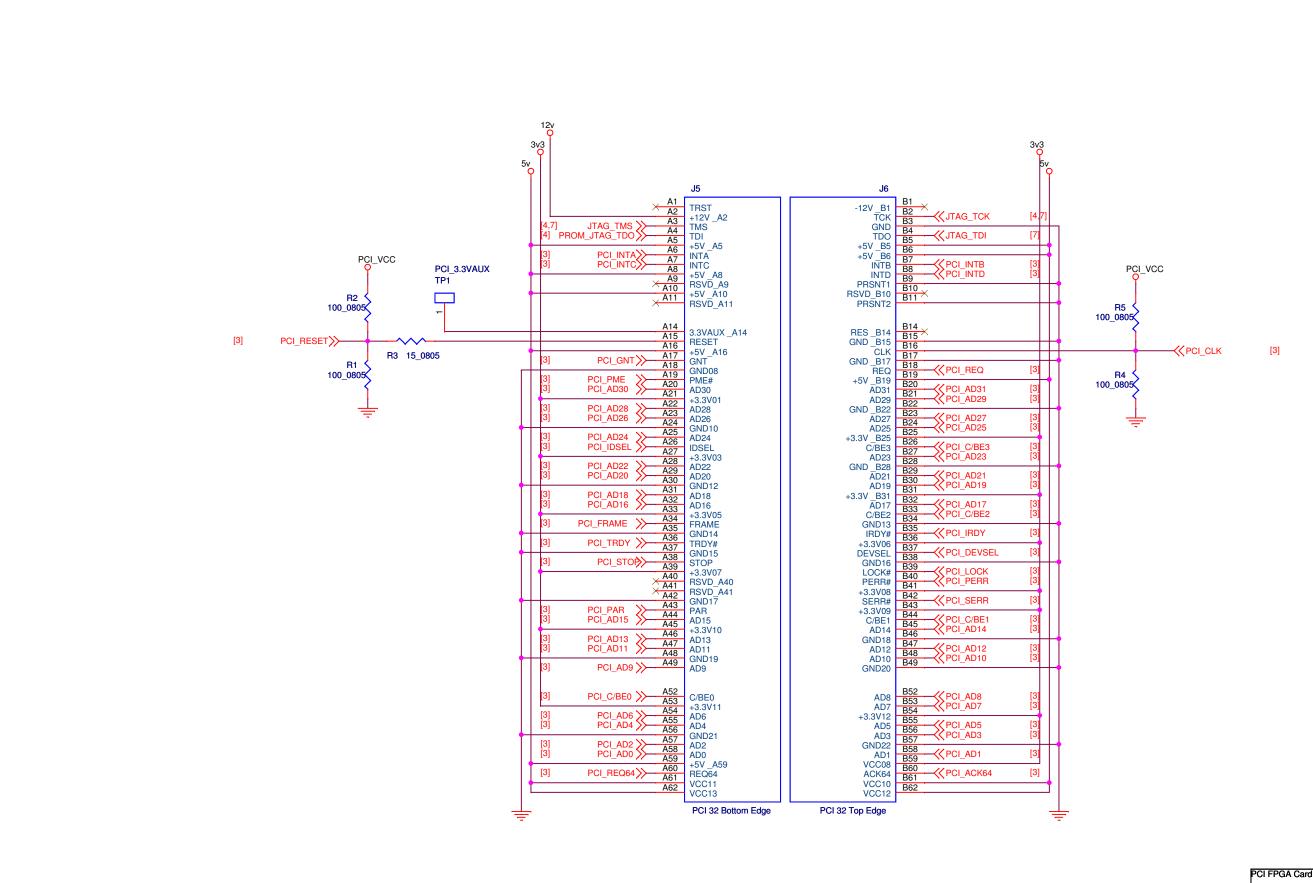


Table of Contents Ol Info Page

- 02 PCI Connector 03 FPGA PCI Banks 04 FPGA Config
- 05 FPGA GND
- 06 FPGA Power
- 07 JTAG
- 08 FPGA Extra I/O
- 09 DDR Socket
- 10 FPGA DDR Banks 5,6
- 11 FPGA DDR Banks 3,4,7
- 12 Power Regulation 13 Power Distribution

PCI FPGA Card Document Info Size Document Number Rev 1.0 Sunday, October 03, 2010



