

PCE-3032/PCE-4132 LGA1200 Intel® Xeon®, Core™ i9/i7/i5/i3/Celeron®/Pentium® PICMG 1.3 Half-size System Host Board with DDR4/Dual GbE LAN Startup Manual

Packing List

Before you begin installing your card, please ensure the following items have been shipped:

- 1 x PCE-3032/PCE-4132 PICMG 1.3 System Host Board
- 1 x PCE-3032/PCE-4132 Startup Manual
- 1 x Serial ATA HDD data cable
- 1 x 2-port COM cable kit
- 1 x 4-port USB 2.0 cable kit
- 1 x Warranty card

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

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

<http://www.advantech.com>

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

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

This manual is for the PCE-3032/PCE-4132 Series Rev. A2.



PCE-3032:



PCE-4132:

Part No. 2041303201
Printed in China

2nd Edition
October 2022

Specifications

General

- CPU:** LGA1200-socket Core™ i9/i7/i5/i3, Pentium® and Xeon® W series processors

Note: Only PCE-4132 supports Intel® Xeon® processors.

- L2 Cache:** Please refer to CPU specification for detailed information.

- BIOS:** AMI SPI BIOS 256Mb (PCE-4132)/128Mb (PCE-3032)

- System Chipset:** Intel® W480E (PCE-4132)/Intel® H420E (PCE-3032)

- System memory:**

- PCE-4132: Up to 64 GB in 2 x 260-pin SODIMM sockets. Supports dual-channel DDR4 2666/2933 SDRAM with or without ECC function.

- PCE-3032: Up to 64 GB in 2 x 260-pin SODIMM sockets. Supports dual-channel DDR4 2666/2933 SDRAM without ECC function.

- SATA hard disk drive interface:** PCE-3032 supports 3 x SATA 3.0 ports without RAID function, and PCE-4132 supports 4 x SATA 3.0 ports with SW RAID 0, 1, 5, 10.

- Serial ports:** 2 x RS-232 serial ports

- Watchdog timer:** Programmable 1~255 sec

- USB:** 4 x USB 3.0 and 6 x USB 2.0

- GPIO:** 1 x programmable 8-bit GPIO pin-header

Display

- Chipset:** Intel® HD Graphics embedded in the processor.

Ethernet Interface

- Chipset supports:

- LAN 1: Intel® I210AT (PCE-3032) and I210AT (PCE-4132).

- LAN 2: Intel® I210AT (PCE-3032) and I210AT (PCE-4132).

- Connection: 2 on-board RJ-45 connectors with LED indicators.

Mechanical and Environmental

- Dimensions: (L x W): 172.6 x 126.3 mm/6.7 x 4.97 in
- Power supply voltage: +3.3 V, +5 V, +12 V, 5 VSB
- Power requirements:

CPU: Intel® i7-10700E CPU @2.90GHz, DDR: 4 GB SO-DDR4-2666*2

Voltage	+V12	+V5_SB	+V3.3	+V5
Current	4.36A	0.17A	1.8A	2.13A

- Operating temperature: 0 ~ 60 °C / 32 ~ 140 °F (depending on CPU)

- Weight: 0.33 kg / 72 lb (weight of board)

Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application. The table below lists the function of each of the jumpers and connectors.

Connectors	
Label	Function
LAN1	PCE-3032: Intel® I210AT PCE-4132: Intel® I210AT
LAN2	PCE-3032: Intel® I210AT PCE-4132: Intel® I210AT
VGA	VGA connector
COM12	Box header for RS-232*2
FP1	HDD LED, power LED, SNMP SM_Bus, reset, power on/off
JCASE1	Case open
CPUFAN1	CPU FAN connector (4-pin)
LANLED1	LAN1/2 LED connector
HDAUD1	HD audio extension module connector
USB3C1	USB 3.2 port 1
USB3C2	USB 3.2 port 2
USB3H1	USB 3.2 port 3, 4
USB2A1	USB 2.0 port 1
USB2C1	USB 2.0 port 2
USB2H1	USB 2.0 port 3, 4
USB2H2	USB 2.0 port 5, 6
SATA0	Serial ATA0 (SATA 3.0)
SATA1	Serial ATA1 (SATA 3.0)
SATA2	Serial ATA2 (SATA 3.0)
SATA3	Serial ATA3 (SATA 3.0, PCE-4132 only)
CPU	CPU Socket
DIMMA1	Memory connector channel A
DIMMB1	Memory connector channel B
GPIO1	GPIO pin header
LPC2	Low pin count module expansion pin-header
PWR1	12 V, 5 V power connector
DP2	DVI/DP via optional cable
DP1	Display pin header to stack board (Display type depends on optional stack board)
EXPCIE1	Mini PCIe pin header to stack board

Jumpers and Connectors (Cont.)

