Neu-X302

Edge Computing System

Powered by 8th/9th Generation Intel® Core™ Processor

Main Features

- Support 8th/9th Intel® Core™ socket type processor
- Dual channel DDR4 SO-DIMM, 32GB max.
- 1 x VGA and 1 x HDMI 1.4 4K display output
- Dual Intel® LAN ports
- 6 x COM port, 10 x USB, Mic-in/Line-out
- Optional TPM 2.0 for security advantage
- Support Intel® AMT Technology
- Onboard M.2 Key B/E for storage & wireless connection

Product Overview

The Neu-X302 is an industrial grade fanless edge computing system powered by Intel® 8th /9th Core™ i7/i5/i3 and Celeron processors (formerly Coffee Lake) with Intel® Q370/H310 express chipset. In addition to the great computing performance, the Neu-X302 features with outstanding GPU performance based on Intel® UHD Graphics 630 engine. The Neu-X302 system comes with rich I/O connectivity including 6 x COM ports, 4 x USB 3.0, 2 x LANs, 1 x VGA and 1 x HDMI 1.4 for 4K display output. There are 6 more expandable USB 2.0 which can be added to the edge by request. It also comes in great expansion possibilities, including two M.2 slot for support SSD storage, Wi-Fi or LTE connectivity. The Neu-X302 is perfect for industrial testing equipment or measurement machine applications which need rich I/O connectivity in high demand for supercomputing and graphic performance.

Specifications

CPU Support

- Support following listed processor

Generation	Socket type	CPU	Smart Cache	Cores	Threads	Base Frequency	TDP
8th Coffee Lake	FCLGA1151	i3-8100T	6M	4	4	3.1GHz	35W
8th Coffee Lake	FCLGA1151	i5-8500T	9M	6	6	2.1GHz	35W
8th Coffee Lake	FCLGA1151	i7-8700T	12M	6	12	2.4GHz	35W
9th Coffee Lake Refresh	FCLGA1151	i3-9100TE	6M	4	4	2.2GHz	35W
9th Coffee Lake Refresh	FCLGA1151	i5-9500TE	9M	6	6	2.2GHz	35W
9th Coffee Lake Refresh	FCLGA1151	i7-9700TE	12M	8	8	1.8GHz	35W

Chipset & Memory

- Intel® PCH Q370
- Intel® PCH H310
- 2x DDR4 SO-DIMM socket, supports up to 32G DDR4 2666 SDRAM, with un-buffered and non-ECC

Graphic & Display

- Intel® UHD Graphics 630
- 1 x VGA output on the edge, resolution up to 1920 x 1200 @ 60Hz
- 1 x HDMI 1.4 output on the edge, resolution up to 4096 x 2160 @ 30Hz
- 1 x LVDS internal connector, dual channel, resolution up to 1920 x 1200 @ 60Hz (eDP: by request)

