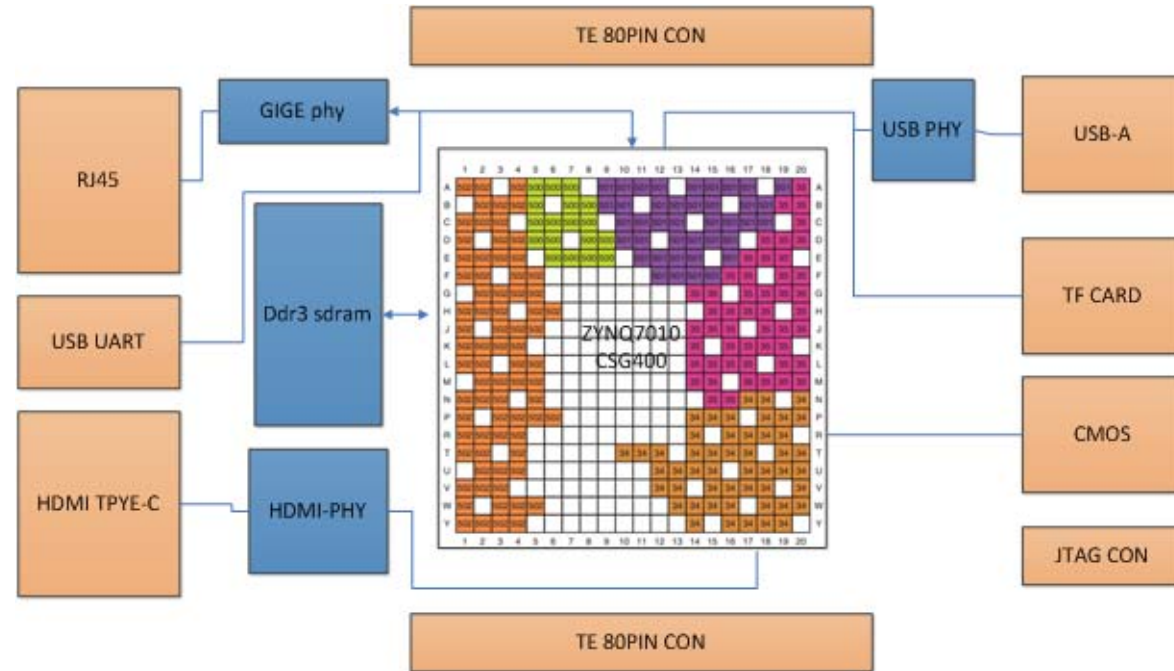
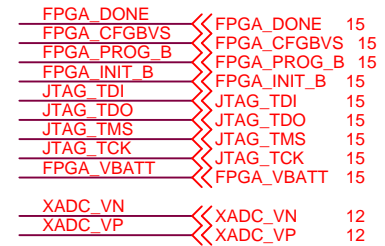
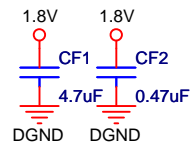
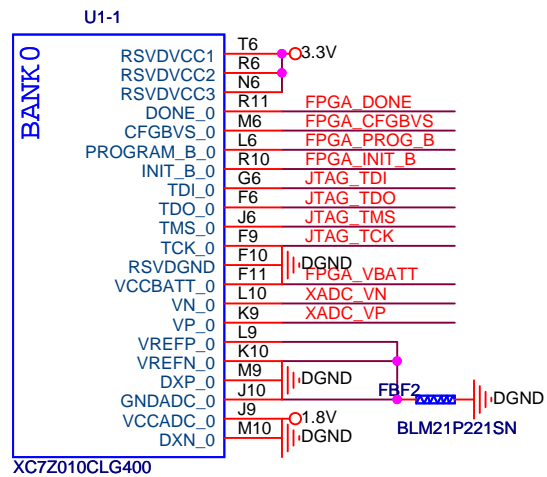


