AIEdge-X®310

Main Features

- Support 14th/13th /12th Gen Intel® Core™ - i9/i7/i5/i3 socket processor
- Support optional M.2 module for storage
- Support 2 x SATA 2.5" SSD
- Support 2 x DP, 2 x LAN (1GbE/2.5GbE), 2 x COM, 4 x USB 3.2 Gen1, 2 x USB 2.0

- PCIe slot supports PCIe x16 graphics card up to 350W
- Stylish design with powerful computing power
- Compatible with NVIDIA RTX™ 40 and Quadro GPUs, up to the RTX 6000 Ada

Product Overview

The AIEdge-X® 310, powered by 14th, 13th, and 12th Gen Intel® Core™ processors, supports high-end graphics cards up to the RTX 6000 Ada. Leveraging powerful GPUs with thousands of CUDA cores, it delivers outstanding performance for deep learning, rendering, streaming, and AI applications.

Engineered for demanding visual computing tasks, the AIEdge-X® 310 excels in image analysis, interactive projection, and smart retail management. Its advanced graphical capabilities and real-time processing also make it ideal for virtual and augmented reality applications, ensuring smooth, immersive, and highly interactive experiences.

Specifications

CPU Support

14th/13th/12th Gen Intel® Core™ i9/i7/i5/i3 processor, up to 65W
- Intel® Core™ i9-14900, 65W
- Intel® Core™ i9-14900T, 35W
- Intel® Core™ i7-14700, 65W
- Intel® Core™ i7-14700T, 35W
- Intel® Core™ i5-14500, 65W
- Intel® Core™ i5-14500T, 35W
- Intel® Core™ i5-14400, 65W
- Intel® Core™ i5-14400T, 35W
- Intel® Core™ i3-14100, 65W
- Intel® Core™ i3-14100T, 35W
- Intel® Core™ i9-13900, 65W
- Intel® Core™ i9-13900E, 65W
- Intel® Core™ i9-13900TE, 35W
- Intel® Core™ i7-13700, 65W
- Intel® Core™ i7-13700E, 65W
- Intel® Core™ i7-13700TE, 35W
- Intel® Core™ i5-13500, 65W
- Intel® Core™ i5-13500TE, 35W
- Intel® Core™ i5-13400, 65W
- Intel® Core™ i5-13400E, 65W
- Intel® Core™ i3-13100, 60W
- Intel® Core™ i3-13100E, 60W
- Intel® Core™ i3-13100TE, 35W

Chipset
- Intel® PCH H610E

Graphics
- Intel® Iris Xe

Expansion
- PCIe 5.0 x16
  - Compatible with NVIDIA RTX 40 series and Quadro series, extending up to the optional RTX 6000 Ada (graphics card not included).
  - 3 slots space available for graphics card
  - Suggested expansion card dimension within the limit of 330mm (L) x 121mm (W) x 43mm (H)
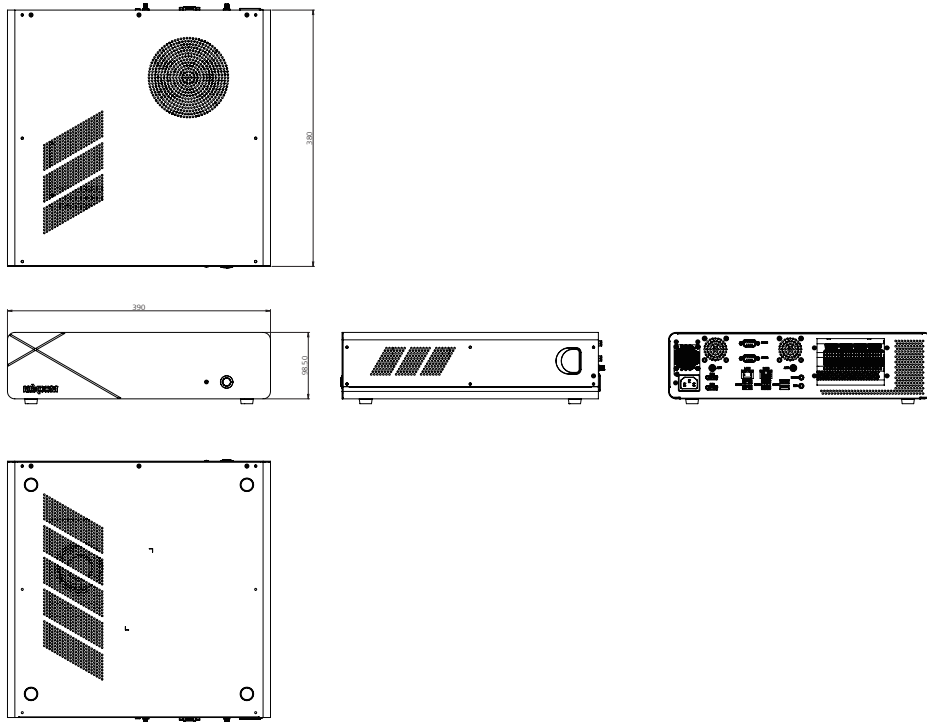
Main Memory
- 2 x DDR5 4800 SO-DIMM, non ECC, unbuffered, up to 64G, up to 32GB per DIMM

Internal I/O
- 1x M.2 Key M 2280 (PCIe 4.0 x4, SATA 3.0)
- 2 x COM port pin header
- 8-channel GPIO pin header
- 2 x SATA 3.0 connector

System Architecture

I/O Interface
- 1 x Power button with LED
- 1 x HDD LED
- 2 x DP 1.4
- 4 x USB 3.2 Gen 1
- 2 x USB 2.0
- 1 x 1GbE RJ45 port, i219LM
- 1 x 2.5GbE RJ45 port, i226LM
- 1 x COM port (DB9), supports RS-232
- 1 x COM port (DB9), supports RS-232/422/485
- 1 x Line out
- 1 x MIC in

Storage
- 1 x 2.5" SATA 3.0 HDD/SSD
- 1 x M.2 Key M 2280 SSD (PCIe 4.0 x4, SATA 3.0)

Power Supply
- 1 x 850W power supply
- Input: 100VAC to 240VAC
- Output: +12VDC

Environment
- Operating temperature: 0℃~45℃
- Storage temperature: -20℃~80℃
- Humidity: 10%~90% (non-condensing)
- Shock protection: 20G peak acceleration, 11ms according to IEC 60068-2-27
- Vibration protection:
  - Random: 2Grms@5~500Hz, IEC 60068-2-64 (with SSD)
  - Sinusoidal: 2Grms@5~500Hz, IEC 60068-2-6 (with SSD)

Certification
- CE (EMC EN55032 + EN55024)
- FCC Class A (EMI part 15B)
- LVD

Mechanical & Dimension
- System Unit
  - Dimension: 390mm (W) x 380mm (D) x 98.5mm (H)
  - Net Weight: 6.7kg/Unit
- Package Carton
  - Gross Weight: 7.3kg 1unit/per carton
  - Carton dimension: 535mm (W) x 480mm (D) x 196mm (H)

Operating System Support
- Windows 10, 64bit
- Linux

Ordering Information

Barebone

- **AIEdge-X®310 (P/N:10W20X31000X0)**
  Industrial AI computing system at the Edge powered by Intel 14th/13th/12th Gen Intel® Core™ CPU