

VTC 7110

Intel® Core™ i7 Fanless In-Vehicle Computer



Main Features

- Build-in Intel® Core™ i7 2610UE 1.5G Hz processor
- Support two Ethernet LAN ports
- Removal 2.5" SSD tray
- Optional CAN bus in support of SAE J1939 or J1708
- Optional isolation digital input and output
- 9~36V wide range DC power input
- Smarter ignition power on/off, delay-time and low voltage protection
- Optional 4-channel POE
- Rugged fanless design to meet MIL standard

Product Overview

VTC 7110, adopting the high performance processor, Intel® Core™ i7, is a new generation of VTC series. In addition to keep the advantage of existing VTC series, it offers dual LAN ports for redundancy, two high speed interface for storage, 2.5" SATA and CFAST. The storage is easily accessible from the front side for maintenance concern. Furthermore, it offers the CAN bus for heavy duty truck such as SAE J1939/ J1708. The outstanding is its flexible designs to reserves the space and interface to extend the required features for application such as 8-channel POE with second storage interface. With the rich features, VTC7110 can satisfy your demand in vehicle applications.

Specifications

Main Chipset

- QM67

CPU

- Intel® Core™ i7 2610UE 1.5GHz

Memory

- One 204-pin SO-DIMM DDR3 1333 up to 4GB

Communication Expansion

- Mini-PCIe socket (PCIe + USB) x 1 (for optional WLAN module)
- Mini-PCIe socket (USB) x 1 (for optional 3.5G module)
- Optional Bluetooth module
- On board Built-in GPS module or optional GPS with dead reckoning

Features Expansion via Optional I/O Board

- 4-channel POE with one 2.5" SSD tray
- 16-channel isolation digital inputs and outputs, and one DB9 for SAE J1939 or SAE J1708

I/O Interface-Front

- 5 x LED's for power stand-by (on power button), power status, HDD, WLAN/ HSDPA and GPIO
- 1 x power button
- 2 x USB port
- 2 x SIM card socket
- 1 x system reset button
- 1 x Mic-in, 1 x Line-out

- 1x CFAST with protection cover
- 1 x accessible 2.5" SSD tray (HDD)

I/O Interface-Rear

- 2 x USB 2.0 host type A connector
- 1 x VGA
- 1 x DB26 pin connector (LVDS, USB, 12V, 5V) or optional with DVI-D
- 2 x RJ45 with LEDs for 10/100/1000Mbps Ethernet
- 2 x DB9 male connector (1 x RS-232; 1x 485/422) or optional with CAN bus to replace one RS-232
- 1 x DB9 female connector for GPIO
Input (source type; 0~30V)
Output (sink type; 20mA max)
- 1 x Mic-in and 1 x Line-out
- 12V@4A DC output connector (TBD)
- 2 pin switch power output directly from vehicle source (@4A)
- Reserved for 4 optional antenna hole for GPS/ WWAN/ WLAN
- 1 x 3-pin power input connector (9~36V DC-in)

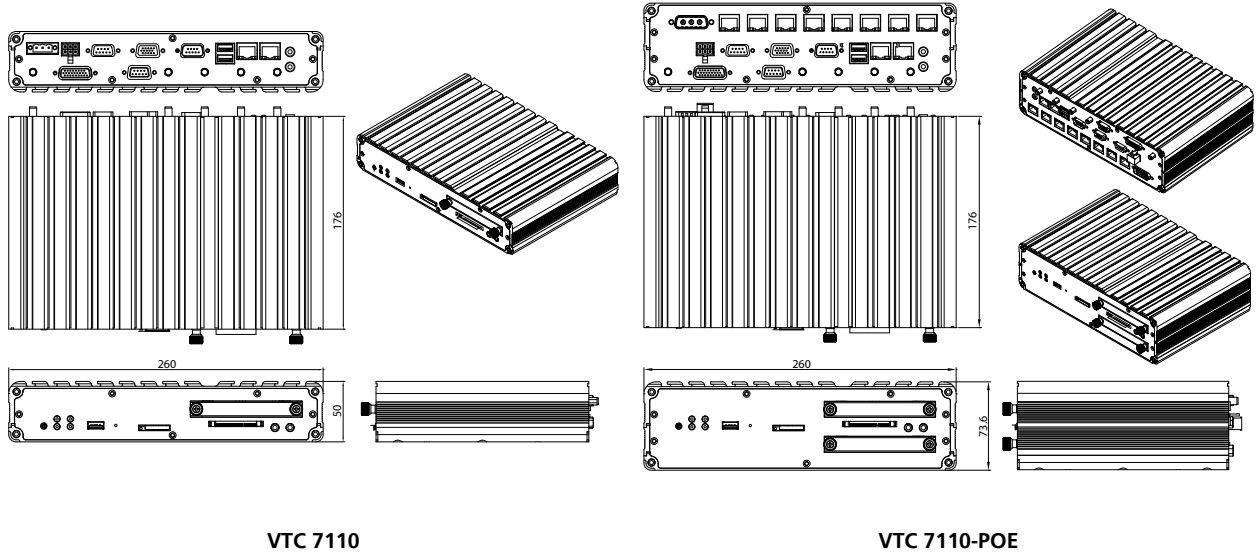
Expandable Storage

- 1 x 2.5" SATA tray
- 1 x CFAST

Power Management

- Selectable boot-up & shut-down voltage for low power protection by software
- Setting 8-level on/off delay time by software

Dimension Drawing



VTC 7110

VTC 7110-POE

- Status of ignition and low voltage status can be detected by software
- Support S3/ S4 suspend mode

Dimensions

- VTC 7110-B:
260mm (W) x 176mm (D) x 50mm (H) (10.24" x 6.93" x 1.97")
2.19 Kg (4.82 Lb)
- VTC 7110-C4 and VTC 7110-D1
260mm (W) x 176mm (D) x 73.6mm (H) (10.24" x 6.93" x 2.9")

Construction

- Aluminum enclosure with fanless design

Environment

- Operating temperatures:
Ambient with air:
-30°C to 50°C
- Storage temperatures: -35°C to 85°C
- Relative humidity: 10% to 90% (non-condensing)
- Vibration (random): 2g@5~500 Hz with SSD (in operation)
- Vibration (with SSD):
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 (with SSD):
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

Protection Grade

- Optional IP65 available upon request

Certifications

- CE approval
- FCC Class A
- e13 Mark

Ordering Information

- **VTC 7110-B (P/N: 10V00711000X0)**
Intel® Core™ i7 1.5GHz processor, 1GB DDR3, built-in GPS module, DB26 for proprietary LVDS and 2 DB9 in support RS-232 and RS-485/422
- **VTC 7110-D1 (P/N: 10V00711001X0)**
VTC 7110 with isolation digital inputs and outputs, and SAEJ1939 support
- **VTC 7110-C4 (P/N: 10V00711002X0)**
VTC 7110 with 4-channel POE and additional one 2.5" SSD tray

Optional Accessories

Part No.	Description
10VD010000X0	VMD 1000-B 7" monitor w/ touch screen
10VD010010X0	VMD1001-B 7" Monitor w/ touch screen, VGA interface
10VD020000X0	VMD2000-B 8" Monitor w/ touch screen
10VD020010X0	VMD2001-B 8" Monitor w/ touch screen, VGA interface
10VD020020X0	VMD2002-B 8" Monitor w/ touch screen, cable integration
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)
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