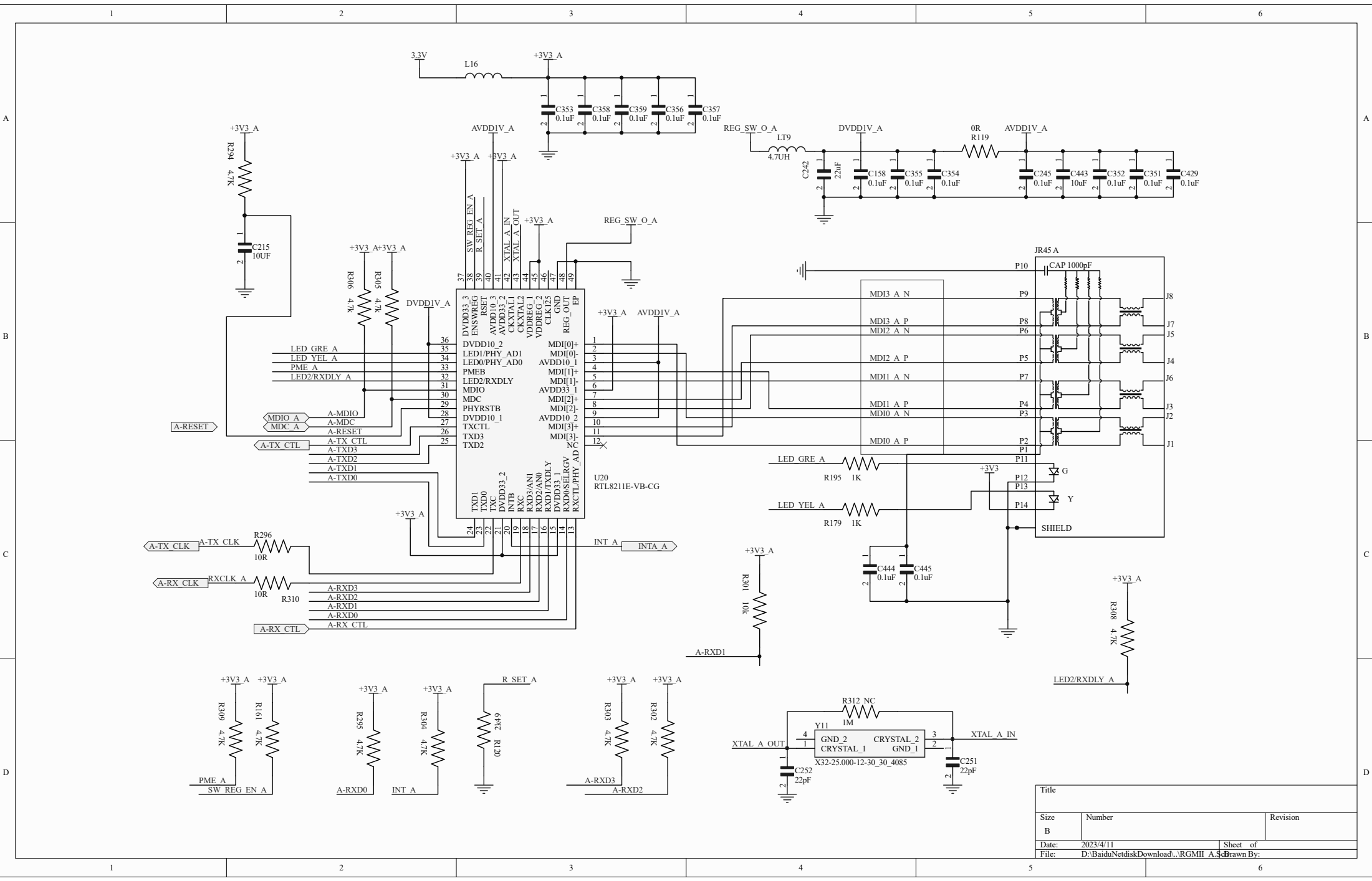


U6  
TMDS141RHAR

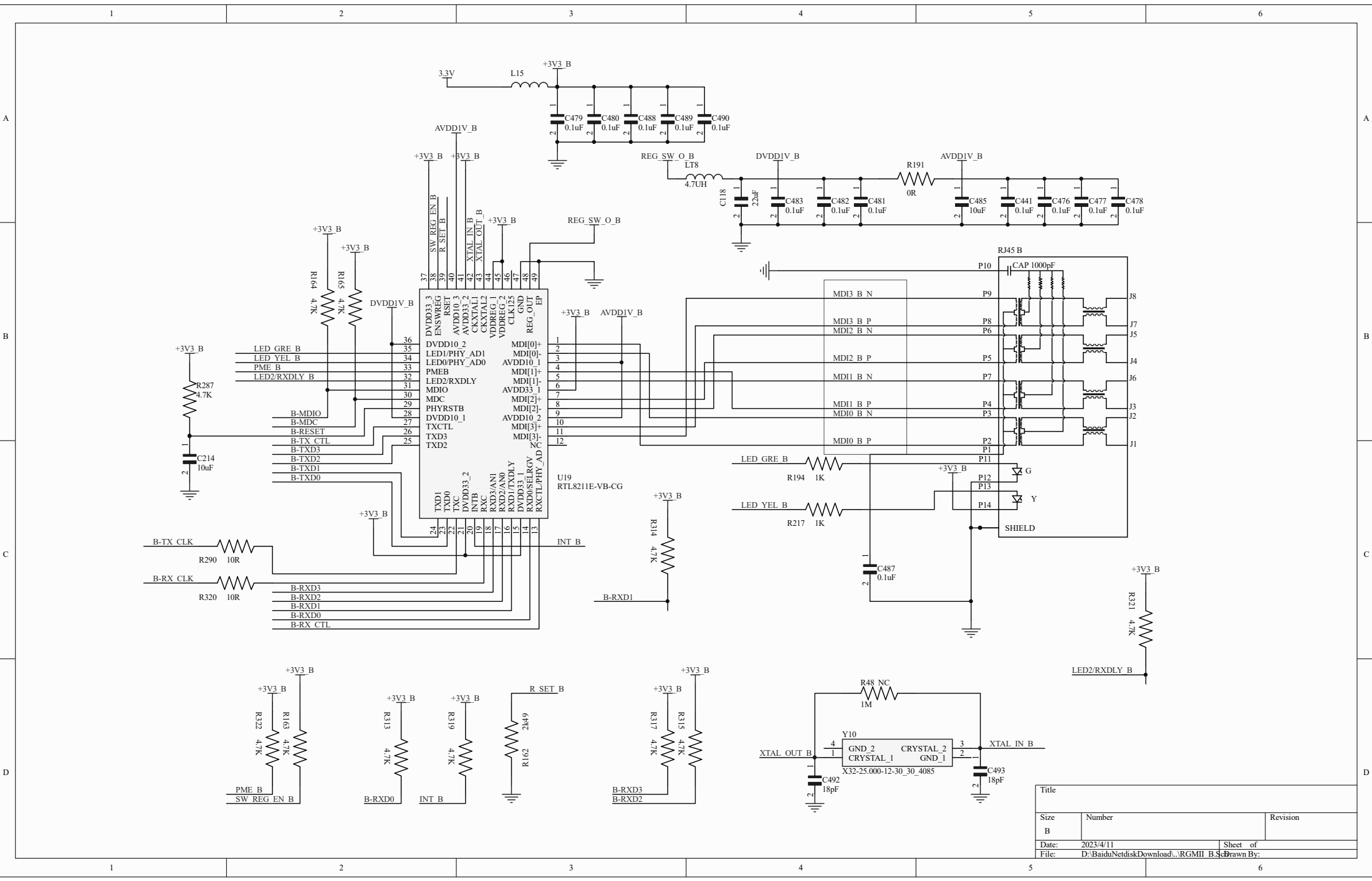
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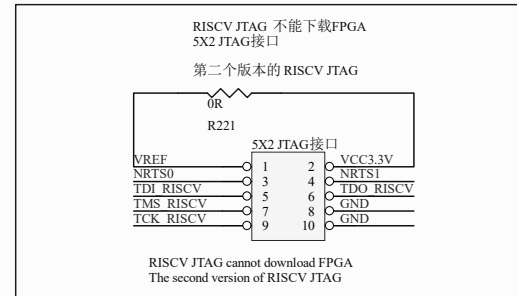
