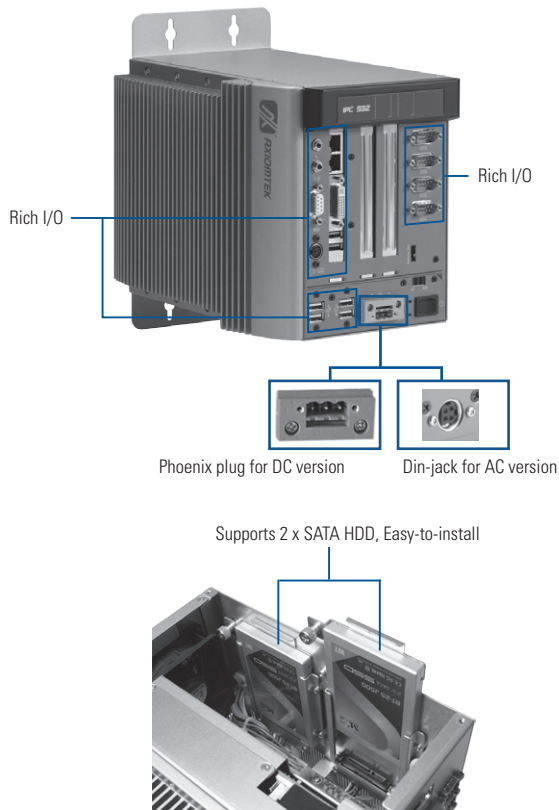


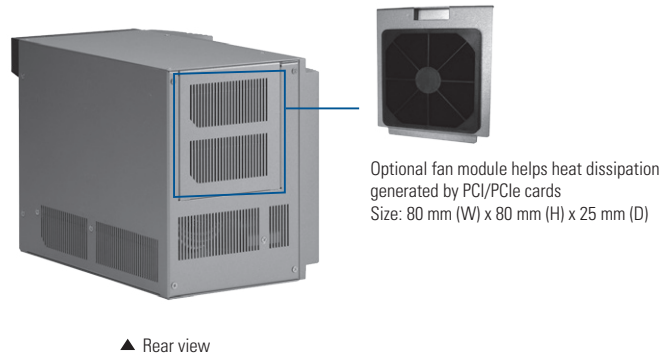
# IPC932-230-FL

2-slot Fanless Barebone System with 4th Generation Intel® Core™ i7/i5/i3 & Celeron® processor (up to 3.3 GHz), Intel® Q87 Chipset, PCIe and PCI Slots



## Features

- 4th generation Intel® Core™ i7/i5/i3 & Celeron® processor, up to 45W (Codename Haswell/Haswell Refresh)
- Intel® Q87 chipset
- Supports two expansion slots
- DC to DC power supply supports 10~30V
- Compact & front I/O design
- Rugged, up to -10°C ~ +50°C fanless operation with W.T. SSD or W.T. CFast™
- Supports Intel® AMT 9.0
- Supports two 2.5" SATA HDD
- Supports SATA 6Gbs with RAID 0,1



## Specifications

Standard Color	Sliver	
Construction	Aluminum extrusion heavy-duty cold-rolled steel, IP30	
System Board	SHB230DGGA	
Processor	4th generation Intel® Core™ i7/i5/i3 & Celeron® processor up to 45W (Codename Haswell/Haswell Refresh)	
System	CPU Level	
	Max. Speed	3.3GHz
	Front Side Bus	N/A
Chipset	Intel® Q87	
System Memory	2 x 204-pin DDR3-1333/1600 SO-DIMM, max. up to 16 GB	
I/O Interface (Front)	ATX power on/off switch 1 x 2-pin connector output for remote on/off switch 2 x USB 3.0 4 x USB 2.0 2 x RS-232 (COM 3/4) 2 x RS-232/422/485 (COM 1/2) 2 x 10/100/1000Mbps Ethernet 1 x DVI-I 1 x DIO (Female DB9 Connector) (4 IN and 4 OUT) 1 x PS/2 keyboard/mouse 1 x Audio (MIC-in/Line-out) 1 x AT/ATX Mode switch	

Expansion Interface	HAB100: 1 PCIe x1 & 1 PCIe x4 HAB103: 1 PCIe x4 & 1 PCI HAB108: 2 PCI HAB110: 1 PCIe x4 & 1 PCIe x16
Storage	2 x 2.5" SATA HDD, 1 x CFast™ socket
System Indicators	1 x power on/off, 1 x HDD
Power Supply	DC ATX 150W: Input : 10~30VDC Output: +5V@11A, +3.3V@5A, +12V@9A, -12V@-150mA, 5Vsb@2A AC-DC power adapter: Input: 90~264VAC Output: 19V@7.89A
Operation Temperature	-10°C ~ +50°C (+14°F ~ +122°F) with W.T. HDD or W.T. SSD or W.T. CFast™
Storage Temperature	-20°C ~ +80°C (-4°F ~ +176°F)
Humidity	10% ~ 90%, non-condensing
Dimensions	159.9 mm (6.36") (W) x 251.8 mm (10.02") (D) x 185 mm (7.2") (H)
Weight (net/gross)	6.2 kg (13.67 lb)/7.2 kg (15.87 lb)
Certification	CE compliance

