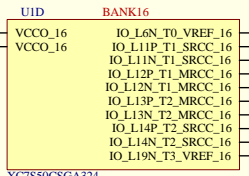
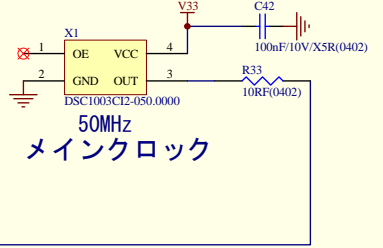


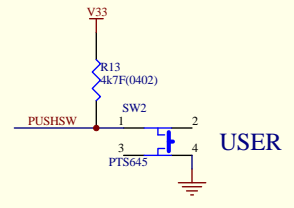
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Spartan7 Config		
Size	Number	Revision
A3	NP1116B	1.2
Date:	15-Jun-2023	Sheet of
File:	C:\naitou\up1116\up1116B(101).Ddb	1/11
		Drawn By:
		R.Naitou



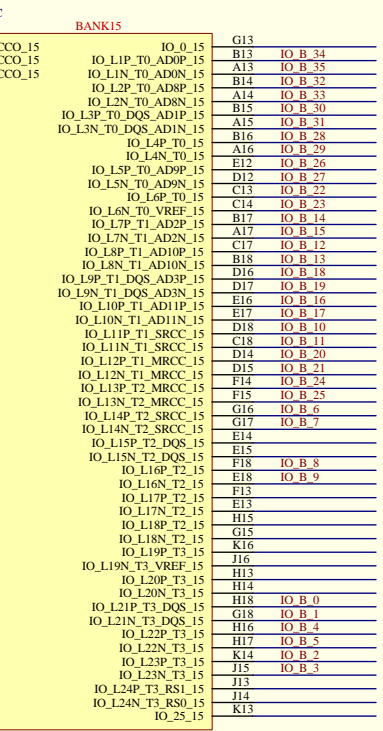
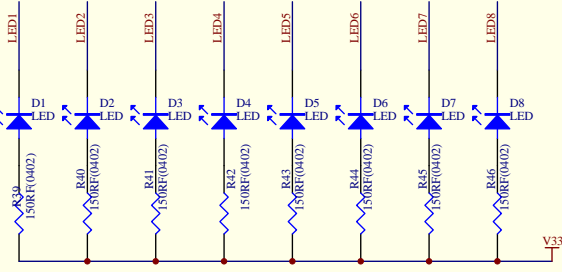
Bank16 3.3V



