

PCE-4B12-03

Backplane: 12 Slot PICMG 1.3 Half-size BP for 14-slot Rackmount Chassis, 1 x PCIe x8, 4 x PCIe x4, 3 x PCIe x1, 3 x 32-bit/33MHz PCI

Startup Manual

Packing List

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

- PCE-4B12-03 Startup Manual 1st Ed. p/n: 20024B1200
- 2-year 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 functions

- **PICMG 1.3 slots:** PCE-4B12-03 supports PICMG 1.3 half-size server grade SHB (PCE-4XXX series)
- **PCIe slots:** PCE-4B12-03 supports one PCIe x8 slot, four PCIe x4 slot, three PCIe x1
- **PCI slots:** PCE-4B12-03 supports three PCI slots

Mechanical and Environment

- **Dimensions:** 315 x 185 mm
- **Power supply voltage:** +12 V, +5 V, -12 V, +3.3 V +5 VSB
- **Power requirements:** Refer to the CPU Board, add-on card & peripherals
- **Operating temperature:** 0 ~ 60 °C
- **Weight:** 0.356 kg (weight of board)

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.tw/support>

This manual is for the PCE-4B12-03 series.

Part No. 20024B1200

Printed in China

1st Edition
November 2014

Connectors

Connectors	
Label	Function
SHBA1 ~ SHBB1	PICMG1.3 CPU board slot
PPCIE1, PPCIE3, PPCIE5	PCIe x1 slot
PPCIE2	PCIe x8 slot
PPCIE4, P1PCIE1-P1PCIE3	PCIe x4 slot
EATXPWR1	ATX2.0 24-pin power connector
PWR1	Big 4 pin power connector
VOLT1	Alarm board power connector
ATX12V1	ATX 12V Auxiliary 4-pin power connector
FAN1~FAN7	FAN connector
FANDEC1	FAN detector connector
SMBUS1, SMBUS2	SMBus connector for chassis monitor
JFP1	Power and Reset button connector

Jumpers

Jumpers	
Label	Function
PSOEN1	ATX/AT Mode Selection
JFAN_CTRL1	System Smart Fan Control
JGENSEL1	PCIe generation selection connector
JCOMP1	Enable compatibility for non-compliant Gen1 end point

Jumpers (cont.)

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 V SB
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

PWR1

Pin	Name
1	12 V
2	GND
3	GND
4	5 V

Jumpers (cont.)

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 ~ FAN7

Pin	Name
1	GND
2	12 V
3	FANIO1~FANIO7

SMBUS1, SMBUS2

Pin	Name
1	5 V
2	SMBCLK
3	SMBDAT
4	GND

ATX12V1

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

PWR1

Pin	Name
1	12 V
2	GND
3	GND
4	5 V

Jumpers (cont.)

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 ~ FAN7

Pin	Name
1	GND
2	12 V
3	FANIO1~FANIO7

SMBUS1, SMBUS2

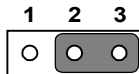
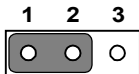
Pin	Name
1	5 V
2	SMBCLK
3	SMBDAT
4	GND

JFP1

Pin	Name
1	PWRBTN#
2	GND
3	RESET#
4	GND

PSON1: ATX/AT Mode Selection

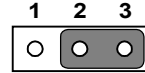
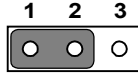
Jumper Setting	Function
1-2	AT mode
2-3 (Default)	ATX mode



Jumpers (cont.)

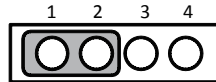
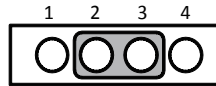
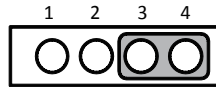
JFAN_CTRL1: System Smart Fan Control

Jumper Setting	Function
1-2 (Default)	Smart fan
2-3	Full speed fan



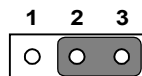
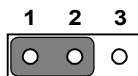
JGENSEL1: PCIe Generation Selection Connector

Jumper Setting	Function
3 - 4 closed pins	Gen2
2 - 3 closed pins	Gen1
1 - 2 closed pins	Gen3 (Default)



JCOMP1 & JCOMP2: Enable compatibility for Non-Compliant Gen1 Endpoints

Jumper Setting	Function
1 - 2 closed pins	Normal
2 - 3 closed pins	Enable Gen1 Endpoints Compatibility (Default)



