PCE-5B10-04A1E Backplane: 10-slot BP for 14-Slot Chassis, 1 PICMIG 1.3, 5 PCIe, 4 32-bit/33-MHz PCI Startup Manual

Packing List

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

- 2 Two Port USB Cable P/N: 1700002204
- PCE-5B10-04A1E Start-up Manual
- M4*6*0.7 Round Screws (20 pieces) P/N: 1939000410
- 2 years quality warranty card P/N: 2190000902

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

Specifications

Standard PC functions

- **PICMG 1.3 Slot:**
  PCE-5B10-04A1E supports PCE-5XXX CPU Cards
- **PCIe Slots:**
  1 PCI-E x 16 Slot
  4 PCI-E x 1 Slots
- **32-bit PCI Slots:**
  4 32-Bit / 33-MHz PCI Slots
- **USB (2.0) support:** Four Universal Serial Bus ports to Backplane

Mechanical and Environment

- **Dimensions:** 327.66 x 315.45 mm
- **Power supply voltage:** +12 V, +5 V, -12 V, -5 V, +5 V SBY, +3.3 V
- **Power requirements:** Depends on the CPU Board, add-don Card & 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/eplatform

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

http://www.advantech.com/support

This manual is for the PCE-5B10-04A1E series Rev. A1

Part No. 200K5B1000 1st Edition,
Printed in China Feb. 2008

Connectors and Jumpers

This table shows the function of each jumper and connector:

Connectors	
Label	**Function**
SHBA1~SHBD1	PICMG1.3 CPU board slot
PPCIE2~5	PCIe x 1 slot
PPCIE1	PCIe x 16 slot
PPCI1~PPCI4	32 Bit / 33 MHz PCI Bus slot
EATXPWR1	ATX2.0 24-pin Power Connector
EATX12V1	ATX 12V Auxiliary 8-pin Power Connector
ATX12V1	ATX 12V 4-pin Power Connector
PWR3V1	3.3V Auxiliary Power Connector
PWR3V2	3.3V Auxiliary Power Connector
VOLT1	Alarm board / CMM Power Connector
FAN1~6	FAN Connector (Horizontal Type)
FAN7	FAN Connector (Vertical Type)
FANDEC1	FAN speed detector Connector
SMBUS1-3	System Management Bus
JFP1	Power and Reset button Connector
IPMB1	IPMB Connector
USB12	Two USB port pin header
USB34	Two USB port pin header

Jumpers	
Label	**Function**
PSON1	ATX / AT Mode Selection

EATXPWER1	
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 V SBY
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

PWR3V1 & PWR3V2	
Pin	**Name**
1	3.3V
2	3.3V
3	3.3V
4	GND
5	GND
6	GND

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

FAN1~FAN7	
Pin	**Name**
1	GND
2	12 V
3	FANIO1~FANIO7

FANDEC1	
Pin	**Name**
1	FANIO1
2	FANIO2
3	FANIO3
4	FANIO4
5	FANIO5
6	FANIO6
7	FANIO7

SMBUS1~SMBUS3	
Pin	**Name**
1	5 V
2	C-SMBBUS
3	C-SMBDAT
4	GND

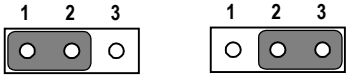
IPMB1	
Pin	**Name**
1	IPMB_CLK
2	IPMB_DAT
3	GND

