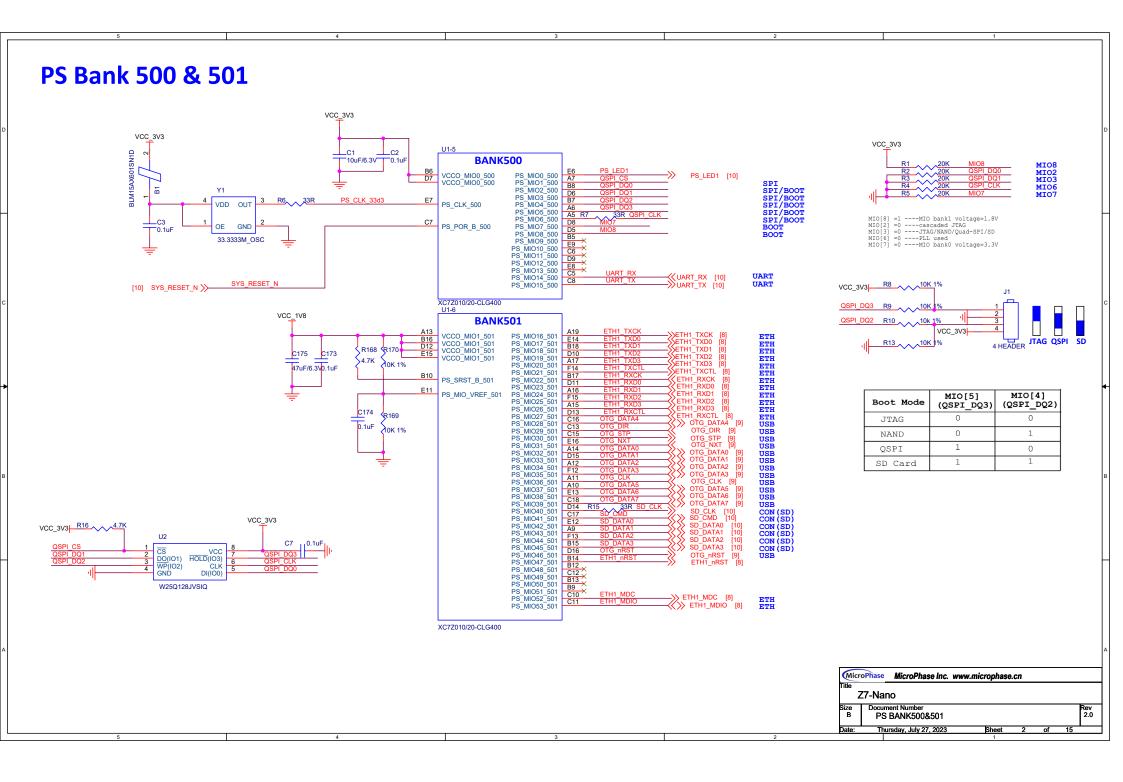
Z7-Nano Block Diagram

REV	DATE	PAGES	DESCRIPTION	1
1.0	13/03/2021	All	Rev 1.0 Release	1
				1
				7
				Ⅎ
				4
				1
				4
				┪

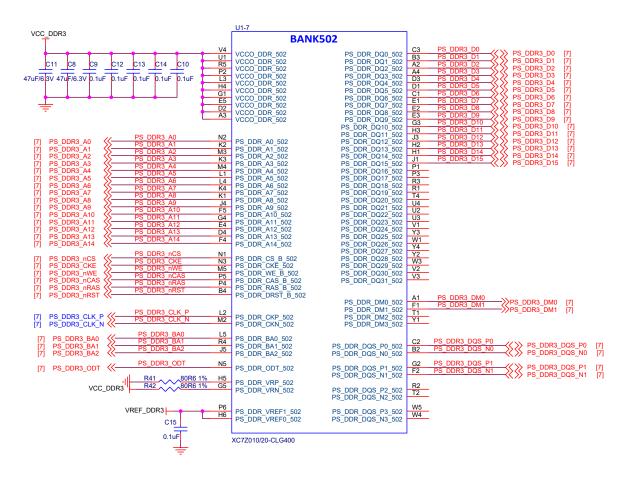
PAGE	DESCRIPTION
1	Title, Notes, Block Diagram, Revision History
2	PS BANK500&501
3	PS BANK502
4	PL BANK0&13
5	PL BANK34&35
6	ZYNQ Power
7	DDR3 RAM
8	PS ETH
9	PS USB
10	PS UART SD KEY LED
11	PL ETH
12	HDMI-TX
13	40Pin GPIO_EEPROM
14	USB-JTAG
15	Power
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	

Copyright 2018, MicroPhase Inc. All Rights Reserved.