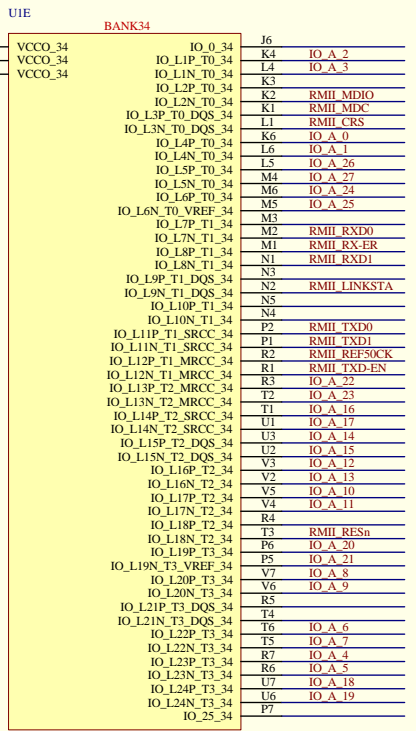
50MHz
メインクロック



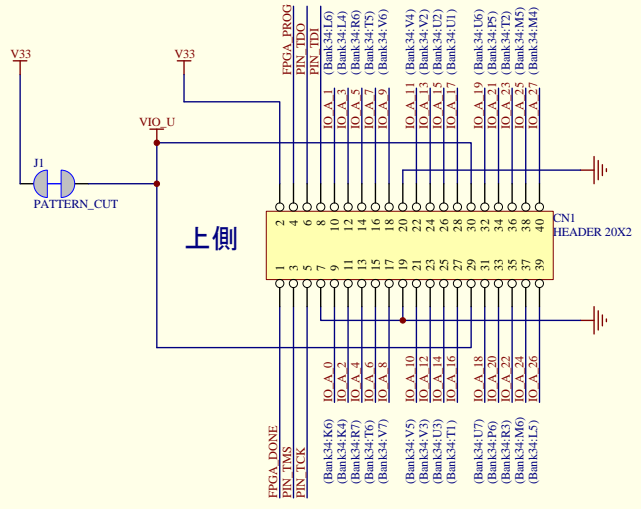
USER



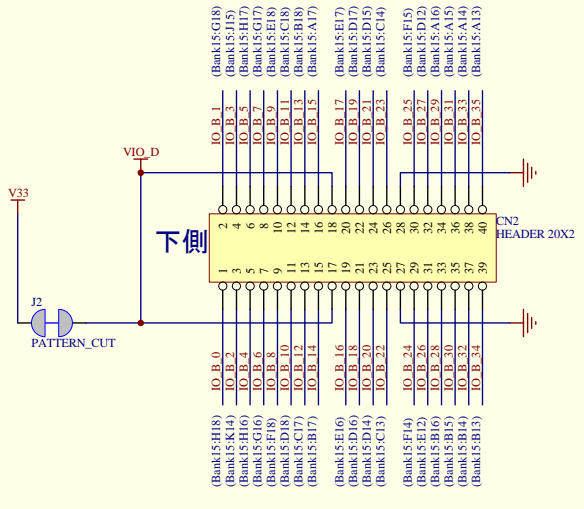
Bank15 3.3V



Bank34 3.3V



上側



下側

Title			
Spartan7 GPIO			
Size	Number	Revision	
A3	NP1116B	1.2	
Date:	15-Jun-2023	Sheet of	2/11
File:	C:\naitou\up1116\up1116B\lcl\l1.Ddb	Drawn By:	R.Naitou

D

D

C

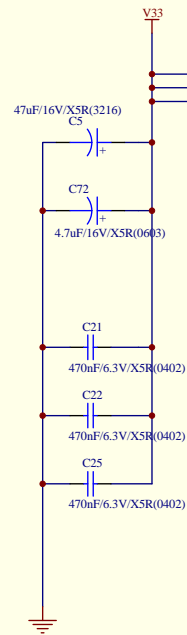
C

B

B

A

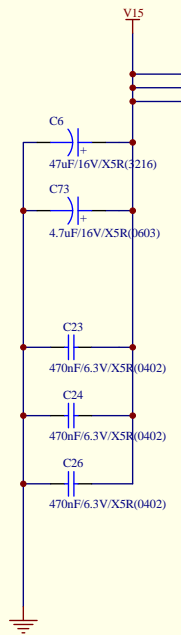
A



UIB BANK14			L13 USB FD6		
VCCO_14	IO_0_14	L13	USB FD6		
T16	IO_L1P_T0_D00_MOSI_14	K17	FPGA_MOSI		
U13	IO_L1N_T0_D01_DIN_14	K18	FPGA_MISO		
	IO_L2P_T0_D02_14	L14	USB FD7		
	IO_L2N_T0_D03_14	M15	USB FD3		
	IO_L3P_T0_DQS_PUDC_B_14	L15	PUDC		
	IO_L3N_T0_DQS_EMCCLK_14	L16	USB FD5		
	IO_L4P_T0_D04_14	L17	USB FLAGA		
	IO_L4N_T0_D05_14	L18	USB FLAGB		
	IO_L5P_T0_D06_14	M14	USB FD4		
	IO_L5N_T0_D07_14	N14	USB FD2		
	IO_L6P_T0_FCS_B_14	M13	FPGA_FCS		
	IO_L6N_T0_D08_VREF_14	N13			
	IO_L7P_T1_D09_14	M16			
	IO_L7N_T1_D10_14	M17	USB FLAGC		
	IO_L8P_T1_D11_14	M18	USB SLOE		
	IO_L8N_T1_D12_14	N18	USB FIFOADR0		
	IO_L9P_T1_DQS_14	P17			
	IO_L9N_T1_DQS_D13_14	P18	USB FIFOADR1		
	IO_L10P_T1_D14_14	R18	USB PKTEND		
	IO_L10N_T1_D15_14	T18	USB FD9		
	IO_L11P_T1_SRCC_14	P14	CAM0 CLPP		
	IO_L11N_T1_SRCC_14	P15	CAM0 CLPN		
	IO_L12P_T1_MRCC_14	N15	USB FD1		
	IO_L12N_T1_MRCC_14	P16	CAM0 GPIO0		
	IO_L13P_T2_MRCC_14	R14	CAM0 CP0		
	IO_L13N_T2_MRCC_14	T14	CAM0 CNO		
	IO_L14P_T2_SRCC_14	R16	USB IFCLK		
	IO_L14N_T2_SRCC_14	R17	USB FD8		
	IO_L15P_T2_DQS_RDWR_B_14	U17	USB FD11		
	IO_L15N_T2_DQS_DOUT_CSO_B_14	U18	USB FD10		
	IO_L16P_T2_CSL_B_14	U16	USB FD13		
	IO_L16N_T2_D31_14	V17	USB FD12		
	IO_L17P_T2_D30_14	R15	USB SLWR		
	IO_L17N_T2_D29_14	T15	USB SLRD		
	IO_L18P_T2_D28_14	U15	USB FD15		
	IO_L18N_T2_D27_14	V16	USB FD14		
	IO_L19P_T3_D26_14	P13	CAM0 DLPP00		
	IO_L19N_T3_D25_VREF_14	R13	CAM0 DLPN00		
	IO_L20P_T3_D24_14	V14	CAM0 CLK0		
	IO_L20N_T3_D23_14	V15	USB_CLKOUT		
	IO_L21P_T3_DQS_14	U12	CAM0 SCL0		
	IO_L21N_T3_DQS_D22_14	V13	CAM0 SDA0		
	IO_L22P_T3_D21_14	T12	CAM0 DP00		
	IO_L22N_T3_D20_14	T13	CAM0 DN00		
	IO_L23P_T3_D19_14	R11	CAM0 DLPP01		
	IO_L23N_T3_D18_14	T11	CAM0 DLPN01		
	IO_L24P_T3_D17_14	U11	CAM0 DP01		
	IO_L24N_T3_D16_14	V12	CAM0 DN01		
	IO_25_14	R12	USB FDD		

