

Nuvo-8240GC

Embedded PC for GPU computing with Intel® Xeon® / Core™
9th/8th Gen. CPU & NVIDIA® T4 GPU support

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Features

- Intel® Xeon®/ Core™ 9th/8th Gen. CPU
- 4x DDR4 2,133 SDRAM, up to 128GB
- Intel® C246 chipset
- Supports NVIDIA® L4/ T4/ A2 GPUs
- Wide range of options for power supply via 8 ~ 48 VDC



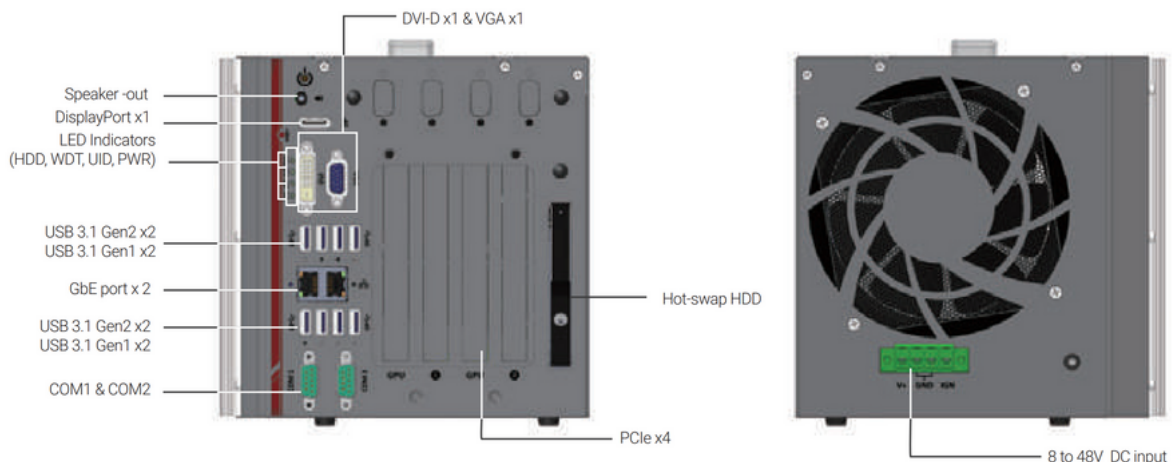
Nuvo-8240GC – Strong computing power and robust design

Nuvo-8240GC is a robust edge AI platform designed to support two NVIDIA® Tesla T4s for advanced inferential acceleration applications. It features NVIDIA multi-precision Turing Tensor cores and new RT cores, while delivering massive GPU performance of up to 130 TFLOPS in FP16 and 520 TOPS in INT4 for advanced GPU-accelerated edge computing and advanced AI inferencing. In addition, the Nuvo-8240GC is powered by an Intel® Xeon® E or 9th/ 8th-Gen Core™ CPU with up to 8 cores and 16 threads in conjunction with the Intel® C246 workstation quality chipset to support up to 128 GB of ECC or non-ECC DDR4 memory.

The system features an internal 2.5-inch SATA HDD/ SSD slot and a hot-swappable 2.5-inch slot for easy HDD/ SSD replacement. There is also an M.2 2280 socket for the ultimate PCIe NVMe SSD. Its front-accessible GbE and USB 3.1 Gen1/ Gen2 ports feature screw-lock mechanisms for secure cable connections. In addition to the two x16 PCIe slots (8 lanes) for graphics card installation, Nuvo-8240GC has two additional x8 PCIe slots (4 lanes) for expansion cards to extend function sets, greatly increasing flexibility for specific applications such as data acquisition, analysis and communications.

The Nuvo-8240GC features a brand new power supply design for 8~48V wide range DC input with integrated ignition control. Mechanically, the Nuvo-8240GC features Neosys' proven heat dissipation design, damping mounts* that withstand vibrations of 3 grms and make it stable and rock solid under various conditions. The Nuvo-8240GC is Neosys' answer to the never-ending performance requirements of industrial AI platforms, and with twice the inferential power, the Nuvo-8240GC is now ready to take it to the next level.

