

REVISION HISTORY

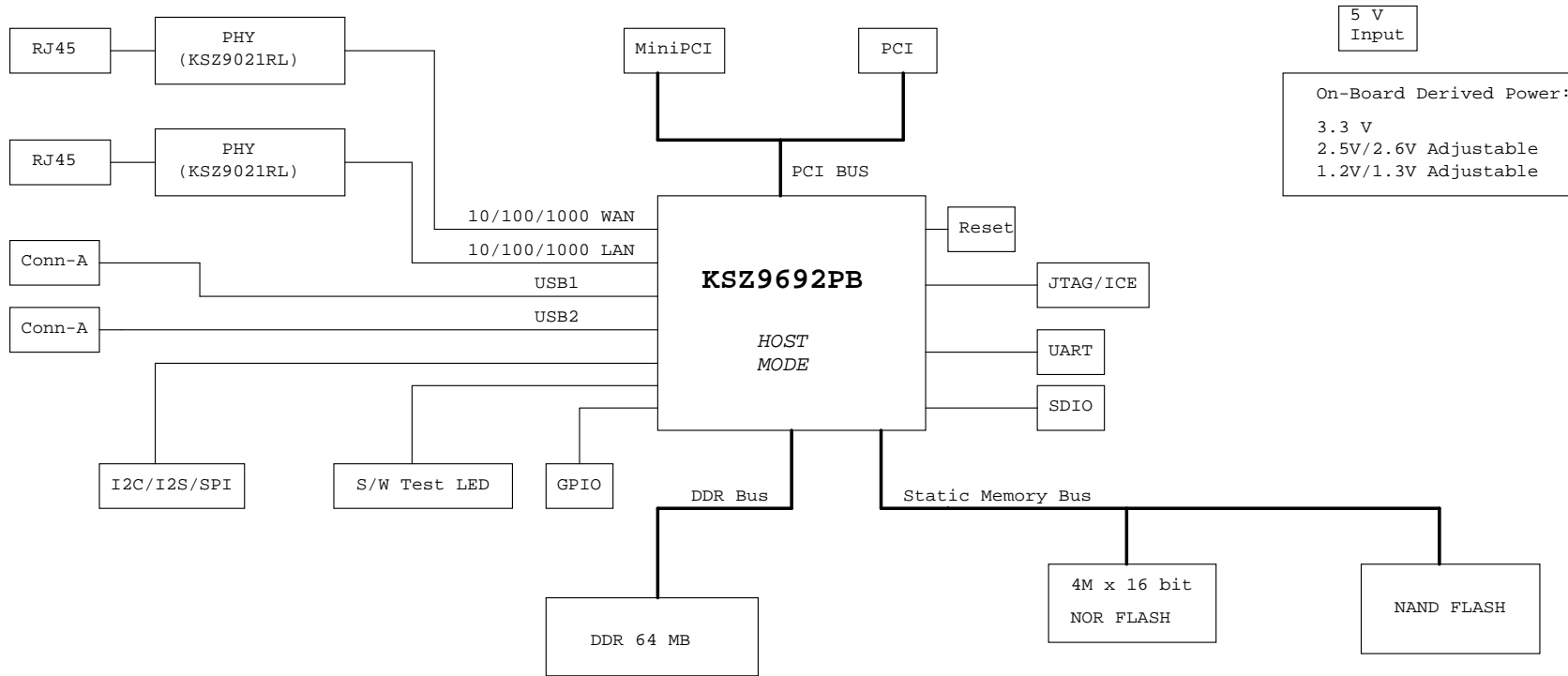
DATE:	DESCRIPTION	REVISION
04/27/09	Release	2.0
01/19/10	Support 32bit DDR. Remove terminator R249 and R250	2.1



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MICREL SEMICONDUCTOR			
Title KSZ9092PB Marketing Eval Board Rev 2.1			
Size Custom	Document Number Revision History	Rev 2.1	
Date: Tuesday, January 19, 2010	Sheet 1 of 22		

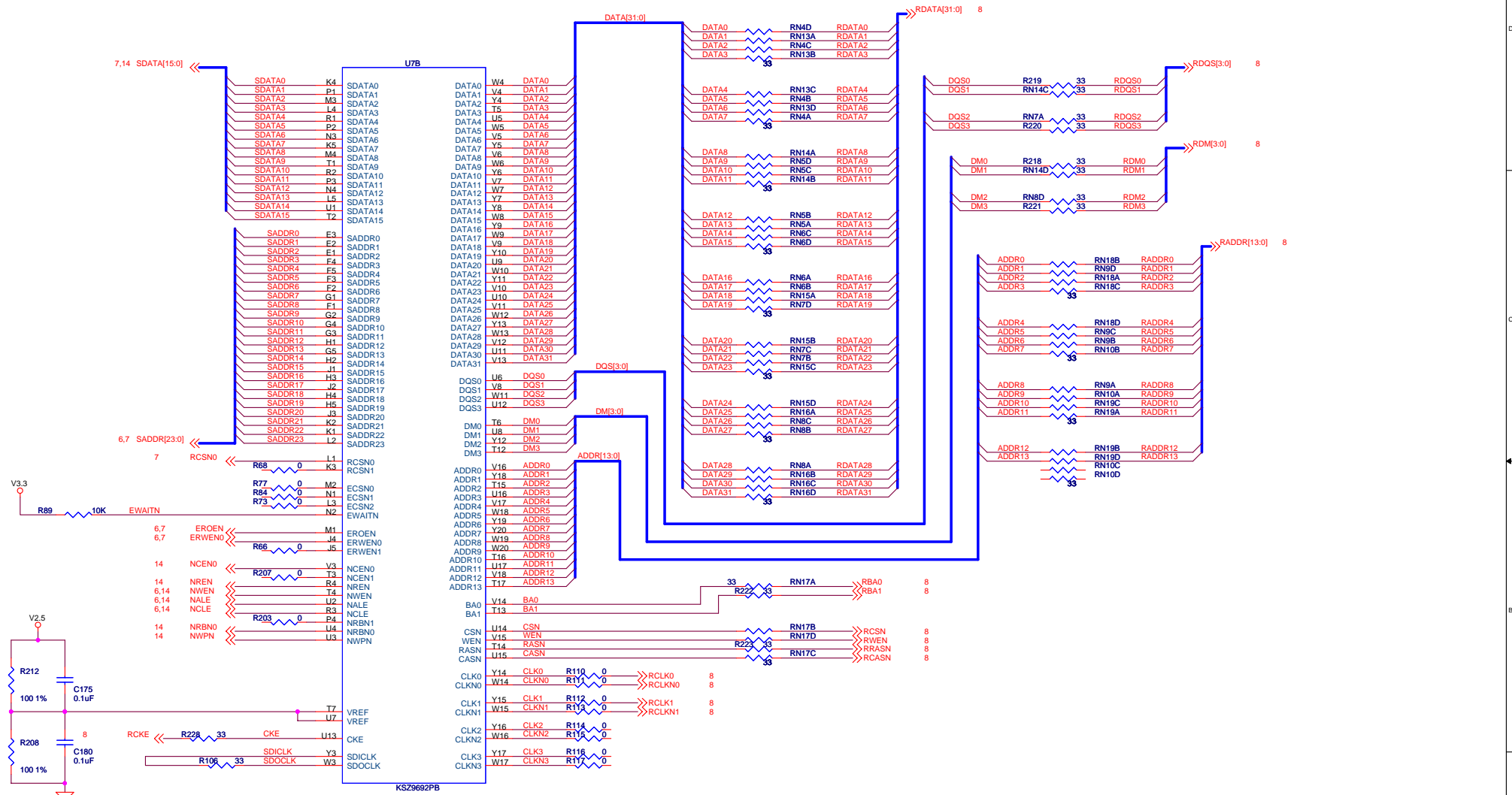
KSZ9692PB Marketing Eval Board Block Diagram

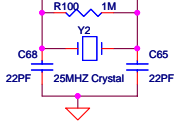
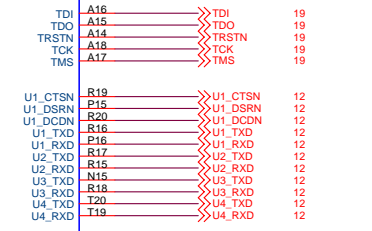
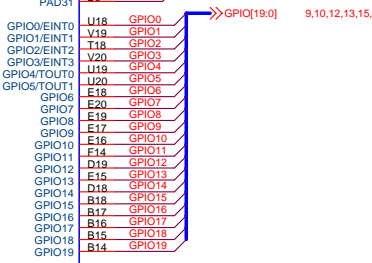
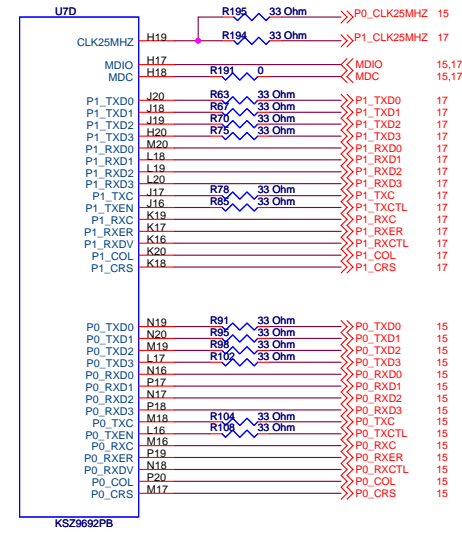
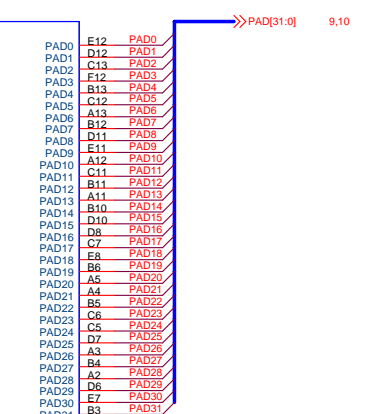
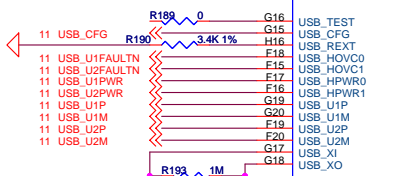
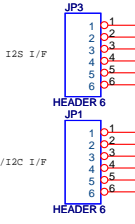
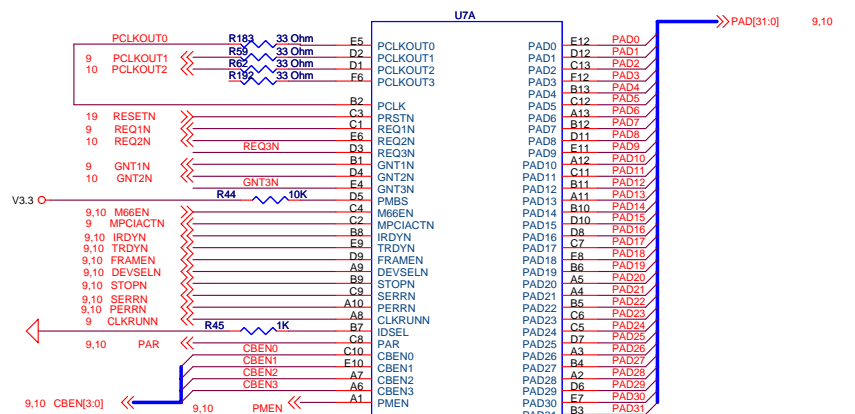
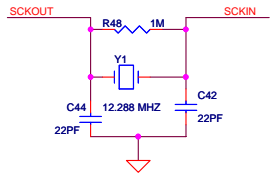
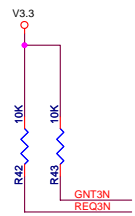


