Neu-X303mini

Edge Computing System
Powered by 12th Generation Intel® Core™ Processor

Main Features

- 12th Generation Intel® Core™ (Alder Lake - PS) processor SoC
- Four 4K@60Hz display output, DP, HDMI 2.1 and 2 x USB 3.2 Type-C
- Dual 2.5G LAN ports, 4 x USB 3.2 and 2 x USB 3.2 Type-C ports for easy connection
- Onboard M.2 2280 Key M with PCIe signal for storage modules
- Onboard M.2 2230 Key E for optional Wi-Fi modules
- Compact design (L: 183mm, W: 137.9mm, H: 47.9mm)
- 12V DC in

Product Overview

Powered by the latest 12th Generation Intel® Core™ (Alder Lake–PS) processor, the Neu-X303mini series edge computing system can handle very rich multimedia contents. With Intel® processor's low power consumption and new Intel® Iris® Xᵉ graphics, the platform delivers powerful graphics offering stunning visuals for compelling 4K content creation and media playback. In addition, the Neu-X303mini series supports display output by HDMI and DP ports with flexible integration for various peripherals such as touchscreen displays, scanners, readers, and many more. Neu-X303mini is a compact edge computing system with ample IOs including 2 LAN ports, 4 USB ports, and 2 USB Type-C ports to support intelligent vending machine, self-service checkout machine, AI facial recognition, or digital transit information signs. With enhanced performance, it is also ideal as a visual edge computer delivering advertising, hospitality, and brand promotion applications in an all-new immersive experience.

Specifications

CPU Support
- Intel® Core™ i7-12800HL, 14 Core, 2.4GHz, 24M Cache
- Intel® Core™ i7-12700HL, 14 Core, 2.3GHz, 24M Cache
- Intel® Core™ i5-12600HL, 12 Core, 2.7GHz, 18M Cache
- Intel® Core™ i5-12500HL, 12 Core, 2.5GHz, 18M Cache
- Intel® Core™ i3-12300HL, 8 Core, 2GHz, 12M Cache

Chipset & Memory
- SoC (codenamed Alder Lake-PS)

Main Memory
- 2 x 262-pin DDR5 SO-DIMM, supports non-ECC, un-buffered memory up to 64G

Graphics & Display
- Intel® Iris® Xᵉ graphics engine
- 1 x DP, support 4096x2304@60Hz
- 2 x DisplayPort over USB Type-C, support 4096 x 2304@60Hz
- 1 x HDMI 2.1, support 7680 x 4320@60Hz

I/O Interface-Front
- 1 x Power button
- 1 x HDD LED

I/O Interface-Rear
- 2 x RJ45 Intel® 2.5G Gigabit LAN port
  - 1 x Intel® I225-LM
  - 1 x Intel® I225v
- 1 x DP
- 1 x HDMI 2.1
- 4 x USB 3.2
- 2 x USB Type-C
- 1 x 12V DC input
- 2 x Antenna hole for Wi-Fi

I/O Interface-Internal
- 1 x 4-pin connector for PWM smart FAN
- 1 x USB 2.0 header
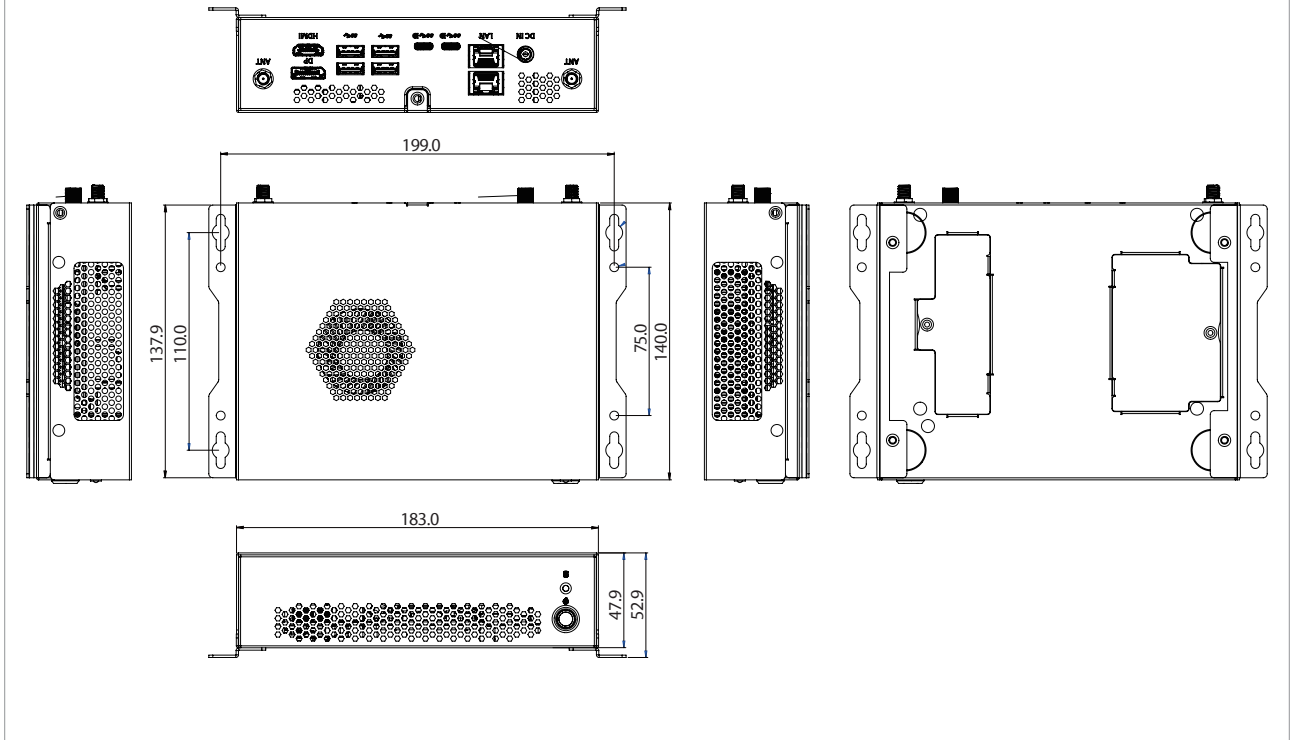- 1 x RS232 header (9-pin)
- TPM 2.0 onboard

Storage
- 1 x M.2 2280 Key M (PCIe x4 only), support optional storage modules

Expansion
- 1 x M.2 2230 Key E (PCIe x1), support optional Wi-Fi modules

Edge Computing System

NEXCOM

Dimension Drawing

Power Requirements

• Power input: 12V DC

Environment

• Operating temperature: 0°C to 60°C
• Storage temperature: -40°C to 80°C
• Humidity: 10 to 95% (non-condensing)
• Shock protection: 50G peak acceleration, 11ms according to IEC-60068-2-27
• Vibration protection:
  - Random: 2G rms@5~500Hz, IEC60068-2-64
  - Sinusoidal: 2G@5~500Hz, IEC60068-2-6

Certification

• CE (EMC EN55032+EN55035)
• FCC Class A (EMI part 15B)

Dimensions

• 183mm (W) x 137.9mm (D) x 47.9mm (H) (without wall mount bracket)

Operating System

• Win10/Win11/Linux

Ordering Information

• **Neu-X303mini (P/N: 10W10X30300X0)**
  Socket LGA1700,12th Generation Intel® Core™ i7/i5/i3 processor compact system, 12V DC