IEC-JH310

Fanless Embedded BOX PC

intel® | IoT Solutions Alliance | ASRock® Industrial

Expansion Slot

mini-PCIe/ mSATA	N/A
mini-PCIe	N/A
M.2	1 x M.2 (KEY E, 2230) with PCIe x1 and USB 2.0 for Wireless
SIM Socket	N/A

Audio

Interface	Realtek ALC233, High Definition Audio

Ethernet

Controller/ Speed	1 x Realtek RTL8111H with 10/100/1000 Mbps
Connector	2 x RJ-45

Storage

M.2	1 x Key M (2280)with PCIe x4 and SATA3 for SSD
mSATA	N/A
SATA	1 x SATA3 (6.0Gb/s)
eMMC	N/A

Front I/O

HDMI	N/A
DisplayPort	N/A
USB	2 x USB 3.1 (Gen1), 2 x USB 3.1 (Gen1)(Type C)
Audio	2 (Mic-in, Line-out)

Rear I/O

HDMI	1 x HDMI 1.4a
DisplayPort	1 x DisplayPort 1.2a
VGA	1
DVI	N/A
Ethernet	1 x Realtek 1 Gigabit LAN
USB	4 x USB 2.0
Audio	N/A
COM	1 x COM (RS-232)
PS2	N/A

KEY FEATURES

- Intel® 9th/8th Gen LGA1151 Processors, up to 35W

- 2 x 260-pin SO-DIMM up to 32GB DDR4 2133 MHz (16GB per DIMM)

- 4 x USB 3.1 Gen1, 1 x USB 3.1 Gen1(Type C), 4 x USB 2.0,
  1 x M.2 Key E, 1 x M.2 Key M, 1 x COM, 1 x SATA

- 1 x Realtek 1 Gigabit LAN

- Supports dual display, 1 x HDMI 2.0, 1 x VGA

- 1 x 19V/90W AC-DC power brick adapter

- 262.35 x 177.35 x 64.7mm, Fanless Barebone

Watchdog Timer

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

Power Requirements

Input PWR	1 x 19V/90W 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

SPECIFICATIONS

Processor System

CPU	Intel® 9th/8th Gen LGA1151 Processors, up to 35W
Chipset	H310
Socket	LGA1151
BIOS	AMI SPI 128 Mbit

Environment

Operating Temp	0ºC ~ 50ºC
Storage Temp	-40° C – 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

Mechanical

Construction	Aluminum housing
Mounting	N/A
Dimensions (W x H x D)	262.35 x 177.35 x 64.7mm
Weight	Net Weight: 2.8kg

Memory

Technology	Dual Channel DDR4 2133 MHz
Capacity	32 GB (16 GB per DIMM)
Socket	2 x 260-pin SO-DIMM

Others

OS Support	Windows 10
TPM	N/A
Certifications	CE, FCC Class A
Packing List	1 x 19/90W Power Adapter
	1 x Screw Package
	1 x Product DVD

Graphics

Controller	Intel® HD Graphics
HDMI	HDMI 1.4a
	Max resolution up to 4096x2160@24Hz
DisplayPort	DisplayPort 1.2a
	Max resolution up to 4096x2160@60Hz
VGA	Max resolution up to 1920x1200@60Hz
LVDS	N/A
eDP	N/A
DVI	N/A
MultiDisplay	Dual Display