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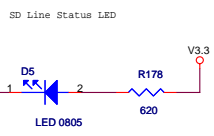
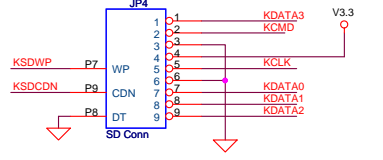
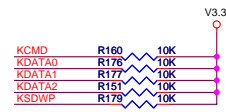
MICREL SEMICONDUCTOR			
Title: KSZ9692PB Marketing Eval Board Rev 2.1			
Size: Custom	Document Number: Block Diagram	Rev: 2.1	
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Note: Support DDR 32-bit data width.





SD Memory I/F



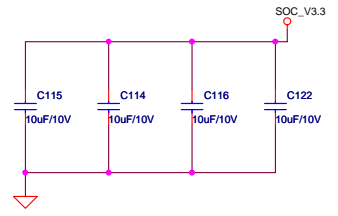
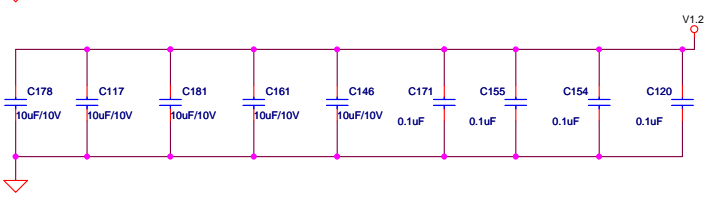
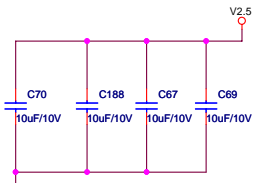
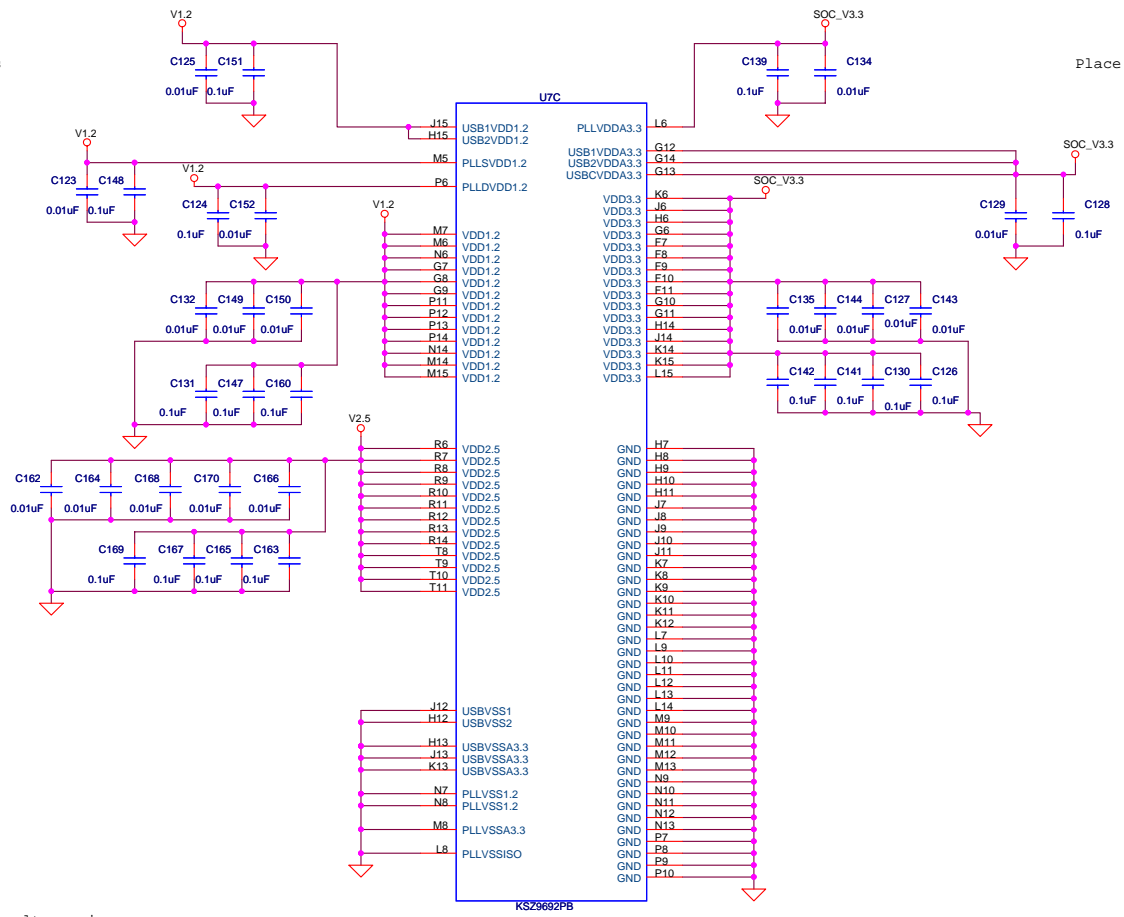
MICREL SEMICONDUCTOR		
Title: KCSZ9692PB Marketing Eval Board Rev 2.1		
Size: Custom	Document Number: Peripherals	Rev: 2.1
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Place V1.2 bypass caps next to BGA power pins

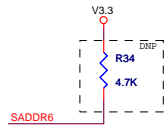
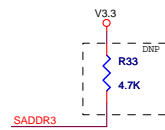
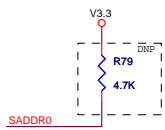
Place SOC_V3.3 bypass caps next to BGA power pins

Place V2.5 bypass caps next to BGA power pins

Place caps close to the group of respective voltage pins



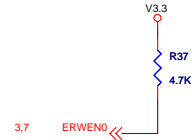
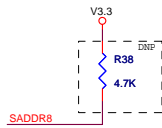
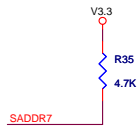
MICREL SEMICONDUCTOR			
Title KSZ9692PB Marketing Eval Board Rev 2.1			
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Internal Pull-Down: NAND boot device small page size 512 byte (default)
 External Pull-Up: NAND boot device small page size 528 byte

Internal Pull-Down: NAND boot device small block size (default)
 External Pull-Up: NAND boot device large block size

Internal Pull-Down: NAND FLASH device does not support automatic page crossing (default)
 External Pull-Up: NAND FLASH device supports automatic page crossing

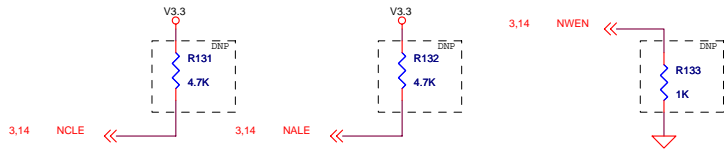


External Pull-Up: 16-bit boot device

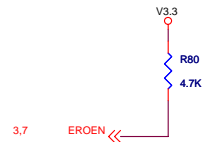
Internal Pull-Down: boot from NOR device (default)
 External Pull-Up: boot from NAND device

Internal Pull-Down: MII mode
 External Pull-Up: RGMII mode (default)

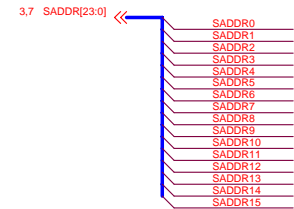
Internal Pull-Down: MII mode
 External Pull-Up: RGMII mode (default)



NAND boot device size:128Mbit (default)

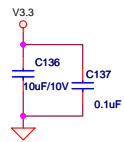
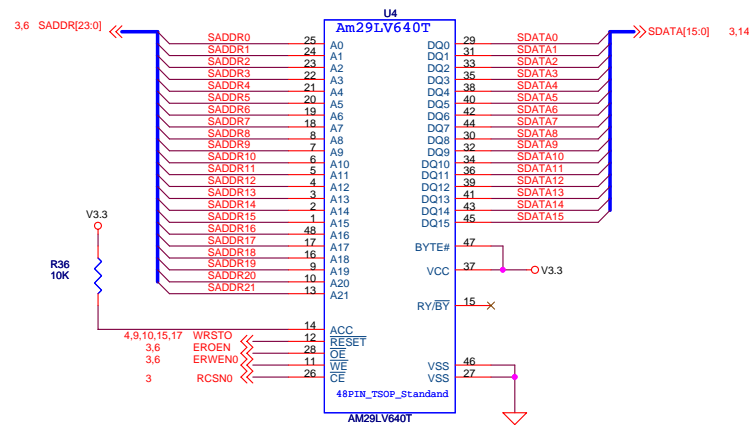