PCI FPGA Card

Title
PCI Connector

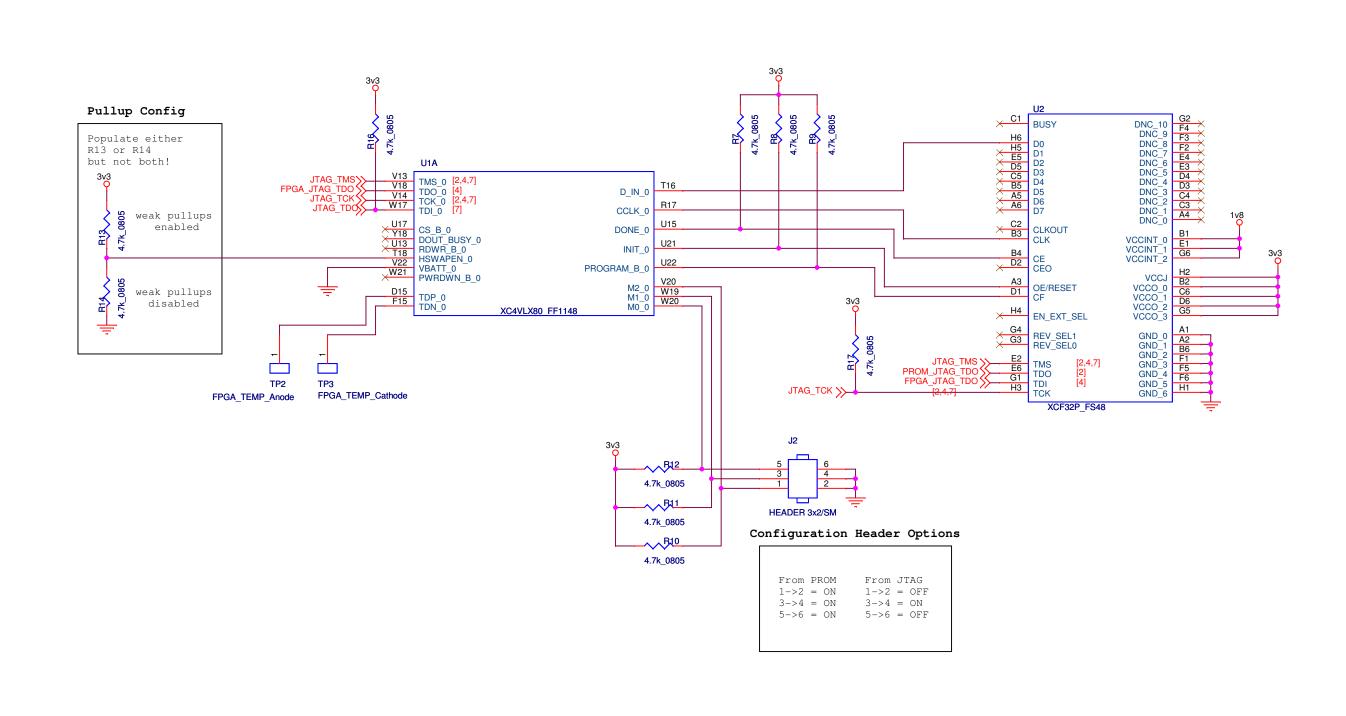
Size Document Number
Rev
1.0

Date: Sunday, October 03, 2010 | Sheet 2 of 1

U1B D16 C15 D20 C20 M16 IO_L14P_GC_LC_1 IO_L14N_GC_LC_1 IO_L15P_GC_LC_1 IO_L15N_GC_LC_1 PCI_SERR Extra IO B1 2 Extra_IO_B1_2 Extra_IO_B1_3 Extra_IO_B1_4 Extra_IO_B1_5 M16 PCI STOP
N15 PCI DEVSEL
K14 Extra IO B1
N18 Extra IO B1
L15 PCI INTA
E21 PCI INTB
D21 PCI INTD PCI STOP IO_L16P_GC_CC_LC_1 IO_L16N_GC_CC_LC_1
IO_L4N_D24_VREF_LC_1
IO_L1P_D31_LC_1 Extra_IO_B1_20 Extra_IO_B1_21 Extra IO B1 6 Extra_IO_B1_ Extra IO B1 8 IO_L1N_D30_LC_1 Extra IO B1 22 F14 IO_L22N_LC_1 F21 IO_L22N_LC_1 F20 IO_L23P_LC_1 IO_L23N_LC_1 IO_L24P_LC_1 Extra IO B1 9 IO_L2P_D29_LC_1 IO_L2N_D28_LC_1 Extra_IO_B1_ Extra IO B1 1 IO L3P D27 LC Extra_IO_B1 IO_L3N_D26_LC_1 J14 N20 M20 Extra IO B1 13 IO_L4P_D25_LC_1 IO_L5P_D23_LC_1 Extra_IO_B1_15 IO_L5N_D22_LC_1 PCI FRAME H14 → PCI PAR Extra_IO_B1_16 Extra_IO_B1_17 IO_L6P_D21_LC_1 IO_L6N_D20_LC_1 IO_L7P_D19_LC_1 H14 PCI_PAR H13 PCI_PME H22 PCI_REQ J21 PCI_REQ F13 PCI_TRDY G13 PCI_IRDY B20 PCI_RDY Extra_IO_B1_19 PCI_C/BE3 IO_L7N_D18_LC_1 IO_L8P_D17_CC_LC_1 IO_L8N_D16_CC_LC_1 A20 PCI_IDSEL IO_L17P_CC_LC_ IO_L17N_CC_LC_1 XC4VLX80_FF1148

U1C AD19
AE19
IO_L23P_VRN_LC_2
IO_L23N_VRP_LC_2
IO_L23N_VRP_LC_2
IO_L23N_VRP_LC_2
IO_L23N_VRP_LC_2
IO_L20N_VREF_LC_2
IO_L17N_LREF_LC_2
IO_L21N_LREF_LC_2
IO_L20P_LREF_LC_2
IO_L21N_LREF_LC_2
IO_L21N_LREF_LC_2
IO_L21N_LREF_LC_2
IO_L10N_GREF_LC_2
IO_L11N_GREF_LC_2
IO_L11N AD19 IO_L23P_VRN_LC_2 [2] [2] [2] [2] [2] [2] [2] [2] [2] XC4VLX80 FF1148

> PCI FPGA Card FPGA PCI Banks 1,2 Document Number Rev 1.0 Sunday, October 03, 2010



