

IBOX-007PRO



- Integrated up to eight Performance-cores, that enhance IoT workload consolidation, and up to eight Efficient-cores, that enhance background task management and multitasking;
- Intel® Active Management Technology (AMT) provides client the remote out-of-band management for efficient proactive and reactive system maintenance over Ethernet or Wi-Fi connections and is a superset of Intel® Standard Manageability features;
- Up to 32 graphics execution units (EUs) based on Intel® UHD Graphics 770 driven by Intel® Xe Architecture, allows for eye-catching visuals;
- Support up to 4* Swappable 2.5 inch HDD Design with RAID 0/1/5/10;
- The graphics, media, and display engine with up to two VDBOXes that can decode over 40 incoming video streams at 1080p and 30 frames per second;
- Full sealed modular parts design and cable-free design with aluminum alloy cooling enclosure, dustproof, anti-vibration and anti-interference;
- 4* PCI/PCIe slots, max 180W Power Budget for independent graphics operation.



The actual appearance is subject to the final configuration.

Specifications

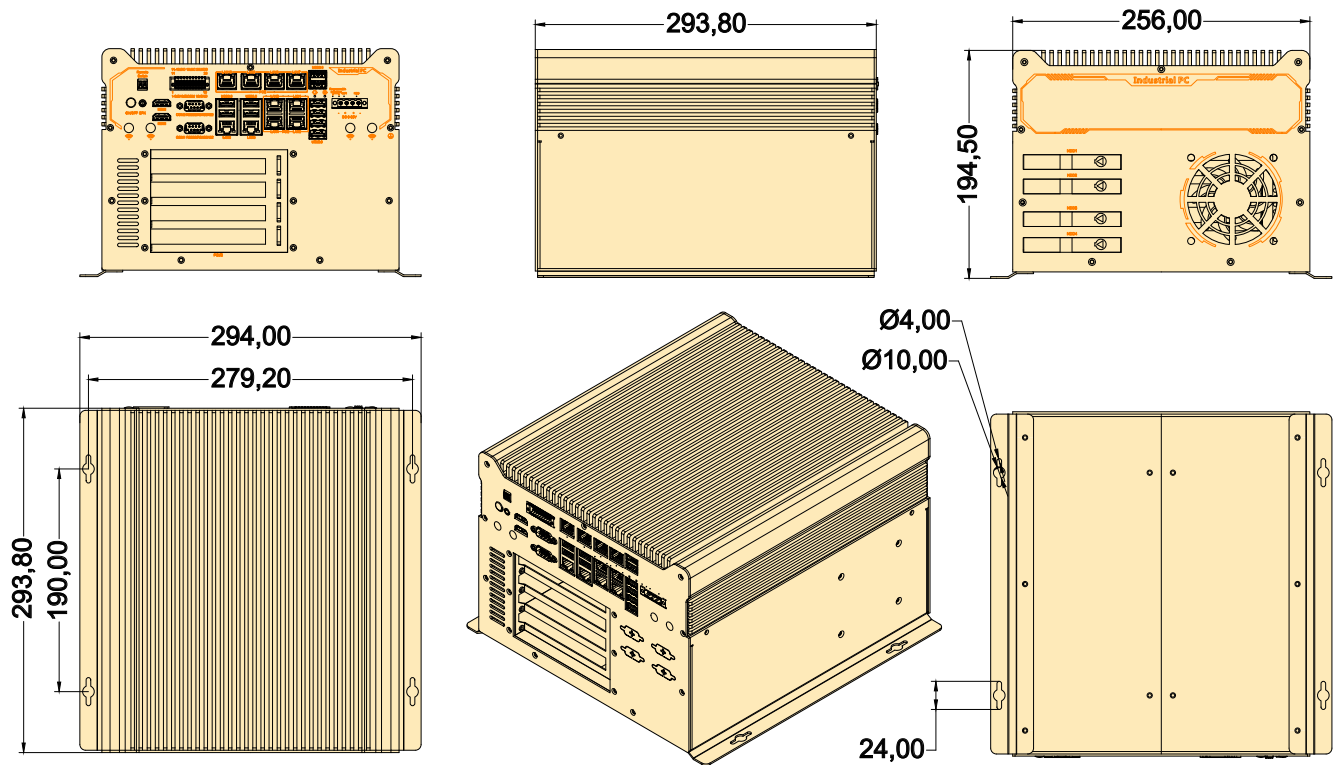
Model	IBOX-007PRO		
Supported OS	Win 10, Win11, Linux (Ubuntu, Debian, Kali, CentOS, etc.); Win 10 IoT		
Chipset	Model	Intel® Q670 Chipset, Intel® Alder Lake-S, TDP 6W	
CPU	Socket	Intel® Desktop Processors Socket LGA1700	
	Series & TDP	Gen. 12/13/14 Intel® Core™ i3 processor; Max. power up to 110W	Gen. 12/13/14 Intel® Core™ i9/i7/i5 processor Max. power up to 117W
	Graphic	Intel® UHD Graphics 730, 24 Execution Units	
	vPRO Tech	Non-Supported	Supported
RAM	SO-DIMM	2* Dual-CH DDR4 3200 MHz SO-DIMM Socket, Capacity up to 64GB;	
Storage Device	M.2	1* M.2 2242/2280 PCIe x4 NVMe SSD (M-key, 2280/2242, Gen4, Support RAID 0/1, From CPU) 1* M.2 2280 3052 PCIe x4/SATA (Default M-key PCIe x4, Gen4, Support PCIe x4 NVMe SSD, Support RAID 0/1, SATA signal is colay with one of SATA port., From PCH; Optional B-key with PClex4, USB3.0, USB2.0 signal and Sim card slot. USB2.0/SIM card slot is colay with Mini PCIe slot.)	
