

## iBOX-230

Fanless Embedded BOX PC



IoT Solutions  
Alliance

**ASRock**  
— Industrial —



### Expansion Slot

mini-PCIe/ mSATA	1 x full size (Supports PCIe x1 shared with m-SATA and USB device)
mini-PCIe	1 x Full/ half size(Supports PCIe x1 and USB device)
M.2	N/A
SIM Socket	N/A

### Audio

Interface	Realtek ALC887, High Definition Audio. Line-out,Mic-in
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### Ethernet

Controller/ Speed	2 x Intel® I210 with 10/100/1000 Mbps
Connector	2 x RJ-45

### Storage

M.2	N/A
mSATA	1 x Full size (Supports PCIe x1 and USB 2.0, shared with m-SATA)
SATA	1 x SATA3 (6Gb/s)
eMMC	N/A

### Front I/O

HDMI	N/A
DisplayPort	N/A
USB	2 x USB 2.0
COM	1 x COM (RS-233/422/485), 1 x COM (RS-232)
Audio	N/A

### Rear I/O

HDMI	1 x HDMI 1.4b
DisplayPort	N/A
VGA	1
DVI	N/A
Ethernet	2 x Intel 1 Gigabit LAN
USB	2 x USB 3.1 (Gen1)
Audio	2 (Mic-in, Line-out)
COM	N/A
PS2	N/A

## KEY FEATURES

- Intel® Apollo Lake SoC Processor
- 2 x 204-pin SO-DIMM up to 16GB DDR3L 1866 MHz (8GB per DIMM)
- 2 x USB 3.1 Gen1, 2 x USB 2.0, 1 x mini-PCIe/mSATA, 1 x mini-PCIe, 2 x COM, 1 x SATA3
- 2 x Intel 1 Gigabit LAN
- Supports dual display, 1 x HDMI 1.4b, 1 x VGA
- 1 x 19V/65W AC-DC power brick adapter
- 200 x 134.5 x 39mm, Fanless Barebone

## SPECIFICATIONS

### Processor System

CPU	Intel® Apollo Lake SoC Processor -iBOX-230D (N4200, QC, up to 2.50 GHz) -iBOX-230L (N3350, DC, up to 2.40 GHz)
Chipset	SoC
Socket	FCBGA1296
BIOS	AMI SPI 128 Mbit

### Memory

Technology	Dual Channel DDR3L 1866 MHz
Capacity	16 GB (8 GB per DIMM)
Socket	2 x 204-pin SO-DIMM

### Graphics

Controller	Intel® Gen9 Graphics DX 12
HDMI	HDMI 1.4b Max resolution up to 4096 x 2160@24Hz
DisplayPort	N/A
VGA	Max resolution up to 1920x1200@60Hz
LVDS	N/A
eDP	N/A
DVI	N/A
MultiDisplay	Dual Display

### Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

### Power Requirements

Input PWR	1 x 19V/65W AC-DC power brick adapter
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

### Environment

Operating Temp	0°C – 50°C
Storage Temp	-40° C – 85° C
Operating Humidity	10% – 90%
Storage Humidity	10% – 90%

### Mechanical

Construction	Aluminum housing
Mounting	VESA mounting
Dimensions (W x H x D)	200 x 134.5 x 39mm
Weight	Net Weight:1.8kg

### Others

OS Support	Windows 10
TPM	N/A
Certifications	CE, FCC Class A
Packing List	1 x 19V/65W Power Adapter 1 x Screw Package 1 x Product DVD 1 x VESA mounting bracket

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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