PCI FPGA Card

Title
FPGA Config

Size Document Number
Rev
1.0

Date: Sunday, October 03, 2010 Sheet 4 of 1

4

U10 GND_D18
GND_P18
GND_P18
GND_AD18
GND_AD18
GND_AD19
GND_G19
GND_G19
GND_AG19
GND_AG19
GND_AG19
GND_AG19
GND_C10
GND_C10
GND_Y20
GND_Y20
GND_Y20
GND_Y20
GND_Y20
GND_Y20
GND_Y20
GND_Y20
GND_C21
GND_AB20
GND_AB20
GND_AB20
GND_C21
GND_C21
GND_C21
GND_C21
GND_C21
GND_C21
GND_C21
GND_AC21
GND_C21
GND_C22
GND GND B1 GND_C1 N1 AC1 AN1 F2 T2 AF2 AP2 J3 W3 GND_N1 GND_AC1 GND_AN1 GND_F2 GND_T2 GND_AF2 GND_AP2 GND_J3 GND_W3 GND_AJ3 AJ3 B4 M4 GND B4 GND_M4 GND_AB4 GND_AM4 AB4 AM4 GND_E5 GND_R5 GND_AE5 GND_H6 GND_V6 GND_AH6 GND_A7 AE5 GND_Y22 AD22 GND_AD22 AF22 GND_AF22 J23 GND_L23 L23 GND_W23 AC23 GND_AC23 AC23 GND_AC23 AE23 GND_AC23 AL23 GND_AC23 AL23 GND_AC23 AL23 GND_AC23 AL23 GND_AC24 AL23 GND_AC25 B24 GND L7 GND_AA7 GND_AL7 GND_D8 AL7 D8 P8 GND_P8 AD8 GND_AD8 GND_AP8 GND_G9 AP8 G9 U9 GND_U9 GND_AG9 GND_K10 GND_B24
GND_B24
GND_B24
GND_M24
GND_AB24
GND_AB24
GND_AD24
GND_AD24
GND_AB25
GND_B25
GND_B25
GND_AE25
GND_AE26
GND_V26
GND_V26
GND_AH26
GND_AH26
GND_AH26
GND_AH26
GND_AH26
GND_AH26
GND_AH27
GND_L27
GND_L27
GND_L27
GND_AL27
GND_B28
GND_D28
GND_D28
GND_P28
GND_D28
GND_D28
GND_D28
GND_D28
GND_D28
GND_D29
GND_C29
GND_C29
GND_C29
GND_C29
GND_G29
GND_G29
GND_G29
GND_G29
GND_G29
GND_G30
GND_G30
GND_G31
GND_G33
GND_G33
GND_G33
GND_G33
GND_G33
GND_G33
GND_G33
GND_G33
GND_G33
GND_G34
GND_G34 AK10 GND_Y10 GND_AK10 GND_C11 GND_C11 GND_L11 N11 GND_L11
AC11 GND_N11
AN11 GND_AC1
F12 GND_AN1
K12 GND_F12 GND_AC11 GND_AN11 GND_F12 GND_K12 GND_M12 GND_T12 GND AD12 J13 GND_AF12
L13 GND_L13
R13 GND_L13 R13 GND_R13 W13 GND_R13 AC13 GND_W13 AE13 GND_AC13 AJ13 GND_AE13 B14 GND_B14 GND_M14 T14 GND_M14 GND_R13 GND_T14 AB14 GND_AB14 AD14 GND_AD14 GND_AM14 AM14 E15 GND_AM1-GND_E15 GND_R15 GND_W15 W15 AE15 H16 GND_AE15 GND_H16 GND_P16 GND_V16 AH16 GND AH16 GND_B34 GND_AB34 GND_AB34 GND_AM34 GND_AM34 GND_AM34 GND_AP16 GND_L17 GND_AA17 GND_AL17 XC4VLX80_FF1148

PCI FPGA Card

Title FPGA GND

Size Document Number Rev 1.0

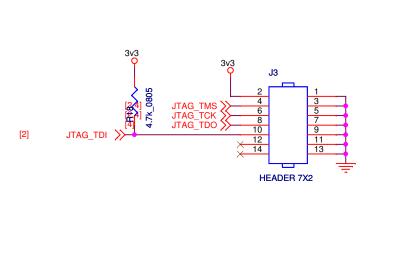
Date: Sunday, October 03, 2010 Sheet 5 of 1

