

# Nuvo-2510VTC

## Intel® Atom™ Bay Trail In-Vehicle Fanless Computer with 2x IEEE 802.3at PoE+ Ports



### Features

- Intel® Atom™ Bay Trail E3845 quad-core processor
- Dual mPCIe and USIM sockets for 3G, LTE, WLAN, BT or GPS modules
- Dual storage with 1x mSATA and 1x SATA
- Intelligent ignition power control
- 1x CAN bus port with compliance to CAN 2.0A and CAN 2.0B
- 8 to 35VDC wide-range DC input
- Operating temperature from -25° to 70°C
- Patented damping bracket\* increases stability with HDD

### Introduction

Nuvo-2510VTC is an in-vehicle fanless computer with Intel® Atom™ E3845 quad-core processor. Equipped with 2 IEEE 802.3at Gigabit Ethernet ports, Nuvo-2510VTC is capable of directly driving 25W GigE and PoE IP cameras with a single standard CAT-5e. Along with intelligent ignition power control and built-in CAN bus, Nuvo-2510VTC is ideal for light-weight mobile applications, such as mobile NVR and mobile APNR. Designed for in-vehicle applications, Nuvo-2510VTC supports wide-range DC input, and thus can be directly powered by 12VDC or 24VDC vehicle battery. It features intelligent ignition power control with selectable on and off delay and battery voltage monitoring. Nuvo-2510VTC also supports one built-in CAN bus port with compliance to CAN 2.0A and CAN 2.0B. The CAN bus is the foundation of many different kinds of vehicles protocols. Nuvo-2510VTC provides 2 PoE+ Gigabit Ethernet ports and 1 USB3.0 port for industry cameras and IP cameras. Besides, 4 serial ports and 3 USB2.0 ports are available. For mobile applications which require data transmission, Nuvo-2510VTC is possible to install two 3G/4G modules with USIMs in its 2 mini PCI Express (mPCIe) sockets. Nuvo-2510VTC is ideal for your versatile in-vehicle applications.

### Product Highlights

#### High Value Fanless Computer

Equipped with Intel® Bay Trail quad-core processor, Nuvo-2510VTC shows much higher performance than previous Atom D2550 computers. This provides adequate computing power for many light-weight applications with reasonable cost. With TDP, thermal design power, of the on-board processor is only 10W, as well as the wide range DC input, Nuvo-2510VTC is also good for battery-powered applications. Moreover, many value-added features, such as shock-absorbing mounting, ignition power control, wide operating temperature, wide-range DC input, are designed in. Whether for in-vehicle or general purpose applications, Nuvo-2510VTC is really a high value industrial fanless computer.

#### Built-in CAN Bus Port

CAN bus is a vehicle bus standard allowing the in-vehicle devices to communicate with each other without a host, and is widely used in different vehicles nowadays. Nuvo-2510VTC provides built-in CAN bus port. The built-in CAN bus supports the bit rate up to 1Mbps and both CAN2.0A and CAN2.0B. These two frame formats forms the Data Link Layer and Physical Layer of many CAN-based HLP, Higher Layer Protocols, such as ISO TP, J1939 and OBD. The built-in CAN bus is provided with SDK facilitating sending and receiving CAN bus messages with configurable CAN bus identifier. By assigning different identifier and data byte, Nuvo-2510VTC is possible to handle different CAN-base HLPs.



#### Ignition Control and Voltage Monitoring

The DC input of Nuvo-2510VTC ranges from 8V to 35V. Besides of AC-DC power supplies for general purpose usages, both 12VDC and 24VDC vehicle batteries can directly power Nuvo-2510VTC for in-vehicle applications. The built-in micro-controller turns on and off the system with a selectable delay correlated with the vehicle ignition signal. Nuvo-2510VTC also monitors the battery voltage power and turns itself off in case of low voltage.



#### 2x IEEE 802.3at PoE+ Ports

Nuvo-2510VTC integrates 2 Gigabit PoE+ PSE ports compliant with IEEE 802.3at standard. Each port can deliver power up to 25.5W and simultaneously transfer data up to 1000 Mb/s over a single CAT-5e/CAT-6 cable. The built-in PoE+ ports support per-port on/off. The per-port on/off feature allows you to reset the connected PoE PD devices. The highly integrated design, moreover, allows Nuvo-2510VTC to effectively manage the heat which PoE circuit generates and consequently makes Nuvo-2510VTC a very stable fanless computer equipped with PoE+ PSE ports.