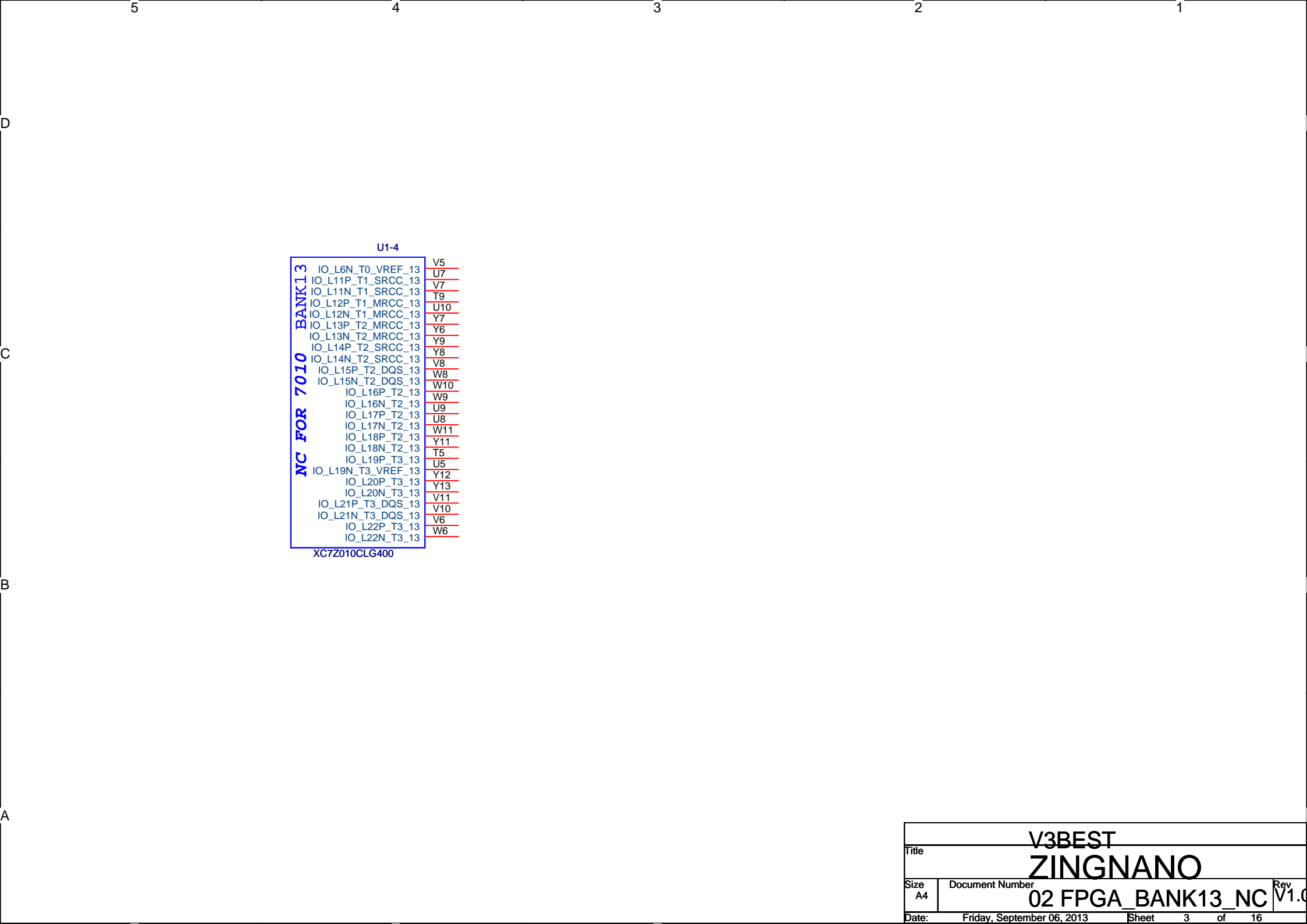
ZINGNANO V1.0

PAGE1 00 TOP
 PAGE2 01 FPGA_BANK0
 PAGE3 02 FPGA_BANK13_NC
 PAGE4 03 FPGA_BANK34_35
 PAGE5 04 FPGA_BANK500_501
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power on sequence
 1 ISL8014A->1.0V
 2 LM26420->1.8V,1.5V





BANK 34		R19	HDMI_G6
IO_0_34		T11	HDMI_DE
IO_L1P_T0_34		T10	HDMI_VS
IO_L1N_T0_34		T12	HDMI_I2SCLK
IO_L2P_T0_34		U12	HDMI_I2SD
IO_L2N_T0_34		U13	FPGA_PUDC
IO_L3P_T0_DQS_PUDC_B_34		V13	HDMI_I2SWS
IO_L3N_T0_DQS_34		V12	HDMI_HS
IO_L4P_T0_34		W13	HDMI_I2SMCLK
IO_L4N_T0_34		T14	HDMI_B4
IO_L5P_T0_34		T15	GPIOB1
IO_L5N_T0_34		P14	HDMI_B2
IO_L6P_T0_34		R14	HDMI_R7
IO_L6N_T0_VREF_34		Y16	HDMI_G0
IO_L7P_T1_34		Y17	HDMI_B5
IO_L7N_T1_34		W14	HDMI_B0
IO_L8P_T1_34		Y14	HDMI_B1
IO_L8N_T1_34		T16	HDMI_R5
IO_L9P_T1_DQS_34		U17	GPIOA31
IO_L9N_T1_DQS_34		V15	HDMI_B3
IO_L10P_T1_34		W15	GPIOA33
IO_L10N_T1_34		U14	GPIOB2
IO_L11P_T1_SRCC_34		U15	GPIOB3
IO_L11N_T1_SRCC_34		U18	HDMI_CLK
IO_L12P_T1_MRCC_34		U19	GPIOA24
IO_L12N_T1_MRCC_34		N18	MCLK
IO_L13P_T2_MRCC_34		P19	GPIOA17
IO_L13N_T2_MRCC_34		N20	GPIOA15
IO_L14P_T2_SRCC_34		P20	GPIOA16
IO_L14N_T2_SRCC_34		T20	HDMI_R4
IO_L15P_T2_DQS_34		U20	GPIOA20
IO_L15N_T2_DQS_34		V20	HDMI_G3
IO_L16P_T2_34		W20	GPIOA27
IO_L16N_T2_34		Y18	GPIOA29
IO_L17P_T2_34		Y19	GPIOA26
IO_L17N_T2_34		V16	HDMI_B6
IO_L18P_T2_34		W16	GPIOA30
IO_L18N_T2_34		R16	HDMI_B7
IO_L19P_T3_34		R17	HDMI_G5
IO_L19N_T3_VREF_34		T17	HDMI_G7
IO_L20P_T3_34		R18	GPIOA23
IO_L20N_T3_34		V17	HDMI_G1
IO_L21P_T3_DQS_34		V18	GPIOA25
IO_L21N_T3_DQS_34		W18	HDMI_G2
IO_L22P_T3_34		W19	HDMI_G4
IO_L22N_T3_34		N17	HDMI_R0
IO_L23P_T3_34		P18	GPIOA13
IO_L23N_T3_34		P15	HDMI_R3
IO_L24P_T3_34		P16	GPIOA19
IO_L24N_T3_34		T19	GPIOA21
IO_25_34			

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BANK 35		IO_0_35	
IO_L1P_T0_AD0P_35		IO_L1N_T0_AD0N_35	
IO_L2P_T0_AD8P_35		IO_L2N_T0_AD8N_35	
IO_L3P_T0_DQS_AD1P_35		IO_L3N_T0_DQS_AD1N_35	
IO_L4P_T0_35		IO_L4N_T0_35	
IO_L5P_T0_AD9P_35		IO_L5N_T0_AD9N_35	
IO_L6P_T0_35		IO_L6N_T0_VREF_35	
IO_L7P_T1_AD2P_35		IO_L7N_T1_AD2N_35	
IO_L8P_T1_AD10P_35		IO_L8N_T1_AD10N_35	
IO_L9P_T1_DQS_AD3P_35		IO_L9N_T1_DQS_AD3N_35	
IO_L10P_T1_AD11P_35		IO_L10N_T1_AD11N_35	
IO_L11P_T1_SRCC_35		IO_L11N_T1_SRCC_35	
IO_L12P_T1_MRCC_35		IO_L12N_T1_MRCC_35	
IO_L13P_T2_MRCC_35		IO_L13N_T2_MRCC_35	
IO_L14P_T2_AD4P_SRCC_35		IO_L14N_T2_AD4N_SRCC_35	
IO_L15P_T2_DQS_AD12P_35		IO_L15N_T2_DQS_AD12N_35	
IO_L16P_T2_35		IO_L16N_T2_35	
IO_L17P_T2_AD5P_35		IO_L17N_T2_AD5N_35	
IO_L18P_T2_AD13P_35		IO_L18N_T2_AD13N_35	
IO_L19P_T3_35		IO_L19N_T3_VREF_35	
IO_L20P_T3_AD6P_35		IO_L20N_T3_AD6N_35	
IO_L21P_T3_DQS_AD14P_35		IO_L21N_T3_DQS_AD14N_35	
IO_L22P_T3_AD7P_35		IO_L22N_T3_AD7N_35	
IO_L23P_T3_35		IO_L23N_T3_35	
IO_L24P_T3_AD15P_35		IO_L24N_T3_AD15N_35	
IO_25_35			