3v3 U1P R20 P23 N26 U14 T17 VCCO_0_0 VCCO_0_1 VCCO 9 0 VCCO_9_1 VCCO_9_2 VCCO_9_2 VCCO_9_3 M29 VCCO 9 4 H31 VCCO_9_5 VCCO_9_6 VCCO_9_7 VCCO_9_7 G34 VCCO_1_0 VCCO_1_1 VCCO_1_2 C16 N16 N16 VCCO_1_2 WCCO_1_3 VCCO_1_4 VCCO_9_8 H1 E20 VCCO_1_6 VCCO_10_0 VCCO_10_1 VCCO_10_2 VCCO_10_3 VCCO_10_4 VCCO_10_4 V66 VCCO_1_7 AG14 AK15 VCCO 2 0 VCCO_10_4 VCCO_10_5 M9 AK15 VCCO 2 0 AC16 VCCO 2 1 AN16 VCCO 2 2 AB19 VCCO 2 3 AM19 VCCO 2 4 AE20 VCCO 2 5 VCCO 2 6 AH21 VCCO 2 7 VCCO_10_6 VCCO_10_7 VCCO_10_8 VCCO_10_8 AA22 1v8 VCCO_11_0 AH21 VCCO_1 VCCO_1 VCCO_2_7 AB29 VCCO_5_0 VCCO_ AE30 VCCO_5_1 VCCO 5 2 VCCO_1 1_4 AH31 1_5 AL32 1_6 AD33 G24 VCCO K25 C26 F27 VCCO 5 3 VCCO 1 VCCO_5_4 AG34 B29 VCCO_5_6 VCCO_11 AH1 VCCO_5_ VCCO_12_0 AL2 AD3 AG4 VCCO_5_8 VCCO_12_1 VCCO 12 2 A2 C6 VCCO_6_0 VCCO_6_1 VCCO_12_3 VCCO_12_4 AC6 VCCO_12_4 AF7 VCCO 6 0 VCCO_6_2 VCCO_12_ VCCO_12_5 VCCO_12_6 AB9 AA12 VCCO 6 3 VCCO_6_4 VCCO_12 Y15 H11 VCCO_6_5 VCCO_12_8 A12 VCCO_6_6 D13 VCCO_6_8 U24 T27 W28 VCCO 13 0 VCCO 13 1 VCCO_13 AL22 AP23 R30 V31 VCCO_7_0 VCCO_7_1 VCCO 13 3 VCCO_13_4 AA32 AG24 VCCO_13_5 VCCO_13_6 VCCO_13_6 U34 VCCO_7_2 AN26 VCCO_7_3 AF27 VCCO_7_4 VCCO_13_6 VCCO_13_7 VCCO 7 5 AJ28 AM29 VCCO_7_6 VCCO_14_0 AA2 P3 U4 VCCO_14_1 VCCO_14_2 VCCO_7_ 3v3 AP33 VCCO_7_8 VCCO_14_3 VCCO_8_0 VCCO_14_4 AK5 VCCO_14_5 VCCO_14_6 VCCO_14_7 VCCO_8_1 VCCO 8 2 AN6 1v8 AJ8 VCCO_8_3 VCCO_14_ VCCO_8_4 AE10 VCCO_8_4 VCCO_8_5 VCCO 4 1 AF17 VCCO 8 6 VCCO_4_0 VCCO_8_ J18 F17 VCCO_3_1 VCCO_8_8 VCCO 3 0 XC4VLX80 FF1148

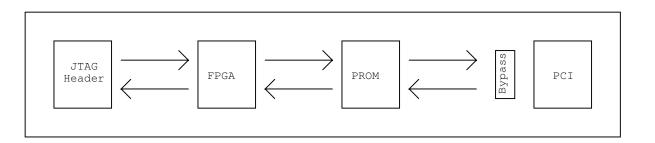
U1Q VCCINT VCCINT . K7 VCCINT_U18 AA18 VCCINT K7 AB7 VCCINT_AA18 AC18 VCCINT_AB7 VCCINT_AF9 VCCINT I 10 AC12 VCCINT_R12
VCCINT_AC12
VCCINT_AE12
VCCINT_AE12 VCCINT_R12 VCCINT_U20 VCCINT_A20 VCCINT_A20 VCCINT_A20 VCCINT_A20 VCCINT_A20 VCCINT_A20 VCCINT K13 M13 VCCINT_K21 VCCINT_K21 VCCINT_M21 VCCINT_T21 VCCINT_T21 V21 VCCINT_M13 T13 VCCINT_M13 VCCINT_T13 VCCINT_AD13 VCCINT_AD13 AF13 VCCINT_AF13 VCCINT_Y21 AB21 VCCINT_AB21 VCCINT_G22 VCCINT_G22 VCCINT_J22 VCCINT_L22 VCCINT_W22 VCCINT_AH13 N14 R14 VCCINT N14 | H14 | VOCINT_N14 | VCCINT_R14 | VCCINT_W14 VCCINT_W22 VCCINT_AC22 VCCINT_AC22 VCCINT_AE22 VCCINT_K23 VCCINT_K23 VCCINT_M23 AE14 VCCINT_AC14 M15 VCCINT_AE14 VCCINT_M15 VCCINT_P15 VCCINT_M23 VCCINT_Y23 VCCINT_Y23 AD23 VCCINT_T15 VCCINT_V15 V15 AD15 VCCINT_AD23 AF23 VCCINT AD15 AH15 VCCINT_AF23 VCCINT_N24 AE24 VCCINT_AH15 J16 R16 VCCINT_J16 VCCINT_R16 VCCINT_AE24 AD25 W16 VCCINT_AD25 J26 VCCINT_W16 AA16 P17 VCCINT_AA16
V17 VCCINT_P17 VCCINT_AA16 VCCINT AE28 VCCINT V17 XC4VLX80_FF1148

VCCAUX2v5 U1R N8 VCCAUX_N8 F9 VCCAUX F9 VCCAUX T9 AH9 VCCAUX2v5 VCCAUX_AH9 J10 AA10 VCCAUX_J10 VCCAUX_AA10 B16 M11 VCCAUX_AA10
AD11 VCCAUX_M11
AG12 VCCAUX_AD11
U16 VCCAUX_AG12
VCCAUX_AG12
VCCAUX_AG16
VCCAUX_AG16 AVDD_ADC AN17 VREFN_SM AN18
VREFP_SM AP19
AVDD_SM AP17 VN_SM AP18 VCCAUX_AJ16 Y17 VCCAUX_AJ16
Y17 VCCAUX_Y17
R18 VCCAUX_R18
F19 VCCAUX_F19 VP_SM AN19 AVSS_SM VCCAUX F19 V19 H23 VCCAUX_V19 L24 VCCAUX_H23 VCCAUX_L24 P25 VCCAUX_AC24 VCCAUX_P25 VP ADC A16 AVSS_ADC G26 VCCAUX_AF25
W26 VCCAUX_G26
AJ26 VCCAUX_W26
AB27 VCCAUX_AJ26
VCCAUX_AJ26 VCCAUX_AB27 XC4VLX80 FF1148

