

# **POC-351VTC Series**

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



#### Key Features

- · Intel® Apollo Lake Atom E3950 quad-core processor
- · Rugged, optional -40 °C to 70 °C fanless operation
- · Two IEEE 803.3at PoE+ ports and one GbE port
- One isolated CAN bus port for in-vehicle communication
- One M.2 socket and three mPCle sockets
- Aluminum heat-spreader for M.2/ mPCle modules
- 4-CH isolated DI and 4-CH isolated DO
- · 8~35V DC input with built-in ignition power control

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#### 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 bus 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 various vehicle typess.

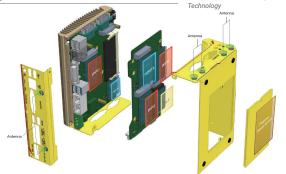
Wireless and internet access is essential for modern day in-vehicle applications and POC-351VTC has a total of four M.2/ mPCle sockets and six antenna holes to accommodate a variety of 4G, 3G, WIFI and GPS modules. An aluminum heat-spreader is thoughtfully designed to dissipate heat generated by modules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

#### **Specifications**

System Core	
Processor	Intel® Atom™ E3950 1.6/ 2.0 GHz quad-core processor
Graphics	Integrated Intel® HD Graphics 505
Memory	Up to 8GB DDR3L-1866 (single SO-DIMM slot)
Panel I/O Interfac	e
Ethernet	3x Gigabit Ethernet ports by Intel® I210 GbE controller
PoE	IEEE 802.3at PoE+ on port #2 and #3
Video Port	VGA and DVI dual display outputs via DVI-I connector
USB	2x USB3.0 ports and 2x USB 2.0 ports
Serial Port	1x software-programmable RS-232/ 422/ 485 ports (COM1)     3x 3-wire RS-232 ports (COM2/ COM3/ COM4)     or 1x RS-422/485 port (COM2)
Audio	1x Mic-in and 1x speaker-out
CAN bus	1x isolated CAN 2.0 port
Isolated DIO	4x isolated DI and 4x isolated DO
Internal I/O Interf	ace
M.2	1x M.2 B key socket for 3G/ 4G option with USIM support
Mini-PCIe	3x full-size mini PCI Express sockets with USIM support
Storage Interface	
mSATA	1x half-size mSATA port 1x full-size mSATA port

8~35 VDC		
3-pin pluggable terminal block for DC input (IGN/ GND/ V+)		
153 mm (W) x 108 mm (D) x 56 mm (H)		
1.0 kg		
Horizontal wall-mount (standard) or vertical wall-mount (optional)		
Environmental		
-25°C ~ 70°C */** -40°C ~ 70°C (optional) */***		
-40°C ~85°C**		
10%~90%, non-condensing		
Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ mSATA, according to IEC60068-2-64)		
Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)		
E-Mark for in-vehicle applications CE/ FCC Class A, according to EN 55032 & EN 55024		

temperature is 25%C  $\sim$  60°C \*\*\*\* For extreme wide temperature  $\cdot$ 40°C  $\sim$  70°C, it is optional with 100% screening, please contact Neousys



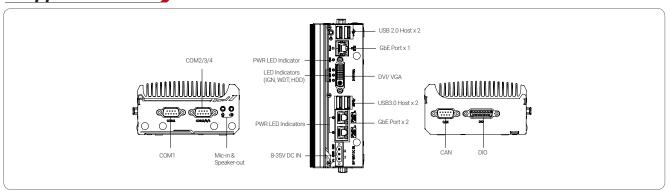
mPCI x3 mSATA x2 M.2 x1 Antenna x6

Passive heat spreader for M.2 and mPCle modules

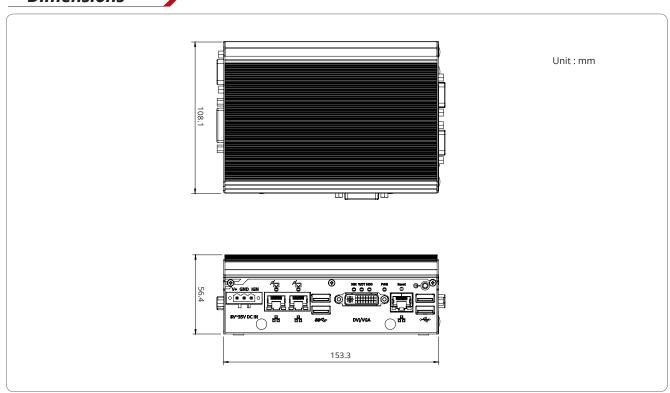
<sup>\*</sup>For wide temperature use condition, a wide temperature/industrial mSATA module is required.
\*\*For full function use condition (mini-PCIe, M.2, and mSATA are all adopted), the recommended operating



#### **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*		
WALL mounting accomply for DOC 251VTC vertical type	PA-60W-OW	60W AC/DC power adapter with 12V, 5A DC output, cord end terminals for terminal block, operating temperature : -30°C to 60 °C.	
Wall moduling assembly for Foc-551V1C, Vertical type	WM-300V	Wall mounting assembly for POC-351VTC, vertical type	

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