

Application FPGA supply

U_SFPGA_power
SFPGA_power.SchDoc

System FPGA supply

B16_{0..0}
B17_{0..0}
B18_{0..0}
B19_{0..0}
B20_{0..0}
B21_{0..0}

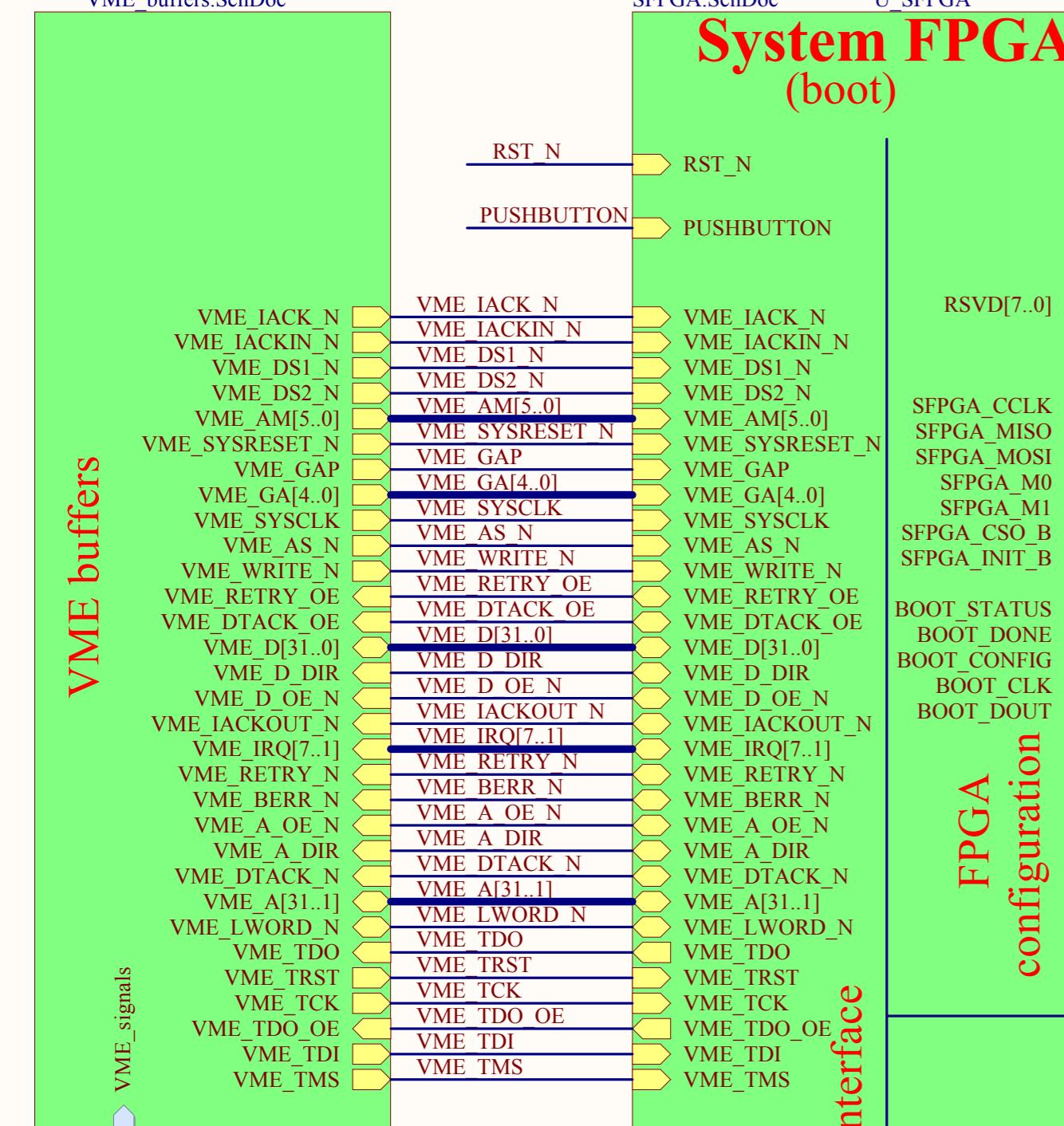
stand-alone
version
mounting
holes

Power_supplies.SchDoc U_PowerSupplies

RST_N switching power supply

VCCO_0 = 3.3V VCCO_2 = 3.3V
VCCO_1 = 3.3V VCCO_3 = 3.3V

System FPGA (boot)



VME_buffers

VME connectors

U_VME_connectors
VME_connectors.SchDoc

P2_DATA_P[19..0]
P2_DATA_N[19..0]

P2_PLLFMC2_CLK_P
P2_PLLFMC2_CLK_N

P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N

P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N

P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N

VME signals

U_VME_connectors
VME_connectors.SchDoc

VME_IACK_N
VME_IACKIN_N
VME_DS1_N
VME_DS2_N
VME_AM[5..0]
VME_SYSRESET_N
VME_GAP
VME_GA[4..0]
VME_SYSCLK
VME_AS_N
VME_WRITE_N
VME_RETRY_OE
VME_DTACK_OE
VME_D[31..0]
VME_D_DIR
VME_D_OE_N
VME_IACKOUT_N
VME_IROQ[7..1]
VME_RETRY_N
VME_BERR_N
VME_A_OE_N
VME_A_DIR
VME_DTACK_N
VME_A[31..1]
VME_LWORD_N
VME_TDO
VME_TRST
VME_TCK
VME_TD_OE
VME_TDI
VME_TMS

P2_PLLFMC2_CLK_P
P2_PLLFMC2_CLK_N

P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N

P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N

P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N

AFPGA.SchDoc U_AFPGA

ApplicationFPGA

FMC control

FMC1_LA_P[33..0] FMC1_LA_N[33..0] FMC1_PGA2M
FMC1_SCL FMC1_SDA FMC1_PrsntM2C_N

FMC1_TMS FMC1_TCK FMC1_TDI FMC1_TDO

FMC1_VREFAM2C FMC1_CLK0M2C_P FMC1_CLK0M2C_N

FMC1_CLK1M2C_P FMC1_CLK1M2C_N FMC1_CLK1M2C_P FMC1_CLK1M2C_N

FMC2_LA_P[33..0] FMC2_LA_N[33..0] FMC2_PGA2M
FMC2_SCL FMC2_SDA FMC2_PrsntM2C_N

FMC2_TMS FMC2_TCK FMC2_TDI FMC2_TDO

FMC2_VREFAM2C FMC2_CLK0M2C_P FMC2_CLK0M2C_N

FMC2_CLK1M2C_P FMC2_CLK1M2C_N FMC2_CLK1M2C_P FMC2_CLK1M2C_N

FMC2_PGA2M FMC2_SCL FMC2_SDA FMC2_PrsntM2C_N

FMC2_TMS FMC2_TCK FMC2_TDI FMC2_TDO

FMC2_VREFAM2C FMC2_CLK0M2C_P FMC2_CLK0M2C_N

FMC2_CLK1M2C_P FMC2_CLK1M2C_N FMC2_CLK1M2C_P FMC2_CLK1M2C_N

FMC2_PGA2M FMC2_SCL FMC2_SDA FMC2_PrsntM2C_N

FMC2_TMS FMC2_TCK FMC2_TDI FMC2_TDO

FMC2_VREFAM2C FMC2_CLK0M2C_P FMC2_CLK0M2C_N

FMC2_CLK1M2C_P FMC2_CLK1M2C_N FMC2_CLK1M2C_P FMC2_CLK1M2C_N

FMC2_PGA2M FMC2_SCL FMC2_SDA FMC2_PrsntM2C_N

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FMC2_VREFAM2C FMC2_CLK0M2C_P FMC2_CLK0M2C_N

FMC2_CLK1M2C_P FMC2_CLK1M2C_N FMC2_CLK1M2C_P FMC2_CLK1M2C_N

FMC2_PGA2M FMC2_SCL FMC2_SDA FMC2_PrsntM2C_N

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FMC2_PGA2M FMC2_SCL FMC2_SDA FMC2_PrsntM2C_N

