

# IPC960-525-FL NEW

Fanless Industrial System with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor, Intel® H310/Intel® Q370, and Front-access I/O

## Features

- LGA1151 Socket 9th/8th gen Intel® Core™ processor, up to 65W
- M.2 Key B slot for 5G wireless connection (optional)
- Supports RAID 0,1 (Intel® Q370)
- Supports Power-on delay function
- Supports TPM 2.0
- Supports AMT 12 (Intel® Q370)
- 2-slot/4-slot expansion kit for further expansion



## Specifications

|                  |   |  |   |
|------------------|---|--|---|
| Standard Color   | Silver & black  |  |   |
| Construction     | Aluminum extrusion heavy-duty cold-rolled steel         |  |   |
| Processor System | CPU Level   | 9th/8th gen Intel® Core™ processor, up to 65W*   |   |
|                  | Chipset   | Intel® H310/Intel® Q370  |   |
| System Memory    | 2 x DDR4-2666/2400 MT/s un-buffered SO-DIMM, up to 64GB |  |   |
| System I/O       | Ethernet  | 2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT & i219-LM)   |   |
|                  | Serial  | 1 x RS-232/422/485 (default RS-232, COM1)  |   |
|                  | USB   | Intel® H310:   | 4 x USB 3.1 Gen1<br>2 x USB 2.0<br>1 x USB 2.0 (internal, 180D type A for license key, up to 30mm)  |
|                  |   | Intel® Q370:   | 4 x USB 3.1 Gen2<br>2 x USB 2.0<br>1 x USB 2.0 (internal, 180D type A for license key, up to 30mm)  |
|                  |   | Display  | 1 x VGA<br>1 x HDMI   |
|                  |   | Audio  | 1 x Line-out  |
|                  |   | Others   | 1 x RS-232/422/485 (default RS-232)<br>1 x Switch for power on/off w/LED (ATX)<br>1 x Remote switch<br>1 x 4-pin terminal block<br>1 x AT/ATX selectable switch |
|                  | Extension System I/O Module                             | AX93511  | 4 x RS-232/422/485 module (default RS-232)  |
|                  |   | AX93512  | 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module  |
|                  |   | AX93516  | 4 x RS-232/422/485 with isolated 2kVDC module   |
| AX93519          |   | Intel® H310:<br>1 x 10/100/1000 Mbps Ethernet, 2 x RS-232/422/485 and 2 x USB 3.0 (USB 2.0 signal)<br>Intel® Q370:<br>1 x 10/100/1000 Mbps Ethernet, 2 x RS-232/422/485 and 2 x USB 3.1 (1 USB 3.1 Gen2 & 1 USB 2.0 signal) module |   |
| TPM              | TPM 2.0   |  |   |

1. 1 x HDD/SSD access LED & 3 x user's LED
2. 4-pin terminal block
3. RS-232/422/485 (default RS-232)
4. 2 x LAN
5. VGA
6. HDMI
7. Switch for power on/off w/LED
8. Extension system I/O module  
(1) AX93511  
(2) AX93512  
(3) AX93516  
(4) AX93519  
(5) Blank I/O cover
9. Line-out
10. Remote switch
11. 2 x USB 2.0
12. 4 x USB 3.1 Gen.1
13. 1 x AT/ATX switch

|                       |  |   |
|-----------------------|--|---|
| Expansion Interface   | SIM  | 1 x SIM slot  |
|                       | PCIe   | Intel® H310:<br>1 x Full-size PCI Express Mini Card slot (USB interface)<br>Intel® Q370:<br>1 x Full-size PCI Express Mini Card slot (USB & PCIe interface) or<br>1 x M.2 Key B 3050 socket |
| Storage               | Intel® H310:   | 2 x 2.5" swappable HDD/SSD (7/9.5 mm height)  |
|                       | Intel® Q370:   | 2 x 2.5" swappable HDD/SSD (7/9.5 mm height), supports RAID 0,1<br>1 x M.2 Key M 2280 socket (PCIe Gen3 x4) for NVMe SSD  |
| System Indicators     | 1 x HDD/SSD access LED<br>3 x User's 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 9th/8th gen Intel® Core™ and W.T. HDD/SSD* |   |
| Storage Temperature   | -20°C to +80°C (-4°F to +176°F)  |   |
| Humidity              | 10% to 90%, non-condensing   |   |
| Dimensions            | 83.5 mm (3.28") (W) x 192 mm (7.54") (H) x 230 mm (9.04") (D)                    |   |
| Weight (net/gross)    | 3.82 kg (8.43 lb)/4.78 kg (10.55 lb)   |   |
| Certifications        | CE/FCC   |   |

\* Please refer to the user's manual for the system CPU support list and the system operating temperature list.