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G14	CMOS_RST
C20	CMOS_D6
B20	CMOS_PIO1
B19	CMOS_D7
A20	CMOS_D4
E17	PUSH
D18	CMOS_D10
D19	CMOS_D11
D20	CMOS_D8
E18	CMOS_D9
E19	CMOS_D5
F16	CMOS_VS
F17	CMOS_HS
M19	GPIOB0
M20	GPIOA11
M17	HDMI_R6
M18	GPIOA12
L19	GPIOA7
L20	GPIOA28
K19	GPIOA3
J19	GPIOA6
L16	GPIOA_CLKP
L17	GPIOA_CLKN
K17	CMOS_PCLK
K18	GPIOA14
H16	CMOS_XCLK
H17	CMOS_STROBE
J18	GPIOA0
H18	CMOS_D1
F19	CMOS_PIO0
F20	LEDG2
G17	CMOS_D3
G18	CMOS_D2
J20	GPIOA1
H20	GPIOA2
G19	CMOS_D0
G20	LEDG1
H15	CMOS_PWD
G15	LEDG3
K14	GPIOA8
J14	GPIOA10
N15	GPIOA32
N16	HDMI_R2
L14	GPIOA9
L15	GPIOA18
M14	HDMI_R1
M15	GPIOA22
K16	GPIOA5
J16	LEDG0
J15	GPIOA4

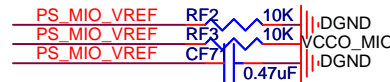
HDMI_CLK	>>>	HDMI_CLK	12,13
HDMI_DE	>>>	HDMI_DE	12,13
HDMI_HS	>>>	HDMI_HS	12,13
HDMI_VS	>>>	HDMI_VS	12,13
HDMI_R[7:0]	<<<	HDMI_R[7:0]	12,13
HDMI_G[7:0]	<<<	HDMI_G[7:0]	12,13
HDMI_B[7:0]	<<<	HDMI_B[7:0]	12,13
HDMI_I2SD	<<<	HDMI_I2SD	12,13
HDMI_I2SWS	<<<	HDMI_I2SWS	12,13
HDMI_I2SCLK	<<<	HDMI_I2SCLK	12,13
HDMI_I2SMCLK	<<<	HDMI_I2SMCLK	12,13
CMOS_D[11:0]	<<<	CMOS_D[11:0]	14
CMOS_PIO[1:0]	<<<	CMOS_PIO[1:0]	14
CMOS_PCLK	<<<	CMOS_PCLK	14
CMOS_HS	<<<	CMOS_HS	14
CMOS_VS	<<<	CMOS_VS	14
CMOS_XCLK	<<<	CMOS_XCLK	14
CMOS_RST	<<<	CMOS_RST	14
CMOS_PWD	<<<	CMOS_PWD	14
CMOS_STROBE	<<<	CMOS_STROBE	14
LEDG[3:0]	<<<	LEDG[3:0]	12
PUSH	<<<	PUSH	12
MCLK	<<<	MCLK	12
GPIOA_CLKP	<<<	GPIOA_CLKP	12
GPIOA_CLKN	<<<	GPIOA_CLKN	12
GPIOA[33:0]	<<<	GPIOA[33:0]	12
GPIOB[3:0]	<<<	GPIOB[3:0]	12

U1-5	
PS_CLK_500	E7 PS_CLK
PS_POR_B_500	C7 PS_POR#
BANK500	
PS_MIO0_500	E6 NAND_CS
PS_MIO1_500	A7 PS_LED0
PS_MIO2_500	B8 NAND_ALE
PS_MIO3_500	D6 NAND_WE
PS_MIO4_500	B7 NAND_D2 mio4
PS_MIO5_500	A6 NAND_D0 mio5
PS_MIO6_500	A5 NAND_D1 mio6
PS_MIO7_500	D8 NAND_CLE
PS_MIO8_500	D5 NAND_RD mio8
PS_MIO9_500	B5 NAND_D4
PS_MIO10_500	E9 NAND_D5
PS_MIO11_500	C6 NAND_D6
PS_MIO12_500	D9 NAND_D7
PS_MIO13_500	E8 NAND_D3
PS_MIO14_500	C5 NAND_BUSY
PS_MIO15_500	C8 PS_LED1

