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Preliminary

POC-200 Series

Ultra-compact Atom Bay-Trail-I Fanless Embedded Controller with PoE and USB 3.0

Features

- Ultra-compact 150 mm x 100 mm foot-print
- Intel® Atom™ E3845 1.91GHz Quad-core processor
- Rugged, -20°C to 70°C fanless operation
- Two 802.3at (25.5W) Gigabit PoE ports
- Three USB 3.0 ports
- Standard 2.5” SATA HDD/SSD accommodation and optional on-board eMMC
- Up to two RS-232/422/485 ports and two RS-232 ports

Introduction

The POC-200 is a fanless controller, ultra compact 146 x 102 x 58mm (W x H x D)—almost as to the same size as a 3.5 inch HDD, and can be easily built into existing systems in the production line, or used for customize systems. Powered by the new Intel® Bay Trail Quad Core CPU, 1.91Ghz E3845, the POC-200 is capable of upgrading to a maximum of 8 GB memory; feature isolated I/O provide users with the digital devices connection, the slick interior design minimizes compatibility and cabling issues.

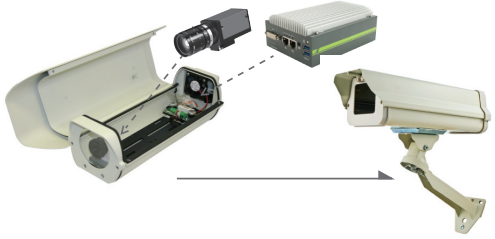
The POC-200 embedded with Intel® new Bay Trail CPU, offers superb enhanced graphics performance. Deliver faster high definition graphic and other media conversions, and more. The unique design of the 22nm technology and integrate more energy-efficient CPU, and built-in security onto a chip draws less than 10 watts of power.

The POC-200 supports rich I/O interfaces, including 4x COM ports, 4x USB ports (3x USB 3.0, 1x USB 2.0) USB 3.0 ports enable fast data computation and acquisition, 4x isolated digital I/Os and 2x PoE GigE ports. The POC-200 also provides with one Mini-PCIe slot with one USIM socket for wireless requirements.

The POC-200’s PoE option is compliant to 802.3at (25.5W), total power budget consumption for 2x PoE GigE ports is up to 50W which can be equipped with IP or Gigabit camera. The POC-200 integrated with PoE solution allow user to easily add-on different power devices such as IP camera for surveillance usage, VOIP terminals, and different Wireless Aps. The POC-200 is excellent for image-processing applications such as video streaming, video surveillance, image mapping, visual inspection and many more. System integrators do not have to worry about external power supplies when connecting network cameras and the system can be place in optimal positions for best performance result.

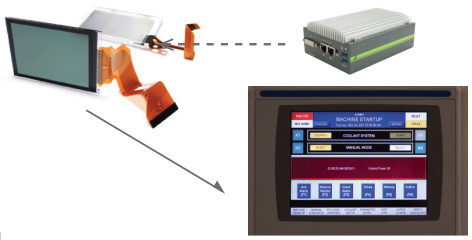
In addition, the POC-200 features performance-enhancing mechanical and thermal design, the special heat sink design enhances the thermal dissipation more efficiency and with aluminum alloy chassis help prevent corrosion, resulting in improved longevity. With industrial SSD storage devices, the POC-200 provides an extended operating temperature range of -20 - 70 °C, for variety of applications under harsh environments.

Application Example



I.

II



III.

-- I. A Smarter Smart Camera

-- II. The Brain of a PCB Alignment Machine

-- III. A Rugged HMI Panel or Hand-Held Device

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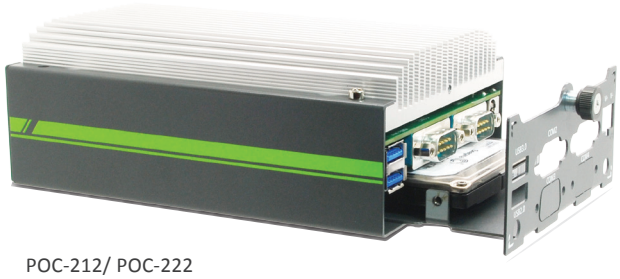
POC-200 Series Specifications

Model	POC-200	POC-210
System Core		
Processor	Intel® Atom™ Bay Trail-I E3845 Quad-core processor	
Graphics	Integrated Intel® HD Graphics	
Memory	1x SO-DIMM socket for DDR3L-1333	
Panel I/O Interface		
Ethernet	2x Gigabit Ethernet ports by Intel® I210	
PoE	**IEEE 802.3at (25.5W PSE)**	-
Video Port	1x DVI-I connector for both analog RGB and DVI/HDMI outputs	
Serial Port	1x software-programmable RS-232/422/485 (COM1) 1x RS-232 (COM2)	
USB	3x USB 3.0 ports and 1x USB 2.0 port	
Audio	1x Speaker-out	
DIO	Optional 4-CH isolated DI + 4-CH isolated DO	
Internal I/O Interface		
Seriel Port	1x optional software-programmable RS-232/422/485 (COM3) 1x optional RS-232 (COM4)	
Mini PCIe	1x mini PCI Express slot with USIM socket	
Storage Interface		
SATA HDD	1x SATA port with 2.5" HDD/SSD bracket	
eMMC	Optional 16GB on-board eMMC module	

Model	POC-200	POC-210
Power Supply		
DC Input	Built-in 8~35V DC input	
Input Connector	1x 2-pin pluggable terminal block for DC input	
Mechanical		
Dimension	149mm (W) x 105 mm (H) x 58 mm (D)	
Weight	1.1 kg (including one 2.5" HDD)	
Mounting	Wall-mounting (standard) or DIN-Rail mounting (optional)	
Environmental		
Operating Temperature	-20°C ~ 70°C with SSD , 100% CPU loading */** -10°C ~ 50°C with HDD, 100% CPU loading */**	
Storage Temperature	-40°C ~ 85°C	
Humidity	10%~90% , non-condensing	
Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, w/o add-on card, according to IEC60068-2-64)	
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, w/o add-on card, according to IEC60068-2-27)	
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 Neousys Technology.*

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



POC-212/ POC-222

Front

Back

Order Information

POC-200
Intel® Atom™ E3845 Quad-Core fan-less Embedded Controller with 2x GigE PoE ports, 4x COM Ports

POC-210
Intel® Atom™ E3845 Quad-Core fan-less Embedded Controller with 2x GigE ports, 4x COM Ports

POC-212
Intel® Atom™ E3845 Quad-Core fan-less Embedded Controller with 2x GigE ports, 2x COM Ports

POC-222
Intel® Atom™ E3825 Quad-Core fan-less Embedded Controller with 2x GigE ports, 2x COM Ports

OPT POC-4DI4DO Isolated 4x Digital Inputs / 4x Digital Outputs

OPT EMMC On-Board eMMC Module. Release Date : 2014Q2

Dinrail-POC Din-Rail mounting Kit,POC-100/POC-200