

# IPC964-512-FL

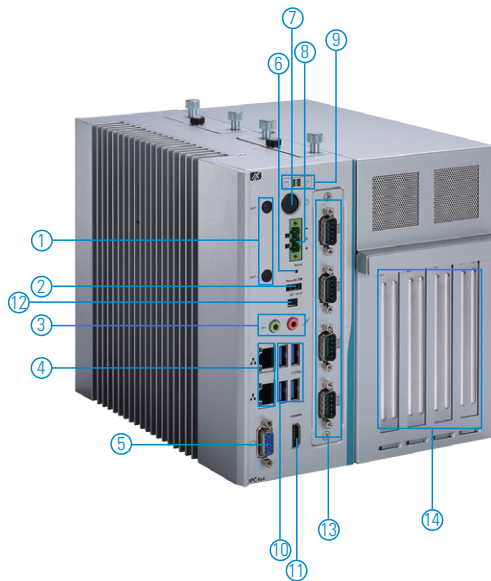
4-slot Fanless Industrial System with LGA1151 Socket 7th/6th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor, Intel® Q170, Front-access I/O, PCIe and PCI Slots

## Features

- LGA1151 Socket 7th/6th gen Intel® Core™ i7/i5/i3 & Celeron® processor, up to 65W (codename: Kaby Lake/Skylake)\*
- Intel® Q170 chipset
- Supports 4 expansion slots
- Power input: 24 VDC (uMin=19V/uMax=30V)
- Compact & front I/O design
- -10°C to +60°C operating temperature range
- Supports 2 swappable 2.5" HDD & RAID 0,1
- Supports ECM BIOS setting
- Supports WLAN module & antenna (optional)
- Supports TPM 2.0



▲ Rear view



1. 2 x Antenna opening
2. Remote switch
3. Mic-in & Line-out
4. 2 x LAN
5. VGA
6. Reset switch
7. Power switch
8. Terminal block
9. HDD & Power LED
10. 4 x USB 3.0
11. HDMI
12. AT/ATX quick switch
13. Extension System I/O Module
  - (1) AX93511: 4 x RS-232/422/485 module (default RS-232)
  - (2) AX93512: 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module
  - (3) AX93516: 4 x RS-232/422/485 with isolated 2kVDC module
  - (4) AX93519: 1 x 10/100/1000 Mbps (Intel® i211-AT) Ethernet, 2 x RS-232/422/485 & 2 x USB 3.0 module
14. Expansion Interface
  - (1) AX96410: 1 PCIe x16 + 3 PCIe x4
  - (2) AX96411: 1 PCIe x16 + 1 PCIe x4 + 2 PCI



## Specifications

|                            |   |
|----------------------------|---|
| Standard Color             | Silver  |
| Construction               | Aluminum extrusion heavy-duty cold-rolled steel   |
| Processor System           | CPU Level 7th/6th gen Intel® Core™ i7/i5/i3 & Celeron® processor up to 65W (Kaby Lake/Skylake)*<br>Chipset Intel® Q170  |
| System Memory              | 2 x DDR4-2133/2400 un-buffered SO-DIMM, up to 32GB  |
| System I/O                 | 1 x Switch for power On/Off (ATX)<br>1 x Remote switch<br>1 x Reset switch<br>1 x 3-pin terminal block<br>1 x AT/ATX selectable switch<br>2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)<br>4 x USB 3.0<br>1 x HDMI<br>1 x VGA<br>1 x Audio (Mic-in/Line-out)   |
| Extension System IO Module | AX93511: 4 x RS-232/422/485 module (default RS-232)<br>AX93512: 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module<br>AX93516: 4 x RS-232/422/485 with isolated 2kVDC module<br>AX93519: 1 x 10/100/1000 Mbps (Intel® i211-AT) Ethernet, 2 x RS-232/422/485 and 2 x USB 3.0 module<br>Blank I/O cover |
| TPM                        | TPM 2.0   |

|                       |  |
|-----------------------|--|
| Expansion Interface   | AX96410: 1 PCIe x16 + 3 PCIe x4<br>AX96411: 1 PCIe x16 + 1 PCIe x4 + 2 PCI<br>1 x Full-size PCI Express Mini Card slot with SIM slot (USB & PCIe interface)                          |
| Storage               | 2 x 2.5" swappable HDD (15mm height)   |
| System Indicators     | 1 x Power LED<br>1 x HDD LED   |
| Power Input           | Type: ATX/AT<br>Input: 24 VDC (uMin=19V/uMax=30V)  |
| Operating Temperature | -10°C to +60°C (+14°F to +140°F) with 6th gen Intel® Core™ up to 35W and W.T. HDD/SSD*<br>-10°C to +50°C (+14°F to +122°F) with 6th/7th gen Intel® Core™ up to 65W and W.T. HDD/SSD* |
| Storage Temperature   | -20°C to +80°C (-4°F to +176°F)  |
| Humidity              | 10% to 90%, non-condensing   |
| Dimensions            | 188.1 mm (7.39") (W) x 192 mm (7.54") (H) x 230 mm (9.04") (D)   |
| Weight (net/gross)    | 4.8 Kg (10.56 lb) / 5.9 Kg (12.98 lb)  |
| Certifications        | CE, FCC, CCC (refer to ordering information)   |
| Software Support      | AMS.AXView   |

\* CPU support list please refer to the user's manual.

## Ordering Information

| System                                    |   |
|---|---|
| IPC964-512-DC-FL<br>(P/N: E26G964100)     | 4-slot fanless industrial system with 7th/6th gen Intel® Core™ i7/i5/i3 processor, Intel® Q170, and front-access I/O  |
| IPC964-512-DC-FL-CCC<br>(P/N: E26G964103) | 4-slot fanless industrial system with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3 & Celeron® processor, Intel® Q170 chipset, front-access I/O and CCC certificated |

### Extension System I/O Module & Expansion Interface

|                                |   |
|--------------------------------|---|
| AX93511<br>(P/N: 8816G962020E) | 4 x RS-232/422/485 module (default RS-232)  |
| AX93512<br>(P/N: 8816G962060E) | 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module  |
| AX93516<br>(P/N: 8816G962030E) | 4 x RS-232/422/485 with isolated 2kVDC module   |
| AX93519<br>(P/N: 8816G964050E) | 1 x 10/100/1000 Mbps (Intel® i211-AT) Ethernet, 2 x RS-232/422/485 & 2 x USB 3.0 module |
| 726G9620610E                   | Blank I/O cover   |
| AX96410<br>(P/N: 83964101000E) | 1 x PCIe x16 + 3 PCIe x4  |
| AX96411<br>(P/N: 83964111010E) | 1 x PCIe x16 + 1 PCIe x4 + 2 PCI  |

### Optional Accessory

|  |                              |
|--|------------------------------|
| 2.5" SATA HDD/SSD                              |                              |
| DDR4-2133/2400 un-buffered SO-DIMM, up to 32GB |                              |
| 8816G9640A0E                                   | IPC964-512-FL fan module kit |
| 8816G9621A0E                                   | Wall mount bracket kit       |
| 50906D24000E                                   | Adaptor 24V/120W, wire only  |
| 50906A24000E                                   | Adapter 24V/230W, wire only  |

## Power Protection

### DC Version

|                               |
|-------------------------------|
| OVP (over voltage protection) |
| OCP (over current protection) |
| Reverse Protection            |

## Packing List

- 1 x IPC964-512-FL unit
- 1 x Screw pack
- 4 x Foot pad
- 1 x CPU grease
- 1 x Terminal block
- 1 x Remote power switch cable
- 1 x Holder bracket

## Dimensions