XC7S50CSGA324

Bank14 3.3V

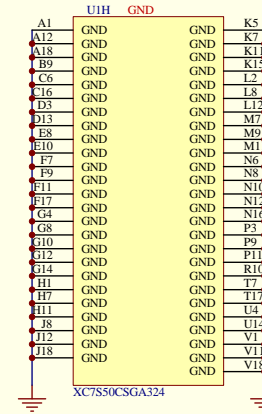
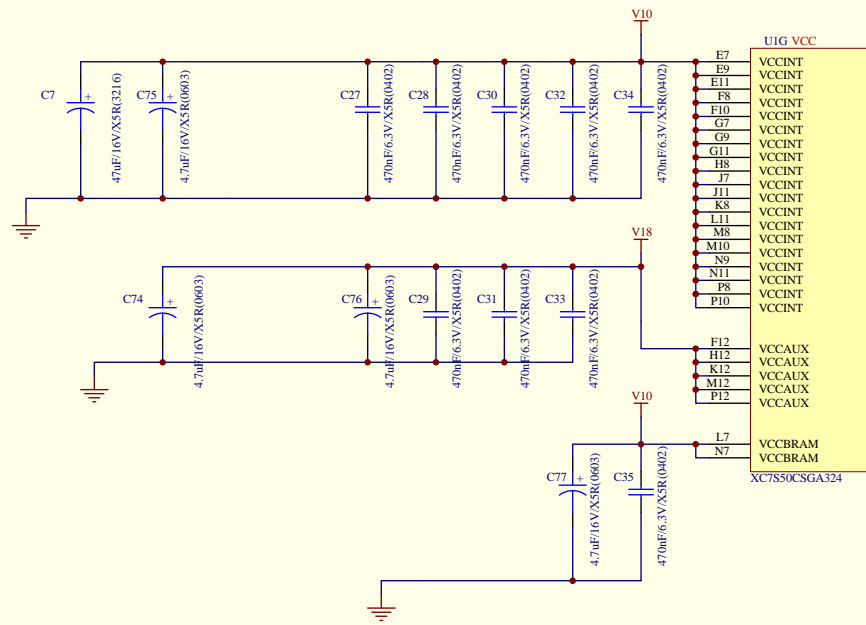