External Pull-Up: WRSTO is active low

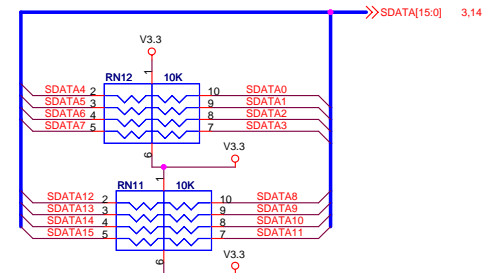


MICREL SEMICONDUCTOR			
Title KSZ9692PB Marketing Eval Board Rev 2.1			
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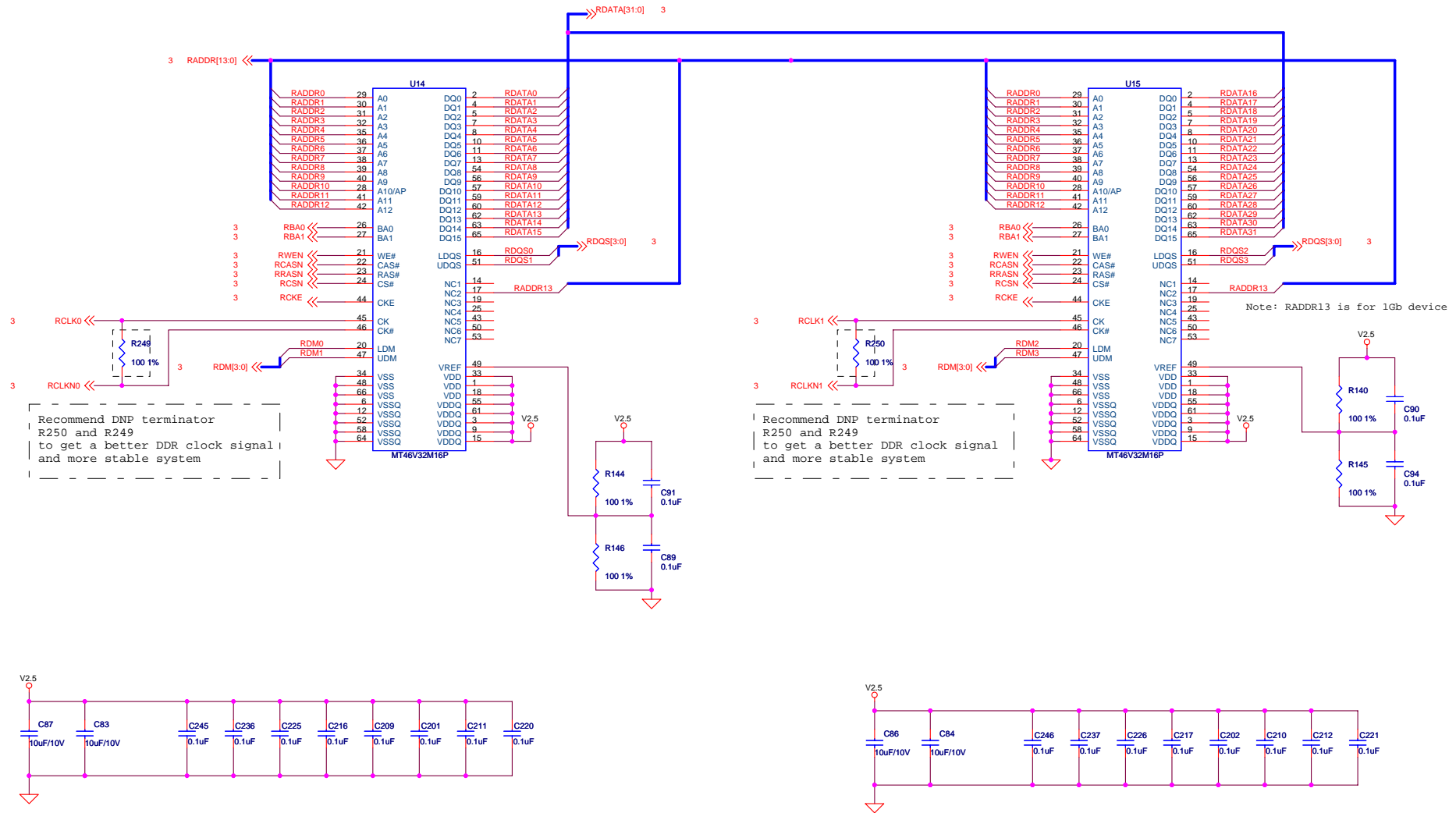
Boot NOR Flash

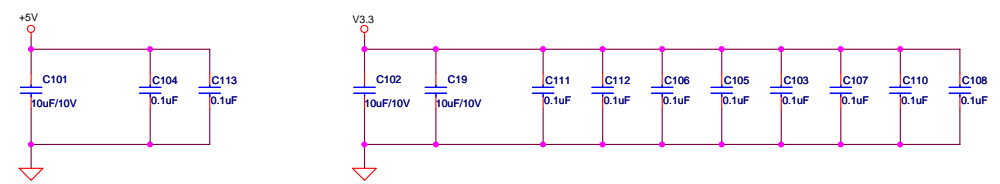
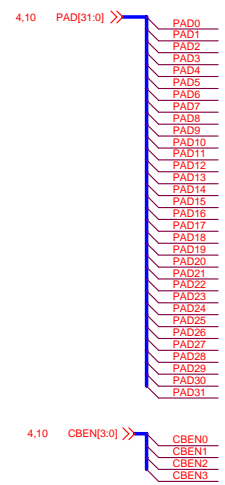
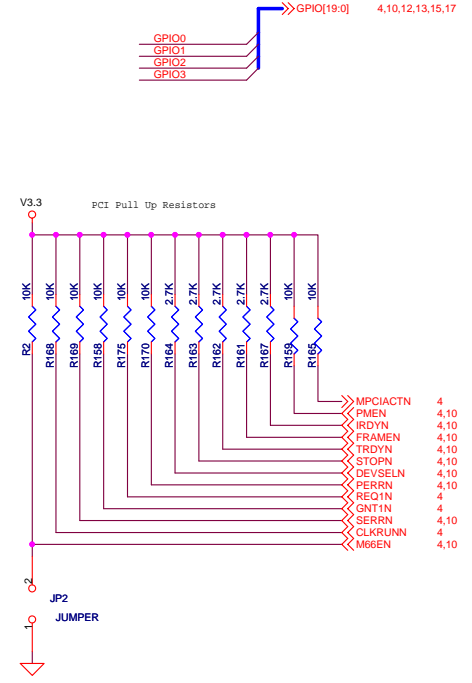
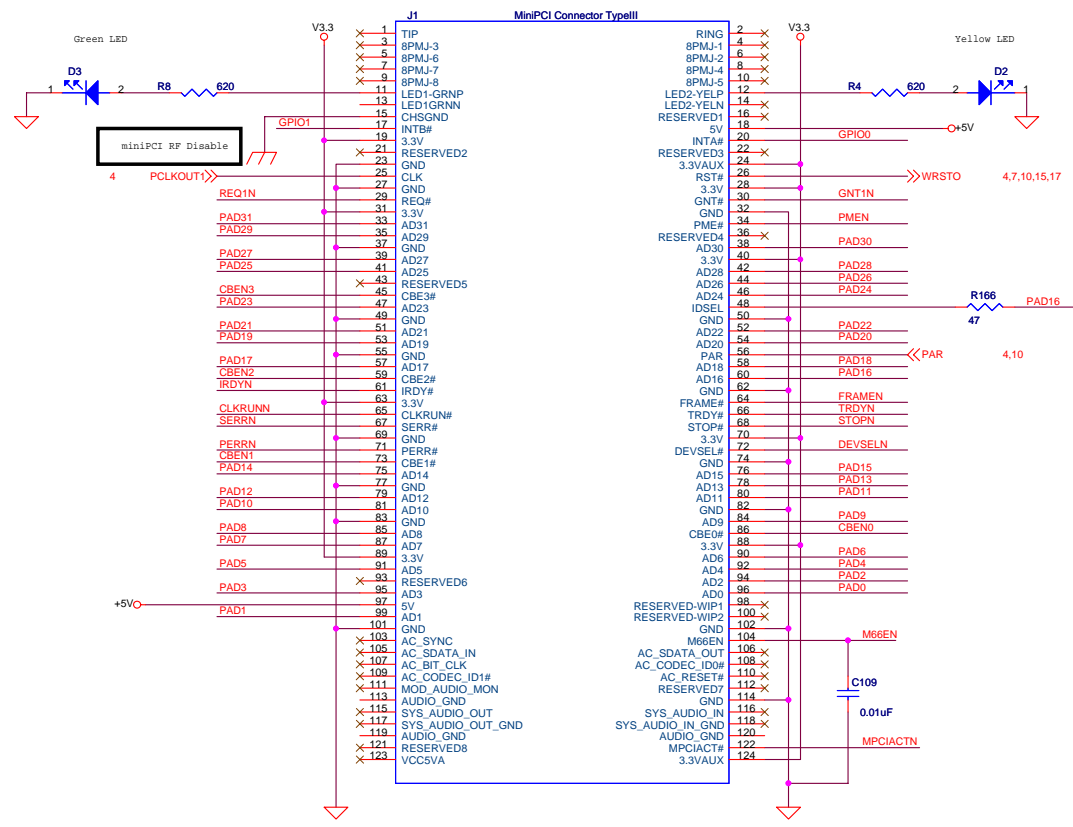