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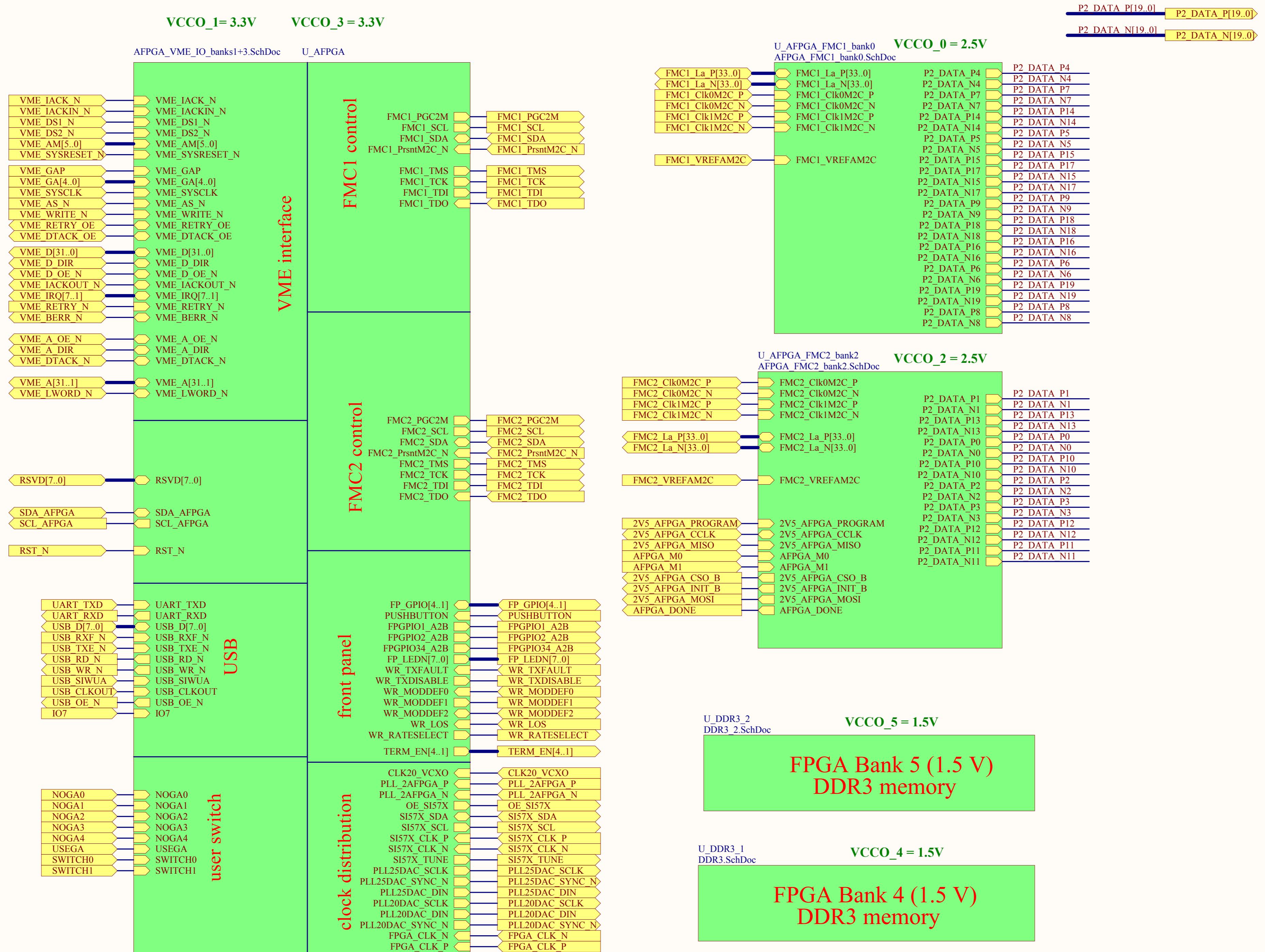
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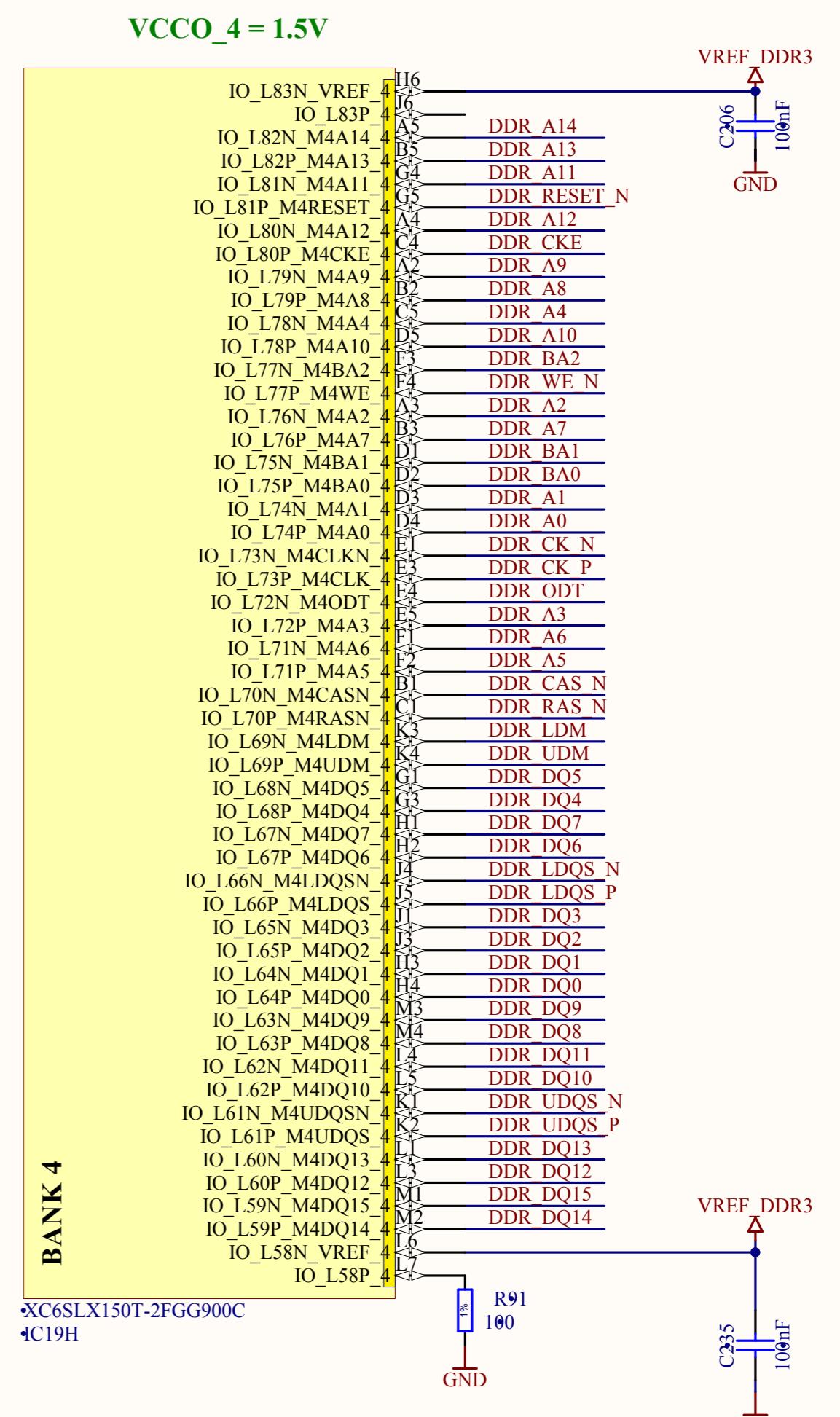
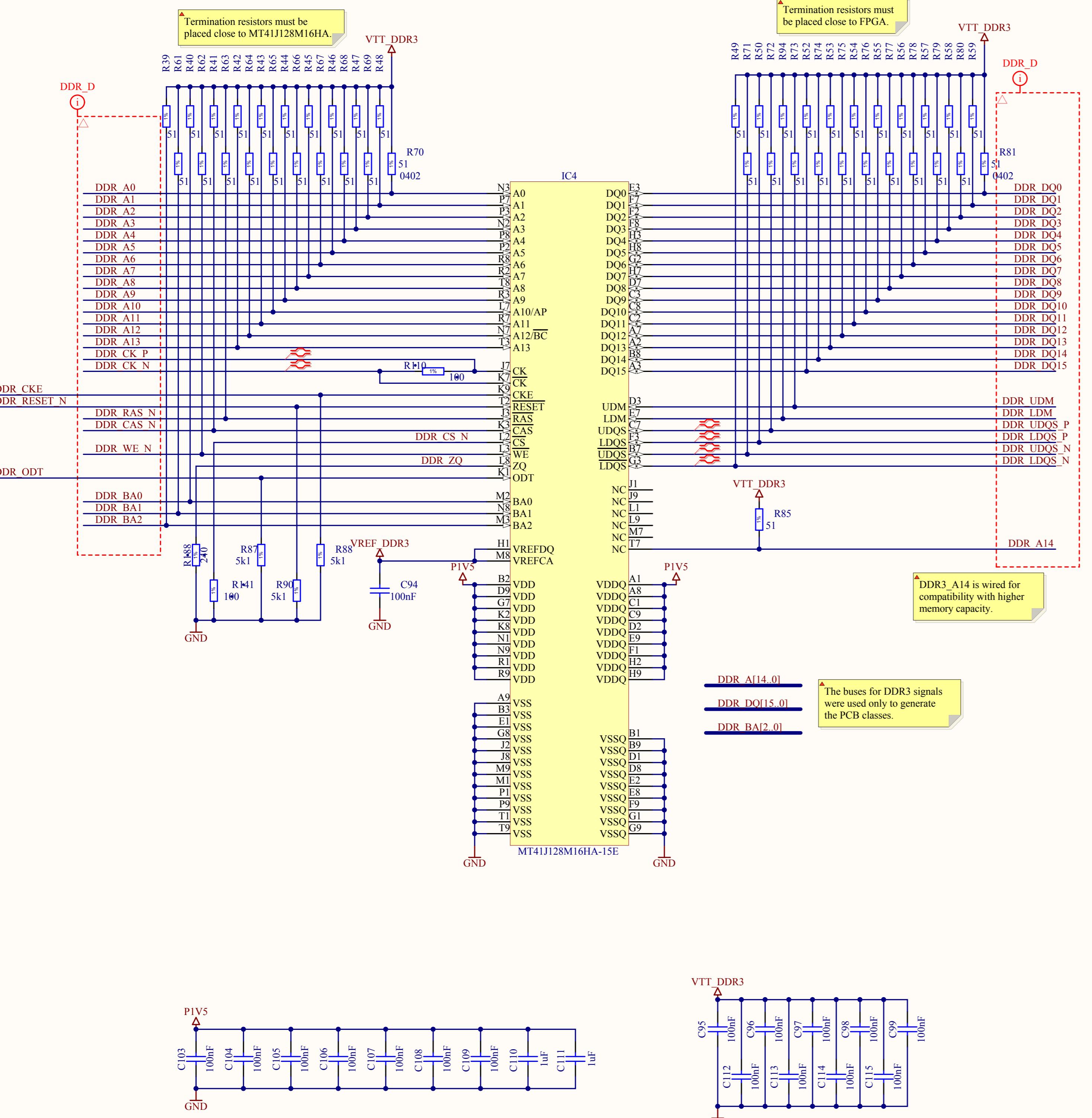
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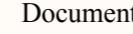
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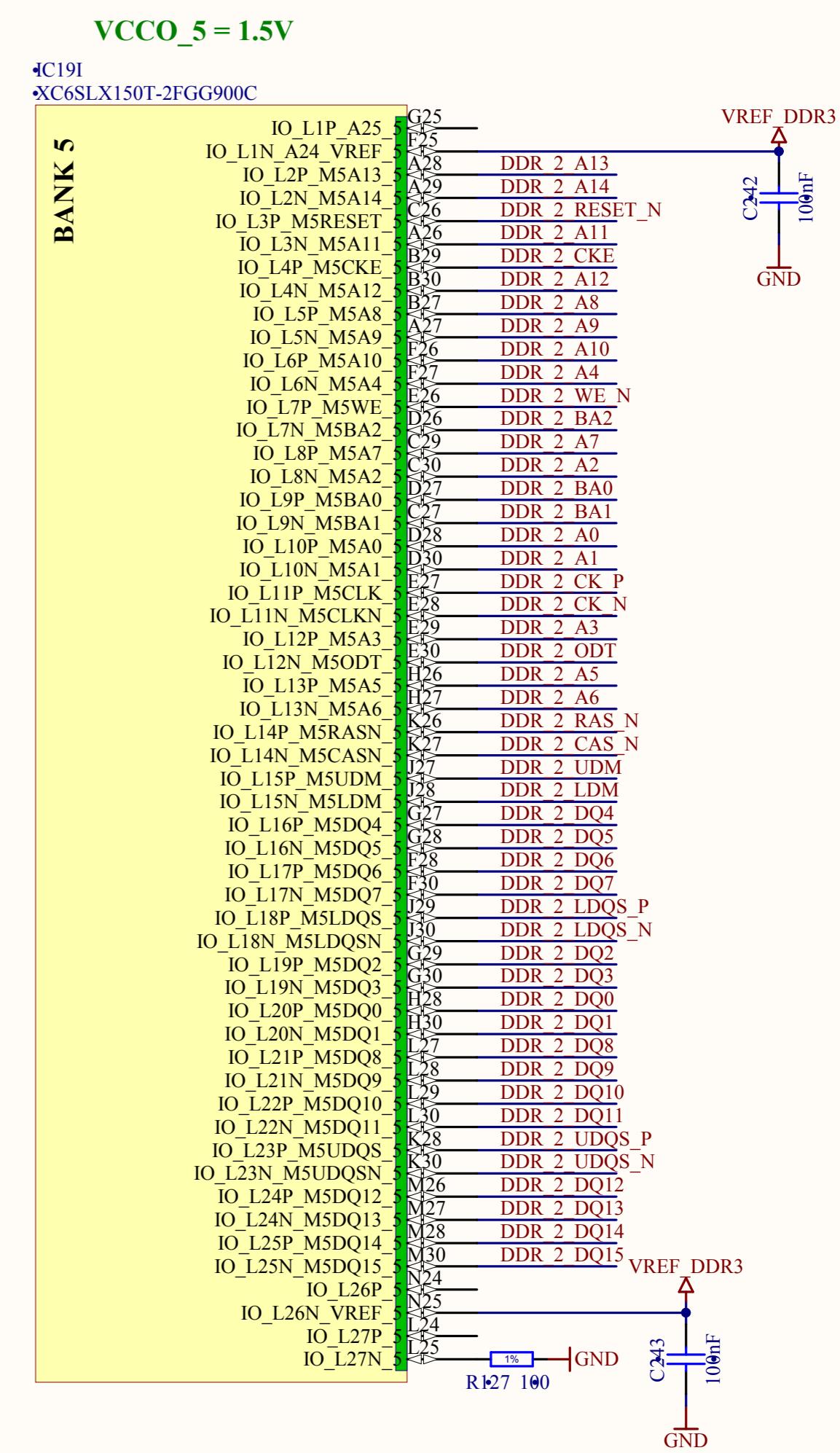
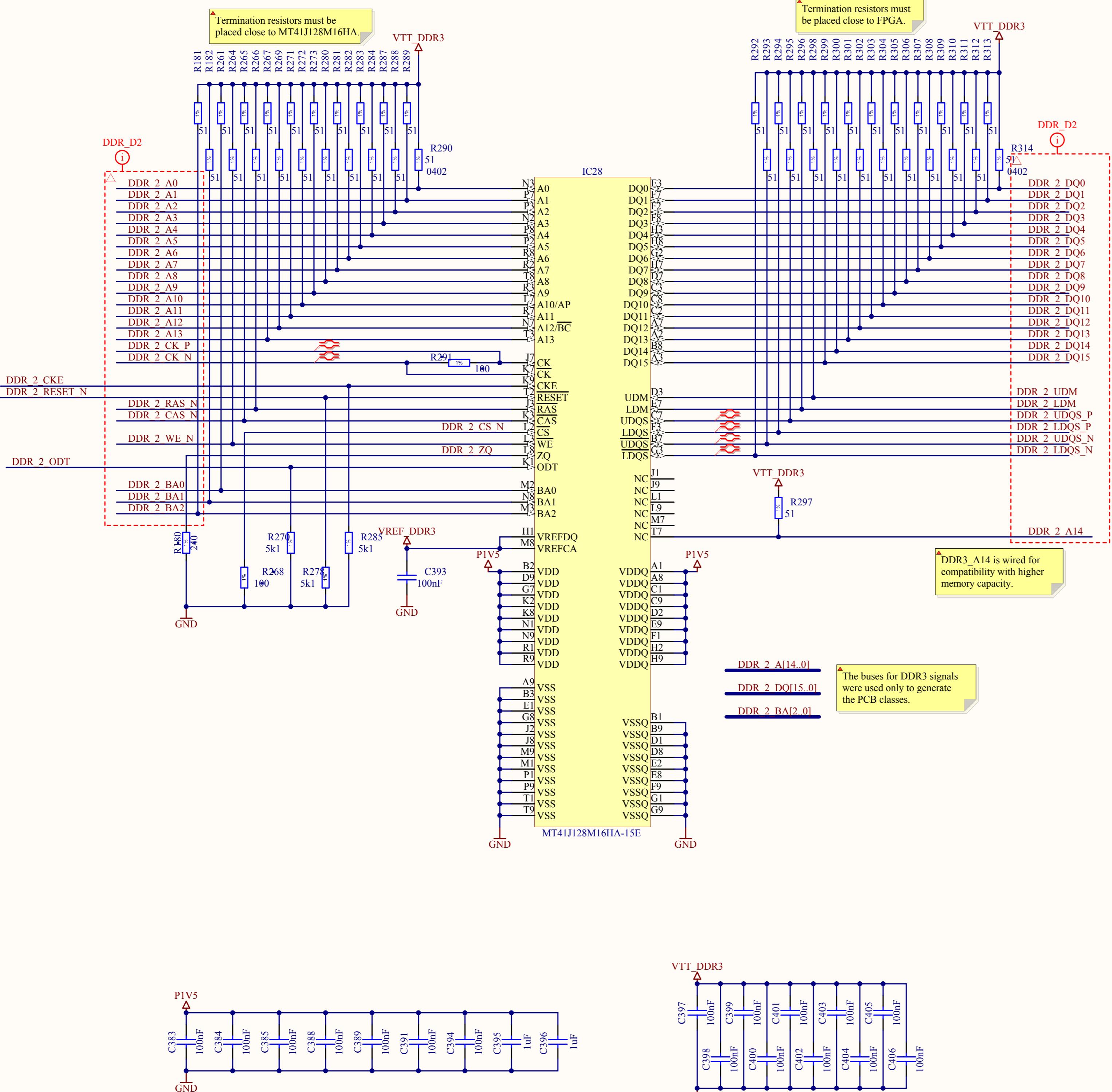
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Project/Equipment	Simple VME FMC Carrier																		
Document	<p style="text-align: center;"><i>DDR3 memory</i> <i>- bank 4 -</i></p>																		
BE-CO																			
																			
<i>European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Designer</td> <td>G.Kasprowicz</td> </tr> <tr> <td>Drawn by</td> <td>G.Kasprowicz</td> </tr> <tr> <td>Check by</td> <td>T.Janicki</td> </tr> <tr> <td>Last Mod.</td> <td>2012-04-27</td> </tr> <tr> <td>File</td> <td>DDR3.SchDoc</td> </tr> <tr> <td>Print Date</td> <td>2012-04-27 13:16:22</td> </tr> <tr> <td>Sheet</td> <td>3 of 19</td> </tr> <tr> <td>Size</td> <td>A3</td> </tr> <tr> <td>Rev</td> <td>-</td> </tr> </table>	Designer	G.Kasprowicz	Drawn by	G.Kasprowicz	Check by	T.Janicki	Last Mod.	2012-04-27	File	DDR3.SchDoc	Print Date	2012-04-27 13:16:22	Sheet	3 of 19	Size	A3	Rev	-
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Rev	-																		

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A

A

B

B

C

C

D

D

E

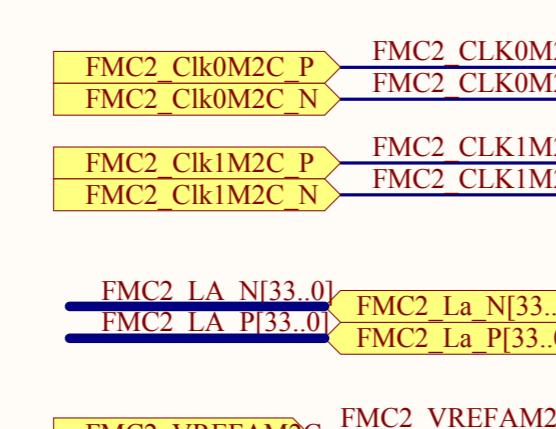
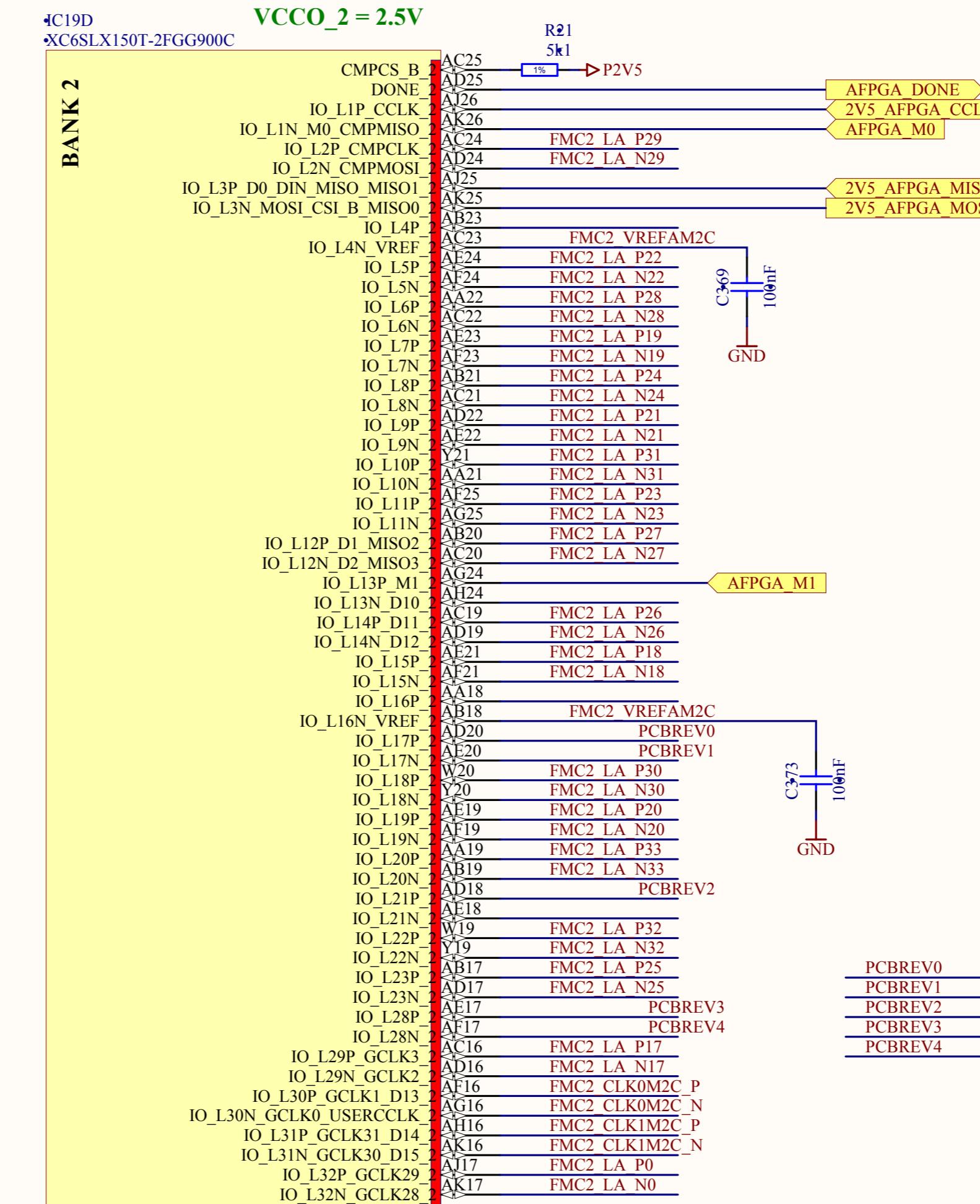
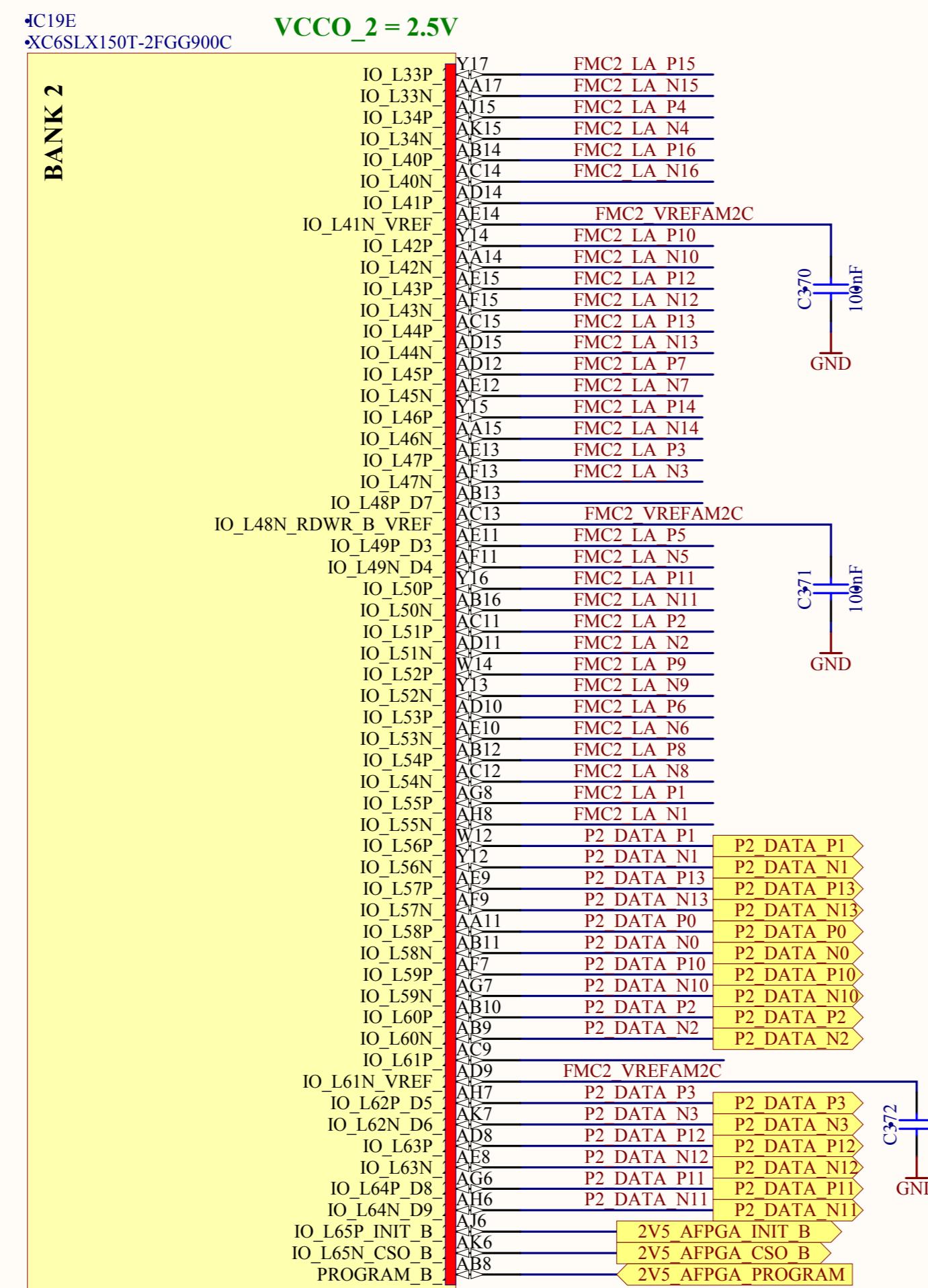
E



