VTC 7210

Intel® Core™ i5-4300U Fanless In-Vehicle Computer





Main Features

- Intel® Core™ processor dual core i5-4300U
- Three SIM cards + dual WWAN modules support
- Dual externally accessible SATA 3.0 SSD/HDD
- Built-in u-blox NEO-M8N module, optional dead reckoning support
- Built-in CAN 2.0B. optional CAN/OBDII module
- Wake on RTC/SMS via WWAN module
- Voice communication via WWAN module
- Compliant with MIL-STD-810G
- 4 x mini-PCIe socket rich expansion capability

Product Overview

VTC 7210 features powerful new generation Intel® Core™ processor i5-4300U. Its CPU performance gives the users the ability to adapt to what they need in any telematics applications. Its Intel® HD graphics 5000 engine allows users to fully take advantage of VTC 7210 to achieve smooth, seamless and stunning graphic performance on 3 different video outputs (VGA, DP, LVDS). VTC 7210 is equipped with 2 externally accessible SSD/HDD trays; users can easily download or upload the data on other devices by just removing the storage devices from VTC 7210. By integrating the variety of I/O ports and 4 x mini-PCIe sockets expansibility, VTC 7210 is not only suitable for video surveillance application, but also can meet the demand for other telematics applications, such as infotainment, fleet management and dispatching system. With dual SIM cards support, VTC 7210 allows three SIM cards backup each other for a better connectivity quality by software. In addition, three SIM cards + dual WWAN modules architecture can increase the bandwidth for a faster data transfer speed. Not only data transmission, VTC 7210 also supports two-way voice communication. Equipped with intelligent power management, VTC 7210 can be waked on by ignition, RTC timer or SMS/Ring remotely.

Specifications

CPU

- Intel® Core™ processor dual core i5-4300U, 1.9GHz

Memory

- 2 channel 204-pin DDR3L SO-DMIM socket support 1333/1600MHz up to 16GB, default 2GB

Storage

- 2 x 2.5" SATA 3.0 SSD/HDD (externally accessible), RAID 0,1 supported (optional lockable storage available)
- 1 x CFast (externally accessible)

Expansion

- 1 x Full size mini-PCIe socket (USB 2.0)
- 1 x Full size mini-PCIe socket (USB 2.0 + PCIe)
- 1 x Full size mini-PCIe socket (USB 2.0 + PCIe)
- 1 x Half size mini-PCIe socket (USB 2.0 + PCIe)

Function

- 1 x u-blox NEO-M8N module (support GPS/Gloness/QZSS/Galileo/Beidou) or optional module with Dead Reckoning
- Built-in G-sensor

