

samTec® NX6412

DATASHEET

Intel Elkhart Lake Processor based Ultra Compact Fanless
Mini PC with Dual Display



Features

- CPU: Intel Elkhart Lake J6412 Processor
- Memory: Dual Channel SO-DIMM DDR4 up to 32GB
- Display via: Intel Integrated Graphics display via 2xHDMI2.0
- I/O Ports: 2xLAN, 2xUSB3.2, 2xUSB2.0, Type-C, SIM
- Ethernet: 10/100/1000Mbps
- Storage: 1x M.2 2242/2280 SSD, SATA optional
- Power: 12V DC-in



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Introduction

SAMTEC NX6412 mini-PC incorporated the Intel Elkhart Lake processors, offering you greater computing power with cost advantages. Supports dual-channel SO-DIMM DDR4 up to 32GB, dual independent displays via 2xHDMI2.0. A rich i/o interface includes 2xLAN, 2xUSB3.2, and 2xUSB2.0 to meet most market requirements. It provides an excellent customer experience, and a long-lasting life expectancy for future development.

Based on small form factors, the compact design at 127mm x 127mm x 43.5mm makes it great for space-saving. The NX6412 has 1xM.2 for storage, SATA optional, SIM slot for expansion. Desktop ready for easy installation. It builds with advanced cooling construction with a compact, fanless design and overcomes noise challenges. Its comprehensive connectivity makes it suitable for kiosks, PoS, retail, home, or office uses.



H/W Monitor



Watchdog

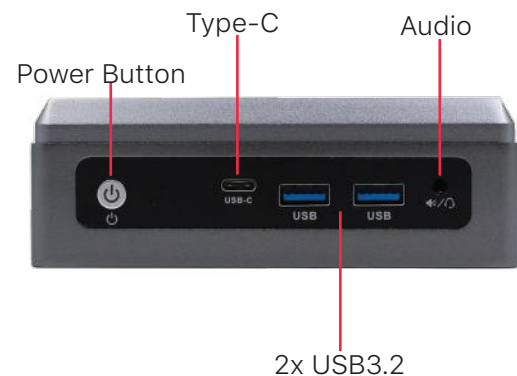


GPIO



Brightness

I/O Interfaces

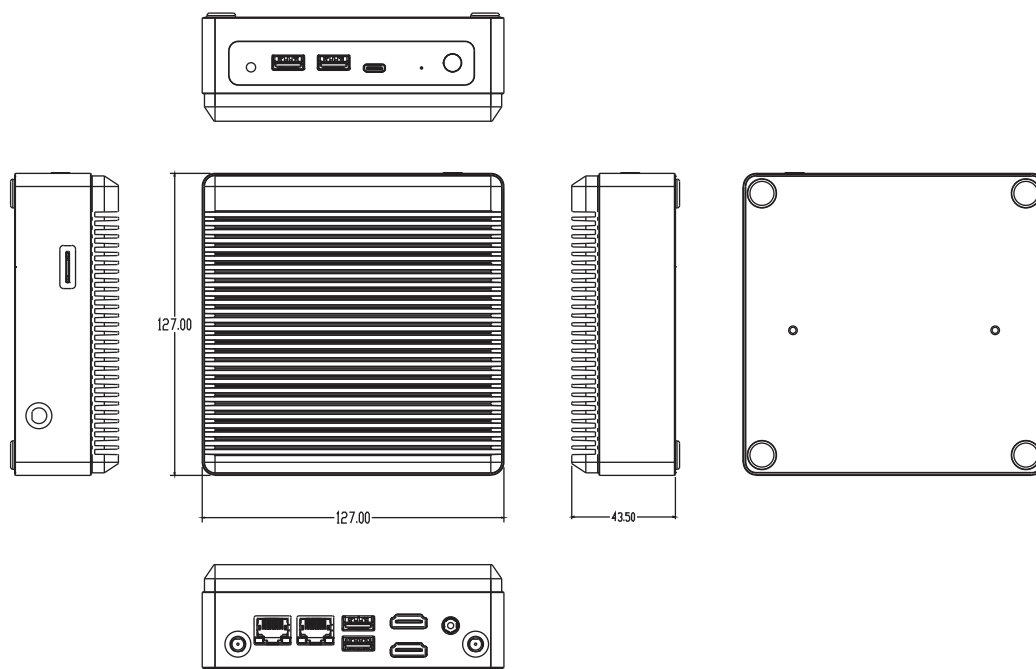


Technical Specifications

Processor	CPU	J6412
	Base Frequency	2.00GHz
	Burst Frequency	2.60GHz
	Cache	1.5MB L2
	TDP	10W
Memory	Type	Dual Channel SO-DIMM DDR4
	Max. Capacity	32GB
Display	GPU	Intel® UHD Graphics for 10th Gen Intel® Processors
	Display via	2xHDMI2.0
Ethernet	Speed	10/100/1000 Mbps
	Controller	RTL8111H
	Interface	2x RJ45
	Wake on LAN	Yes
Audio	Audio Codec	Realtek HD
	Interface	2-in-1 Audio Jack, Mic-in+Line-out
Storage	M.2	1xM.2 for 2242/2280 SSD (SATA ONLY) or 4G
	SATA	Optional
Expansion	M.2	1xM.2 for WiFi Optional
	SIM	1
I/O	LAN	2
	USB2.0	2
	USB3.2	2
	Type-C	1
	HDMI2.0	2
Dimension	Size	127mm x 127mm x 43.5mm
Weight	N.W.	TBD
Power	Standard Port	12V DC-in
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

* All specifications and photos are subject to change without notice.

Dimension (in mm)



Customized options



* Default without COM



* Customized options with COM(1xRS232)