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NOTE: DNI = DO NOT INSTALL COMPONENT.

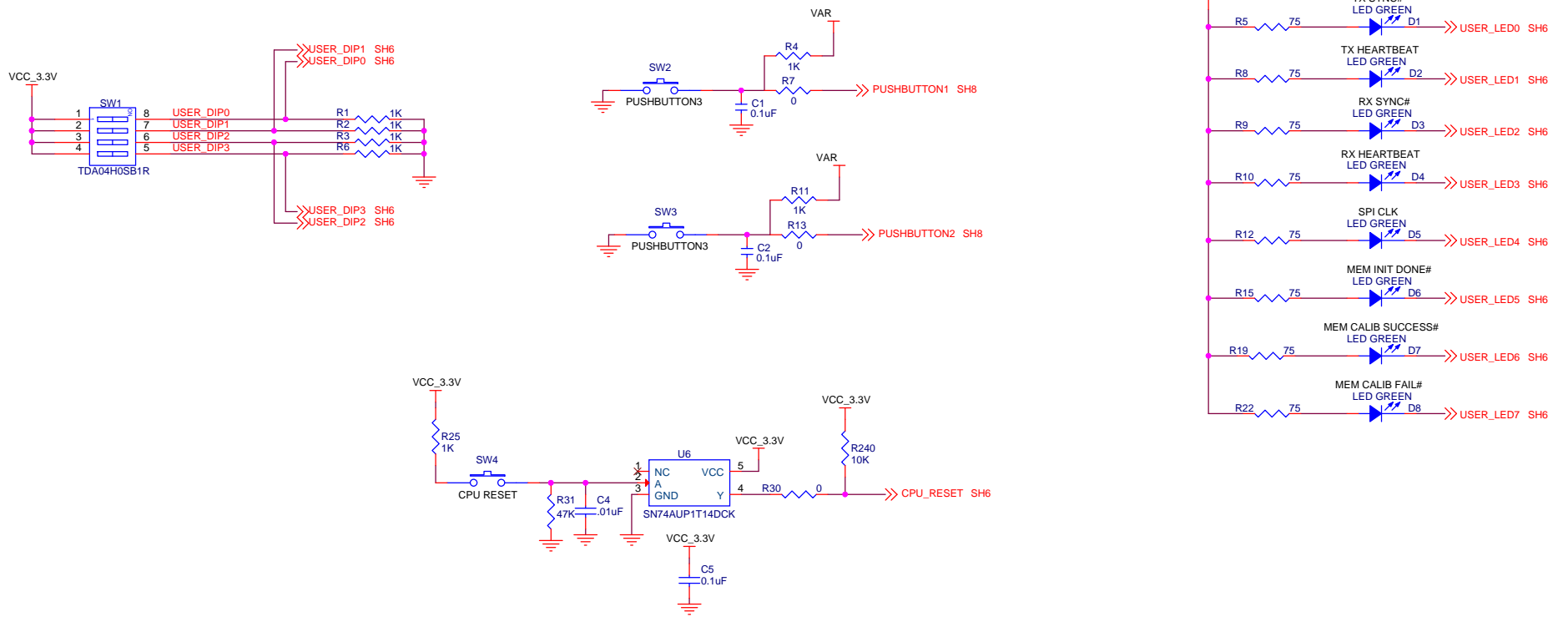
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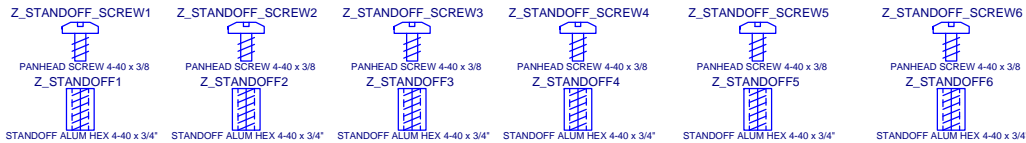
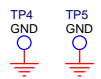
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Engineer: <b>J. SETON / E. DWOBENG</b>	Date: <b>Monday, May 05, 2014</b>	Sheet <b>1</b> of <b>21</b>	

# Buttons, Switches, LEDs



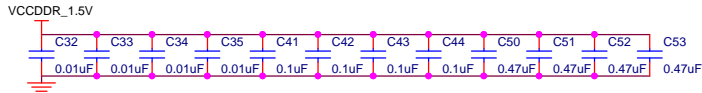
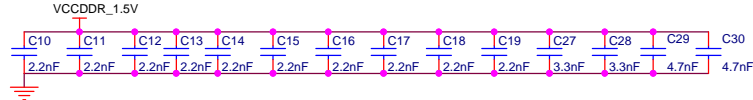
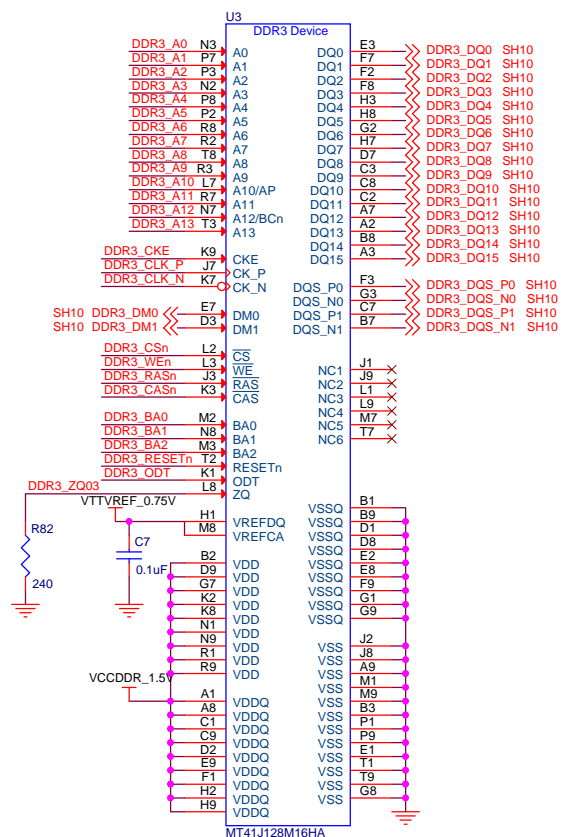
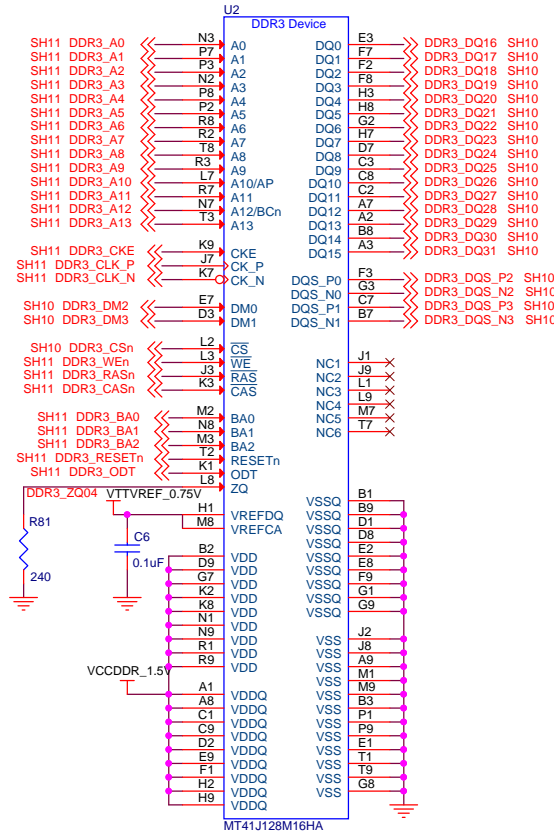
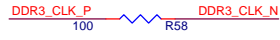
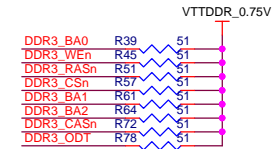
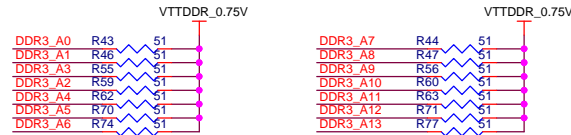
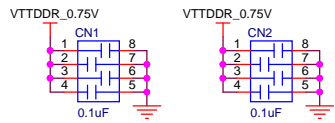
## MECHANICAL PARTS