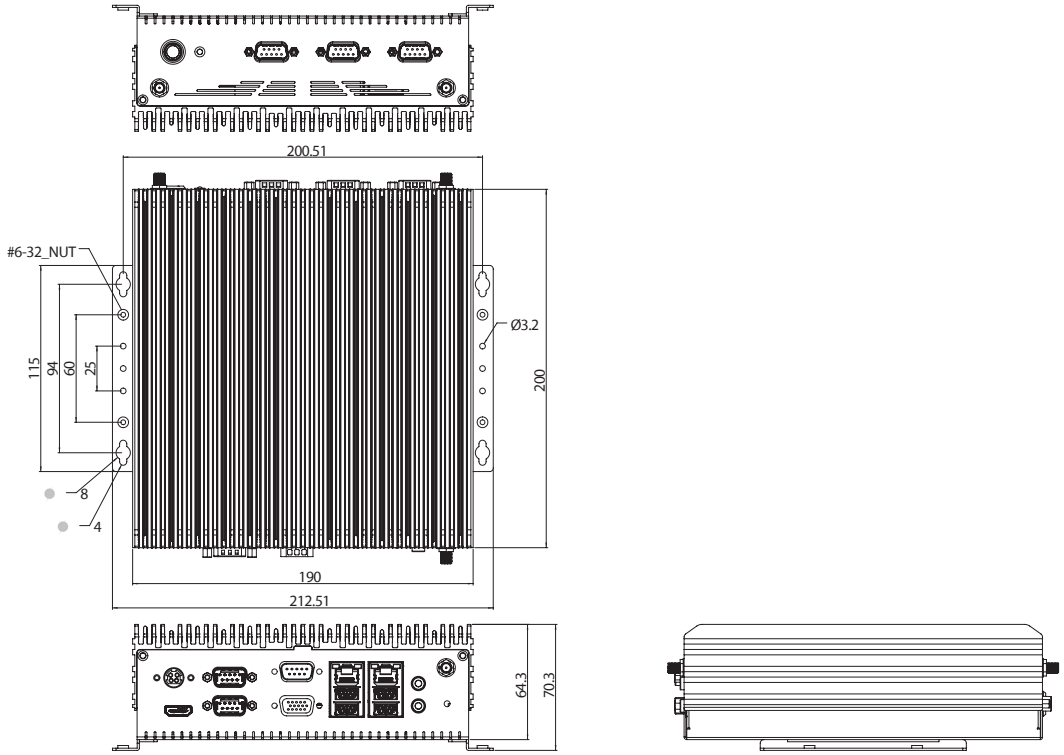
I/O Interface on the Front

- Power button
- HDD LED status
- 3 x RS232 DB9 COM port (COM4 support RI 5V or 12V)
- 2 x Antenna holes

I/O Interface on the Rear

- +12V DC input
- 1 x HDMI 1.4 output, resolution up to 4096 x 2160 @30Hz
- 3 x RS232/422/485 DB9 COM ports
- 1 x VGA output
- 2 x Intel® GbE LAN ports (Intel® I219-LM and I211-AT)
- 4 x USB 3.0
- 1 x Mic-in, 1 x Line-out powered by Realtek ALC888

Dimension Drawing



Internal I/O Function
- 6 x USB 2.0, internal pin header (with Intel® Q370 chipset)
- 3 x USB 2.0, internal pin header (with Intel® H310 chipset)
- 8 channel GPIO, 5V TTL level
- 1 x Internal pin header for speaker with 2W amplifier

Expansion
- 1 x M.2 Key E, 2230, support optional Wi-Fi/Bluetooth module
- 1 x M.2 Key B, 2242/3042, support optional 3G/4G or LTE module
- 1 x SIM card holder for M.2 Key B use

Storage
- 1 x 2.5" SATA SSD space

Power Requirements
- +12V DC input
- Equip with 96W AC/DC power adapter in carton
- AT/ATX power setting by jumper (ATX as the default)

Environment
- Operating temperature: -5°C to 45°C ambient with air flow (according to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14)
- Relative humidity (non-condensing): 95% (non-condensing)
- Storage temperature: -20°C to 80°C
- Shock protection: 50G peak acceleration, 11ms according to IEC60068-2-27
- Vibration protection
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64
  - Sinusoidal: 2G @ 5~500 Hz, IEC60068-2-6

Certification
- CE approval (EN55032/EN55035)
- FCC Class A

Mechanical & Dimension
- Aluminum and metal chassis with fanless design
- 200mm (L) x 190mm (W) x 64.3mm (H) without mounting bracket
- 200mm (L) x 212.5mm (W) x 70.3mm (H) with mounting bracket

Weight Information
- Gross weight: 4.25kgs
- Net weight: 2.68kgs

Ordering Information

- **Neu-X302-Q (P/N: 10W10X30200X0)**
  8th/9th Intel® Core™ edge computing fanless system with Intel® Q370 onboard

- **Neu-X302-H (P/N: 10W10X30201X0)**
  8th/9th Intel® Core™ edge computing fanless system with Intel® H310 onboard