nTUF 610

Intel® 2nd Generation Core i7-2610UE 1.5GHz Fanless Marine Computer

Main Features

- On-board Intel® 2nd Generation Core™ i7-2610UE 1.5 Ghz
- 4x USB ports
- Dual M12 connector for Intel® 82574L GbE LAN ports
- 1x VGA display output
- 2x RS232
- 2x PS/2 for keyboard and mouse
- 1x external CFast socket
- 1x mini-PCIe with two antenna holes
- Support +24V DC power input
- Dual Cold Swappable 2.5" SSD tray
- Supports ATX power mode, WoL, LAN teaming and PXE function

Product Overview

nTUF series stands for NEXCOM Tough Computer mainly for Marine Bridge and Control Room computing solution. The nTUF610 Marine Fanless Computer is based on Intel® 2nd Generation Core™ i7 platform providing the highest graphic and computing performance with versatile interfaces for Marine peripherals connection. The nTUF610 features with 4x USB2.0, 2x M12 GbE LAN port, 1x VGA, 1x DVI-D, 2x DB9 RS232, 2x PS/2, 1x CFast socket and two cold swappable 2.5" SSD trays on the front panel. In the rear side, the nTUF600 offers 4x Digital Input, 4x Digital Output and 4x NMEA ports with 2KV optical protection. The isolated 24V DC input in nTUF600 is designed for Marine applications followed by IEC60945 regulations.

The fan-less design and thermal solution on nTUF610 ensure the Marine Bridge System running smoothly and reliably. The front accessible interface design, swappable 2.5" SSD tray and screwed type CFast deliver the benefit of engineering-free and the ease of installation and maintenance. Powered by Intel® Core™ i7 platform, the superior computing and graphic performance enable the nTUF610 an ideal solution for Marine ECDIS Navigation applications.

Specifications

CPU Support

- On-board Intel® 2nd Generation Core™ i7-2610UE 1.5 Ghz 4M Cache
- Intel® QM67 PCH

Main Memory

- 1 x DDR3 SO-DIMM sockets, support up to 2 GB DDR3 1066/ 1333 SDRAM, un-buffered and non-ECC

I/O Interface-Front

- ATX power on/off switch
- HDD access/power status LEDs
- LAN1 & LAN2 Status LEDs
- 4x USB2.0 ports
- 2x M12 GbE LAN ports
- Intel® 82574L GbE LAN controller on board
- 1.5KV ESD/ surge protection
- 1x VGA output & 1x DVI-D display output
- 1x HDMI (only work when optional MXM 3.0 graphic module is installed)
- Audio jack (speaker-out & Mic-in)
- 2x antenna holes
- 2x DB9, RS232
- 2x PS/2 for keyboard & mouse
- 2x cold swappable 2.5" HDD tray
- 1x external screwed type CFast socket
- 3-pin +24V DC input
- 1x external fuse

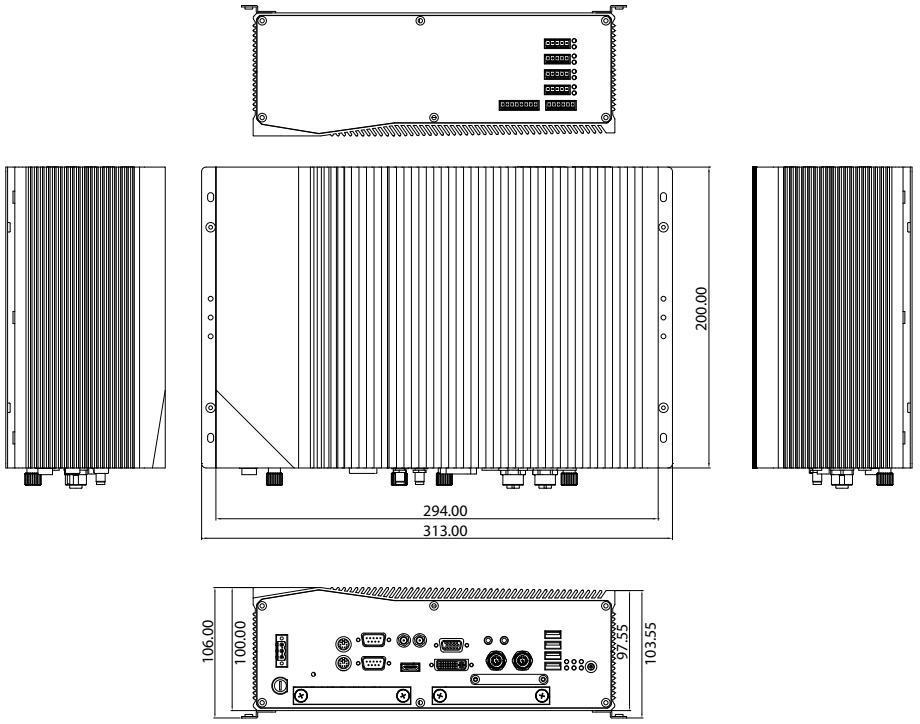
I/O Interface-Rear

- 4x Digital Input: 6-pin screw terminals
  Voltage level: 5V, TTL-level digital input
- 4x Digital Output: 8-pin screw terminals
  36V DC with 100mA relay
- 4x NMEA interfaces
  Signal: TX/RX signals
  2KV optical isolation protection

Device

- 2x 2.5" SSD driver bay
- 1x external CFast socket
- 1x mini-PCIe socket
  Default: support optional Wi-Fi module
  Option: support optional 3.5G module

Dimension Drawing



Power Requirements

- DC input range: 16V~30V DC input
- Nominal DC Input: +24V DC input with 1.5KV isolation protection
- Pin definition: Positive, Negative and Chassis Ground

Dimensions

- 294mm (W) x 200mm (D) x 100mm (H) (11.6"x 7.9"x 3.94")

Construction

- Aluminum chassis with fanless design

Environment

- Operating temperature:
  Ambient with air flow: -25°C ~ 55°C
  (according to IEC60945, E10 and DNV standards)
- Storage temperature: -20°C ~ 80°C
- Relative humidity: 10% to 93% (non-condensing)

Certifications

- IEC60945 (in process)
- IACS-E10 (in process)
- DNV 2.4 (in process)

Ordering Information

Barebone

- **nTUF 610 (P/N: 10M00061000X2)**
  Intel® 2nd generation Core i7-2610UE 1.5GHz
  Fanless Marine Computer