Nuvo-6108GC Series

Edge AI Computer In-Vehicle Platform with Intel® Xeon®/Core™ CPU und NVIDIA® GPU Support

Features

- Intel® Xeon® E3 or Core™ 6th Gen. CPU
- DDR4 2,133 SDRAM, up to 32GB
- Intel[®] C236 chipset
- Supports NVIDIA® RTX 3070 GPU
- Two Gen3 x8 PCIe slots for expansion cards



Nuvo-6108GC: Powerful Computing Performance and Robust Design

The Nuvo-6108GC is an edge AI GPU computing platform that supports high-end graphics cards. Specifically designed for new and demanding tasks, the platform, with its support for an NVIDIA[®] GPU (TDP up to 250W), excels in applications such as artificial intelligence inference, virtual reality, autonomous driving, and CUDA computing, benefiting from the GPU computing power.

Inside the Nuvo-6108GC series lies an Intel[®] C236 chipset, with a choice of either a Xeon[®] E3 v5 or 6th Gen Core[™] i7/i5 CPU, along with configurations of up to 32GB DDR4 memory (ECC/non-ECC). Equipped with common computer I/O interfaces such as Gigabit Ethernet, USB 3.0, and serial ports, the device also features two x16 PCIe slots for GPU installation and two additional x8 PCIe slots, allowing integration of additional devices for data acquisition or exchange.

The Nuvo-6108GC series boasts an intelligent power supply concept capable of meeting the energy demands and power transients of the 250W GPU. The edge computer utilizes a patented heat dissipation design, with a specially designed cold air intake effectively dissipating heat generated by the graphics card, providing reliable GPU performance for industrial environments. This unique design ensures operation at 60°C, even under 100% GPU load, making the Nuvo-6108GC an extremely reliable partner for field deployments.

Nuvo-6108GC Drawing (mm)



Nuvo-6108GC-IGN Drawing (mm)







Last update: April 2024 - Specifications are subject to change without notification



Nuvo-6108GC Series

Edge AI Computer In-Vehicle Platform with Intel® Xeon[®]/Core[™] CPU und NVIDIA[®] GPU Support



Specifications	Nuvo-6108GC Series
SYSTEM	
СРU	Supports Intel® Xeon® E3 V5 and 6th-Gen Core™ LGA 1151 CPU - Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.6/ 4.0 GHz)* - Intel® Xeon® Processor E3-1268L v5 (8M Cache, 2.4/ 3.4 GHz) - Intel® Core™ i7-6700 (8M Cache, 3.4/ 4.0 GHz)* - Intel® Core™ i7-6500 (6M Cache, 3.2/ 3.6 GHz)* - Intel® Core™ i7-6500TE (8M Cache, 2.4/ 3.4 GHz) - Intel® Core™ i5-6500TE (6M Cache, 2.4/ 3.4 GHz) - Intel® Core™ i5-6500TE (6M Cache, 2.3/ 3.3 GHz)
Chipset	Intel [®] C236 Platform Controller Hub
Graphics	Independent GPU via x16 PEG port, or integrated Intel® HD 530 controller
RAM	Up to 32 GB ECC/ non-ECC DDR4 2,133
Storage	4x SATA ports for 2.5" HDD/ SSD installation, supporting RAID 0/ 1/ 5/ 10
Expansion	Ix PCIe x16 slot @ Gen3, 16-lanes PCIE signals for GPU 2x PCIe x8 slot @ Gen3, 4-lanes PCIE signals Ix M.2 B key socket for 3G/4G options with SIM socket Ix full-size mini PCI express socket Ix full-size mini PCI express socket Ix 2×6-pin 2.0mm pin-header connector for remote on/off control and status LED output
INTERFACE	
Ethernet	1x Gigabit Ethernet port by Intel I219-LM 1x Gigabit Ethernet port by Intel I210-IT
USB	4x USB 3.0 ports
СОМ	2x Software-programmable RS-232/ 422/ 485 ports
Video	2x DVI-D connectors for DVI outputs, supporting 1,920 x 1,200 resolution
Audio	1x Speaker-out
ENVIRONMENTAL	
Power Supply	1x 3-pin pluggable terminal block for 24 VDC input
Remote Control & LED	1x 3-pin pluggable terminal block for remote on/off control
Operating Temperature	-25° ~ 60°C with 100% CPU/GPU loading */**
Storage Temperature	-40° ~ 85°C
Vibration/Shock Resistance	Vibration: Operating, 1 Grms, 5-500 Hz, 3 Axes (w/ GPU, fan and HDD), according to IEC60068-2-64
Humidity	10 ~ 90% , non-condensing
Dimensions	Nuvo-6198GC: 164 (W) x 360 (D) x 174 (H) mm Nuvo-6198GC-IGN: 178 (W) x 360 (D) x 174 (H) mm
Weight	4.7 kg (incl. CPU, GPU, memory and HDD)
Mounting	Wallmount with damping brackets
Certifications	CE/ FCC Class A, according to EN 55022, EN 55024 & EN 55032

* The CPU and GPU loading are applied using Passmark® BurnIn Test 8.0 with 35 TDP CPU. Operating Temperature degrades with higher TDP CPU. For detail testing criteria, please contact BRESSNER Technology ** For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.

Nuvo-6108GC Series



Edge AI Computer In-Vehicle Platform with Intel® Xeon®/Core™ CPU und NVIDIA® GPU Support



Ordering Information	Product Description
Nuvo-6108GC	Industrial-grade GPU computing platform supporting 180W NVIDIA® GTX-1080 and Intel® Xeon® E3 v5 and 6th-Gen Core™ processor
Nuvo-6108GC-TI	Industrial-grade GPU computing platform supporting 250W NVIDIA® GTX-1080 Ti and Intel® Xeon® E3 v5 and 6th-Gen Core™ processor
Nuvo-6108GC-IGN	Industrial-grade GPU computing platform supporting up to 250W NVIDIA® graphics card, Intel® Xeon® E3 v5 and 6th-Gen Core™ processor with built-in ignition control and 2x easy-swap trays

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	
PA-480W-DIN	480W AC-DC power adapter DIN-rail mount, 24V 20A, 90~264VAC/127~370VDC, terminal block, -20 to70°C, Meanwell SDR-480-24	