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PROJECT NAME: Pearl EIP Comm Module
CAT NO:

REVISION HISTORY

Sr.No.	REVISION	REV DATE	PREPERED BY	REVIEWED BY	APPROVED BY
1	0	06-FEB-2024	VY/RK	GS	

Pearl Ethernet Main card Schematic

Title: INDEX

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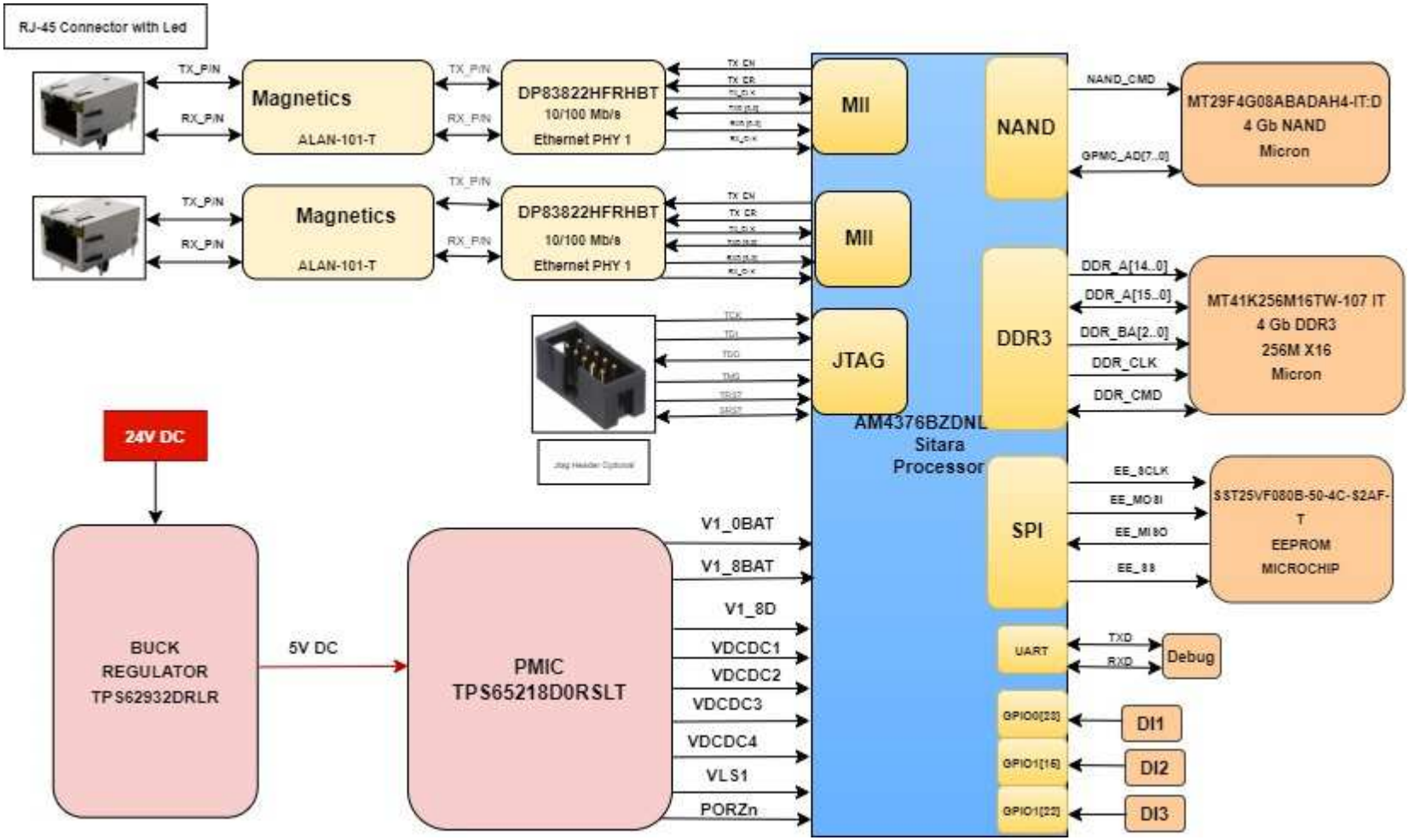

Title	BLOCK_DIAGRAM	
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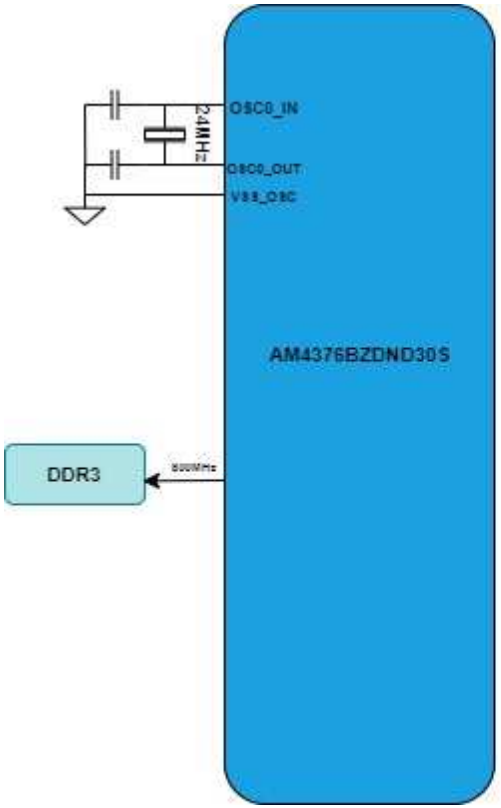

