VTC 6100

Intel® Atom™ N270 Fan-less In-vehicle Computer

VTC 6100 with optional IP65 enclosure

Main Features

* Build-in Intel® Atom™ N270 processor
* Availability of GSM/GPRS/WCDMA/HSDPA/GPS
* e13 Mark Certification
* External smart battery back up support
* Power ignition on/off delay control

* Circuitry design for low-power protection
* 6~36V DC power input
* 1 PCI-104 Expansion Slot
* Multiple display interface connections (VGA, DVI-D and LVDS)
* Optional IP65 enclosure

Product Overview

The VTC 6100 is an innovative in-vehicle computer for use in any car, truck, or even for maritime applications. The design itself makes the system available as a complete system allowed the user easily defi ne and build requirements. Thanks to the extremely-low power consumption nature from Intel® Atom™ processor, the VTC 6100 mechanical design is even more compact yet reach wider operating temperature range than ever. The VTC 6100 fulfi lls vehicle industry requirements. The design itself is in compliance with vehicle industrial standard such as eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection and SMBus connection, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS function navigates drivers to ultimate the fleet management. Optional 802.11b/g/n, 3.5G, and Bluetooth availability make the VTC6 100 ready for wider coverage and future trend. Multiple display connections make the VTC 6100 an ideal choice for in-vehicle signage platforms as well.

Specifications

Main Chipset

* 945 GSE + ICH-7M

CPU

* Intel® Atom™ N270 1.6GHz

Memory

* DDR2 400/533 SO-DIMM up to 2GB

Expansion

* 1 x PCI-104
* 1 x Bluetooth module (Optional)
* 2 x Mini-PCI express Socket

I/O interface-Front

* 4 x SMA Antenna holes for WLAN, HSDPA, Bluetooth
* 1 x Power button
* 1 x Reset switch
* 1 x SIM Socket
* 1 x USB
* 4 x LED's for Stand-by, HDD, WLAN/HSDPA and GPO
* 1 x Mic-in & 1 x Line-out

I/O interface-Rear

* 2 x RS232
* 1 x RS232/485 w/ auto flow control
* 1 x DB26 LVDS (w/ +12V for backlight power & USB2.0)
* 1 x DB15 VGA
* 1 x DVI-D
* 2 x USB2.0
* 1 x 10/100/1000 Ethernet
* 1 x Mic-in & 1 Line-out
* 1 x SMA antenna hole for GPS
* 1 x GPIO (4 input & 4 output)
* 6V ~ 36V DC thru 3-pin connector (ignition, power & ground)
* +5V/+12V DC output, SMBus
  5V DC (1A), 12V DC (1A), without VTK 33M-01
  5V DC (0.5A), 12V DC (0.5A), with VTK 33M-01

Expandable storage

* 1 x 2.5" SATA II HDD + 1 x CF

Dimension Drawing

260.0

50.0

176.0
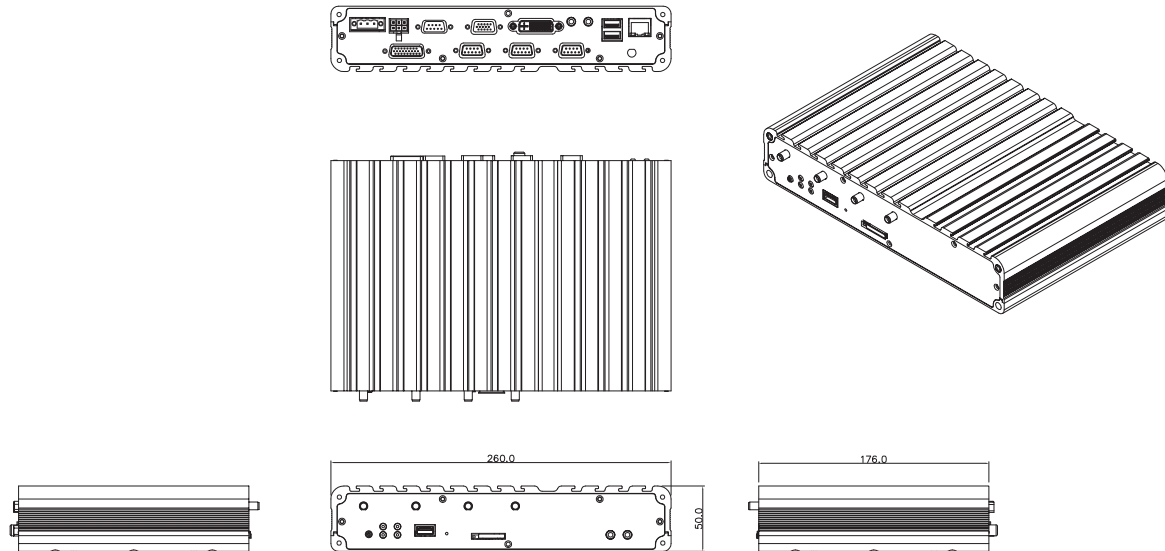
Power management

- Boot-up & shut-down voltage setting selectable for low power protection by software
- Setting 8-level on/off delay time by software
- Status of ignition and low voltage status can be detected by software

IP rating

- IP65 compliant (w/ VTK 60P)

Dimensions

- 260mm(W) x 176mm(D) x 50mm(H) (10.24"(W) x 7"(D) x 1.97"(H))

Construction

- Aluminum enclosure with fanless design

Environment

- Operating Temperature
  -30°C ~ +60°C with CF or Automotive HDD
- Storage Temperature
  -40°C ~ +80°C @ relative humidity 10% to 90% non-condensing
- Vibration (w/o vibration kit)
  2G @ 5-500Hz random with CF
  1G @ 5-500Hz random with Automotive HDD
  MIL-STD-810F Method 514.5 C-17 Category 20
  Gound Vehicle-Highway Truck (in operation)
- Shock
  Operating: MIL-STD-810F Method 516.5, Proceure I, Trucks andsemitrailers=20g
  Non-Operating: MIL-STD-810F, Method 516.5, Procedure V, Gound equipment=75g

Certifications

- CE approval
- FCC Class B
- e13 Mark

Ordering Information

- **VTC 6100 (P/N: 10V00610000X0)**
  Intel® Atom™ N270 1.6GHz processor & 1GB DDR2 memory & GPS module & GPS antenna