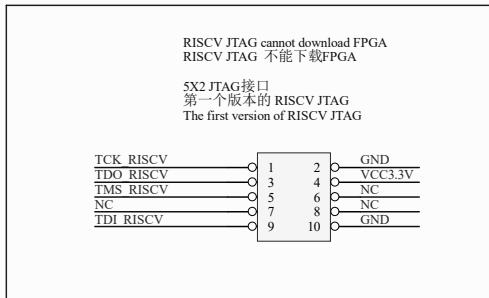
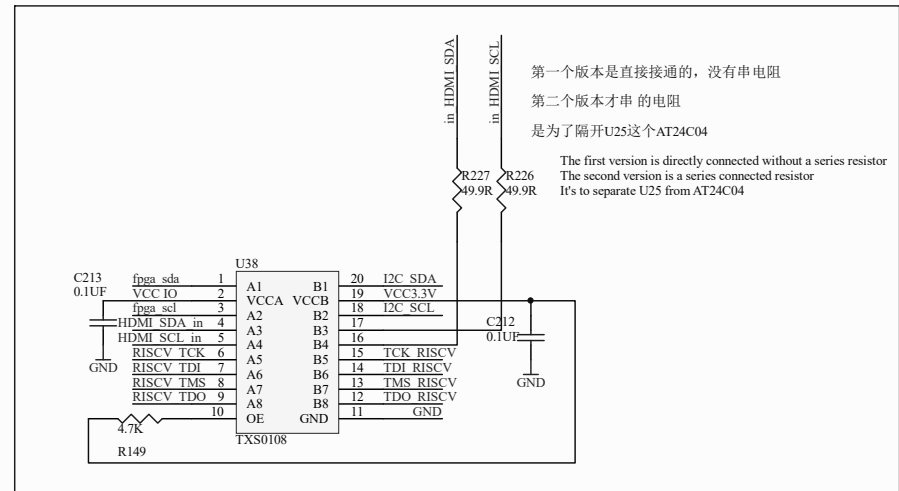
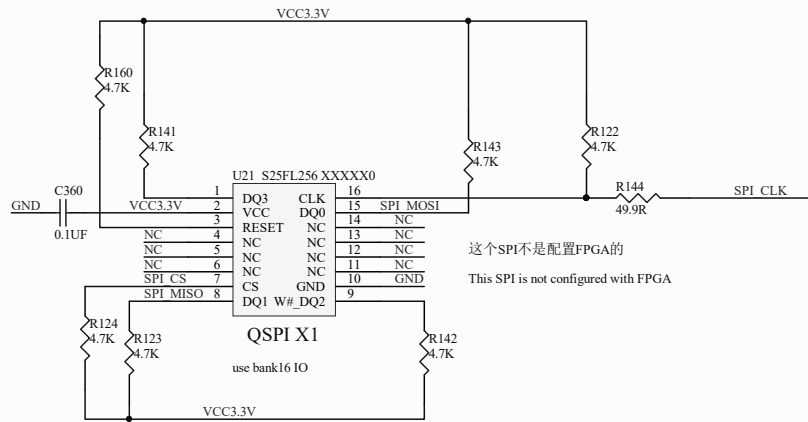
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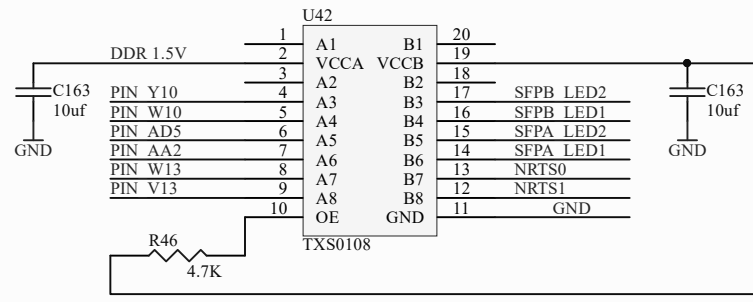