Locating Connectors and Jumpers

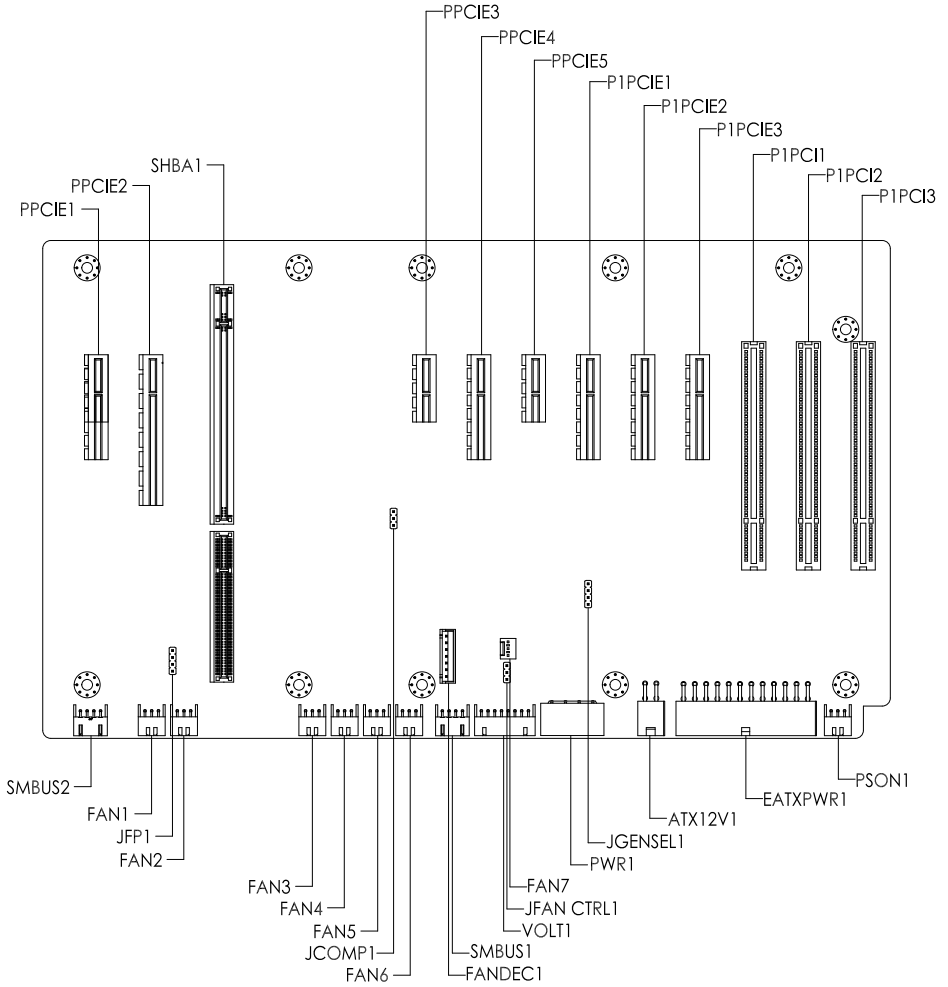


Figure 1: PCE-4B12-03 Connectors and Jumpers

Board Dimensions

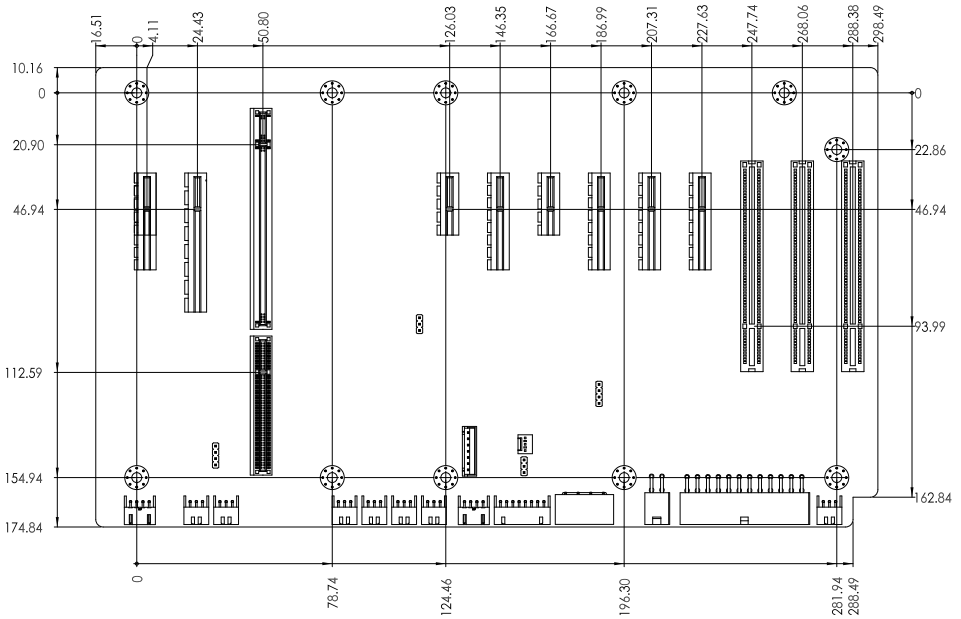


Figure 2: PCE-4B12-03 Board Dimensions

Board Diagram

PICMG_v1.3 Half-size BACKPLANE

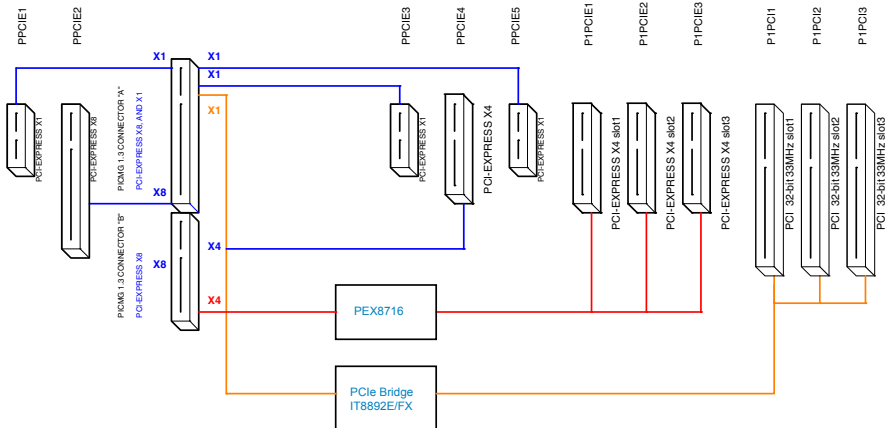


Figure 3: PCE-4B12-03 Board Diagram