

# **PCE-7132/5132/5032 LGA1200 Intel® Core™ i9/i7/i5/i3/Pentium® ECC/non-ECC PICMG 1.3 Single Host Board with (ECC/non-ECC) DDR4/M.2 (2280)/Dual GbE LAN**

## **Startup Manual**

### **Packing List**

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

1. PCE-7132/5132/5032 PICMG 1.3 single host board
2. PCE-7132/5132/5032 Startup Manual
3. Serial ATA HDD data cables
4. COM port cable kit
5. Warranty card

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

- Note 1:** For detailed contents of PCE-7132/5132/5032, please refer to the user manual on the Advantech website.
- Note 2:** Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: [get.adobe.com/reader](http://get.adobe.com/reader) (Acrobat is a trademark of Adobe)

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://advt.ch/PCE-7132>



<https://advt.ch/PCE-5132>



<https://advt.ch/PCE-5032>



Register your products on our website and get 2 months extra warranty for Free at:

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



This manual is for the PCE-5032/5132/7132

Part No. 2041513201  
Printed in China

2nd Edition  
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### **Specifications**

#### **General**

- LGA1200 10th Gen. Intel® Core™ i9/i7/i5/i3/Pentium®/Xeon®
- **BIOS:** AMI 256 Mb SPI BIOS
- **Chipset:**
  - PCE-7132: Intel® W480E
  - PCE-5132: Intel® Q470E
  - PCE-5032: Intel® H420E
- **System memory:**
  - PCE-7132: Supports dual channel DDR4 2666/2933 32GB per DIMM with ECC/non-ECC; Max. capacity is up to 64GB
  - PCE-5132/5032: Supports dual channel DDR4 2666/2933 32GB per DIMM without ECC; Max. capacity is up to 64GB.
- **Note:** Please select Intel® ECC supported processor to enable ECC function.
- **SATA Ports:**
  - PCE-7132/5132 supports 6 x SATA3.0 ports with SW Raid 0, 1, 5, 10.
  - PCE-5031 supports 4 x SATA3.0 ports without Raid function.
- **M.2 Ports:** PCE-7132/5132 supports M.2 2280 type M module and compatible to PCI Express 3.0
- **Serial ports:** Two RS-232 with pin headers
- **Watchdog timer:** 255 level timer intervals
- **USB 2.0:**
  - PCE-7132/5132/5032: 6\*USB 2.0 (USB Type A\*1+Rear\*1, 4 on backplane)
- **USB 3.2:**
  - PCE-7132/5132: 6 \* USB 3.2 (Gen1) (Pin-header \* 6), 2 \* USB 3.2 (Gen2) (Rear I/O)
  - PCE-5031: 2 \* USB 3.1 (Gen1) (Pin-header \* 2), 2 \* USB 3.2 (Gen1) (Rear I/O)
- **GPIO:** One programmable 8-bit GPIO pin-header

#### **VGA Interface**

- **Chipset:** Intel® HD Graphics
- Shared system memory is subject to OS

#### **Ethernet Interface**

- **Chipset supports:**
  - LAN 1: I219LM(PCE-7132/5132); I219V(PCE-5032)
  - LAN 2: I210AT(PCE-7132/51322); I210AT (PCE-5032)
- **Connection:** 2 x on-board RJ-45 connectors with LED indicators

## Specifications

### Mechanical and Environmental

- **Dimensions:** (L x W): 338 x 122 mm
- **Power supply voltage:** +12 V, +5 V, +3.3 V, +5 V<sub>SB</sub>
- **Power requirements (Idle):**  
CPU: Processor: Intel® W-1290E  
Memory: 2 DDR4 2666U 32GB  
Voltage: +3.3 V, +5 V, +12 V  
Current: 1.15 A, 1.54 A, 1.38 A  
Operating temperature: 0 ~ 60 °C (depending on CPU)
- **Weight:** 0.5 kg (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
USB3C1	USB3 port1
USB3C2	USB3 port2
USB2C1	USB2 port1
LAN1	Intel® I219LM (PCE-7132/5132); Intel® I219V (PCE-5032)
LAN2	Intel® I210-AT (PCE-7132/5132); Intel® I210-AT (PCE-5032)
VGA1	VGA connector
KBMS1	External PS/2 keyboard and mouse
HDAUD1	Advantech HD audio module expansion pin-header
LPC1	LPC module expansion pin-header
Sysfan1	4-PIN fan power connector for supporting PWM or DC fan
LANLED1	LANLED
USB2A1	USB2 port2
USB3H1	USB3 port 3,4
USB3H2	USB3 port 5,6 (PCE-7132/5132)
USB3H3	USB3 port 7,8 (PCE-7132/5132)
COM1	RS-232 (9-pin Box Header) COM2 RS-232 (9-pin Box Header) LPT1 Parallel port
SATA0	Port 0
SATA	SATA port 1, 2, 3, 4, 5 (PCE-7132/5132); SATA port 1, 2, 3 (PCE-5032)

## Jumpers and Connectors (Cont.)

### Jumpers

Label	Function
JCMOS1	CMOS clear
JME1	Clear ME data
JWDT1	Watchdog timer output selection
JOBS1	SIO Monitor Alarm

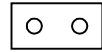


### JCMOS1/JME1: Clear CMOS/ME data

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



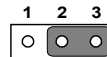
Closed



Open

### H/W monitor alarm (JOBS1)

Function	Jumper Setting
Closed	Enable OBS alarm (Default)
Open	Disable OBS alarm



### JWDT1: Watchdog timer output option

Closed Pins	Result
1-2	Reserved
2-3	System reset (Default)

## Software Installation

The drivers for the PCE-7132/5132/5032 are located on the Advantech official website. Please visit the official website for downloading.

[https://support.advantech.com/support/new\\_default.aspx](https://support.advantech.com/support/new_default.aspx)

**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.

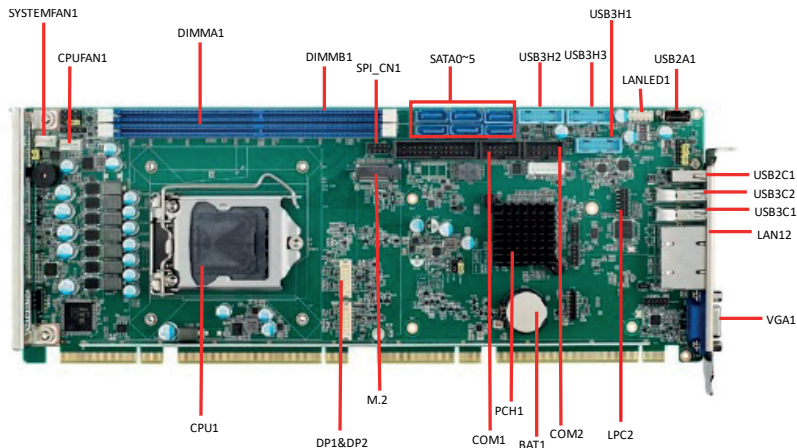


## Declaration of Conformity

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*

**Note:**

- \*PCE-5032 supports 4 SATA ports (SATA0~3) and one internal USB 3.2 pin-header.
- \*PCE-5032 doesn't feature NGFF(M.2).
- \*PCE-5032 supports 1 DP port.