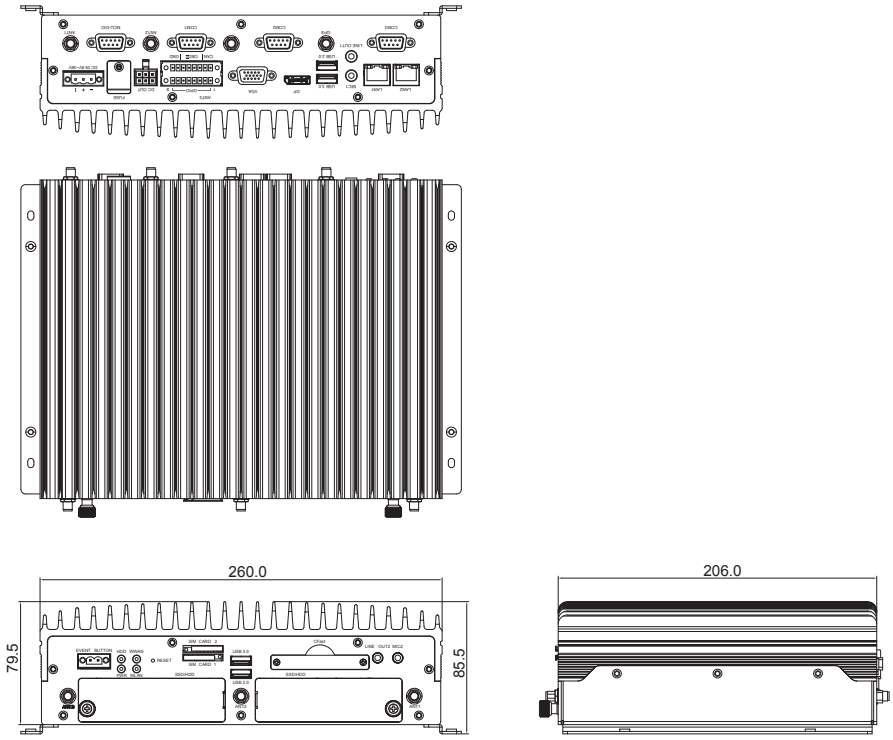
I/O Interface-Front

- 4 x LED for power, storage, WWAN, WLAN
- 2 x Externally accessible SATA 3.0 SSD/HDD tray, RFID 0, 1 supported (optional lockable storage available)
- 1 x Dual USB type A connector for USB 3.0 port + USB 2.0 port
- 2 x Externally accessible SIM card socket (selectable)
- 1 x Phone jack 3.5mm for 1 x Mic-in
- 1 x Phone jack 3.5mm for 1 x Line-out
- 1 x Externally accessible CFast card socket with cover
- 1 x Event button (trigger type)
- 1 x Reset button
- 3 x Antenna hole for WWAN/WLAN/BT

I/O Interface-Rear

- 1 x 9~36VDC input with ignition and 36W typical power consumption
- 1 x Dual USB type A connector for USB 3.0 port + USB 2.0 port
- 2 x RJ45 10/100/1000 Fast Ethernet with LED
- 1 x Phone jack 3.5mm for 1 x Mic-in
- 1 x Phone jack 3.5mm for 1 x Line-out with 1.5W output each
- 1 x DB-15 VGA. Resolution up to 2560 x 1600 @60Hz
- 1 x DP port. Resolution up to 2560 x 1600 @60Hz

Dimension Drawing



- 2 x DB-9 RS-232
- 1 x DB-9 RS-232/422/485 (RI/5V/12V selectable)
- 1 x DB-9 for CAN 2.0B (optional CAN Bus 2.0B mini-PCIe card), 2 x MCU-DI and 2 x MCU-DO
- 1 x 16-pin terminal block
  - 1 x CAN Bus 2.0B (on board)
  - 1 x optional CAN/OBDII module (CAN Bus 2.0B or OBDII SAE J1939)
  - 8 x Programmable GPIO
    (Digital Input)
    Input voltage (internal type): 5VDC TTL (default)
    Input voltage (source type): 3~12VDC
    (Digital Output)
    Digital output (sink type): 5VDC TTL (default), max current: 20mA
    Digital output (source type): 3 ~ 24VDC, max current: 150mA
- 1 x 12VDC output (2A), SM Bus
- 4 x Antenna hole for WWAN/WLAN/BT/GPS
- 1 x Fuse (15A)

Power Management

- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level power on/off delay time by software
- Status of ignition and low voltage can be detected by software
- Support S3/S4 suspend mode

Operating System

- Windows 8, WES8
- Window 7, WES7
- Linux kernel 3.X

Dimensions

- 260mm (W) x 206mm (D) x 79.5mm (H) (10.24" x 8.11" x 3.13")
- Weight: 2.5kg

Environment

- Operating temperatures:
  -30°C to 50°C (w/ industrial SSD) with air flow
  -20°C to 45°C (w/ commercial HDD) with air flow
- Storage temperatures: -35°C to 85°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 1.5g@5 ~ 500 Hz (in operation, HDD), 2g@5 ~ 500 Hz (in operation, SSD)
- Vibration (SSD/HDD):
  Operating: MIL-STD-810G, Method 514.6, Category 4, common carrier US highway truck vibration exposure
  Storage: MIL-STD-810G, Method 514.6, Category 24, minimum integrity test
- Shock (SSD/HDD):
  Operating: MIL-STD-810G, Method 516.6, Procedure I, functional shock=20g
  Non-operating: MIL-STD-810G, Method 516.6, Procedure V, crash hazard shock test=75g

Standards/Certifications

- CE approval
- FCC Class B
- E13 Mark

Ordering Information

- **VTC 7210-BK (P/N: 10V00721000X0)**
  Intel® Core™ processor i5-4300U, 1.9 GHz dual core CPU, Industrial Grade 2GB DDR3L SO-DIMM, VGA/DP output, 2 LAN, 2 x RS-232, 1 x RS-232/422/485, 8 x GPIO, 3 x USB, 12VDC output

We reserve the right to change specifications and product descriptions at any time without prior notice.