

Nuvo-2500E/P Series

Intel® Celeron® Bay Trail Fanless Computer with Expansion Cassette



Key Features

- Intel® Celeron® Bay Trail J1900 quad-core processor
- 1x PCI/PCIe expansion with compact size
- Rugged, -25°C to 70°C fanless operation
- Dual storage with 1x mSATA and 1x SATA
- Dual independent display via VGA and DVI connectors
- 2x RS-232/422/485 + 2x RS-232
- Optional MAIO for DI/O, PWM and Encoder signals
- 8 to 35VDC wide-range DC input



*R.O.C Patent No. M456527

Introduction

Nuvo-2500 series is a general purpose fanless computer with Intel® Bay Trail processor. Powered by the quad-core Bay Trail processor, Nuvo-2500 shows outstanding computing power and is even more power efficient compared to those with its predecessors. Nuvo-2500 supports dual Independent display, dual storage for isolating system and data, 2x Gigabit Ethernet ports, 4x COM ports and 4x USB ports.

Provided with 1x PCI or PCIe expansion slot, Nuvo-2500 still features its compact design. The dimension is only 205mm (W) x 146mm (D) x 76mm (H). The expansion slot locates in Neosys Patented Expansion Cassette. The patented design well reduces the potential thermal impact from the installed add-on card, and thus make Nuvo-2500 compact, expandable yet stable.

Wireless communication, such as 3G, LTE, Wi-Fi and BT, supported by internal Mini PCIe socket with USIM socket enables Nuvo-2500 connecting to the networks. Moreover, Nuvo-2500 optionally equips with Auxiliary I/O. The Auxiliary I/O includes 4x isolated digital inputs, 8x isolated digital outputs, 6x PWM outputs, 1x quadrature encoder input and 2x ADC. The Auxiliary I/O facilitates simple sequence control and speed control to various types of motors. Nuvo-2500 is perfect for controlling your versatile equipments as well as connecting them up to the Cloud.

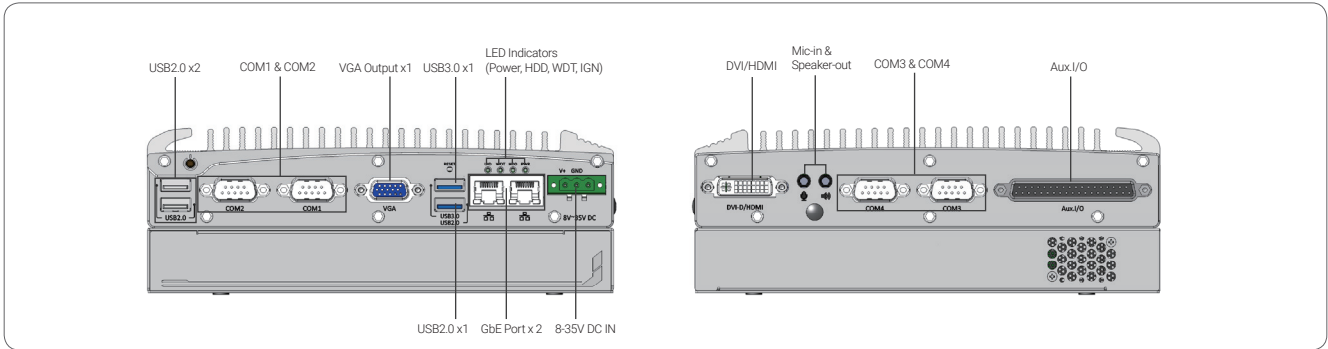
Specifications

System Core		Expansion Bus	
Processor	Intel® Celeron® Bay Trail J1900 quad-core processor (2.42 GHz, 2M cache)	Mini PCI-E	1x full-size mini PCI Express socket with USIM holder (PCIe x1 Gen2 and USB2 signal) 1x full-size mini PCI Express socket (USB signal)
Graphics	Integrated Intel® HD Graphics	PCIe (Nuvo-2500E)	1x PCI Express x4 slot with 1-lane Gen2 PCI Express Signal, supporting max. card size up to 99.4mm x 167.6mm (with optional fan) or 99.4mm x 179.6mm (without optional fan)
Memory	1x 204-pin SO-DIMM socket, up to 8GB DDR3L 1333MHz SDRAM	PCI (Nuvo-2500P)	1x PCI Slot with 33MHz/33-bit PCI, supporting max. card size up to 99.4mm x 167.6mm (with optional fan) or 99.4mm x 179.6mm (without optional fan)
Front Panel I/O Interface		Power Supply	
Ethernet	2x Gigabit Ethernet by Intel® Ethernet Controller I210	DC Input	8~35V DC
Video Port	1x VGA output, supporting resolution up to 2560 x 1600	Mechanical	
Serial Port	2x BIOS-Configurable RS-232/422/485 (COM1 & COM2)	Dimension	205 mm (W) x 146 mm (D) x 73 mm (H)
USB	1x USB3.0 and 3x USB2.0	Weight	2.3 kg (incl. CPU, memory and HDD)
Audio	1x Mic-in and 1x Speaker-out	Mounting	Wall-mounting (standard) or DIN-Rail mounting (optional)
Power Input	1x 3-pin pluggable terminal block for DC input	Environmental	
Back Panel I/O Interface		Operating Temperature	-25°C ~ 70°C with SSD, 100% CPU loading */**
Video Port	1x DVI-D output via DVI-I connector, supporting resolution up to 2560 x 1600	Storage Temperature	-40°C ~ 85°C**
Serial Port	2x RS-232 (COM3 & COM4)	Humidity	10%~90% , non-condensing
Audio	1x Mic-in and 1x Speaker-out	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)
Aux I/O Port	1x DB37 connector 1x DB-37 female connector 4x DI and 8x DO, 6x PWM, 1x encoder and 2x voltage inputs are available as an option of MAIO	Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
Back Panel I/O Interface		EMC	CE/FCC Class A, according to EN 55022 & EN 55024
SATA 2.0	1x Internal SATA port for 2.5" HDD/SSD installation		
mSATA	1x internal half-sized mSATA (SATA + USB)		

