

# Nuvo-3005/3003TB Series

## Intel® 3rd-Gen Core™ i7/i5/i3 Fanless Embedded Controller with -25°C to 70°C Operation and Terabytes Storage



### Features

- Intel® 3rd-Gen i7 quad-core superb performance
- Up to 5x GigE ports, supporting 9.5 KB jumbo frame
- Rugged, -25°C to 70°C fanless operation
- Supports one 3.5" HDD and one 2.5" HDD
- 4x USB 3.0 ports + 4x USB 2.0 ports
- Option of isolated DIO with Change-of-State interrupt support

### Introduction

Nuvo-3005TB/3003TB is the embedded version of Nuvo-3000 series. Replacing the expansion Cassette with the installation of one additional 3.5" HDD, Nuvo-3005TB/3003TB delivers terabytes storage capacity in an embedded platform with superior reliability and durability.

Nuvo-3005TB/3003TB incorporates the cutting-edge 3rd-Gen i7 quad-core processor and versatile I/O functions such as Gigabit Ethernet ports, USB 3.0 ports and dual display outputs. It also offers the options of isolated DIO with COS (Change-of-State) interrupt support for wider range of applications.

Inside its compact chassis, Nuvo-3005TB/3003TB accommodates one 2.5" HDD/SSD and one 3.5" HDD to support terabytes storage capacity. A special shock-absorbing bracket is designed to protect 3.5" HDD from shock/vibration, and a unique isolation/conduction chamber is used to manage heat generated by 3.5" HDD and increase overall system stability.

### Specifications

System Core		Power Supply & Ignition Control	
Processor	Intel® Core™ i7-3610QE (2.3/3.3 GHz, 6 MB cache) Intel® Core™ i5-3610ME (2.7/3.3 GHz, 3 MB cache) Intel® Celeron™ 1020E (2.2 GHz, 2 MB cache)	DC Input	1x 4-pin power connector for 8~25V DC input
Chipset	Intel® HM76 Platform Controller Hub	Ignition Control	1x 3-pin pluggable terminal block for ignition signal input (IGN/GND/V+) (Optional)
Graphics	Integrated Intel® HD Graphics 4000 Controller (i7/i5) Integrated Intel® HD Graphics Controller (Celeron)	Remote Ctrl. & Status Output	1x 10-pin (2x5) wafer connector for remote on/off control and status LED output
Memory	2x 204-pin SO-DIMM sockets, up to 16 GB DDR3 1333/1600 MHz SDRAM	Power Consumption	With i7-3610QE : 72.96W (3.84A@19V) With i5-3610ME : 48.83W (2.57A@19V)
I/O Interface		Mechanical	
Ethernet	5x Gigabit Ethernet ports by Intel® i210 (Nuvo-3005TB) 3x Gigabit Ethernet ports by Intel® i210 (Nuvo-3003TB)	Dimension	240 mm (W) x 225 mm (D) x 85.5 mm (H)
Video Port	1x DB-15 connector for analog RGB, supporting 2048x1536 resolution 2x DVI-D connectors for DVI/HDMI outputs, supporting 1920x1080 resolution (Supporting dual independent display outputs)	Weight	3.4 Kg (including 2.5" HDD and DDR3 SO-DIMM)
USB	4x USB 3.0 ports and 4x USB 2.0 ports	Mounting	Wall-mounting (Standard) or DIN-Rail mounting (optional)
Serial Port	2x software-programmable RS-232/422/485 (COM1 & COM2)	Environmental	
Isolated DIO	8x isolated DI with COS interrupt and 8x isolated DO(Optional)	Operating Temperature	With wide-temperature range HDD or SSD installed -25°C ~ 70°C *** (with i5-3610ME & Celeron 1020E) -25°C ~ 60°C *** (with i7-3610QE) With 3.5" HDD installed -10°C ~ 60°C *** (with i5-3610ME & Celeron 1020E) -10°C ~ 50°C *** (with i7-3610QE)
KB/MS	1x 6-pin mini-DIN connector for PS/2 keyboard/mouse	Storage Temperature	-40°C ~ 85°C
Audio	1x Mic-in and Speaker-out	Humidity	10%~90% , non-condensing
Storage Interface		Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)
SATA HDD	1x Internal SATA port for 2.5" HDD/SSD installation 1x Internal SATA port for 3.5" HDD installation	Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
CFast	1x CFast socket	EMC	CE/FCC Class A, according to EN 55022 & EN 55024
Expansion Bus		* 100% CPU loading is applied using Intel® Thermal Analysis Tool. For detail testing criteria, please contact Neousys Technology. ** For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.	
Mini PCI-E	1x internal mini PCI Express socket with USIM socket 1x internal mini PCI Express socket		

### Order Information

#### Nuvo-3005TB-I7QC

Intel® Core™i7-3610QE fanless embedded controller with 5x GbE and dual SATA ports

#### Nuvo-3005TB-I5DC

Intel® Core™i5-3610ME fanless embedded controller with 5x GbE and dual SATA ports

**Option of isolated DIO (8DI + 8DO)(Nuvo-3005TB only)**

**Option of DIN-Rail mounting kit**

**120 W AC/DC power adapter**