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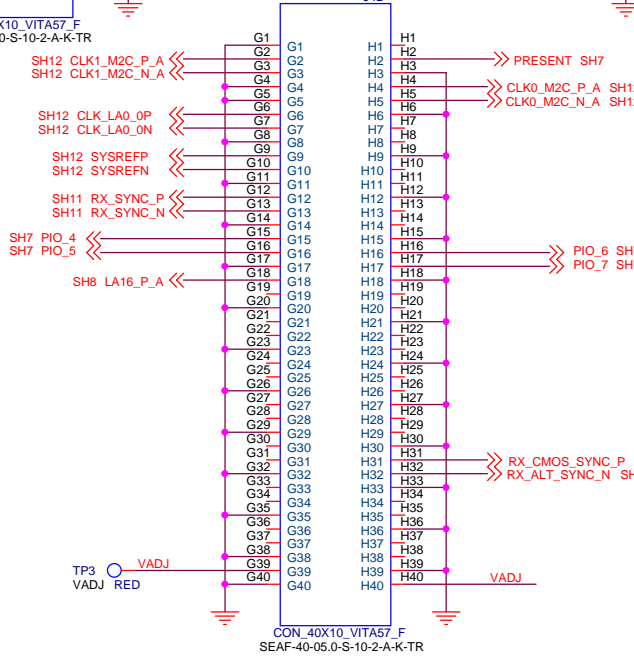
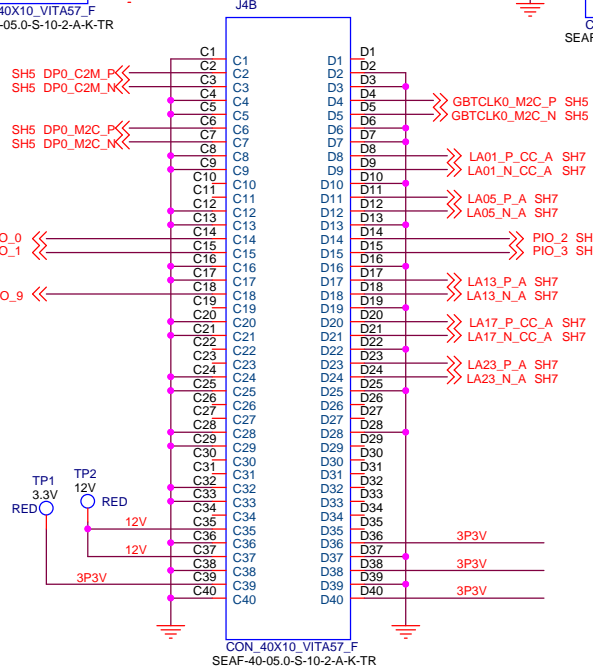
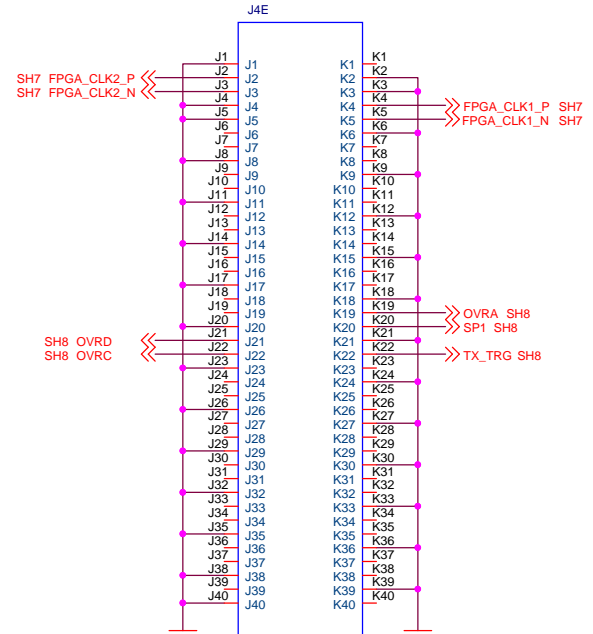
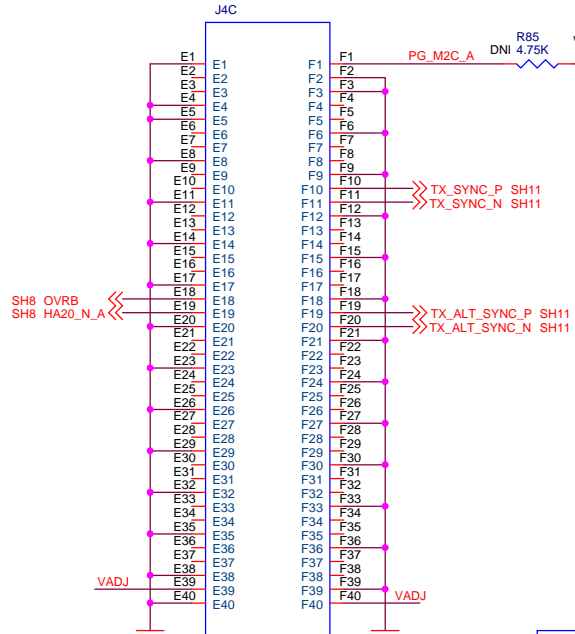
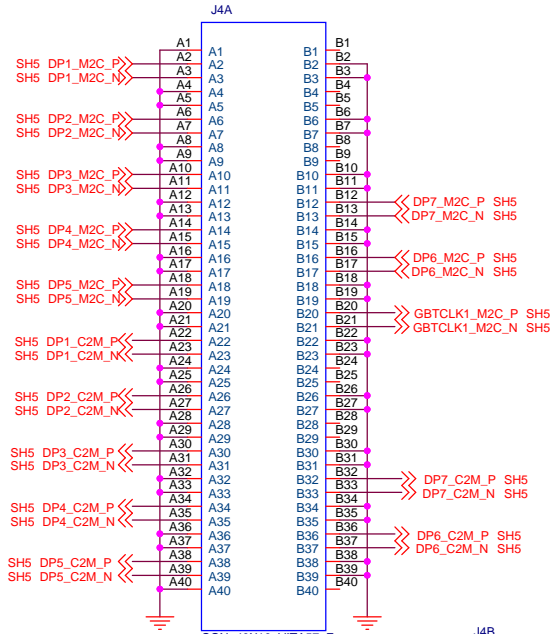
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**DDR III**  
 Uses Soft Controller



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FPGA=CARRIER  
DUT=MEZ  
M2C - ADC  
C2M - DAC

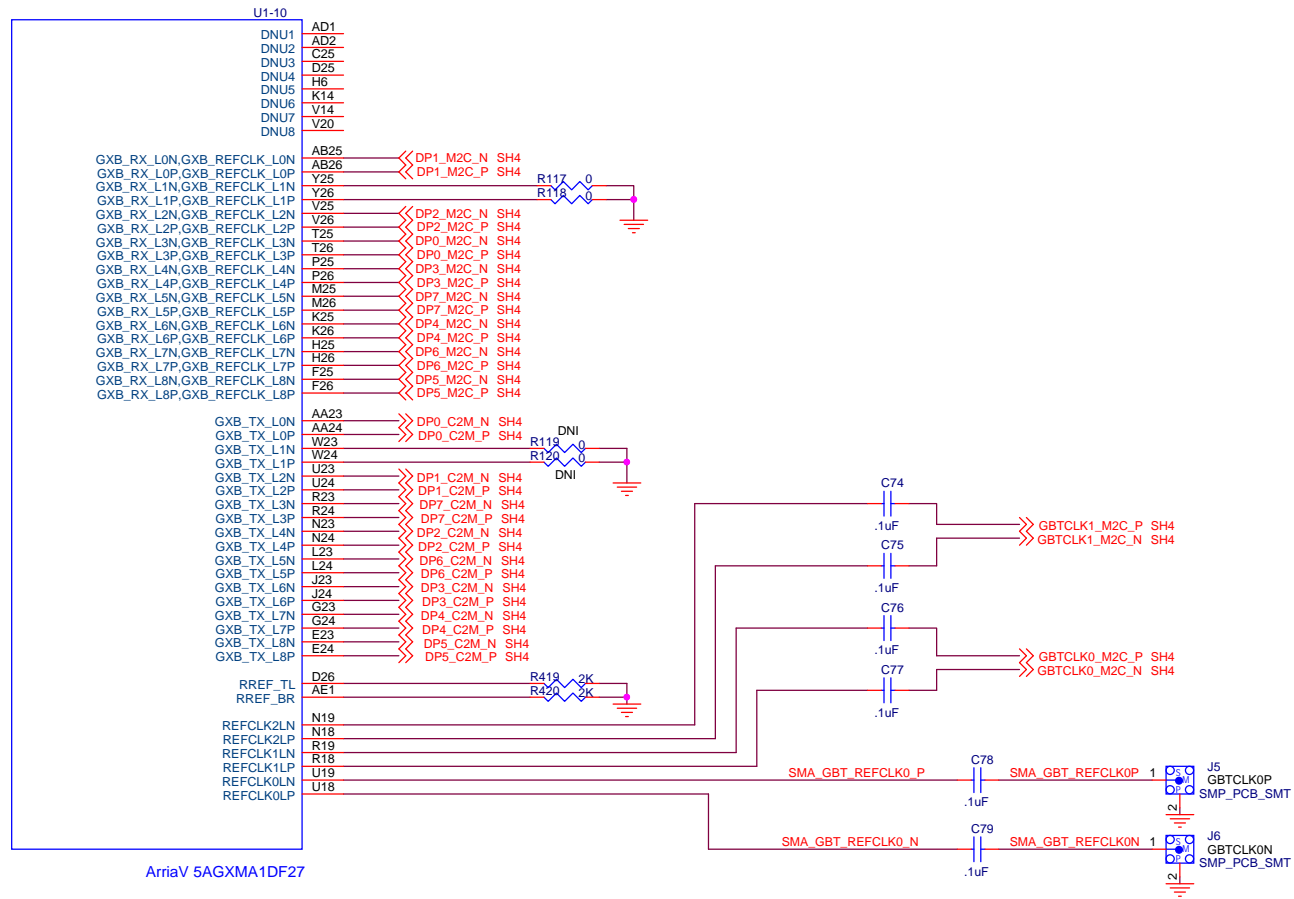
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**FMC HPC CONNECTOR**