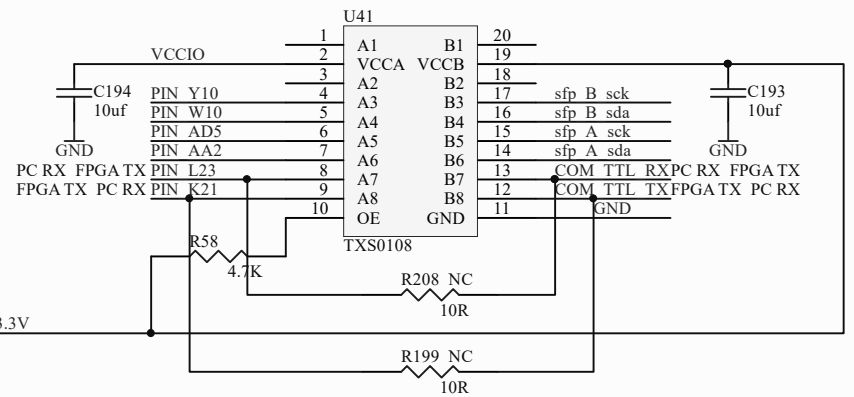
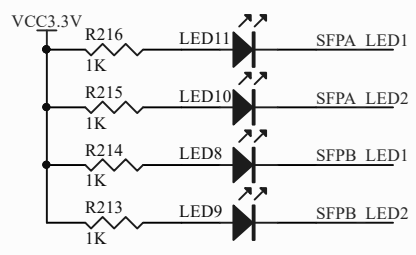
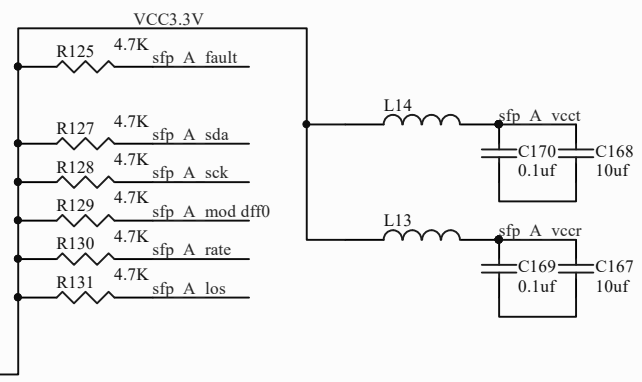
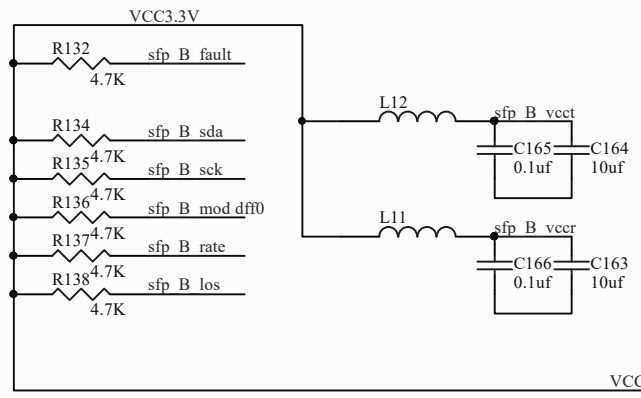