Project/Equipment			Simple VME FMC Carrier		
Document			AFGA FMC1 - bank 0 -		
BE-CO			European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland		
Designer G.Kasprowicz	Drawn by G.Kasprowicz	20/11/2012			
Check by T.Janicki		23/01/2012			
Last Mod. -		2012-04-27			
File AFPGA_FMC1_bank0.SchDoc					
Print Date 2012-04-27 13:16:22			Sheet 5 of 19		
			Size A3	Rev -	

A

A



B

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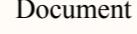
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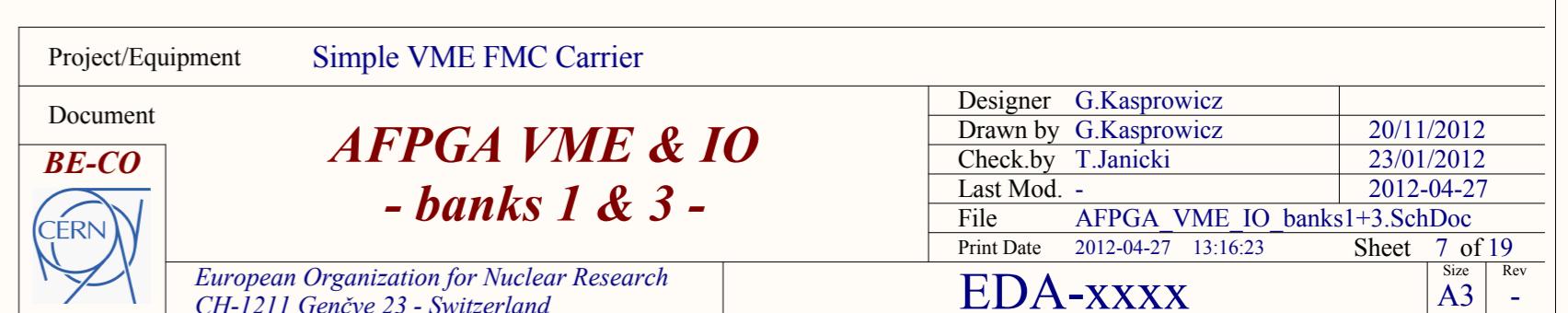
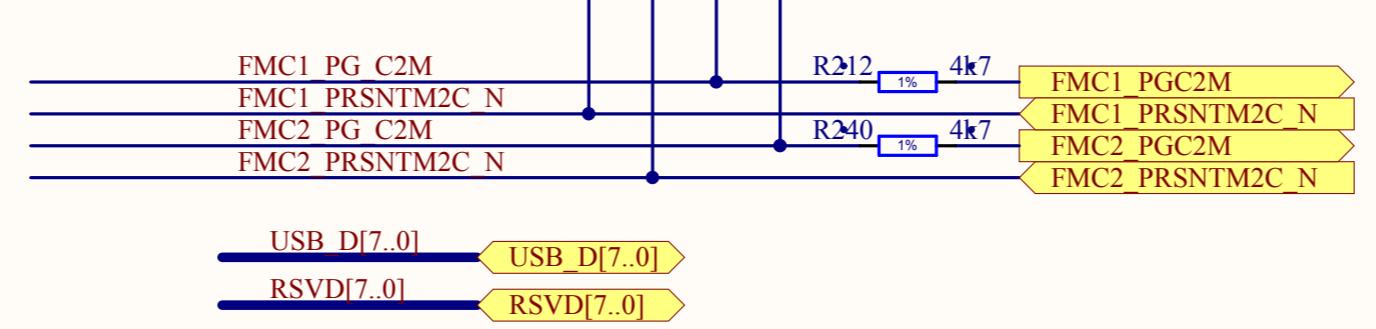
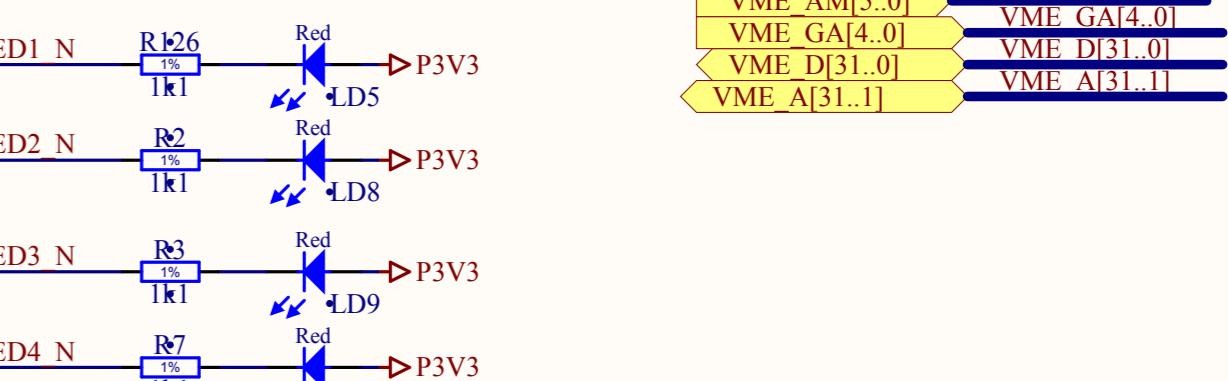
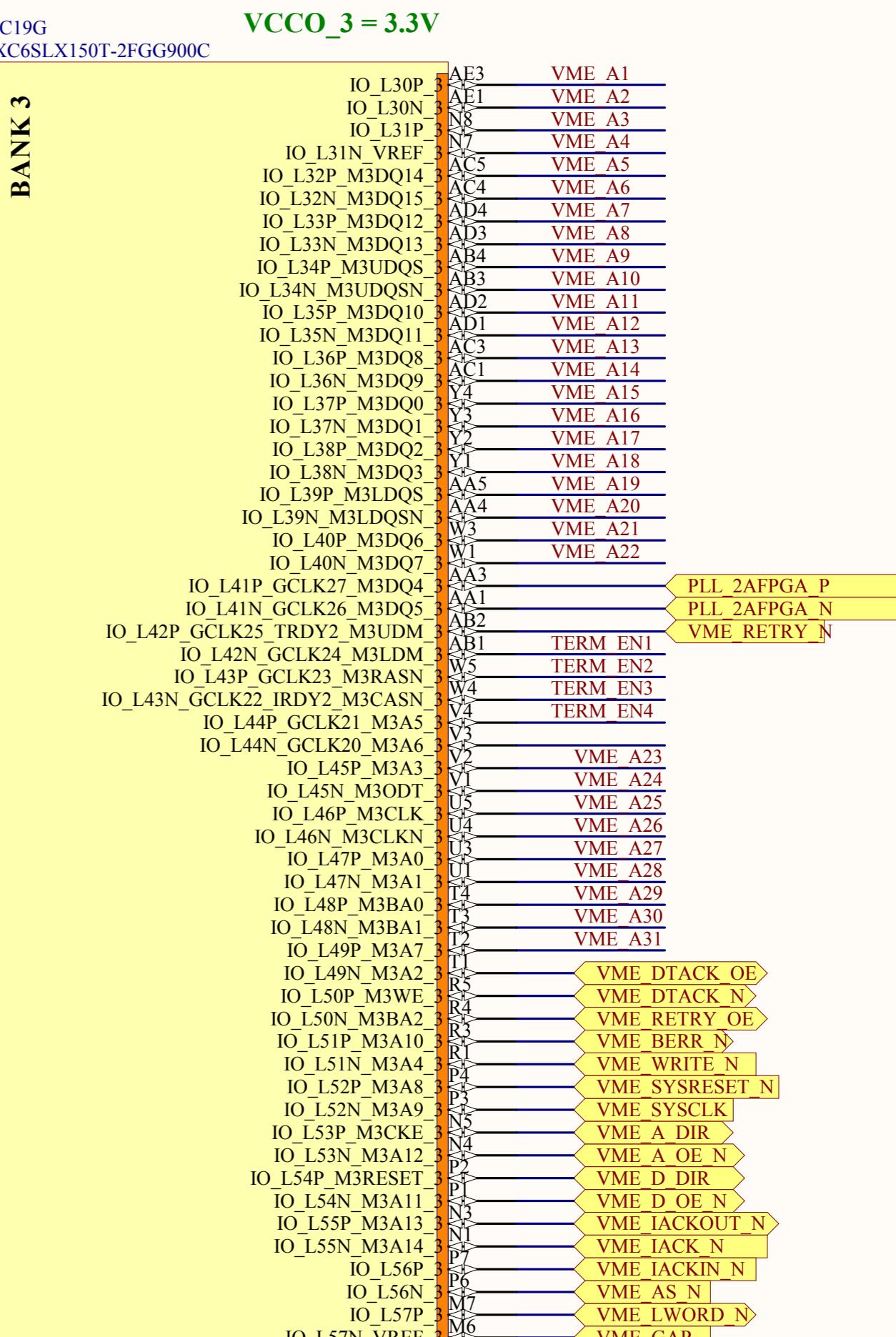
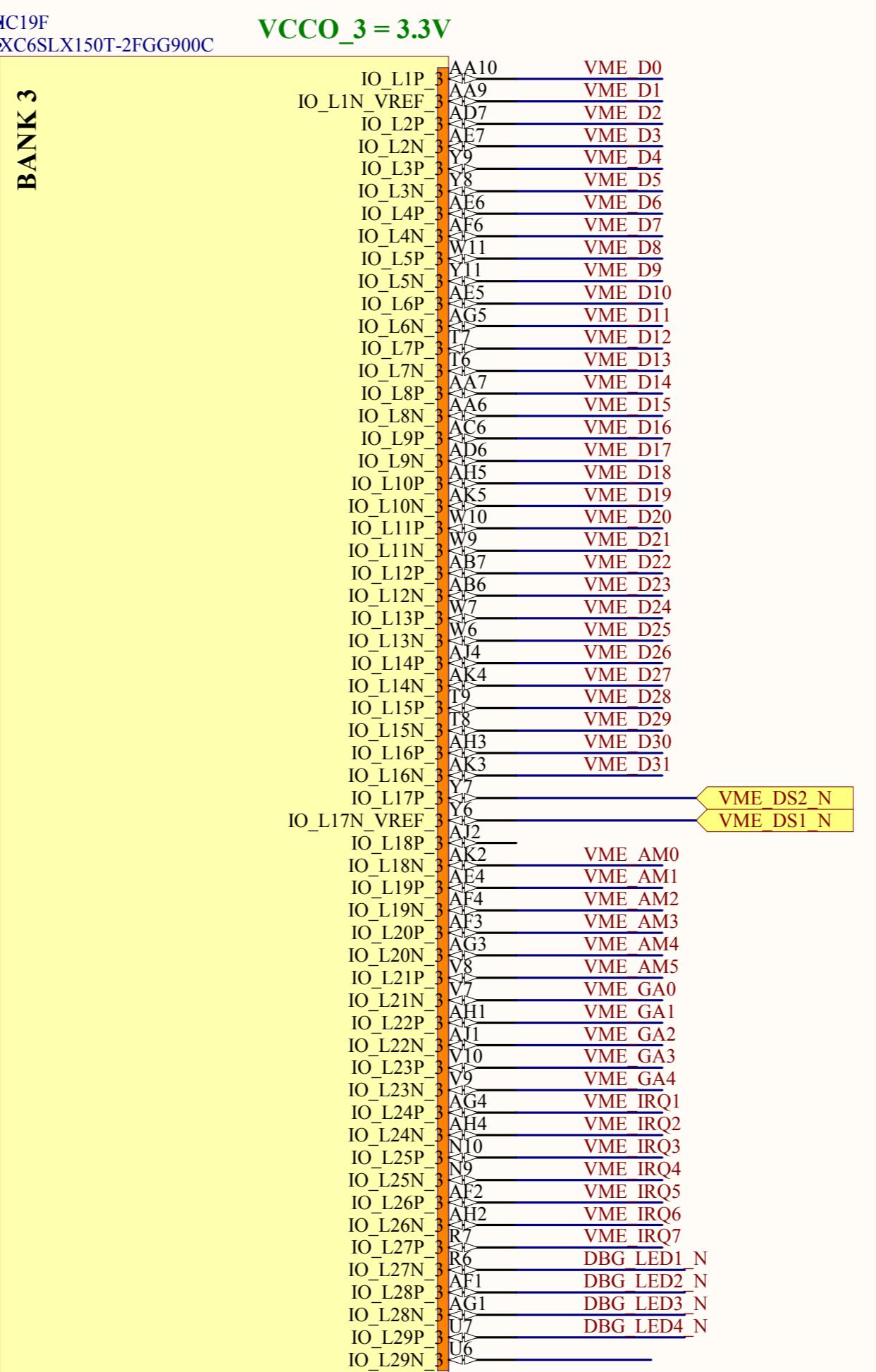
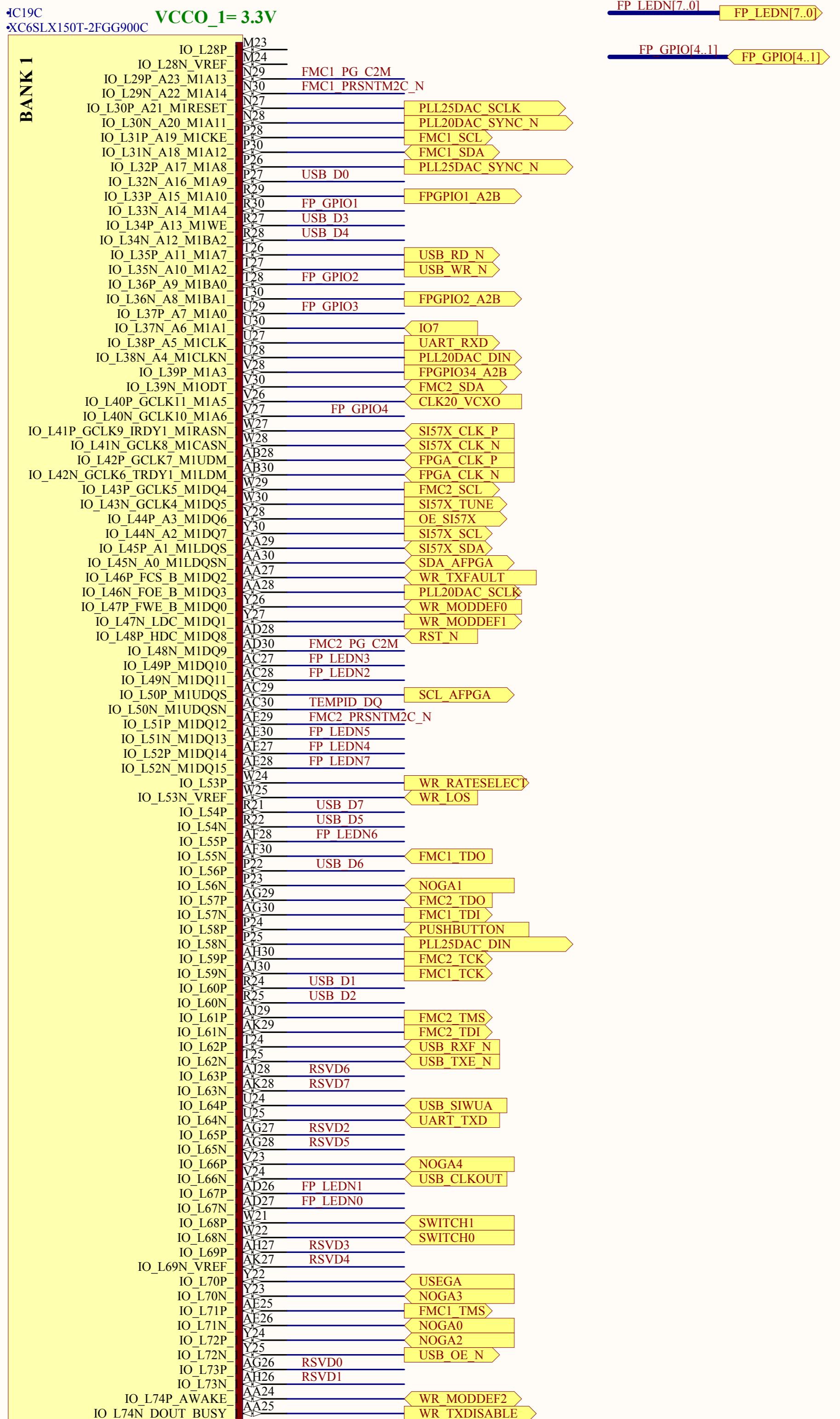
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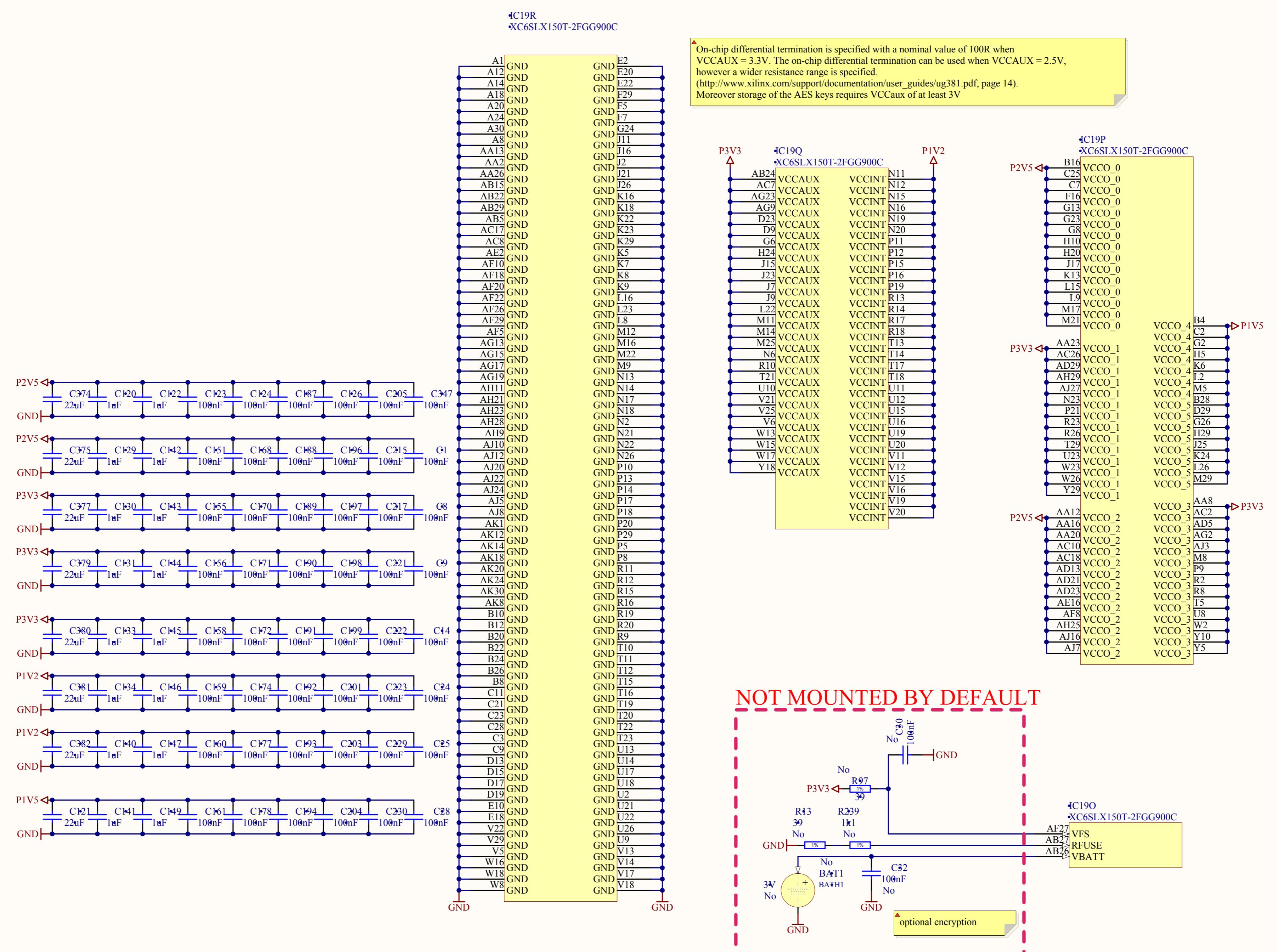
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E

