

POC-40

Intel® Elkhart Lake Atom® x6211E Extreme-compact Embedded Controller

Preliminary



CE FC

Key Features

- Intel® Elkhart Lake Atom® x6211E dual-core processor
- 49 x 89 x 112 mm extremely compact form factor
- Rugged -25°C to 70°C fanless wide-temperature operation
- Two GigE ports, two USB 3.1 Gen1 ports and two USB2.0 ports
- M.2 2280 M key SATA storage interface
- One M.2 B key socket supporting 5G/ 4G 3042/ 3052 modules
- One M.2 E key socket for WiFi 5/ WiFi 6 modules
- One COM port with RS-232/ 422/ 485 modes and three RS-232 COM ports

Introduction

POC-40 is an extremely compact fanless controller with dimensions measuring just 49 x 89 x 112 mm. It features Elkhart Lake Atom® processor and is designed for space-restricted applications such as factory data collection, rugged edge computing and mobile gateway.

Utilizing Intel's 10nm process technology, the new Elkhart Lake Atom® x6211E dual-core processor can deliver up to 1.7 times the performance boost over its previous generation. In comparison to POC-200, POC-40 provides 1.9 times computing performance at only half the size. It features generic I/O functions, such as two Gigabit Ethernet ports, four USB 3.1 Gen1/ 2.0 ports, four COM ports and optional isolated digital I/Os for industrial communication and control. In addition, by adopting dedicated M.2 B key and E key slots, the POC-40 can fully harness the bandwidth of 5G and WiFi 6 wireless communications to provide wide-area coverage and real-time data transmission for industrial and mobile gateway applications.

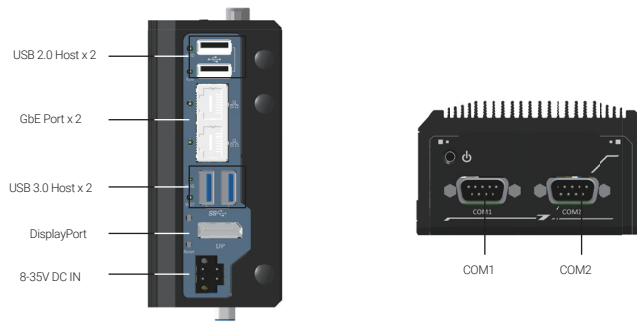
With a similar footprint as a PICO-ITX motherboard, Neosys' POC-40 is perfect for projects that require above par performance in an extremely compact package. Ideal for both edge computing and gateway applications, it is a low power consumption and lightweight fanless controller that offers wide-temperature operation for harsh environments.

Specifications

System Core		Internal Expansion Bus	
Processor	Intel® Elkhart Lake Atom® x6211E dual-core 1.2GHz/ 3.0GHz 6W processor	M.2 B key	1x M.2 3042/ 3052 B key socket with internal SIM socket for 4G/ 5G module
Graphics	Integrated Intel® UHD Graphics	M.2 E key	1x M.2 2230 E key socket for WiFi 5/ WiFi 6 module
Memory	Up to 32 GB DDR4-3200 SDRAM (one SODIMM slot)	Power Supply	
Panel I/O Interface		DC Input	1x 4-pin pluggable terminal block for 8-35VDC DC input
Ethernet	2x Gigabit Ethernet ports by Intel® I210 GbE controllers	Remote Ctrl. & LED Output	1x 4-pin pluggable terminal block for remote control and PWR LED output
USB 3.1	2x USB 3.1 Gen1 (5 Gbps) ports	Mechanical	
USB 2.0	2x USB 2.0 ports	Dimension	49 mm (W) x 89 mm (D) x 112 mm (H)
Video Port	1x DisplayPort connector, supporting 4096 x 2160 resolution @ 60Hz	Weight	TBC
Serial Port	1x software-programmable RS-232/ 422/ 485 port (COM1) 1x 3-wire RS-232 ports (COM2)	Mounting	DIN-rail mount (standard) or Wall-mount (optional)
Isolated Digital I/O	Optional 4-ch isolated digital input and 4-ch isolated digital output	Environmental	
Audio	1x 3.5 mm jack for mic-in and speaker-out	Operating Temperature	-25°C ~ 70°C
Storage Interface		Storage Temperature	-40°C ~ 85°C
M.2	1x M.2 2280 M key SATA interface	Humidity	10%~90% , non-condensing
		Vibration	Operating, MIL-STD-810G, Method 514.6, Category 4
		Shock	Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
		EMC	CE/FCC Class A, according to EN 55032 & EN 55024

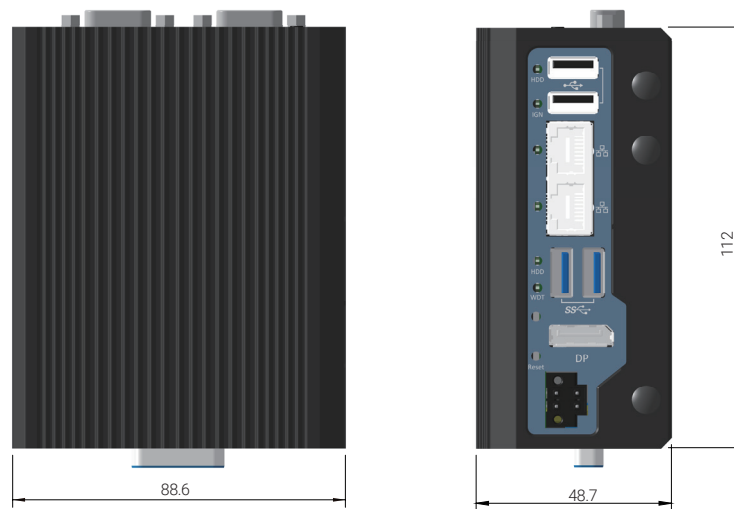
Appearance

DIO (Optional)



Dimensions

Unit : mm



Ordering Information

Model No.	Product Description
POC-40	Intel® Elkhart Lake Atom® x6211E Extreme-compact Embedded Controller

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
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