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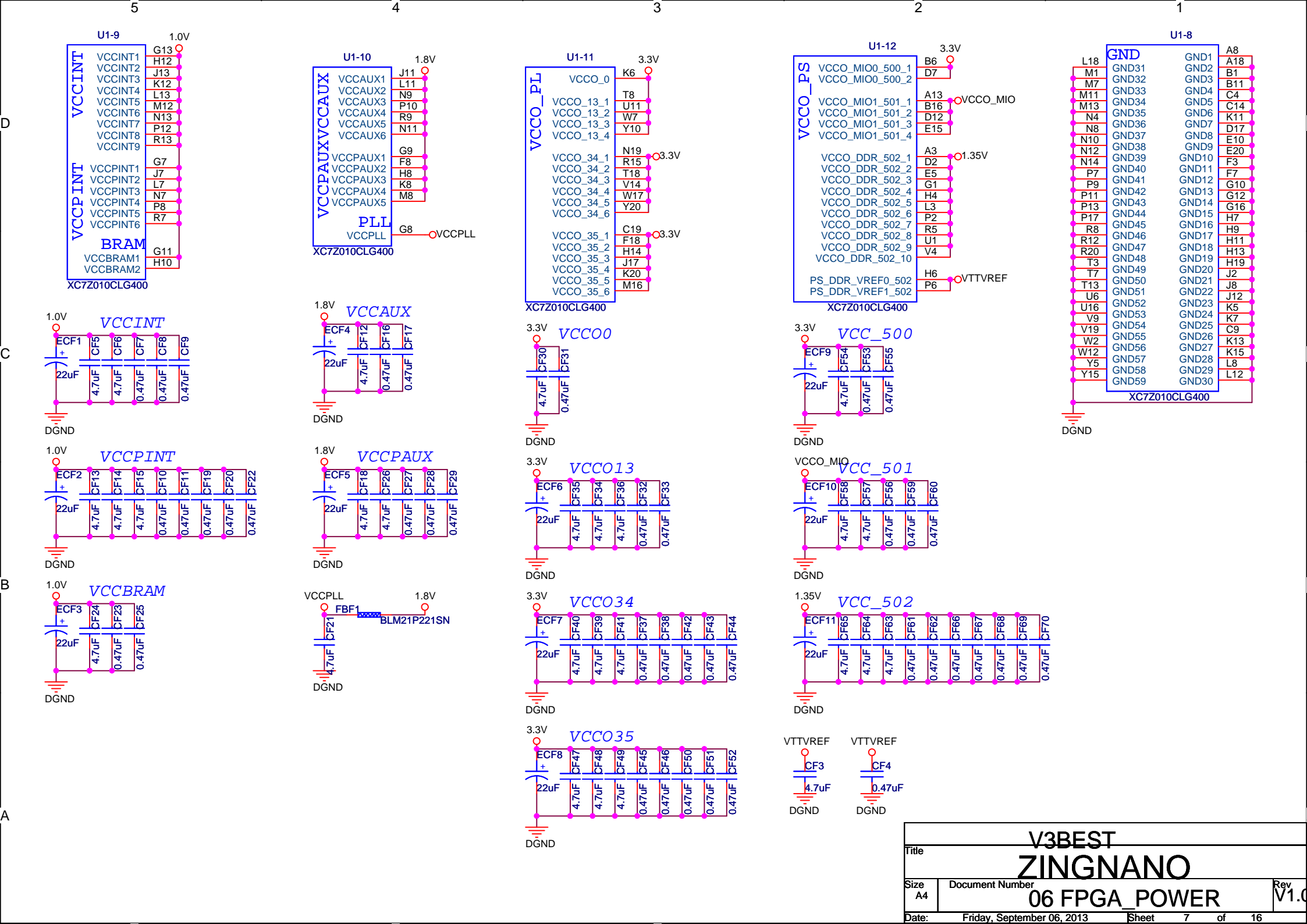
U1-6	
PS_MIO_VREF_501	E11 PS_MIO_VREF
PS_SRST_B_501	B10 PS_SRST#
BANK501	
PS_MIO16_501	A19 PHY_TX_CLK
PS_MIO17_501	E14 PHY_TXD0
PS_MIO18_501	B18 PHY_TXD1
PS_MIO19_501	D10 PHY_TXD2
PS_MIO20_501	A17 PHY_TXD3
PS_MIO21_501	F14 PHY_TX_CTRL
PS_MIO22_501	B17 PHY_RX_CLK
PS_MIO23_501	D11 PHY_RXD0
PS_MIO24_501	A16 PHY_RXD1
PS_MIO25_501	F15 PHY_RXD2
PS_MIO26_501	A15 PHY_RXD3
PS_MIO27_501	D13 PHY_RX_CTRL
PS_MIO28_501	C16 USB_DATA4
PS_MIO29_501	C13 USB_DIR
PS_MIO30_501	C15 USB_STP
PS_MIO31_501	E16 USB_NXT
PS_MIO32_501	A14 USB_DATA0
PS_MIO33_501	D15 USB_DATA1
PS_MIO34_501	A12 USB_DATA2
PS_MIO35_501	F12 USB_DATA3
PS_MIO36_501	A11 USB_CLKOUT
PS_MIO37_501	A10 USB_DATA5
PS_MIO38_501	E13 USB_DATA6
PS_MIO39_501	C18 USB_DATA7
PS_MIO40_501	D14 SD_CLK
PS_MIO41_501	C17 SD_CMD
PS_MIO42_501	E12 SD_DAT0
PS_MIO43_501	A9 SD_DAT1
PS_MIO44_501	F13 SD_DAT2
PS_MIO45_501	B15 SD_DAT3
PS_MIO46_501	D16 UART0_RX
PS_MIO47_501	B14 UART0_TX
PS_MIO48_501	B12 UART1_TX
PS_MIO49_501	C12 UART1_RX
PS_MIO50_501	B13 I2C_SCL
PS_MIO51_501	B9 I2C_SDA
PS_MIO52_501	C10 PHY_MDC
PS_MIO53_501	C11 PHY_MDIO