H

Project/Equipment	Simple VME FMC Carrier		
Document		Designer G.Kasprowicz	
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		Check by T.Janicki	23/01/2012
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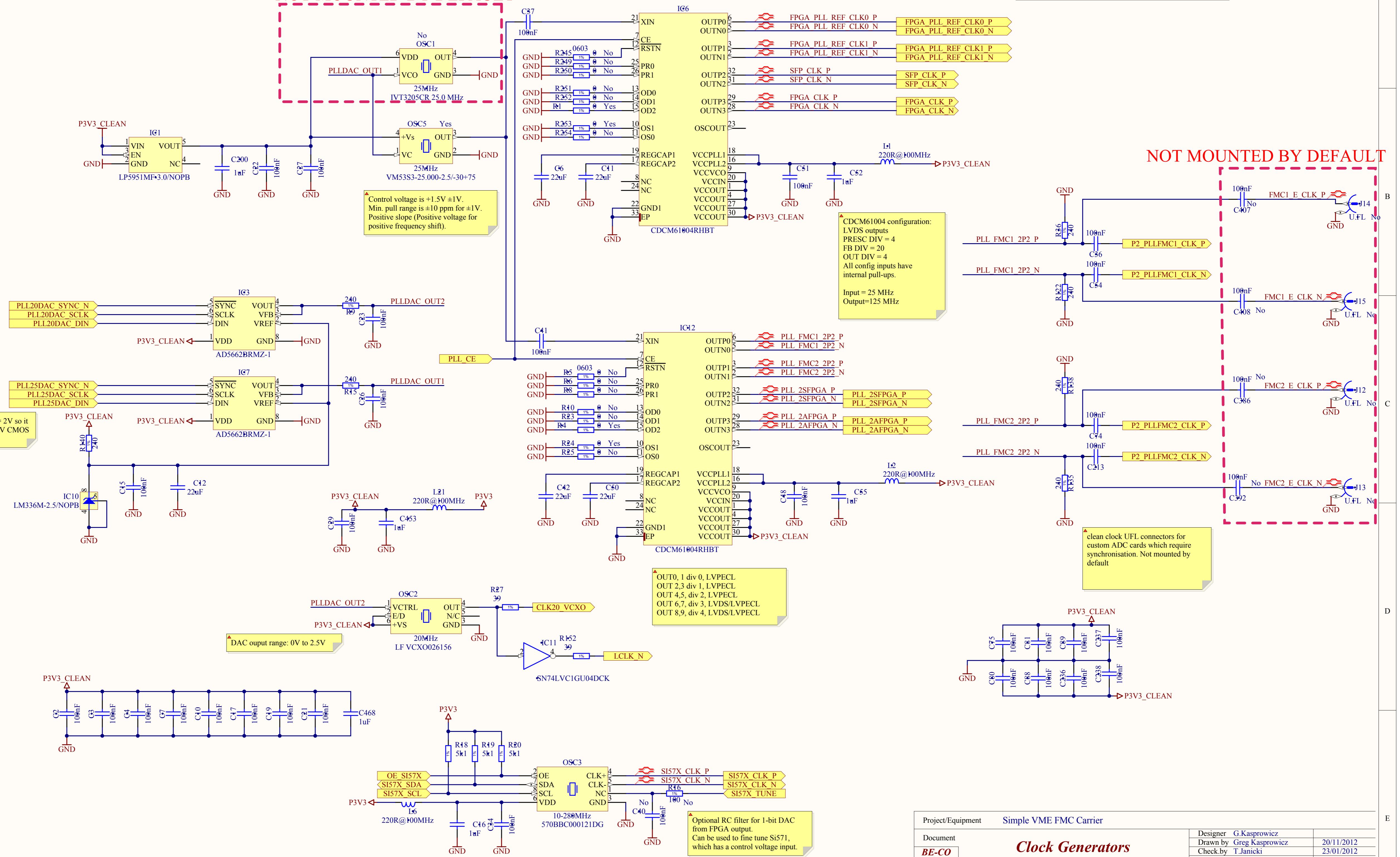




Project/Equipment			Simple VME FMC Carrier		
Document			Application FPGA power supply		
BE-CO			European Organization for Nuclear Research CH-1211 Geneve 23 - Switzerland		
Designer G.Kasprowicz	Drawn by Greg Kasprowicz	20/11/2012			
Check by T.Janicki		23/01/2012			
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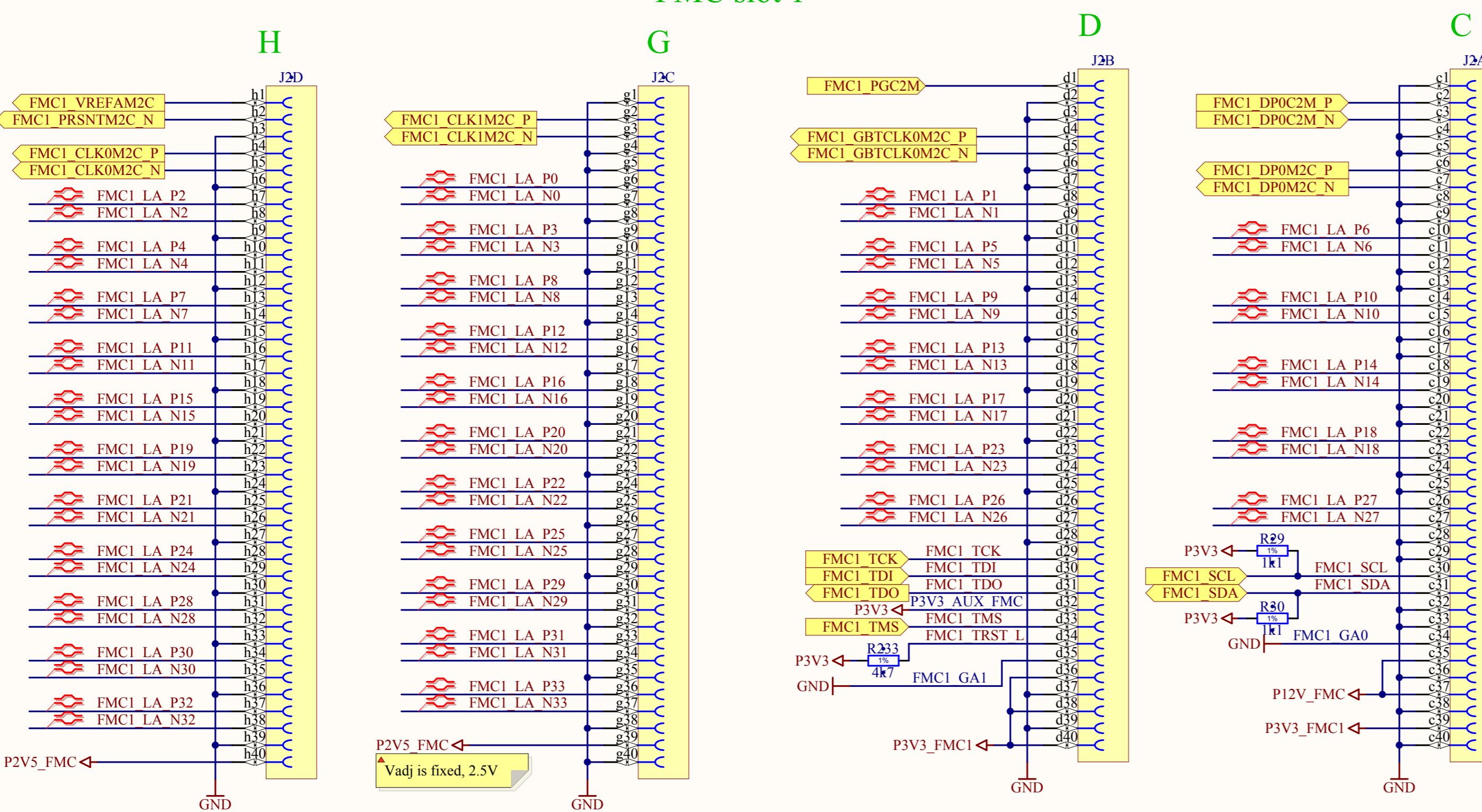
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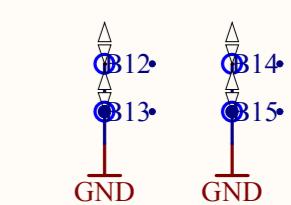