Static memory data bus pullup

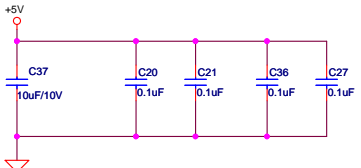
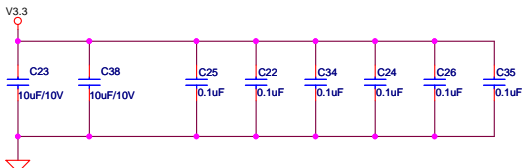
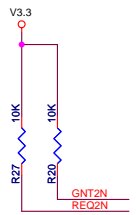
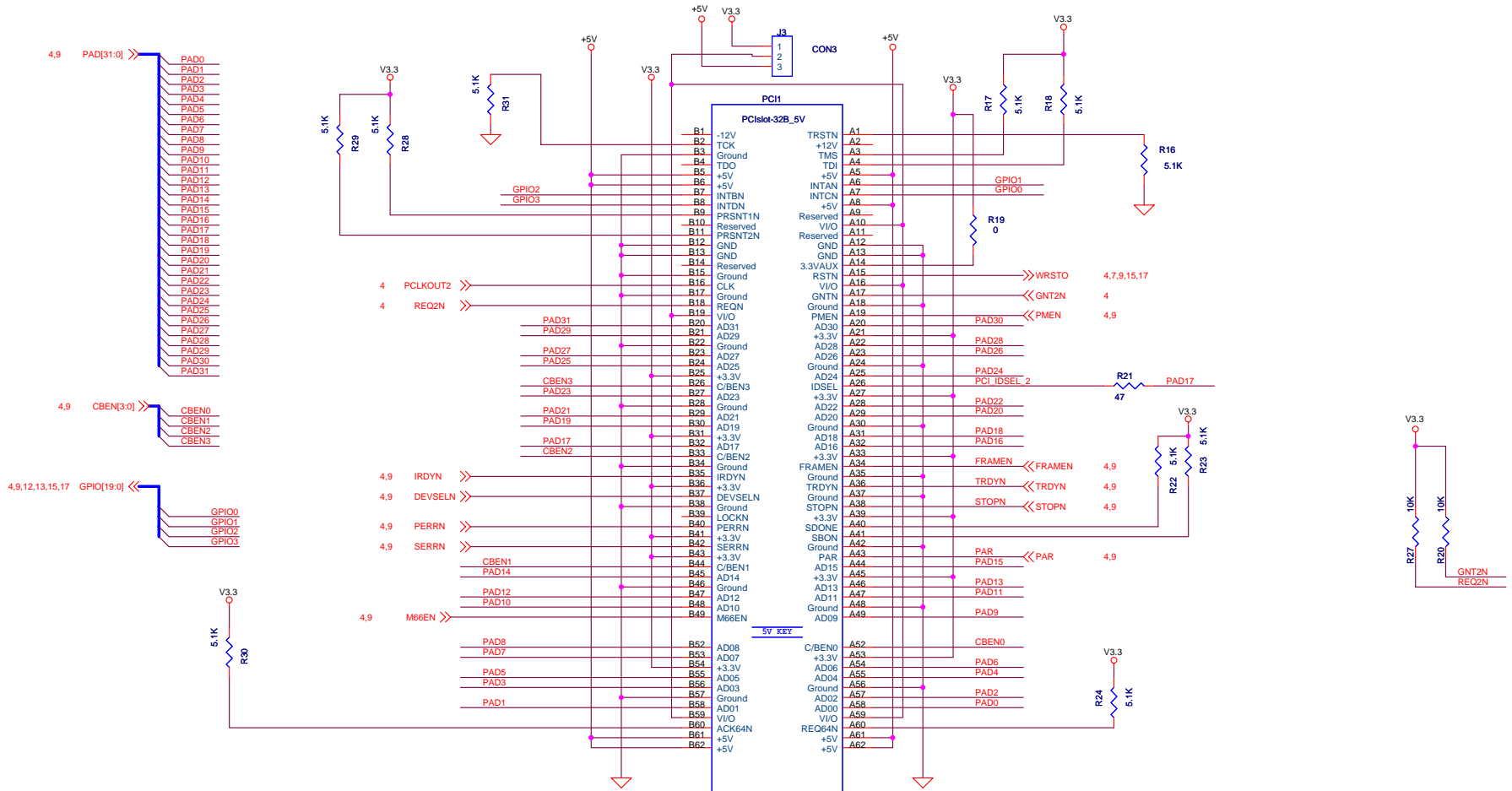


Note: Support DDR 32-bit data width

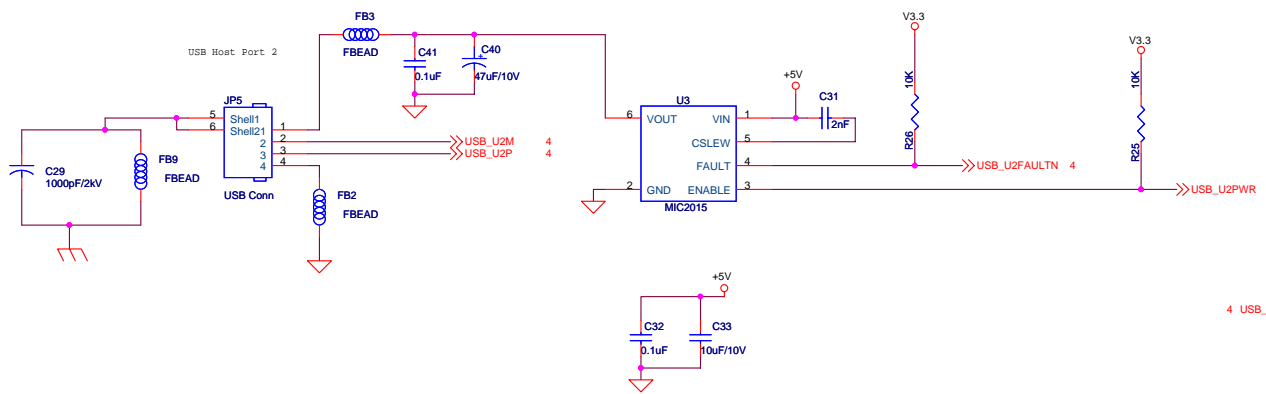
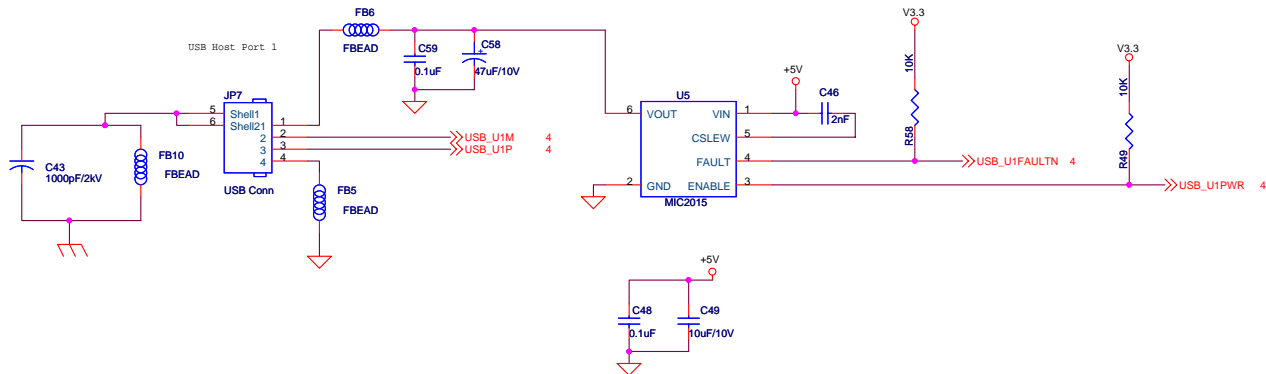




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Title: KSZ9692PB Marketing Eval Board Rev 2.1			
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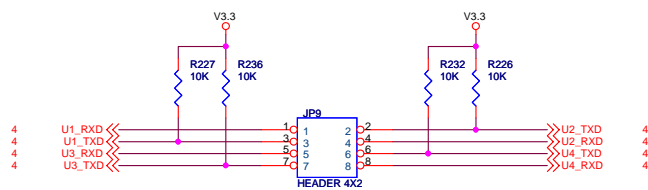
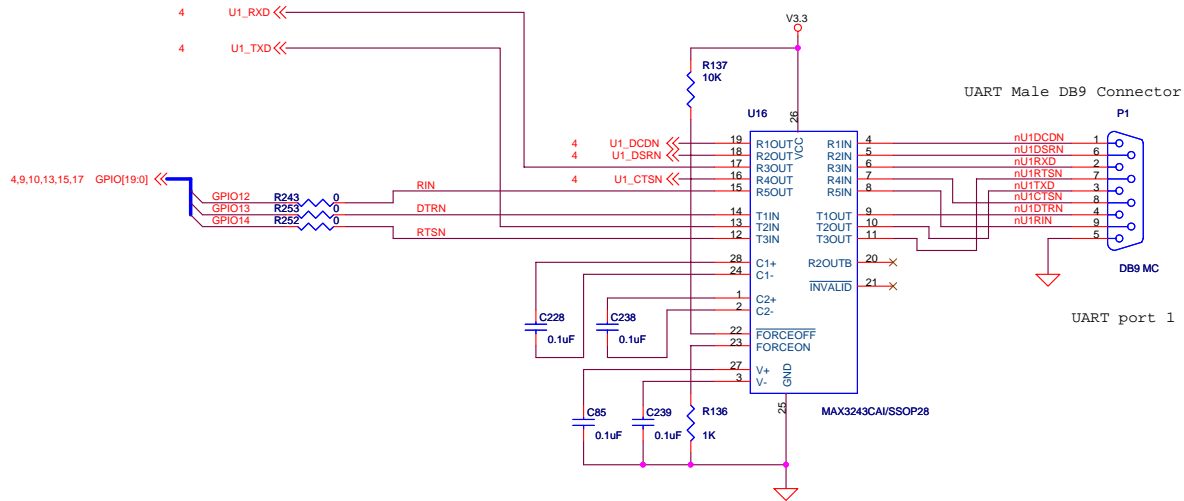
MICREL SEMICONDUCTOR			
Title KSZ9692PB Marketing Eval Board Rev 2.1			
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USB port 2 configuration:
 R71 installed: USB port 2 is Host (default)
 R67 installed: USB port 2 is Device

Caution: if Port 2 is configured as Device, do not apply external power to JP5 or remove FB2