	SATA	4* SATA3.0 7P Port, support max 4* swappable SSD design, support RAID 0/1/5/10	
I/O Interface	COM	2* COM DB9/M (COM1/2, RS232/RS485/RS422, sel by BIOS); 2* RS232 Header (COM3/4, expanded by I/O Daughter Card)	
	Ethernet	1* Intel® I219 GBE Ethernet Controller, LAN5, RJ45 1* Intel® I210 GBE Ethernet Controller, LAN6, RJ45 8* Intel® I210 GBE Ethernet Controller, RJ45, LAN1-4, LAN7-10, support PoE (PSE, End-Span, LAN7-LAN10 are expanded by I/O Daughter Card)	
	USB	4* USB3.0; 4* USB2.0; 1* Internal USB2.0; 2* USB3.0 (These two USB3.0 are expanded by I/O Daughter Card)	
	Video	2* HDMI (TYPE-A), Support 3840*2160@60Hz;	
	Audio	1* Line-Out + MIC 2in1 Jack; 1* Front Audio Header (Line-out + MIC)	
	SIM	1* /* Internal SIM card slot connected to Mini-PCIe or M.2 B-key slot	
	Power Supply	9-36 VDC; 1* Terminal Block (4-Pin, 5.08mm)	
	Other	1* 8-bit GPIO header (4-Inputs/4-Outputs, 0-5V Input Range, on motherboard); 1* 16-bit GPIO on Terminal Block (8-Inputs/8-Outputs, 5-48V Input Range, 10*2Pin, 2.54mm, Expanded by I/O Daughter Card) 1* Remote Switch on Terminal Block (2*1Pin, 3.5mm, Expanded by I/O Daughter Card)	
	Extended Capabilities	1* Mini-PCIe with SIM Card Slot (PCIe+USB2.0, support WiFi or 4G); 1* PClex16 Gen4 +PClex4 Gen3[1]+ 0* PCI; Or 2* PClex8 + 1* PClex4; Or 1* PClex16 Gen4+1* PClex2 Gen3 with x4 socket + 2* PCI, expanded by Expansion Daughter Card[2]	
Environment	Operating Temp.	-20 ~ 55 °C w/ 0.7m/s Airflow	
	Relative Humidity	40 °C @ 95%, Non-Condensing	
Physical Characteristics	Dimensions	294* 194.5* 293.8 mm (W* H* D)	
	Storage Temp.	-40 ~ 85 °C (-40~185 °F)	
	Net Weight	7 KG	
Regulation	EMC	CE/FCC Class B, CCC	
	Safety	CE-LVD, RoHS, CCC	

