xBP-6E2P3

2U high performance PICMG 1.3 Backplane

kontron

Board Rev.	0

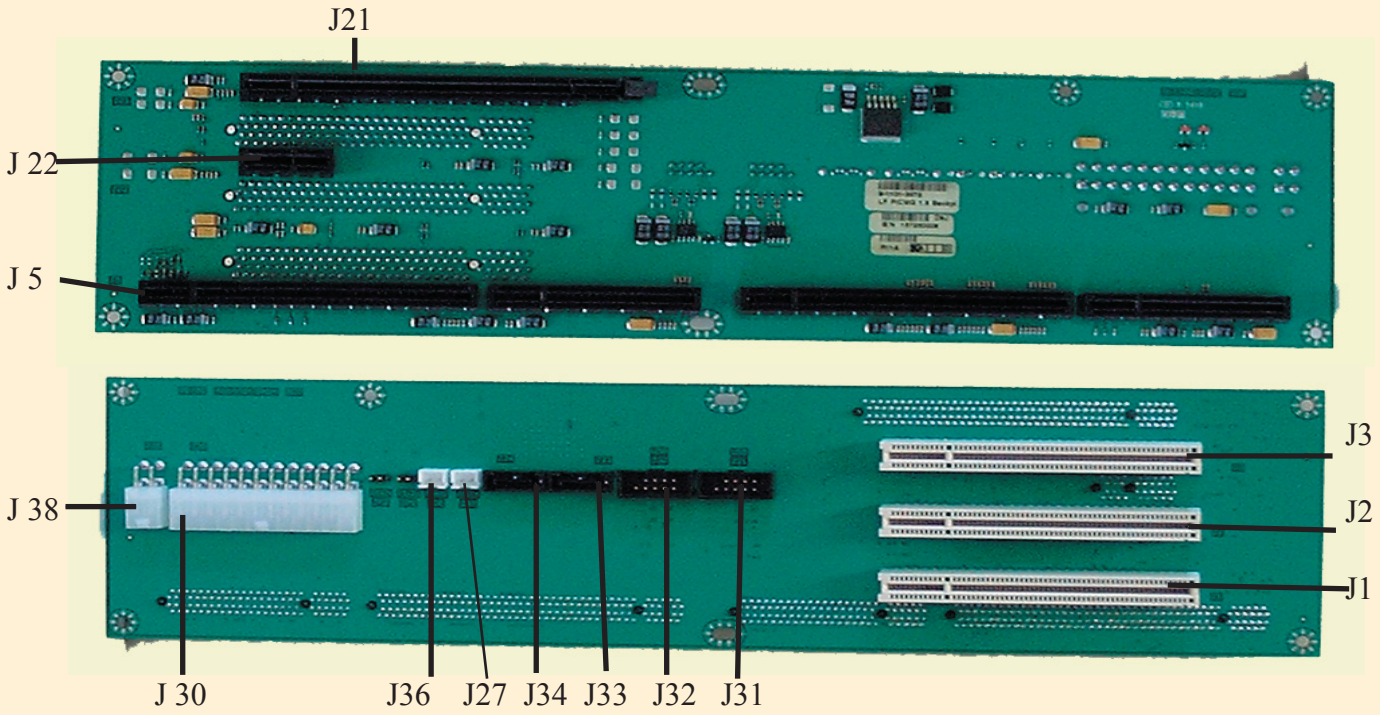
Quick REFERENCE

Version 1.3

Connectors	
J1-3: PCI Connector	J31-32: USB
J 5: PICMG Connector	J33+34: SATA
J 21: PCIeX16 Connector	J36: PWR button
J 22: PCIe x1 Connector	J37: Reset button
J30+38: ATX Connector	

First Level Debugging

1. If ATX +12V power supply is used on SHB, make sure that the +12V power cable (J19) is conected in SHB and +12V power supply cable mated in J17.
2. Remove all peripheral boards and SBCs.
3. Remove all cables from backplane.
4. Make sure that all the Power Good LEDs are on.



