VTC 2100

Main Features

- Build-in Intel® Pineview D410 1.6GHz processor
- Internal wireless communication (3.5G, GSM/GPRS,WLAN, BT)
- Smarter ignition power on/off, delay-time and low voltage protection
- PCI-104 and mini card for expansion

- 8~60V wide range DC power input
- Dual VGA output (Clone mode)
- Fan-less design
- Support 2 x RS-232/1 x RS-485

Product Overview

The VTC 2100 is an an economic version of car pc with high performace for use in transportation application. The VTC 2100 system is designed in a very compact form factor, yet maintaining the industrial requirements for high availability, wide operation temperature range, and better vibration protection. The design also follows the in-vehicle industrial standard, like eMark. More features required for in-vehicle operations, such as power ignition delay control, low-power protection, SMBus connection and capture module, etc., are continued from others of NEXCOM's in-vehicle computer products. The GPS is an integrated function of VTC 2100. With expansion capability, the 3.5G, Bluetooth, etc., can be added to cover varieties of application requirements. Dual VGA display connections make the VTC 2100 an ideal choice for in-vehicle signage platforms as well.

Specifications

Main Chipset
- ICH-8M

CPU
- Intel® Pineview D series
  Single Core 1.6GHz (D410)

Memory
- DDR2 667/800 SDRAM one 200-pin SO-DIMM up to 2GB

Expansion
- Mini-PCIe socket (PCIe + USB) x 1 (for WLAN module)
- Mini-PCIe socket (USB) x 1 (for 3.5G module)
- 1 x Bluetooth module (optional)
- 1 x GPS module
- PCI-104 x 1

I/O Interface-Front
- 5 x LED's for power stand-by (on power button), power status, HDD, WLAN/HSDPA and GPIO
- Power button
- 2 x USB port
- 1 x SIM card socket
- System reset button
- 1 x Mic-In, 1 x Line-Out
- 4 x mounting hole SMA-type for WLAN/HSDPA/BT

I/O Interface-Rear
- Mounting hole reserved:
  For RF coax to SMA bulkhead x 1 (for GPS) reference, signal connect to function board
- 8V~60V wide range DC power input, power ignition signal control
- Dual VGA output (clone mode)
- 5V/1A, 12V/1A DC power output, can be controlled by S/W
- 1 x Mic-In, 1 x Line-Out
- 2 x RS232 (COM1/2/), 1 x RS485 (COM3)
- 2 x USB 2.0
- 1 x LVDS (DB26 female connector for LVDS with backlight, control power (+12V) and USB 2.0 x 1)
- 10/100/1000 Fast Ethernet, RJ45 with LED connector x 1
- 1 x GPIO (4 input & 4 output)

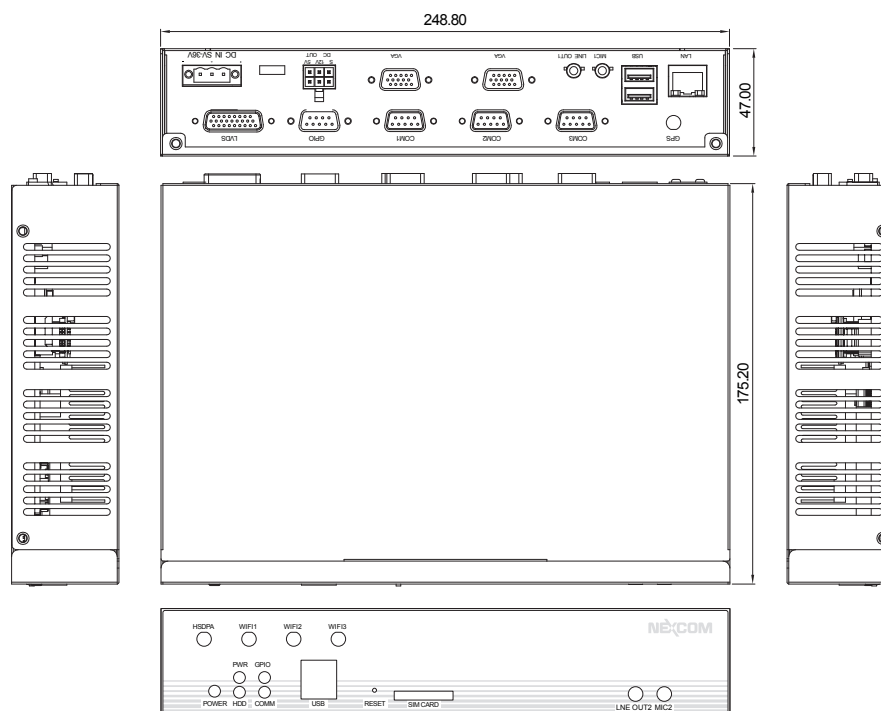### Expandable Storage
- SATA 2.5" HDD Bay x 1