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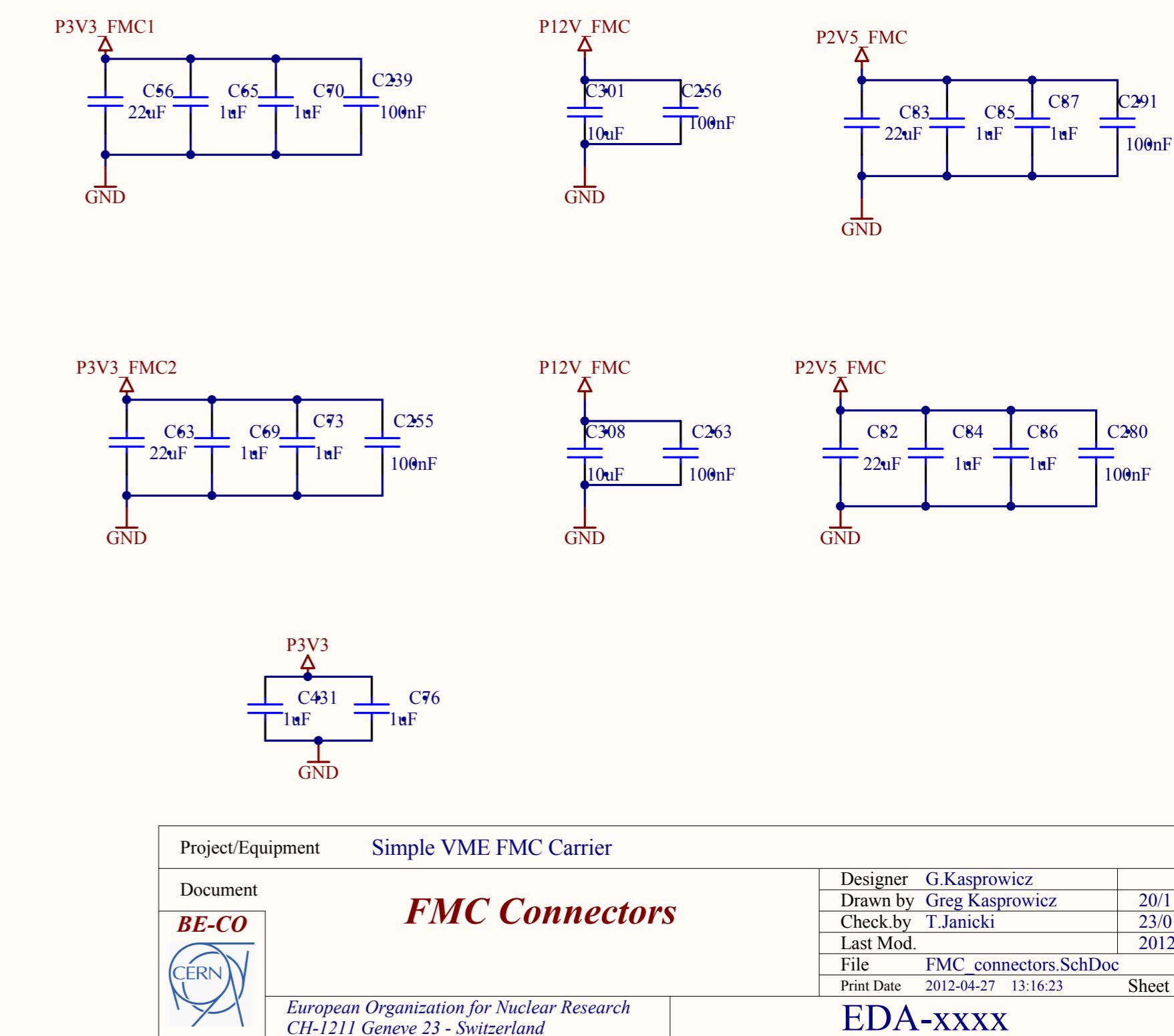
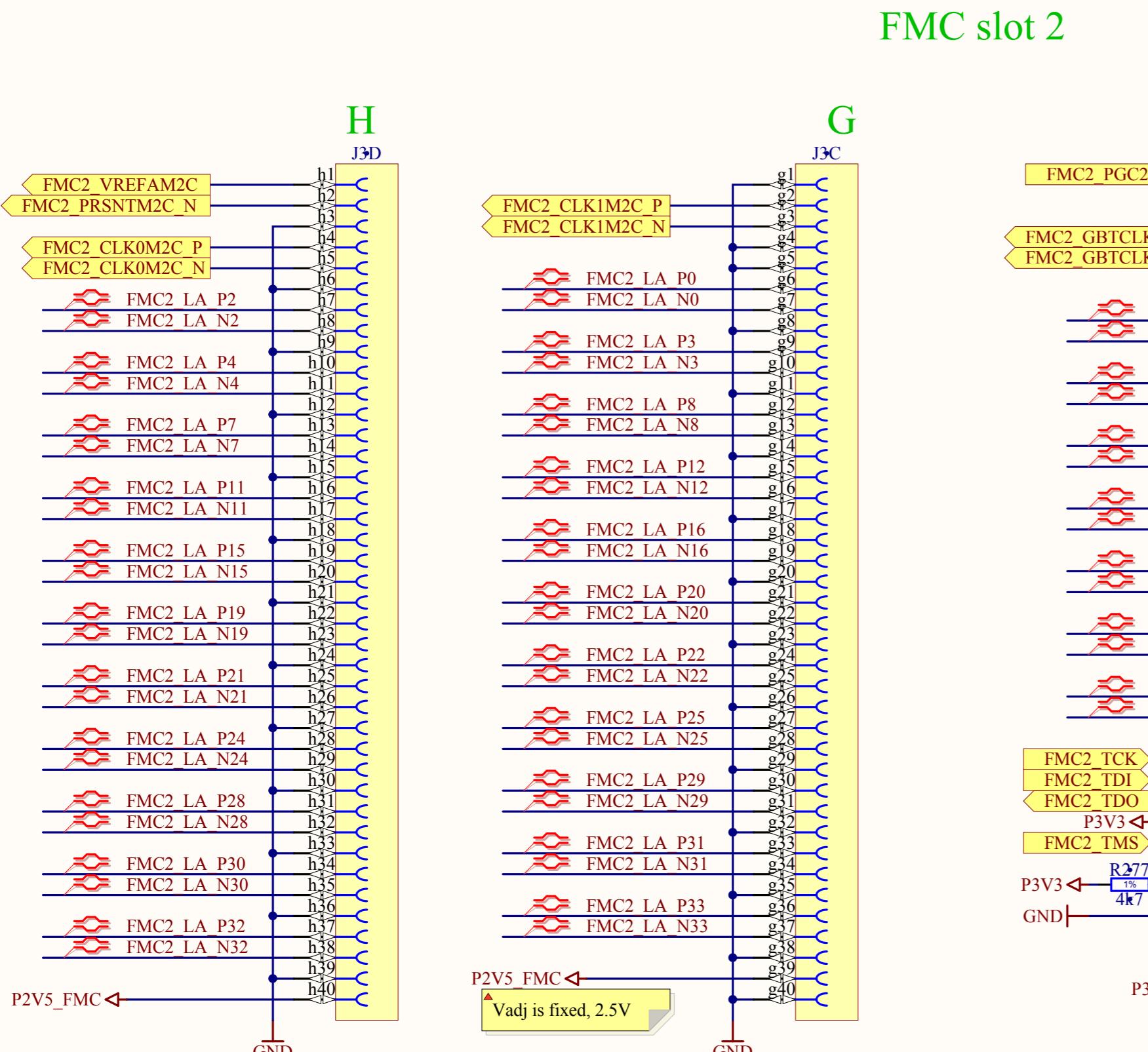
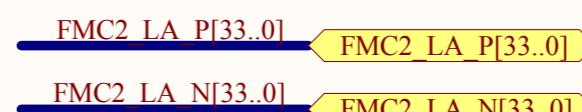
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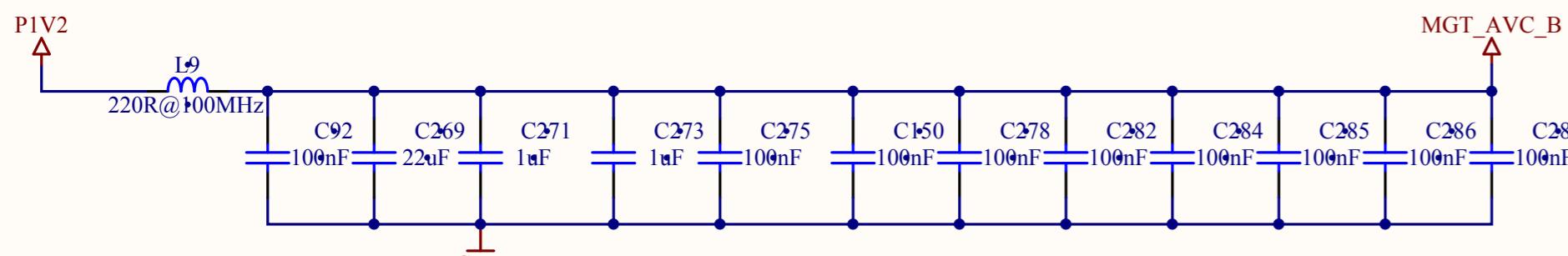
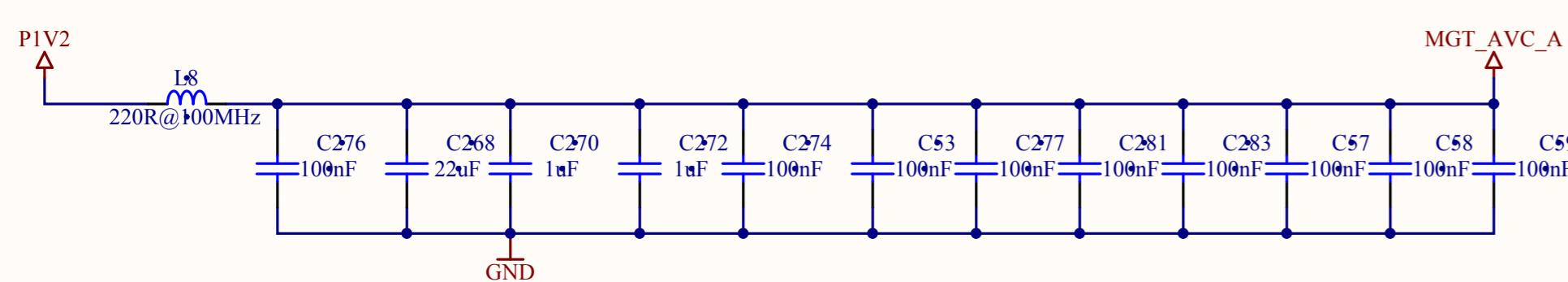
FMC1_LaP and FMC1_LaN are 100ohms diff. pairs



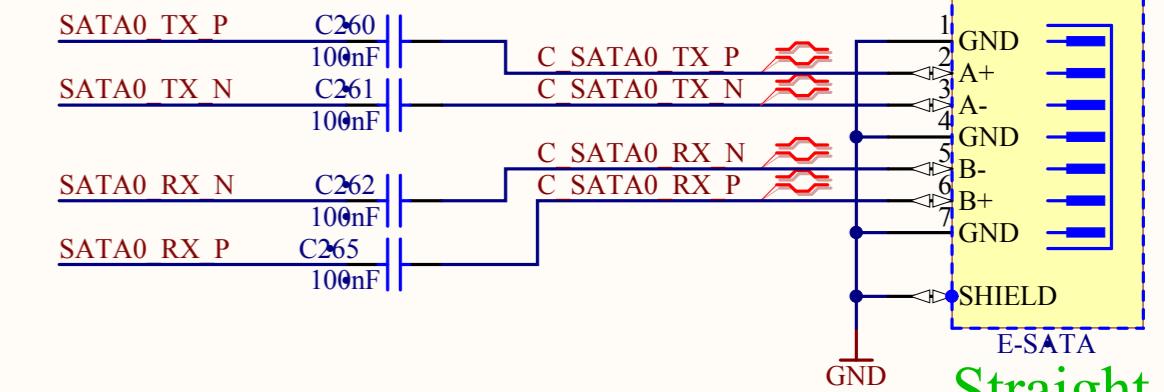
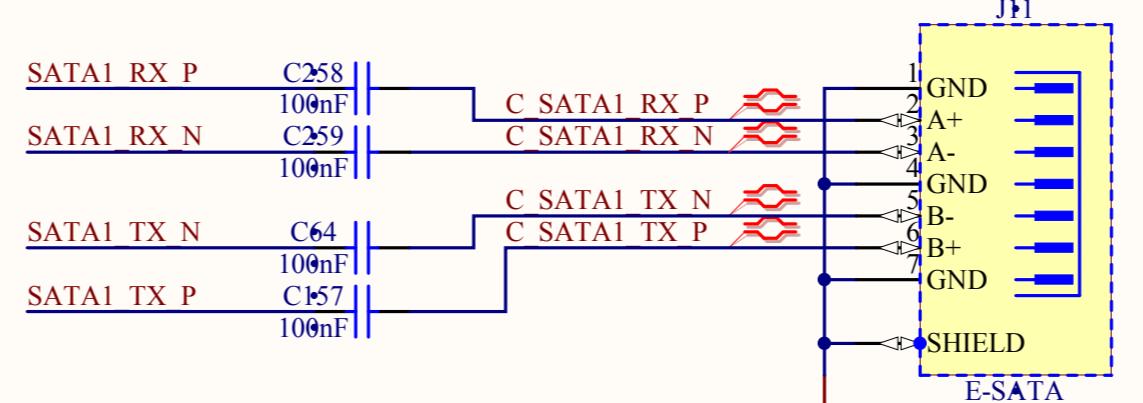
FMC2_LaP and FMC2_LaN are 100ohms diff. pairs



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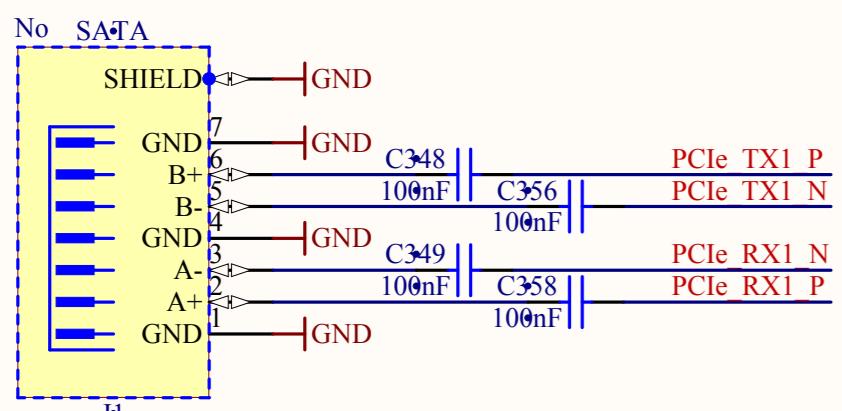


E-SATA connectors

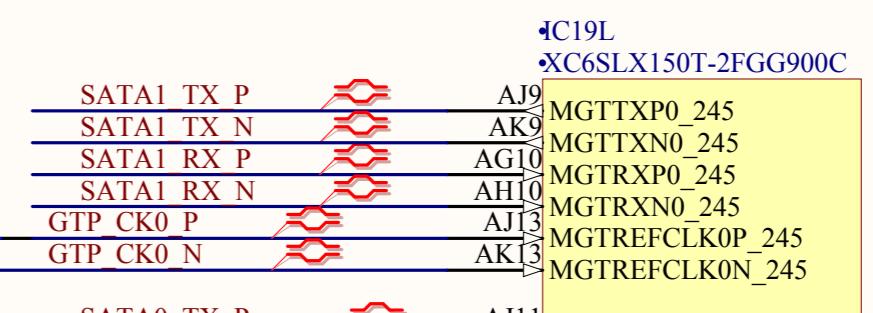
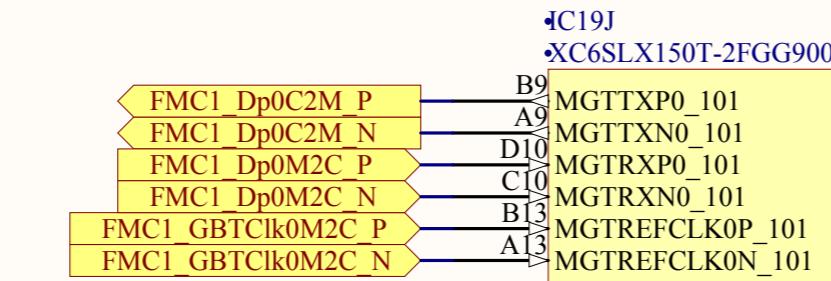