USB12	
Pin	**Name**
1	USBV0
2	USBV0
3	USBD0-
4	USBD1-
5	USBD0+
6	USBD1+
7	GND
8	GND
9	Null
10	GND

USB34	
Pin	**Name**
1	USBV2
2	USBV2
3	USBD2-
4	USBD3-
5	USBD2+
6	USBD3+
7	GND
8	GND
9	Null
10	GND

PSON1: ATX / AT Mode Selection	
Setting	**Function**
1-2	AT Mode
2-3*	ATX Mode

*: Default



JFP1	
Pin	**Name**
1	VCC
2	PWRBTN
3	RESET#
4	GND

Board Layout

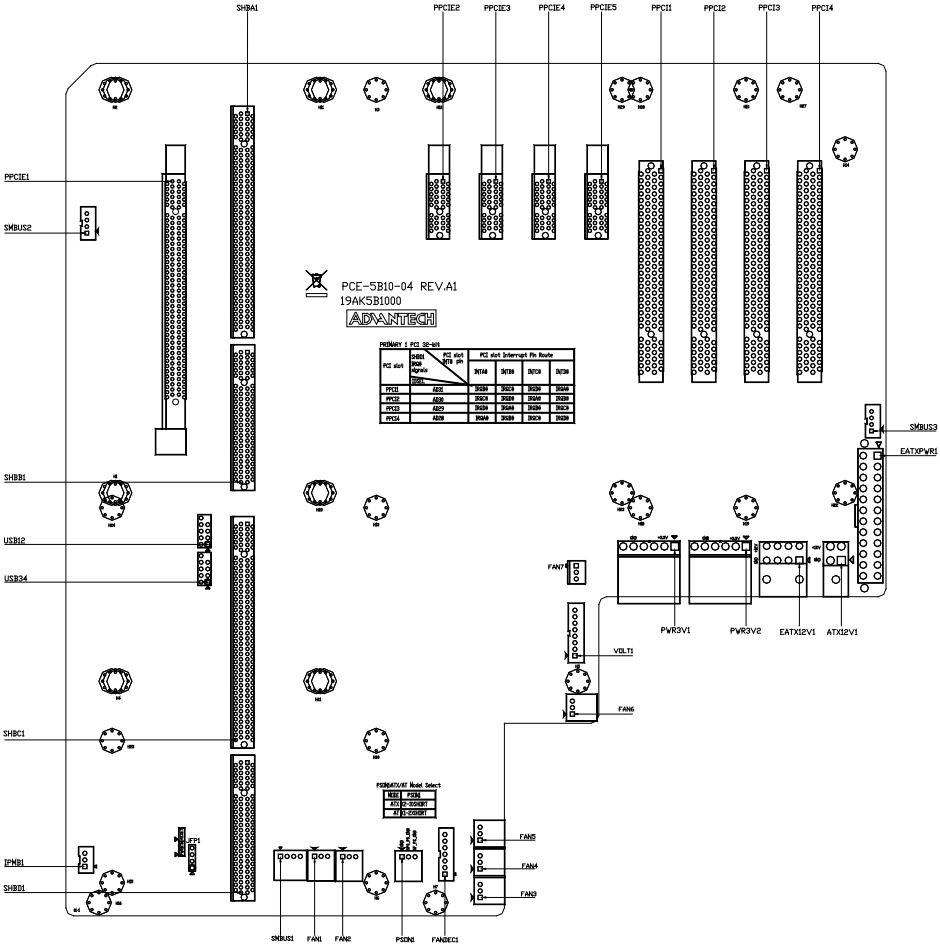


Figure 1: Board Layout