PCI FPGA Card								
Title	FPGA Power							
Size	Document Number					Rev 1.0		
Date:	Sunday, October 03, 2010	Sheet	6	of	1	•		

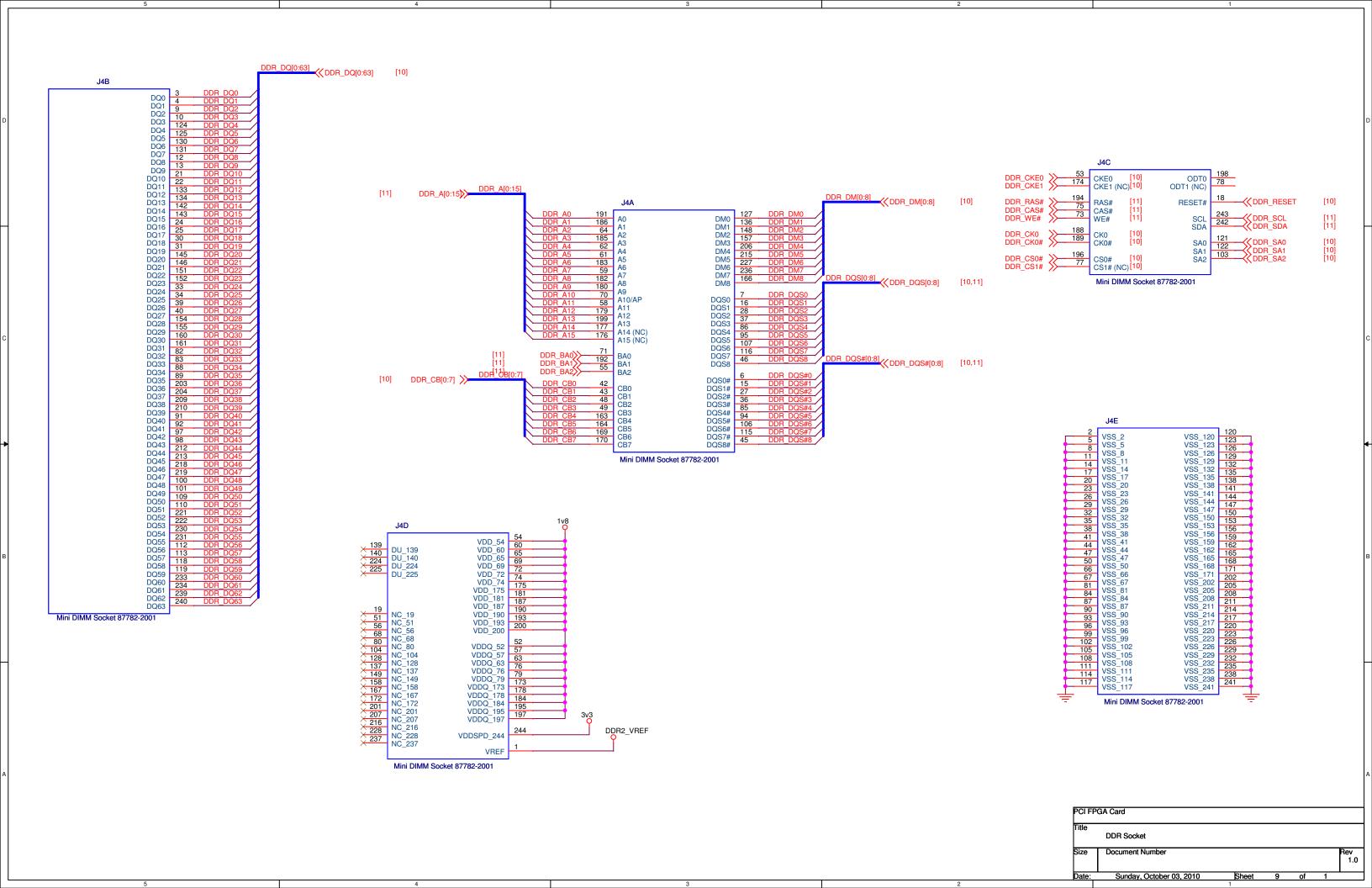


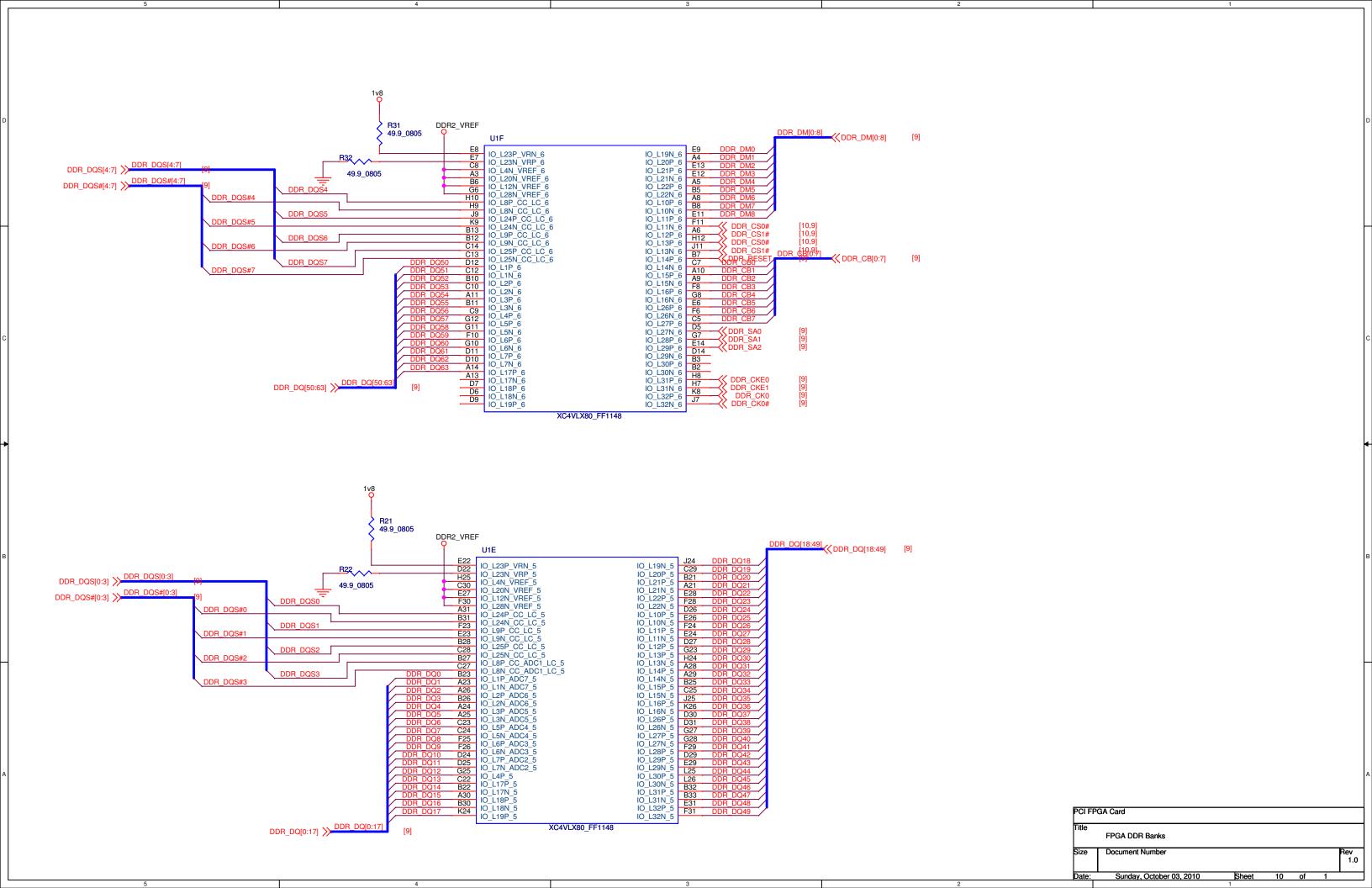
JTAG Path

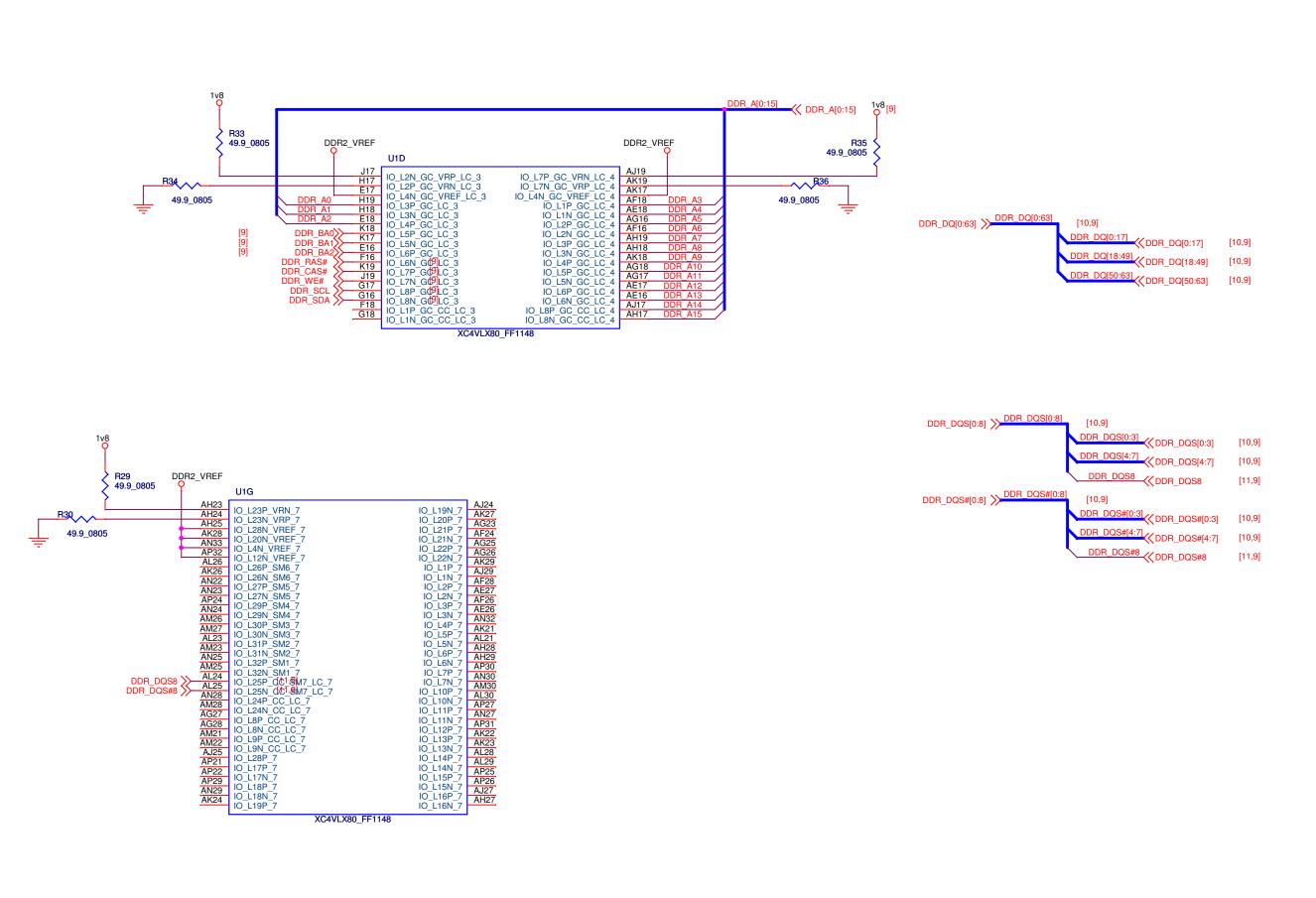


PCI FPGA Card							
Γitle							
	JTAG						
Size	Document Number					Rev	
						1.0	
Date:	Sunday, October 03, 2010	Sheet	7	of	1		

	5	•	4	3	3		2	1	1
D									
				[3] Extra_IO_B1_2\> [3] Extra_IO_B1_3\>					
				[3] Extra_IO_B1_4\> [3] Extra_IO_B1_5\> [3] Extra_IO_B1_6\>					
				[3] Extra_IO_B1_7\(\) [3] Extra_IO_B1_8\(\) [3] Extra_IO_B1_8\(\)					
				[3] Extra_IO_B1_10 [3] Extra_IO_B1_11					
				[3] Extra_IO_B1_13 [3] Extra_IO_B1_13 [3] Extra_IO_B1_14		Extra_IO_B2_2 [3] Extra_IO_B2_3 [3]			