Jumpers

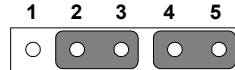
Label	Function
JCMOS1	CMOS clear
JWDT1+JOBS1	Hardware monitor alarm+watchdog timer output selection
JME1	Enable ME

JCMOS1: Clear CMOS

Closed Pins	Result
1-2	Keep CMOS (Default)
2-3	Clear CMOS

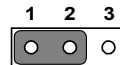
JOBS1+JWDT1: Hardware monitor alarm+watchdog timer output selection

Function	Jumper Settings
2-3	Enable watchdog timer (Default)
4-5	Enable Hardware monitor alarm (Default)



JME1: Enable ME

Closed Pins	Result
1-2	Enable ME (Default)
2-3	Disable ME



Software Installation

Advantech PCE-3032/4132 drivers are located on the Advantech website. Please visit the official website to download them.

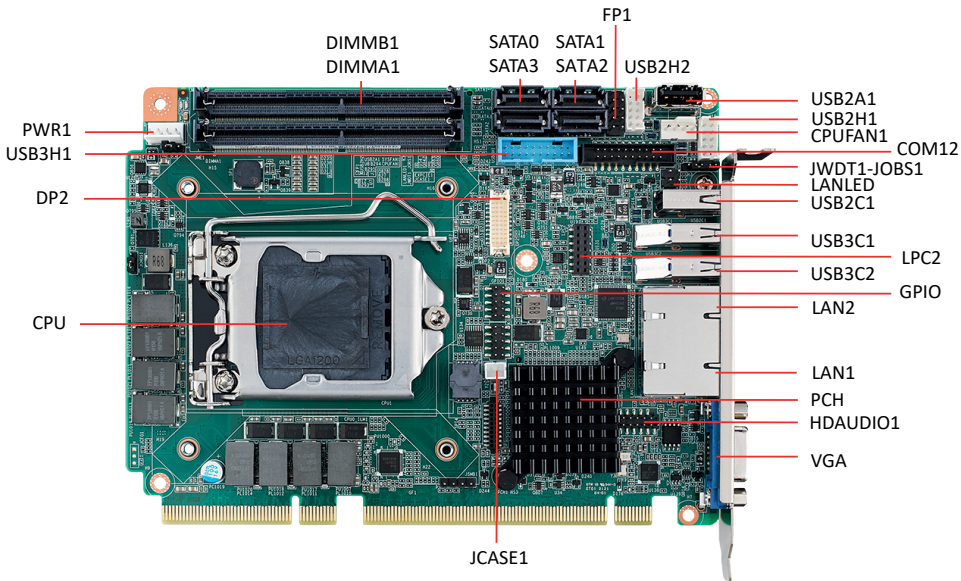
Caution! The computer is supplied with a battery-powered real-time clock circuit. There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.



Declaration of Conformity

- This device complies with the requirements in Part 15 of the FCC rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference;
 2. This device must accept any interference received, including interference that may cause undesired operation.

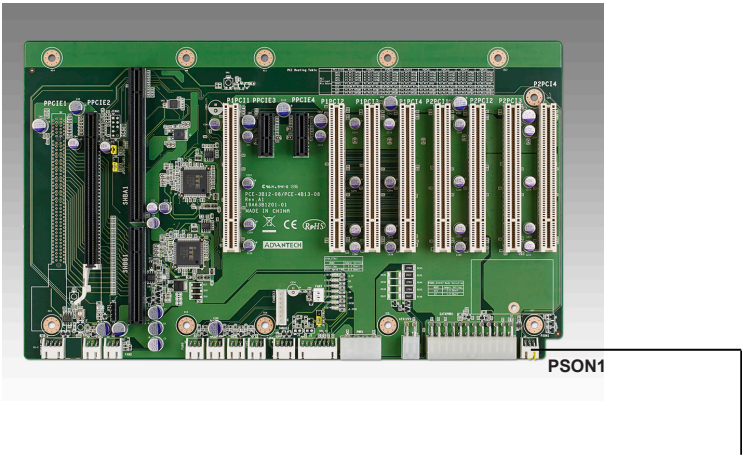
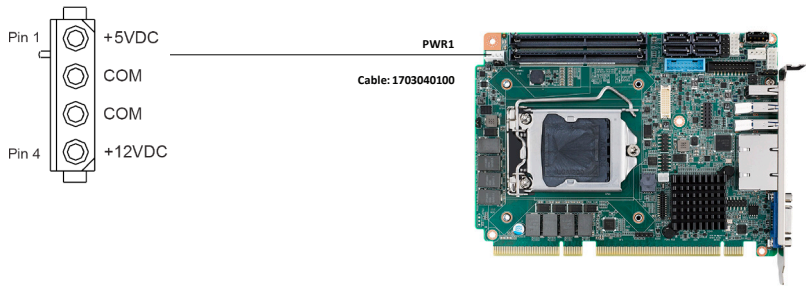
Board Layout



Board Layout: Jumper and Connector Locations

Activating the PCE-3032/PCE-4132

To power on PCE-3032/PCE-4132 with backplanes, please ensure that the connectors and jumpers displayed below are correctly connected.



PSON1: ATX/AT Mode Selection	
Jumper Setting	Function
1-2	AT mode
2-3 (Default)	ATX mode

