eBP-5A4B0

5-Slot ePCI Passive Backplane

kontron

Board Rev.	0

Quick REFERENCE

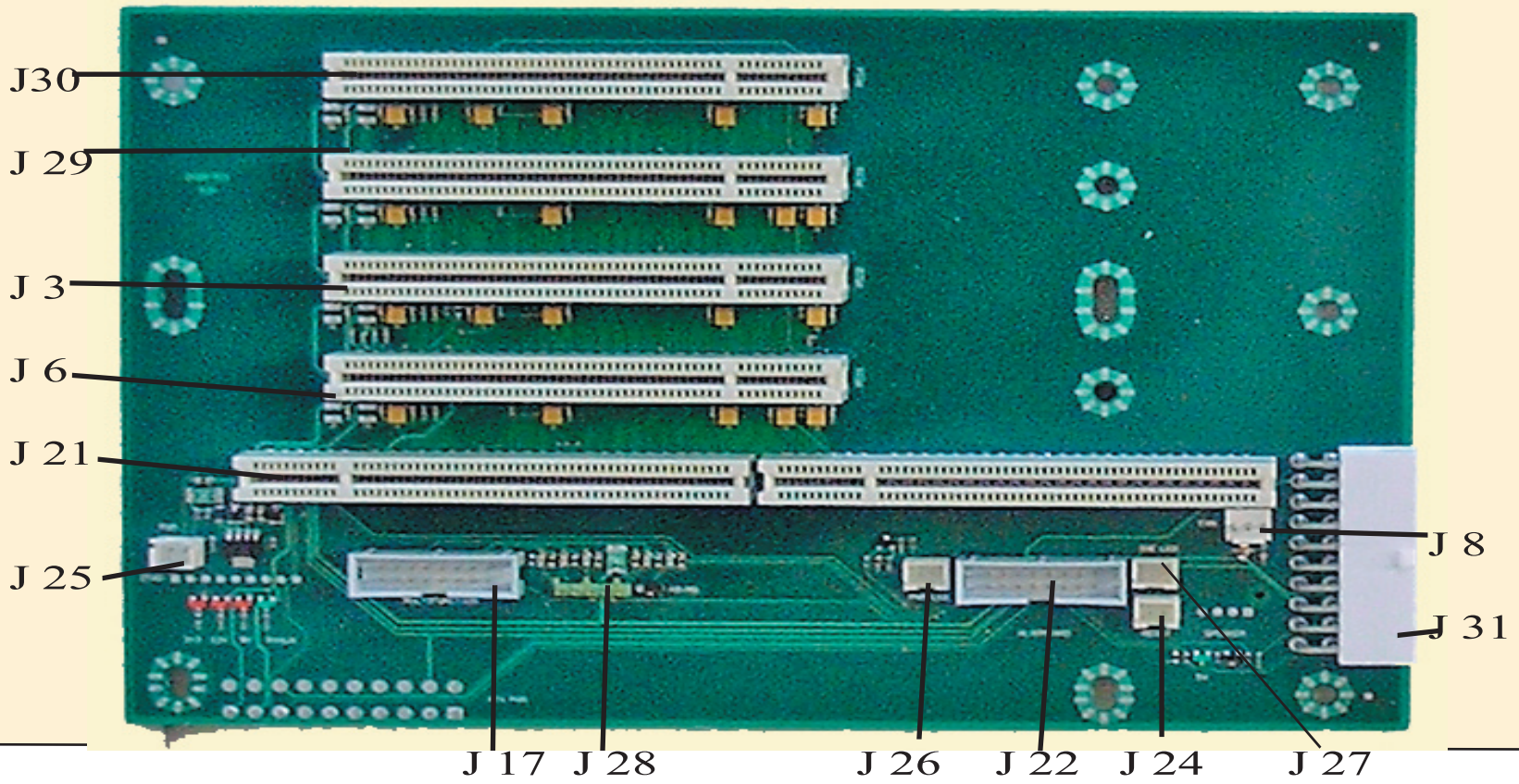
Version 1.2

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.

