

POC-300 Series

Intel® Apollo Lake Pentium® N4200 and Atom® E3950 Ultra-Compact DIN-rail Controller with GbE, PoE and USB 3.1



Key Features

- Intel Apollo Lake Pentium N4200 and Atom E3950 quad-core processor
- Fanless, rugged and wide temperature operation (-25 °C to 70 °C)
- One GbE port and two Gigabit PoE+ ports
- Two USB 3.1 and two USB 2.0 ports
- DVI + VGA dual display outputs
- Front-accessible I/O
- DIN-rail mount design
- MeziO® interface compatible

Introduction

POC-300 series features Pentium® N4200 and Atom® x7-E3950 quad-core processors, which offers up to 1.5 times of CPU performance and 3 times the GPU performance improvement compared to previous generation Atom® E3845 CPU.

POC-300 series have an ingenious mechanical design that combines DIN-rail mount chassis with front-accessible I/O in an ultra-compact enclosure. They have rich computer-like I/Os such as GbE, USB 3.1/ 2.0, COM ports and mSATA storage, in a compact footprint that measures just 5.6 x 15 x 11 cm. IEEE 802.3at PoE+ function is also available on 2 of the 3 GbE ports to power cameras for machine vision or surveillance applications. POC-300 series features Neosys' MeziO® interface for easy function expansion via versatile MeziO® modules.

With Neosys' proven fanless design heritage, the POC-300 series thrive in harsh environments. Featuring rich I/Os, advanced CPU and compact size, POC-300 series are compelling fanless controllers beneficial for various industrial applications.

Specifications

	POC-300	POC-310	POC-320	POC-330
System Core				
Processor	Intel® Atom® E3950 1.6/ 2.0 GHz quad-core processor		Intel® Pentium® N4200 1.1/ 2.5 GHz quad-core processor	
Graphics	Integrated Intel® HD Graphics 505			
Memory	Up to 8GB DDR3L-1866 (single SODIMM slot)			
Panel I/O Interface				
Ethernet	3x Gigabit Ethernet ports by Intel® I210 GbE controller			
PoE	IEEE 802.3at PoE+ on port #2 and #3, 50 W total power budget	-	IEEE 802.3at PoE+ on port #2 and #3, 50 W total power budget	-
Video Port	VGA and DVI dual display outputs via DVI-I			
USB 3.1	2x USB 3.1 Gen1 (5 Gbps) ports			
USB 2.0	2x USB 2.0 ports			
Serial Port	1x Software-programmable RS-232/ 422/ 485 ports (COM1) 3x 3-wire RS-232 ports (COM2/ 3/ 4) or 1x RS-422/ 485 port (COM2)			
Audio	1x mic-in and 1x speaker-out			
Internal I/O Interface				
Mini-PCIe	1x full-size mini PCI Express slot with USIM socket			
Expandable I/O	1x MeziO® expansion interface for Neosys MeziO® modules			
Storage Interface				
mSATA	1x half-size mSATA port			
Power Supply				
DC Input	1x 3-pin pluggable terminal block for 8 to 35V DC input			
Mechanical				
Dimension	56 mm (W) x 108 mm (D) x 153 mm (H)			
Weight	0.96 kg			
Mounting	DIN-rail mount (standard) or Wall-mount (optional)			

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Environmental				
Operating Temperature	-25°C to 70°C with SSD, 100% CPU loading **/** -10°C to 50°C with HDD, 100% CPU loading **/**			
Storage Temperature	-40°C to 85°C**			
Humidity	10% to 90% , non-condensing			
Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)			
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)			
EMC	CE/FCC Class A, according to EN 55022, EN 55024 & EN 55032			

* The 100% CPU/GPU loading for high temperature test is applied using Passmark® BurnInTest™ v8.0.

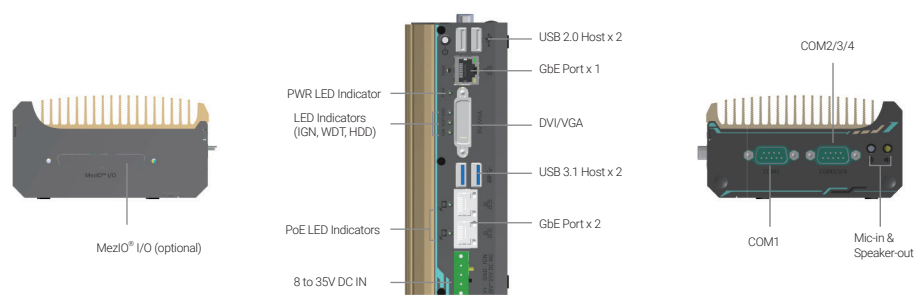
For detail testing criteria, please contact Neosys Technology

** For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.

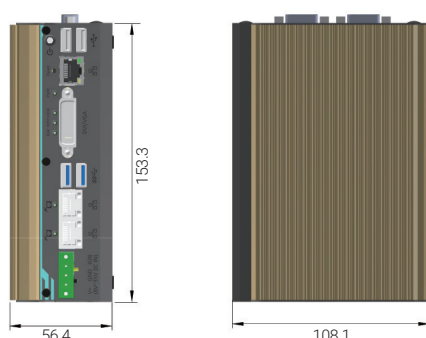


▲ POC-300 with MeziO® - R11 and 2.5" HDD

Appearance



Dimensions



Unit : mm

Ordering Information

Model No.	Product Description
POC-300	Intel® Apollo Lake Atom® E3950 ultra-compact DIN-rail controller with 1xGbE, 2x PoE+ and 2x USB 3.1
POC-310	Intel® Apollo Lake Atom® E3950 ultra-compact DIN-rail Controller with 3xGbE and 2x USB 3.1
POC-320	Intel® Apollo Lake Pentium® N4200 ultra-compact DIN-rail controller with 1xGbE, 2x PoE+ and 2x USB 3.1
POC-330	Intel® Apollo Lake Pentium® N4200 ultra-compact DIN-rail controller with 3xGbE and 2x USB 3.1

Ordering Model Matrix

Pre-installed MeziO Controller	MeziO-R11	MeziO-R12
POC-300	POC-301	POC-302
POC-310	POC-311	POC-312
POC-320	POC-321	POC-322
POC-330	POC-331	POC-332

Optional Accessories

PA-60W-OW	60W AC/DC power adapter with 12V, 5A DC output, cord end terminals for terminal block. Operating temperature : -30 to 60 °C
Wmkit-V-POC300	Wall-mount assembly for POC-300 series, vertical type
Wmkit-H-POC300	Wall-mount assembly for POC-300 series, horizontal type
Cbl-DB9F-3DB9M-15CM	1x DB9 (Female) to 3x DB9 (Male), length: 15CM

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®-V20	MeziO® module with ignition power control function and 1x mini-PCIe socket for in-vehicle usage
MeziO®-U4	MeziO® module with 4x USB 3.1 ports
MeziO®-R11	MeziO® module with SATA port for 2.5" HDD/ SSD
MeziO®-R12	MeziO® module with SATA port for 2.5" HDD/ SSD, 4-CH isolated DI and 4-CH isolated DO