AIEdge-X®300-RTX30

Industrial AI Computing System at The Edge Powered by Intel® 8th Gen Intel® Core™ CPU and NVIDIA® Graphics Card

Main Features

- Supports 8th/9th Gen Intel® Core™ - i3/i5/i7 socket type processor up to 65W
- PCI-e slot supports PCI-e x16 graphics card up to 350W
- Validated with NVIDIA RTX30 series graphics card
- Industrial AI system stylish yet able to contain powerful GPU
- Support optional M.2 module for Wi-Fi and flash storage
- Support 1 x SATA 2.5" HDD/SSD

Product Overview

Powered by the 8th/9th generation Intel® Core™ processor, the AIEdge-X® 300-RTX30 GPU enhanced Edge PC that can handle powerful multimedia content. In addition, it includes one expansion slot for graphics card that supports up to NVIDIA RTX 3090 GPU which powers up to 10496 CUDA Cores, not only does it offer stunning visuals for image projecting, it is also optimal for AI machine/deep learning. AIEdge-X® 300- RTX30 engages "calls to action" with virtual interactions in order to increase product interest and dwell time.

The AIEdge-X® 300-RTX30, supporting HDMI display, LAN ports, USB 3.0 ports, and a RS232/RS422/RS485 interface, is an ideal high-end PC to optimize Image analytics, interactive projection, information visualization, convey brand messages, customer engagement, and smart retail management efficiencies to increase customer interaction and brand awareness. The AIEdge-X®300-RTX30 can also support usages in education, interactive walls/floors, virtual and augmented reality and much more.

Specifications

CPU Support
- Socket LGA1151, Intel® 8/9th Generation Core™ i9/i7/i5/i3 processor, 14nm process

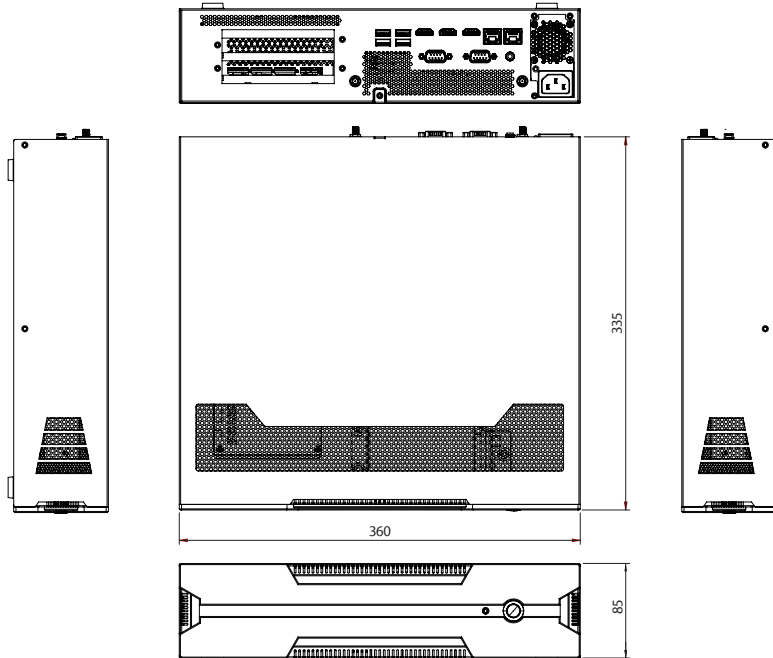| Generation	Socket Type	CPU	Smart Cache	Cores	Threads	Base Frequency	TDP
8th Coffee Lake	FCLGA1151	i3-8100T	6M	4	4	3.1GHz	35W
8th Coffee Lake	FCLGA1151	i5-8500T	9M	6	6	2.1GHz	35W
8th Coffee Lake	FCLGA1151	i7-8700T	12M	6	12	2.4GHz	35W
8th Coffee Lake	FCLGA1151	i3-8300	8M	4	4	3.7GHz	65W
8th Coffee Lake	FCLGA1151	i5-8500	9M	6	6	3.0GHz	65W
8th Coffee Lake	FCLGA1151	i7-8700	12M	6	12	3.2GHz	65W
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
9th Coffee Lake Refresh	FCLGA1151	i9-9900T	16M	8	16	2.1GHz	35W

Chipset
- Intel® PCH Q370

Graphics
- Supports up to RTX 2060 (graphics card optional)

- Integrated graphic powered by Intel® UHD graphics 630
- Suggested expansion card dimension within the limit of 290mm (L) x 121mm (W) x 43mm (H)
- Validated graphics card include:
  - ASUS PH-RTX2060-O6G

AIEdge-X® Series

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System Architecture

- Leadtek Quadro P2200

Main Memory
- 2 x 260-pin SO-DIMM sockets support DDR4-2400/2666 MHz non ECC, un-buffered memory up to 32G (single socket max16GB)

Internal I/O
- 2 x RS232 COM port box header
- 8 channels GPIO pin header
- 4 x USB 2.0 pin header
- 1 x SATA connector

I/O Interface
- 1 x Power button with LED
- 1 x HDD LED
- 2 x Antenna hole
- 3 x HDMI 2.0
- 4 x USB 3.0
- 2 x RJ45 with LEDs for gigabit LAN (i219LM/i211AT)
- 1 x COM 1 port RS232/RS422/RS485
- 1 x COM 2 port RS232
- 1 x Audio line out

Storage
- 1 x SATA 2.5" HDD/SSD
- 1 x M.2 Key M 2280 SSD with SATA/PCIe signal

Expansion
- PCIe x16 Gen 3 slot (2 slot space available for graphics card)
- 1 x M.2 Key E 2230 supporting Wi-Fi module

Power Supply
- 1 x 850W power supply
- Input: 100VAC to 240VAC

- Output: +12VDC

Environment
- Operating temperature: 0°C to 45°C (active cooling design)
- Storage temperature: -20°C to 80°C
- Humidity: 10% to 90% (non-condensing)
- Shock protection: 50G peak acceleration, 11ms according to IEC60068-2-27
- Vibration protection:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64 (with SSD)
  - Sinusoidal: 2G @ 5~500 Hz, IEC60068-2-6 (with SSD)

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

Dimensions
- 360mm (W) x 335mm (D) x 85mm (H)

Operating System Support
- Win10/Linux

Ordering Information

Barebone

- **AIEdge-X®300-RTX30 (P/N:10W20X30001X0)**
  Industrial AI computing system at the Edge powered by Intel 8th/9th Gen Intel® Core™ CPU and NVIDIA® graphics card

- **AIBooster®-X8 (P/N: 10E000AIB00X0)**
  Intel® Movidius™ Myriad™ X VPU PCIe deep learning accelerator card

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AIEdge-X® Series

We reserve the right to change specifications and product descriptions at any time without prior notice.

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Assured Systems

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