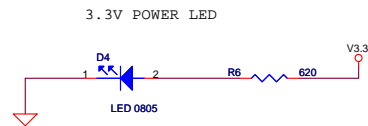
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KSZ9692PB Marketing Eval Board Rev 2.1		
Size	Document Number	Rev
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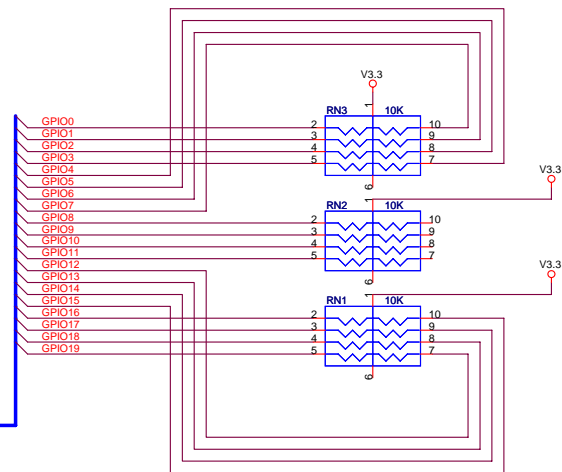
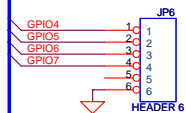
UART port 1-4 I/F

MICREL SEMICONDUCTOR			
Title KSZ9692PB Marketing Eval Board Rev 2.1			
Size Custom	Document Number UART		Rev 2.1
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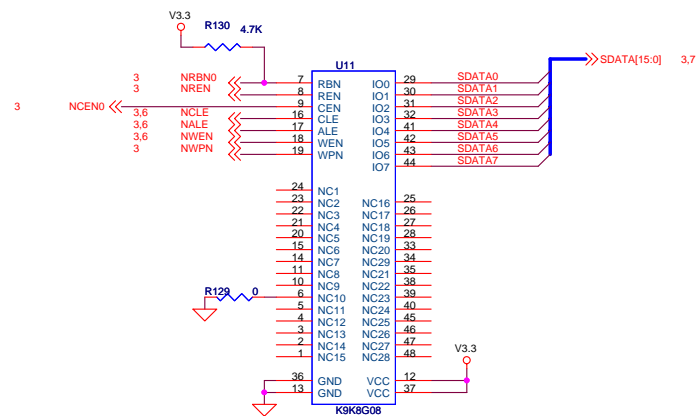
Programmable GPIO LED Indicators



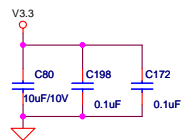
User Programmable GPIO

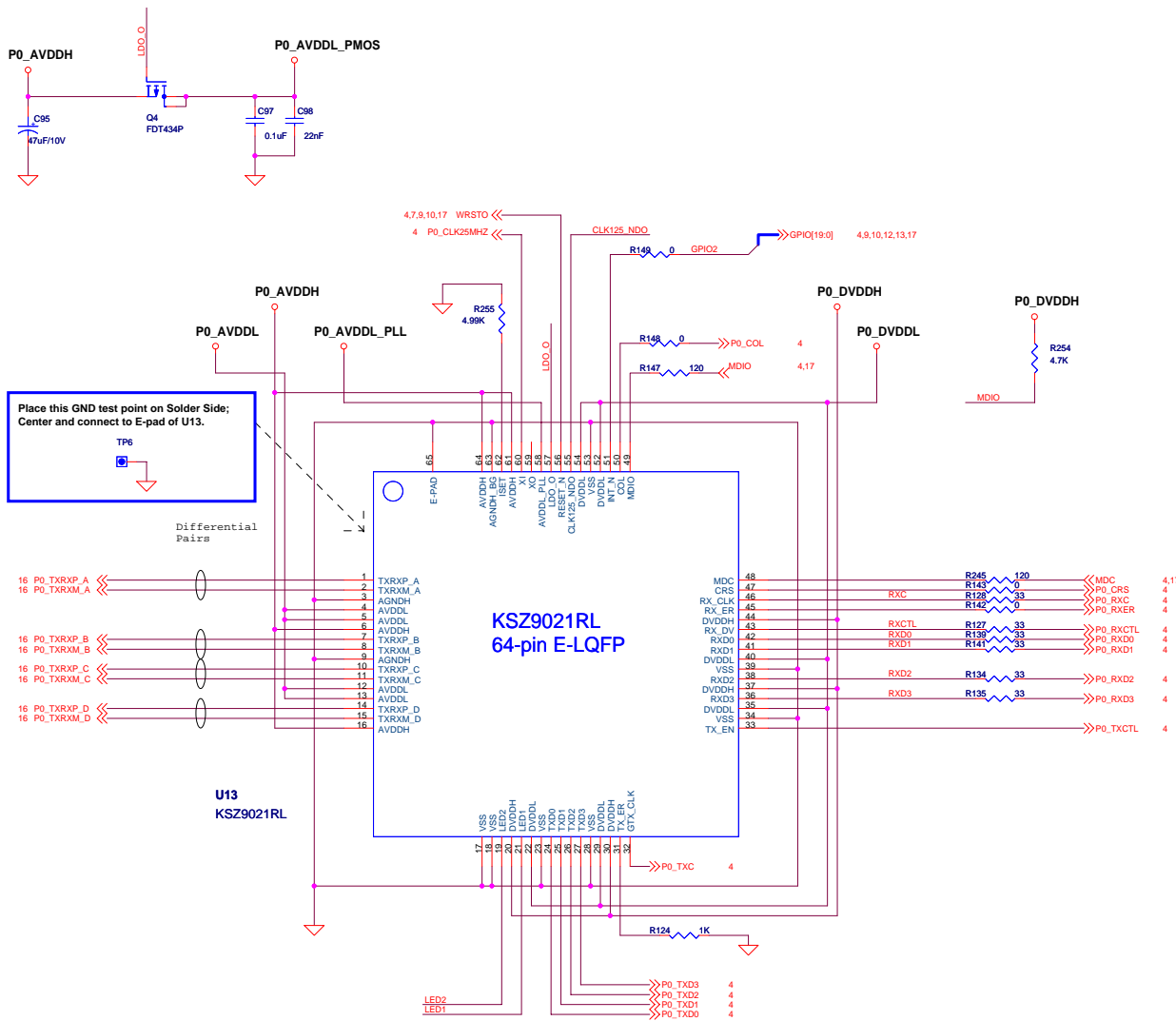


MICREL SEMICONDUCTOR			
Title KSZ9692PB Marketing Eval Board Rev 2.1			
Size Custom	Document Number GPIO-LED		Rev 2.1
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Note: U11 is DNP

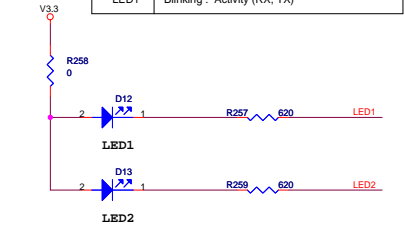




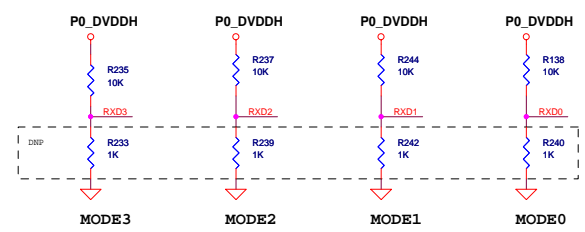
Place this GND test point on Solder Side; Center and connect to E-pad of U13.

Two single LEDs

Pin	Description
LED2	1 : Link off 0 : Link on (any speed), solid color
LED1	Blinking : Activity (RX, TX)

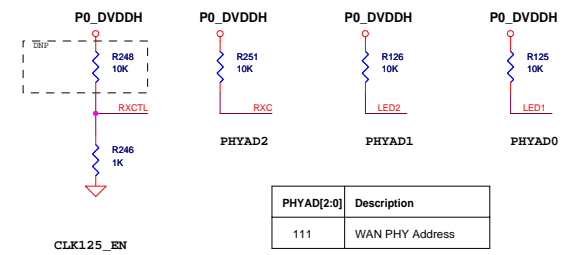


Strapping Pins



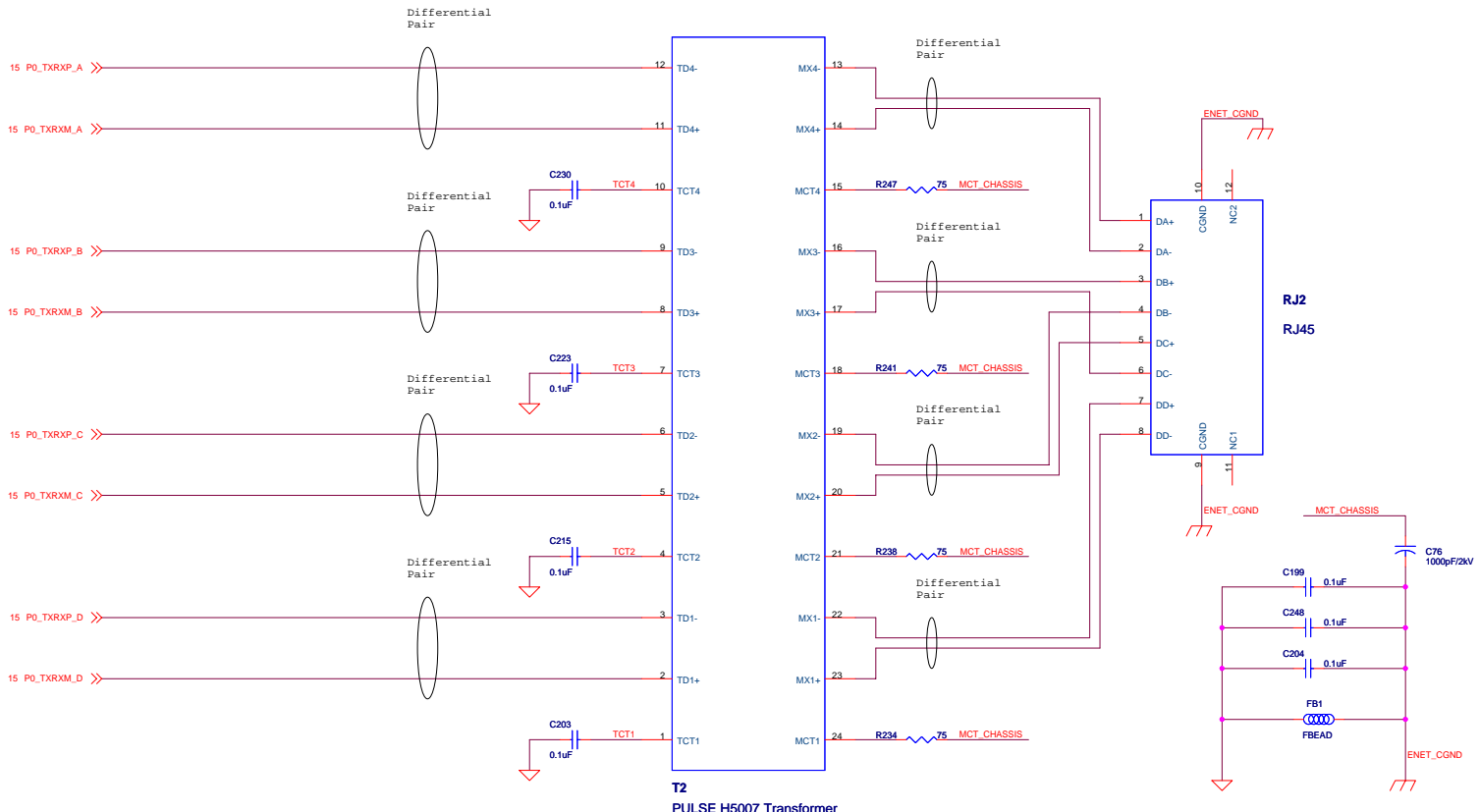
MODE[3:0]	Description
0000	reserved
0001	reserved
0010	reserved
0011	reserved
0100	NAND Tree mode
0101	reserved
0110	reserved
0111	reserved