## Ordering Information

| System                     |   |
|----------------------------|---|
| PC960-525-N-DC-FL-H310     | Fanless industrial system with 9th/8th gen Intel® Core™ processor and Intel® H310 and PCI Express Mini Card slot, w/o Axiomtek logo |
| IPC960-525-N-DC-FL-Q370    | Fanless industrial system with 9th/8th gen Intel® Core™ processor, Intel® Q370 and PCI Express Mini Card slot, w/o Axiomtek logo    |
| IPC960-525-N-DC-FL-Q370-5G | Fanless industrial system with 9th/8th gen Intel® Core™ processor, Intel® Q370 and 5G wireless version, w/o Axiomtek logo           |

### I/O Module & Riser Card

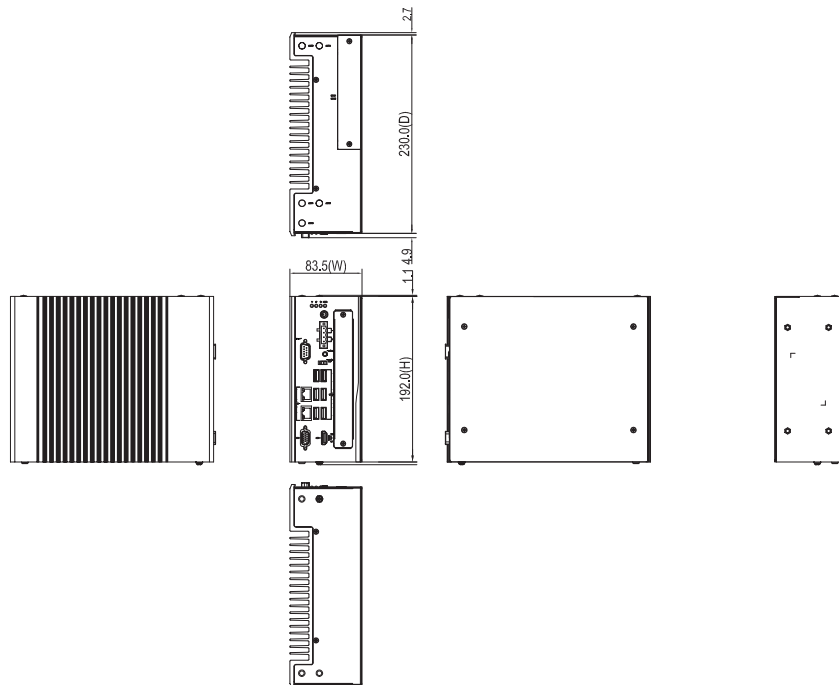
|                                |   |
|--------------------------------|---|
| AX93511<br>(P/N: 826G9620170E) | 4 x RS-232/422/485 module (default RS-232)  |
| AX93512<br>(P/N: 826G9620200E) | 2 x RS-232/422/485 with isolated 1.5kVDC & 8-in/8-out with isolated 1.5kVDC DIO module  |
| AX93516<br>(P/N: 826G9620180E) | 4 x RS-232/422/485 with isolated 2kVDC module   |
| AX93519<br>(P/N: 826G9620190E) | 1 x 10/100/1000 Mbps (Intel® i211-AT) Ethernet<br>2 x RS-232/422/485 & 2 x USB 3.1 (1 USB 3.1 Gen2 & 1 USB 2.0 signal or 2 USB 2.0 signal) module |
| 726G9740690E                   | Blank I/O cover   |

## Power Protection

### DC Version

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

## Dimensions



### Optional

|  |  |
|--|--|
| 2.5" SATA HDD/SSD                          |  |
| M.2 Key M 2280 (PCIe x4) NVMe SSD          |  |
| DDR4-2666 MT/s non-ECC SO-DIMM, up to 64GB |  |
| 8816G9621A0E                               | Wall mount bracket kit   |
| 8816G9600A0E                               | Din-rail mounting kit (for IPC960)   |
| 50906D24000E                               | Adaptor 24V/120W, wire only  |
| 50906A24000E                               | Adaptor 24V/230W, wire only  |
| AX96205 expansion kit<br>(P/N: E26G962116) | 1 PCIe x16 + 1 PCIe x4 w/chassis expansion kit                                 |
| AX96206 expansion kit<br>(P/N: E26G962117) | 1 PCIe x16 + 1 PCI w/chassis expansion kit                                     |
| AX96207 expansion kit<br>(P/M: E26G962118) | 2 PCI w/chassis expansion kit  |
| 8816G962BA0E                               | Fan module kit (internal, for AX96205/6/7 w/chassis expansion kit)             |
| 8816G962CA0E                               | Fan module kit (external, for AX96205/6/7 w/chassis expansion kit)             |
| 8816G9629A0E                               | NVIDIA® Tesla T4 GPU card fan module kit (for AX96205 w/chassis expansion kit) |
| AX96410 expansion kit<br>(P/N: E26G964107) | 1 PCIe x16 + 3 PCIe x4 w/chassis expansion kit (for Intel® Q370)               |
| AX96411 expansion kit<br>(P/N: E26G964108) | 1 PCIe x16 + 1 PCIe x4 + 2 PCI w/chassis expansion kit (for Intel® Q370)       |
| 8816G9643A0E                               | Fan module kit (internal, for AX96410/11 expansion kit)                        |
| 8816G9644A0E                               | Fan module kit (external, for AX96410/11 expansion kit)                        |
| 5946G962000E                               | Graphics card power cable ATX4P/BTX6 + 2P, L = 200mm                           |

## Packing List

1 x IPC960-525-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 HDD spacer