This Material may not be reprooduced, distributed, republished, displayed, posted, transmitted or copied in any form or by any mean without the prior written permission of MicroPhase Inc.



PS DDR Interface



MicroPhase Inc. www.microphase.cn

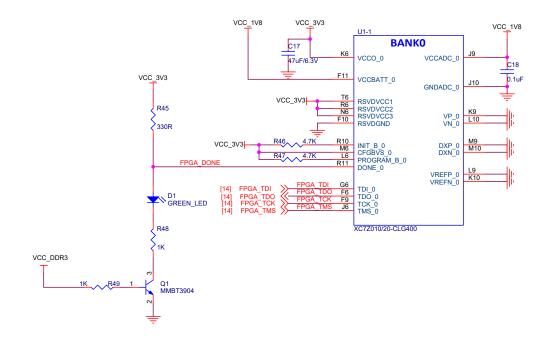
Title

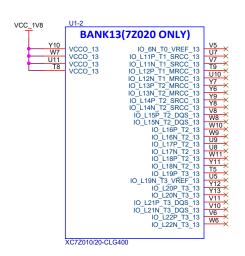
Z7-Nano

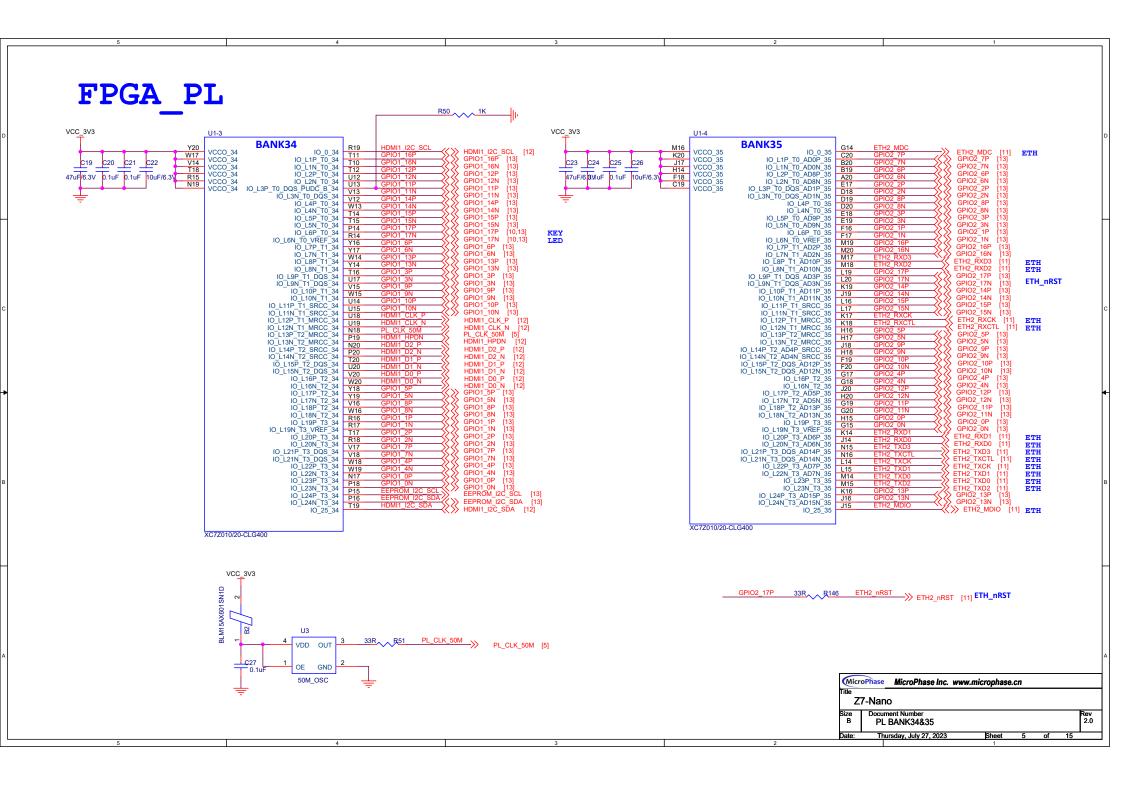
Size Document Number PS BANK502

Date: Thursday, July 27, 2023 Sheet 3 of 15

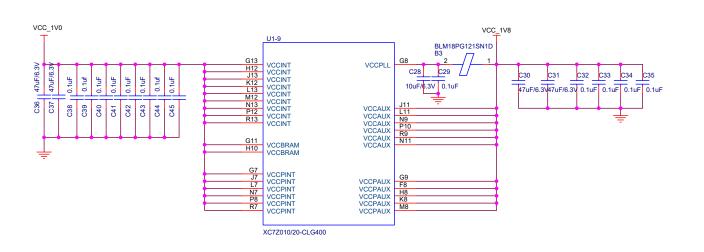
