

PCE-5B05V-30B1E Backplane: 5-slot BP for 2U Chassis, 1 x PICMIG 1.3, 1x PCIe, 3 x 64-bit PCI-X Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

- One 2-port USB cable p/n: 1700002204
- PCE-5B05V-30B1E startup manual
- M4*6*0.7 round screws (5 pcs) p/n: 1939000410
- Warranty Card p/n: 2190000902

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Specifications

Standard Functions

- **PICMIG 1.3 slots:**
PCE-5B05V-30 supports PCE-5xxx CPU boards
- **PCIe slots:**
PCE-5B05V-30 supports one PCIe x16 slot
- **64-bit PCI-X:**
Three 64 Bit / 100 MHz PCI-X slots
- **USB (2.0) support:**
Four Universal Serial Bus ports to backplane

Mechanical and Environment

- **Dimensions:** 80.01 x 325 mm
- **Power supply voltage:** +12 V, +5 V, -12 V, -5 V, +5 V SBY, +3.3 V
- **Power requirements:** Refer to the CPU board, add-on card and peripherals
- **Operating temperature:** 0 ~ 60° C

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>

<http://www.advantech.com/Network/>

For technical support and service, please visit our support website at:

<http://www.advantech.com/support>

This manual is for the PCE-5B05V-30B1E series.

Part No. 200K5B0503

4th Edition
May 2016

Connectors & Jumpers

Connectors

Label	Function
SHBA1 ~ SHBD1	PICMG1.3 CPU board slot
PPCIE1	PCIe x 8 Slot
PPCIE2	PCE-5B05V-30: PCIe x 8 slot
P1PCIX1	64-bit / 66 MHz PCI-X slot
P1PCIX2	64-bit / 66 MHz PCI-X slot
P1PCIX3	64-bit / 66 MHz PCI-X slot
EATXPWR1	ATX2.0 24-pin power connector
EATX12V1	ATX 12v auxiliary 8-pin power connector
ATX12V1	ATX 12 V 4-pin power connector
VOLT1	Alarm board / CMM power connector
FAN1	FAN connector (box header)
FAN2	FAN connector (box header)
FAN3	FAN connector (box header)
FAN4	FAN connector (box header)
FANDEC1	FAN speed detector connector
SMBUS1	SMBus connector for chassis monitor
SMBUS2	SMBus connector for chassis monitor
JFP1	Power and reset button connector
IPMB1	IPMB connector
USB12	Two USB port pin header
USB34	Two USB port pin header

Jumpers

Label	Function
PSOEN1	ATX / AT mode selection
JP1VIO1	P1PCIX1 and P1PCIX2 3.3V / 5V VIO Selection

PCI-X jumper setting

Bus Rate/ Mode	JPCIXCAPA1	JSEL100A1	JM66ENA1
PCI 25MHz	(1-2)GND	(1-2)High	(2-3)GND
PCI 33MHz	(1-2)GND	(2-3)GND	(2-3)GND
PCI 50MHz	(1-2)GND	(1-2)High	(1-2)High
PCI 66MHz	(1-2)GND	(2-3)GND	(1-2)High
PCIX 50MHz	(2-3)10K to GND	(1-2)High	X
PCIX 66MHz	(2-3)10K to GND	(2-3)GND	X
PCIX 100MHz	(open)	(1-2)High	X
PCIX 133MHz	(open)	(2-3)GND	X

Note: **"X" means "don't use this pin"
 **"Open" means "doesn't need a jumper"

P1PCIX1~3 PCI Bus rate indicator

Bus rate/Mode	LED8	LED9	LED10	LED11
PCI 25MHz	OFF	OFF	ON	OFF
PCI 33MHz	OFF	OFF	ON	ON
PCI 50MHz	OFF	OFF	OFF	OFF
PCI 66MHz	OFF	OFF	OFF	ON
PCI 50MHz	OFF	ON	X	OFF
PCI 66MHz	OFF	ON	X	ON
PCI 100MHz	ON	ON	X	OFF
PCI 133MHz	ON	ON	X	ON

Connectors & Jumpers (Cont.)

Connector Pin Definitions

EATXPWR1	
Pin	Name
1	3.3 V
2	3.3 V
3	GND
4	5 V
5	GND
6	5 V
7	GND
8	Power OK
9	5 VSB
10	12 V
11	12 V
12	3.3 V
13	3.3 V
14	-12 V
15	GND
16	PSON
17	GND
18	GND
19	GND
20	-5 V
21	5 V
22	5 V
23	5 V
24	GND

ATX12V1	
Pin	Name
1	GND
2	GND
3	12 V
4	12 V

EATX12V1	
Pin	Name
1	GND
2	GND
3	GND
4	GND
5	12 V
6	12 V
7	12 V
8	12 V

VOLT1	
Pin	Name
1	5 VSB
2	GND
3	GND
4	-5 V
5	5 V
6	3.3 V
7	-12 V
8	12 V

FAN1 ~ FAN4	
Pin	Name
1	GND
2	12 V
3	FANIO1 ~ FANIO4

FANDEC1	
Pin	Name
1	FANIO1
2	FANIO2
3	FANIO3
4	FANIO4

SMBUS1 ~ SMBUS2	
Pin	Name
1	5 V
2	C-SMBBUS
3	C-SMBDAT
4	GND

Connectors & Jumpers (Cont.)