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HIGH SPEED BANK

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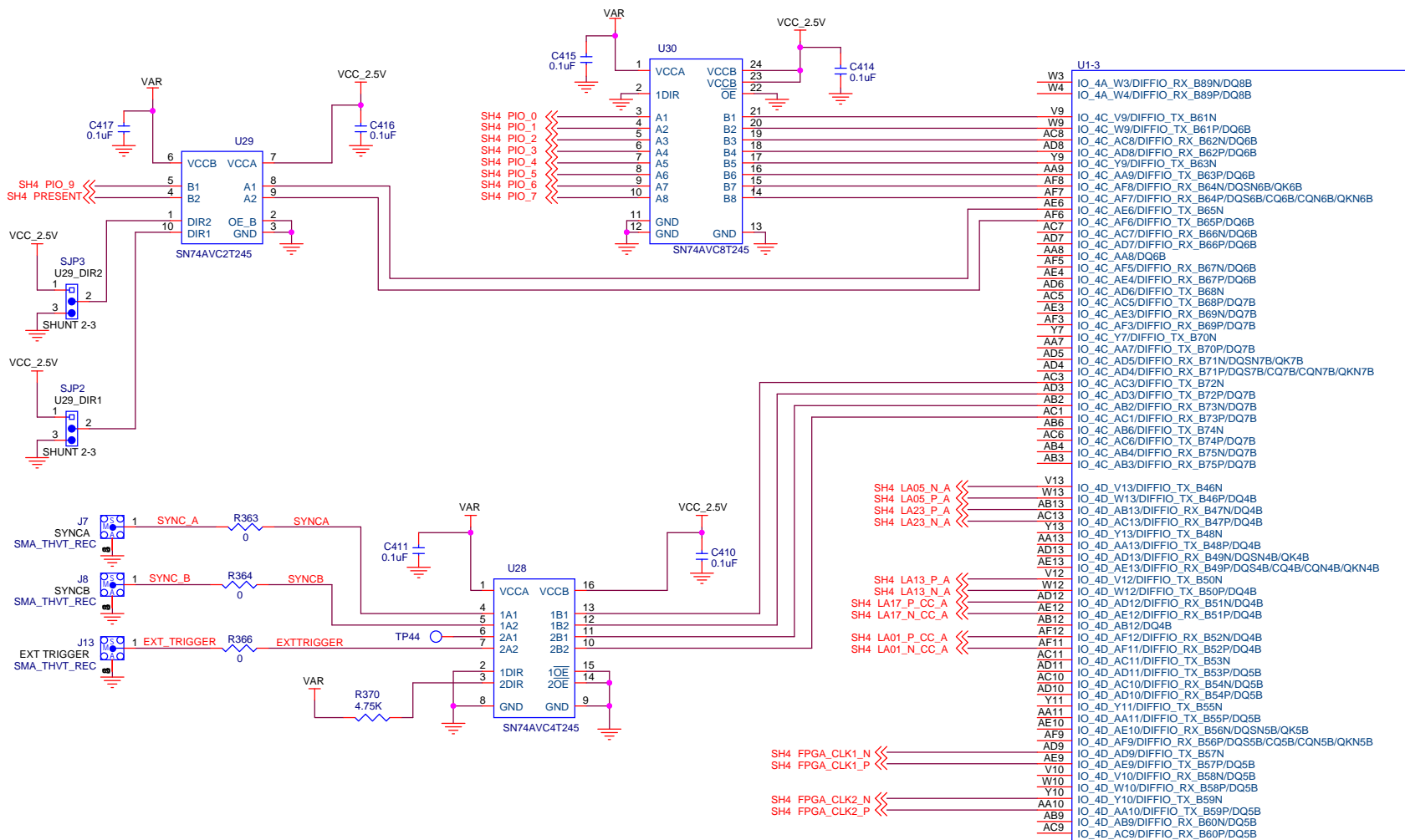
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BANK 3

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- SH4 LA05\_N\_A <<> W13
- SH4 LA05\_P\_A <<> AB13
- SH4 LA23\_P\_A <<> AC13
- SH4 LA23\_N\_A <<> Y13
- SH4 LA13\_P\_A <<> V12
- SH4 LA13\_N\_A <<> W12
- SH4 LA17\_P\_CC\_A <<> AE12
- SH4 LA17\_N\_CC\_A <<> AB12
- SH4 LA01\_P\_CC\_A <<> AF12
- SH4 LA01\_N\_CC\_A <<> AF11
- SH4 FPGA\_CLK1\_N <<> V10
- SH4 FPGA\_CLK1\_P <<> W10
- SH4 FPGA\_CLK2\_N <<> AA10
- SH4 FPGA\_CLK2\_P <<> AB9

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 BANK 4C (3.3V)  
 BANK 4D (2.5V)

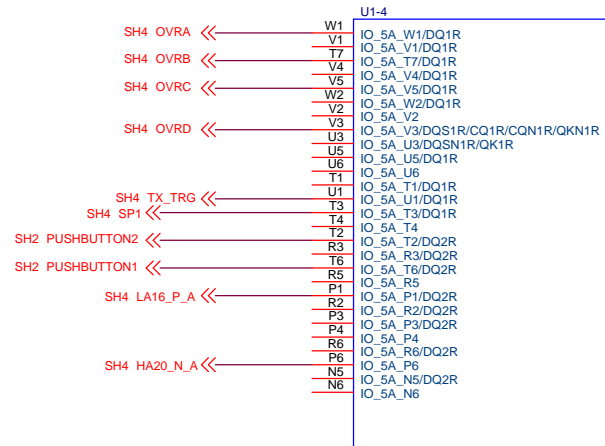
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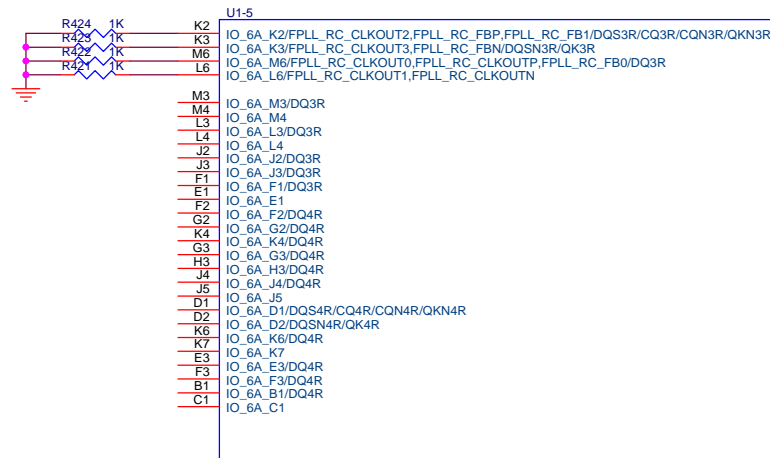
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FPGA Bank 5A (VAR)

