

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 P/N: 1700003194
4. COM + printer ports cable kit P/N: 1701260305
5. Warranty card P/N: 2190000902

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 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 (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. 2041513200
Printed in China

1st Edition
September 2020

Specifications

General

- LGA1200 10th 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-5032 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
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Watchdog timer:** 255 level timer intervals
- **USB 2.0:**
 - PCE-7132/5132/5032: 6*USB2.0 (USB Type A*1+Rear*1, 4 on backplane)
- **USB 3.2:**
 - PCE-7132/5132: 6*USB3.2 (Gen1) (Pin-header*6), 2*USB3.2 (Gen2) (Rear I/O)
 - PCE-5032: 2*USB3.1 (Gen1) (Pin-header*2), 2*USB3.2 (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-7132/5132); I211AT (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 VSB
- **Power requirements (Idle):**
CPU: Processor: Intel® W-1290E
Memory: 2 DDR4 26666U 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 i211-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 |



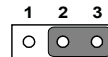
Closed



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 websites. Please visit the official website for downloading.

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 battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to 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

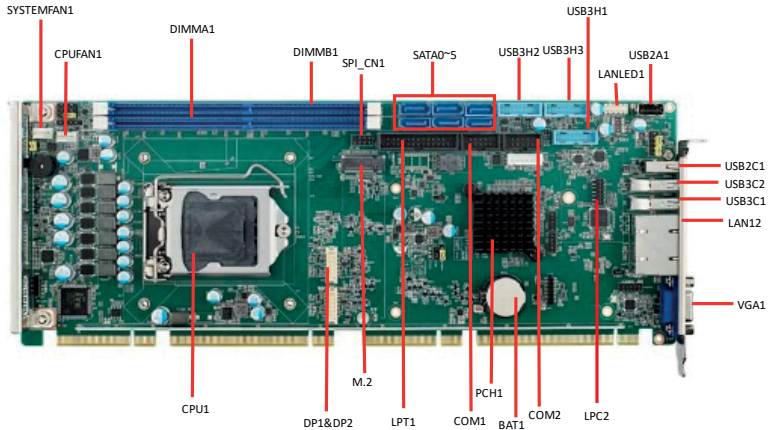


Figure 1: Board Layout: Jumper and Connector Locations

- Note:**
- *PCE-5032 supports 4 SATA ports (SATA0~3) and one internal USB3.2 pin-header.
 - *PCE-5032 doesn't feature NGFF(M.2).
 - *PCE-5032 supports 1 DP port.