Drawing (mm)



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Specifications	Nuvo-8240GC
SYSTEM	
CPU	Supporting Intel® Xeon® E and Core™ 9th/ 8th Gen CPU (LGA1151 socket) – Xeon E 2176G (6C/12T) / 2278GE (8C/16T) / 2278GEL (8C/16T) – i7-9700E, i7-9700TE, i7-8700, i7-8700T – i5-9500E, i5-9500TE, i5-8500, i5-8500T – i3-9100E, i3-9100TE, i3-8100, i3-8100T
Chipset	Intel® C246 Platform Controller Hub
Graphics	Integrated Intel® UHD Graphics 630
RAM	Up to 128GB ECC/ non-ECC DDR4 2.133 SDRAM (four SODIMM slots)
Storage	2x hot-swappable HDD trays for 2.5" HDD/ SSD installation (support RAID 0/ 1) 1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation 2x full-size mSATA port (mux with mini-PCIe)
AMT	Supports AMT 12.0
TPM	Supports TPM 2.0
Expansion	2x PCIe x16 slots@Gen3, 8-lanes 2x PCIe x8 slots@Gen3, 4-lanes 1x M.2 2242 B key socket supporting dual SIM mode with selected M.2 LTE module 2x full-size mini PCI Express socket
INTERFACE	
Ethernet	1x Gigabit Ethernet port by Intel® I219-LM 1x Gigabit Ethernet port by Intel® I210-IT
USB	4x USB 3.1 Gen2 (10 Gbps) ports 4x USB 3.1 Gen1 (5 Gbps) ports 1x USB 2.0 ports (internal for dongle use)
COM	COM 1/2: software-programmable RS-232/ 422/ 485 ports
Video	1x VGA (supports 1,920 x 1,200 resolution) 1x DVI-D (supports 1,920 x 1,200 resolution) 1x Display Port (supports 4,096 x 2,304 resolution)
Audio	1x 3.5 mm mic-in and speaker-out
ENVIRONMENTAL	
Power Supply	1x 4-pin pluggable terminal block for 8 ~ 48V DC with ignition control
Operating Temperature	With 35W CPU: -25° ~ 60°C** With 65W CPU: -25° ~ 60°C */** (configured as 35W TDP mode) -25° ~ 50°C */** (configured as 65W TDP mode) In compliance with NVIDIA® L4/ T4/ A2 warranty policy, an operating temperature of 0°C~50°C is required for systems with L4/ T4/ A2 installed
Storage Temperature	-40° ~ 85°C
Vibration/Shock Resistance	Vibration: Operating, MIL-STD-810G, Method 514.6, Category 4; and 3 Grms Shock: Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
Humidity	10 ~ 90% , non-condensing
Dimensions	190 (W) x 271 (D) x 198.5 (H) mm
Weight	5kg
Mounting	Wallmount with damping brackets
Certifications	CE/ FCC Class A, according to EN 55032 & EN 55024

* For i7-9700E and i7-8700 running at 65W mode, the highest operating temperature shall be limited to 50°C and thermal throttling may occur when sustained full-loading applied. Users can configure CPU power in BIOS to obtain higher operating temperature.

** For sub-zero operating temperature, a wide temperature HDD or Solid State Disk (SSD) is required.

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Ordering Information	Nuvo-8240GC
Model No.	Industrial-grade edge AI platform supporting dual NVIDIA® Tesla T4 and Intel® Xeon® E and 9th/ 8th-Gen Core™ processor

Optional Accessories	
PA-280W-ET2	280W AC/DC power adapter 24V/11.67A; 16AWG/100cm; cord end terminals for terminal block, operating temperature : -30°C to 60°C