MODE[3:0]	Description
1000	reserved
1001	reserved
1010	reserved
1011	reserved
1100	Advertise 1000BT full-duplex only (RGMII)
1101	Advertise 1000BT full- and half-duplex only (RGMII)
1110	Advertise all capabilities, except 1000BT half-duplex (RGMII)
1111	Advertise all capabilities (RGMII)- DEFAULT



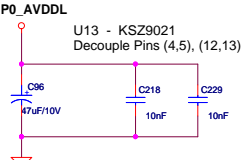
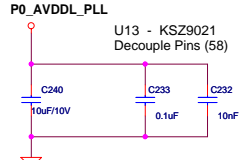
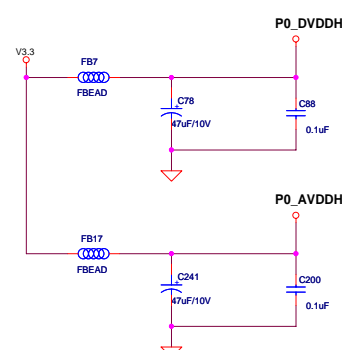
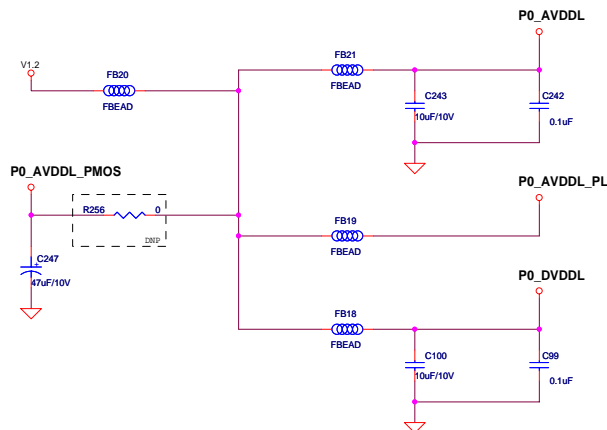
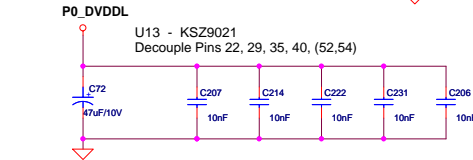
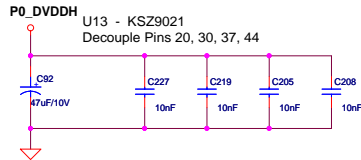
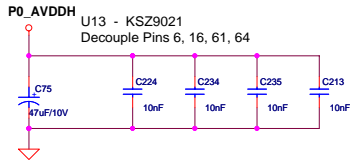
PHYAD[2:0]	Description
111	WAN PHY Address

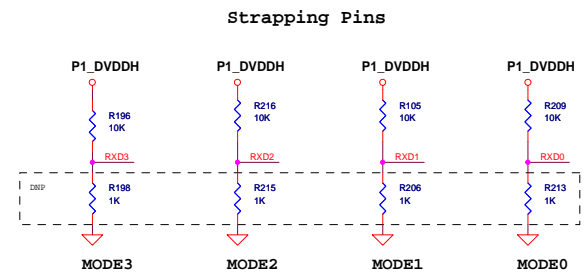
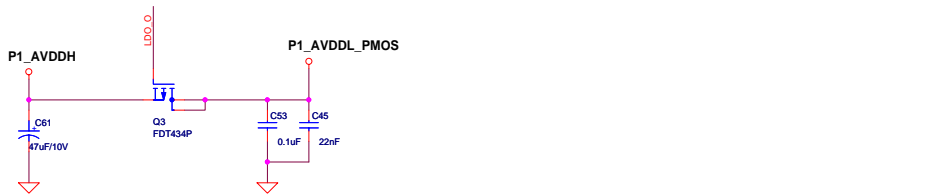
CLK125_NDO	Description
1	Two Single LEDs



T2
PULSE H5007 Transformer

RJ45

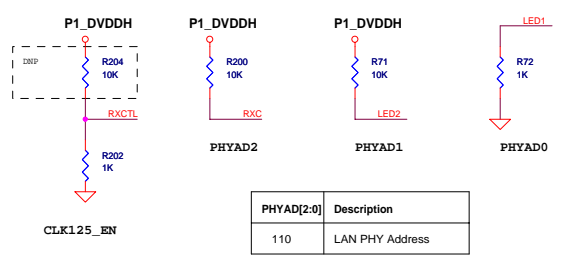
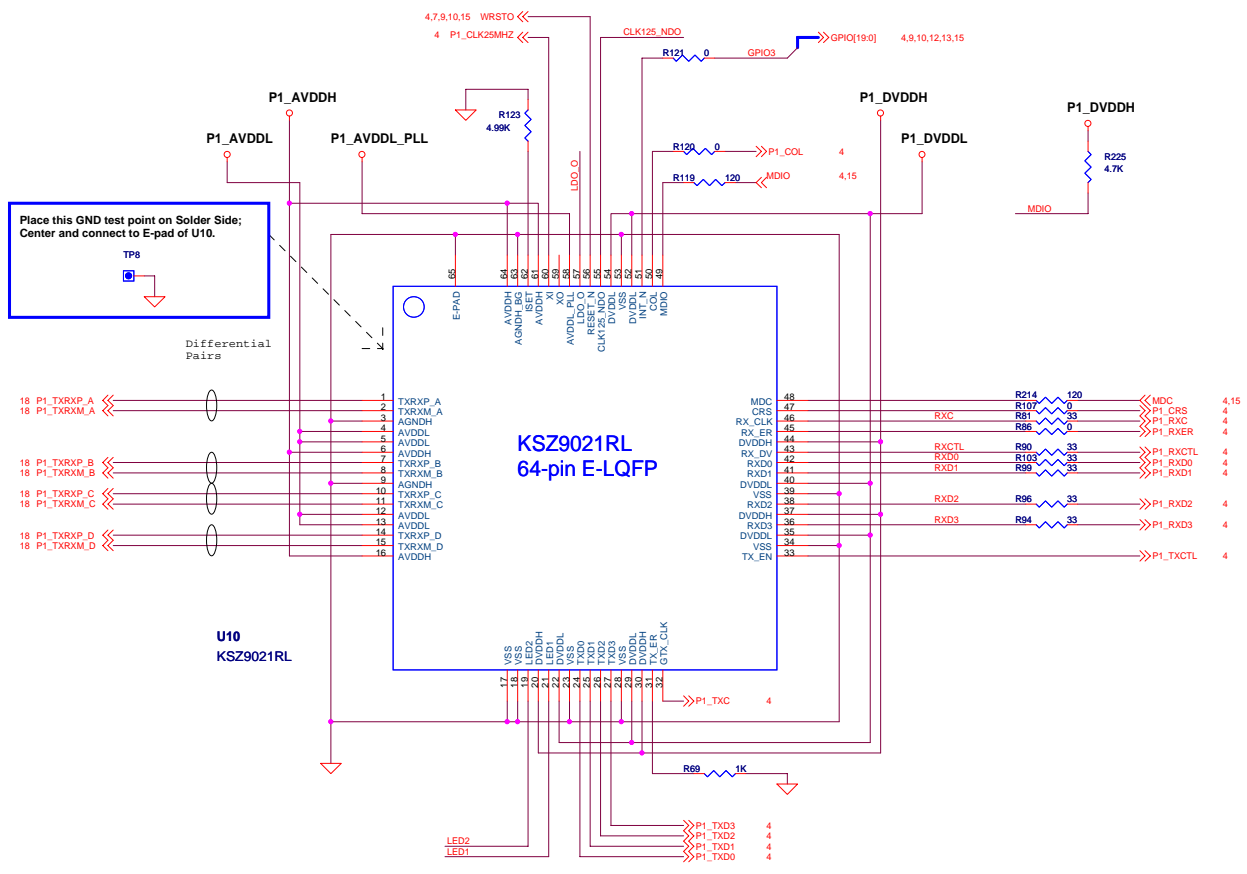




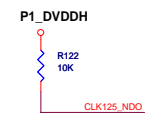
MODE[3:0]	Description
0000	reserved
0001	reserved
0010	reserved
0011	reserved
0100	NAND Tree mode
0101	reserved
0110	reserved
0111	reserved

MODE[3:0]	Description
1000	reserved
1001	reserved
1010	reserved
1011	reserved
1100	Advertise 1000BT full-duplex only (RGMII)
1101	Advertise 1000BT full- and half-duplex only (RGMII)
1110	Advertise all capabilities, except 1000BT half-duplex (RGMII)
1111	Advertise all capabilities (RGMII)- DEFAULT

Place this GND test point on Solder Side; Center and connect to E-pad of U10.