ZYNQ_CONFIG

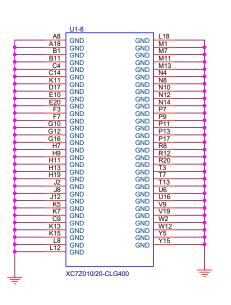


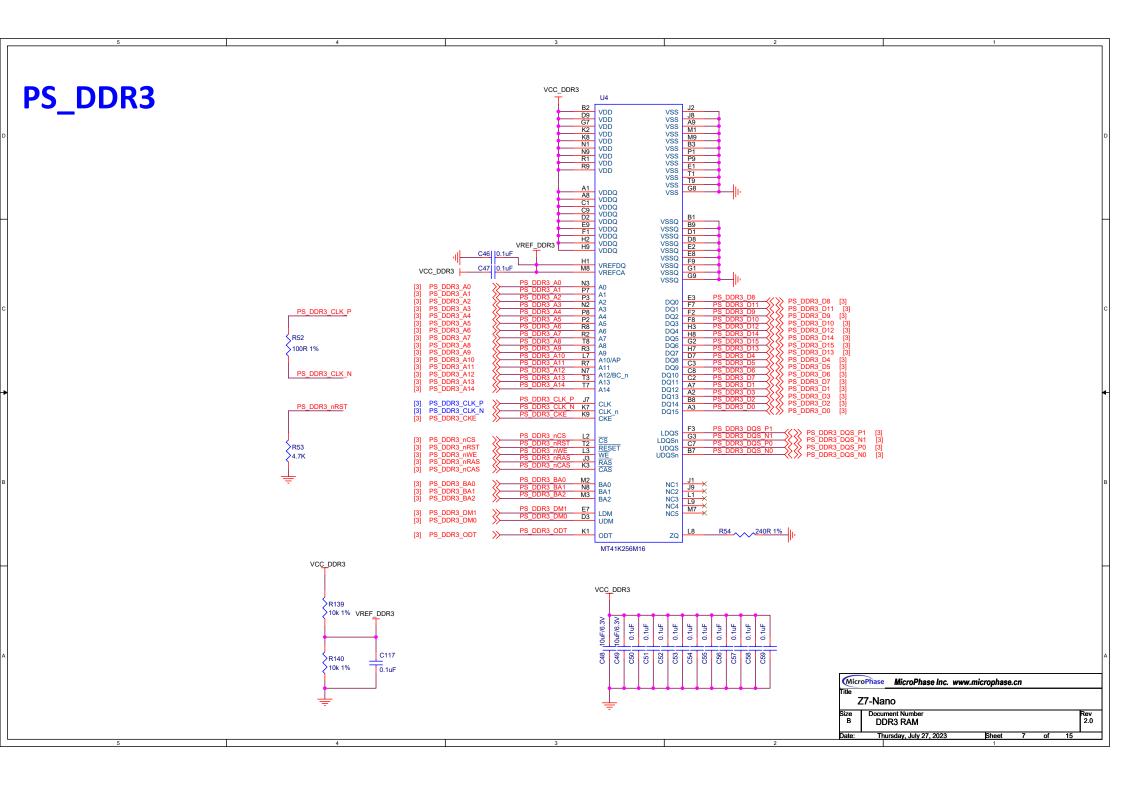


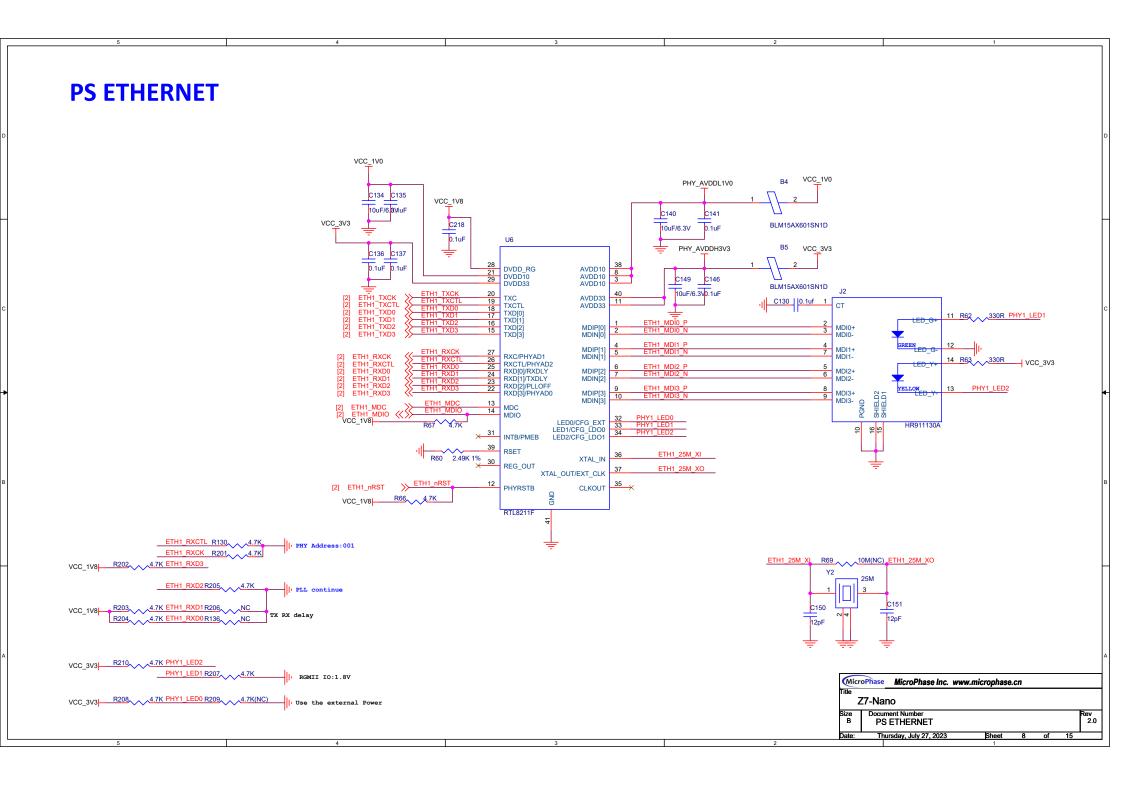


ZYNQ POWER

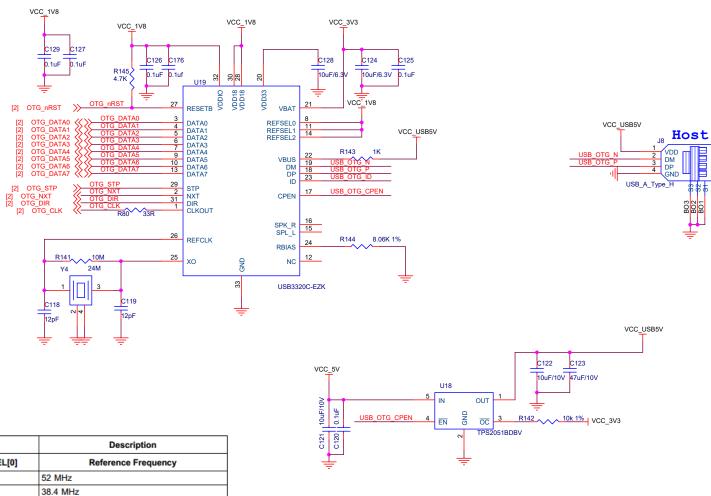






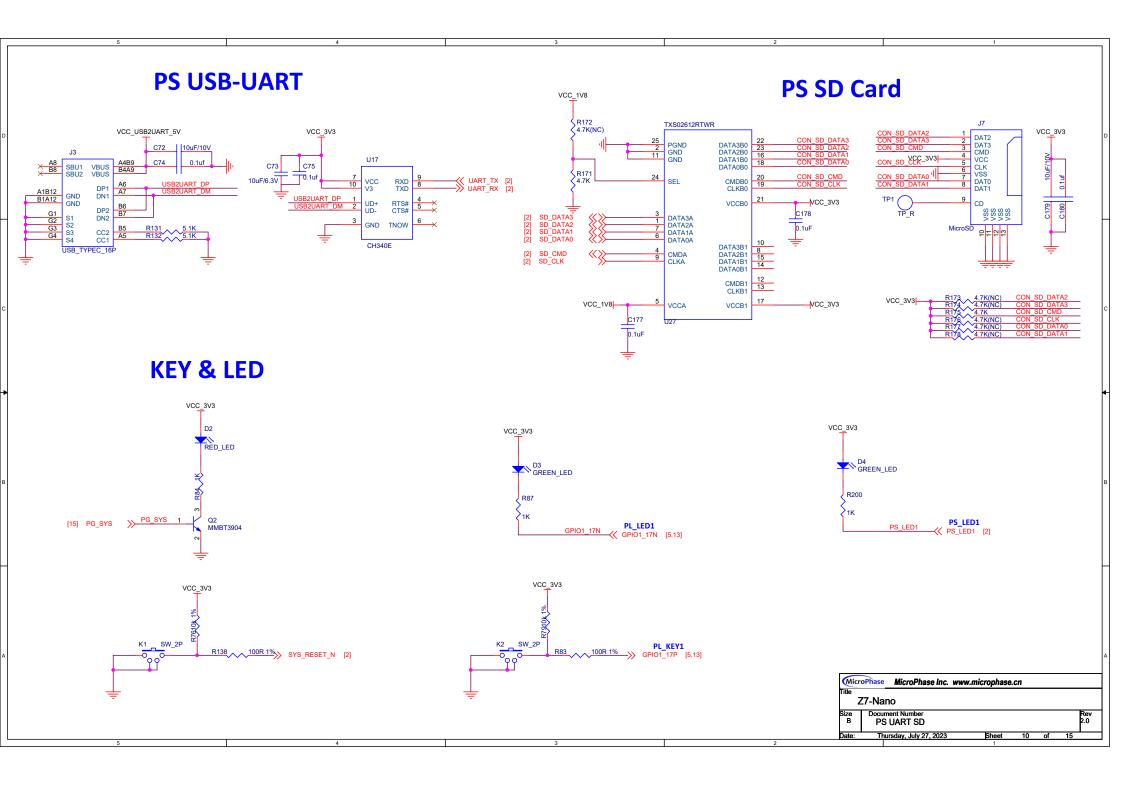


PS USB OTG

