VTC 6220-BK

Intel Atom® x7- E3950 Fanless In-Vehicle Computer





Main Features

- Intel Atom® x7-E3950 processor quad core 1.6GHz
- 3 x LAN support (2 x POE by request)
- Dual externally accessible 2.5" SSD tray
- Inside backup battery (option)
- VGA/HDMI/(ultraONE+ is supported to 10 meter or LVDS, by request)
- 4 x SIM card support (default type is 3 x external & 1 x internal)
- Built-in u-blox M8N GPS module, optional dead reckoning support
- Built-in CAN 2.0B optional SAE J1708/SAE J1939 module
- Dual Mic-in and Line-out for various application
- Certified by CE/FCC/E13 mark

Product Overview

VTC 6220-BK features next generation Intel Atom® x7-E3950 processor quad core 1.6GHz, is specifically powerful designed for the public transit or public works. It allows 3 x LAN support (2 x POE by request) are suited for most devices, including wireless access points, as well as IP cameras. We also support dual externally accessible 2.5" SSD tray for high storage capacity. In the meantime, VGA/HDMI/(LVDS or ultraONE+, option) video output to provide customer the appropriate choice. On board CAN 2.0B and optional OBD interface (SAE J1939) for vehicle diagnostics and driver behavior management. An advanced GPS receiver supports GPS/Gloness/QZSS/Galileo/Beidou and optional dead reckoning module is also available.

VTC 6220-BK can be optioned inside backup battery to avoid power failure. By integrating the variety of I/O ports and 1 x M.2 & 3 x mini-PCIe sockets expansibility, VTC 6220-BK also keeps the flexibility to meet the demand for different telematics applications, such as infotainment, fleet management, dispatching system and video surveillance.

Specifications

CPU

- Intel Atom® processor Apollo Lake E3950, 1.6GHz

Memory

- 1 x 204-pin DDR3L SO-DIMM socket support 1066MHz/1333MHz up to 8GB (default 4GB)

Storage

- 2 x Removable 2.5" SSD tray

Expansion

- 1 x Full size mini-PCIe socket (USB 2.0)
- 1 x M.2 slot B (USB 3.0 + USB 2.0)
- 2 x Full size mini-PCIe socket (USB 2.0 + PCIe)

Function

- 1 x U-blox NEO-M8N module (support GPS/Glonass/QZSS/Galileo/ Beidou)
- Built-in G-sensor
- TPM 2.0

I/O Interface-Front

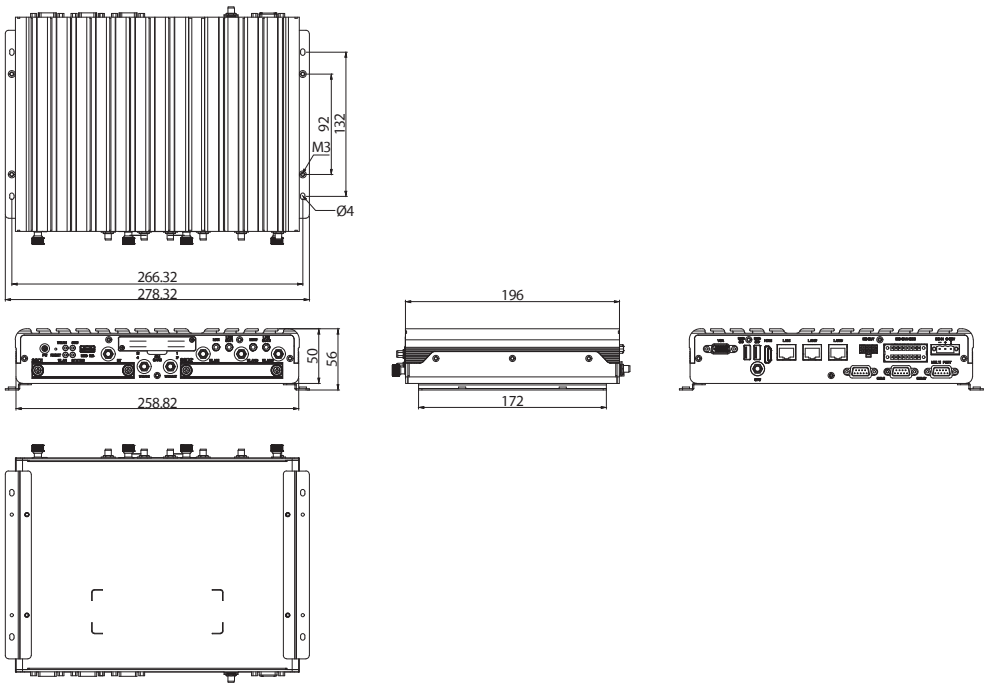
- 1 x Power button with LED
- 4 x LED for WWAN, WLAN, SSD, GPS
- 1 x Reset button
- 1 x USB 2.0 type A connector
- 4 x SIM card support (default type is 3 x external & 1 x internal)
- 2 x Removable 2.5" SSD tray
- 2 x Mic-in and 2 x Line-out
- 6 x SMA type antenna hole for WWAN (2)/WLAN (3)/BT (1)

Interface-Rear

- 1 x DB15 VGA
- 1 x HDMI port
- 1 x LVDS/ultaONE+ (by request)
- 1 x Phoenix connector for 9~36VDC power/GND/ignition input
- 1 x 4 x 2 connect for 12V/2A DC output, RS-232, power button, reset button (MDI1) and sleeping mode (MDI2)
- 2 x USB 3.0 type A connector
- 3 x RJ45 10/100/1000 fast ethernet with LED (2 x POE by request)
- 2 x DB-9 (male) for fully RS-232
- 1 x DB-9 (male) for multi-port
  - 2 x MDO
  - 1 x Speed (for DR)
  - 1 x Direction (for DR)
  - 1 x SAE J1708 or J1939 (opional VIOB-CAN-05 or CAN-06 module)

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Dimension Drawing



- 1 x 16-pin terminal block
  - 1 x CAN Bus 2.0B (onboard)
  - 1 x RS422/485
  - 4 x DI, 4 x DO
- 1 x Antenna hole for GPS

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 10
- YOCTO (by request)

Dimensions

- 259mm (W) x 196mm (D) x 50mm (H) (10.20" x 7.72" x 1.97")
- Weight: 1.7kg

Environment

- Temperature
  - Operating temperatures: -40°C~70°C (w/ industrial SSD) with air flow
  - Storage temperatures: -40°C~85°C
  - Damp heat test per EN60068-2-30
- Humidity
  - IEC60068-2-3, damp heat steady state test, 40C, 95%, 48Hrs
- Vibration
  - IEC 60068-2-64, 2G for SSD
  - Operating: MIL-STD-810G, 514.6C procedure 1, category 4
  - Storage: MIL-STD-810G, 514.6E procedure 1, category 24
- Shock (SSD)
  - MIL-STD-810G, 516.6 procedure I, trucks and semi-trailers=40g
  - Crash hazard: procedure V, ground equipment=75g

Certifications

- CE
- FCC Class A
- E13 Mark
- LVD (EN 62368-1)

Ordering Information

- **VTC 6220-BK (P/N: 10V00622000X0)**
  Intel Atom® processor Apollo Lake E3950, 1.6GHz with 4GB DDR3L SO-DIMM, u-blox M8N GPS module, VGA/HDMI output, 3 x LAN, 2 x RS-232 (full) & 1 x RS-422/485, 1 x CAN 2.0B, 4 x DI & 4 x DO, 1 x USB 2.0 & 2 x USB 3.0, 2 x Line-out/Mic-in

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

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