

IBOX-104V2-2L6C-NS



- Equipped with an Intel Alder Lake-N quad-core processor based on the Intel® 7 process. Compared with the previous generation Elkhart Lake platform, the CPU single-thread performance is improved by up to 130%, and the multi-thread performance is improved by 109%. The built-in UHD graphics chip improves AI inference, with 6.85 times the object recognition performance.
- Modular Expansion, it comes with three M.2 slots for wireless cards (5G/4G, Wi-Fi, Bt, and GNSS) and M.2 SSD.
- Easy Maintenance, setup and adjustment of the IBOX-104V2-2L6C-NS is quick because key functions, including the clear CMOS switch and remote power switch, are all accessible on the panel maintenance area.
- Ultra-thin design, 44mm height, max optional 55mm height.
- Full sealed design with aluminum alloy cooling enclosure, dustproof, anti-vibration and anti-interference.
- Supports VESA and wall mounting for different applications.



The actual appearance is subject to the final configuration.

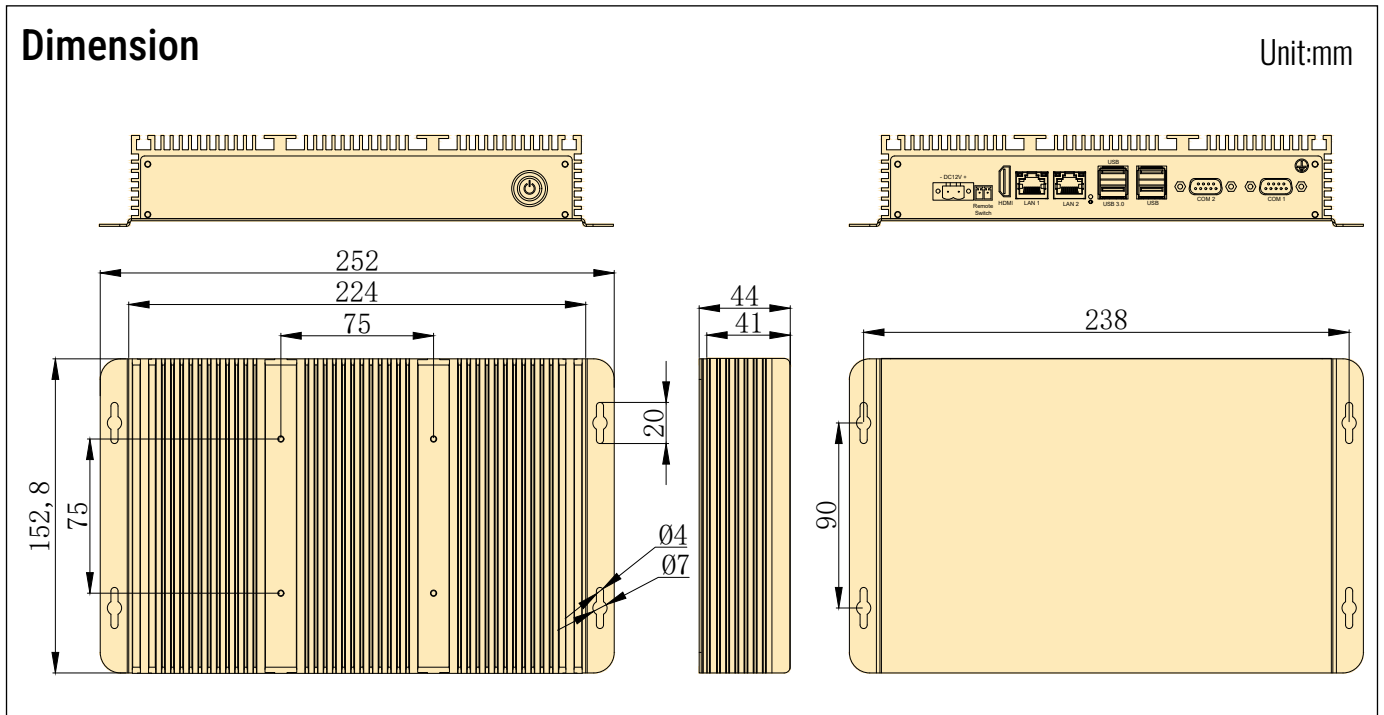
Specifications

Model	IBOX-104V2-2L6C-NS	
Supported OS	Windows 10/11, Win 10 IoT; Linux Kernel 5.4	
CPU	Processor info	Intel® Processor N95, 4* E-cores, Turbo Fre. 3.40GHz, TDP 15W Intel® Processor N97, 4* E-cores, Turbo Fre. 3.60GHz, TDP 12W
	Graphics	Intel® UHD Graphics, up to 16 EUs, 1.20 GHz Intel® UHD Graphics, up to 24 EUs, 1.20 GHz
RAM	SO-DIMM 1 * Non-ECC SO-DIMM Slot, support DDR4-3200MHz, up to 16GB	