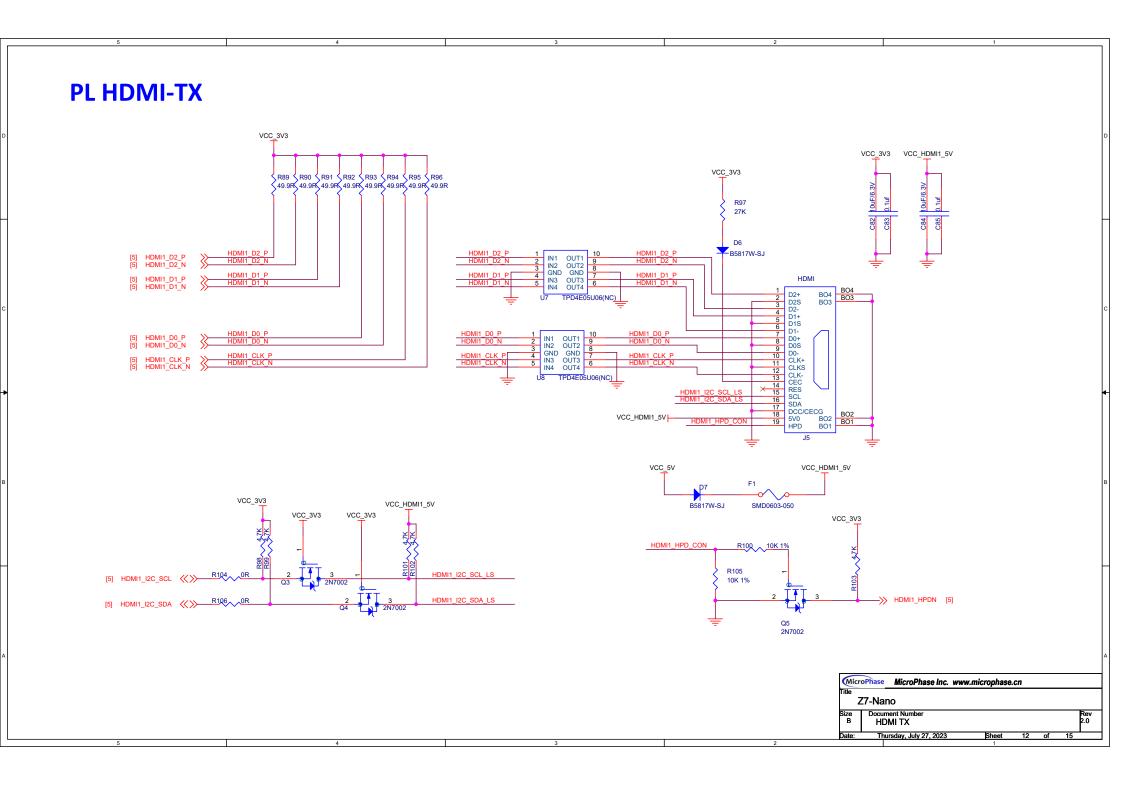


	Configuration Pins	Description				
REFSEL[2]	REFSEL[1]	REFSEL[0]	Reference Frequency			
0	0	0	52 MHz			
0	0	1	38.4 MHz			
0	1	0	12 MHz			
0	1	1	27 MHz			
1	0	0	13 MHz			
1	0	1	19.2 MHz			
1	1	0	26 MHz			
1	1	1	24 MHz			

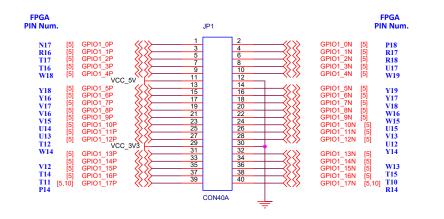
/	oPhase MicroPhase Inc. v	ww.microphase.	<i>,</i> 111			
Title						
7	Z7-Nano					
_						
Size	Document Number					Rev
В	I PS USB					2.0
						1
Date:	Thursday, July 27, 2023	Sheet	9	of	15	
			_			