UIF BANK35			F6 LED7		
VCCO_35	IO_0_35	A8	DDR3_A14		
VCCO_35	IO_L1P_T0_AD4P_35	A7	DDR3_A15		
VCCO_35	IO_L1N_T0_AD4N_35	A7	DDR3_A15		
	IO_L2P_T0_AD12P_35	C5			
	IO_L2N_T0_AD12N_35	D7	DDR3_CKP		
	IO_L3P_T0_DQS_ADS5P_35	D7	DDR3_CKN		
	IO_L3N_T0_DQS_ADS5N_35	B5	LED4		
	IO_L4P_T0_35	C7	DDR3_A8		
	IO_L4N_T0_35	B7	DDR3_A8		
	IO_L5P_T0_AD13P_35	A6	DDR3_A13		
	IO_L5N_T0_AD13N_35	E6	DDR3_BA1		
	IO_L6P_T0_35	D6	DDR3_A6		
	IO_L6N_T0_VREF_35	E5	LED6		
	IO_L7P_T1_AD6P_35	D5	FPGA_VREF		
	IO_L7N_T1_AD6N_35	C4	FPGA_VREF		
	IO_L8P_T1_AD14P_35	B4	DDR3_A10		
	IO_L8N_T1_AD14N_35	B4	DDR3_A10		
	IO_L9P_T1_DQS_AD7P_35	C3	DDR3_CKE		
	IO_L9N_T1_DQS_AD7N_35	B3	DDR3_A12		
	IO_L10P_T1_AD15P_35	A5	LED1		
	IO_L10N_T1_AD15N_35	A4	DDR3_A4		
	IO_L11P_T1_SRCC_35	A3	DDR3_A11		
	IO_L11N_T1_SRCC_35	A2	DDR3_A5		
	IO_L12P_T1_MRCC_35	C2	DDR3_CS		
	IO_L12N_T1_MRCC_35	B2	DDR3_BA0		
	IO_L13P_T2_MRCC_35	C1	DDR3_A2		
	IO_L13N_T2_MRCC_35	B1	DDR3_A3		
	IO_L14P_T2_SRCC_35	F4	DDR3_A7		
	IO_L14N_T2_SRCC_35	E4	LED8		
	IO_L15P_T2_DQS_35	D1	DDR3_ODT		
	IO_L15N_T2_DQS_35	D1	DDR3_A0		
	IO_L16P_T2_35	F5	DDR3_RESET		
	IO_L16N_T2_35	E3	DDR3_A9		
	IO_L17P_T2_35	E2	DDR3_WE		
	IO_L17N_T2_35	D2	DDR3_BA2		
	IO_L18P_T2_35	G5	LED3		
	IO_L18N_T2_35	F5	LED5		
	IO_L19P_T3_VREF_35	F2	DDR3_RAS		
	IO_L19N_T3_VREF_35	F1	DDR3_CAS		
	IO_L20P_T3_35	J4	DDR3_DM		
	IO_L20N_T3_35	J3	FPGA_VREF		
	IO_L21P_T3_DQS_35	H3	DDR3_DQ4		
	IO_L21N_T3_DQS_35	H2	DDR3_DQ3		
	IO_L22P_T3_35	G2	DDR3_DQS_P0		
	IO_L22N_T3_35	G1	DDR3_DQS_N0		
	IO_L23P_T3_35	H5	DDR3_D01		
	IO_L23N_T3_35	H4	DDR3_DQ0		
	IO_L24P_T3_35	J2	DDR3_DQ7		
	IO_L24N_T3_35	J1	DDR3_DQ5		
	IO_25_35	H6	DDR3_DQ2		
		G6	DDR3_DQ6		
		J5	LED2		