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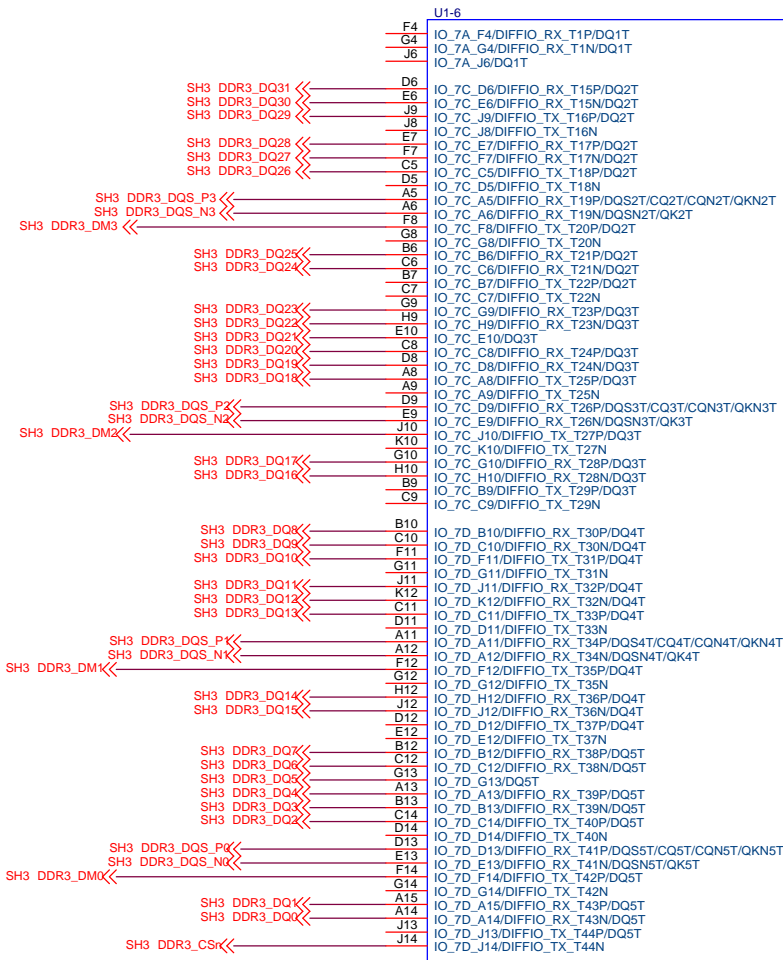
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FPGA Bank 6 (2.5V)

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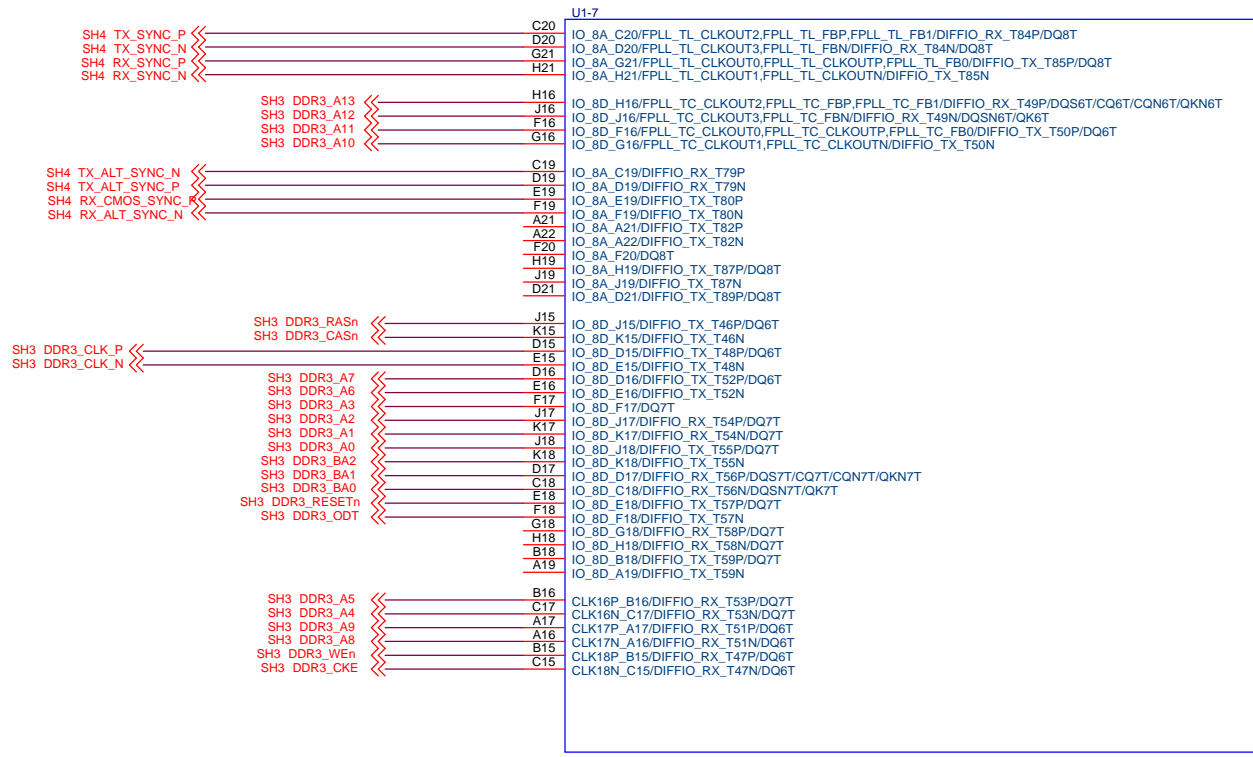


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 DDRIII - FPGA Bank 7C & 7D (1.5V)

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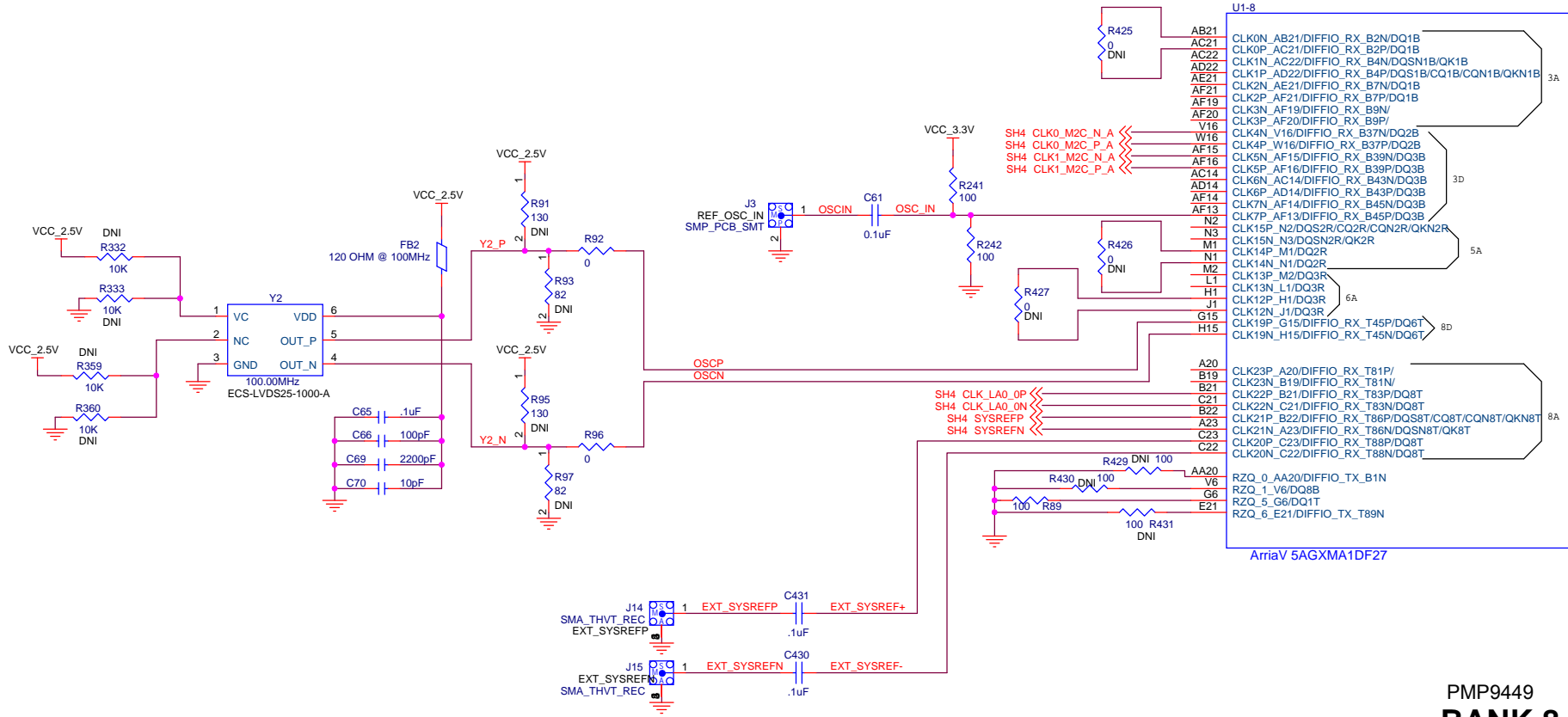
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DDRIII - FPGA Bank 8D (1.5V)  
FPGA Bank 8A (2.5V)