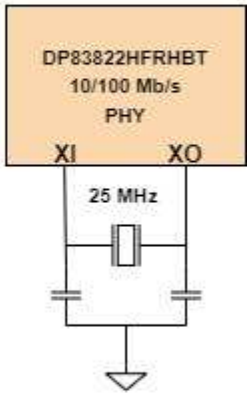

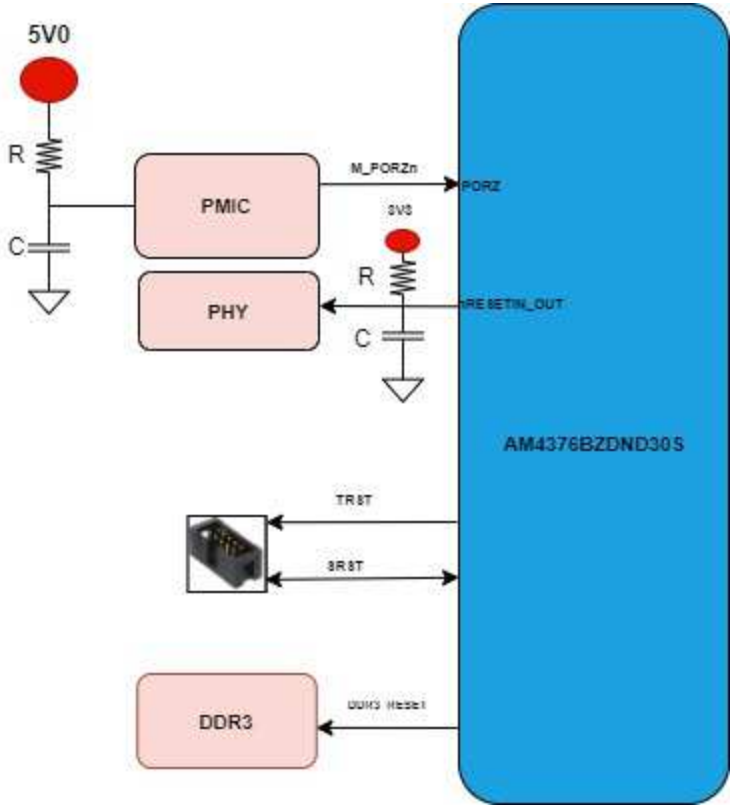

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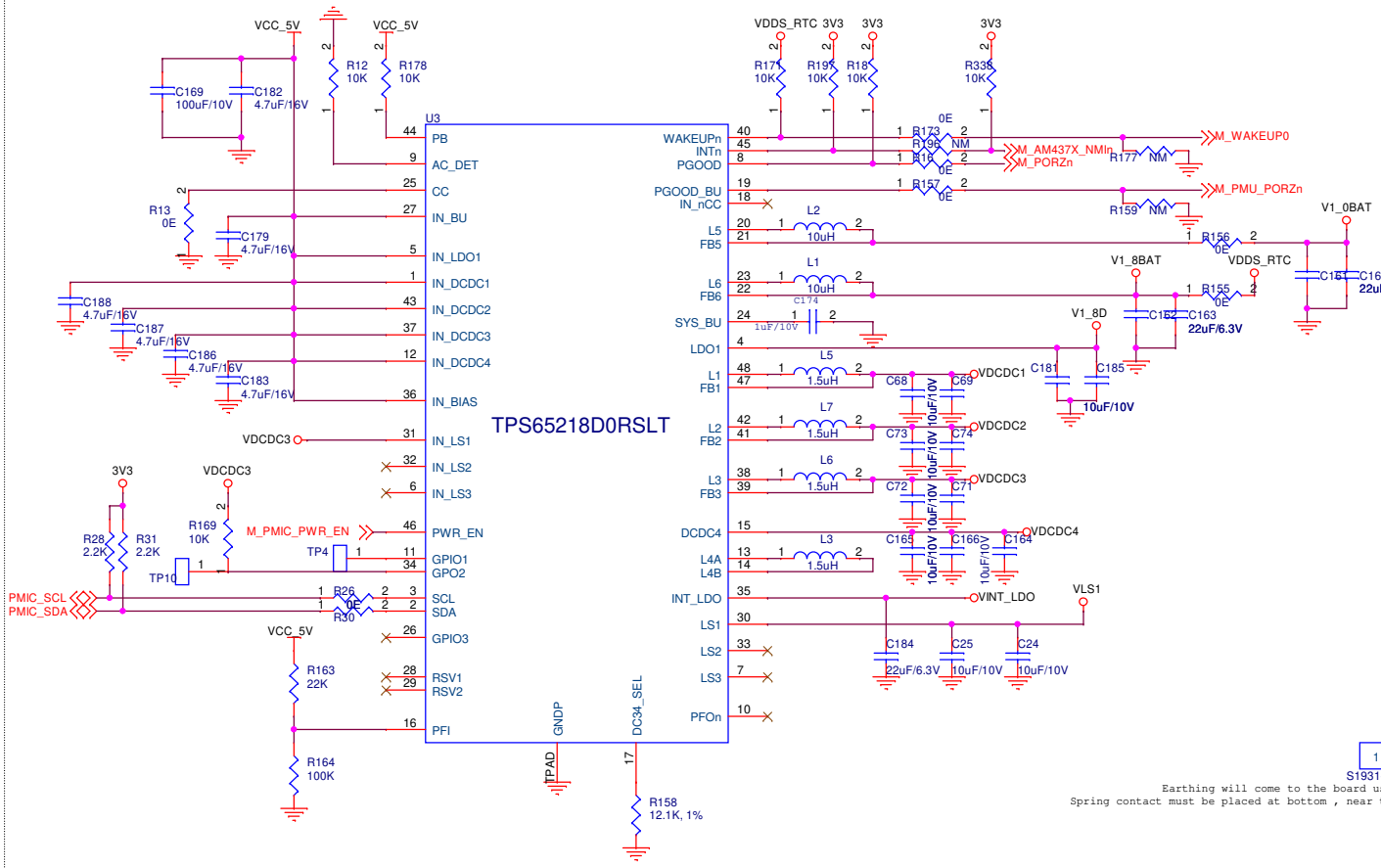
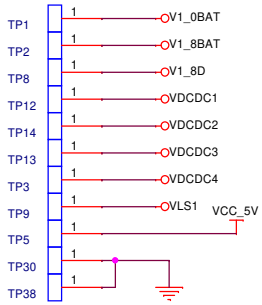
POWER MANAGEMENT - PMIC