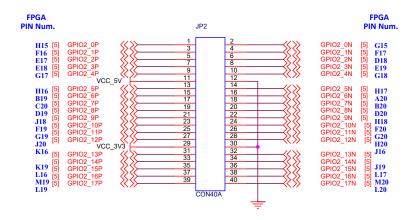


PL ETHERNET VCC_1V0 B8 VCC_1V0 PHY_AVDDL1V0 C188 C187 VCC 3V3 10uF/6.**3**MuF C189 VCC_3V3 C228 BLM15AX601SN1D 10uF/6.3V 0.1uF 0.1uF U30 PHY_AVDDH3V3 VCC_3V3 C184 C186 0.1uF 0.1uF DVDD_RG AVDD10 DVDD10 AVDD10 C191 DVDD33 AVDD10 BLM15AX601SN1IC183 ETH2 TXCK ETH2 TXCTI ETH2 TXD0 ETH2 TXD1 ETH2 TXD2 .19 10uF/6.3V0.1uF ETH2_TXCK ETH2_TXCTL ETH2_TXD0 ETH2_TXD1 ETH2_TXD2 AVDD33 19 TXCTL 18 TXD[0] 17 TXD[1] 16 TXD[2] 15 TXD[3] СТ AVDD33 11 R193 330R PHY2_LED1 0.1uf LED G+ MDIP[0] MDI0+ ETH2_TXD3 MDI0-GREEN LED_G-ETH2 MDI1 P ETH2 MDI1 N MDIP[1] MDI1+ ETH2_RXCK ETH2_RXCTL ETH2_RXD0 RXC/PHYAD1 MDIN[1] ETH2_RXCT ETH2_RXD0 ETH2_RXD1 ETH2_RXD2 MDI1-R192 330R PHY2_LED2 26 25 24 23 22 14 RXCTL/PHYAD2 ETH2_MDI2_P ETH2_MDI2_N RXD[0]/RXDLY RXD[1]/TXDLY RXD[2]/PLLOFF MDIP[2] MDI2+ ETH2_RXD1 ETH2_RXD2 MDIN[2] MDI2-ETH2 MDI3 P ETH2_RXD3 RXD[3]/PHYAD0 MDI3+ SHIELD2 SHIELD1 MDI3-MDIN[3] [5] E11. [5] ETH2 No... VCC_3V3 ETH2_MDC 13 ETH2_MDC MDC 14 MDIO ETH2 MDIO «>> R191 4.7K LED0/CFG_EXT HR911130A 9 5 LED1/CFG_LD00 LED2/CFG_LD01 × 31 INTB/PMEB R197 2.49K 1% 30 RSET ETH2_25M_XI XTAL_IN REG_OUT ETH2_25M_XO XTAL_OUT/EXT_CLK [5] ETH2_nRST >> ETH2_nRST CLKOUT 35 × PHYRSTB VCC_3V3 R190 4.7K RTL8211F ETH2_RXCTLR226____4.7K PHY Address:001 ETH2_RXCK_R212____4.7K VCC_3V3| R213 4.7K ETH2_RXD3 ETH2_25M_XI__R156, ____10M(NC)_ETH2_25M_XO Y5 ETH2_RXD2 R217_____4.7K PLL continue R214 4.7K ETH2_RXD1 R220 NC VCC_3V3 TX RX delay C155 R216 4.7K ETH2 RXD0 R224 NC C154 12pF PHY2_LED2 R225_____4.7K PHY2_LED1 R219 4.7K RGMII IO:3.3V MicroPhase Inc. www.microphase.cn VCC 3V3 R221 4.7K PHY2_LED0 R222 4.7K(NC) Use the external Power Z7-Nano Document Number Rev 2.0 PS ETHERNET Thursday, July 27, 2023 Sheet

