



## Main Features

- Build-in Intel® Atom™ 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)
- Fanless design
- Support 2 x RS-232/ 1 x RS-485

## Product Overview

The VTC 2100 is an economic version of car pc with high performance 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® Atom™ D410 Single Core 1.6GHz

### 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 SMA-type antenna hole 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 RS-232 (COM1/ 2), 1 x RS-485 (COM3)
- 2 x USB 2.0
- 1 x LVDS (DB26 female connector with backlight 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)

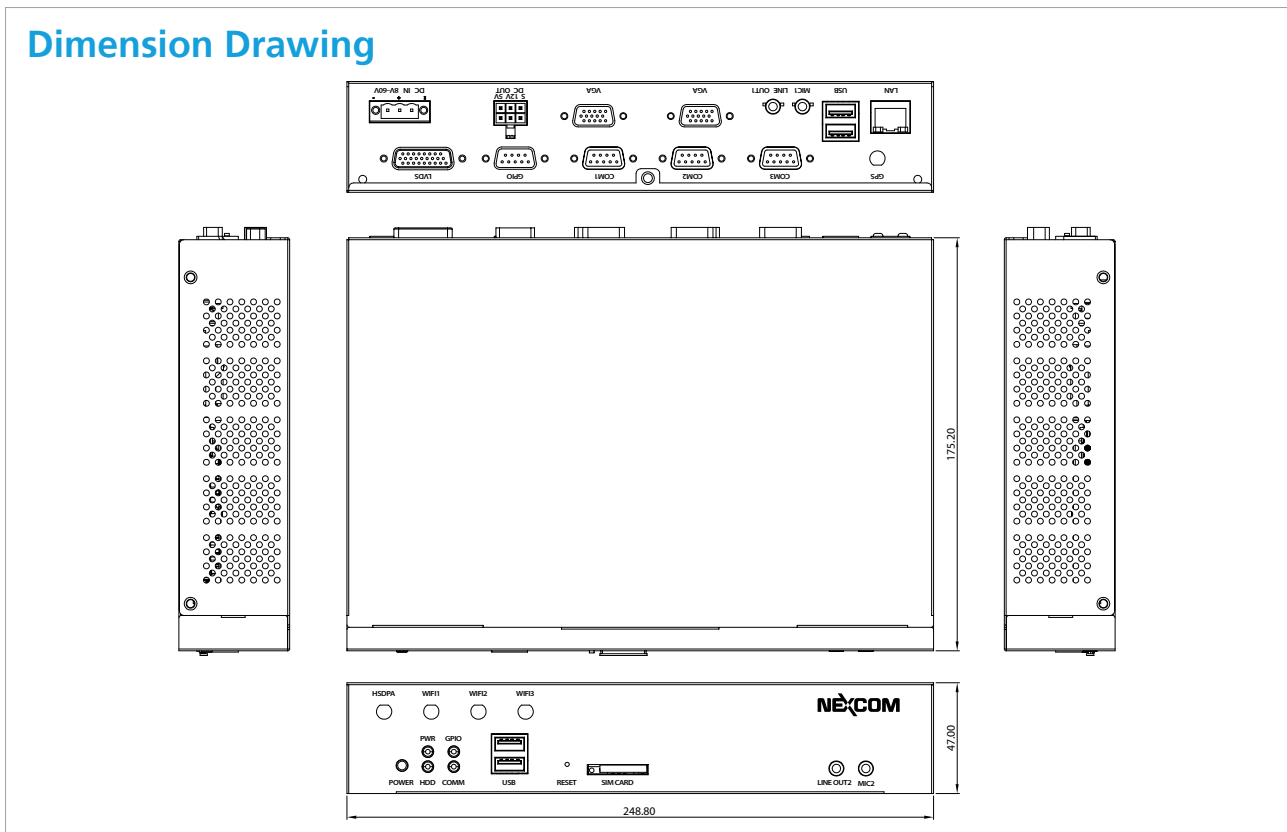
### Expandable Storage

- 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

## Dimension Drawing



### Dimensions

- 248.8mm (W) x 175.2mm (D) x 47mm (H) (9.8" x 6.9" x 1.85")
- 1.49 Kg (3.28 Lb)

### Construction

- Fanless 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

## Ordering Information

### • VTC 2100 (P/N: 10V00210000X0)

Intel® Atom™ D410 1.6GHz processor w/ 1GB DDR2, GPS module and GPS antenna

### • Optional Accessories

Part No.	Description
10VD010000X0	VMD 1000-B 7" monitor w/ touch screen
10VK33M0100X0	VTK 33M-01 8.4" monitor w/ touch screen
10VK0061B00X0	VTK 61B, Back-up battery kit for 4 hours in system full loading
10VK0006013X0	Wireless mini card kit, Ralink 802.11b/g/n 2T2R, QCOM: Q802XKN5F, 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
60233SMA30X00	GPS+GSM combo antenna 5M/ SMA180P
60233SAM17X00	GPRS/ UMTS/ HSDPA antenna, SMA, support 850/ 900/ 1800/ 1900/ 2100