POC-300 Series

Intel® Apollo Lake Pentium® N4200 and Atom™ E3950 Ultra-Compact DIN-rail Controller with GbE, PoE and USB3.0

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 USB3.0 and two USB2.0 ports
- DVI + VGA dual display outputs
- Front-accessible I/O
- DIN-rail mounting design
- MezIO™ interface compatible

Introduction

Experience the giant leap in performance of Intel® Apollo Lake Pentium® and Atom™ platform! POC-300 series features the latest 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 mounting chassis with front-accessible I/O in one ultra-compact enclosure. They have rich computer-like I/Os such as GbE, USB3/2.0, 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 Neousys’ MezIO™ interface for easy function expansion via versatile MezIO™ modules.

With Neousys’ 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

<table>
<thead>
<tr>
<th>System Core</th>
<th>POC-300</th>
<th>POC-310</th>
<th>POC-320</th>
<th>POC-330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Intel® Atom™ E3950 1.6/2.0 GHz quad-core processor</td>
<td>Intel® Pentium® N4200 1.1/2.5 GHz quad-core processor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphics</td>
<td>Integrated Intel® HD Graphics 505</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>Up to 8GB DDR3L-1866 (single SO-DIMM slot)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel I/O Interface</th>
<th>POC-300</th>
<th>POC-310</th>
<th>POC-320</th>
<th>POC-330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet</td>
<td>3x Gigabit Ethernet ports by Intel® I210 GbE controller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PoE</td>
<td>IEEE 802.3at PoE+ on port #2 and #3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Port</td>
<td>VGA and DVI dual display outputs via DVI-I connector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USB</td>
<td>2x USB3.0 ports and 2x USB2.0 ports</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 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 |

<table>
<thead>
<tr>
<th>Internal I/O Interface</th>
<th>POC-300</th>
<th>POC-310</th>
<th>POC-320</th>
<th>POC-330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini-PCIe</td>
<td>1x full-size mini PCI Express slot with USIM socket</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expandable I/O</td>
<td>1x MezIO™ expansion interface for Neousys MezIO™ modules</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage Interface</th>
<th>mSATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>mSATA</td>
<td>1x half-size mSATA port</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>POC-300</th>
<th>POC-310</th>
<th>POC-320</th>
<th>POC-330</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC Input</td>
<td>1x 3-pin pluggable terminal block for 8–35V DC input</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical</th>
<th>POC-300</th>
<th>POC-310</th>
<th>POC-320</th>
<th>POC-330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>56 mm (W) x 108 mm (H) x 153 mm (D)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>0.96 kg (incl. CPU, memory and HDD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting</td>
<td>DIN-rail mount (standard) or wall-mount (optional)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The 100% CPU/GPU loading for high temperature test is applied using Passmark® BurnInTest™ v8.0.
** For detail testing criteria, please contact Neousys Technology.

POC-300 with MezIO™ - R11 and 2.5” HDD

CoastIPC.com
866-412-6278
**POC-300 Series**

### Appearance

- **COM3/4**
- **Power & Speaker-out**
- **USB 3.0 Host x 2**
- **GbE Port x 2**
- **PoE LED Indicators GbE Port x 1**
- **POC LED Indicator**
- **8-35V DC IN**
- **DVI/VGA**
- **COM1**
- **COM2/3/4**

### Dimensions

**Unit:** mm

- **Width:** 108.1 mm
- **Height:** 56.4 mm
- **Depth:** 153.3 mm

### Ordering Information

**Model No.**

- **POC-300**
  - Intel® Apollo Lake Atom™ E3950 ultra-compact DIN-rail controller with 1xGbE, 2x PoE+ and 2x USB3.0
- **POC-310**
  - Intel® Apollo Lake Atom™ E3950 ultra-compact DIN-rail controller with 3xGbE and 2x USB3.0
- **POC-320**
  - Intel® Apollo Lake Pentium® N4200 ultra-compact DIN-rail controller with 1xGbE, 2x PoE+ and 2x USB3.0
- **POC-330**
  - Intel® Apollo Lake Pentium® N4200 ultra-compact DIN-rail controller with 3xGbE and 2x USB3.0

### 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
- **WM-300V**
  - Wall mounting assembly for POC-300 series, vertical type
- **WM-300H**
  - Wall mounting assembly for POC-300 series, horizontal type
- **64GB mSATA mini SSD with pre-installed Windows 10 IoT English version**
- **128GB mSATA mini SSD with pre-installed Windows 10 IoT English version**
- **C-D9-3D9-RS232-10CM**
  - 1x DB9 (Female) to 3x DB9 (Male), length: 10CM

### 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
- **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

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

All specifications and photos are subject to change without prior notice.