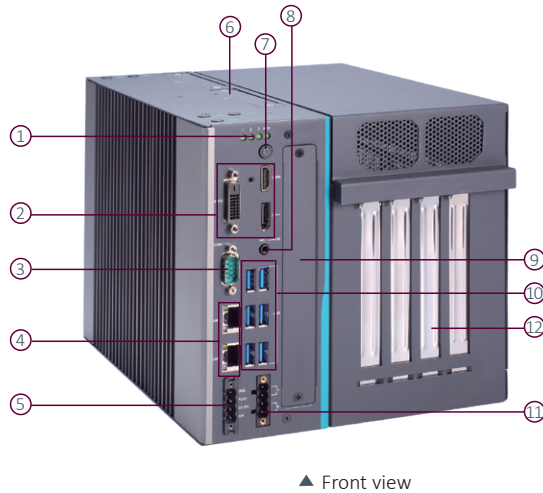


# IPC964A NEW

4-slot Industrial System with LGA1700 Socket 14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 or Celeron® Processor, Intel® Q670E, Front-access I/O, and 4 PCIe & PCI Slots



▲ Front view



▲ Rear view

- |                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. 1 x HDD/SSD access LED &amp; 3 x user's LED</li> <li>2. DVI-D, DisplayPort++, HDMI</li> <li>3. RS-232/422/485</li> <li>4. 2 x LAN</li> <li>5. 4-pin terminal block for ignition control, remote power, and remote LED</li> <li>6. 2 x HDD/SSD bay</li> <li>7. Switch for power on/off with LED</li> <li>8. Mic-in &amp; Line-out</li> </ol> | <ol style="list-style-type: none"> <li>9. Extension system I/O module               <ol style="list-style-type: none"> <li>(1) AX93511</li> <li>(2) AX93512</li> <li>(3) AX93516</li> <li>(4) AX93519</li> <li>(5) MIO160</li> </ol> </li> <li>10. 6 x USB</li> <li>11. 4-pin terminal block for DC input</li> <li>12. Expansion interface               <ol style="list-style-type: none"> <li>(1) EIO141</li> <li>(2) EIO142</li> </ol> </li> </ol> |
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## Features

- Intelligent power management: Ignition and USB power on/off control
- Optional extension system I/O module
- Optional 5G network
- Supports Intel® RAID
- EN 61000-6-2 certified

## Specifications

|                |                                                 |                                                                                                                                                                    |
|----------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Color | Silver & black                                  |                                                                                                                                                                    |
| Construction   | Aluminum extrusion heavy-duty cold-rolled steel |                                                                                                                                                                    |
| Processor      | CPU Level                                       | 14th/13th/12th gen Intel® Core™ processor, up to 65W*                                                                                                              |
| System         | Chipset                                         | Intel® Q670E                                                                                                                                                       |
| System Memory  | 262-pin DDR5 4800 non-ECC SO-DIMM, up to 96GB** |                                                                                                                                                                    |
| System I/O     | Ethernet                                        | 1 x 2.5GbE LAN (Intel® I226-V)<br>1 x GbE LAN with Intel® AMT (Intel® I219-LM)                                                                                     |
|                | Serial                                          | 1 x RS-232/422/485 (default RS-232, COM1)                                                                                                                          |
|                | USB                                             | 6 x USB 3.2 Gen2 (10G) Type-A<br>1 x USB 2.0 (Internal, up to 30mm) 180D Type-A                                                                                    |
|                | Display                                         | 1 x DisplayPort++ with support for 4096 x 2160 resolution<br>1 x HDMI with support for 4096 x 2160 resolution<br>1 x DVI-D with support for 1920 x 1200 resolution |
|                | Audio                                           | 1 x 3.5 mm jack for Mic-in and Line-out                                                                                                                            |
|                |                                                 |                                                                                                                                                                    |