[1]: PClex4 Gen3 by default, PClex4 Gen4 by optional

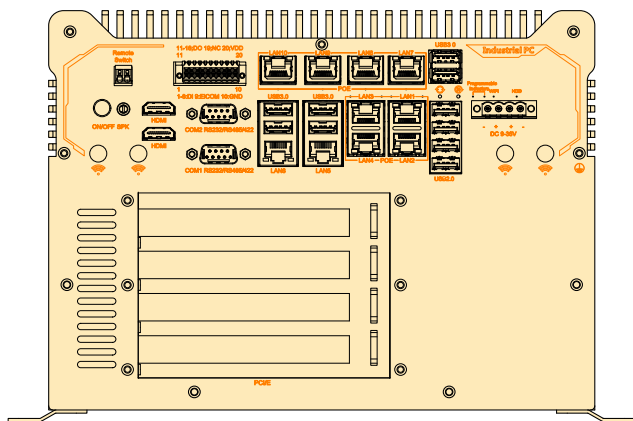
[2]: PClex4_1 can support PCIe x2 or PCIe x4 signal. When PClex4 slot support PCIe x4 signal, PCI 1-2 can't be used. (BOM and BIOS Optional)

Dimension

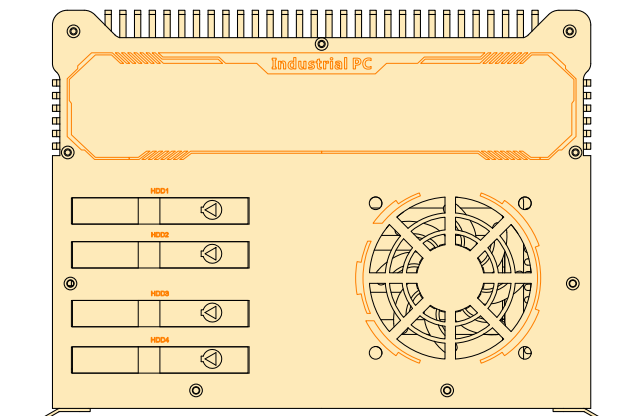
Unit:mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



I/O Daughter Card Information

Model	MEV EXP-4POE
Input	1* Daughter Card Expand Connector
LAN	4* Intel® i210 GbE LAN, RJ45, Support PoE, Max 4* 15.4W (each 15.4W max)
COM	2* RS232 (COM3/4, Wafer)
USB	2* USB3.0 (TYPE-A, Rear IO)
Other Ports	1* Power System On Terminal Block, 2*1 Pin, 3.5mm; 1* 16-bit GPIO Terminal Block, 10*2 Pin, 2.54mm, Input Range 5-48V
Power Supply	1* DC48V POE Power Input ATX 4P Connector

Expansion Daughter Card Information

Model	MEV EXP-2PCIe2PCI
Input	1 * PClex16 Gold Finger and 1 * PClex4 Gold Finger
Expansion Slots	1 * PClex16+ PClex4+ 0 * PCI (MEV EXP-2PCIe2PCI, 66MHz/33MHz); Or 1 * PClex16+ 1 * PClex2 with x4 slot+ 2 * PCI (MEV EXP-2PCIe2PCI, 66MHz/33MHz); Or 2 * PClex8+1 * PClex4 (Q6764-3PCIe) BOM and BIOS Optional
Others	1 * Power On Header
Power Supply	1 * DC 9-36V Power Input ATX 6P Connector; 1 * DC 12V Power Output ATX 6P Connector