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U1-8

AB21	CLK0N_AB21/DIFFIO_RX_B2N/DQ1B	3A
AC21	CLK0P_AC21/DIFFIO_RX_B2P/DQ1B	
AD22	CLK1N_AC22/DIFFIO_RX_B4N/DQSN1B/QK1B	
AE21	CLK1P_AD22/DIFFIO_RX_B4P/DQS1B/CQ1B/CQN1B/QKN1B	
AF21	CLK2N_AE21/DIFFIO_RX_B7N/DQ1B	
AF19	CLK2P_AF21/DIFFIO_RX_B7P/DQ1B	
AF20	CLK3N_AF19/DIFFIO_RX_B9N/	
V16	CLK3P_AF20/DIFFIO_RX_B9P/	
W16	CLK4N_W16/DIFFIO_RX_B37N/DQ2B	
AF15	CLK4P_W16/DIFFIO_RX_B37P/DQ2B	3D
AF16	CLK5N_AF15/DIFFIO_RX_B39N/DQ3B	
AC14	CLK5P_AF16/DIFFIO_RX_B39P/DQ3B	
AD14	CLK6N_AC14/DIFFIO_RX_B43N/DQ3B	
AF14	CLK6P_AD14/DIFFIO_RX_B43P/DQ3B	
AF13	CLK7N_AF14/DIFFIO_RX_B45N/DQ3B	
N2	CLK7P_AF13/DIFFIO_RX_B45P/DQ3B	
N3	CLK15P_N2/DQS2R/CQ2R/CQN2R/QKN2R	5A
M1	CLK15N_N3/DQS2R/QK2R	
N1	CLK14P_M1/DQ2R	
M2	CLK14N_N1/DQ2R	
L1	CLK13P_M2/DQ3R	6A
H1	CLK13N_L1/DQ3R	
J1	CLK12P_H1/DQ3R	
G15	CLK12N_J1/DQ3R	
H15	CLK19P_G15/DIFFIO_RX_T45P/DQ6T	8D
A20	CLK23P_A20/DIFFIO_RX_T81P/	
B19	CLK23N_B19/DIFFIO_RX_T81N/	
C21	CLK22P_B21/DIFFIO_RX_T83P/DQ8T	
B22	CLK22N_C21/DIFFIO_RX_T83N/DQ8T	8A
A23	CLK21P_B22/DIFFIO_RX_T86P/DQS8T/QK8T	
C23	CLK21N_A23/DIFFIO_RX_T86N/DQS8T/QK8T	
C22	CLK20P_C23/DIFFIO_RX_T88P/DQ8T	
	CLK20N_C22/DIFFIO_RX_T88N/DQ8T	
AA20	RZQ_0_AA20/DIFFIO_TX_B1N	
V6	RZQ_1_V6/DQ8B	
G6	RZQ_5_G6/DQ1T	
E21	RZQ_6_E21/DIFFIO_TX_T89N	

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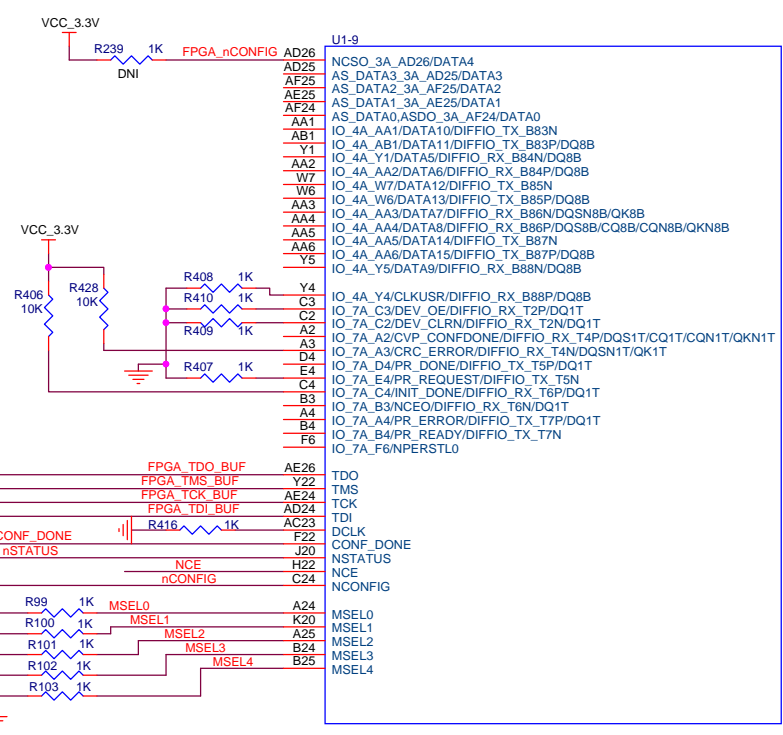
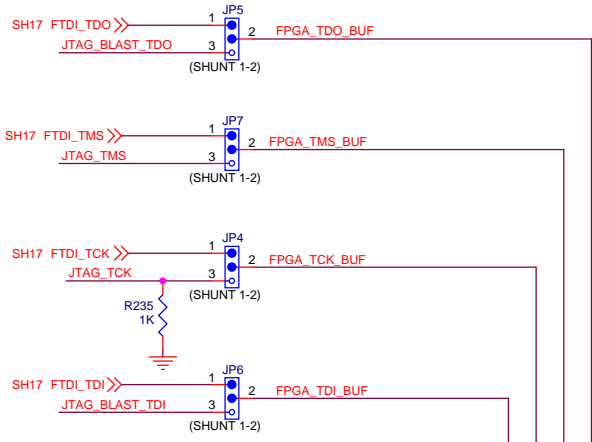
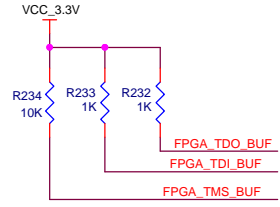
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BANK 8