IPMB1

Pin	Name
1	IPMB_CLK
2	IPMB_DAT
3	GND

USB12

Pin	Name
1	USBV0
2	USBV0
3	USB0D-
4	USB0D1-
5	USB0D0+
6	USB0D1+
7	GND
8	GND
9	Null
10	GND

USB34

Pin	Name
1	USBV2
2	USBV2
3	USB0D2-
4	USB0D3-
5	USB0D2+
6	USB0D3+
7	GND
8	GND
9	Null
10	GND

PS0N1: ATX / AT Mode Selection

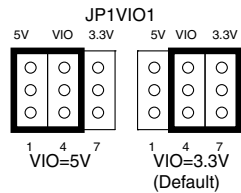
Setting	Function
1-2	AT Mode
2-3*	ATX Mode

*: Default



JP1VIO1

Pin	Name
1	5 V
2	5 V
3	5 V
4	PA_VIO
5	PA_VIO
6	PA_VIO
7	3.3 V
8	3.3 V
9	3.3 V



Locating Connectors & Jumpers

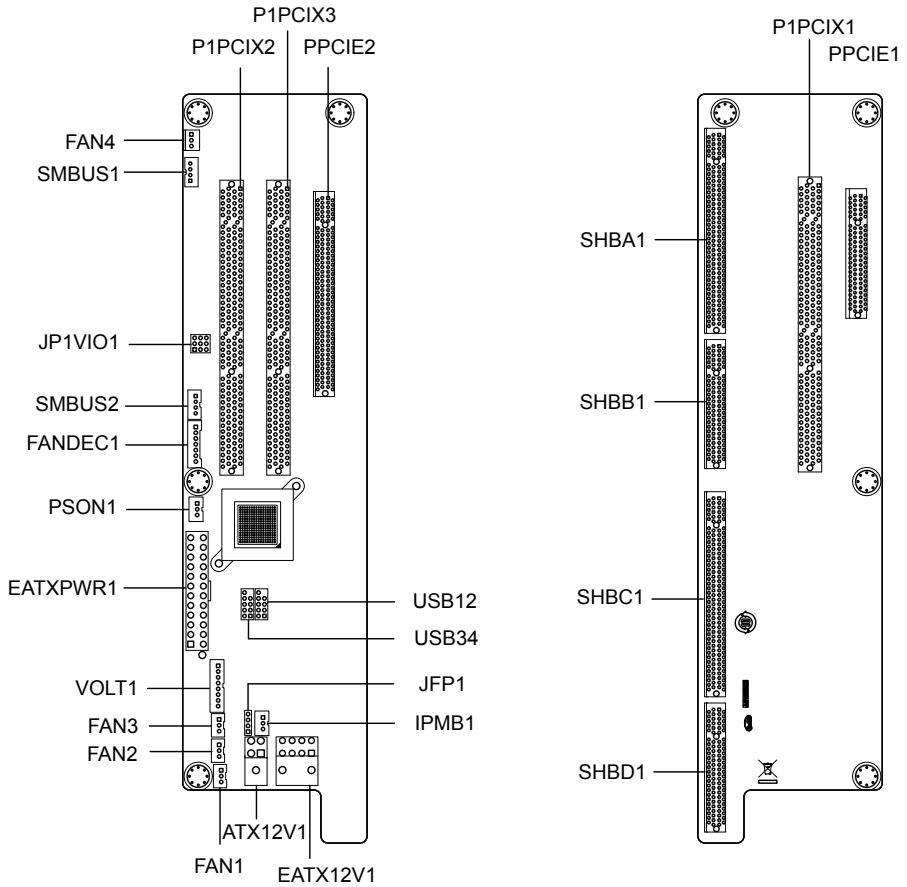


Figure 1: Locating Connectors

Board Dimensions

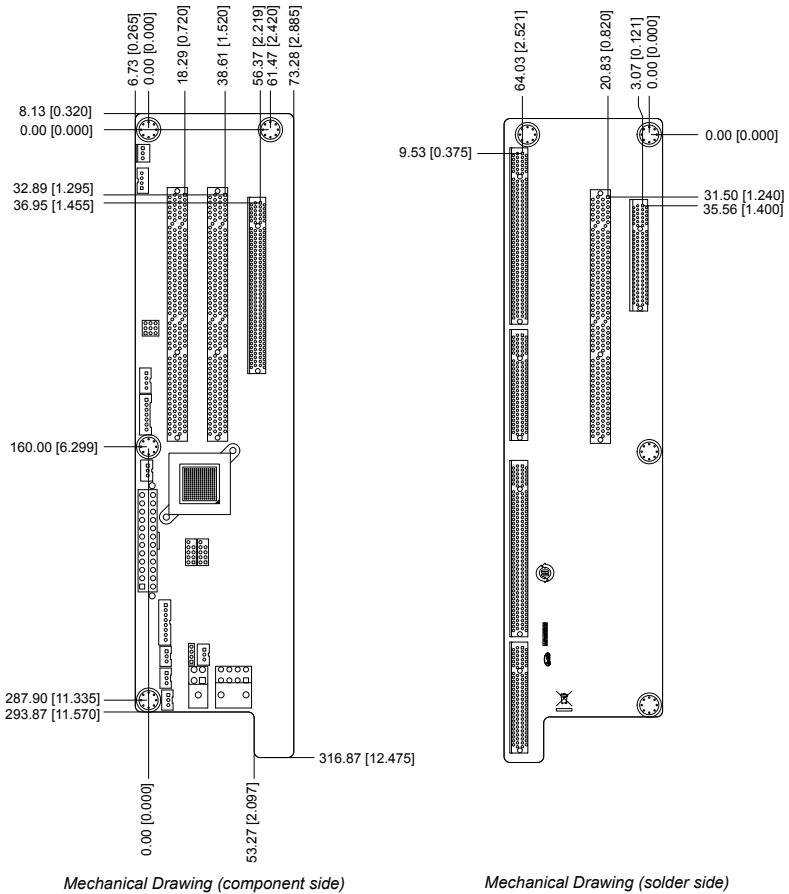
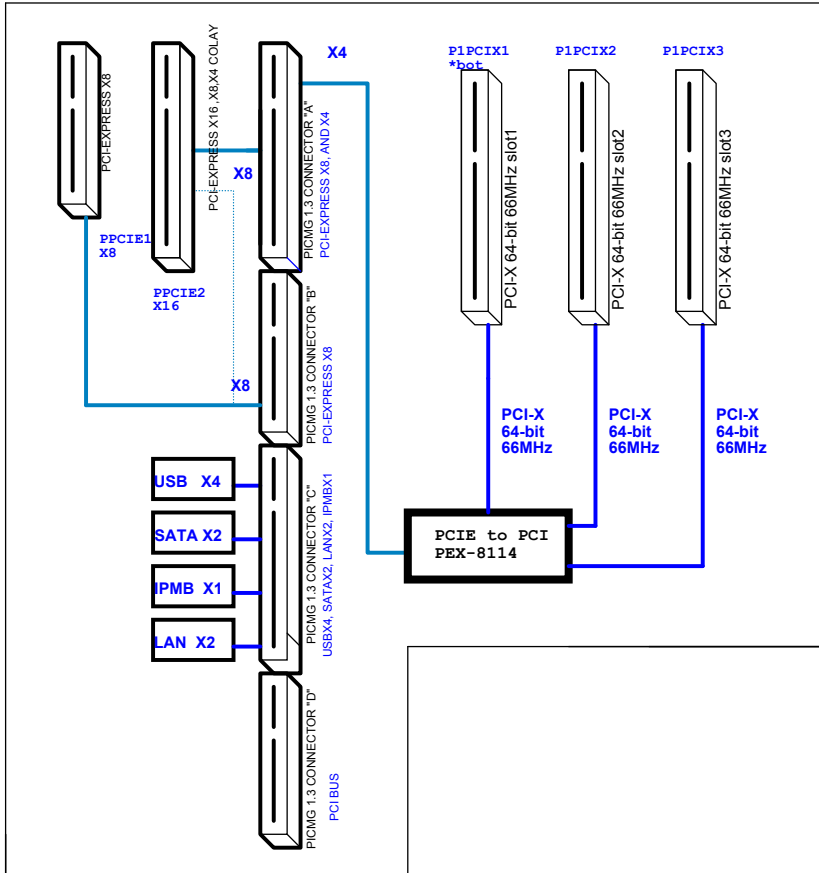


Figure 2: Mechanical Drawing

Board Diagram



PCI Routing Tables

PCI SLOT	IDSEL	PCI INTERRUPT PIN ROUTE			
		INTA	INTB	INTC	INTD
P1PCIX1	PA_AD31	PA_INTD#	PA_INTA#	PA_INTB#	PA_INTC#
P1PCIX2	PA_AD30	PA_INTC#	PA_INTD#	PA_INTA#	PA_INTB#
P1PCIX3	PA_AD29	PA_INTB#	PA_INTC#	PA_INTD#	PA_INTA#