Test Points

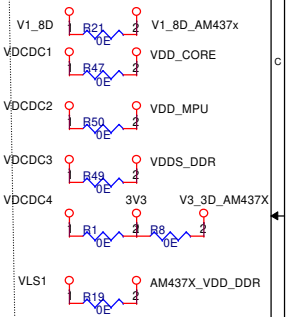


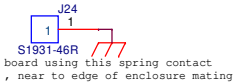
On Bottom side
Place One GND TP on
TOP & BOT

Fiducial

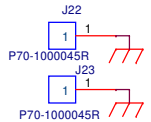
Mounting Holes

0E for PMIC TESTING

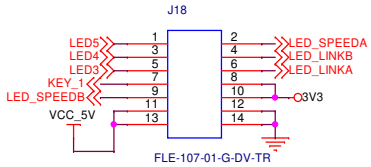


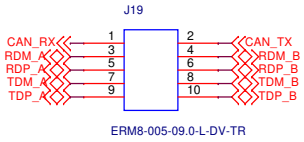


Earthing will come to the board using this spring contact
Spring contact must be placed at bottom , near to edge of enclosure mating



Pogo pins must be kept just below ethernet connector of PS card.
Placement of pogo pins should not be under spring contact of ethernet connector





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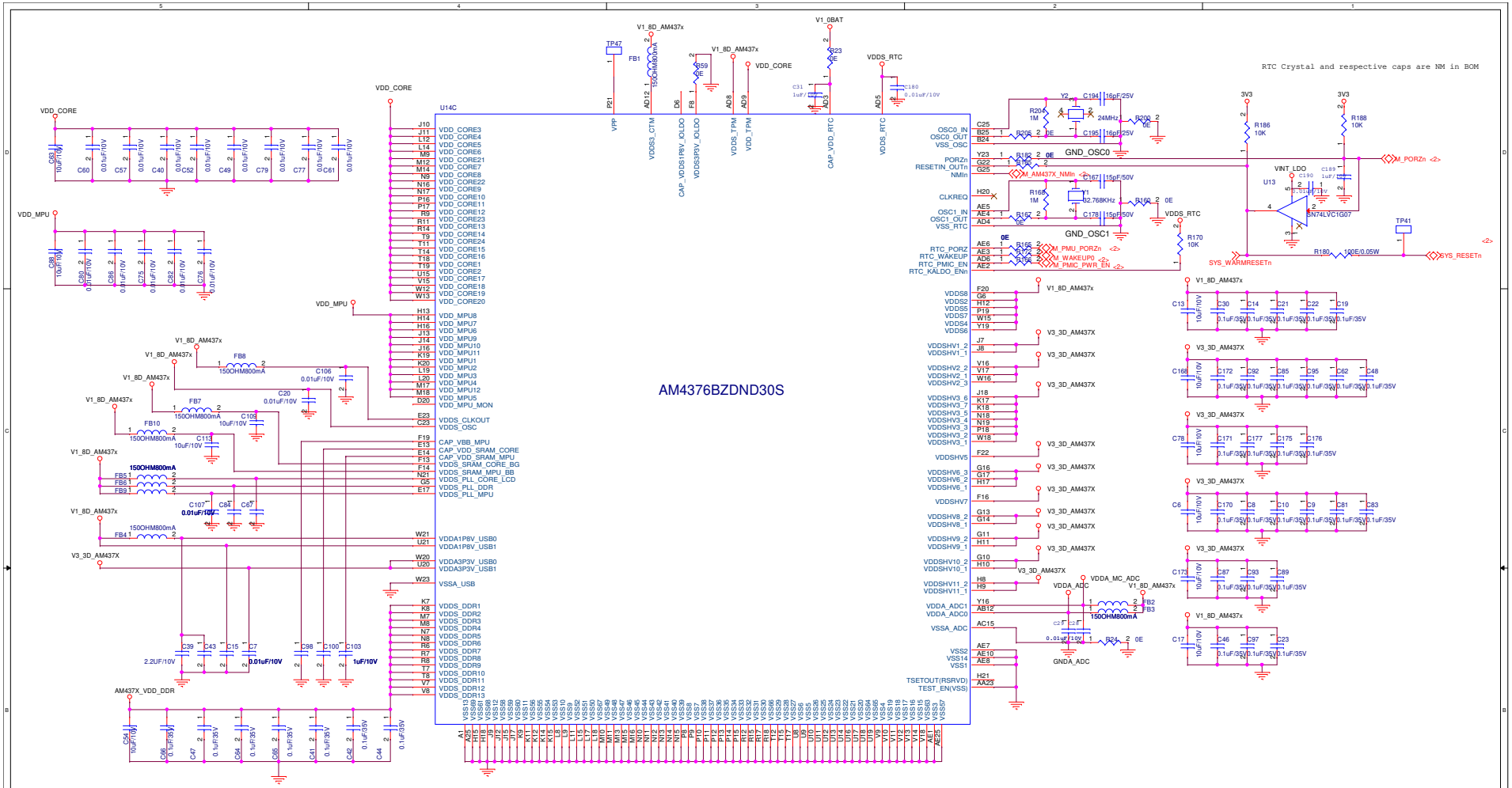
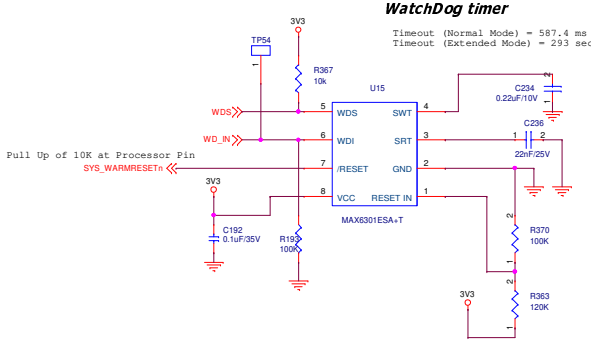


