

# POC-120 Series

Ultra-compact Atom™ Bay Trail-I Fanless General-Purpose Embedded Controller



CE FC

## Key Features

- Low-profile, Ultra-compact 15 cm x 10 cm x 3.4 cm footprint
- Intel® Atom™ E3826 1.46GHz dual-core processor
- Rugged, -25°C to 70°C fanless operation
- Two GigE ports and three USB ports
- One RS-232/422/485 port and one RS-232 port
- I/O expansion interface for ODM projects
- MeziO™ interface for easy function expansion

## Introduction

Introducing the latest member of Neosys' ultra-compact POC family! POC-120 is a low-cost, entry-level embedded controller with yet more compact dimension. It further reduces its height to 3.4 cm to have a very low-profile chassis for restricted space.

POC-120 incorporates Intel® Atom™ E3826 dual-core processor to deliver adequate computing performance. It provides general I/O, such as GigE ports, COM ports and USB3/USB2 ports, for most embedded applications. Instead traditional HDD, POC-120 supports mSATA SSD to ensure reliable disk access in harsh environments.

POC-120MZ, the new member of POC-120 series, further incorporates Neosys' MeziO™ interface for I/O expansion. By customizing a mezzanine board, you can have versatile I/O functions and make POC-120MZ not only an ordinary ultra-compact controller, but also a tailor-made embedded system for your specific application.

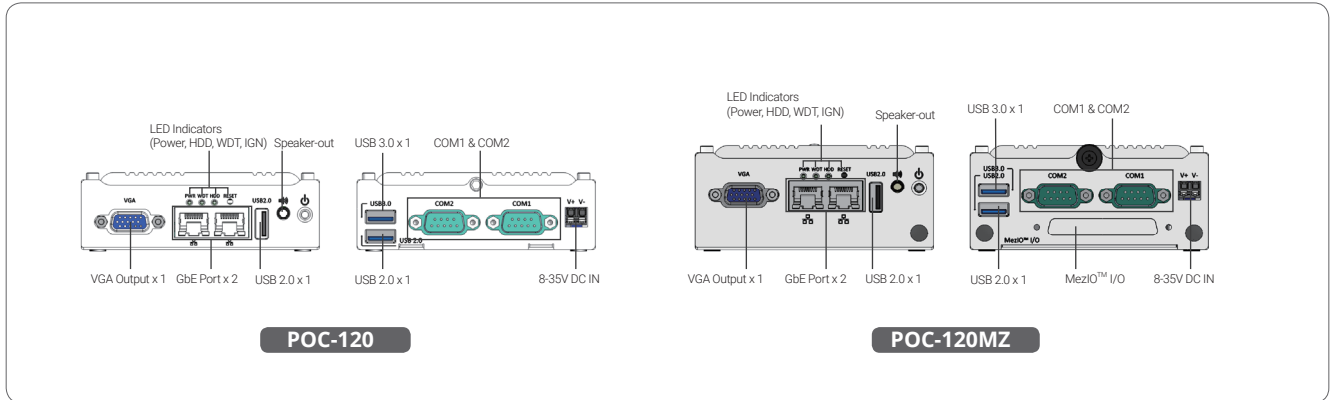
## Specifications

<b>System Core</b>		<b>Power Supply</b>	
Processor	Intel® Atom™ E3826 1.46 GHz dual-core processor	DC Input	Built-in 8-35V DC input
Graphics	Integrated Intel® HD Graphics	Input Connector	2-pin spring-clamp terminal block for DC input
Memory	1x SODIMM socket for DDR3L-1067, up to 8GB	<b>Mechanical</b>	
<b>I/O Interface</b>		Dimension	105mm (W) x 149 mm (D) x 34mm (H) (POC-120) 105mm (W) x 149 mm (D) x 46mm (H) (POC-120MZ)
Ethernet	2x Gigabit Ethernet ports by Intel® I210 GbE controller	Weight	0.9 kg
Video Port	1x VGA connector for both analog RGB output, supporting 2560x1600 resolution	Mounting	Wall-mounting (standard) or DIN-Rail mounting (optional)
Serial Port	1x RS-232/422/485 (COM1) 1x RS-232 (COM2)	<b>Environmental</b>	
USB	1x USB 3.0 port and 2x USB 2.0 ports	Operating Temperature	-25°C ~ 70°C with SSD, 100% CPU loading */**
Audio	1x Speaker-out	Storage Temperature	-40°C ~ 85°C
<b>Storage Interface</b>		Humidity	10%~90% , non-condensing
mSATA	1x full-size mSATA socket	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)
<b>Expansion Bus</b>		Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
Expandable I/O (POC-120MZ only)	1x MeziO™ expansion port for Neosys' MeziO™ modules (POC-120MZ only)	EMC	CE/FCC Class A, according to EN 55022 & EN 55024