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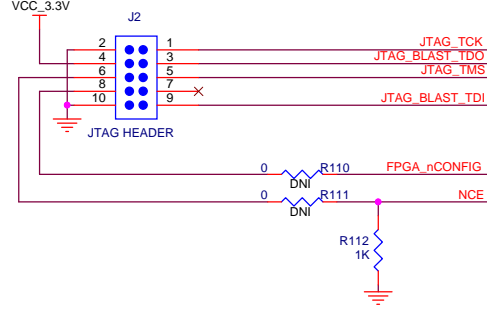
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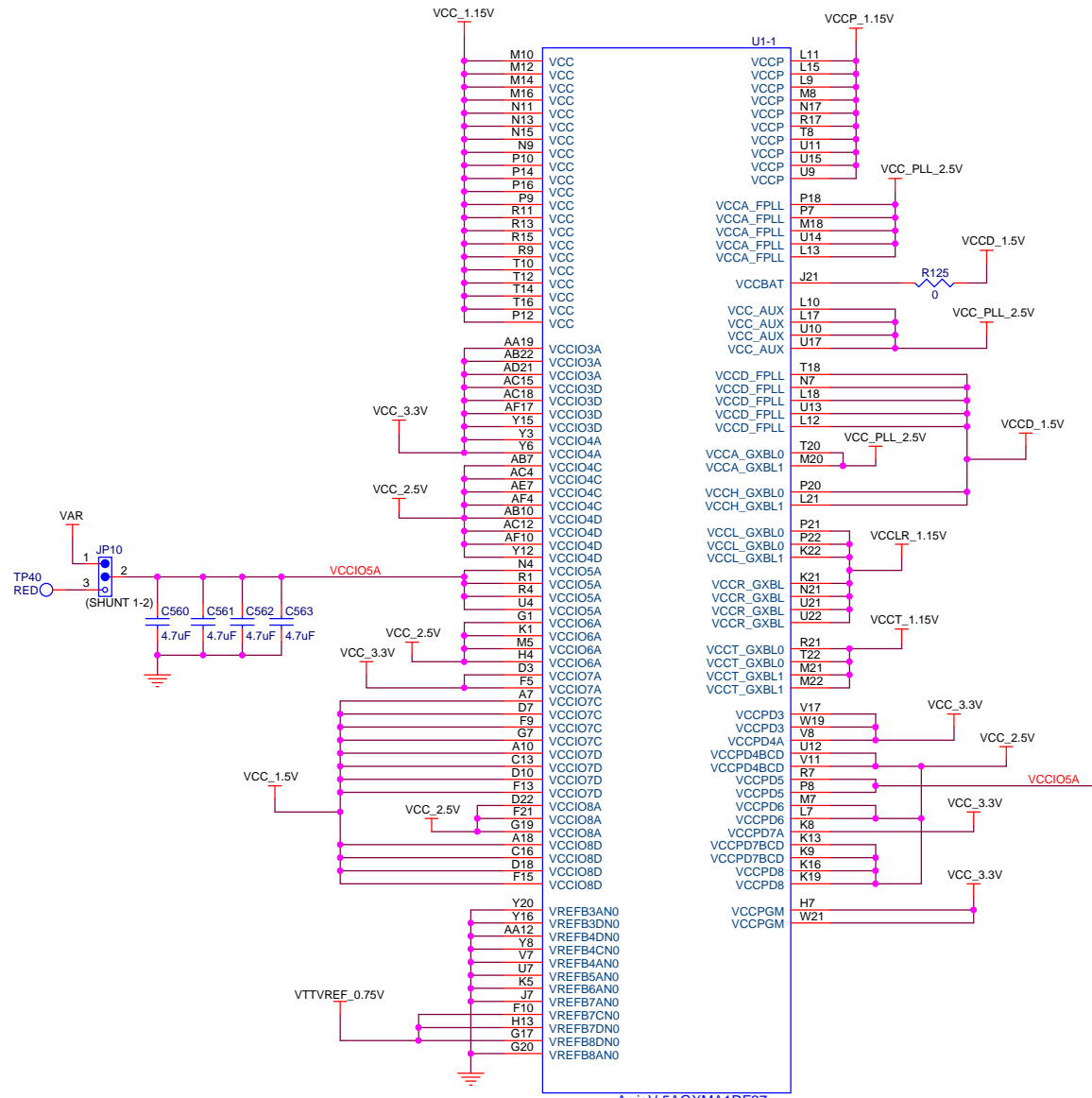
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AE25	AS_DATA2_3A_AF25/DATA2
AF24	AS_DATA1_3A_AE25/DATA1
AA1	AS_DATA0_ASDO_3A_AF24/DATA0
AB1	IO_4A_AA1/DATA10/DIFFIO_TX_B83N
Y1	IO_4A_AB1/DATA11/DIFFIO_TX_B83P/DQ8B
AA2	IO_4A_Y1/DATA5/DIFFIO_RX_B84N/DQ8B
W7	IO_4A_AA2/DATA6/DIFFIO_RX_B84P/DQ8B
W6	IO_4A_W7/DATA12/DIFFIO_TX_B85N
AA3	IO_4A_W6/DATA13/DIFFIO_TX_B85P/DQ8B
AA4	IO_4A_AA3/DATA7/DIFFIO_RX_B86N/DQ8B
AA5	IO_4A_AA4/DATA8/DIFFIO_RX_B86P/DQ8B/CQ8B/CQN8B/QKN8B
AA6	IO_4A_AA5/DATA14/DIFFIO_TX_B87N
Y5	IO_4A_AA6/DATA15/DIFFIO_TX_B87P/DQ8B
Y4	IO_4A_Y5/DATA9/DIFFIO_RX_B88N/DQ8B
Y4	IO_4A_Y4/CLKUSR/DIFFIO_RX_B88P/DQ8B
C3	IO_7A_C3/DEV_OE/DIFFIO_RX_T2P/DQ1T
C2	IO_7A_C2/DEV_CLRN/DIFFIO_RX_T2N/DQ1T
A2	IO_7A_A2/CVP_CONFDONE/DIFFIO_RX_T4P/DQS1T/CQ1T/CQN1T/QKN1T
A3	IO_7A_A3/CRC_ERROR/DIFFIO_RX_T4N/DQSN1T/QK1T
D4	IO_7A_D4/PR_DONE/DIFFIO_TX_T5P/DQ1T
A4	IO_7A_E4/PR_REQUEST/DIFFIO_TX_T5N
C4	IO_7A_C4/INIT_DONE/DIFFIO_RX_T6P/DQ1T
B3	IO_7A_B3/NCEO/DIFFIO_RX_T6N/DQ1T
A4	IO_7A_A4/PR_ERROR/DIFFIO_TX_T7P/DQ1T
B4	IO_7A_B4/PR_READY/DIFFIO_TX_T7N
F6	IO_7A_F6/NPERSTL0
AE26	TDO
Y22	TMS
AE24	TCK
AD24	TDI
AC23	DCLK
F22	CONF_DONE
J20	CONF_DONE
H22	NSTATUS
C24	NCE
C24	NCONFIG
A24	MSEL0
K20	MSEL1
A25	MSEL2
B24	MSEL3
B25	MSEL4



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FPGA CONFIGURATION




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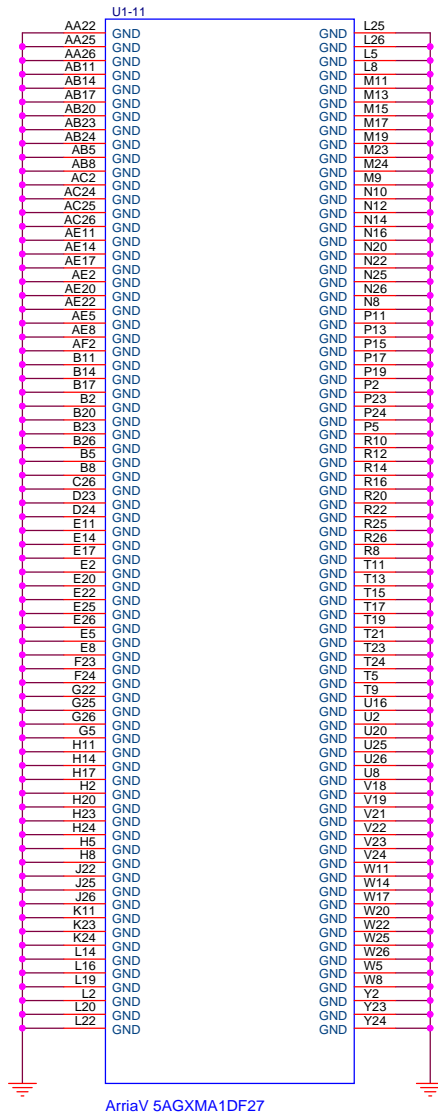
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**FPGA POWER**

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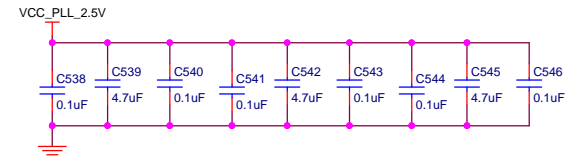
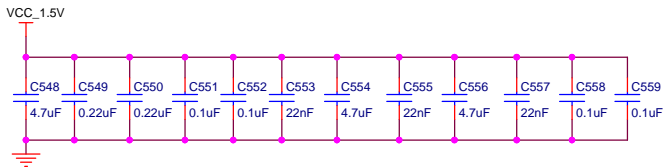
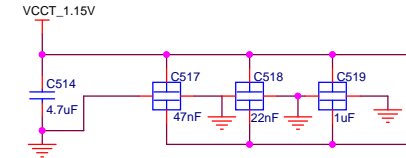
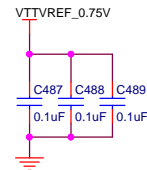
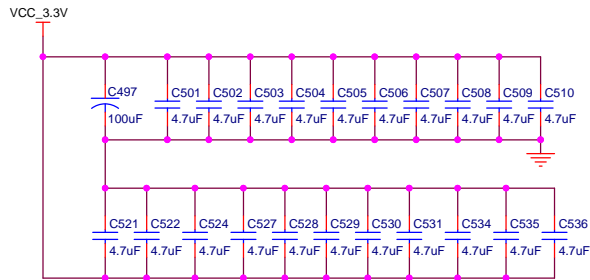
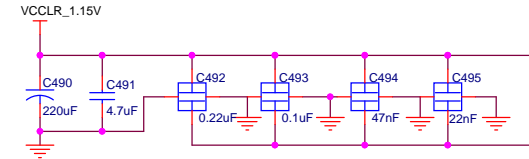
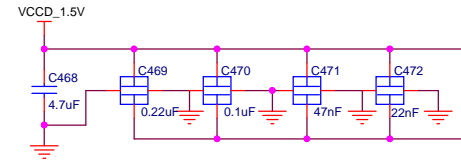
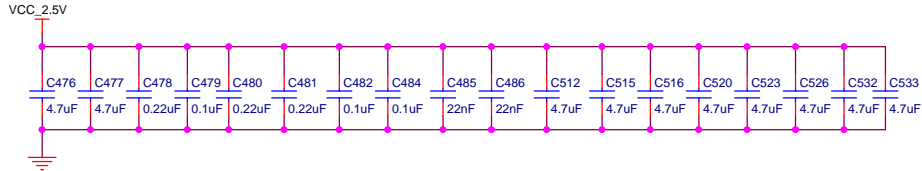
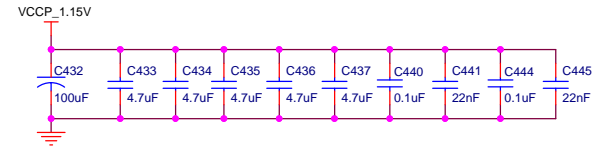
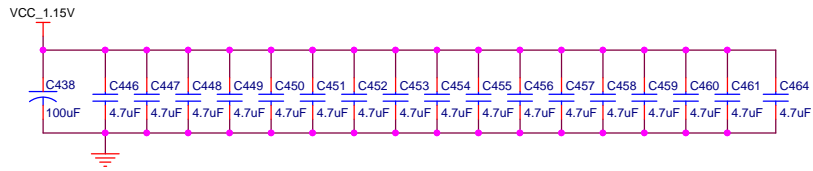