## Specifications

|                       |                                                                                                                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TPM                   | TPM 2.0                                                                                                                                                                                                                                                                   |
| Expansion Interface   | UP to 350W power for add-in card, 1 x USB 2.0 (180D type A)<br>EIO141: 1 PCIe x16 Gen4 + 1 PCIe x8 (x4 signal) Gen3 + 2 PCIe x4 Gen4<br>EIO142: 1 PCIe x16 Gen4 + 1 PCIe x4 Gen4 + 2 PCI<br>1 x Full-size PCI Express Mini Card slot (USB & PCIe interface) with SIM slot |
| Storage               | 2 x 2.5" HDD/SSD bay (7/9.5/15 mm height)<br>1 x M.2 Key M 2280 socket (PCIe x4 Gen4)                                                                                                                                                                                     |
| System Indicators     | 1 x HDD/SSD access LED<br>3 x User's LED                                                                                                                                                                                                                                  |
| Power Input           | Input: 18 to 36 VDC<br>1 x Switch for power on/off with LED (default ATX)<br>1 x 4-pin terminal block for DC input<br>1 x 4-pin terminal block for ignition control, remote power, and remote LED                                                                         |
| Operating Temperature | -20°C to +60°C with 14th/13th/12th gen Intel® Core™ processor and industrial wide-temp SSD, 0.7m/s air flow***                                                                                                                                                            |
| Storage Temperature   | -20°C to +80°C                                                                                                                                                                                                                                                            |
| Humidity              | 10% to 90%, non-condensing                                                                                                                                                                                                                                                |
| Vibration             | IEC 60068-2-64 (with SSD: 1Grms, random, 5 to 500 Hz)<br>MIL-STD-810H, Method 514.8, Category 20                                                                                                                                                                          |
| Shock                 | IEC 60068-2-27 (with SSD: 50G, half sine, 11 ms duration)<br>MIL-STD-810H, Method 516.8, Procedure I                                                                                                                                                                      |
| Dimensions            | 205 x 192 x 260 mm (8.07" x 7.56" x 10.24")                                                                                                                                                                                                                               |
| Weight (net/gross)    | 5.6 kg (12.35 lb)/6.7 kg (14.77 lb)                                                                                                                                                                                                                                       |
| Certifications        | CE (EN 61000-6-4/EN 61000-6-2), FCC                                                                                                                                                                                                                                       |

\*Please refer to the user manual for the supported CPU list.

\*\*Intel® Core™ 14th Gen processors support a maximum single SO-DIMM capacity of 48GB.

\*\*\*CPU power settings can be adjusted in the BIOS to optimize performance and operating temperature.

## Ordering Information

### System

|                                     |                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------|
| IPC964A-Q-E1F5<br>(P/N: E26G964A00) | Industrial system with Intel® Q670E, EIO141 and blank extension system I/O cover; without Axiomtek logo |
| IPC964A-Q-E2F5<br>(P/N: E26G964A01) | Industrial system with Intel® Q670E, EIO142 and blank extension system I/O cover; without Axiomtek logo |

### Optional Module

|                              |                                                                                                                                                                 |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AX93511<br>(P/N: E29R127101) | 4 x RS-232/422/485 module (default RS-232)                                                                                                                      |
| AX93512<br>(P/N: E29R127102) | 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module (project-based support)                                                  |
| AX93516<br>(P/N: E29R127103) | 4 x RS-232/422/485 with isolated 2kVDC module (project-based support)                                                                                           |
| AX93519<br>(P/N: E29R127104) | 1 x 1GbE LAN + 2 x RS-232/422/485 + 2 x USB module                                                                                                              |
| MIO160<br>(P/N: E39Q160100)  | 6 x Serial port (4-wire RS-232: TX/RX/RTS/CTS)/422/485 isolated 1.5kVDC & 2 CAN bus with isolated 1.5kVDC module (supporting the CAN 2.0A and CAN2.0B protocol) |
| MIO530<br>(P/N: E39Q530100)  | 1 x M.2 Key E 2230 socket + 1 x M.2 Key B 3042/3050/3052/3060 socket with SIM slot for 5G module or selected LTE module                                         |

### Optional Accessory

## Power Protection

## Packing List

## Dimensions