

Nuvo-8208GC

Industrial-grade GPU computing platform supporting dual 250W NVIDIA® GPU Card, Intel® Xeon® E and 8th-Gen Core™ processor



Key Features

- Supports dual 250W NVIDIA® GPU cards
- Supports Intel® Xeon® E and 8th-Gen Core™ i7/ i5/ i3 LGA1151 CPU
- Patented thermal design for -25°C to 60°C rugged operation*
- Two x8, one x4, Gen PCIe slots for add-on cards
- M.2 2280 M key socket (Gen3 x4) supporting NVMe SSD or Intel® Optane™ memory
- 4x USB 3.1 Gen2 ports and 4x USB 3.1 Gen1 ports
- Two hot-swappable 2.5" SATA HDD/SSD with RAID 0/1 support
- Patented damping brackets* to withstand 1 Grms vibration
- 8~35V wide-range DC input with built-in ignition power control

CE FC

Preliminary

*R.O.C Patent No. M534371 / M491752

Introduction

Nuvo-8208GC is world's first industrial-grade GPU computer supporting dual high-end (2x 250W) graphics cards. It's designed to fuel emerging GPU accelerated applications, such as artificial intelligence, VR, autonomous driving and CUDA computing by accommodating NVIDIA® GPU.

Leveraging Intel® C246 chipset, Nuvo-8208GC supports Intel® Xeon® E or 8th-Gen Core™ i7/ i5 CPU with up to 64 GB ECC/ non-ECC DDR4 memory. It incorporates two hot-swappable 2.5" SATA for simple HDD/ SSD replacement and general computer I/O like Gigabit Ethernet, USB3.1, USB3.0 and serial ports. In addition to the two x16 PCIe port for GPU installation, Nuvo-8208GC also has two x8 PCIe slots and one x4 PCIe slot so you can install additional high performance expansion card with high bandwidths for data collections/ analytics and communication.

Nuvo-8208GC features 8~35V wide-range DC input with built-in ignition power control and comes with sophisticated power design to handle heavy power consumption and power transient of dual 250W GPU.

Furthermore, to have reliable GPU performance for industrial environments, Nuvo-8208GC utilizes Neosys' patented design*, a tuned cold air intake to effectively dissipate the heat generated by GPU. This unique design guarantees operation at 60°C under 100% GPU loading, making Nuvo-8208GC extremely reliable for demanding field applications.

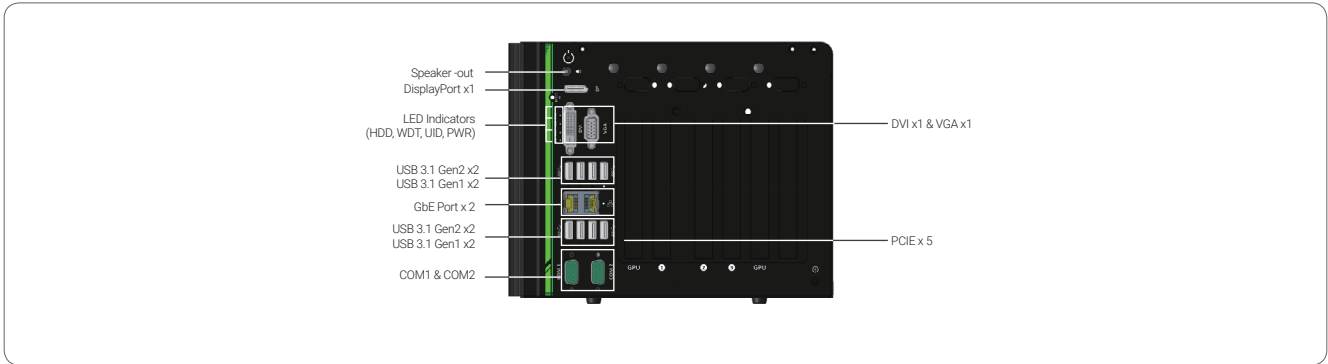
Specifications

System Core		Expansion Bus/ Internal I/O Interface	
Processor	Supporting Intel® Xeon® E and 8th-Gen Coffee Lake CPU (LGA1151 socket)	PCI Express	2x PCIe x16 slot@Gen3, 8-lanes
	- Intel® Xeon® Processor E-2176G		2x PCIe x8 slots@Gen3, 4-lanes
	- Intel® Xeon® Processor E-2124G		1x PCIe x4 slot@Gen3, 1-lane
	- Intel® Core™ i7-8700/ i7-8700T	M.2	1x M.2 2242 B key socket with dual front-accessible SIM sockets, supporting dual SIM mode with selected M.2 LTE module
	- Intel® Core™ i5-8500/ i5-8500T		mini-PCIe
Chipset	Intel® C246 Platform Controller Hub	Power Supply	
Graphics	Independent GPU via x16 PEG port, or integrated Intel® UHD Graphics 630	DC Input	2x 4-pin pluggable terminal block for 8~35V DC input and 1x 3-pin ignition control
Memory	Up to 64 GB ECC/ non-ECC DDR4 2666/ 2400 SDRAM (four SODIMM slots)	Mechanical	
AMT	Supports AMT 12.0	Dimension	235 mm (W) x 360 mm (D) x 185.6 mm (H)
TPM	Supports TPM 2.0	Weight	TBD
I/O Interface		Mounting	Wall-mounting with damping brackets or DIN-Rail mounting (optional)
Ethernet	1x Gigabit Ethernet port by Intel® I219-LM 1x Gigabit Ethernet port by Intel® I210-IT	Environmental	
Native Video Port	1x VGA connector, supporting 1920 x 1200 resolution 1x DVI-D connector, supporting 1920 x 1200 resolution 1x DisplayPort connector, supporting 4096 x 2304 resolution	Operating Temperature	-25°C ~ 60°C with 100% CPU/ GPU loading **/**
Serial Port	2x software-programmable RS-232/ 422/ 485 ports (COM1/ COM2)	Storage Temperature	-40°C ~ 85°C
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)	Humidity	10%~90%, non-condensing
Audio	1x Speaker-out	Vibration	TBD
Storage Interface		EMC	CE/ FCC Class A, according to EN 55024 & EN 55032
SATA	2x hot-swappable HDD trays for 2.5" HDD/ SSD installation		
M.2	1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation		
mSATA	2x full-size mSATA port (mux with mini-PCIe)		