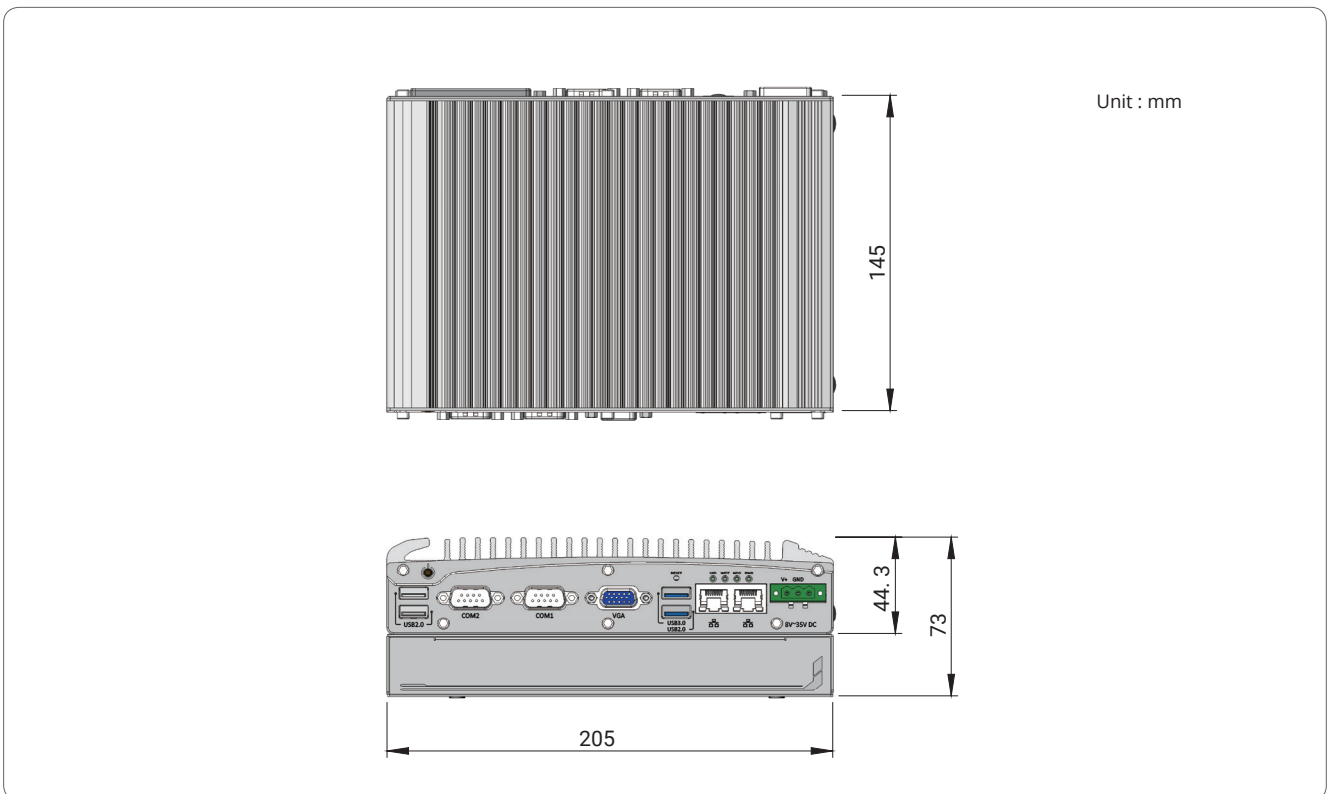
* The 100% CPU loading is applied using Passmark® BurnInTest™ v7.0. For detail testing criteria, please contact Neosys Technology

** 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-2500P	Intel® Celeron® Bay Trail J1900 Fanless Computer with 1x PCI slot in Neosys Patented Cassette
Nuvo-2500E	Intel® Celeron® Bay Trail J1900 Fanless Computer with 1x PCIe x4 slot (PCIe x1 signal) in Neosys Patented Cassette
Nuvo-2500P-POE	Intel® Celeron® Bay Trail J1900 Fanless Computer with 2x IEEE 802.3at PoE+ ports and 1x PCI slot in Neosys Patented Cassette
Nuvo-2500E-POE	Intel® Celeron® Bay Trail J1900 Fanless Computer with 2x IEEE 802.3at PoE+ ports and 1x PCIe x4 slot (PCIe x1 signal) in Neosys Patented Cassette

Optional Accessories

60W AC/DC power adapter with 12V, 5A DC output

DIN-rail mounting kit

Multi-function Automation I/O, including 4x DI, 8x DO, 6x PWM, 1x Encoder and 2x voltage input

Cassette Modules

CSM-PoE354 Cassette module with PCIe-PoE354at and pre-installed passive heat-spreader

CSM-PoE352 Cassette module with PCIe-PoE352at and pre-installed passive heat-spreader

CSM-USB380 Cassette module with PCIe-USB380 and pre-installed passive heat-spreader

CSM-USB340 Cassette module with PCIe-USB340 and pre-installed passive heat-spreader