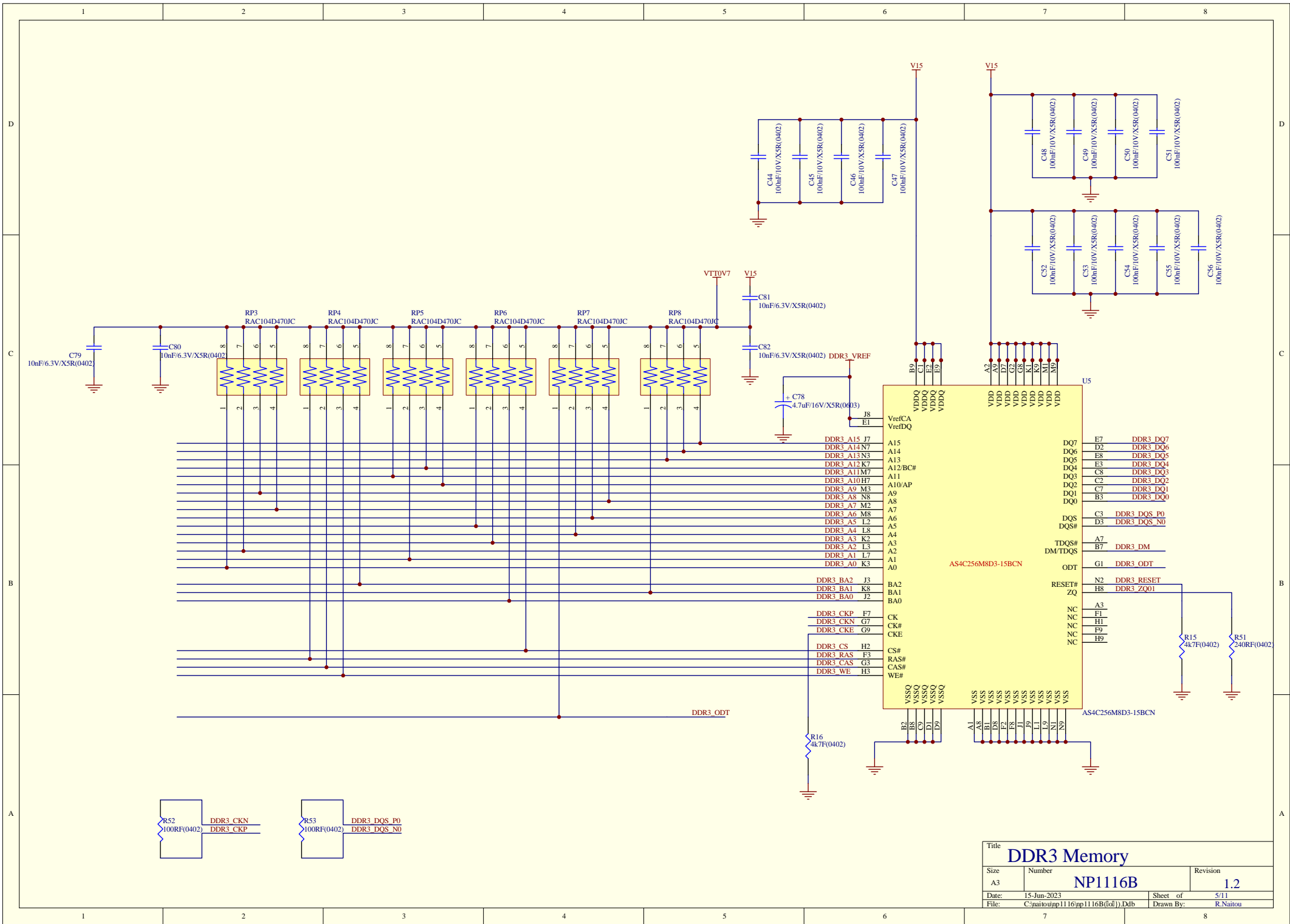
XC7S50CSGA324

Bank35 1.5V

Title			
Spartan7 DDR3/USB			
Size	Number	Revision	
A3	NP1116B	1.2	
Date:	15-Jun-2023	Sheet of	3/11
File:	C:\naitou\up1116\up1116B(101).Ddb	Drawn By:	R.Naitou



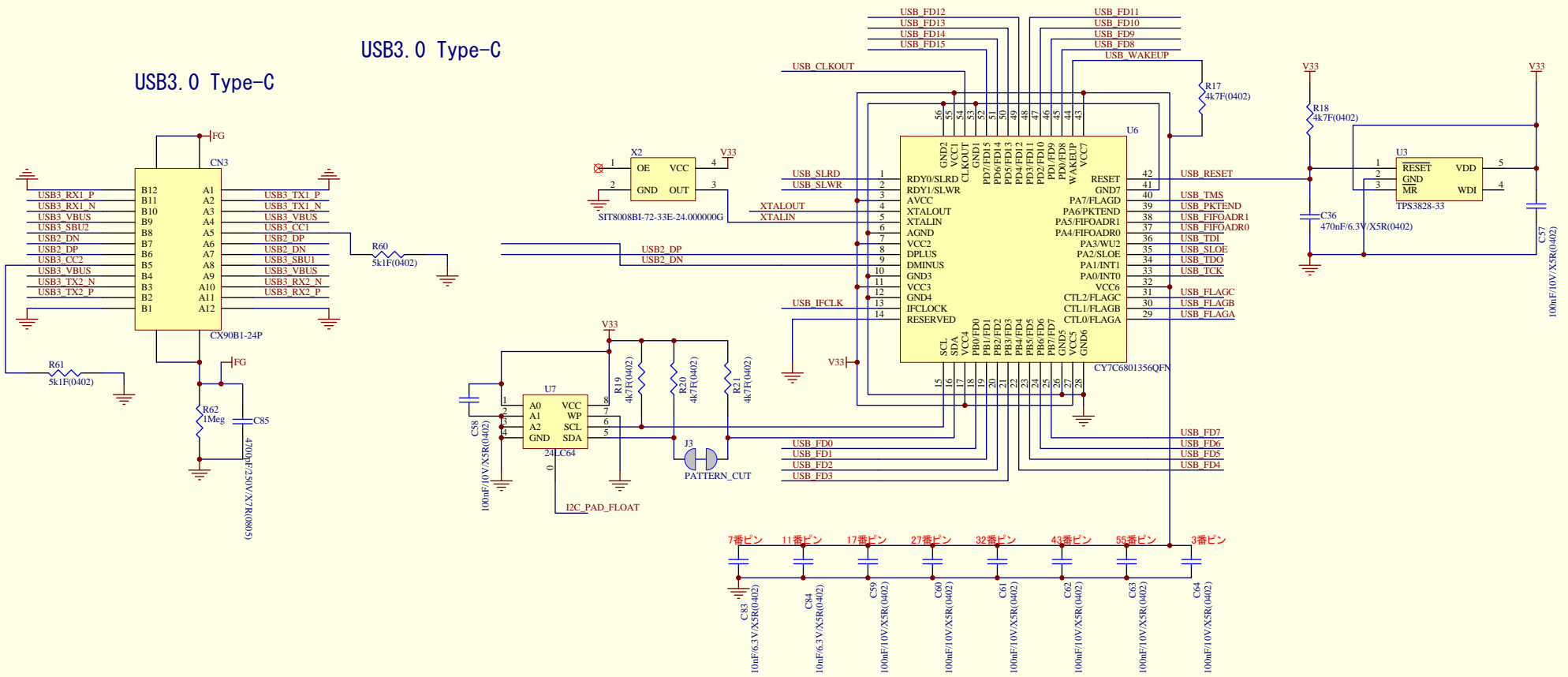
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Size	Number	Revision			
A3	NP1116B	1.2			
Date:	15-Jun-2023	Sheet of	4/11		
File:	C:\naitou\mp1116\mp1116B(lol1).Ddb	Drawn By:	R.Naitou		