Crossover

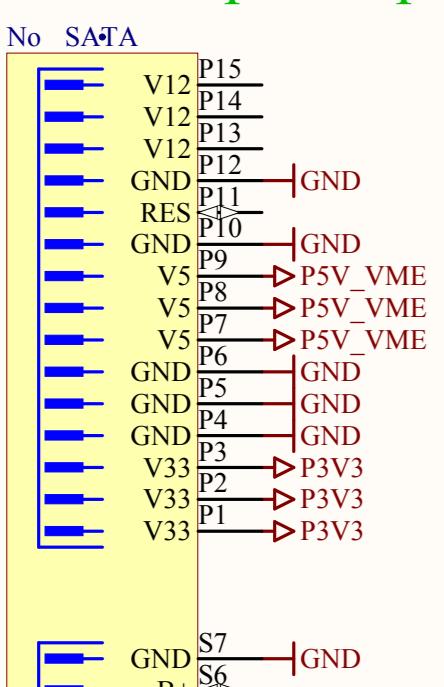
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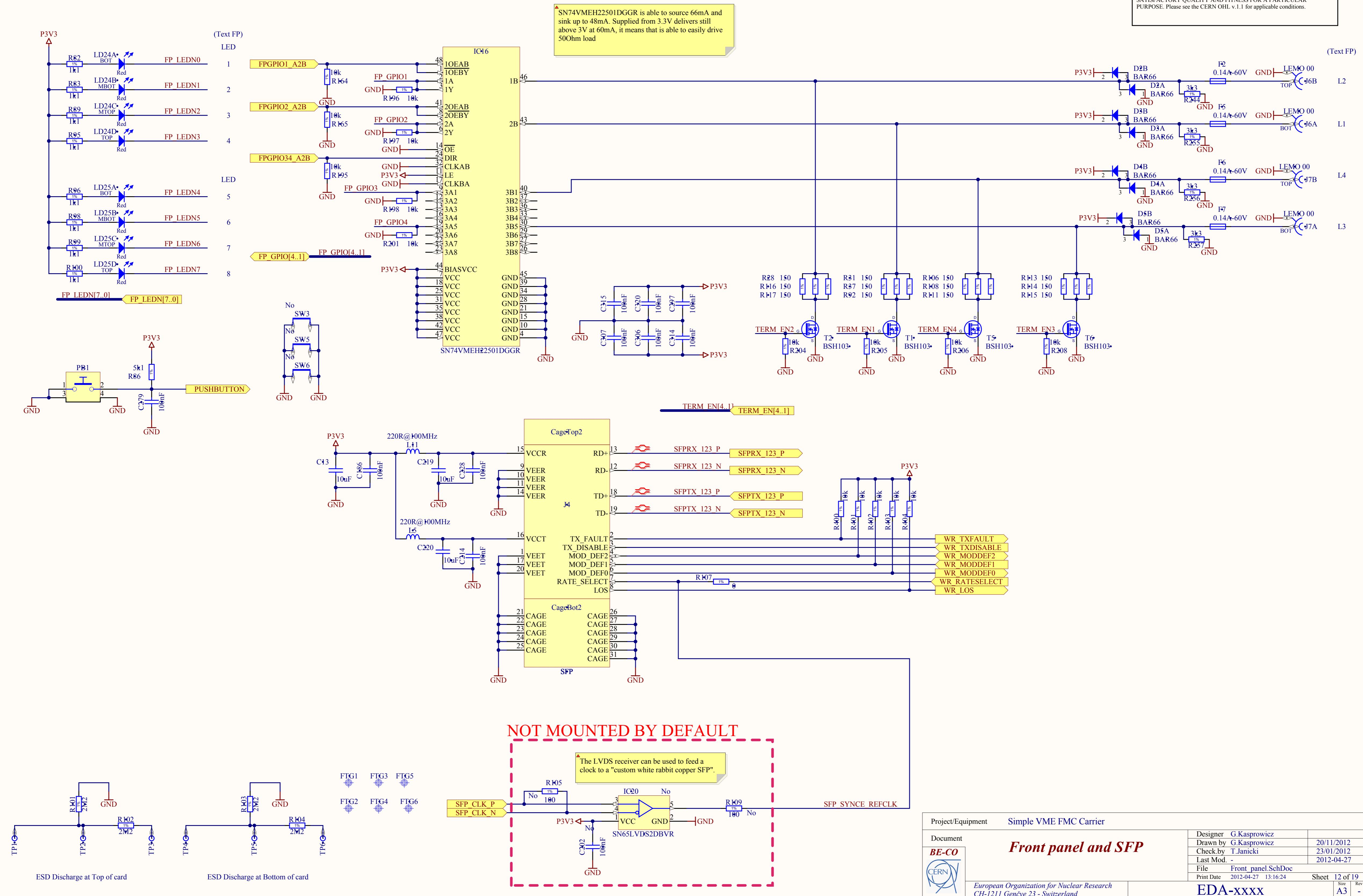


Stand-alone power port and PCIe interface



R242 and R235 should have the same lengths for their terminals



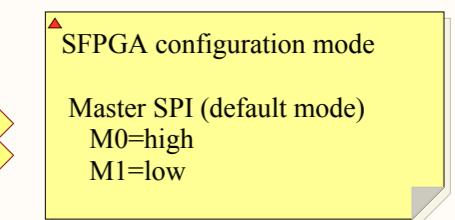
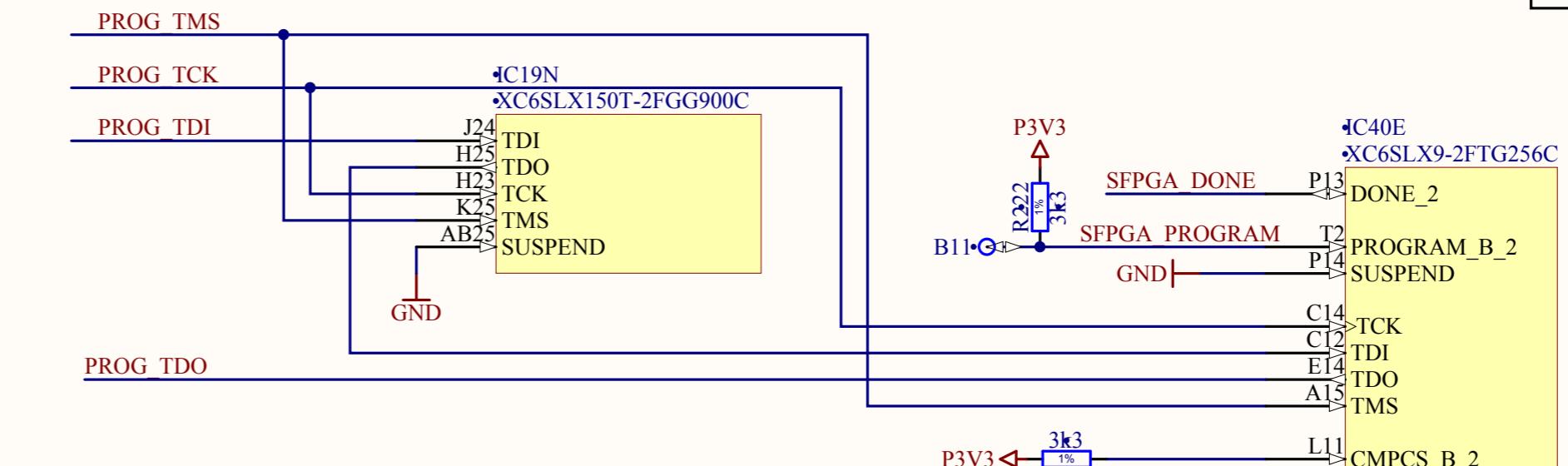
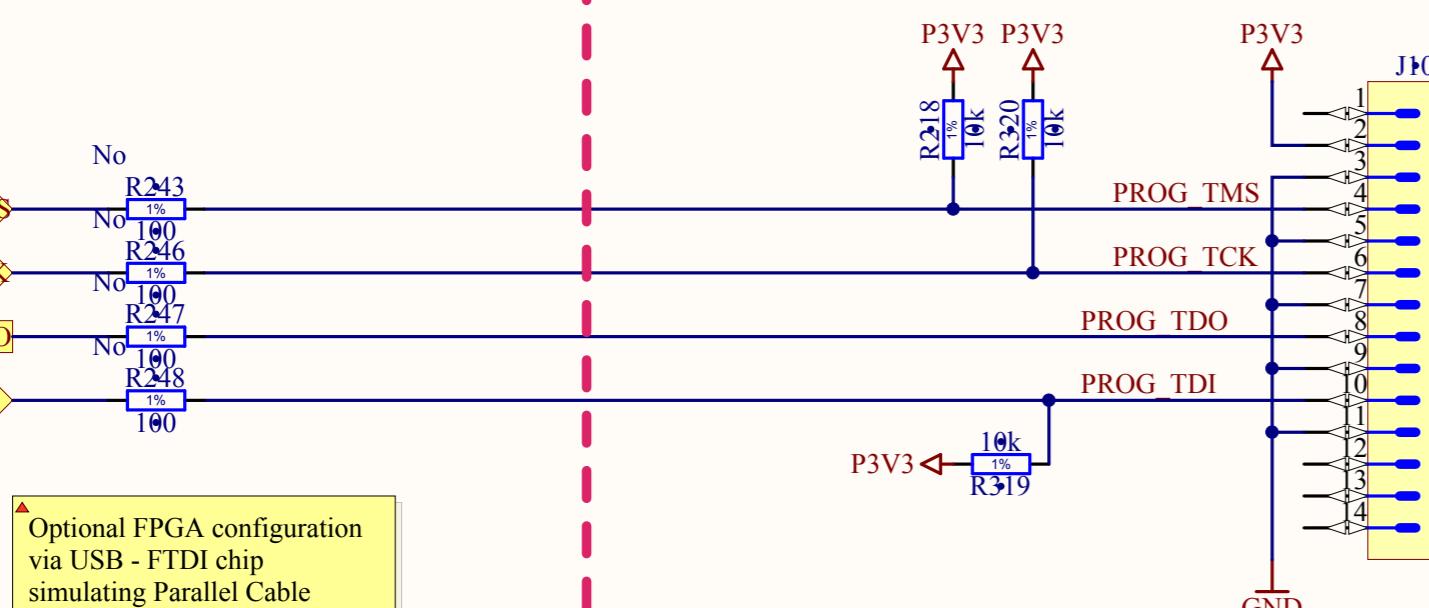