				3 Extra_IO_B1_2\\ 3 Extra_IO_B1_3\\ 3 Extra_IO_B1_4\\ 3 Extra_IO_B1_5\\ 3 Extra_IO_B1_5\\ 3 Extra_IO_B1_5\\ 3 Extra_IO_B1_5\\ 3 Extra_IO_B1_5\\ 3 Extra_IO_B1_1\\ 3 Extra_IO_B1_10\\ 3 Extra_IO_B1_110\\ 3 Extra_IO_B1_110\\ 3 Extra_IO_B1_12\\ 3 Extra_IO_B1_13\\ 3 Extra_IO_B1_15\\ 3 Extra_IO_B1_16\\ 3 Extra_IO_B1_16\\ 3 Extra_IO_B1_16\\ 3 Extra_IO_B1_16\\ 3 Extra_IO_B1_16\\ 3 Extra_IO_B1_18\\ 4 Extra_IO_B1_18\\ 5 Ex		Extra_IO_B2_4 [3] Extra_IO_B2_5 [3] Extra_IO_B2_6 [3]			
				Stra_IO_B1_2 Stra_IO_B1_3 Stra_IO_B1_4 Stra_IO_B1_4 Stra_IO_B1_5 Stra_IO_B1_6 Stra_IO_B1_6 Stra_IO_B1_6 Stra_IO_B1_6 Stra_IO_B1_1 Stra_IO_B1_1 Stra_IO_B1_12 Stra_IO_B1_12 Stra_IO_B1_13 Stra_IO_B1_14 Stra_IO_B1_16 Stra_IO_B1_16 Stra_IO_B1_16 Stra_IO_B1_17 