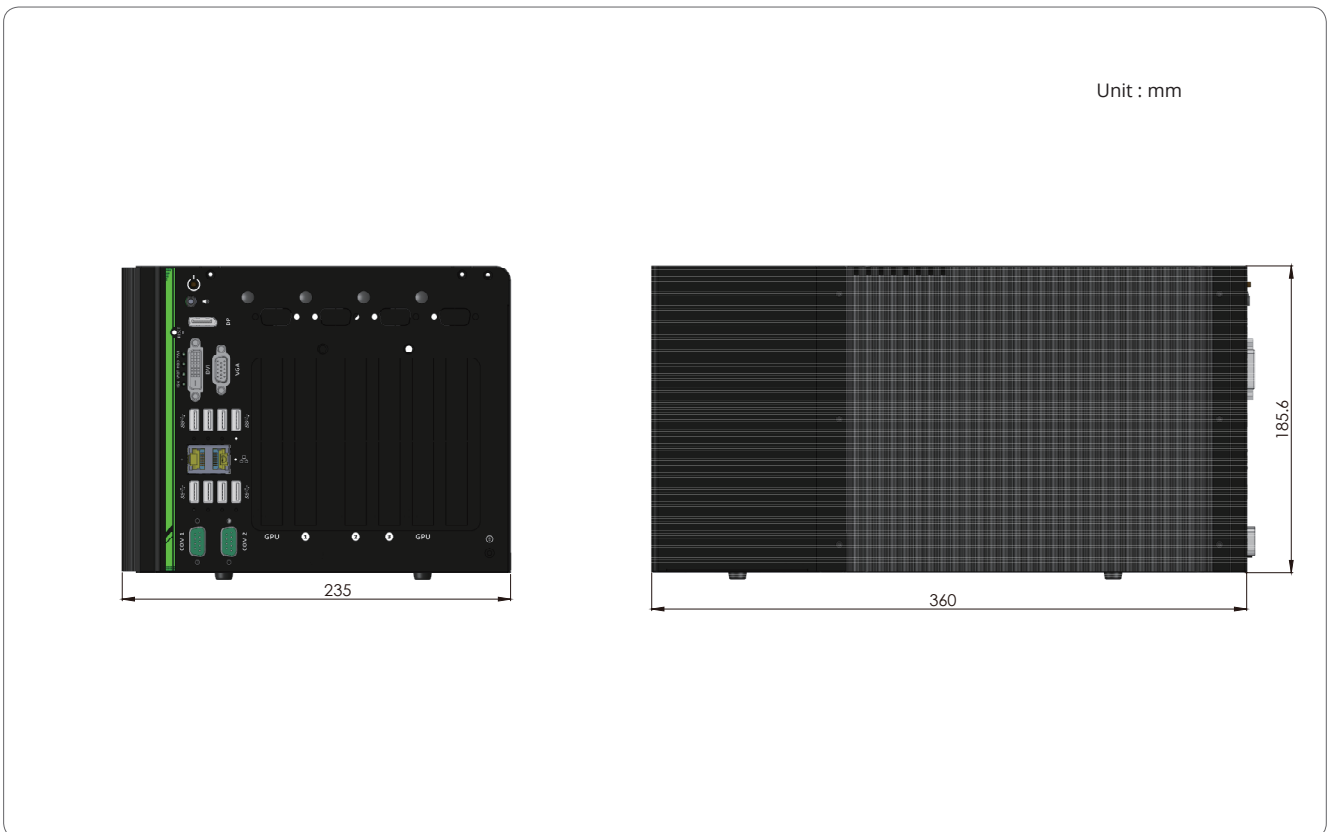
** The CPU and GPU loading are applied using Passmark® BurnInTest 8.0 with 35 TDP CPU. Operating Temperature degrades with higher TDP CPU. For detail testing criteria, please contact Neosys Technology

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

Appearance



Dimensions



Ordering Information

Model No.	Product Description
Nuvo-8208GC	Industrial-grade GPU computing platform supporting dual 250W NVIDIA® GPU Card, Intel® Xeon® E and 8th-Gen Core™ processor with 8-35V wide-range DC input and built-in ignition control