Connector Pinouts

xBP-6E2P3

PCI express X1			
A1	PRSNT1#	B1	12V_1
A2	12V_4	B2	12V_2
A3	12V_5	B3	12V_3
A4	GND_0	B4	GND_1
A5	TCK	B5	SMCLK
A6	TDI	B6	SMDAT
A7	TDO	B7	GND_2
A8	TMS	B8	3V3_0
A9	3V3_1	B9	TRST#
A10	3V3_2	B10	3V3AUX_0
A11	PERST#	B11	WAKE#
A12	GND_3	B12	RSVD_0
A13	REFCLK+	B13	GND_4
A14	REFCLK-	B14	b_PETp[0]
A15	GND_5	B15	b_PETn[0]
A16	b_PERp[0]	B16	GND_6
A17	b_PERp[0]	B17	PRSNT#
A18	GND_7	B18	GND_8

J30+8 - ATX Power Supply (24-pins)			
1	VCC3	13	VCC3
2	VCC3	14	-12V
3	GND	15	GND
4	VCC	16	PS_ON#
5	GND	17	GND
6	VCC	18	GND
7	GND	19	GND
8	PWRO K	20	-5V
9	5VSB	21	VCC
10	12V	22	VCC
11	+12V	23	VCC
12	VCC3	24	GND

PCIexpress X16			
A1	PRSNT1#	12V_1	B1
A2	12V_4	12V_2	B2
A3	12V_5	12V_3	B3
A4	GND	GND	B4
A5	TCK	SMCLK	B5
A6	TDI	SMDAT	B6
A7	TDO	GND	B7
A8	TMS	3V3_0	B8
A9	3V3_1	TRST#	B9
A10	3V3_2	3V3AUX_0	B10
A11	PERST#	WAKE	B11
A12	GND_3	RSVD_0	B12
A13	REFCLK+	GND_4	B13
A14	REFCKL-	a_PETp[0]	B14
A15	GND_5	a_PETn[0]	B15
A16	a_PERp[0]	GND_6	B16
A17	a_PERn[0]	PRSNT2#1	B17
A18	GND_7	GND_8	B18
A19	RSVD_1	a_PETp[1]	B19
A20	GND_9	a_PETn[1]	B20
A21	a_PERp[1]	GND_10	B21
A22	a_PERn[1]	GND_11	B22
A23	GND_12	a_PETp[2]	B23
A24	GND_13	a_PETn[2]	B24
A25	a_PERp[2]	GND_14	B25
A26	a_PERn[2]	GND_15	B26
A27	GND_16	a_PETp[3]	B27
A28	GND_17	a_PETn[3]	B28
A29	a_PERp[3]	GND_18	B29
A30	a_PERn[3]	RSVD_2	B30
A31	GND_19	PRSNT2#2	B31
A32	RSVD_3	GND_20	B32
A33	RSVD_$	a_PETp[4]	B33
A34	GND_21	a_PETn[4]	B34
A35	a_PERp[4]	GND_22	B35
A36	a_PERn[4]	GND_23	B36
A37	GND_24	a_PETp[5]	B37
A38	GND_25	a_PETn[5]	B38
A39	a_PERp[5]	GND_26	B39
A40	a_PERn[5]	GND_27	B40
A41	GND_28	a_PETp[6]	B41
A42	GND_29	a_PETn[6]	B42
A43	a_PERp[6]	GND_30	B43
A44	a_PERn[6]	GND_31	B44
A45	GND_32	a_PETp[7]	B45
A46	GND_33	a_PETn[7]	B46
A47	a_PERp[7]	GND_34	B47
A48	a_PERn[7]	PRSNT2#3	B48
A49	GND_35	GND_36	B49
A50	RSVD_5	a_PETp[8]	B50
A51	GND_37	a_PETn[8]	B51
A52	a_PERp[8]	GND_38	B52
A53	a_PERn[8]	GND_39	B53
A54	GND_40	a_PETp[9]	B54
A55	GND_41	a_PETn[9]	B55
A56	a_PERp[9]	GND_42	B56
A57	a_PERn[9]	GND_43	B57
A58	GND_44	a_PETp[10]	B58
A59	GND_45	a_PETn[10]	B59
A60	a_PERp[10]	GND_46	B60
A61	a_PERn[10]	GND_47	B61
A62	GND_48	a_PETp[11]	B62
A63	GND_49	a_PETn[11]	B63
A64	a_PERp[11]	GND_50	B64
A65	a_PERn[11]	GND_51	B65
A66	GND_52	a_PETp[12]	B66
A67	GND_53	a_PETn[12]	B67
A68	a_PERp[12]	GND_54	B68
A69	a_PERn[12]	GND_55	B69
A70	GND_56	a_PETp[13]	B70
A71	GND_57	a_PETn[13]	B71
A72	a_PERp[13]	GND_58	B72
A73	a_PERn[13]	GND_59	B73
A74	GND_60	a_PETp[14]	B74
A75	GND_61	a_PETn[14]	B75
A76	a_PERp[14]	GND_62	B76
A77	a_PERn[14]	GND_63	B77
A78	GND_64	a_PETp[15]	B78
A79	GND_65	a_PETn[15]	B79
A80	a_PERp[15]	GND_66	B80
A81	a_PERn[16]	PRSNT2#4	B81
A82	GND_67	RSVD_&	B82