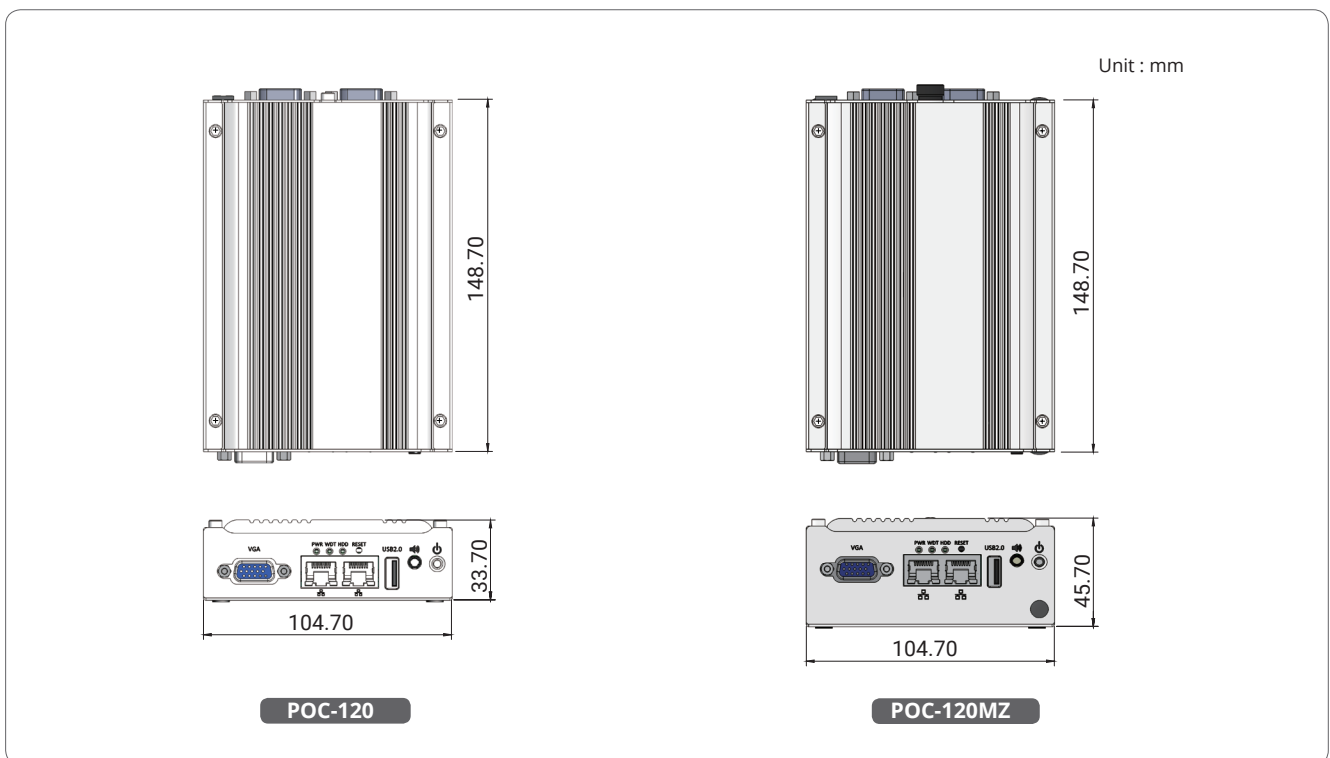
\* 100% CPU loading is applied using Intel® Thermal Analysis Tool. For detail testing criteria, please contact Neosys Technology.

\*\* For sub-zero operating temperature, a wide temperature mSATA SSD module is required.

## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
POC-120	Intel® Atom™ E3826 ultra-compact controller with 2x GbE ports, 3x USB and 2x COM ports
POC-120MZ	Intel® Atom™ E3826 ultra-compact controller with 2x GbE ports, 3x USB, 2x COM ports and MeziO™ accommodation

## Optional Accessories

- DIN-Rail mounting kit
- 60W AC/DC power adapter with 12V, 5A DC output

### MeziO™ Modules

- MeziO™-C180** MeziO™ module with 4x RS-232/422/485 ports and 4x RS-232 ports
- MeziO™-C181** MeziO™ module with 4x RS-232/422/485 ports and 4x RS-422/485 ports
- MeziO™-D220** MeziO™ module with 8-CH isolated digital input and 8-CH isolated digital output
- MeziO™-D230** MeziO™ module with 16-CH isolated digital input and 16-CH isolated digital output
- MeziO™-R10** MeziO™ module with 2.5" HDD/SSD accommodation and 1x mini-PCIe socket