

POC-120 Series

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



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 Neousys' 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 Neousys' 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

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

Order Information

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



(POC-120MZ with MeziO™-C180 installed)

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

Accessories

Option of DIN-Rail mounting kit

60W AC/DC power adapter with 12V, 5A DC output