WatchDog timer

Timeout (Normal Mode) = 587.4 ms
Timeout (Extended Mode) = 293 sec / 4.9 mins



FOOT NOTES

Terminals AA23, AE10, AE7, AE8 are not connected to VSS in the device, but they are required to be connected to board ground.

AD12 and AD8 are not connected to VDDS in the device, but they are required to be connected to 1.8V VDDS on the board

Pearl Ethernet Main Card Schematic		
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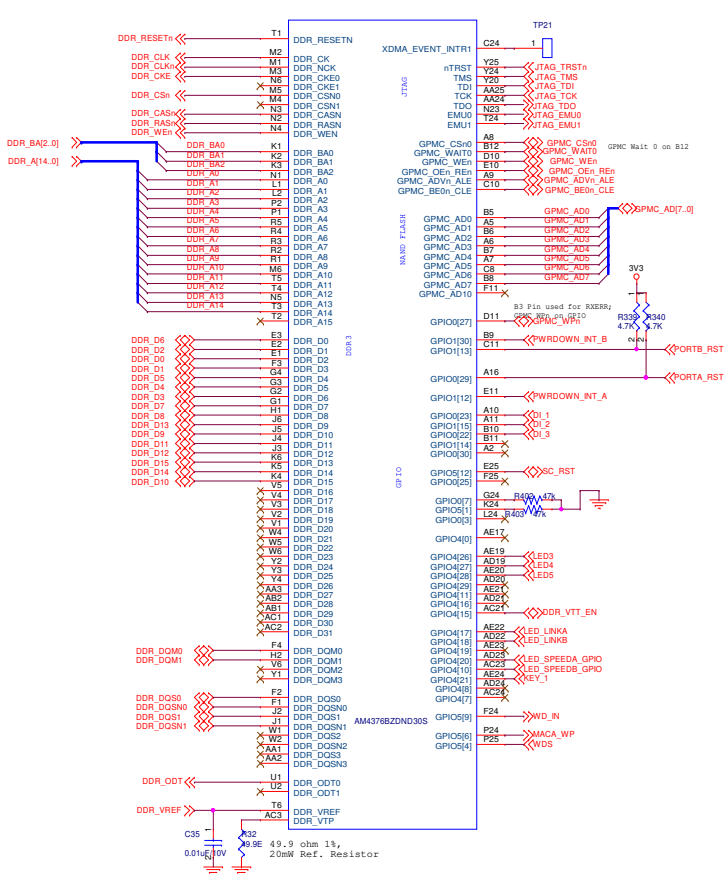
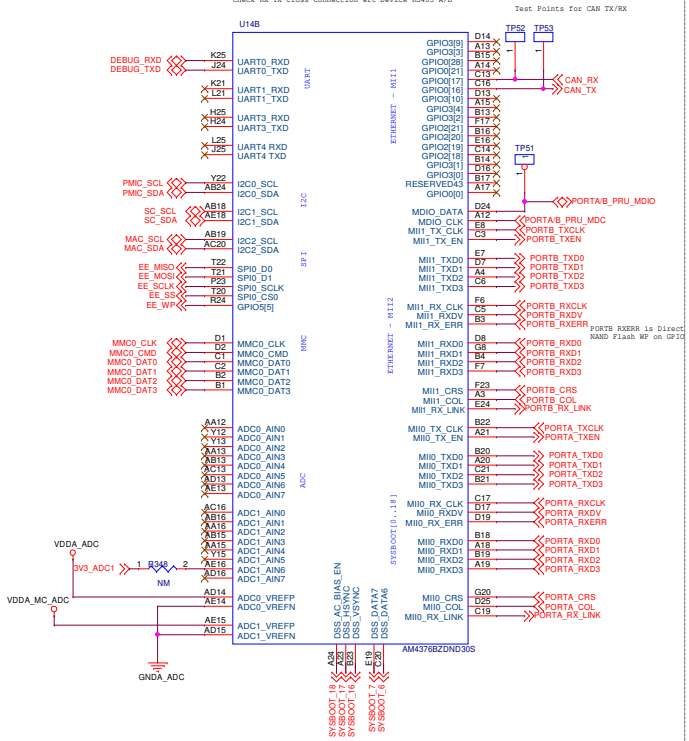
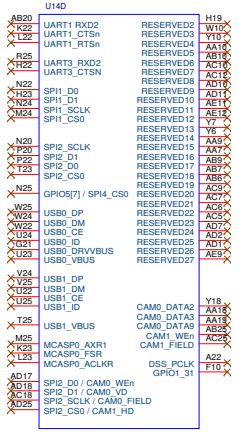
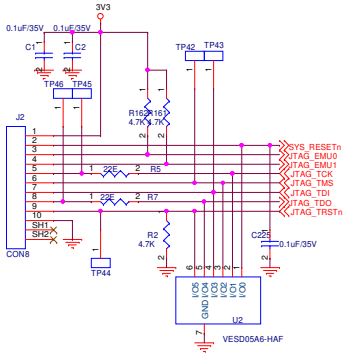
PROCESSOR SUBSYSTEM