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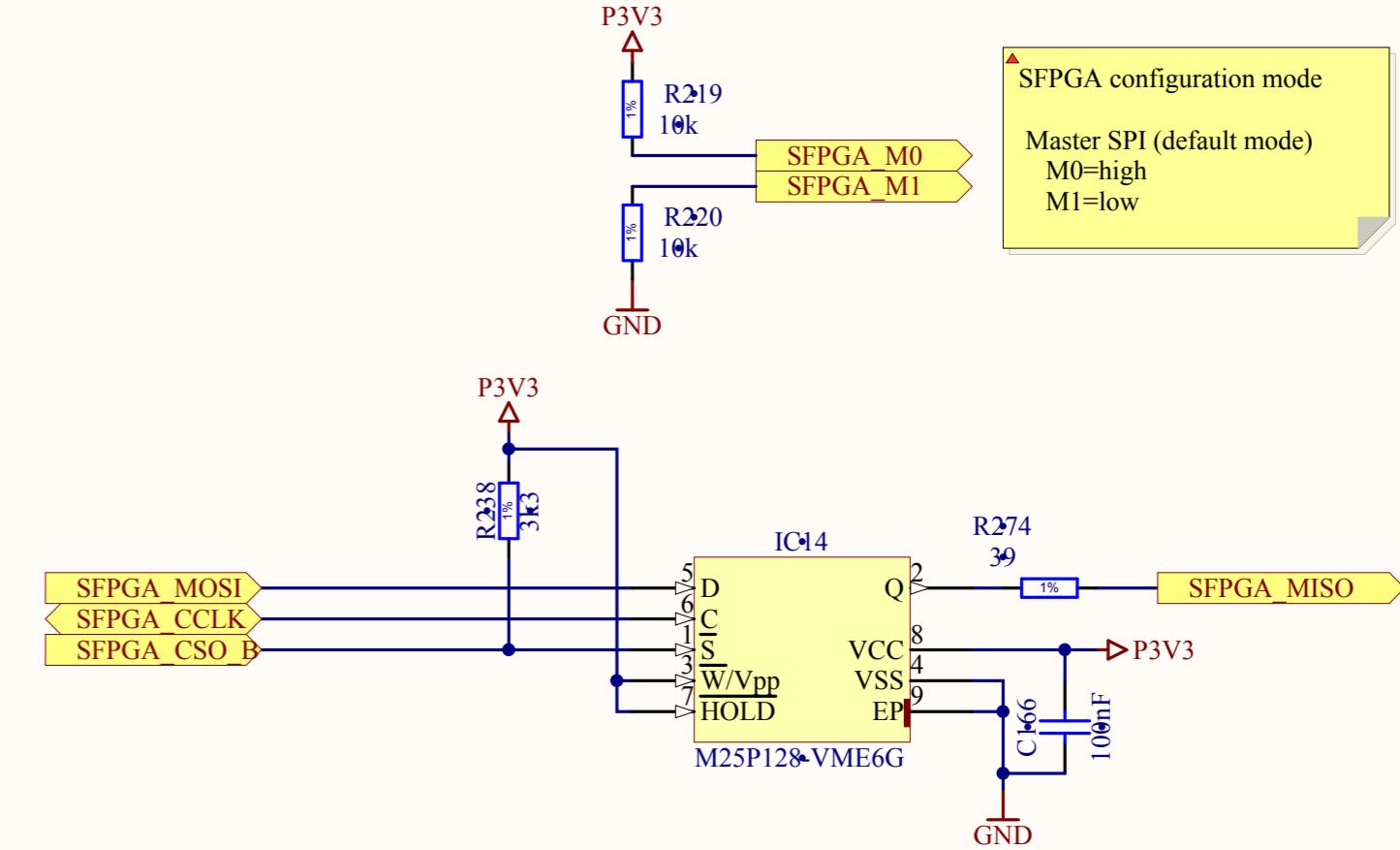
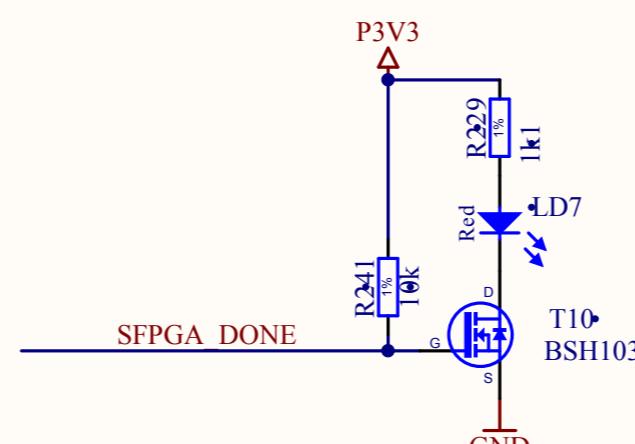
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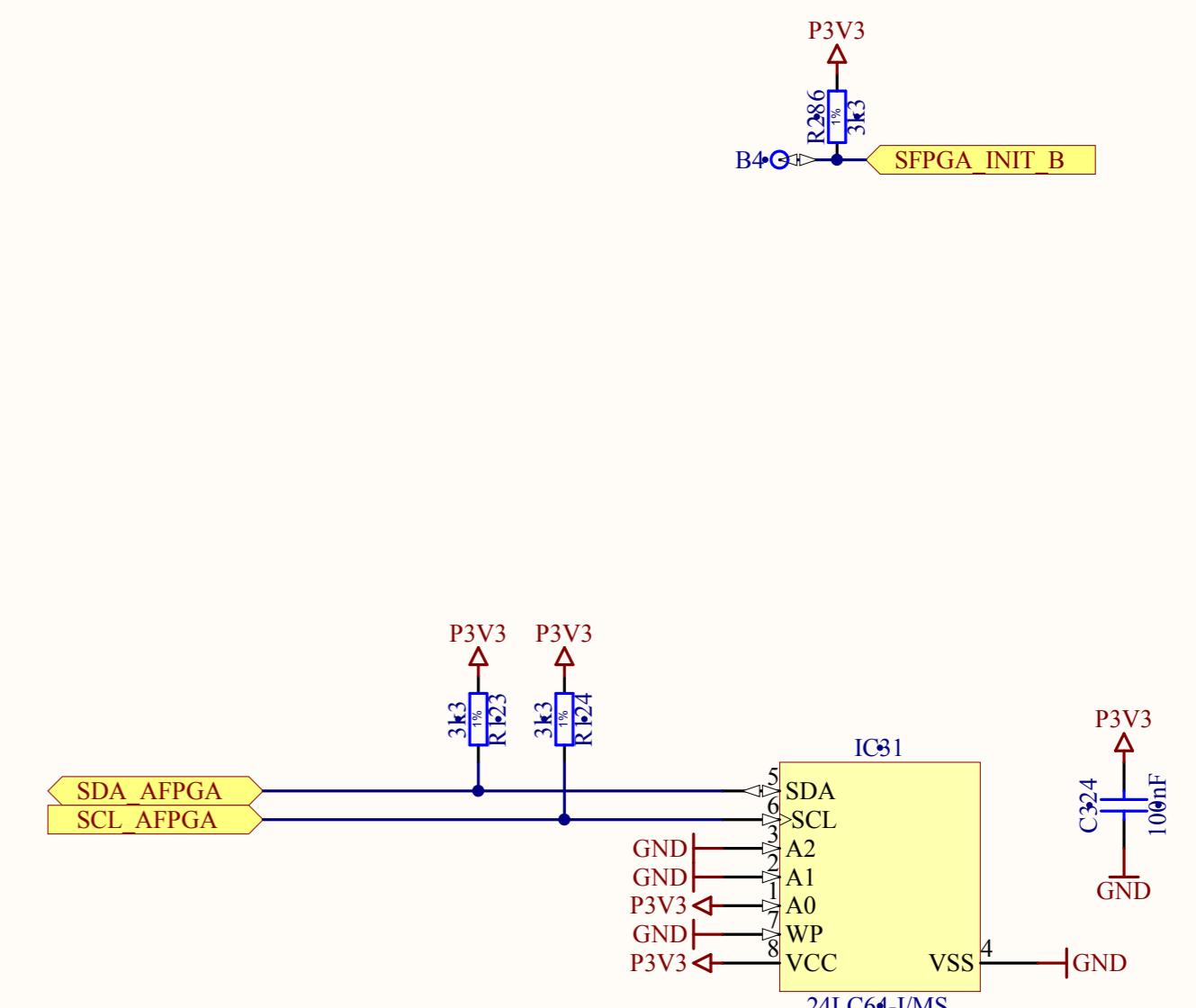
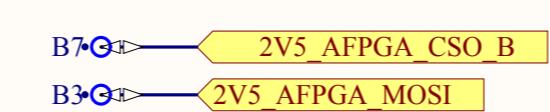
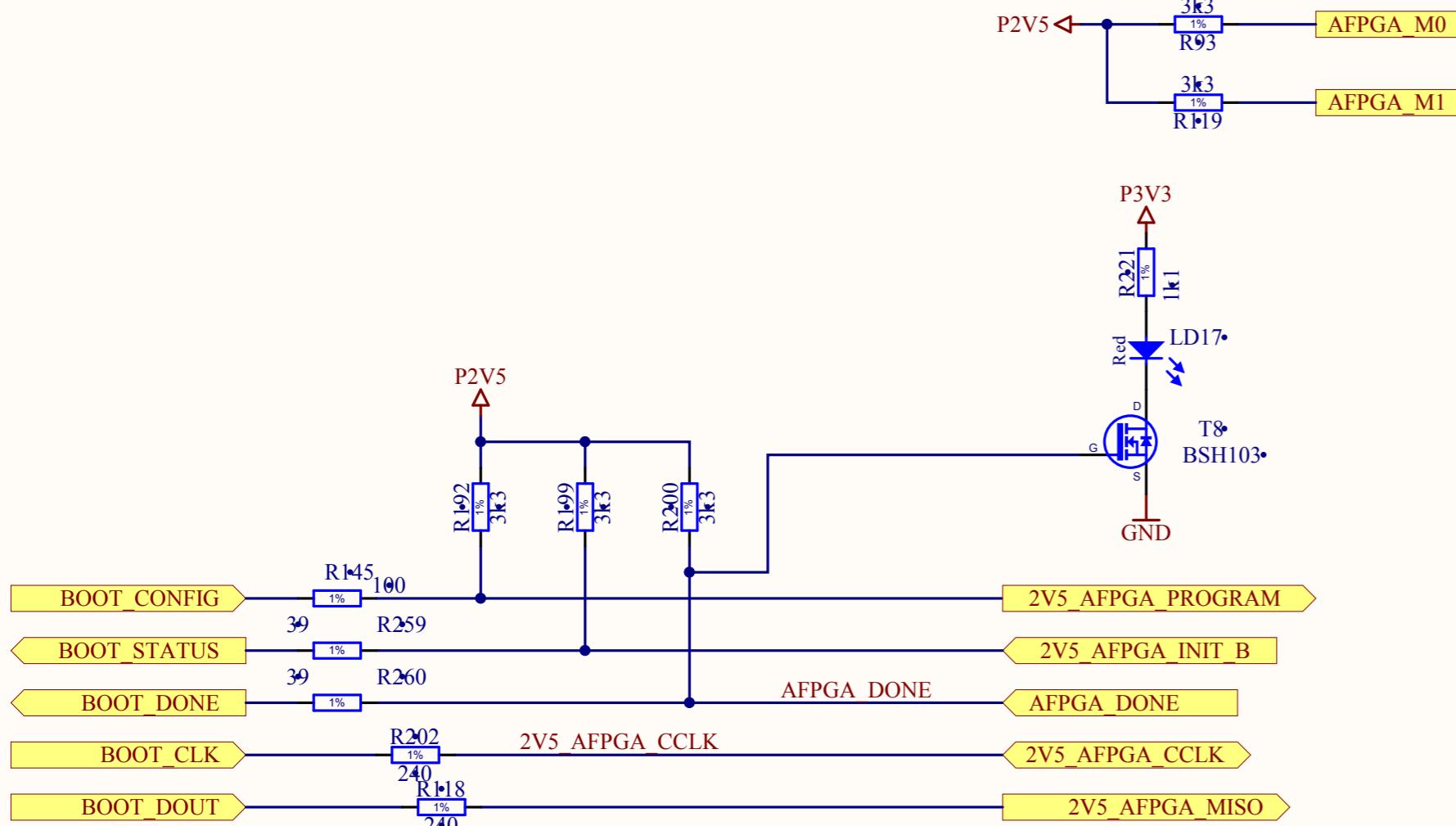
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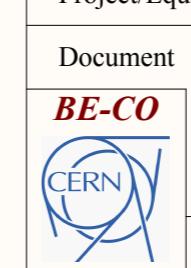
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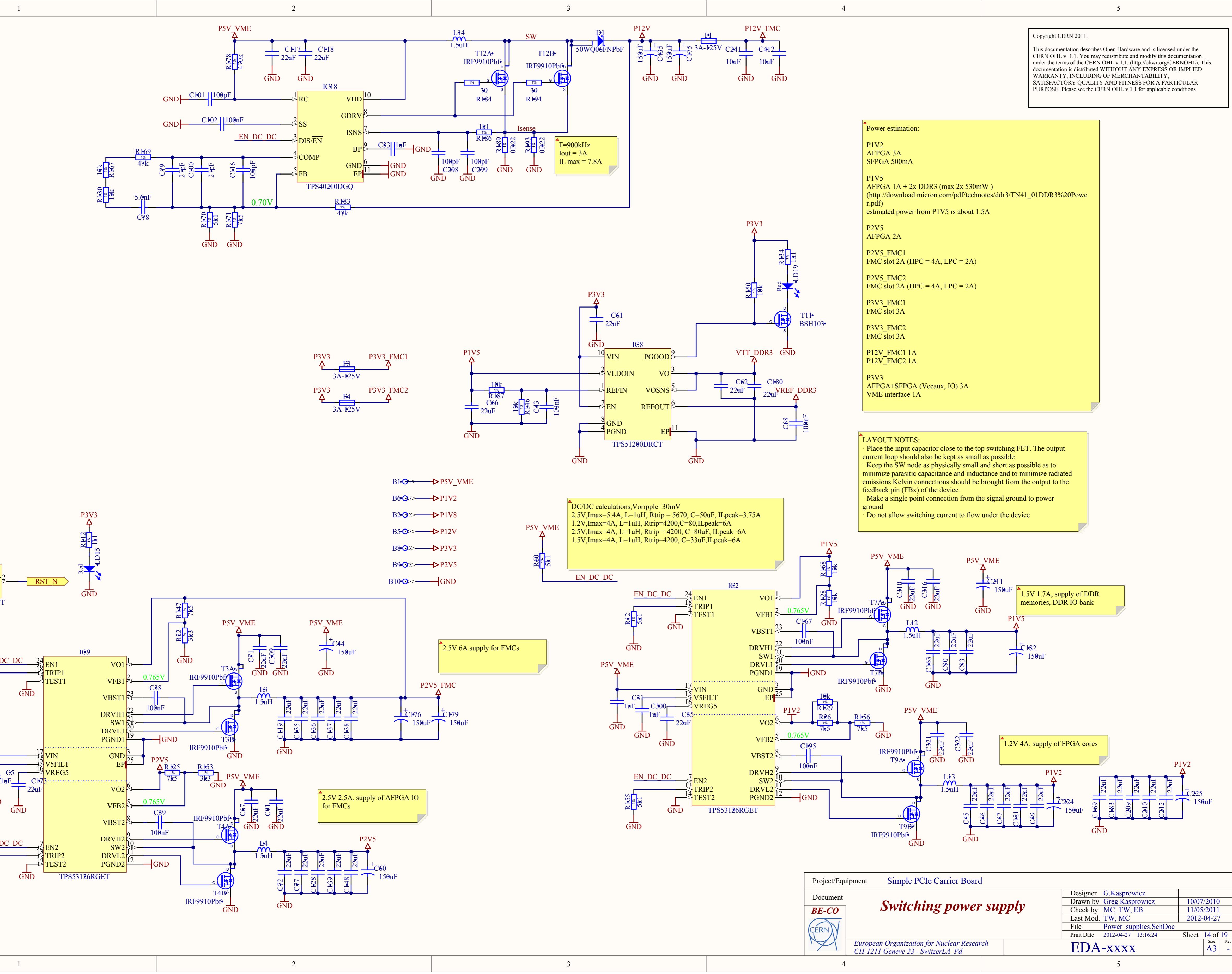
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Project/Equipment Simple VME FMC Carrier

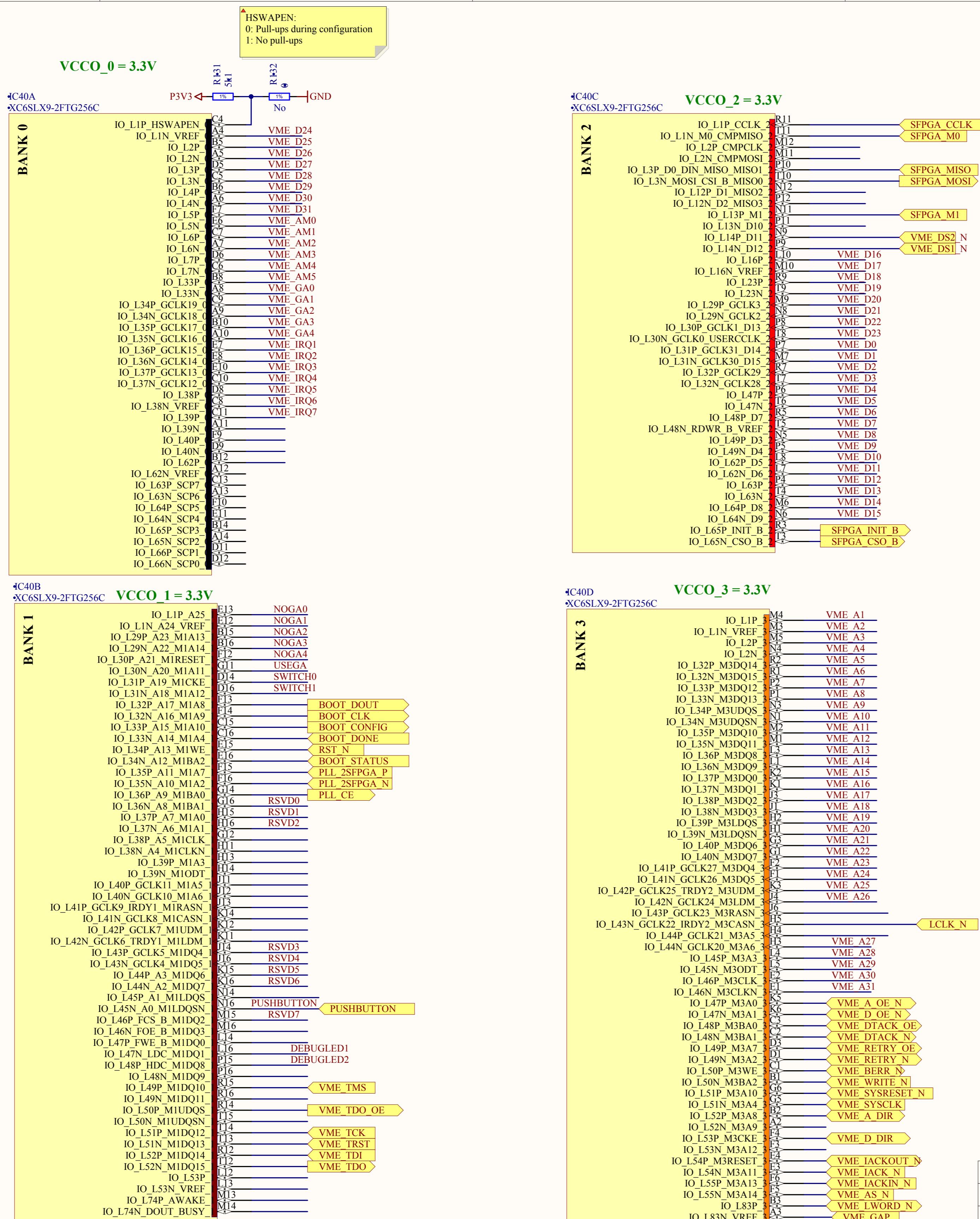

**JTAG chain +
FPGA flash**

Document	G.Kasprowicz Drawn by Greg Kasprowicz Check by T.Janicki Last Mod. 2012-04-27 File JTAG chain + SFPGA flash SchDoc Print Date 2012-04-27 13:16:24	Designer G.Kasprowicz Drawn by Greg Kasprowicz Check by T.Janicki Last Mod. 2012-04-27 File JTAG chain + SFPGA flash SchDoc Print Date 2012-04-27 13:16:24
BE-CO	European Organization for Nuclear Research CH-1211 Geneve 23 - Switzerland	EDA-xxxx



