

VHEHL-30 V3.0

Intel® Elkhart Lake J6412 Processor based Fanless Mini PC
with 2LAN, 3HDMI, 6USB



Features

- CPU: Intel® Elkhart Lake J6412 Processor
- Memory: Dual Channel SO-DIMM DDR4 up to 32GB
- Display: Integrated Intel® UHD Graphics display via 3xHDMI
- I/O Ports: 2xLAN, 1xCOM, 2xUSB3.2, 4xUSB2.0, Type-C, SIM Slot
- Ethernet: 10/100/1000Mbps
- Storage: M.2 for NVMe SSD(PCIe2X Signal),M.2 for SATA SSD/4G
- Power: 12V/19V DC-in or 9V-35V Optional



Introduction

The VHEHL-30 Fanless Mini PC, powered by the Intel® Elkhart Lake Celeron J6412 processor, delivers reliable computing performance in a compact and durable design. Featuring a quad-core CPU with burst frequencies up to 2.6GHz and low 10W TDP, it balances efficiency and performance for industrial, digital signage, and embedded applications. With dual-channel DDR4 memory support up to 32GB and integrated Intel® UHD Graphics, the system provides smooth multitasking and triple independent display outputs via HDMI 2.0, ensuring clear visuals and seamless connectivity.

Designed with flexibility in mind, the VHEHL-30 offers rich I/O options including dual Intel® Gigabit Ethernet ports, seven USB ports, COM ports, and an optional onboard TPM module. Expansion is supported through multiple M.2 slots for NVMe SSD, SATA storage, WiFi/Bluetooth, or 4G modules, along with a SIM slot for network applications. The fanless design ensures silent, reliable operation with an extended operating temperature range of -20°C to 60°C, making it suitable for harsh environments. Compact yet powerful, the VHEHL-30 is the ideal choice for industrial automation, digital signage, and other edge computing solutions.



H/W Monitor



Watchdog



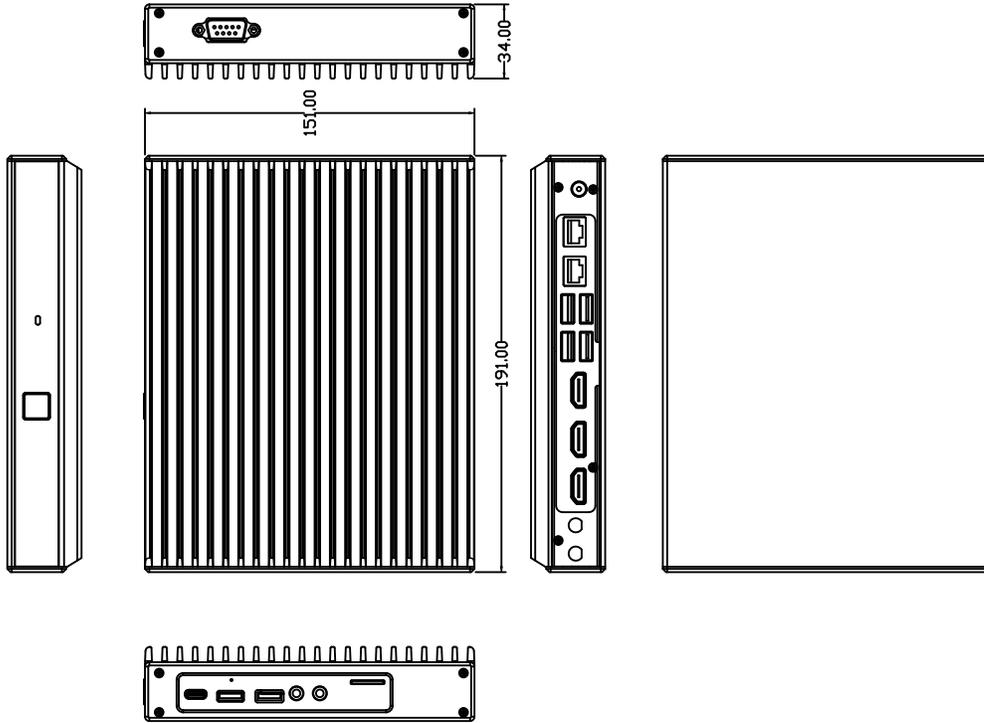
I/O Interfaces



Technical Specifications

Processor	CPU	Celeron J6412
	Cores/Threads	4C/4T
	Base Frequency	2.00GHz
	Burst Frequency	2.60GHz
	Cache	1.5 MB L2 Cache
	TDP	10W
	BIOS	AMI UEFI BIOS
	Memory	Type
Max. Capacity		32GB
Display	GPU	Intel® UHD Graphics for 10th Gen Intel® Processors
	Interface	3 x HDMI2.0
Ethernet	Controller	2x RTL8111H
	Max. Speed	10/100/1000 Mbps
	Interface	2 x RJ45
	Wake on LAN	Yes
Audio	Audio Codec	CONEXANT HD CX20632
	Interface	1x Line-out, 1x Mic-in
Storage	M.2	1 x M.2 Key M for 2280 NVMe SSD (PCIe 2X signal)
	M.2	1 x M.2 Key B for 2242/2280 SATA SSD or 4G Module
Expansion	M.2	1 x M.2 Key E for WiFi and Bluetooth
	SIM Slot	1
Other I/O	COM	1 x COM, RS232 by default. 2xCOM optional. COM1 RS422/RS485 optional
	USB2.0	4 x USB2.0
	USB3.2	2 x USB3.2
	Type-C	1 x Type-C(USB3.2 Gen 2)
	TPM	Onboard, optional
	Size	191 mm x 151mm x 34 mm
Weight	N.W.	TBD
Power	Standard Port	12V/19V DC-in, or 9V-35V optional
Temperature	Operating Temp.	- 20°C to 60°C
	Storage Temp.	- 40°C to 80°C
Cooling Method		Passive
Operating System		Windows 10/11 64bit, Linux 64bit

Dimension(in mm)



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