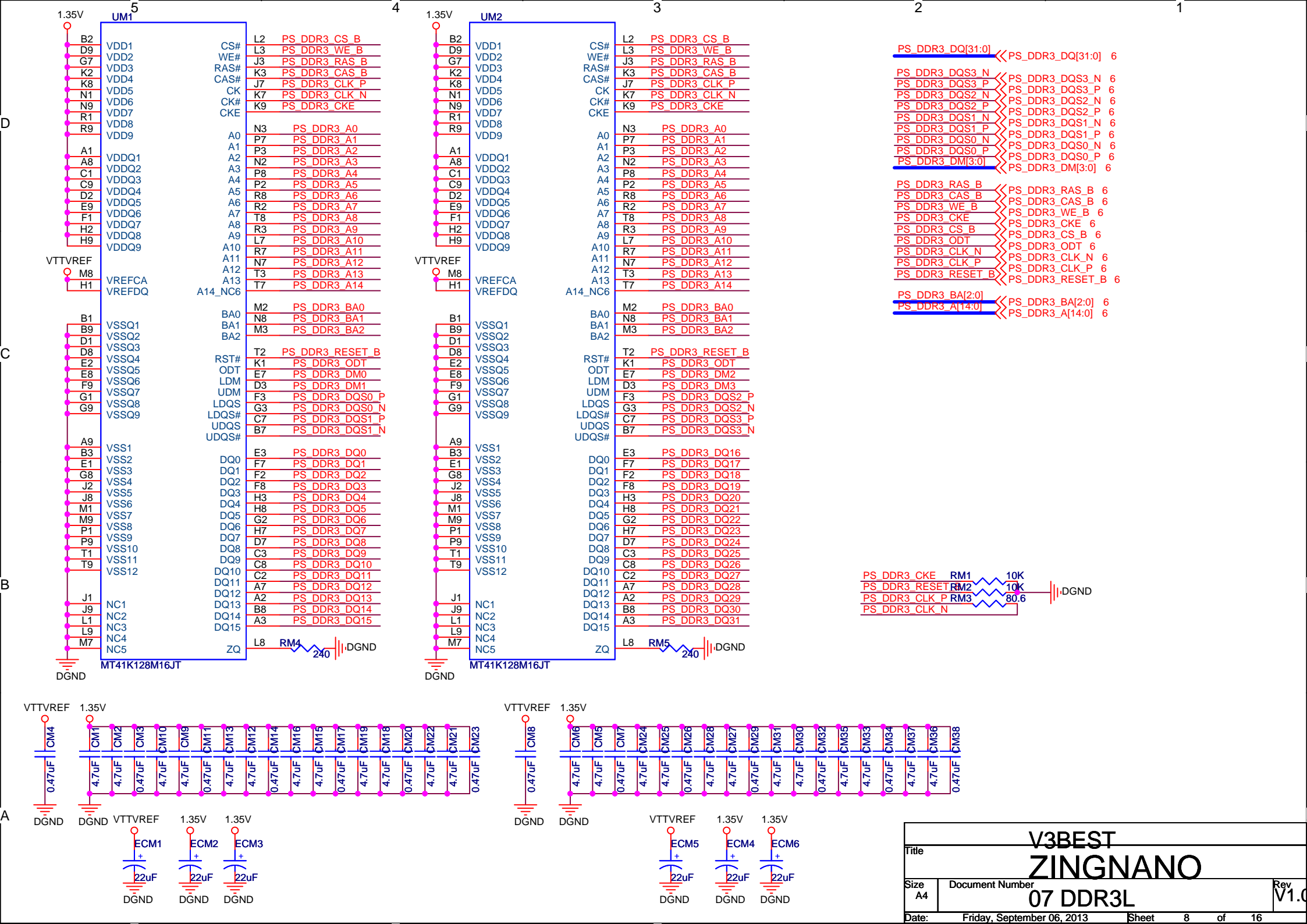
XC7Z010CLG400



set to 0.9V with VCCO_MIO1 at 1.8V.
In any other case, tie to VCCO_MIO1

PS_CLK	<< PS_CLK	12
PS_POR#	<< PS_POR#	10,11,15
PS_SRST#	<< PS_SRST#	15
PS_LED[1:0]	<< PS_LED[1:0]	12
NAND_CS	<< NAND_CS	9,15
NAND_ALE	<< NAND_ALE	9,15
NAND_WE	<< NAND_WE	9,15
NAND_CLE	<< NAND_CLE	9,15
NAND_RD	<< NAND_RD	9,15
NAND_BUSY	<< NAND_BUSY	9
NAND_D[7:0]	<< NAND_D[7:0]	9,15
USB_DATA[7:0]	<< USB_DATA[7:0]	11
USB_CLKOUT	<< USB_CLKOUT	11
USB_STP	<< USB_STP	11
USB_NXT	<< USB_NXT	11
USB_DIR	<< USB_DIR	11
PHY_RXD[3:0]	<< PHY_RXD[3:0]	10
PHY_TXD[3:0]	<< PHY_TXD[3:0]	10
PHY_RX_CLK	<< PHY_RX_CLK	10
PHY_TX_CLK	<< PHY_TX_CLK	10
PHY_RX_CTRL	<< PHY_RX_CTRL	10
PHY_TX_CTRL	<< PHY_TX_CTRL	10
PHY_MDIO	<< PHY_MDIO	10
PHY_MDC	<< PHY_MDC	10
SD_CMD	<< SD_CMD	9
SD_CLK	<< SD_CLK	9
SD_DAT[3:0]	<< SD_DAT[3:0]	9
UART0_TX	<< UART0_TX	12
UART0_RX	<< UART0_RX	12
UART1_TX	<< UART1_TX	12
UART1_RX	<< UART1_RX	12
I2C_SCL	<< I2C_SCL	14
I2C_SDA	<< I2C_SDA	14