Stra_IO_B1_18 Stra_IO_B1_18 Stra_IO_B1_18 Stra_IO_B1_18 Stra_IO_B1_18 Stra_IO_B1_18 Stra_IO_B1_18		<pre>\$\int Extra_IO_B2_7 [3] \$\int Extra_IO_B2_8 [3] \$\int Extra_IO_B2_9 [3]\$</pre>			
C						Extra_IO_B2_2 [3] Extra_IO_B2_3 [3] Extra_IO_B2_4 [3] Extra_IO_B2_5 [3] Extra_IO_B2_6 [3] Extra_IO_B2_7 [3] Extra_IO_B2_8 [3] Extra_IO_B2_9 [3] Extra_IO_B2_10 [3] Extra_IO_B2_11 [3] Extra_IO_B2_11 [3] Extra_IO_B2_12 [3] Extra_IO_B2_13 [3] Extra_IO_B2_14 [3] Extra_IO_B2_15 [3]			
				Extra_IO_B1_20 [3] Extra_IO_B1_21 [3] Extra_IO_B1_22 [3]		<pre> Extra_IO_B2_13 [3] Extra_IO_B2_14 [3] Extra_IO_B2_15 [3] </pre>			
•									•
в									
A									
							PCI F Title	PGA Card	
								JTAG Document Number	Rev
									Rev 1.0 Sheet 8 of 1
L							paic.		,







