

Rugged Embedded



Nuvo-5026E Series

Intel® 6th-Gen Core™ i7/ i5/ i3 Fanless Controller with Dual PCIe Slot Expansion Cassette, 6x GbE and MeziO™ Interface



Key Features

- Intel® 6th-Gen Core™ i7/ i5/ i3 LGA1151 35W/ 65W
- Dual PCIe x8 slots in patented expansion Cassette*
- MeziO™ interface for easy function expansion
- Rugged, -25°C to 70°C fanless operation
- 6x GbE ports, supporting 9.5 KB jumbo frame
- Up to 32 GB, DDR4-2133 SO-DIMM
- Accommodates two 2.5" SATA HDD/ SSD with RAID 0/1 support
- VGA/ DVI/ DP triple independent display, supporting 4K2K resolution

*R.O.C Patent No. M456527

Introduction

Nuvo-5026E is the latest Nuvo-5000 family member with dual PCIe slots. The dual PCIe slots enhance expansion abilities while preserving all practical features such as ruggedness, performance and versatility. The expandability makes Nuvo-5026E more adaptable to various application needs while the two PCIe slots in the patented expansion Cassette are easy to access for PCIe card installation without the need to disassemble the system. Nuvo-5026E supports LGA1151 6th-Gen Core™ processors. It offers processor selection flexibility from Core™ i7 to Celeron according to performance needs and operating environment. It also offers plenty of I/O functions such as 6x GbE, 4x USB3.0, 3x COM ports and triple independent display support. In addition, Neosys' MeziO™ interface can also further expand system I/Os offering up to either 11x COM ports, 10x GbE, 8x USB3.0, 32x DIO or ignition power control by installing an optional MeziO™ module. Nuvo-5026E is an expandable and flexible platform with numerous I/O functions for various industrial applications.

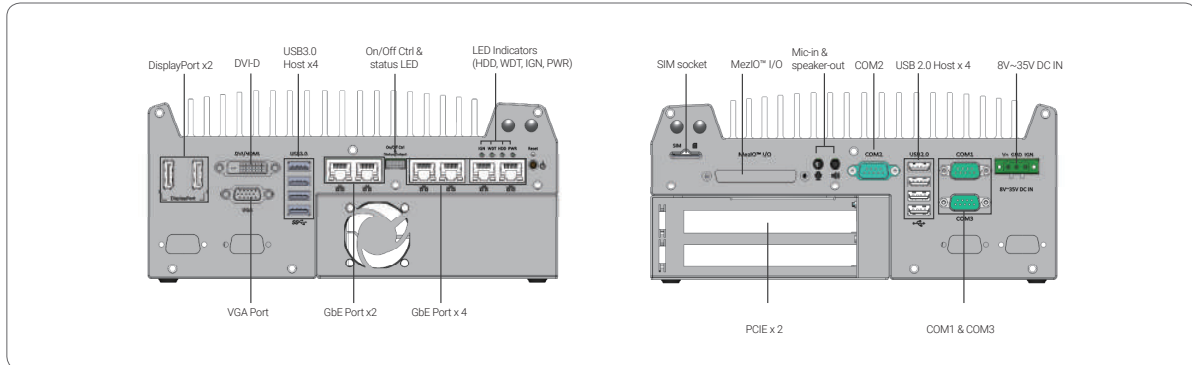
Specifications

| System Core | | Expansion Bus | | |
|--|---|---|---|--|
| Processor | Intel® Core™ i7-6700 (8M Cache, 3.4/ 4.0 GHz, 65W TDP)* | PCI/PCI Express | 2x PCIe x8 slot @ Gen3, 4-lanes PCIe signals in expansion Cassette | |
| | Intel® Core™ i5-6500 (6M Cache, 3.2/ 3.6 GHz, 65W TDP)* | Mini PCI-E | 1x internal mini PCI Express socket with front-accessible SIM socket 1x internal mini PCI Express socket with internal SIM socket (mux with mSATA) | |
| | Intel® Core™ i3-6100 (3M Cache, 3.7 GHz, 51W TDP)* | Expandable I/O | 1x MeziO™ expansion port for Neosys' MeziO™ modules | |
| | Intel® Pentium® G4400 (3M Cache, 3.3 GHz, 54W TDP)* | Power Supply | | |
| | Intel® Celeron® G3900 (2M Cache, 2.8 GHz, 51W TDP)* | DC Input | 1x 3-pin pluggable terminal block for 8~35VDC DC input | |
| | Intel® Core™ i7-6700TE (8M Cache, 2.4/ 3.4 GHz, 35W TDP) | Remote Ctrl. & Status Output | 1x 10-pin (2x5) wafer connector for remote on/off control and status LED output | |
| | Intel® Core™ i5-6500TE (6M Cache, 2.3/ 3.3 GHz, 35W TDP) | Mechanical | | |
| | Intel® Core™ i3-6100TE (4M Cache, 2.7 GHz, 35W TDP) | Dimension | 240 mm (W) x 225 mm (D) x 111 mm (H) | |
| Intel® Pentium® G4400TE (3M Cache, 2.4 GHz, 35W TDP) | Weight | 3.7 kg (incl. CPU, memory and HDD) | | |
| Intel® Celeron® G3900TE (2M Cache, 2.3 GHz, 35W TDP) | Mounting | Wall-mount by mounting bracket (standard) or DIN-rail mounting (optional) | | |
| Chipset | Intel® Q170 platform controller hub | Environmental | | |
| Graphics | Integrated Intel® HD graphics 530 or 510 (CPU dependent) | Operating Temperature | -25°C ~ 70°C ** | i7-6700TE (35W TDP) i5-6500TE (35W TDP) i3-6100TE (35W TDP) Pentium G4400TE (35W TDP) |
| Memory | Up to 32 GB DDR4-2133 SDRAM (two SO-DIMM slots) | | -25°C ~ 70°C */** (configured as 35W CPU mode) | i7-6700 (65W/51W TDP) |
| AMT | Supports AMT 11.0 | -25°C ~ 50°C */** (configured as 65W/ 51W CPU mode) | i5-6500 (65W/51W TDP) | i3-6100 (65W/51W TDP) |
| TPM | Supports TPM 2.0 | Storage Temperature | -40°C ~ 85°C | |
| I/O Interface | | Humidity | 10%~90% , non-condensing | |
| Ethernet | 6x Gigabit Ethernet ports by Intel® I219 and 5x I210 | Vibration | Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64) | |
| PoE+ | Optional IEEE 802.3at PoE+ PSE for GbE Port 3 ~ Port 6, 80 W total power budget | Shock | Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27) | |
| USB | 4x USB3.0 ports via native xHCI controller 4x USB 2.0 ports | EMC | CE/ FCC Class A, according to EN55024 & EN55032 | |
| Video Port | 1x stacked VGA + DVI-D connector 2x DisplayPort connectors, supporting 4K2K resolution | * For i7-6700 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 drive or Solid State Disk (SSD) is required. | | |
| Serial Port | 2x software-programmable RS-232/ 422/ 485 port (COM1 & COM3) 1x RS-232 port (COM2) | | | |
| Audio | 1x Mic-in and 1x Speaker-out | | | |
| Storage Interface | | | | |
| SATA HDD | 2x internal SATA port for 2.5" HDD/ SSD installation, supporting RAID 0/ 1 | | | |
| mSATA | 1x full-size mSATA port (mux with mini-PCIe) | | | |

