

Main Features

- Built-in Google Edge TPU ML accelerator coprocessor
- Intel Atom® processor quad core E3950, up to 2.0GHz
- 4 x PoE (802.3af/at, max. 60W)
- Built-in u-blox-M8N GPS
- Built-in CAN Bus 2.0B
- Three video outputs, one VGA and two HDMI
- E Mark conformity
- 3 x mini-PCIe socket expansion
- Dual external storage (compatible with 15mm disk)
- 1 x USB DOM to run OS
- 1 x SD card for exporting and backing up data

Product Overview

VTC 6222-GCIoT, based on Intel Atom® quad core processor E3950 (up to 2.0GHz), is specifically comply with stringent E mark standard in rugged, fanless and compact mechanism. VTC 6222-GCIoT provides complete communication capability between vehicle and computer with build-in CAN BUS 2.0B interface. Equipped with intelligent power management, VTC 6222-GCIoT can be waked on by ignition, RTC timer or SMS message remotely. VTC 6222-GCIoT supports 4 x 802.3at/3af (max. 60W) PoE ports to connect with IP cameras. The design of 2.5" removable SSD and SD memory card helps to access storage easily. VTC 6222-GCIoT keeps the flexibility to meet the demand for video surveillance in vehicle application.

Specifications

CPU

- Intel Atom® processor quad core E3950, up to 2.0GHz, 12W, 4 core

Memory

- 1 x 204-pin DDR3L SO-DIMM socket support 1866MHz up to 8GB. Default 4GB

Google Edge TPU (Coral ML Accelerator Card)

- Hardware interface: mini-PCIe (half size)
- Serial interface: PCIe Gen2 x1
- Performance: 4TOPS @2Watt
- Operating voltage: 3.3V +/- 10 %
- Dimensions: 30mm x 26.8mm x 2.5 mm

Video Output

- Chipset Intel® HD graphics 505
- 2 x HDMI 1.4b up to 4096 x 2160 @30Hz
- 1 x VGA up to 1920 x 1200 @60Hz

Storage

- 2 x 2.5" SSD/HDD SATA 3.0 (compatible with 15mm drive)
- 1 x SD memory card 3.0 (externally accessible)
- 1x USB EDC for USB DOM

Expansion

- 1 x Full size mini-PCIe socket (USB 2.0), BOM optional M.2 Key B (USB2.0 + USB 3.0) with 2 x external SIM
- 1 x Full size mini-PCIe socket (USB 2.0 + PCIe 2.0)
- 1 x Half size mini-PCIe socket (USB 2.0 + PCIe 2.0)

GNSS and On Board Sensor

- 1 x Default U-blox NEO-M8N GNSS for GPS/Glonass/QZSS/Galileo/Beidou
- G Sensor (3-axis, 10-bit resolution)
- TPM 2.0 (optional)