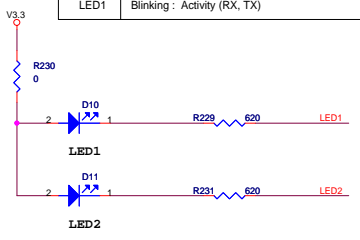
PHYAD[2:0]	Description
110	LAN PHY Address

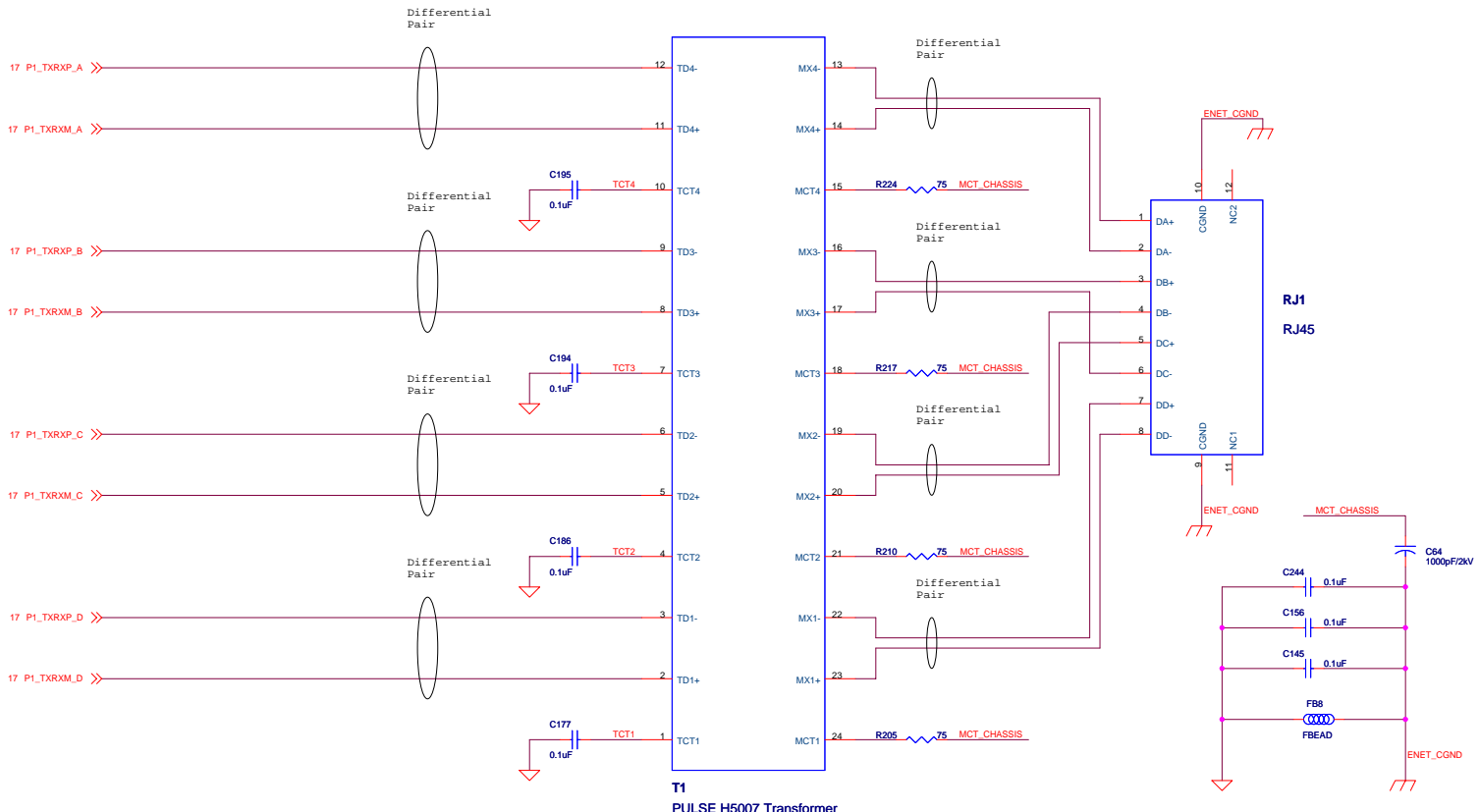


CLK125_NDO	Description
1	Two Single LEDs

Two single LEDs

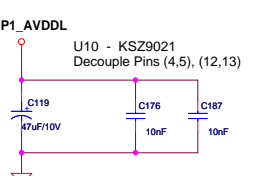
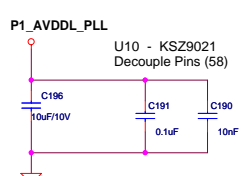
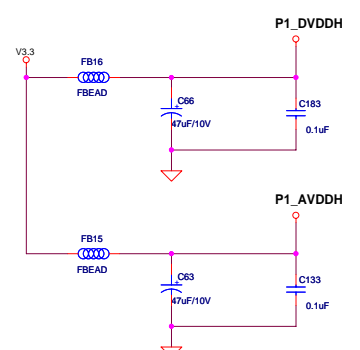
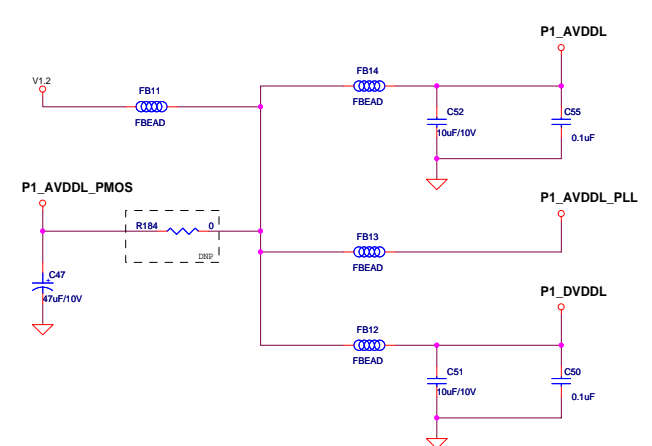
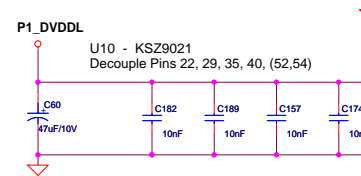
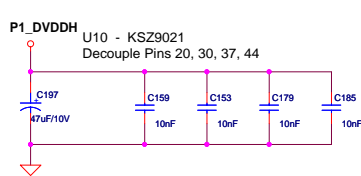
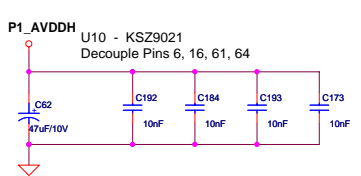
Pin	Description
LED2	1 : Link off 0 : Link on (any speed), solid color
LED1	Blinking : Activity (RX, TX)