Storage	M.2	1 * M.2 Key-M Slot (PCIe 2x/SATA, Default PCIe 1x/SATA, Support PCIe 1xNVMe/SATA SSD, Auto Detect, 2280)
	SATA	1 * SATA 3.0 7P Port (with 1 * SATA Power Wafer)
I/O INTERFACE	COM	2 * RS232/RS485 (COM1-2, DB9/M); 4 * RS232 (COM3-6, BOX Header)
	Ethernet	2 * Realtek GbE LAN Chip (10/100/1000 Mbps, RJ45)
	USB	4 * USB3.0 (TYPE-A, Rear IO); 5 * USB2.0 (3*Wafer/ 2*Header, Internal) [3]
	Video	1 * HDMI (TYPE-A), max resolution up to 4096*2160@30Hz; 1 * VGA (Internal Wafer, max resolution up to 1920*1080@60Hz)
	Audio	Realtek Audio HDA Codec, with 1 * Line Out 3.5mm Jack; 1 * MIC 3.5mm Jack; (Internal 1 * Front Audio Header (Line-Out+ MIC); 2 * Amplifier, 3-W (per channel) into an 8-Ω Loads)
	SIM	1* Built-in SIM card slot connected to M.2 Key-B slot
	Power Supply	1 * DC 12V Power Input Terminal Block (DC24V BOM Optional) 1 * DC 12V Power Input ATX 2*2P Connector
	Other	1* 8-bit GPIO wafer; 1* Remote Switch Terminal (2-Pin, 3.81mm); 1 * CMOS Clear Button
Extended Capabilities	Additional Internal Interface	1 * M.2 Key-B Slot (PCIe/USB3.0+USB2.0, Default PCIe+USB2.0, Support 5G+4G, 2242/3052) [2] 1 * M.2 Key-E Slot (PCIe+USB2.0, Support WiFi+ BlueTooth, 2230) [3]
Environment	Operating Temp.	-10 ~ 70 °C w/ 0.7m/s Airflow
	Storage Temp.	-40 ~ 85 °C (-40~185 °F)
	Relative Humidity	40 °C @ 95%, Non-Condensing
Physical Characteristics	Dimensions	250* 44* 153 mm (W* H* D) (It has a higher version with 49mm solution)
	Net Weight	1.5 KG
Regulation	EMC	CE/FCC Class B, CCC
	Safety	CE-LVD, RoHS, CCC