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**FPGA GROUND**

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FPGA Decoupling

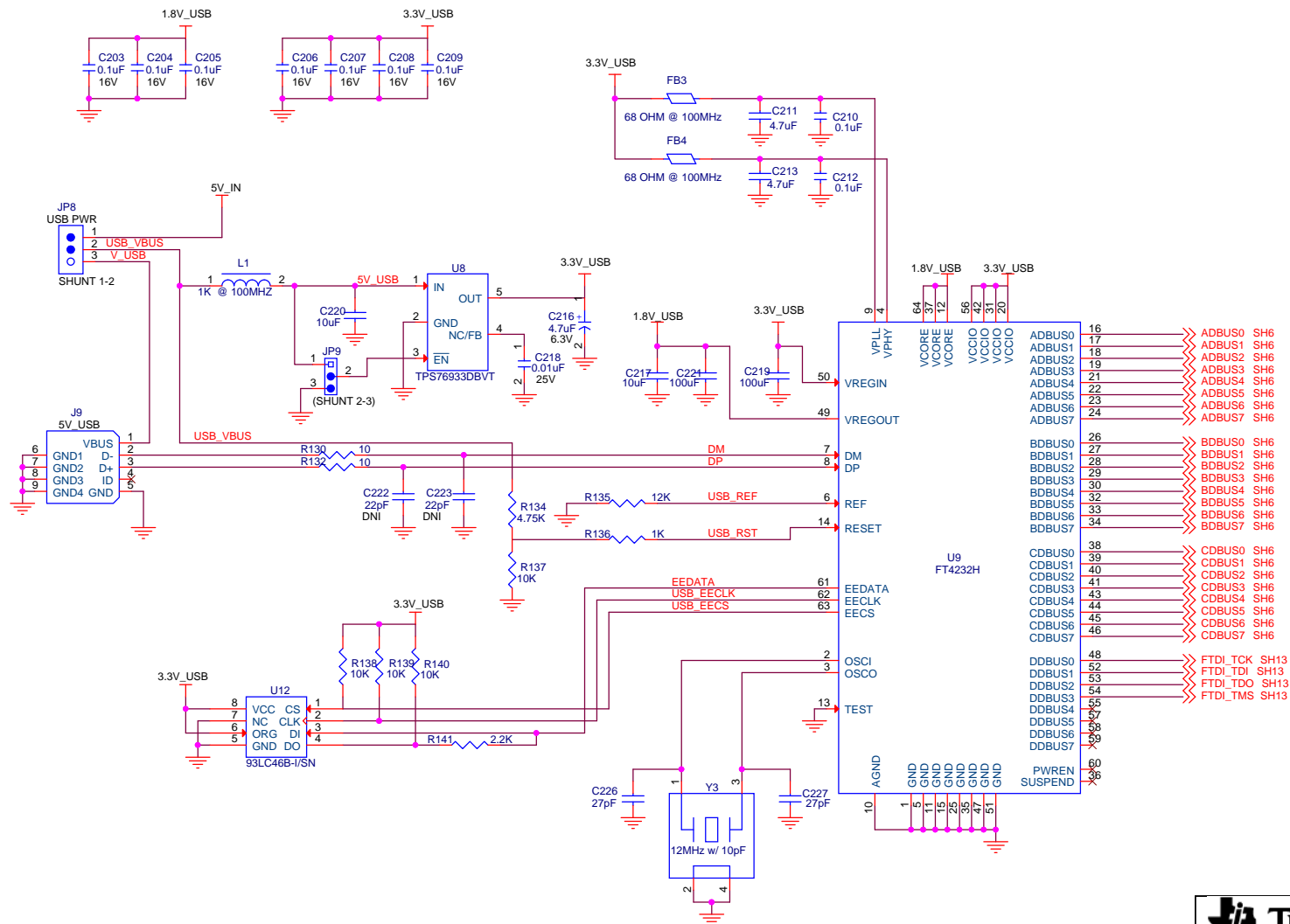
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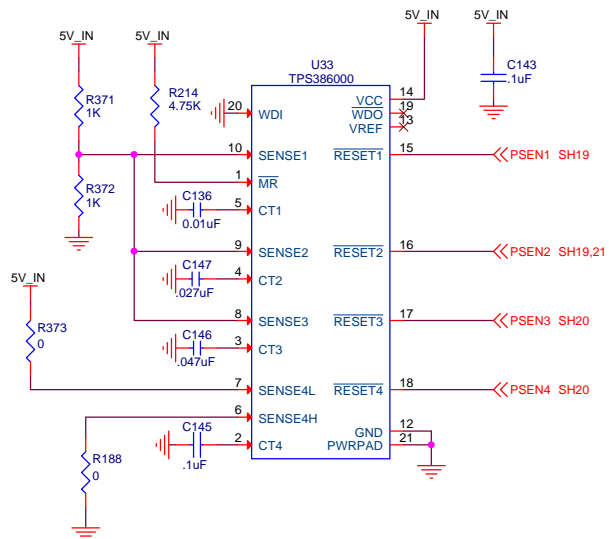





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USB



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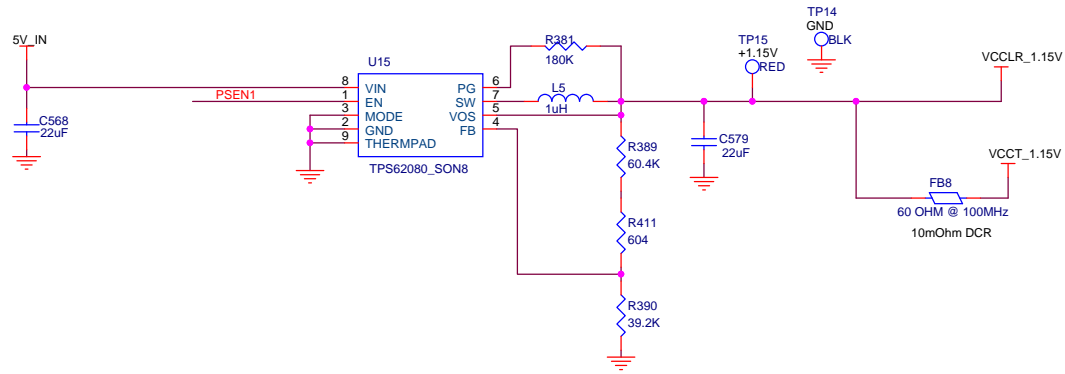
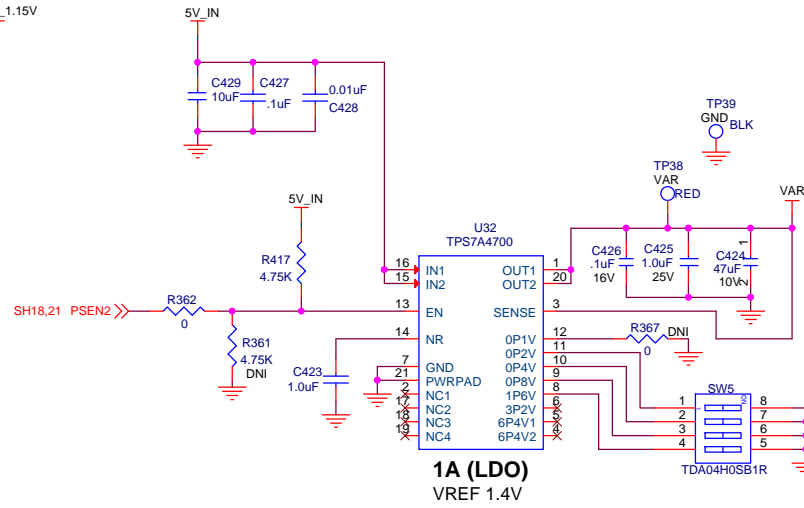
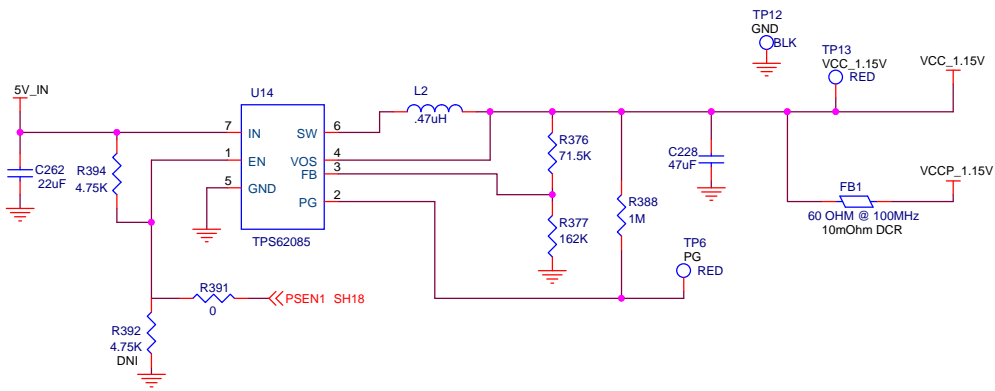