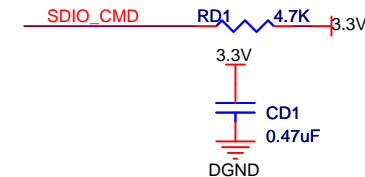
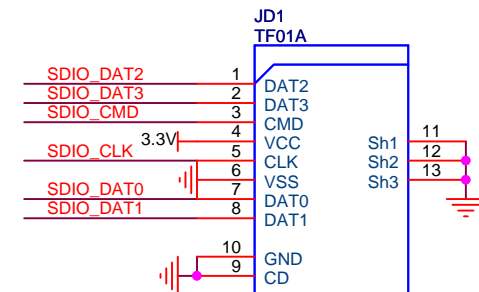
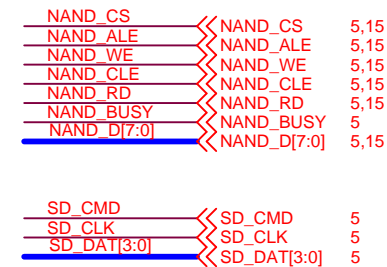
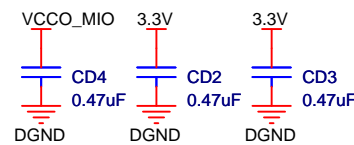
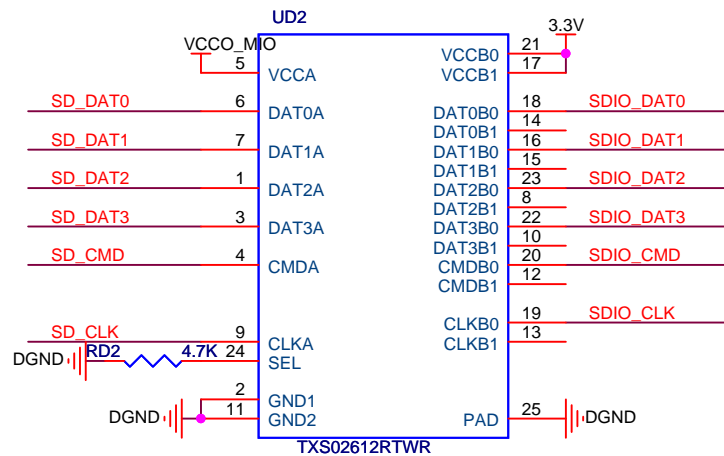
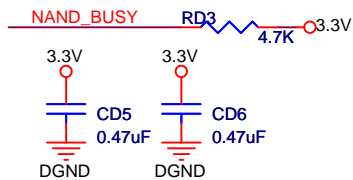
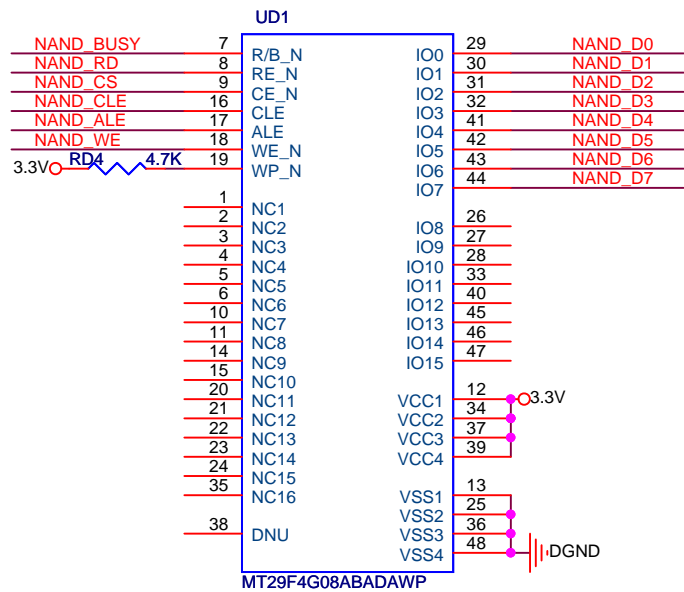


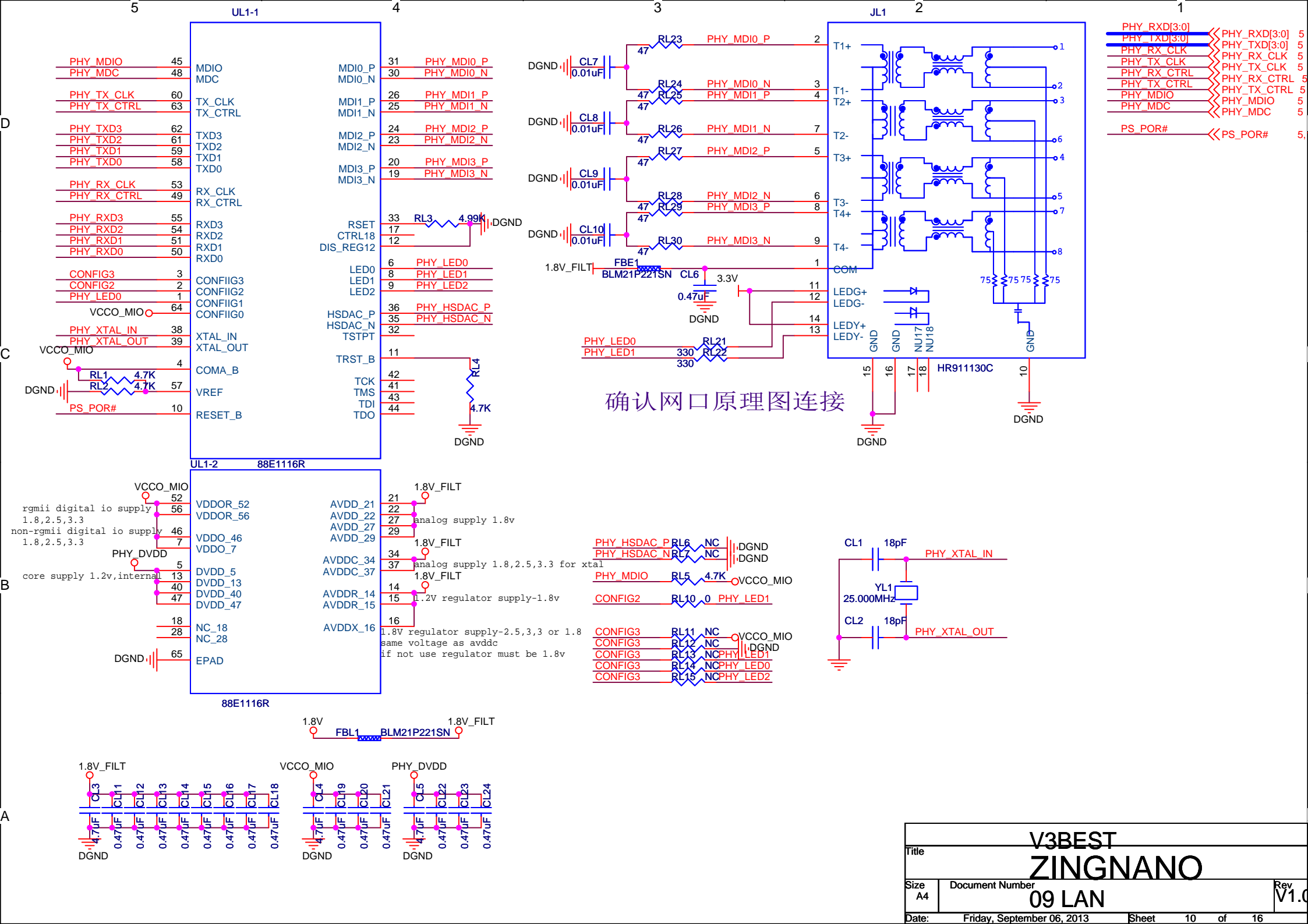
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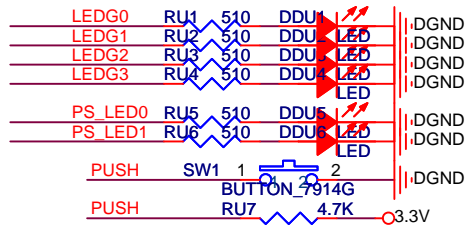
C