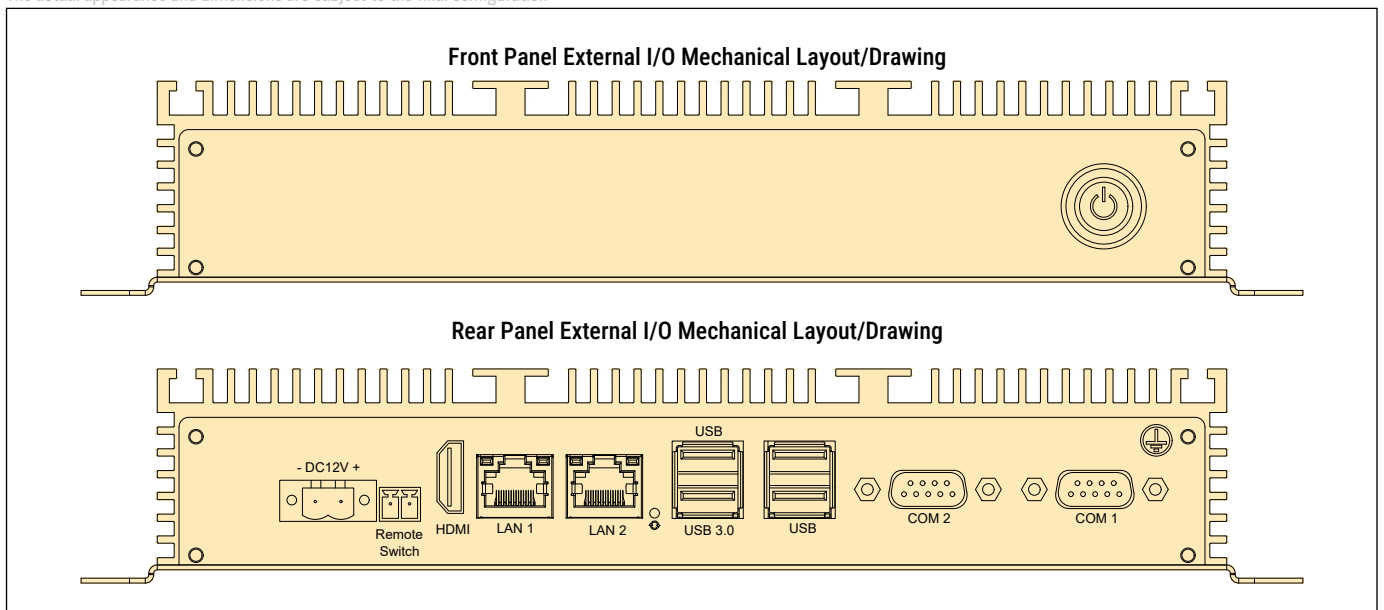
[1]: SATA1 and M.2_KEYM_PCIESSD1 use the same PCIe/SATA signal. (BOM selectable)

[2]: MINI_PCIE1 and M.2_KEYB_SSD/WWAN1 share the same signal and position. They cannot be accessed simultaneously.

[3]: One of USB2.0 signal for F_USB1 can use USB2.0 signal of M.2_WLAN_E1 for BlueTooth.



The actual appearance and dimensions are subject to the final configuration



Ordering Information

SO-DIMM Socket	M.2 2280 M-key Slot	SATA 3.0	M.2 3052 B-key Slot	M.2 2230 E-key Slot	RS232/485 DB9 Connector	RS232 Header	GbE LAN		
1	1	1	1	1	2	4	2		
USB 3.0	USB 2.0 Headers	HDMI	Line Out	Mic In	8-bit GPIO	Remote Switch	CMOS Clear Button	SIM Card Slot	Power Supply
4	2	1	1	1	1	1	1	1	DC 12V

Processors Info & Available List

CPU	Code Name	Total Cores	Total Threads	Max Turbo Frequency	Base Frequency	Cache	TDP	Memory Types	Integrated Graphics
Intel® Processor N95	Alder Lake-N	4	4	3.4 GHz	-	6 MB	15W	DDR4	Intel® UHD Graphics; 16Eus
Intel® Processor N97	Alder Lake-N	4	4	3.6 GHz	-	6 MB Intel® Smart Cache	12W	DDR4	Intel® UHD Graphics; 24Eus

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Packing list

Default Items	Qty
IBOX-104V2-2L6C-NS Unit	1
AC-to-DC Adapter	1
Power cable 3-pin 150cm	1

Options for default items

Optional Items	Qty
Power cable 3-pin 150cm, USA type	-
Power cable 3-pin 150cm, EU type	-
Power cable 3-pin 150cm, UK type	-
VESA mount kits	-

Optional accessories or internal modules for unit

Optional Items	Max Qty	Description
DC9-30V TO DC 12V PWR module	1	Phoenix Terminal connector, Power supply voltage conversion module, connected by header
Isolated RS-232	6	DB9 or Phoenix Terminal connector, connected by header
Isolated 8-bit GPIO, 9-24V	1	Phoenix Terminal connector, connected by header
4G Module	1	Connected by M.2 interface
WiFi Module without AP mode	1	Connected by M.2 interface
Dual channel CAN-Bus Module	1	Connected by M.2 interface

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