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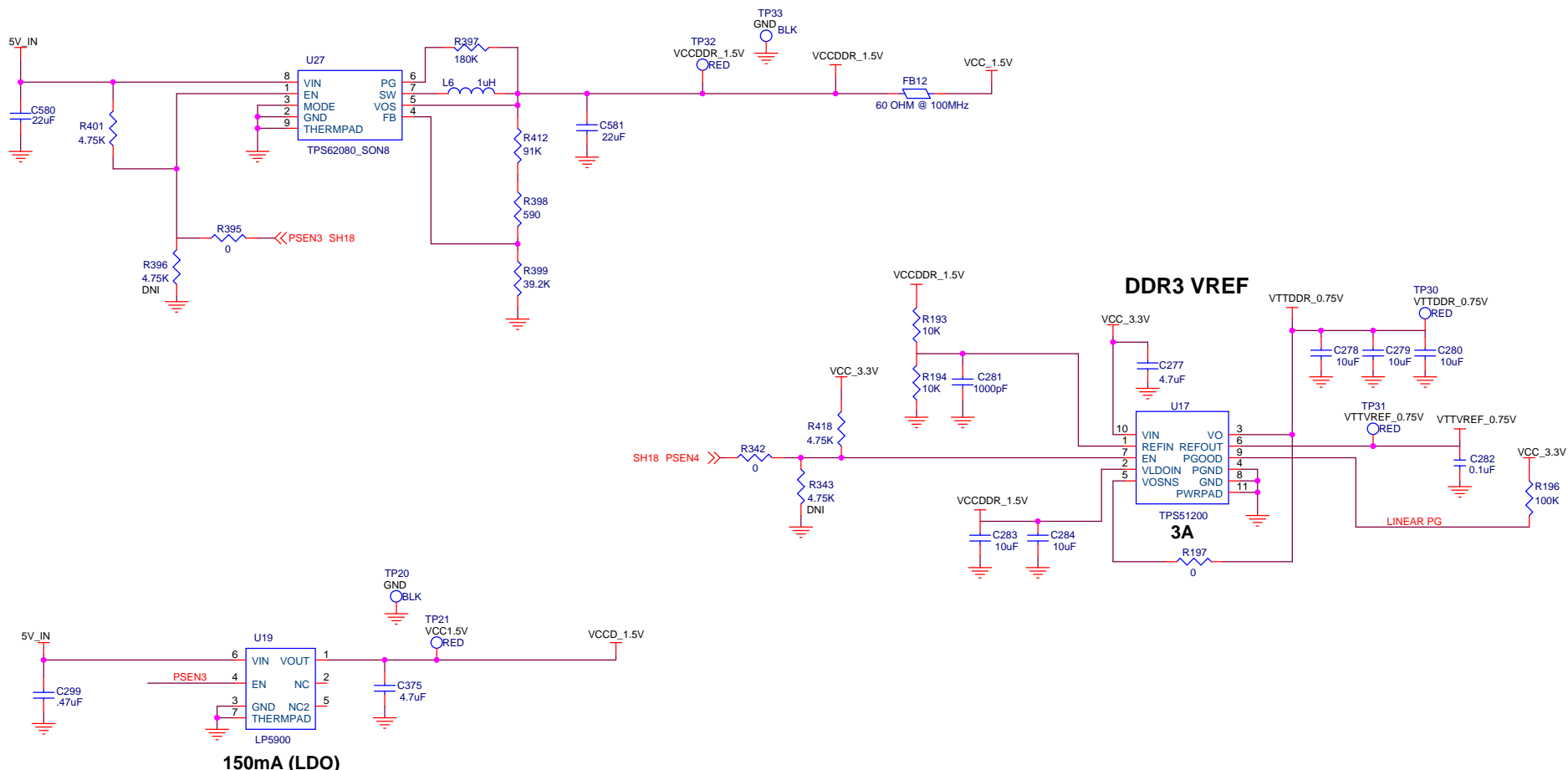
1.15V, VAR

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**150mA (LDO)**

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**0.75V, 1.5V**

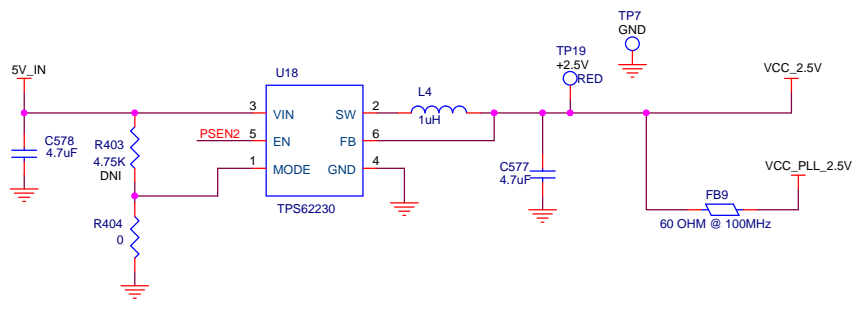
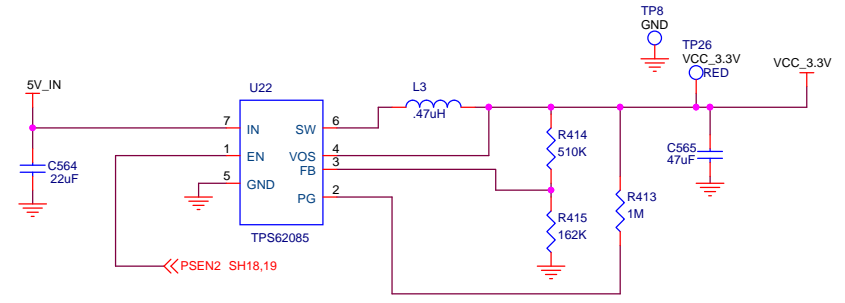
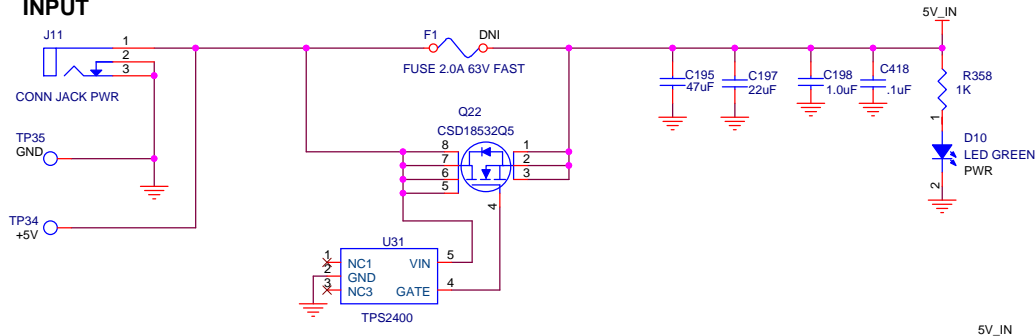
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**5V DC INPUT**



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**3.3V, 2.5V**

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