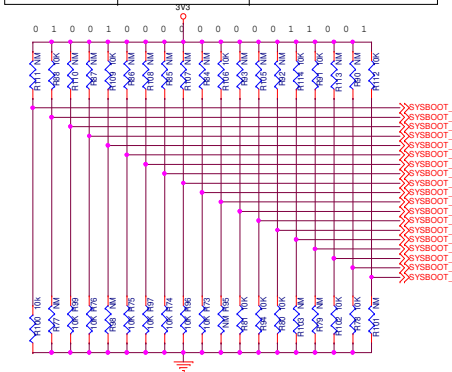
JTAG

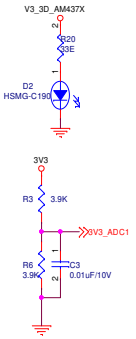


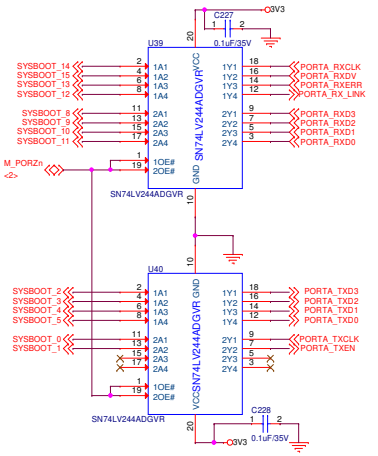
Check Connection & Sequence with EMULATOR and Probe to be used

