

In-vehicle Computing

www.neosys-tech.com

# POC-351VTC

Intel® Apollo Lake Atom™ E3950 Ultra-compact In-vehicle Controller with GbE, PoE+ and Isolated CAN



## Key Features

- Intel® Apollo Lake Atom™ E3950 quad-core processor
- Rugged, -25 °C to 70 °C fanless operation
- Two IEEE 803.3at PoE+ ports and one GbE port
- One isolated CAN port for in-vehicle communication
- One M.2 socket and three mini-PCIe sockets
- Aluminum heat-spreader for M.2/ mPCIe modules
- 4-CH isolated DI and 4-CH isolated DO
- 8~35V DC input with built-in ignition power control



## Introduction

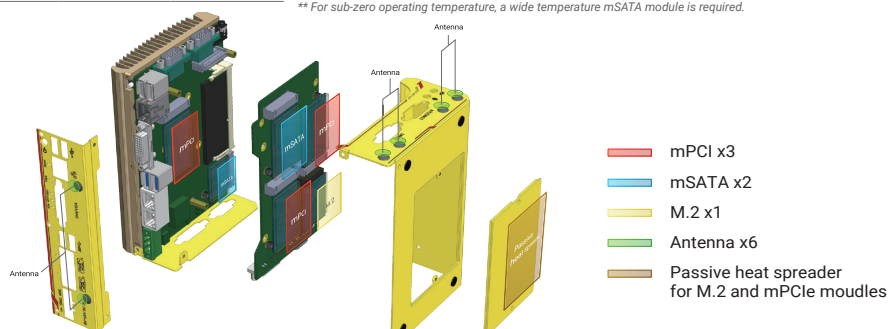
POC-351VTC is an ultra-compact, fanless in-vehicle controller powered by Intel® Apollo Lake Atom™ E3950 quad-core processor. It combines finesse performance, extraordinary reliability and affordability for versatile in-vehicle applications.

POC-351VTC offers two PoE+ ports to power devices such as IP cameras, and one additional GbE port for data communication. It also features isolated CAN 2.0 port and RS-232/ 422/ 485 ports for communicating with other automotive devices. Wide-range DC input and ignition power control make POC-351VTC fit for most vehicle categories.

Wireless and internet access is essential for modern day in-vehicle applications. POC-351VTC has a total of four M.2/ mPCIe sockets and six antenna holes to accommodate a variety of 4G, 3G, WIFI and GPS modules. An aluminum heat-spreader is thoughtfully designed to dissipate heat generated by modules to maintain superior operating stability, for the system and communication modules.

## Specifications

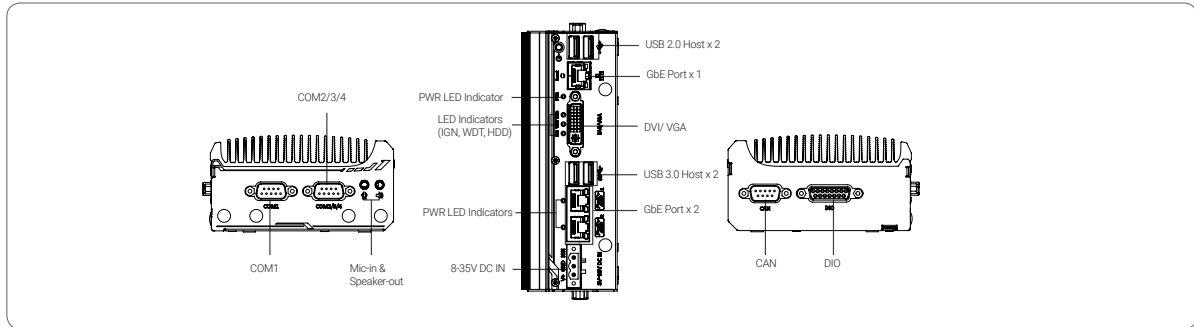
System Core		Power Supply	
Processor	Intel® Atom™ E3950 1.6/ 2.0 GHz quad-core processor	DC Input	8~35 VDC
Graphics	Integrated Intel® HD Graphics 505	Input Connector	3-pin pluggable terminal block for DC input (IGN/ GND/ V+)
Memory	1x SODIMM socket for DDR3L-1866, up to 8GB	<b>Mechanical</b>	
<b>Panel I/O Interface</b>		Dimension	56 mm (W) x 153 mm (H) x 108 mm (D)
Ethernet	3x Gigabit Ethernet ports by Intel® I210 GbE controller	Weight	1.0 kg
PoE	IEEE 802.3at PoE+ on port #2 and #3	Mounting	Horizontal wall-mount (standard) or vertical wall-mount (optional)
Video Port	VGA and DVI dual display outputs via DVI-I connector	<b>Environmental</b>	
USB	2x USB 3.0 ports and 2x USB 2.0 ports	Operating Temperature	-25°C ~ 70°C with mSATA, 100% CPU loading **/**
Serial Port	• 1x software-programmable RS-232/ 422/ 485 ports (COM1) • 3x 3-wire RS-232 ports (COM2/ COM3/ COM4) • 1x RS-422/485 port (COM2)	Storage Temperature	-40°C ~ 85°C**
Audio	1x Mic-in and 1x speaker-out	Humidity	10%~90% , non-condensing
CAN Bus	1x isolated CAN 2.0 port	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ mSATA, according to IEC60068-2-64)
Isolated DIO	4x isolated DI and 4x isolated DO	Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
<b>Internal I/O Interface</b>		EMC	E-Mark for in-vehicle applications EN 50155/ EN 50121-3-2 CE/ FCC Class A, according to EN 55022 & EN 55024
M.2	1x M.2 B key socket for 3G/ 4G option with USIM support	* The 100% CPU/ GPU loading for high temperature test is applied using Passmark® BurnInTest™ v8.0. For detail testing criteria, please contact Neosys Technology	
Mini-PCIe	3x full-size mini PCI Express sockets with USIM support	** For sub-zero operating temperature, a wide temperature mSATA module is required.	
<b>Storage Interface</b>			
mSATA	1x half-size mSATA port 1x full-size mSATA port		