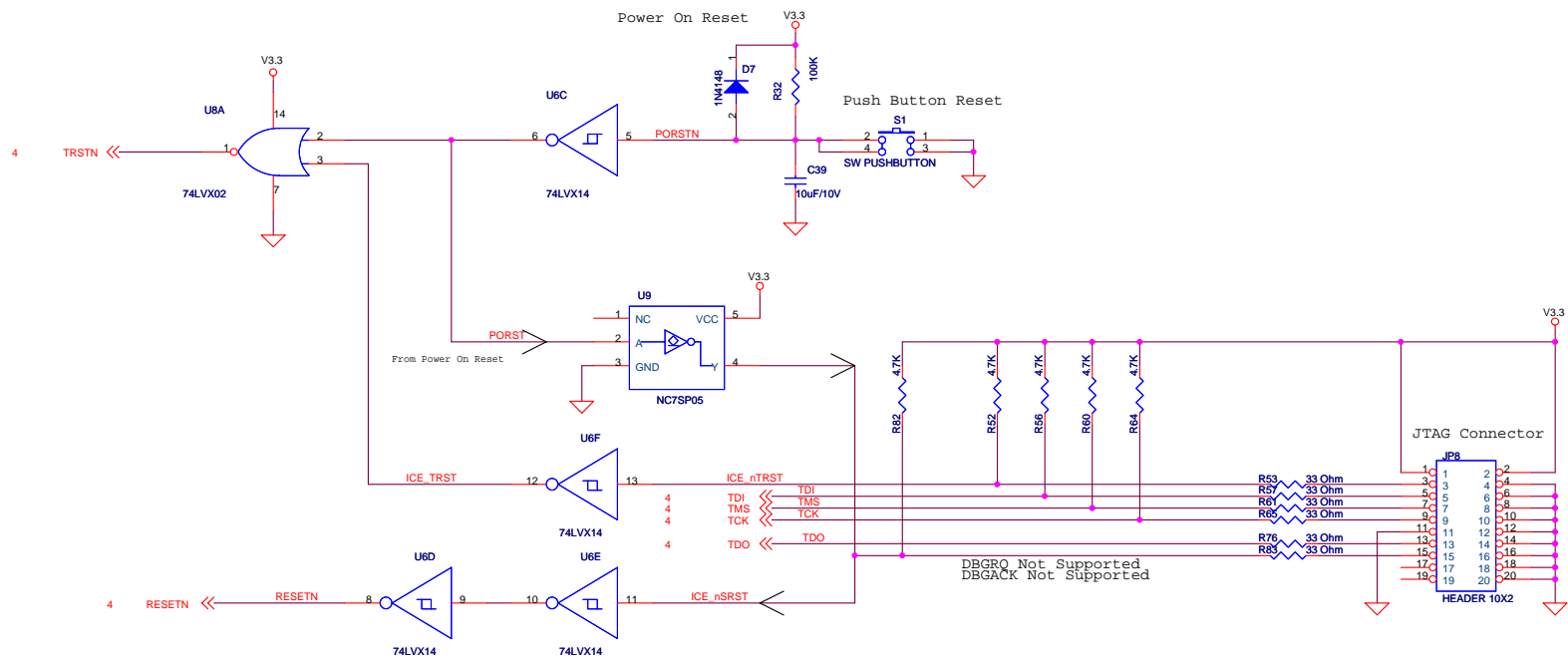


T1
PULSE H5007 Transformer

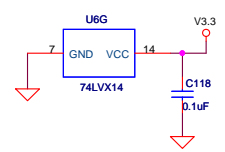
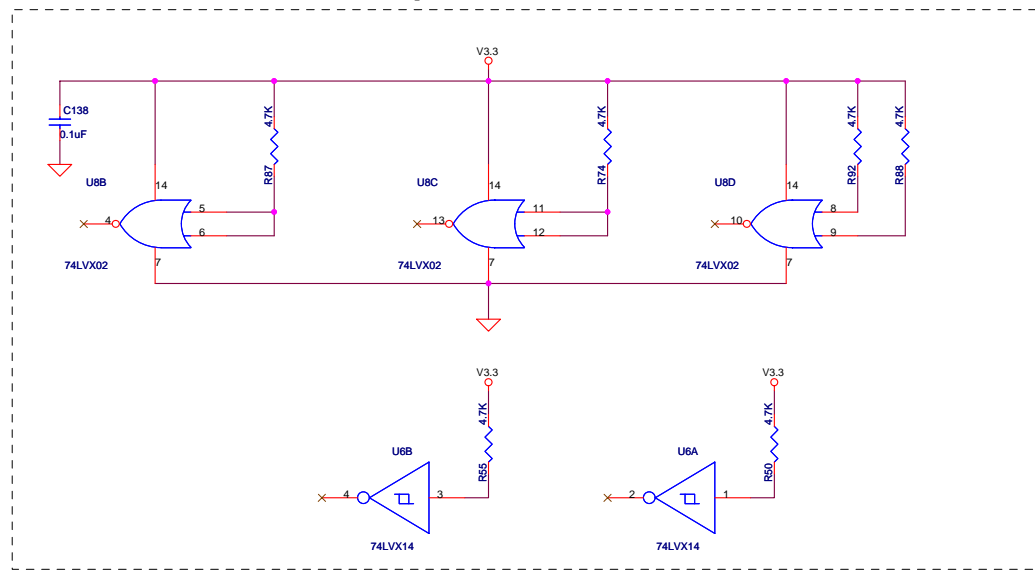
RJ1
RJ45



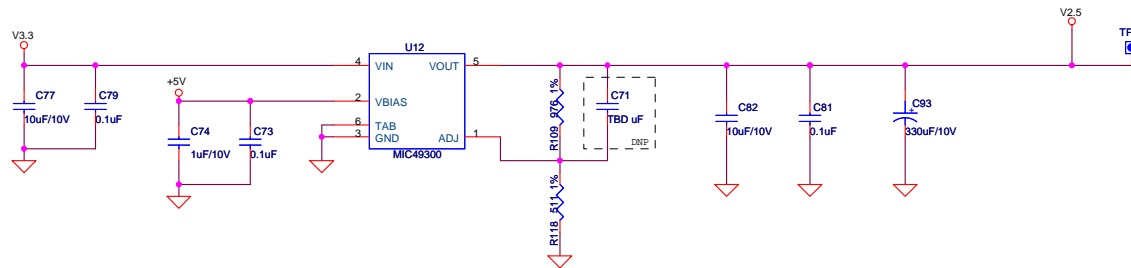
Micrel, Inc.		
Title: KSZ9021PB Marketing Eval Board Rev 2.1		
Size: C	Document Number: Ethernet LAN Transformer-Power	Rev: 2.1
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Spare Gates

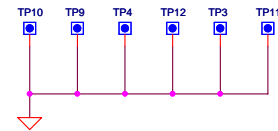


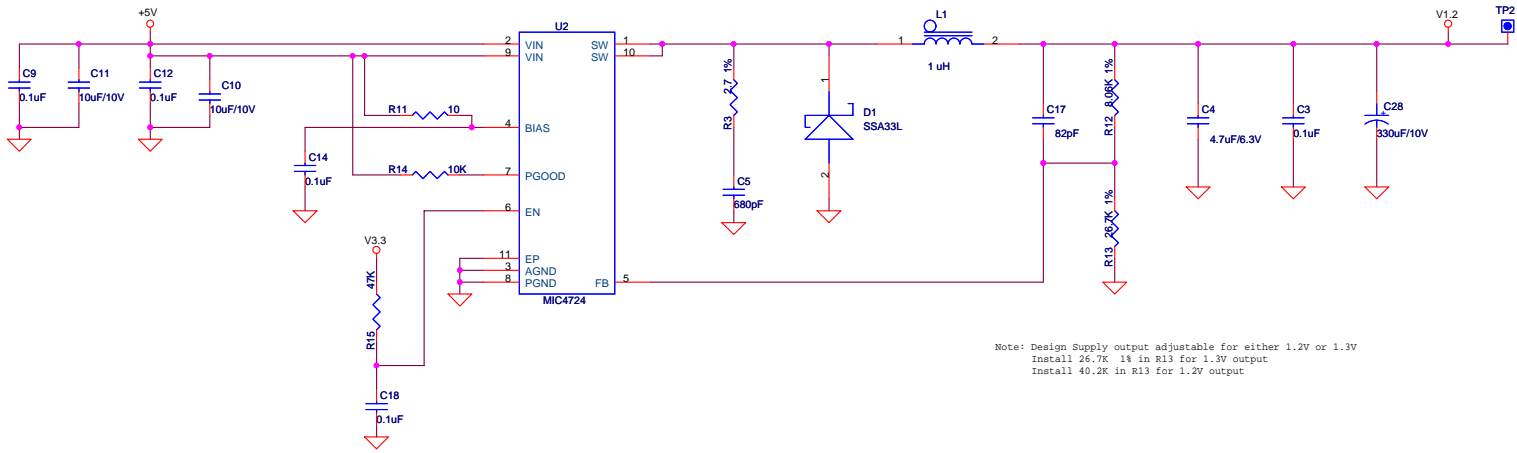
MICREL SEMICONDUCTOR		
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Note: V2.5 must be adjusted to 2.6V for Micron DDR device MT46V32M16-5B. See Micron Electrical Specification.
 For DDR devices that require 2.5V, install 1K in R109, 562 ohm in R118

Ground Test Points

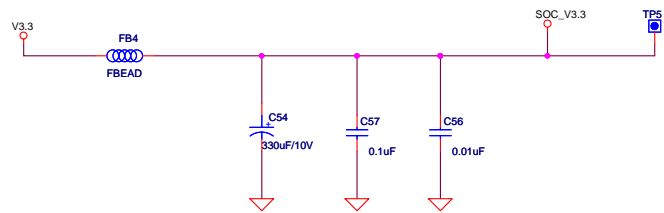
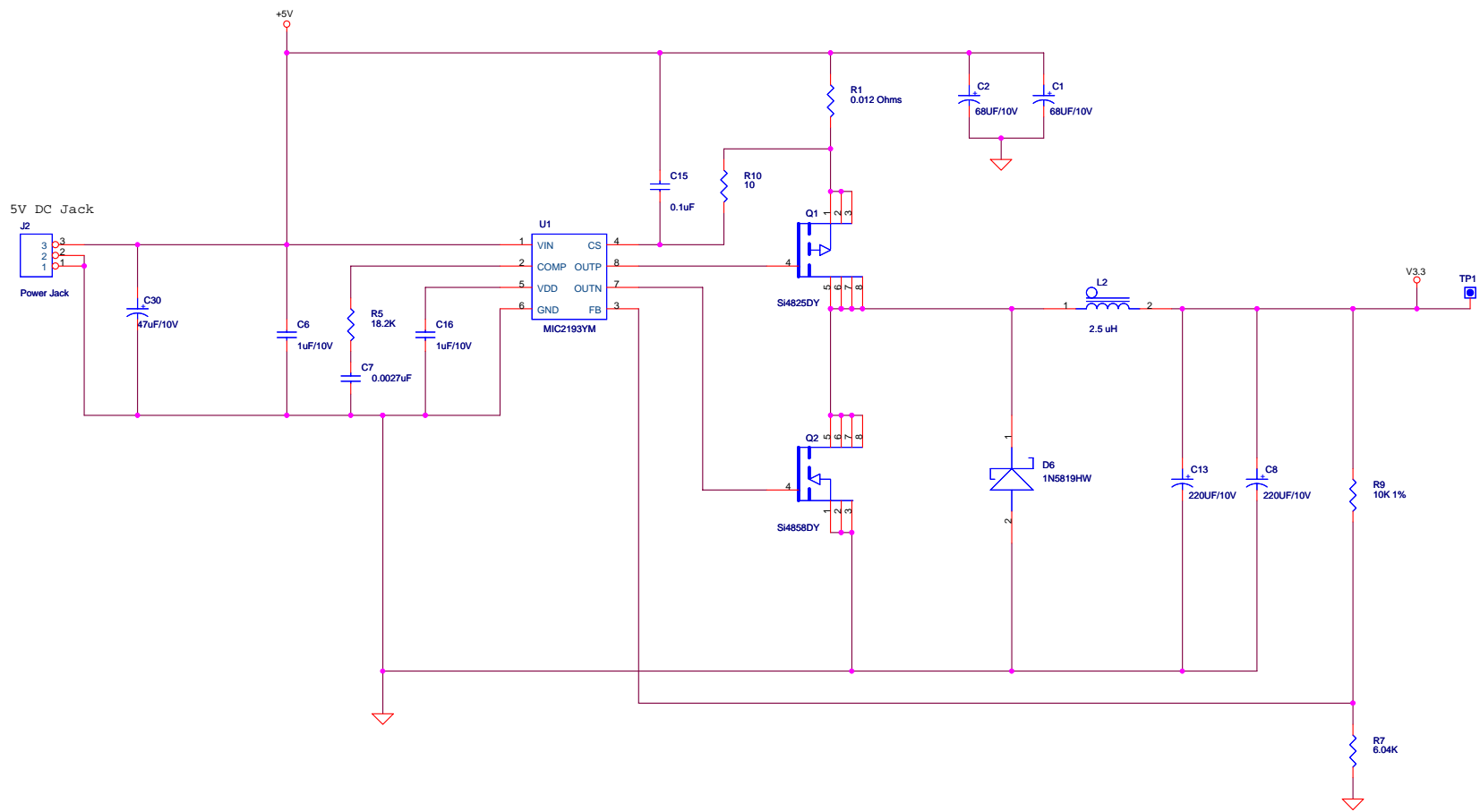




Note: Design Supply output adjustable for either 1.2V or 1.3V
 Install 26.7K Ω in R13 for 1.3V output
 Install 40.2K Ω in R13 for 1.2V output

Note: RC added to EN control to enforce power sequencing

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