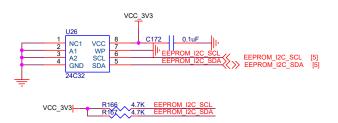


GPIO Interface

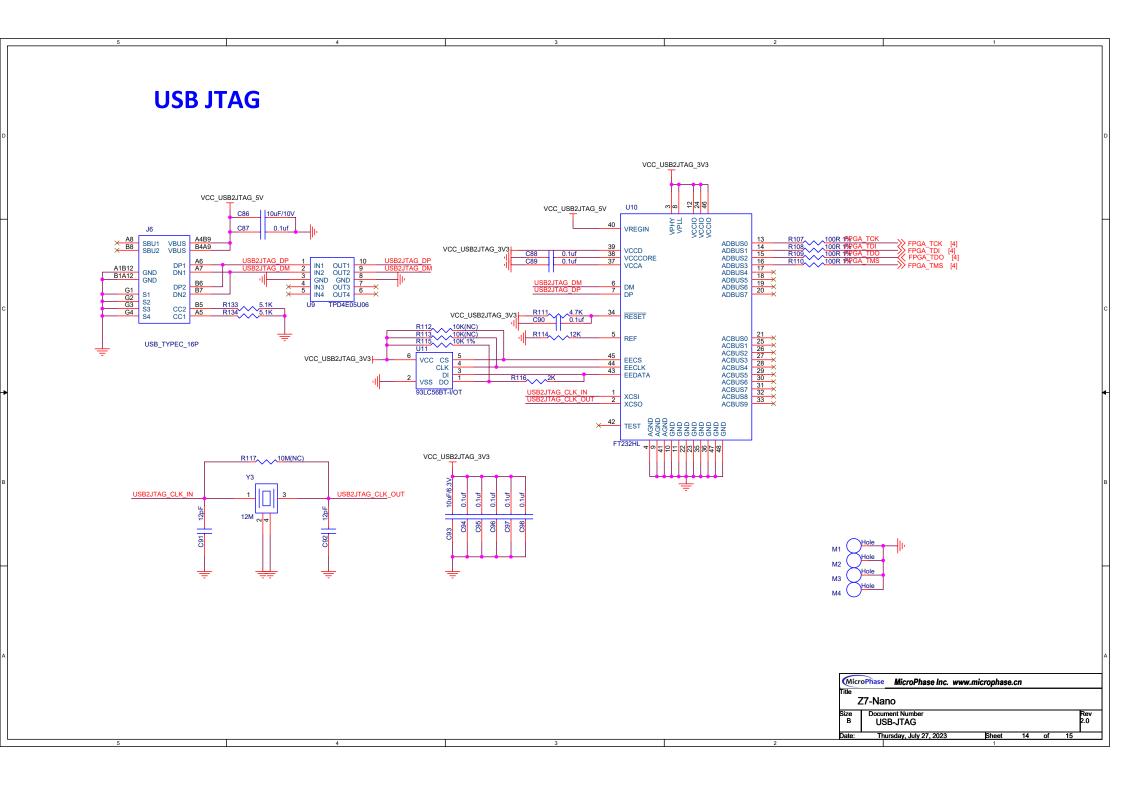




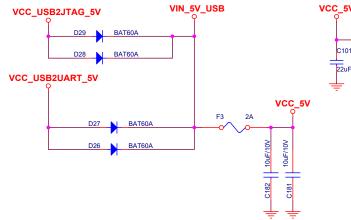
EEPROM

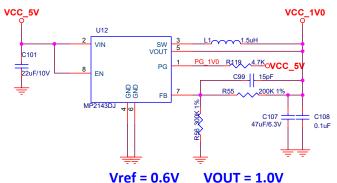


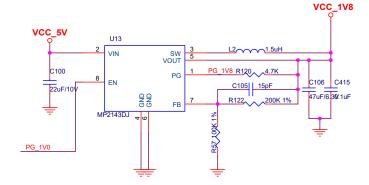
MicroPhase MicroPhase Inc. www.microphase.cn								
Title Z	Z7-Nano							
Size B	Document Number GPIO					Rev 2.0		
Date:	Thursday, July 27, 2023	Sheet	13	of	15			



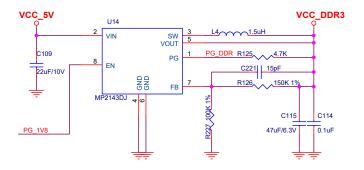




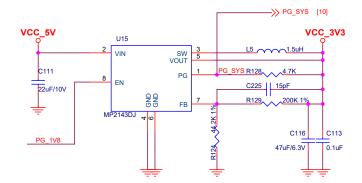




Vref = 0.6V VOUT = 1.8V



Vref = 0.6V VOUT = 1.5V



Vref = 0.6V VOUT = 3.3V

_	MicroPhase Inc. www.microphase.cn									
Title	77-Nano									
Size	Document Number					Rev				
В	Power					2.0				
Date:	Thursday, July 27, 2023	Sheet	15	of	15					
		1								