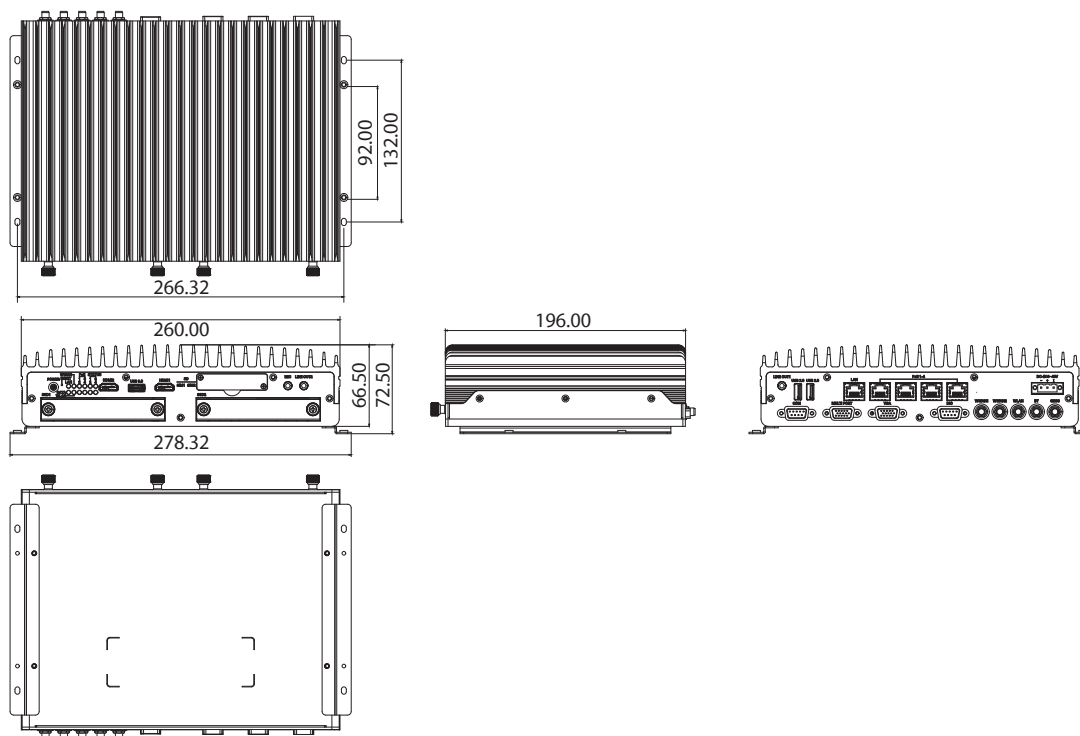
LAN and Power over Ethernet

- 4-Port LAN, 10/100/1000 Mbps 1210-IT GbE, PoE 802.3af/at, max. 60W
- 1-Port LAN, 10/100/1000 Mbps 1210-IT GbE

I/O Interface-Front

- 12 x LED indicators (including 3 x programmable LED)
- 2 x Externally accessible SIM card socket with cover
- 2 x 2.5" removable SSD tray
- 1 x Externally accessible SD card socket with cover
- 1 x Reset button
- 1 x Power button

Dimension Drawing



- ♦ 1 x USB 3.0 type A (5V/0.9A)
- ♦ 2 x HDMI 1.4b
- ♦ 1 x Mic-in, 1 x Line-out

I/O Interface-Rear

- ♦ 1 x 3-pin terminal block for 9V~48V DC
- ♦ 1 x RJ45 10/100/1000 Mbps
- ♦ 4 x PoE 802.3af/at (max. 60W)
- ♦ 1 x VGA
- ♦ 1 x DB9 full RS-232
- ♦ 4 x SMA antenna
- ♦ 2 x USB 2.0 type A (5V/0.5A)
- ♦ 1 x Line-out
- ♦ 1 x DB15 (DIO)
 - 4 x DI with isolation
 - 4 x DO with isolation
 - Vin, GND for GPIO
- ♦ 1 x DB15 (MULTI PORT)
 - 1 x RS422/RS485
 - 1 x RS232 (TX/RX)
 - 1 x CAN 2.0B
 - 1 x 12VDC, 2A output (Vout, GND)

Power Management

- ♦ Power input 9~48 VDC
- ♦ Selectable boot-up & shut-down voltage for low power protection by software
- ♦ Setting 8-level power on/off delay time by software
- ♦ Support S3/S4 suspend mode
- ♦ 10~255 seconds WDT support, setup by software
- ♦ SDK (Windows/Linux) including utility and sample code

Operating System

- ♦ Windows 10/Linux

Dimensions

- ♦ 260mm (W) x 196mm (D) x 66.5mm (H)

Weight

- ♦ 3.2kg

Environment

- ♦ Operating temperatures:
 - -20°C~60°C (w/ Google Edge TPU & industrial SSD) with air flow
- ♦ Storage temperatures: -40°C to 80°C
- ♦ Relative humidity: 10% to 90% (non-condensing)
- ♦ Vibration (SSD)
 - 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)
 - Operating: MIL-STD-810G, Method 516.6, Procedure I, functional shock=40g
 - Non-operating: MIL-STD-810G, Method 516.6, Procedure V, crash hazard shock test=75g

Standards/Certifications

- ♦ CE
- ♦ FCC Class A
- ♦ E13 mark

Ordering Information

♦ VTC 6222-GC IoT (P/N: TBD)

Intel Atom® processor E3950 up to 2.0GHz CPU, 4GB DDR3L SO-DIMM, DC input 9~48 VDC, 1 x VGA, 2 x HDMI, 1 x LAN, 4 x PoE, 2 x RS-232, 1 x RS-422/485, 8 x GPIO, 1 x USB 3.0, 2 x USB 2.0