Ordering Information

SO-DIMM Socket	M.2 M-key Slot	SATA3.0 Connector	Full Size Mini PCIe Slot	RS232/ 422/ 485 DB9 COM Port	GbE LAN Without PoE	1.0 GbE PoE LAN			
2	2	4	1	2	2	4 or 8			
USB 3.0	USB 2.0	Internal USB2.0	HDMI	Audio Jack	Internal SIM Card Slot	16-bit GPIO	8-bit GPIO Header	Remote Switch	Power Supply
4 or 6	4	1	2	1	1	0 or 1	1	0 or 1	DC 9-36V

Processors Info.

CPU	Code Name	Total Cores	Total Threads	Max Turbo Frequency	Base Frequency	Cache	TDP	Memory Types	Integrated Graphics
Intel® Core™ i3-12100T	Alder Lake	4	8	4.10 GHz	2.20 GHz	12 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 730, 24EUs
Intel® Core™ i5-12500T	Alder Lake	6	12	4.40 GHz	2.00 GHz	18 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i7-12700T	Alder Lake	12	20	4.70 GHz	1.40 GHz	25 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i9-12900T	Alder Lake	16	24	4.90 GHz	1.40 GHz	30 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i3-12100	Alder Lake	4	8	4.30 GHz	3.30 GHz	12 MB Intel® Smart Cache	65 W	DDR4	Intel® HD Graphics 730, 24EUs
Intel® Core™ i3-13100T	Alder Lake	4	8	4.10 GHz	2.20 GHz	12 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 730, 24EUs
Intel® Core™ i5-13500T	Alder Lake	14	20	4.40 GHz	2.00 GHz	24 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i7-13700T	Alder Lake	16	24	4.70 GHz	1.40 GHz	30 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i9-13900T	Alder Lake	24	32	4.90 GHz	1.40 GHz	36 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i3-14100T	Raptor Lake	4	8	4.40 GHz	2.70 GHz	12 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 730, 24EUs
Intel® Core™ i5-14500T	Raptor Lake	14	20	4.80 GHz	1.70 GHz	24 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i7-14700T	Raptor Lake	20	28	5.20 GHz	1.30 GHz	33 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i9-14900T	Raptor Lake	24	32	5.50 GHz	1.10 GHz	36 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs

All products and company name listed are trademarks or trade names of their respective companies.

!! Note: For more interface configuration or available processors, please consult the sales.

Packing list

Default Items	Qty
IBOX-007PRO Unit	1
AC-to-DC Adapter	1
Power cable 4-pin 150cm	1

Options for default items

Optional Items	Qty
Power cable 4-pin 150cm, USA type	-
Power cable 4-pin 150cm, EU type	-
Power cable 4-pin 150cm, UK type	-

Optional accessories or internal modules for unit

Optional Items	Max Qty	Description
I/O Daughter Card	1	Connected by IO expand slot, offering 4* PoE LAN+1* 16bit GPIO(5-48V)+1* Remote Switch+ 2* USB3.0
Expansion Daughter Card	1	Connected by PCIe expand slot, offering 1*PCIe x16+ 1*PCIe x4+ 2*PCI, working with PRO-BASE only
4G Module	1	Connected by Mini-PCIe or M.2 interface
WiFi Module without AP mode	1	Connected by Mini-PCIe interface
WiFi Module with AP mode	1	Connected by Mini-PCIe interface
Dual channel CAN-Bus Module	2	Connected by Mini-PCIe or M.2 interface
Four channel CAN-Bus Module	1	Connected by PCIe interface
Dual GbE PoE LAN Module	3	Connected by Mini-PCIe or M.2 interface
AI Acceleration Card	4	26 TOPS, Connected by M.2 interface; 13 TOPS, Connected by Mini-PCIe interface
Ignition Switch Module	1	Phoenix Terminal connector, connected by internal power switch and 4-pin ATX power connector

!! Note: As this product has expansion slots, please consult sales for the specific maximum number of expandable interfaces.