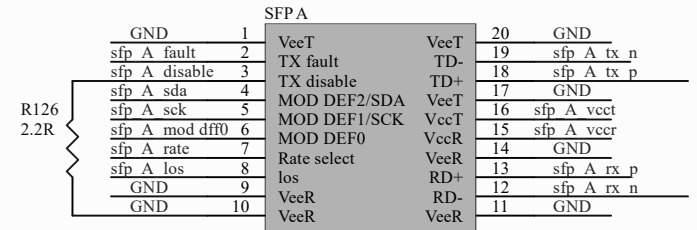
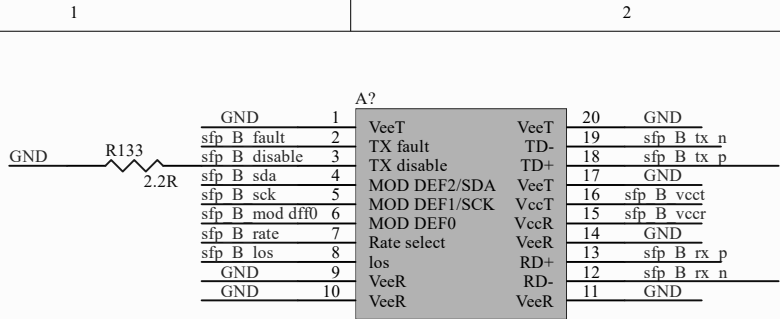
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Title		
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