Boot Configuration

SYS_BOOT[18:0]	x1x0100x0x0x0x11001 b	UART0, NAND I2_C, NAND, MMC0







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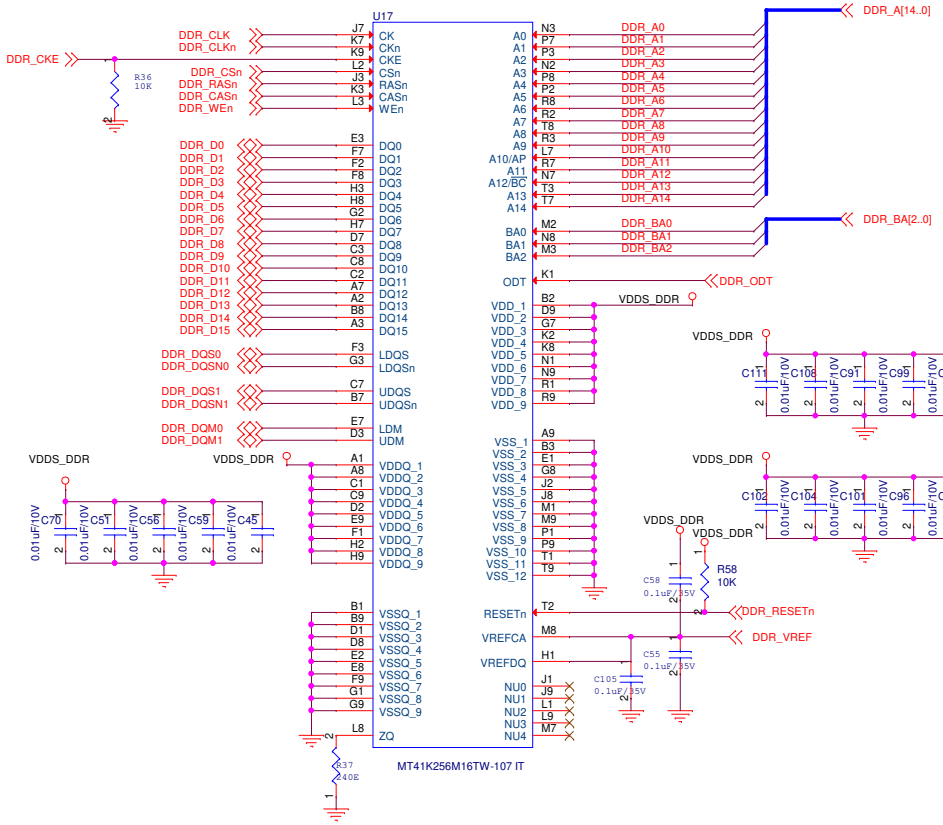
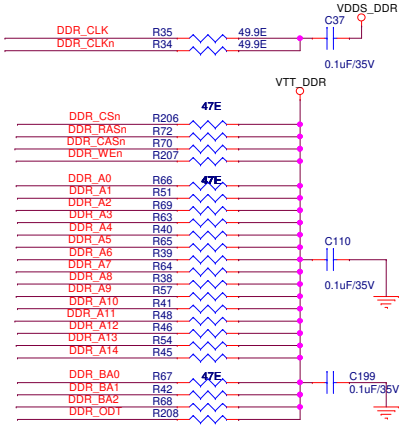
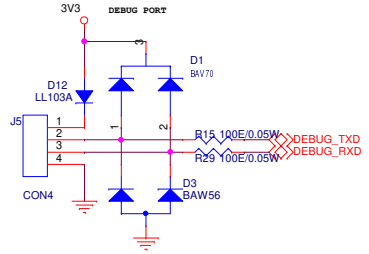
DDR3 INTERFACE

4 Gb DDR3 SDRAM

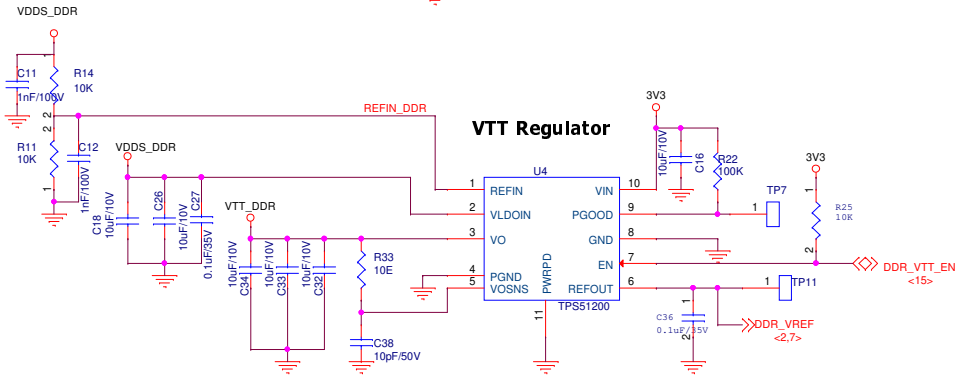


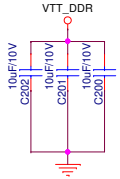
Terminations





VTT Regulator





CAPACITOR TO BE PLACED
AT OTHER END OF VTT PLANE

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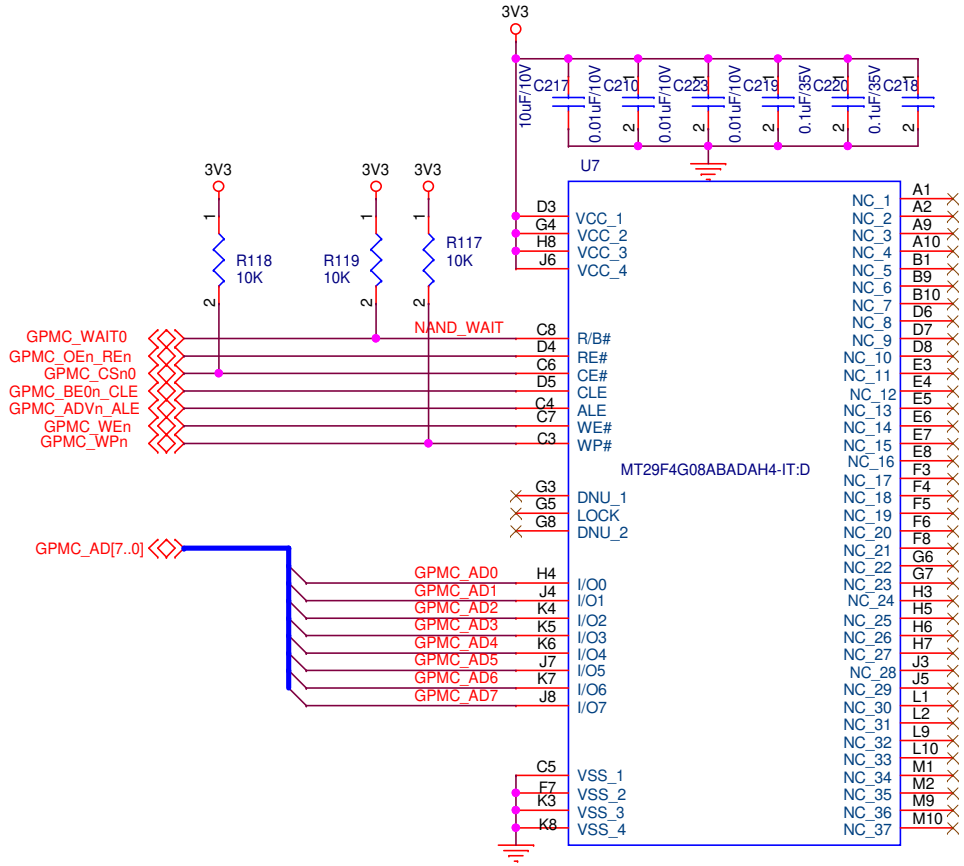
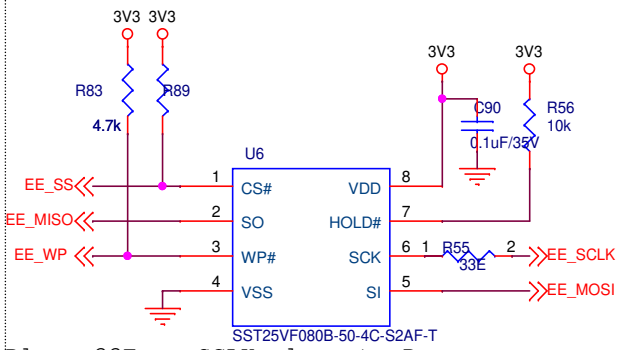
4Gb NAND Interface

