

# Nuvo-8034

Rugged Embedded PC with Intel® Xeon®/ Core™ 8th/9th Gen. CPUs and 7x PCIe/PCI Slots

**BRESSNER**  
A ONE STOP SYSTEMS COMPANY

## Features

- Intel® Xeon®/ Core™ 8th/9th Gen. CPU
- 4x DDR4 2,133 SDRAM, up to 128GB
- Intel® C246 chipset
- 2x PCIe x16, 2x PCIe x8 and 3x PCI slots
- Supports single NVIDIA® GPU card with up to 180W TDP



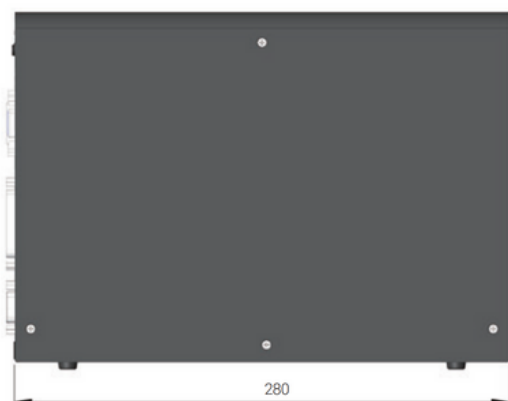
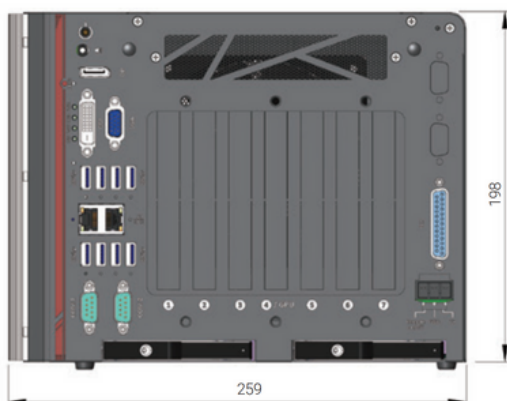
## Nuvo-8034 – Rugged Embedded PC with powerful computing and robust design

The Nuvo-8034, powered by the Intel® C246 chipset, supports Intel® 8th/9th Gen Core™ i CPUs, delivering high-performance computing capabilities. Featuring a unique power supply concept, this embedded PC is capable of supporting the high power consumption of multiple PCIe and PCI expansion cards, with a power input range of 8 to 35 V DC.

Thanks to its up to 7 expansion slots, the Nuvo-8034 offers exceptional flexibility. Two out of four Gen3 PCIe slots are directly connected to the CPU-PEG port, providing a bandwidth of 8 GT/s for high-speed I/O cards. Additionally, the system supports an NVIDIA® graphics card (180 W) for modern AI applications. This fanless embedded PC also includes up to 3 PCI slots compatible with most commercially available PCI cards for general industrial use. The system features 2 hot-swappable drive bays for 2.5-inch SATA III SSD or HDD with RAID 0/1 support, conveniently located on the front panel for easy access in cabinet mounting. Furthermore, the Nuvo-8034 supports external I/O modules, offering 8-channel DI/8-channel DO for industrial automation. It also provides 8x USB 3.1 ports (Gen1/Gen2) with screw-lock connection for devices such as HD cameras.

With its wide array of I/O connections and flexible expansion via 7 PCIe/PCI slots, the Nuvo-8034 is a robust all-in-one solution for various industrial applications including machine vision, industrial automation, and data analysis.

## Drawing (mm)



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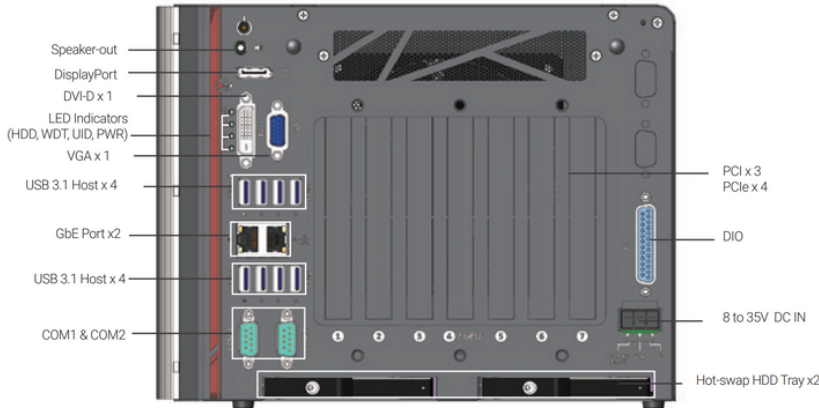
Specifications	Nuvo-8034
<b>SYSTEM</b>	
CPU	Supporting Intel® Xeon® E and 9th/ 8th – Gen CPU(LGA1151 socket) – Intel® Xeon® Processor E-2176G/ E-2124G/ E-2278GE/ E-2278GEL – Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T – Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T – Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T
Chipset	Intel® C246 platform controller hub
Graphics	Independent GPU via x16 (@ x8 signals) PEG port, or integrated Intel® UHD graphics 630
RAM	Up to 128 GB ECC/ non-ECC DDR4 2,133 SDRAM(four SODIMM slots)
Storage	2x hot-swappable trays for 2.5" HDD/ SSD installation, supporting RAID 0/ 1 1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory 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 3x 33MHz/ 32-bit 5V PCI slots 1x M.2 2242 B key socket supporting dual SIM mode with selected M.2 LTE module 2x full-size mini PCI Express socket with internal SIM socket(mux. with mSATA)
<b>INTERFACE</b>	
Ethernet	1x Gigabit Ethernet port by Intel® I219-LM with screw-lock 1x Gigabit Ethernet port by Intel® I210-IT with screw-lock
USB	4x USB 3.1 Gen2 (10 Gbps) ports with screw-lock 4x USB 3.1 Gen1 (5 Gbps) ports with screw-lock 1x USB 2.0 port (internal)
COM	COM 1/2: 2x software-programmable RS-232/422/485 ports COM 3/4: 2x RS-232 ports (optional)
Digital I/O	8x isolated DI 8x isolated DO
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
<b>ENVIRONMENTAL</b>	
Cooling	Fanless
Power Supply	1x 3-pin pluggable terminal block for 8 ~ 35V DC input
Remote Control & LED	1x 3-pin pluggable terminal block for remote control
Operating Temperature	-25° ~ 60°C with 100% CPU/ GPU loading
Storage Temperature	-40° ~ 85°C
Vibration/Shock Resistance	Vibration: Operating, MIL-STD-810G, Method 514.6, Category 4 Shock: Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
Humidity	10 ~ 90% , non-condensing
Dimensions	259 (W) x 280 (D) x 198 (H)mm
Weight	7kg
Mounting	Wallmount
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-8034
Model No.	Intel® 9th/ 8th-Gen Core™ i7/ i5/ i3 embedded computer with 2x PCIe x16(@ x8 signals), 2x PCIe x8(@ x4 signals) and 3x PCI slots

Optional Accessories	
PA-160W-OW	160W AC-DC power Adapter, 20V 8A , 90~264VAC /127~370VDC, Open-Wire Terminal, -30°C~70°C
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. (recommended for 65W CPU or 35W CPU with PoE+ option)
PA-480W-DIN	480W AC-DC power Adapter(SDR-480-24) DIN-rail mount, 24V 20A, 90~264VAC/127~370VDC, Terminal Block, -20°C~70°C
Cbl-IDC210F-DB9M-20CM	10Pin Female to DB9 Male Cable, 20CM