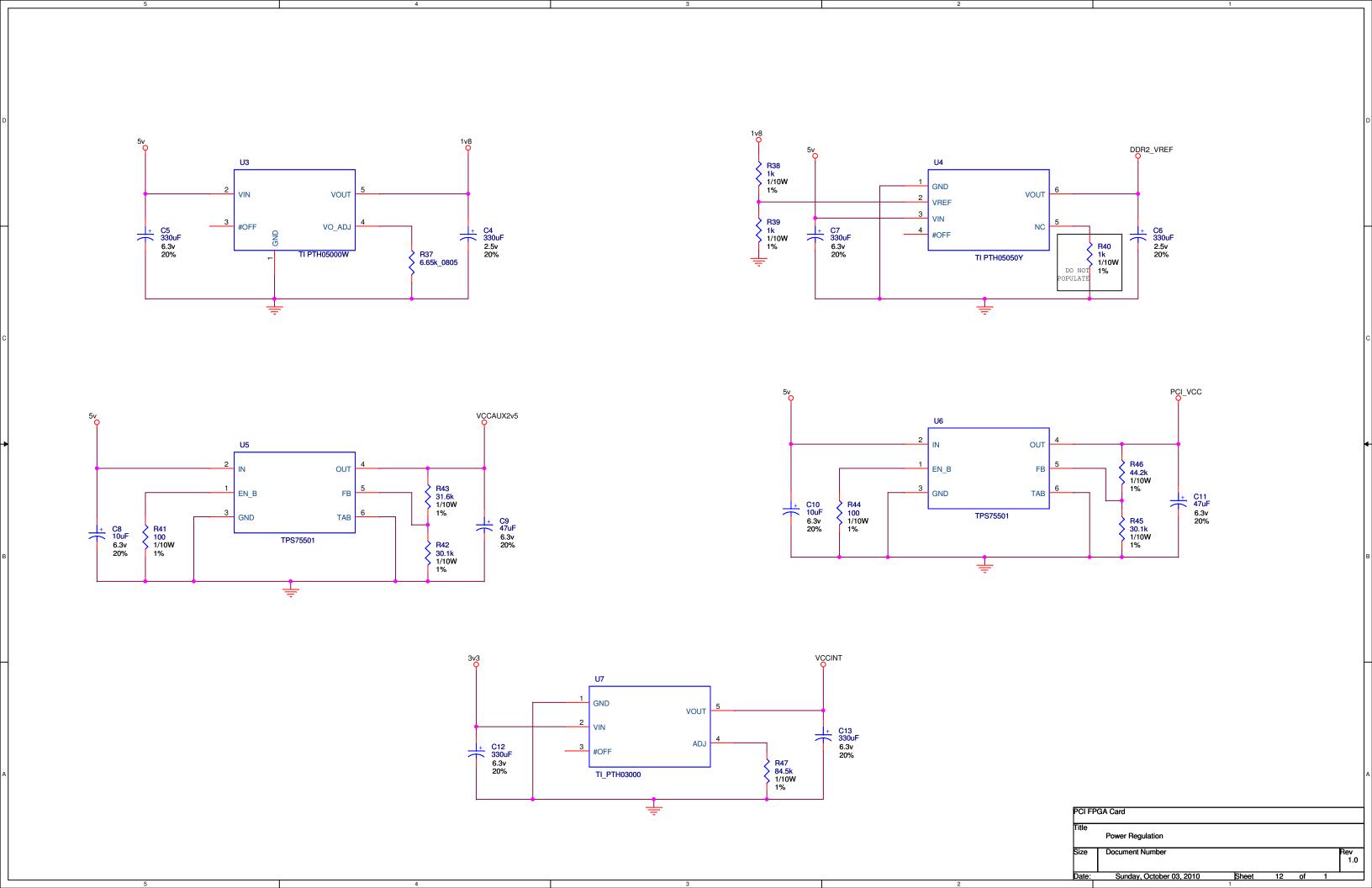
PCI FPGA Card

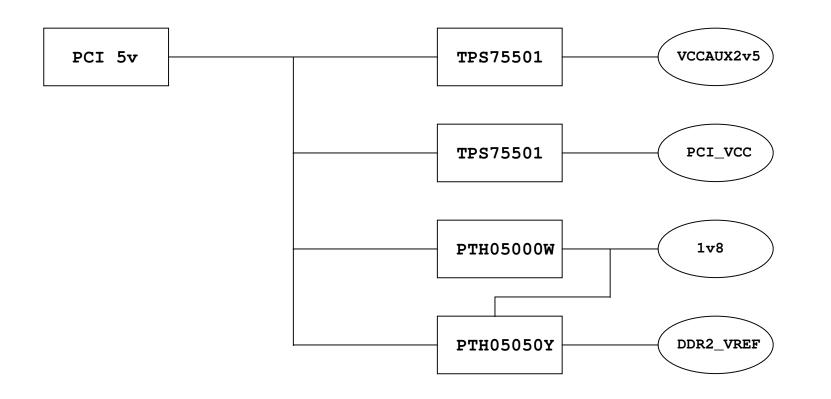
Title

FPGA DDR Banks

Size Document Number Rev
1.0

Date: Sunday, October 03, 2010 Sheet 11 of 1





PCI 3v3 PTH03000 VCC_INT

PCI FPGA Card

Title
Power Distribution

Size Document Number Rev
1.0

Date: Sunday, October 03, 2010 Sheet 13 of 1