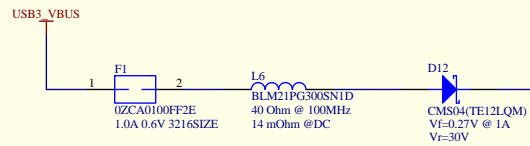
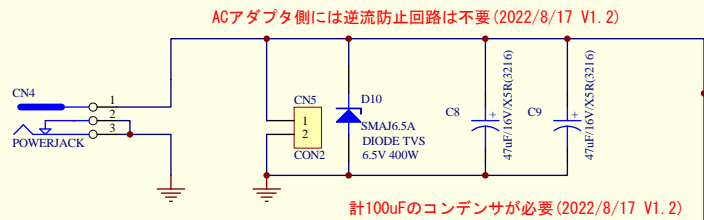
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Size A3	Number NP1116B	Revision 1.2
Date: 15-Jun-2023	Sheet of: 5/11	Drawn By: R.Naitou
File: C:\naitou\up1116up1116B\lcl(i).Ddb		

USB3.0 Type-C

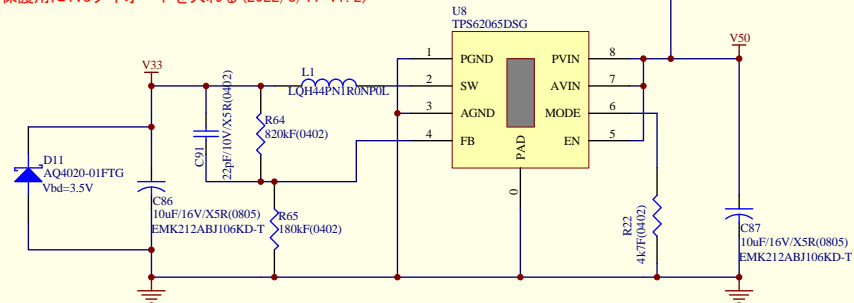
USB3.0 Type-C



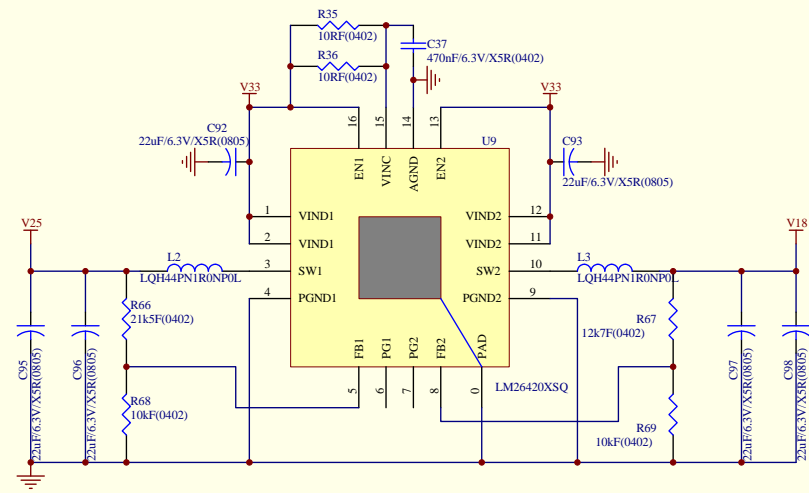
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Size	Number	Revision			
A3	NP1116B	1.2			
Date:	15-Jun-2023	Sheet of	6/11		
File:	C:\naitou\up1116\up1116B\l01\).Ddb	Drawn By:	R.Naitou		



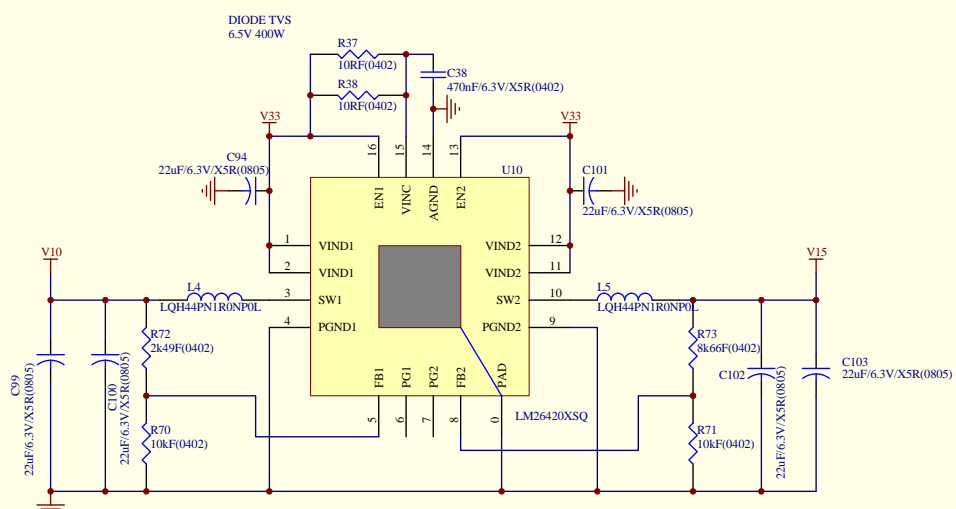
保護用にTVSダイオードを入れる (2022/8/17 V1.2)



