Neu-X102-N97





Main Features

- Intel® Alder Lake-N processors, Intel 7 process
- Slim compact chassis and fanless design
- 1 x DDR4 SO-DIMM socket, max up to 16GB
- Support 2 x HDMI 1.4b output, 4K@30Hz
- TPM 2.0 onboard design for security

- Richful I/O connectivity: 2 x 2.5GbE LAN, 4 x USB 3.2 Gen2
- 1 x M.2 2242 Key M for supporting PCIe & SATA storage device
- 1 x mini-PCIe slot support Wi-Fi and LTE module
- Support power input 12 VDC

Product Overview

Neu-X102 series are powered by Intel® processor N50, N97 featuring upgraded computing performance with low power-efficient and integrated a rich set of IOT features. It supports 2x HDMI 1.4b display outputs, dual 2.5GbE LAN ports, 4x USB 3.2 Gen2 ports, 1x RS232/RS422/RS485 port and a M.2 2242 Key M storage slot that supports PCIe and SATA format. In addition, the mPCIe slot support LTE and Wi-Fi6/6E module. With the LTE and Wi-Fi communication, provide the wide-area coverage and real-time transmission for gateway applications.

With its slim, compact-size, fanless design and extended durability can furtherly cover a lot of usages like IOT gateway, self-service kiosks, endless aisles, QSRs, drive-thru kiosks, bus stops, digital transit information signs, intelligent Pole/lighting system, information display system, such as PIDS for smart city.

Specifications

CPU Support

• Intel® Alder Lake-N processor, N97 (up to 3.6GHz, 12W)

Graphic & Display

Intel® UHD graphics

Main Memory

• 1 x 260-pin DDR4 SO-DIMM socket, up to 3200MHz with non-ECC, un-buffered memory up to 16GB

I/O Interface-Front

- 2 x RJ45 with LEDs for 2.5GbE LAN
- 2 x HDMI 1.4b, resolution 3840 x 2160@30Hz
- 4 x USB 3.2
- 1 x Power button with LED
- 1 x DC-in Jack with lock

I/O Interface-Rear

- 2 x Antenna hole
- 1 x COM port (RS232/RS422/RS485)
- 1 x Storage active LED

Internal I/O

- 1 x COM port connector (RS232, RI/5V/12V)
- 1 x Line-out audio connector
- 2 x 6-pin header for 3 x USB 2.0 ports
- 1 x 10-pin header for GPIO, 4 x GPI, 4 x GPO

• 1 x mini-PCIe full-size connector with SIM slot (nano) onboard, support Wi-Fi 6/6E & LTE module

Storage

• 1 x M.2 2242 Key M storage for supporting SATA & PCIe signal

Power Supply

- 1 x External 12V/5A, 60W power adapter (Included in accessory)
- Input: DC+12V DC

Environment

- Operating temperature: -5°C to 50°C ambient with 0.7m/s air flow
- Humidity: 95% (non-condensing)
- Storage temperature: -20°C to 80°C
- Shock protection: 50G peak acceleration, 11ms according to



Dimension Drawing 203.50 193 179 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46-32 46

- IEC60068-2-27
- Vibration protection
 - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
 - Sinusoidal: 2G @ 5~500 Hz, IEC60068-2-6

Mechanical & Dimension

- Aluminum and metal chassis with fanless design
- 203.5mm (W) x 106mm(D) x 40mm (H)

Certification

- CE (EN55035 + EN55032)
- FCC Class A (EMI part 15B)
- LVD (EN62368-1)

Operating System

- Win10 64-bit, Win 11
- Linux 4.1 above

Ordering Information

Neu-X102-N97 (P/N:10W10X10201X0)
Intel® Alder Lake-N processor, N97 slim and fanless system

NECOM