Power Management
- Selectable boot-up & shut-down voltage for low power protection
- HW design ready for 8-level delay time on/off at user's self configuration
- Power on/off ignition, software detectable
- Support S3/S4 suspend mode

VTC 2100

Dimension Drawing

248.80

47.00

175.20

HSDPA WIFI1 WIFI2 WIFI3

PWR GPIO

POWER HDD COMM USB RESET SIM CARD LNE OUT2 MIC2

NEXCOM

Dimensions

- 248.8mm (W) x 175.2mm (D) x 47mm (H) (9.8" x 6.9" x 1.85")

Construction

- Fan-less design

Environment

- Operating temperatures:
  Ambient with air:
  -10°C to 50°C (SSD)
  -10°C to 50°C (HDD)
- Storage temperatures: -40°C to 80°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g@5~500 Hz with SSD; 1g@5~500 Hz with HDD (In operation)
- Vibration:
  Operating: MIL-STD-810F, Method 514.5, Category 20, Ground Vehicle – Highway Truck
  Storage: MIL-STD-810F, Method 514.5, Category 24, Integrity Test
- Shock:
  Operating: MIL-STD-810F, Method 516.5, Procedure I, Trucks and semi-trailers=20g
  Crash Hazard: MIL-STD-810F, Method 516.5, Procedure V, Ground equipment=75g

Certifications

- CE approval
- FCC Class B
- e13 Mark
- EN50155

Ordering Information

- **VTC 2100 (P/N: 10V00210000X0)**
  Intel® Pineview D410 1.6GHz processor w/1GB DDR2, GPS module and GPS antenna
- **Optional Accessories**

Part No.	Description
10VK33M0100X0	VTK 33M-01 8.4" monitor w/Touch Screen
10Z00330200X0	NAK3302, GSM/GPRS Mini-PCIe card module for VTC6xxx & VTC2xxx series
10VK0006006X0	Wireless Mini Card Kit, RALINK 802.11b/g/n 2T3R, QCOM: Q802XKN, w/antenna & cable (without assembly in NEXCOM)
10VK0006000X0	Sierra MC8790V Kit, GPRS/UMTS/HSDPA, w/ internal cable, antenna & packing (without assembly in NEXCOM)
10VK0006007X0	Bluetooth Kit, QCOM: QBTM400-01(V7), w/ antenna&cable (without assembly in NEXCOM)
10VK0006004X0	GPS Kit, GlobalSat: EM-313 w/ antenna& cable (without assembly in NEXCOM)
7400120002X00	Power adapter FSP: 120-AAB(N09001),120W 19V/6.3A
60233SAM03X00	Internal cable for GSM/WLAN/GPS antenna connection. MOQ: 20 pcs
60233SAM05X00	GPS antenna/5m/SMA180P
60233SAM07X00	GSM/GPRS antenna, SMA, support 850/900/1800/1900
60233SAM30X00	GPS+GSM COMBO antenna 5M/SMA180P
60233SAM17X00	GPRS/UMTS/GPRS antenna, SMA, support 850/900/1800/1900/2100