Title		
Power Input		
Size	Number	Revision
A3	NP1116B	1.2
Date:	15-Jun-2023	Sheet of 7/11
File:	C:\naitou\mp1116\mp1116B\lclj).Ddb	Drawn By: R.Naitou

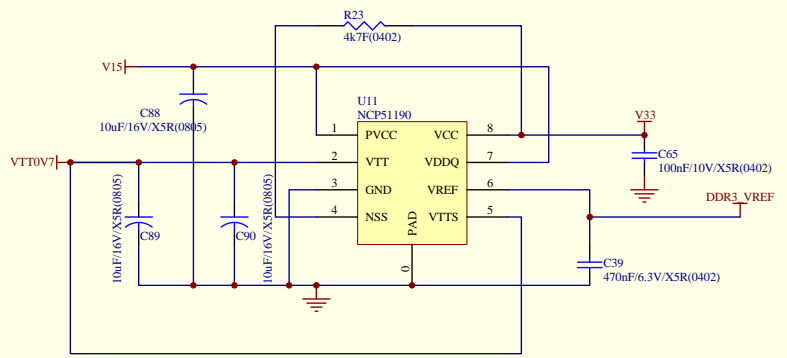


3.3V→2.5V
 3.3V→1.8V (FPGA AUX電源)

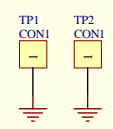


3.3V→1.5V (DDR3電源)
 3.3V→1.0V (FPGA電源)

この電源のコンデンサには2012サイズを選ぶ(2022/8/17 V1.2)