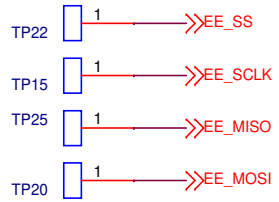


NAND WPn is TAKEN FROM GPIO0[27]
Check boot condition of IO WP/RXERROR select; Use Pull up; Pull down; NO\NC Accordingly

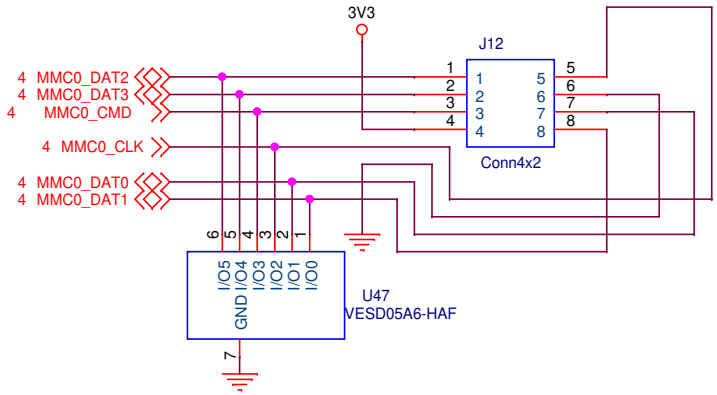
FLASH/EEPROM



Place 33E on SCLK close to Processor



MMC PROVISION



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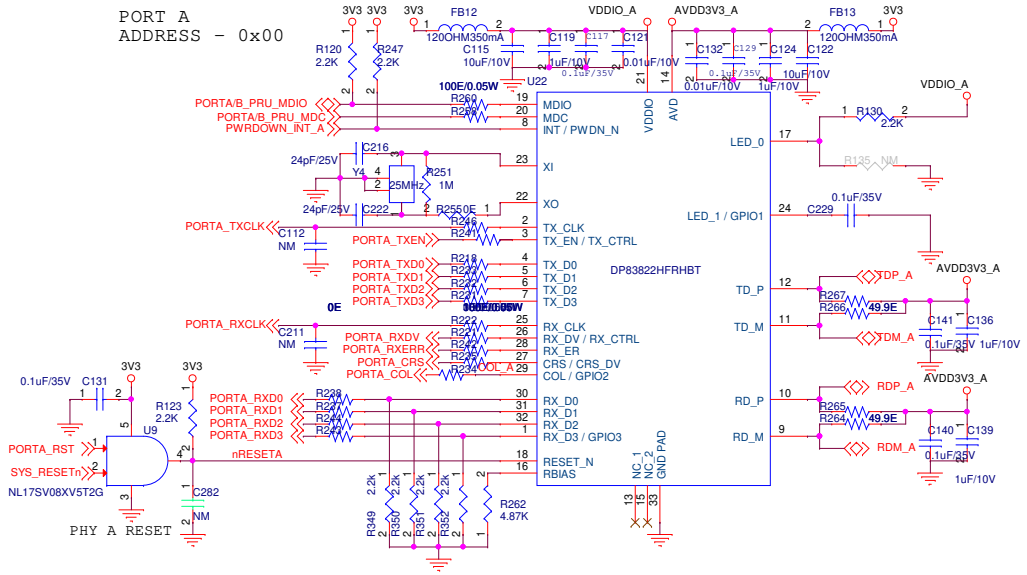
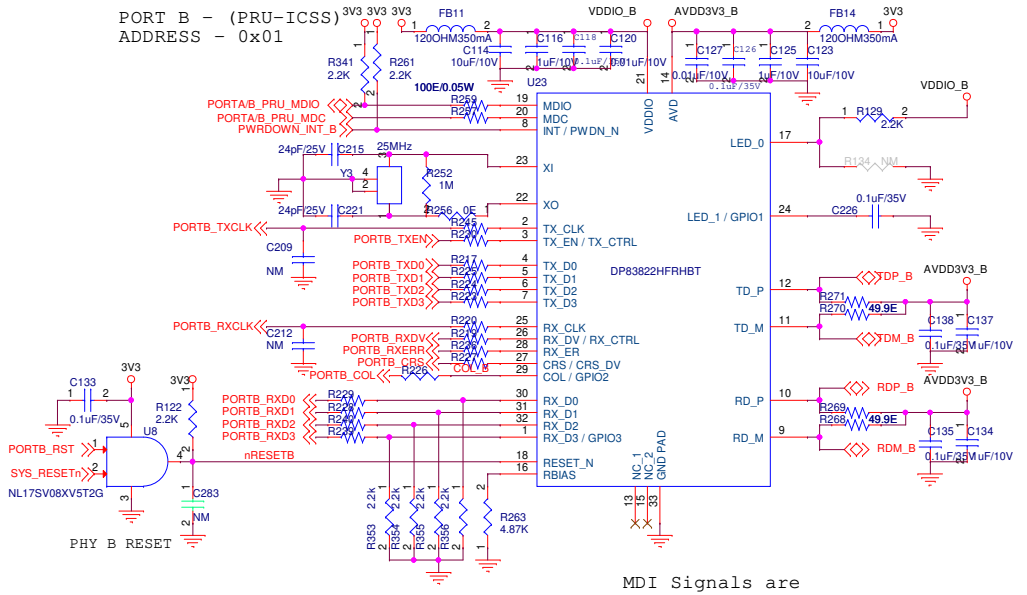
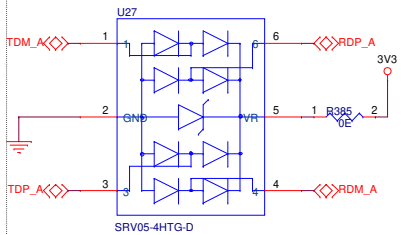
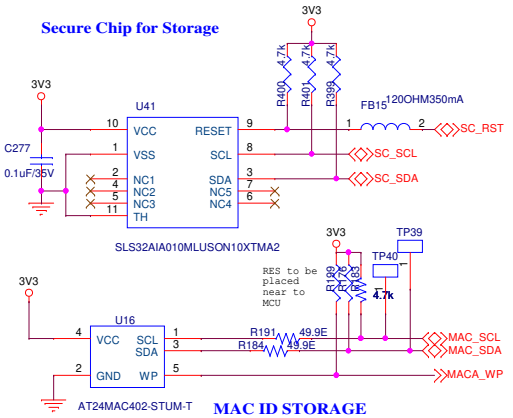