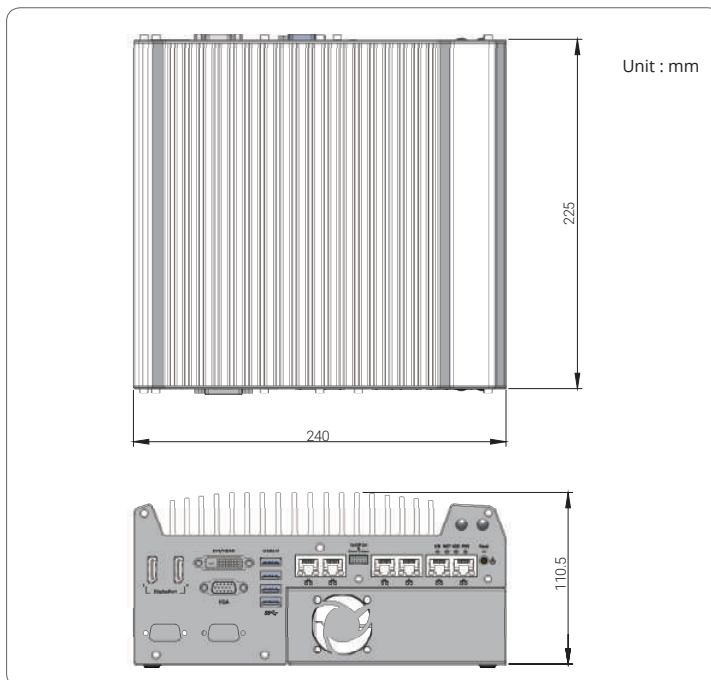
Nuvo-5026E Series



Appearance



Dimensions



▲ Nuvo-5026E



▲ Dual PCIe Cassette

Ordering Information

| Model No. | Product Description |
|------------|--|
| Nuvo-5026E | Intel® 6th-Gen Core™ fanless controller with dual PCIe Cassette, 6x GbE and MeziO™ interface |
| | Optional IEEE 802.3at PoE+ for GbE ports 3 ~ 6 |

Optional Accessories

| | |
|-----------------------|--|
| PA-160W-OW | 160W AC/DC power adapter 20V/8A;18AWGx4C/120cm, cord end terminals for terminal block. operating temperature : -30 to 70 °C. |
| DINRAIL-O | DIN-rail mounting assembly for Nuvo-5026E series |
| DmpbrNuvo5000_7000 | Neosys' patented damping bracket assembly for Nuvo-7000E/DE/P |
| MeziO™ Modules | |
| MeziO™-C180 | MeziO™ module with 4x RS-232/422/485 ports and 4x RS-232 ports |
| MeziO™-C181 | MeziO™ module with 4x RS-232/422/485 ports and 4x RS-422/485 ports |
| MeziO™-D220 | MeziO™ module with 8-CH isolated digital input and 8-CH isolated digital output |
| MeziO™-D230 | MeziO™ module with 16-CH isolated digital input and 16-CH isolated digital output |
| MeziO™-V20-EP | MeziO™ module with ignition power control function for in-vehicle usage |
| MeziO™-G4P | MeziO™ module with 4x Gigabit 802.3at PoE+ ports |
| MeziO™-G4 | MeziO™ module with 4x Gigabit Ethernet ports |
| MeziO™-U4 | MeziO™ module with 4x USB3.0 |

Assured Systems

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US

sales@assured-systems.com

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050
Support: +44 (0)1785 879 050

Unit A5 Douglas Park
Stone Business Park
Stone
ST15 0YJ
United Kingdom

VAT Number: 120 9546 28
Business Registration Number: 07699660