B

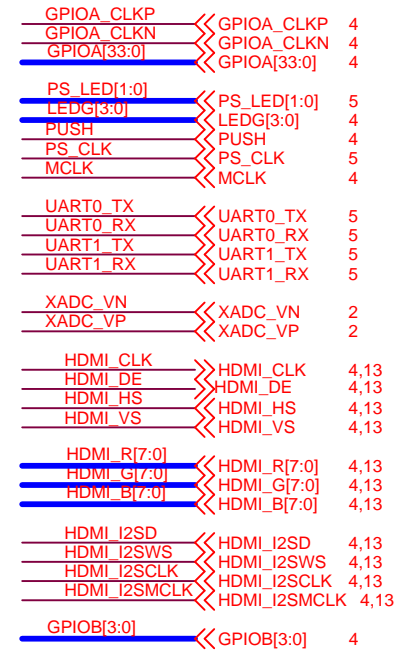
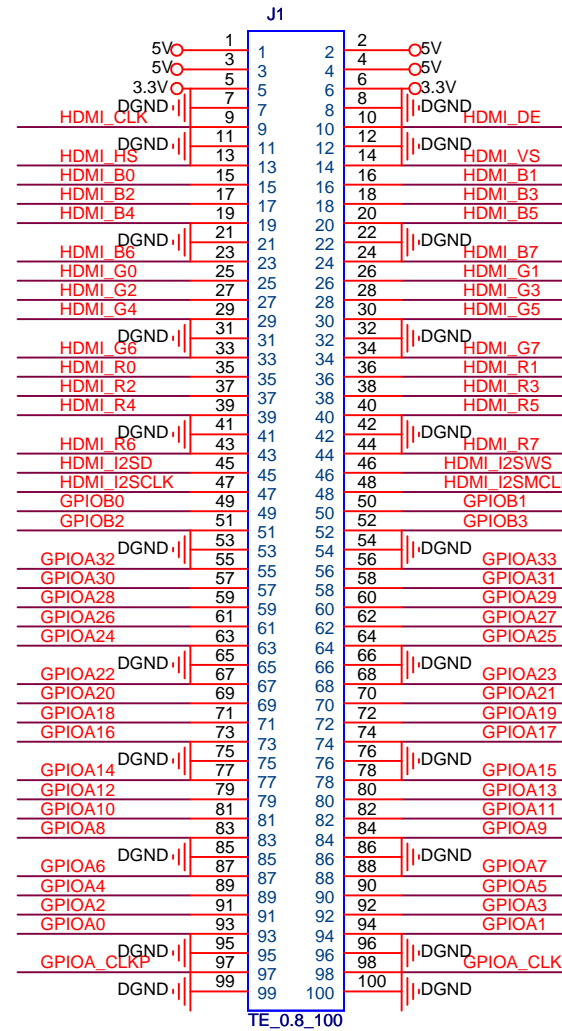
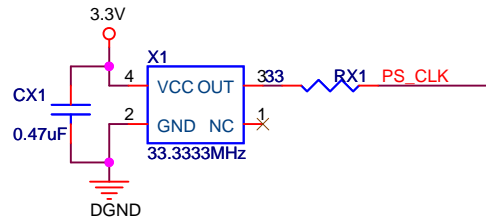
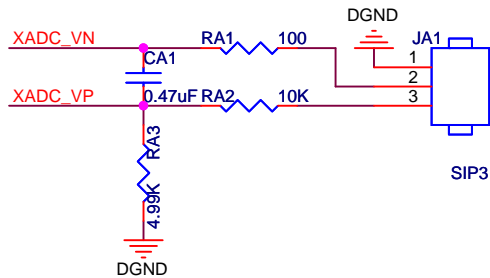
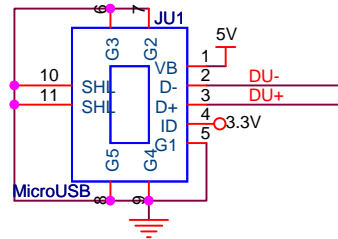
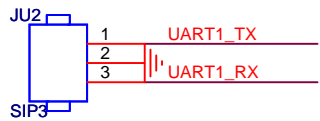
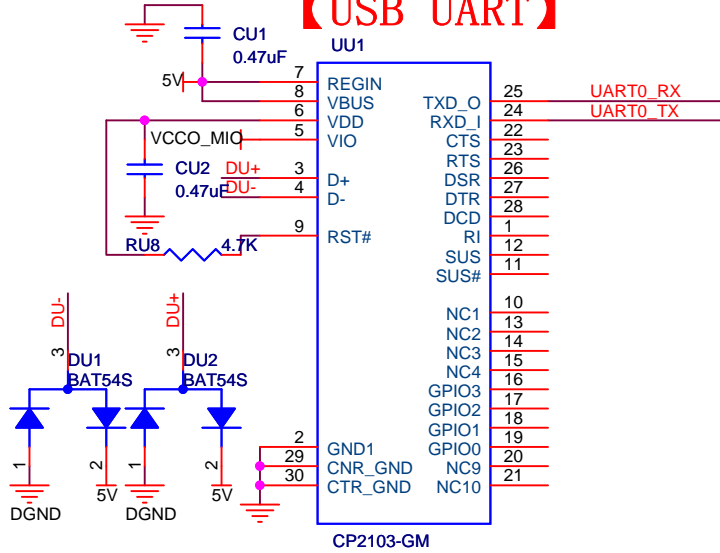
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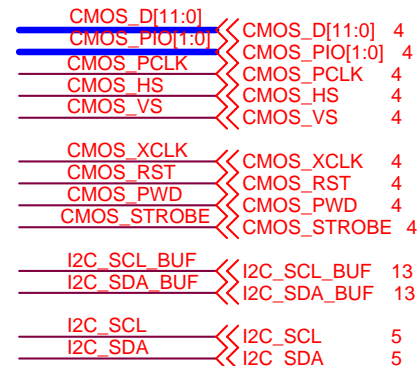
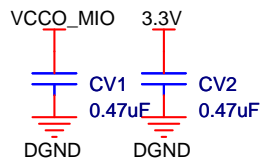
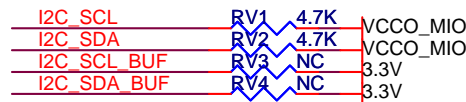
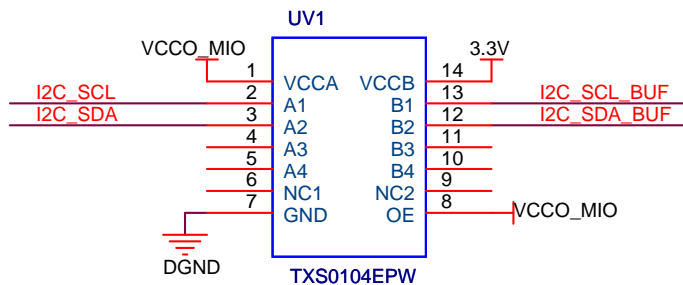
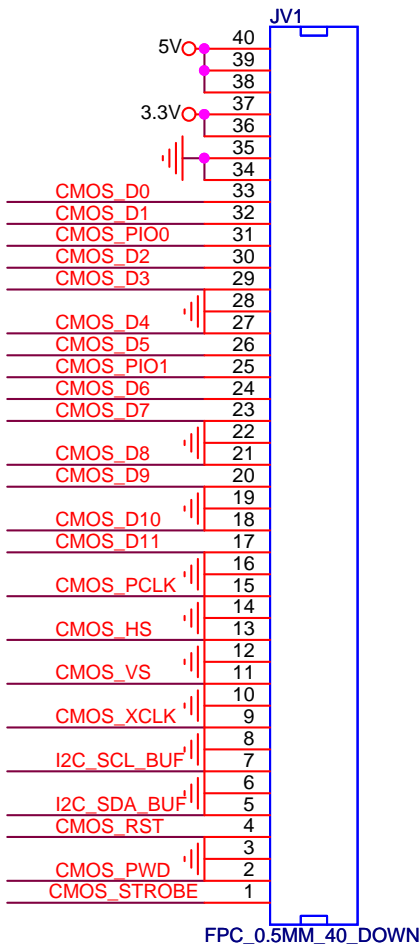


