

POC-700 Series	Intel [®] Core [™] i3-N305/ Atom [®] x7425E Ultra-compact Embedded Computer with 4x PoE+, USB 3.2, and MezIO [®] Interface
Preliminary	 Key Features Intel[®] Alder Lake Core[™] i3-N305 processor 15W with 8 E-Cores or Atom[®] x7425E Up to 16GB DDR5-4800 SODIMM -25 °C to 70 °C rugged wide temperature operation 4x GbE ports PoE+ / 4x USB3.2 Gen 2 with screw-lock M.2 2280 M key SATA socket DP++/ HDMI 1.4b dual display outputs 4-CH isolated DI + 4-CH isolated DO Front I/O access DIN-mounting design MezIO[®] compatible

Introduction

POC-700 is Neousys' next-generation ultra-compact embedded controller, with a choice of the latest Intel® Alder Lake i3-N305 or x7425E processor that is capable of delivering up to 1.3x the CPU performance when compared to previous POC-500 series.

Neousys POC-700 is powered by Intel's Alder Lake i3-N305 featuring 8-core/ 8-thread processor with 32EUs UHD Graphics or Atom[®] x7425E featuring 4-core/ 4-thread with 24EUs UHD Graphics to support Intel OpenVINO[™] for Al inference capabilities. The systems adopts DDR5-4800 to offer up to 1.8x the memory bandwidth over DDR4 to boost overall system performance. It also has four USB3.2 Gen2, and four GigE PoE+ ports with screw lock mechanisms to connect and secure industrial cameras for machine vision applications. Display output wise, there are HDMI and DP video outputs to support high-definition display devices. As for connections and expansions, POC-700 features isolated DIO for device monitoring/control, M.2 2280 M key for SATA SSD and a mini-PCIe socket for wireless WiFi, LTE/5G or CAN bus device.

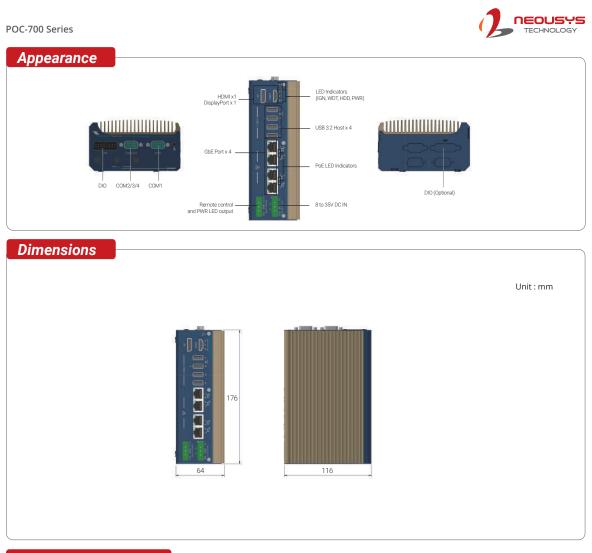
Measuring just 64 x 116 x 176mm, the ultra-compact POC-700 can easily fit into confined spaces and is a seamless upgrade from POC-500 series with identical footprint. Benefiting from the performance gains of the latest Intel CPU, wide-temperature fanless design, and ample interfaces for industrial cameras and I/Os, POC-700 is perfect for machine vision and smart city applications.

Specifications

	POC-715	POC-712		POC-715	POC-712
System Core			Power Supply		
_	Intel [®] Alder Lake Core [™] i3-N305	Intel [®] Alder Lake Atom [®] x7425E	DC Input	1x 3-pin pluggable terminal block for 8 to 35V DC input	
Processor	processor (8C/8T, 1.8/3.8 GHz, 15W TDP) processor (4C/4T, 1.5 /3.4 G 12W TDP)		Remote Ctrl. &LED Output	1x 3-pin pluggable terminal block for remote control and PWR LED output	
Graphics	Integrated Intel [®] UHD Graphics with 32EUs	Integrated Intel [®] UHD Graphics with 24EUs	Mechanical		
Memory	Up to 16 GB DDR5-4800 SDRAM (one SODIMM socket)		Dimension	64 (W) x 116 (D) x 176 (H) mm	
TPM	Supports TPM 2.0 (fTPM/ dTPM)		Weight	1.2 kg	
Panel I/O Interface		Mounting	DIN-rail mount (standard) or wall-mount (optional)		
Ethernet	4x Gb Ethernet ports by Intel [®] I3	50-AM4	Fan	Optional external-accessible 80mm x 80mm fan for system heat dissipation	
PoE+	IEEE 802.3at PoE+ on port #1~ 4	-	Environmental		
Native Video Port	1x DP++, Supporting 4096 x 216 1x HDMI1.4b, Supporting 3840 x		Operating Temperature	-25°C ~ 70°C*	
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)		Storage	-40°C ~ 85°C	
USB	4x USB 3.2 Gen2 ports with screw-lock		Temperature		
Isolated DIO	4-CH isolated DI and 4-CH isolated DO		Humidity	10%~90% , non-condensing	
Storage Interfac	e		Vibration	Operating, MIL-STD-810G, Method	514.6, Category 4
M.2	1x M.2 2280 M key socket (PCle Gen3 x1) for NVMe SSD storage		Shock	Operating, MIL-STD-810G, Method 516.6, Procedure I, Table	516.6-II
	(supports SATA signal)		Safety	EN62368-1	
Expansion Bus			EMC	CE/ FCC Class A, according to EN	55032 & EN 55024
Mini-PCle	1x full-size mini PCI Express socket with internal micro SIM socket		* For sub-zero and over 60°C operating temperature, a wide temperature HDD		
Expandable I/O	1x MezIO [®] expansion interface f	or Neousys MezlO [®] modules	or Solid State Disk (SSD) is required.		

All rights reserved. Copyright© 2023 Neousys Technology Inc.





Ordering Information

Optional	Accessories					
	ind J					
POC-712	Intel [®] Atom [®] x7425E Ultra-Compact Embedded Computer with 4x GbE, 4x USB3.2 and MezIO [®] Interface					
POC-715	POC-715 Intel [®] Core [™] i3-N305 Ultra-Compact Embedded Computer with 4x PoE+, 4x USB 3.2 and MezIO [®] Interface					
Model No.	Product Description					

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 70°C
PA-120W-OW	120W AC/DC power adapter with 12V, 10A DC output, cord end terminals for terminal block. Operating temperature : -30 to 60°C
Wmkit-V-POC500	Wall-mount assembly for POC-500 and POC-700 series, vertical type
Wmkit-H-POC500	Wall-mount assembly for POC-500 and POC-700 series, horizontal type
Cbl-DB9F-3DB9M-15CM	1x DB9 (Female) to 3x DB9 (Male), length: 15CM
AccsyBx-FAN-POC-700	Fan assembly for POC-700 series, 80x80x15 mm
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 [®] -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

All specifications and photos are subject to change without prior notice



Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

US

sales@assured-systems.com

Sales: +1 347 719 4508 Support: +1 347 719 4508

1309 Coffeen Ave Ste 1200 Sheridan WY 82801 USA

EMEA

sales@assured-systems.com

Sales: +44 (0)1785 879 050 Support: +44 (0)1785 879 050

Unit A5 Douglas Park Stone Business Park Stone ST15 0YJ United Kingdom

VAT Number: 120 9546 28 Business Registration Number: 07699660