PCI 32 BIT J6-J9 5V Environment					
	ROW B	ROW A		ROW B	ROW A
1	-12V	TRST#	49	Ground	AD[09]
2	TCK	+12V	50	Key Areal	
3	Ground	TMS	51		
4	TDO	TDI	52	DA[08]	C/BE[0]#
5	+5V	+5V	53	AD[07]	+3.3V
6	+5V	INTA#	54	+3.3V	AD[06]
7	INTB#	INTC#	55	AD[05]	AD[04]
8	INTD#	+5V	56	AD[03]	Ground
9	PRSNT1#	Reserved	57	Ground	AD[02]
10	Reserved	+5V(I/O)	58	AD[01]	AD[00]
11	PRSNT2#	Reserved	59	+5V (IO)	+5V (I/O)
12	Ground	Ground	60	ACK64#	REQ64#
13	Ground	Ground	51	+5V	+5V
14	Reserved	3.3Vaux	62	+5V	+5V
15	Ground	RST#			
16	CLK	+5V (I/O)			
17	Ground	GNT#			
18	REQ#	Ground			
19	+5V (I/O)	PME#			
20	AD[31]	AD[30]			
21	AD[29]	+3.3V			
22	Ground	AD[28]			
23	AD[27]	AD[26]			
24	AD[25]	Ground			
25	+3.3V	AD[24]			
26	C/BE[3]#	IDSEL			
27	AD[23]	+3.3V			
28	Ground	AD[22]			
29	AD[21]	AD[20]			
30	AD[19]	Ground			
31	+3.3V	AD[18]			
32	AD[17]	AD[16]			
33	C/BE[2]#	+3.3V			
34	Ground	FRAME#			
35	IRDY#	Ground			
36	+3.3V	TRDY#			
37	DEVSEL#	Ground			
38	Ground	STOP#			
39	LOCK#	+3.3V			
40	PERR#	SMBCLK			
41	+3.3V	SMBDAT			
42	SERR#	Ground			
43	+3.3V	PAR			
44	C/BE[1]#	AD[15]			
45	AD[14]	+3.3V			
46	Ground	AD[13]			
47	AD[12]	AD[11]			
48	AD[10]	Ground			

J 37 - Reset Button	
PIN	Signal
1	GND
2	PBRST#

J 33,34 -SATA	
GND1	1
TX+	2
TX-	3
GND2	4
RX-	5
RX+	6
GND3	7
DRL1	8
DRL2	9

J 31,32 - USB			
VCC	1	2	VCC
USB0-	3	4	USB1-
USB0+	5	6	USB1+
GND1	7	8	GND2

J36 - Power ON Switch	
1	PWR_BUTTON#
2	GND

Note

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