\*\*The maximum power rating for expansion slots at 50°C can not be exceeded the following values: The maximum loading of +3.3V /1A and +5V/5A and +12V /3A <60W

## Ordering Information

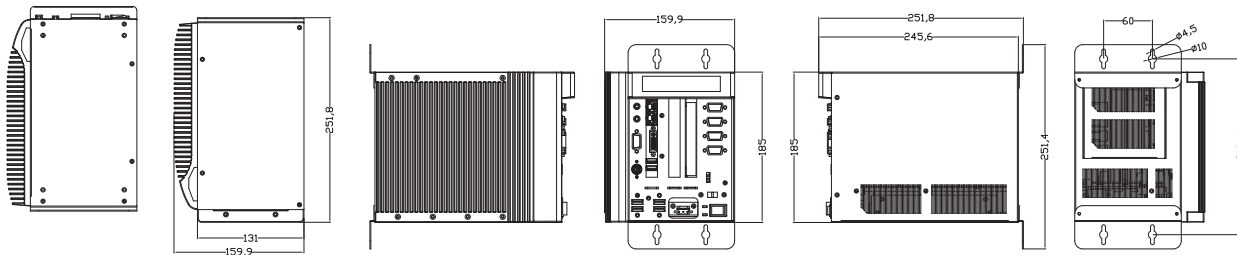
PCIe Version	
IPC932-230-FL-HAB100-DC (PN: E26G932107)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCIe slots and DC-in ATX 150W P/S
IPC932-230-FL-HAB100-AC (PN: E26G932106)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCIe slots , DC-in ATX 150W P/S, AC-DC 150W power adaptor and US power cord
IPC932-230-FL-HAB110-DC (PN: E26G932116)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCIe slots and DC-in ATX 150W P/S
IPC932-230-FL-HAB110-AC (PN: E26G932115)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCIe slots and DC-in ATX 150W P/S

PCI Version	
IPC932-230-FL-HAB108-DC (PN: E26G932114)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCI slots and DC-in ATX 150W P/S
IPC932-230-FL-HAB108-AC (PN: E26G932113)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCI slots and DC-in ATX 150W P/S

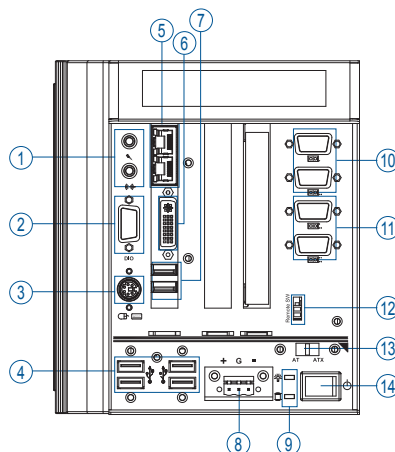
PCI+PCIe Version	
IPC932-230-FL-HAB103-DC (PN: E26G932103)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCI & PCIe slots and DC-in ATX 150W P/S
IPC932-230-FL-HAB103-AC (PN: E26G932102)	2-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor PCI & PCIe slots, DC-in ATX 150W P/S, AC-DC150W power adaptor and US power cord

\*Specifications and certifications are based on options and may vary.

## Dimensions



## Front & Rear Metal Panel I/O Layout



1. Audio(MIC-in/Line-out)
2. Digital I/O
3. PS/2 keyboard/mouse
4. USB 2.0 x 4
5. Ethernet x 2
6. DVI-I
7. USB 3.0 x 2
8. Power connector (Din-Jack or Phoenix plug)
9. LED for Power and HDD
10. RS-232/422/485 (COM 1/2)
11. RS-232 (COM 3/4)
12. Remote power switch
13. ATX/AT Mode switch
14. ATX Power switch

## Power Protection

AC Version
OVP (over voltage protection)
OTP (over temperature protection)
OPP (over power protection)
SCP (over circuit protection)

DC Version
OVP (over voltage protection)
SCP (short circuit protection)
OCP (over current protection)

## Optional Items

DDR3 SO-DIMM: 2 GB, 4 GB, 8 GB  
 CFast™: 2 GB, 4 GB, 8 GB  
 2.5" SATA HDD: 320 GB, 500 GB  
 IPC932-230-FL Fan module kit (E26G932104)  
 Y-Cable for CRT and DVI 150 mm (594826A0010E)  
 6P PS/2 KB+Mouse cable (59381560000E)

## Packing List

IPC932-230-FL Series Unit x 1  
 19V 150W Adapter (for AC Version)  
 Driver CD  
 Quick Manual  
 Wall Mount Bracket x 2  
 Screw pack x 1  
 Foot pad x 4  
 CPU Thermal Pad x 1  
 HDD Bracket x 2  
 HDD Mylar x 2  
 Terminal block x 1 (for DC version)  
 Remote power switch cable x 1

Overview

Embedded Systems

Embedded Systems for Transportation

Embedded Field Controllers

Industrial Firewall

Digital Signage Solutions

Embedded MicroBoxes

7  
Industrial Barebone Systems

Industrial Chassis

Backplanes

Power Supplies

Peripherals & Accessories