Connectors

J 30, J29, J 3, J 6 PCI Connector	J 24: Reset Connector
J 31 : FAN Connector	J 25: Power Butten Connector
J 8 : Chassis Fan Connector	J 26: Power good LED
J 17: Multi-Function Connector	J 27: HD Activity LED
J 21: ePCI Connector	J 28: Keyboard Mouse Connector
J 22: Arlarm Card Connector	



Connector Pinouts

eBP-5A4B0

J 8 - FANS	
1	12 V
2	NC
3	GND

J 27 - Hard Drive LED	
1	VCC
2	HDACT#

J26 - Power LED	
1	VCC
2	PWR_LED#

J31 - ATX Power Supply (20-pins)*				
1	VCC3		11	VCC3
2	VCC3		12	-12V
3	GND		13	GND
4	VCC		14	PS_ON#
5	GND		15	GND
6	VCC		16	GND
7	GND		17	GND
8	PWR_OK		18	-5V
9	5VSB		19	VCC
10	12V		20	VCC

J22 - Alarmcard Connector			
Signal	PIN	PIN	Signal
KBCLK	1	2	GND
KBDATA	3	4	GND
+5V fused	5	6	+5 V fused
SPEAKER	7	8	+5 V fused
MCLK	9	10	GND
MDATA	11	12	GND
PBRES#	13	14	GND
HDACT#	15	16	+5 V fused

J28 - PS/2 Keyboard/Mouse	
1	KB_DATA
2	NC(not populated)
3	MS_DATA
4	GND
5	5VALW
6	KB_CLK
7	MS_CLK

J 17 - SHB KCI Multi-Function				
Keyboard Clock	1		2	GND
Keyboard Data	3		4	GND
VCC	5		6	VCC
Speaker	7		8	VCC
Mouse Clock	9		10	GND
Mouse Data	11		12	GND
Push Button Reset#	13		14	GND
HDD Activity LED#	15		16	VCC

