iBOX 6000 Series
iBOX-J6412
Fanless BOX

ASRock Industrial







KEY FEATURES

- Intel® ElkHart Lake SoC Processors
- 2 x 260-pin SO-DIMM up to 32GB DDR4 3200 MHz
- 4 x USB 3.2 Gen2, 1 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E, 1 x SATA3
- 2 x Realtek 1 Gigabit LAN
- Supports Dual display, 1 x HDMI 2.0b, 1 x DP 1.4
- TPM onboard
- 19V/65W Power Adapter

SPECIFICATIONS

Processor System

CPU	Intel® ElkHart Lake SoC Processors iBOX-J6412 (J6412, QC, Max Speed up to 2.6GHz, 10W)
Chipset	SoC
BIOS	AMI SPI 256 Mbit

Memory

Technology	Dual Channel DDR4 3200 MHz
Capacity	32GB (16 GB per DIMM)
Socket	2 x 260-pin SO-DIMM

Graphics

Controller	Intel® Gen 11 Graphics
HDMI	HDMI 2.0b Max resolution up to 4096x2160@60Hz
DisplayPort	DisplayPort 1.4, DP++ Max resolution up to 4096x2160@60Hz
MultiDisplay	Dual-Display

Expansion Slot

M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0

Audio

Interface	Realtek ALC233, High Definition Audio.

Ethernet

Controller/ Speed	Realtek RTL8111G with 10/100/1000 Mbps
Connector	2 x RJ-45

Storage

M.2	1 x M.2 (KEY M, 2242/2260/2280) with PCIe x1 and SATA3 for SSD *M.2 Key M 2280(Supported by bracket)
SATA	1 x SATA3.0 (6.0 Gb/s)

Front I/O

USB	1 x USB 3.2 Gen2 (Type-A) 2 x USB 3.2 Gen2 (Type-C) 1 x USB 2.0
Audio	1 (headphone & microphone jack)

Rear I/O

HDMI	1 x HDMI 2.0b
DisplayPort	1 x DP1.4
Ethernet	2 x 1 Gigabit LAN
USB	1 x USB 2.0 1 x USB 3.2 Gen2 (Type-A)
DC Jack	1

Internal Connector

TPM	Infineon SLB9670VQ2.0

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 Power 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	5% ~ 90%
Storage Humidity	5% ~ 90%

Others

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

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