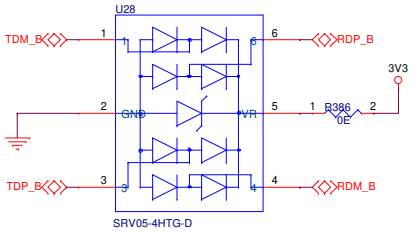


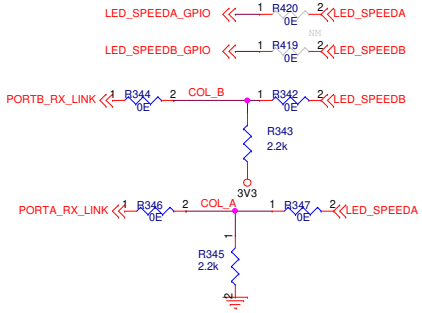
MDI Signals are
100 Ohm Differential Signals





MODBUS TCP/IP PHYSICAL INTERFACE





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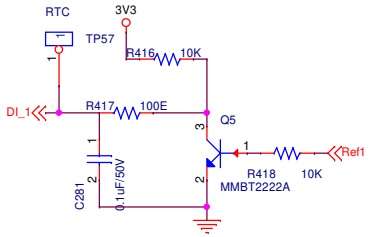
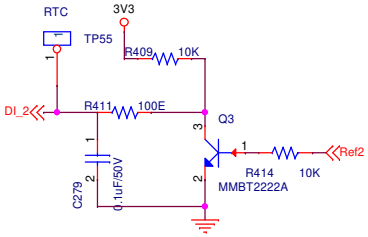
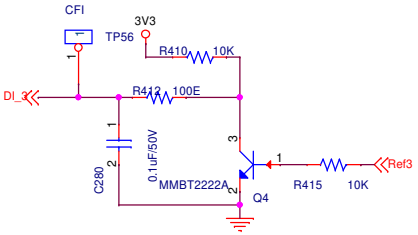
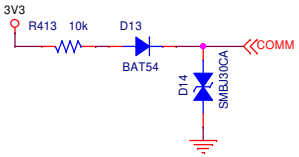
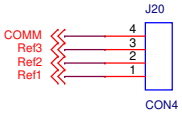
Digital Input Interface and its circuitry











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