Board Dimensions

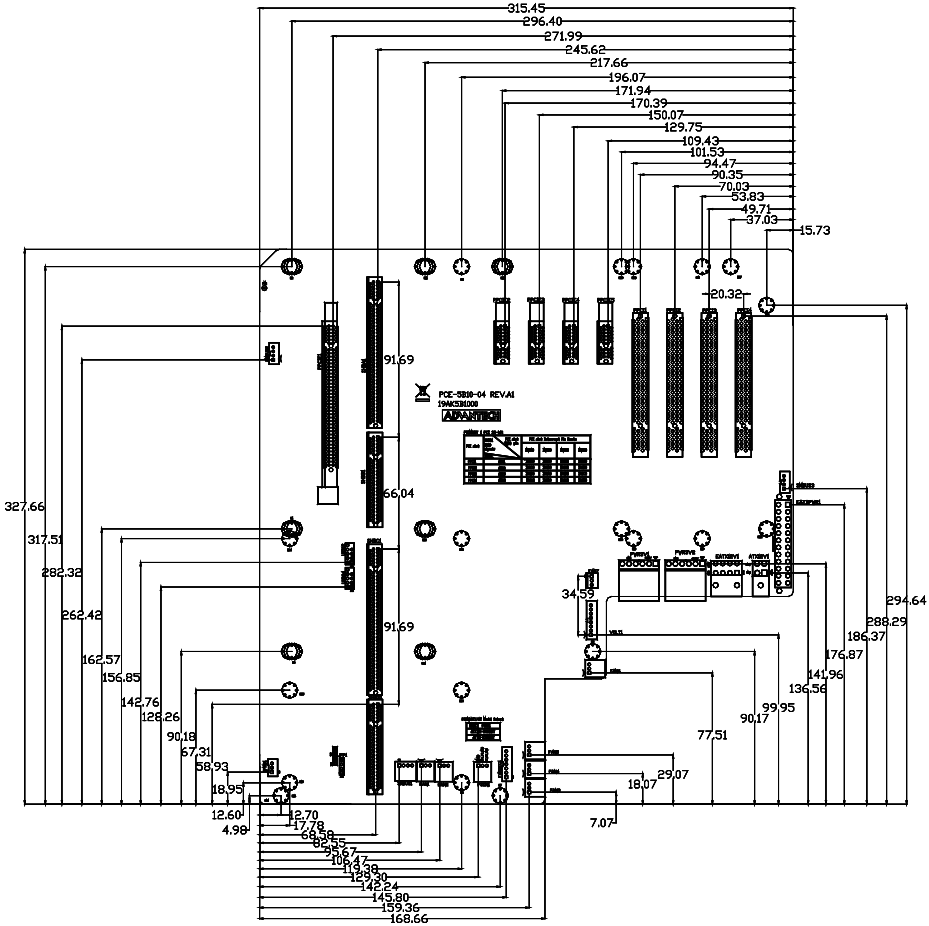


Figure 2: Board Dimensions

Board Diagram

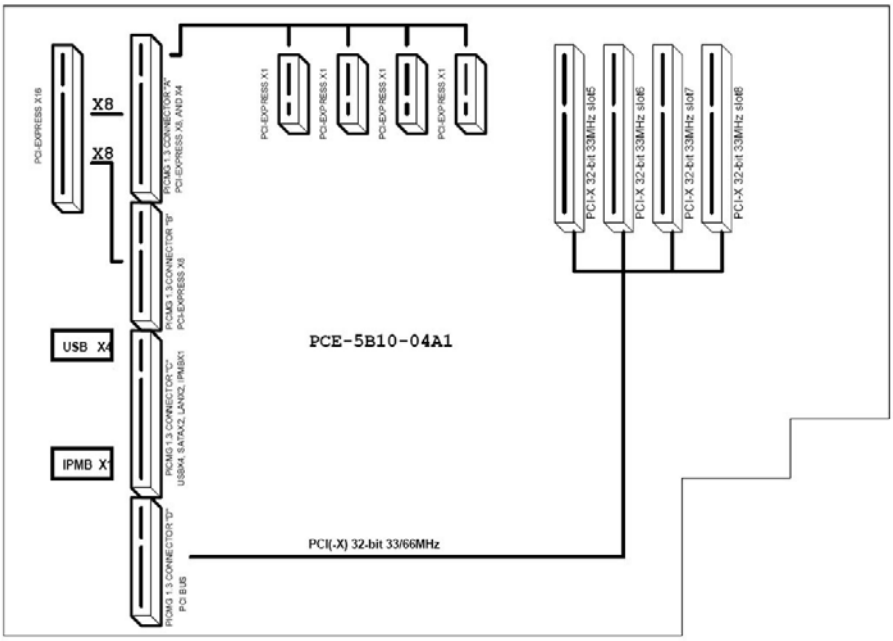


Figure 3: Board Diagram

PCI Routing Table

PCI 32-bit					
PCI Interrupt Pin Route	**PCI Slot**	**PPCI1**	**PPCI2**	**PPCI3**	**PPCI5**
	IDSEL	AD31	AD30	AD29	AD28
	INTA	INTB	INTC	INTD	INTA
	INTB	INTC	INTD	INTA	INTB
	INTC	INTD	INTA	INTB	INTC
	INTD	INTA	INTB	INTC	INTD