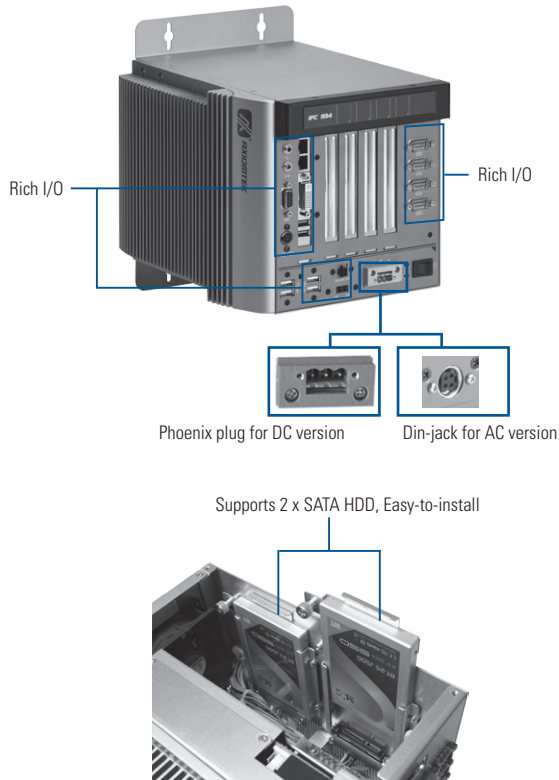


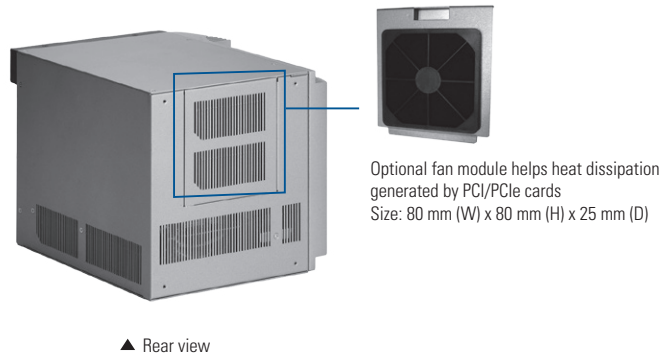
# IPC934-230-FL

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



## Features

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



## Specifications

Standard Color	Sliver	
Construction	Aluminum extrusion heavy-duty cold-rolled steel, IP30	
System Board	SHB230DGGGA	
Processor System	CPU Level	4th Generation for Intel® Core™ i7/i5/i3 & Celeron® processor, up to 45W (Codename Haswell/ Haswell Refresh)
	Max. Speed	3.3 GHz
	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-232/422/485(COM 1/2)	
	2 x RS-232(COM 3/4)	
	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 SW		

Expansion Interface	HAB104: 4 PCI
	HAB105: 2 PCI & 1 PCIe x1 & 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 ATX150W :
	Input : 10~30Vac
	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) w/ W.T. HDD or SSD or CFast™
Storage Temperature	-20°C ~ +80°C (-4°F ~ 176°F)
Humidity	10% ~ 90%, non-condensing
Dimensions	200.54 mm (7.96") (W) x 251.8mm (9.99") (D) x 185 mm (7.3") (H)
Weight (net/gross)	5.9 kg (12.98 lb)/6.9 kg (15.18 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

### PCI Version

IPC934-230-FL-HAB104 DC (P/N: E26G934101)	4-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor, PCI slots and DC-in ATX 150W P/S
IPC934-230-FL-HAB104 AC (P/N: E26G934100)	4-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor, PCI slots, DC-in ATX 150W P/S and AC-DC 150W power adaptor and US power cord

### PCI+PCIe Version

IPC934-230-FL-HAB105 DC (P/N: E26G934103)	4-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor, PCI & PCIe slots and DC-in ATX 150W P/S
IPC934-230-FL-HAB105 AC (P/N: E26G934102)	4-slot fanless embedded system with 4th generation Intel® Core™ i7/i5/i3 processor, PCI & PCIe slots, DC-in ATX 150W P/S and AC-DC 150W power adaptor and US power cord

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

## Power Protection

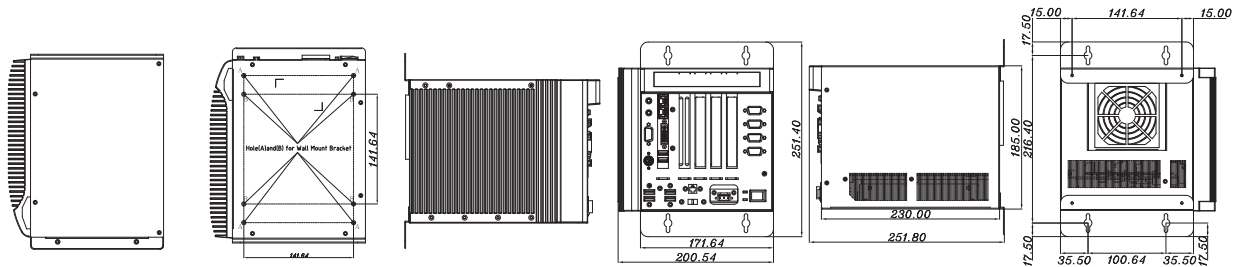
### AC Version

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

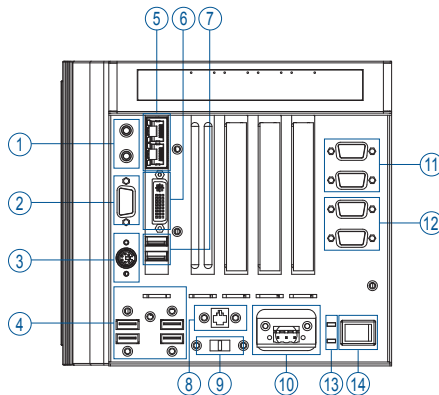
### DC Version

OVP (Over voltage protection)  
 SCP (short circuit protection)  
 OCP (Over current protection)

## 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. Remote power switch
9. ATX/AT Mode switch
10. Power connector (Din-Jack or Phoenix plug)
11. RS-232/422/485 (COM 1/2)
12. RS-232 (COM 3/4)
13. LED for Power and HDD
14. ATX Power switch

## Optional Items

DDR3 SODIMM: 2 GB, 4 GB, 8 GB  
 CFast : 2 GB, 4 GB, 8 GB  
 Embedded OS: WIN7 OS Image and License  
 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

19V 150W adapter and US Power cord (for AC Version)  
 Driver CD  
 Quick Manual  
 Wall mount bracket x 2  
 Foot Pad x 4  
 HDD bracket x 2  
 HDD Mylar x 2  
 Screw pack x 1  
 Thermal Pad for RAM x 1  
 CPU thermal Pad x 1  
 Terminal block x 1 ( for DC version)  
 Remote power switch cable x 1