J 24 - Reset Button	
PIN	Signal
1	GND
2	PBRST#

J25 - Power ON Switch	
1	GND
2	PWR_BUTTON#

P1-P3, ePCI-X SHB

	P1		P2		P3		
	ROW B	ROW A	ROW B	ROW A	ROW B	ROW A	
1	-12V	+12V	GND	a_AD04	b-VIO	b_AD22	1
2	PWRGD	PWRBT#	a_AD05	+3.3V	b_C/BE3#	GND	2
3	PSON#	+5Vaux	a_AD03	a_AD02	b_AD23	b_AD21	3
4	TRST#	GND	GND	a_AD00	+5V	b_AD20	4
5	TMS	TCK	a_AD01	GND	b_AD19	GND	5
6	TDO	TDI	Reserved	a_REQ64#	b_AD17	b_AD18	6
7	RESERVED	a_PRSNT#	+5V	a_ACK64#	GND	b_AD16	7
8	+5V	Reserved	Reserved	+5V	b_C/BE2#	+3.3V	8
9	a_INTB#	+5V	a_VIO	a_C/BE7#	b_IRDY#	b_FRAME#	9
10	a_INTD#	a_INTA#	GND	a_C/BE6#	GND	b_TRDY#	10
11	+5V	a_INTC#	a_C/BE5#	GND	b_DEVSEL#	GND	11
12	Key Area						12
13							13
14	+3,3Vaux	+5V	a_C/BE4#	a_RAR64	+5V	b_PCIXCAP	14
15	GND	Reserved	+5V	a_AD62	b_LOCK#	b_STOP#	15
16	RESERVED	a_GNT3#	a_AD63	GND	b_PERR#	GND	16
17	+3,3V	GND	a_AD61	a_AD60	GND	b_PAP	17
18	a_REQ3#	a_GNT2#	GND	a_AD58	b_SERR#	b_AD15	18
19	a_REQ2#	a_GNT1#	a_AD59	+3.3V	b_C/BE1#	+3.3V	19
20	GND	+3.3V	a_AD57	a_AD56	GND	b_AD13	20
21	a_REQ1#	a_RST#	GND	a_AD54	b_AD14	b_AD11	21
22	a_REQ0#	a_GNT0#	a_AD55	GND	b_AD12	GND	22
23	+3.3V	GND	a_AD53	a_AD52	+5V	b_AD09	23
24	a_CLKFO	a_CLKFI	+5V	a_AD50	b_AD10	b_M66EN	24
25	GND	+3.3V	a_AD51	GND	b_AD08	GND	25
26	a_CLKC	a_CLKD	a_AD49	a_AD48	GND	b_C/BE0#	26
27	+3.3V	GND	GND	a_AD46	b_AD07	b_AD06	27
28	a_CLKA	a_CLKB	a_AD47	+3.3V	b_AD05	+3.3V	28
29	GND	+3.3V	a_AD45	a_AD44	GND	b_AD04	29
30	a_AD31	PME#	GND	a_AD42	b_AD03	b_AD02	30
31	a_AD29	GND	a_AD43	GND	b_Ad01	GND	31
32	+5V	a_AD30	a_AD41	a_AD40	+5V	b_AD00	32
33	a_AD27	a_AD28	+5V	a_AD38	b_ACK64#	b_REQ64#	33
34	a_AD25	GND	a_AD39	GND	b_C/BE7#	GND	34
35	GND	a_AD26	a_AD37	a_AD36	GND	b_C/BE6#	35
36	a_C/BE3#	a_AD24	GND	a_AD34	b_C/BE5#	b_PAR64	36
37	a_AD23	+3.3V	a_AD35	+3.3V	b_C/BE4#	+3.3V	37
38	GND	a_AD22	a_AD33	a_AD32	GND	b_AD62	38
39	a_AD21	a_AD20	GND	GND	b_AD63	b_AD60	39
40	a_AD19	GND	b_CLKD	b_CLKC	b_AD61	GND	40
41	+5V	a_AD18	+3.3V	GND	+5V	b_AD58	41
42	a_AD17	a_AD16	b_CLKB	b_CLKA	b_AD59	b_AD56	42
43	a_C/BE2#	GND	GND	+3.3V	b_AD57	GND	43
44	GND	a_FRAME#	b_CLKFO	b_CLKFI	GND	b_AD54	44
45	a_IRDY#	a_TRDY#	GND	GND	b_AD55	b_AD52	45
46	a_DEVSEL#	+5V	b_INTB#	b_INTA#	b_AD53	+3.3V	46
47	+3.3V	a_PCIXCAP	b_INTD#	b_INTC#	GND	b_AD50	47
48	a_LOCK#	a_STOP#	+5V	GND	b_AD51	b_AD48	48
49	a_PERR#	GND	b_GNT3#	b_GNT2#	b_AD49	GND	49
50	+5V	SER SDA	b_REQ3#	b_REQ2#	+5V	b_AD46	50
51	a_SERR#	SER_SCL	GND	+5V	b_AD47	b_AD44	51
52	a_PAR	GND	b_GNT1#	b_GNT0#	b_AD45	GND	52
53	GND	a_C/BE1#	b_REQ1#	b_REQ0#	GND	b_AD42	53
54	a_AD15	a_AD14	+5V	GND	b_AD43	b_AD40	54
55	a_AD13	+3.3V	b_RST#	b_PRSNT#	b_AD41	+3.3V	55
56	GND	a_AD12	+5V	b_AD30	GND	b_AD38	56
57	a_AD11	a_AD10	b_AD31	GND	b_AD39	b_AD36	57
58	a_AD08	GND	b_AD29	b_AD28	b_AD37	GND	58
59	+5V	a_AD09	GND	b_AD26	+5V	b_AD34	59
60	a_AD07	a_C/BE0#	b_AD27	+3.3V	b_AD35	b_AD32	60
61	a_M66EN	GND	b_AD25	b_AD24	b_AD33	GND	61
62	RESERVED	a_AD06	GND	Reserved	GND	Reserved	62

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 (I/O)	+5V (I/O)
12	Ground	Ground	60	ACK64#	REQ64#
13	Ground	Ground	61	+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			

Note

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