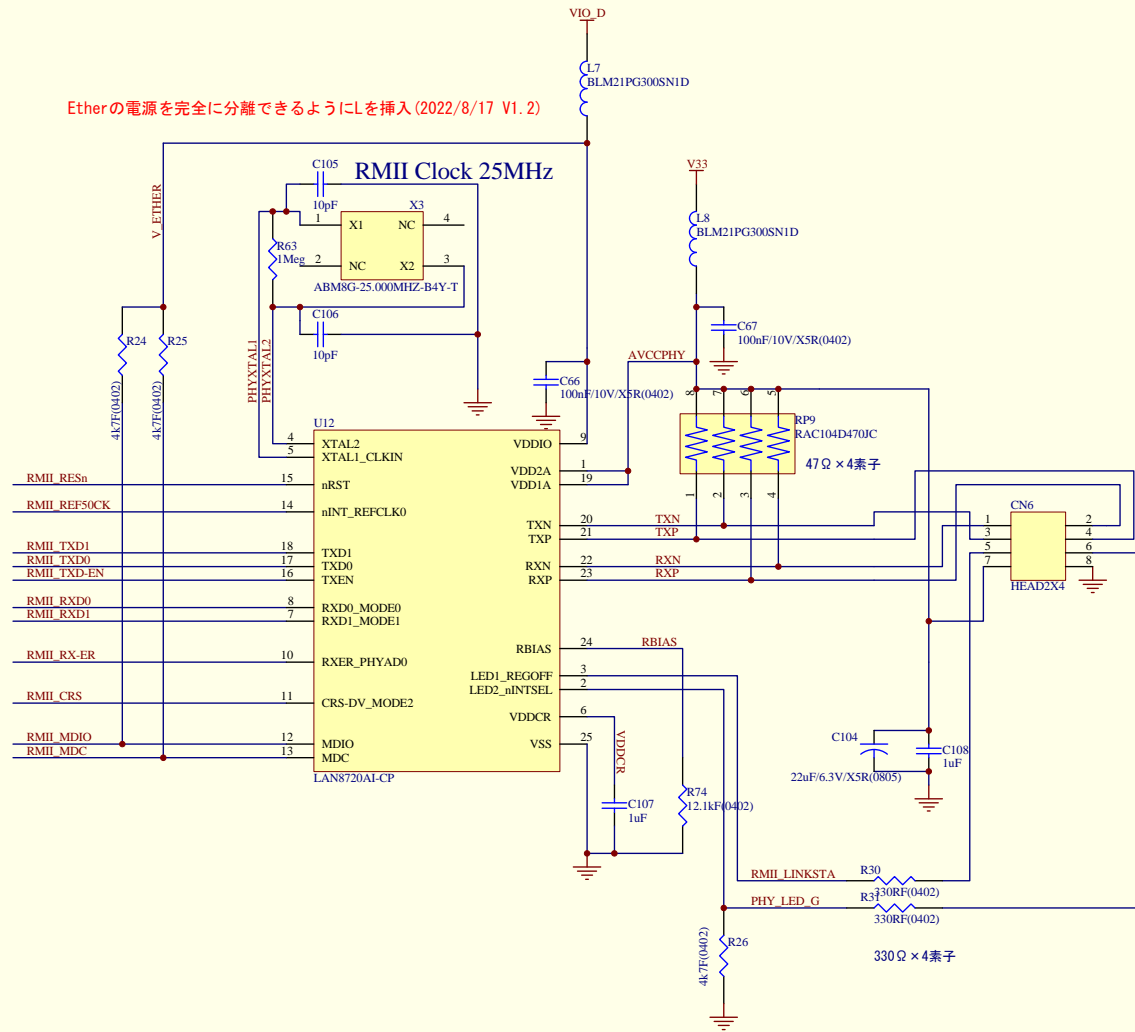


3.3V/1.5V→0.75V (DDR3 終端)
 3.3V/1.5V→0.9V (DDR3 VREF)



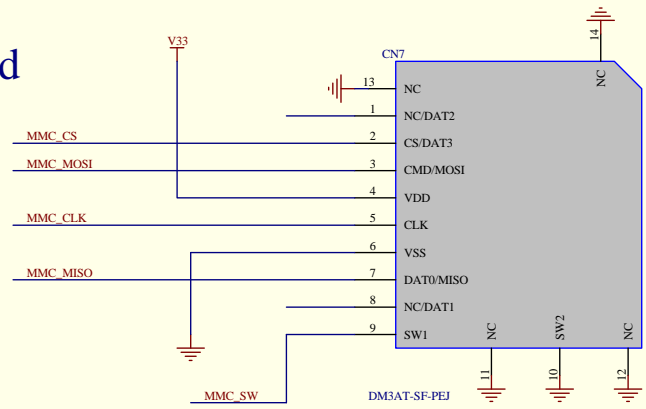
Title System Power		
Size A3	Number NP1116B	Revision 1.2
Date: 15-Jun-2023	Sheet of 8/11	Drawn By: R.Naitou
File: C:\naitou\up1116\up1116B\lcl\l1.Ddb		

Etherの電源を完全に分離できるようにLを挿入 (2022/8/17 V1.2)

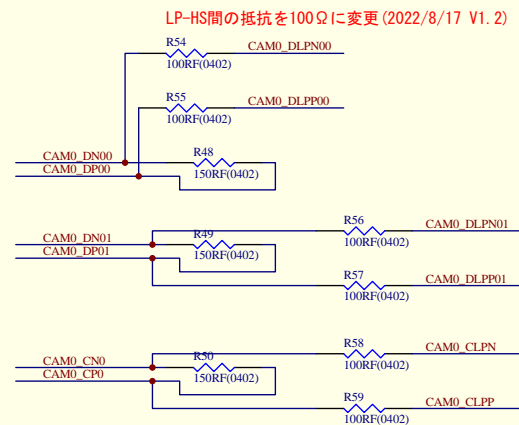
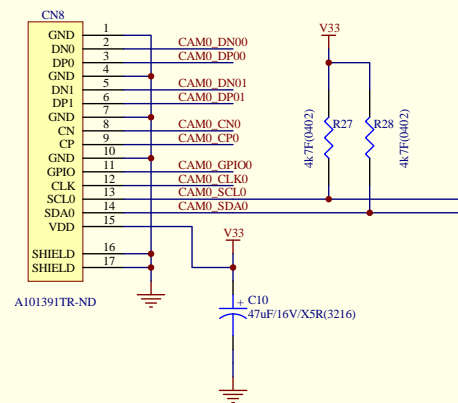


Title		
Ethernet PHY		
Size	Number	Revision
A3	NP1116B	1.2
Date:	15-Jun-2023	Sheet of 9/11
File:	C:\naitou\up1116\up1116B\lcl1.Ddb	Drawn By: R.Naitou

SD-Card



Title			SD/MMC Card Slot		
Size	Number	Revision			
A3	NP1116B	1.2			
Date:	15-Jun-2023	Sheet	of 10/11		
File:	C:\naitou\mp1116\mp1116B(101).Ddb	Drawn By:	R.Naitou		



Title			MIPI CSI Interface		
Size	Number	Revision			
A3	NP1116B	1.2			
Date:	15-Jun-2023	Sheet of	11/11		
File:	C:\naitou\mp1116\mp1116B(lolj).Ddb	Drawn By:	R.Naitou		