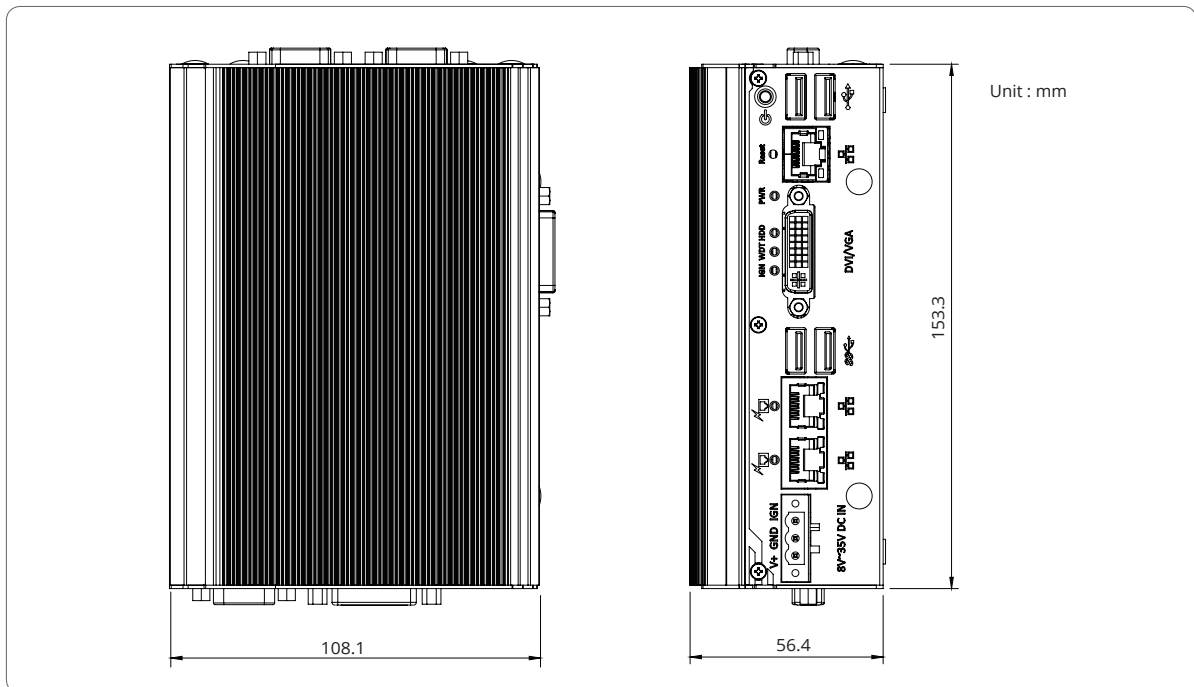
POC-351VTC

www.neusys-tech.com

## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
POC-351VTC	Intel® Apollo Lake Atom™ E3950 ultra-compact in-vehicle controller with 1x GbE, 2x PoE+ and isolated CAN

## Optional Accessories

- 64GB mSATA mini SSD with pre-installed Windows 10 IoT English version\*
- 128GB mSATA mini SSD with pre-installed Windows 10 IoT English version\*
- 12V, 60W AC/ DC power adapter
- Optional vertical wall-mounting bracket

\* For Windows 10 IoT with other language packages, MOQ is required. Please contact Neusys for further information.

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660