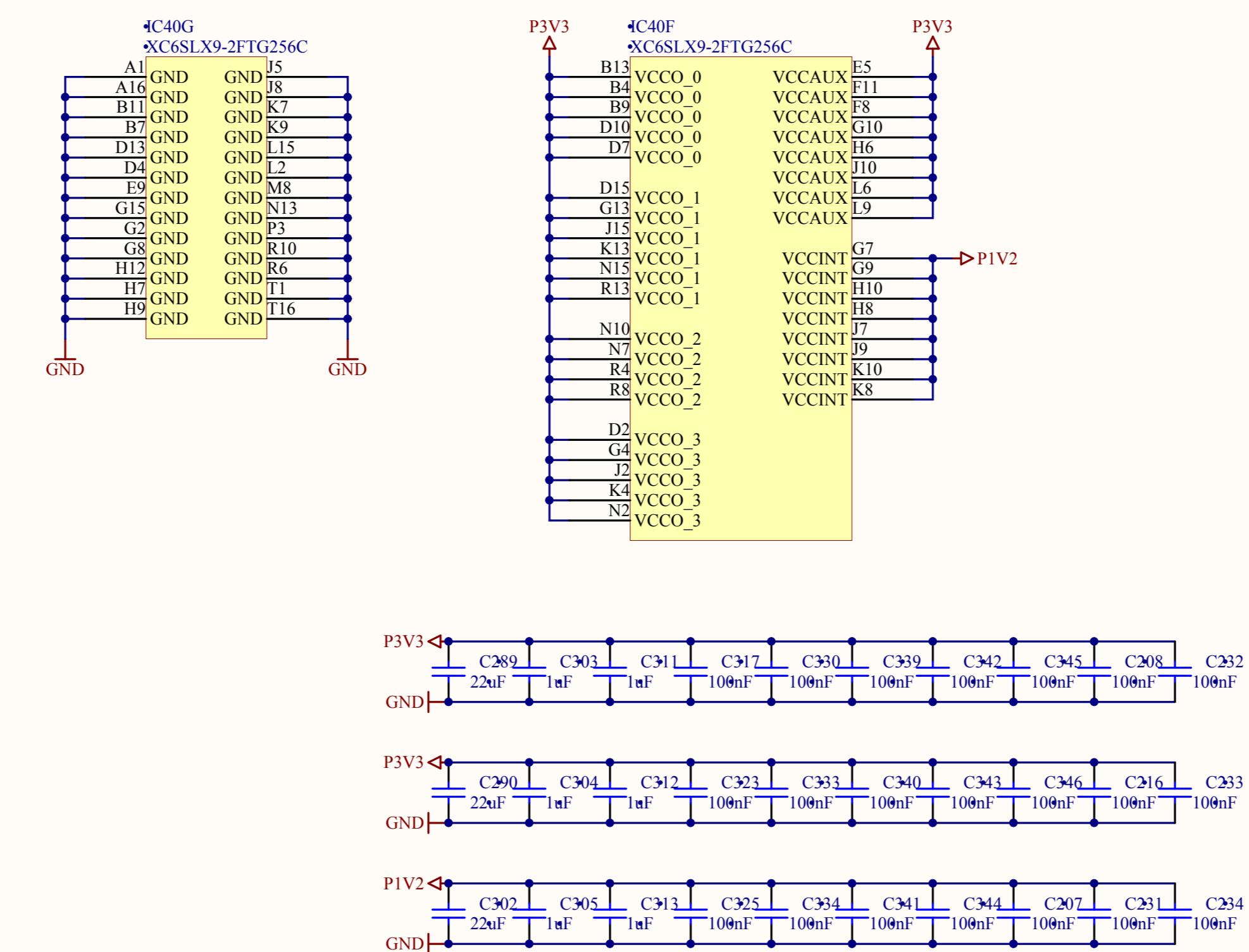
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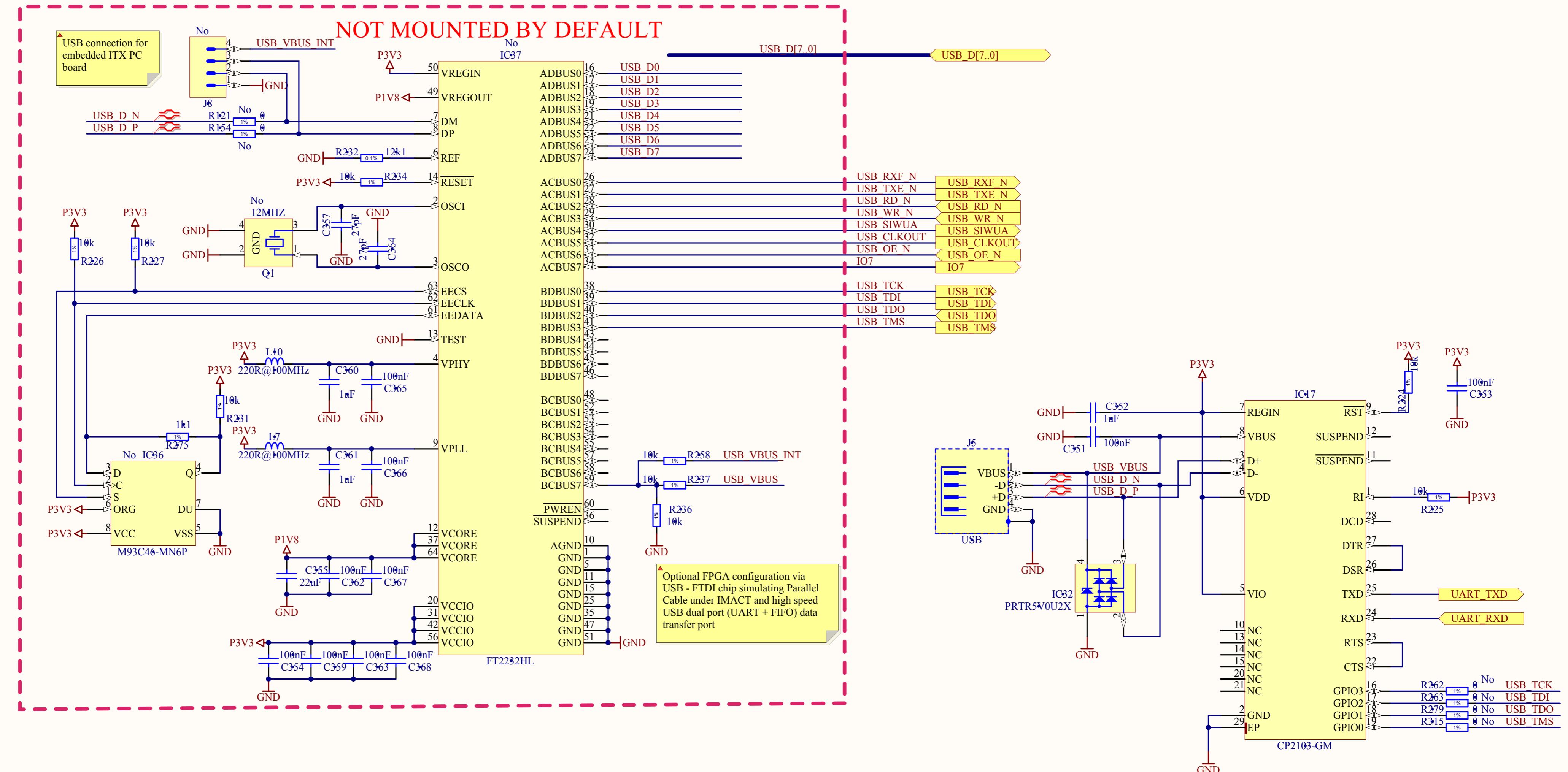


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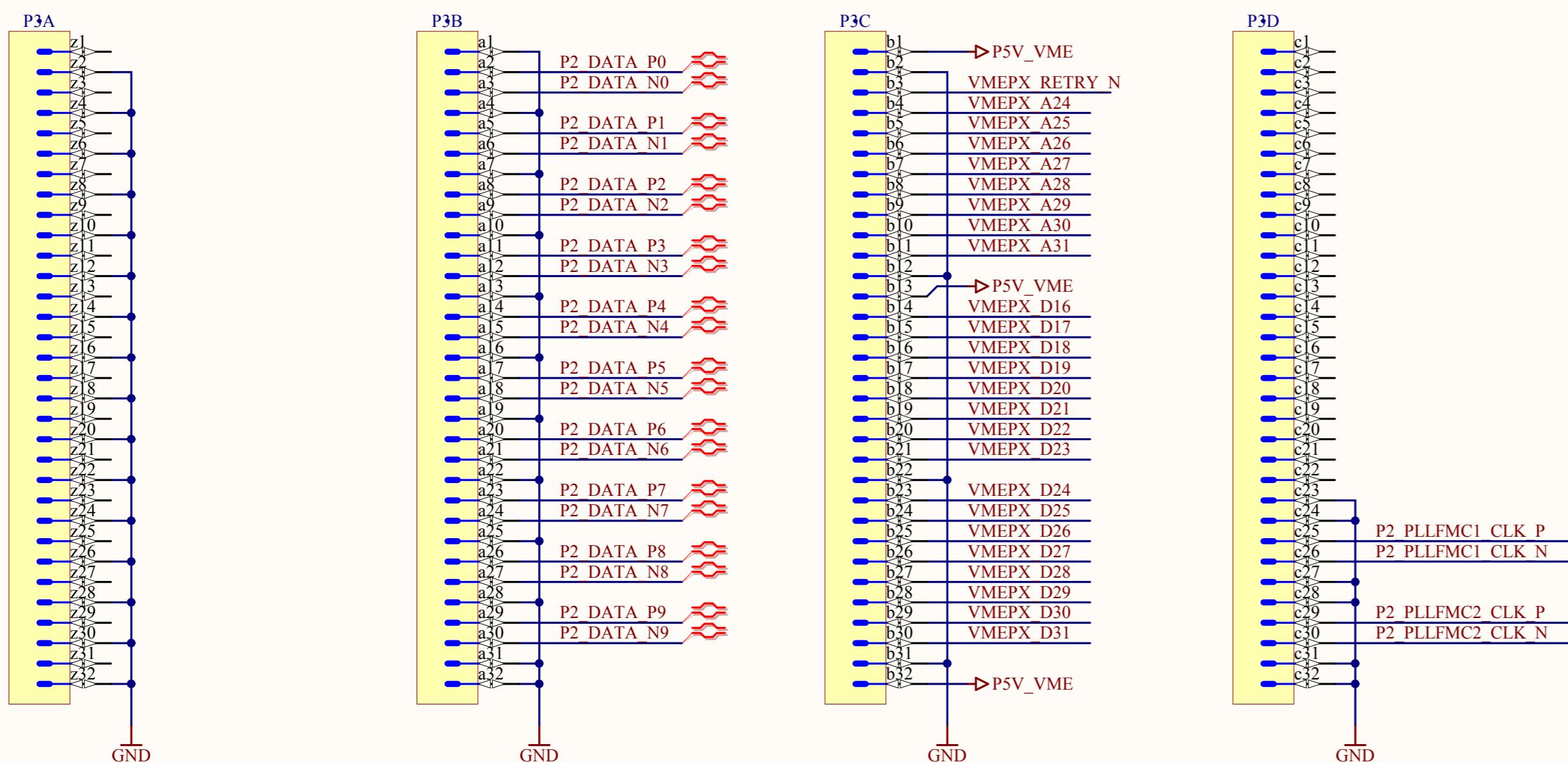


Project/Equipment			Simple VME FMC Carrier		
Document			System FPGA power		
			Designer G.Kasprowicz Drawn by Greg Kasprowicz 20/11/2012 Check by T.Janicki 23/01/2012 Last Mod. 2012-04-27 File SFPGA_power.SchDoc Print Date 2012-04-27 13:16:25 Sheet 16 of 19 European Organization for Nuclear Research CH-1211 Geneve 23 - Switzerland EDA-xxxx		



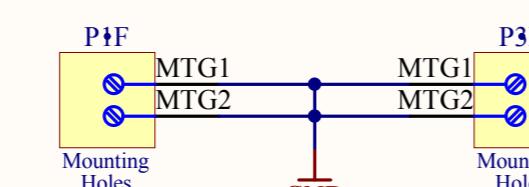
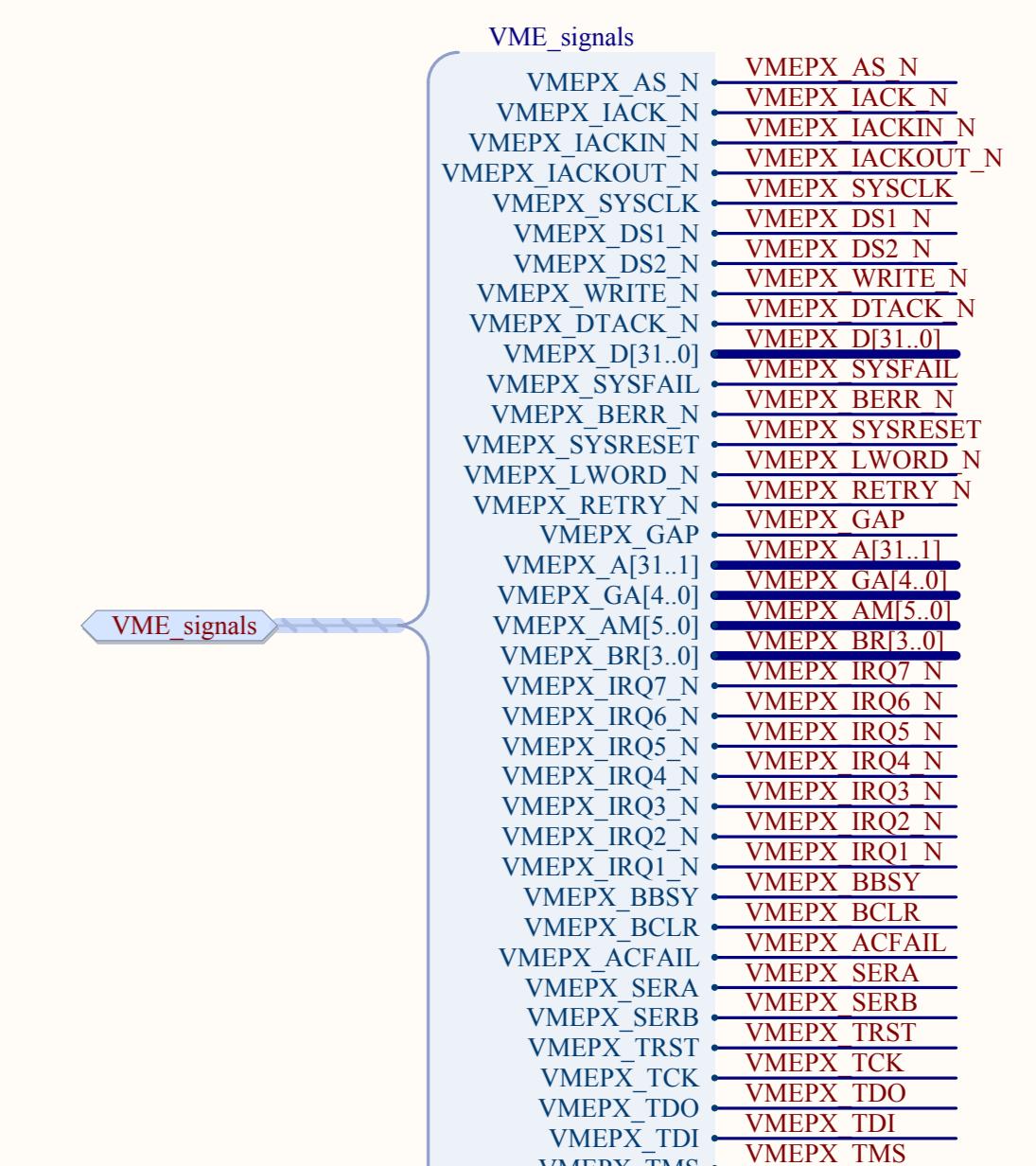
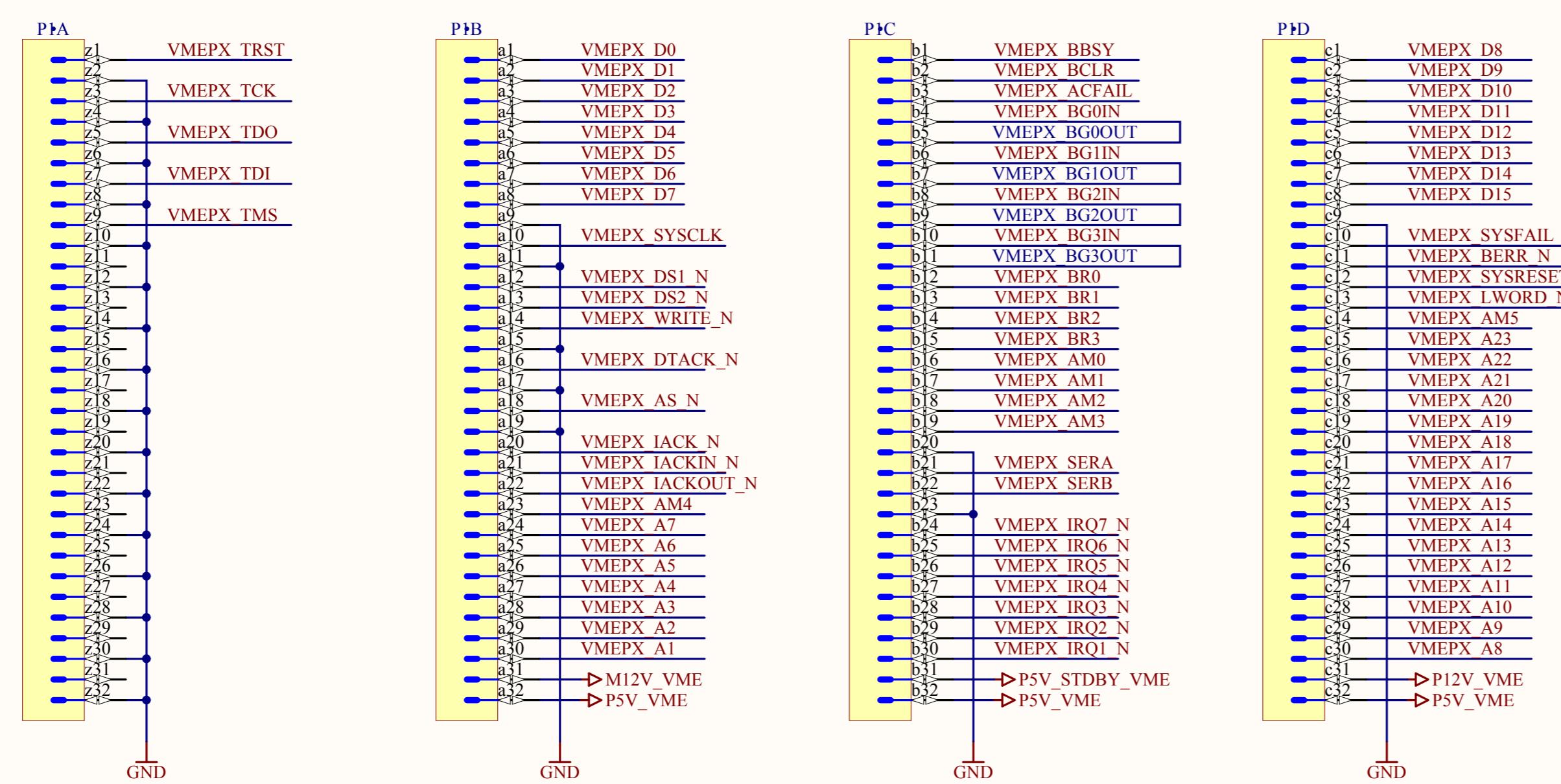
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P2_PLLFMC1_CLK_P
P2_PLLFMC1_CLK_N
P2_PLLFMC2_CLK_P
P2_PLLFMC2_CLK_N

100ohms diff. pairs
P2_DATA_P[19..0]
P2_DATA_N[19..0]



Project/Equipment		Simple VME FMC Carrier		
Document	BE-CO	VME connectors		Print Date
				2012-04-27 13:16:25
				Sheet 18 of 19
				Size Rev
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