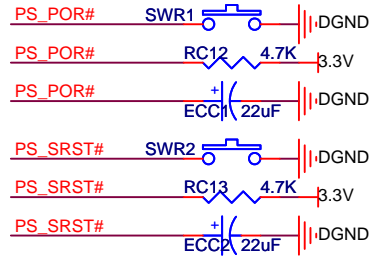
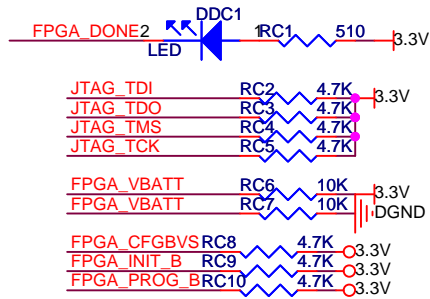




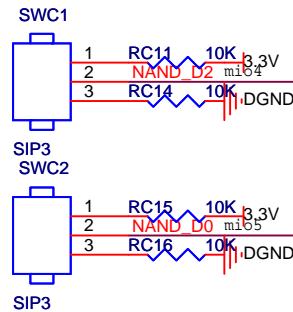
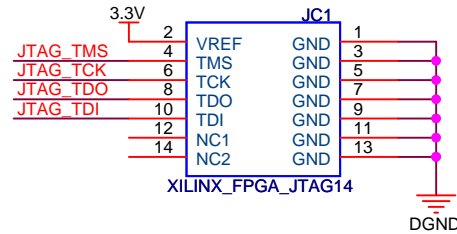
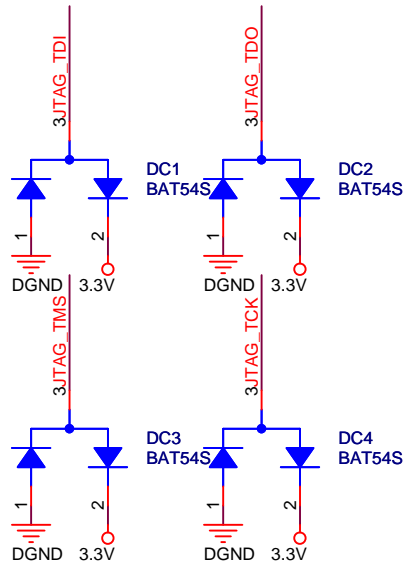
【USB UART】







FPGA_DONE	<< FPGA_DONE	2
FPGA_CFGBVS	<< FPGA_CFGBVS	2
FPGA_PROG_B	<< FPGA_PROG_B	2
FPGA_INIT_B	<< FPGA_INIT_B	2
JTAG_TDI	<< JTAG_TDI	2
JTAG_TDO	<< JTAG_TDO	2
JTAG_TMS	<< JTAG_TMS	2
JTAG_TCK	<< JTAG_TCK	2
FPGA_VBATT	<< FPGA_VBATT	2
PS_POR#	<< PS_POR#	5,10,11
PS_SRST#	<< PS_SRST#	5
NAND_RD	<< NAND_RD	5,9
NAND_D[7:0]	<< NAND_D[7:0]	5,9
NAND_CS	<< NAND_CS	5,9
NAND_ALE	<< NAND_ALE	5,9
NAND_WE	<< NAND_WE	5,9
NAND_CLE	<< NAND_CLE	5,9



MIO0=0 SDCard CD
 NAND_CS RC24 0 DGND
 MIO2=0 Cascaded JTAG
 NAND_ALE RC23 10K DGND
 MIO3=0
 NAND_WE RC22 10K DGND
 MIO7=0 BANK0 3.3V
 NAND_CLE RC21 10K DGND

	MIO[6]	MIO[5]	MIO[4]	MIO[3]
JTAG	0	0	0	0
NAND	0	1	0	0
SD	1	1	0	0
PLL Used	0			
PLL Bypassed	1			

MIO Bank1 Voltage
 MIO8 0 2.5 V, 3.3 V
 MIO8 1 1.8 V

NAND_D1	mio6	RC17	NC	3.3V
NAND_D1	mio6	RC18	10K	DGND
NAND_RD	mio8	RC19	NC	3.3V
NAND_RD	mio8	RC20	10K	DGND

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