



CERVOZ

MEC-LAN-2002

M.2 2242/2260/2280 (B+M key) 2 port
10/100/1000 Ethernet board

Product Datasheet



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Revision History

Date	Revision	Description
2026.04.10	1.2	New datasheet format and add PoE+ daughter board



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1. Product Overview

1.1 Introduction

MEC-LAN-2002 is a dual-port GbE LAN expansion module designed for embedded systems and industrial PC platforms. With an M.2 form factor and PCI Express x2 interface, it provides a flexible and cost-effective solution for high-speed network expansion in systems with available M.2 slots.

MEC-LAN-2002 features dual Ethernet ports with support for 10/100/1000Mbps auto-negotiation and IEEE 802.3x flow control, ensuring stable and high-throughput network performance.

MEC-LAN-2002 is powered by the Intel I210 Ethernet Controller, providing reliable performance, high efficiency, and stable network connectivity. An external PoE+ module is available to support both power and data transmission over a single Ethernet cable, delivering higher power output than standard PoE.

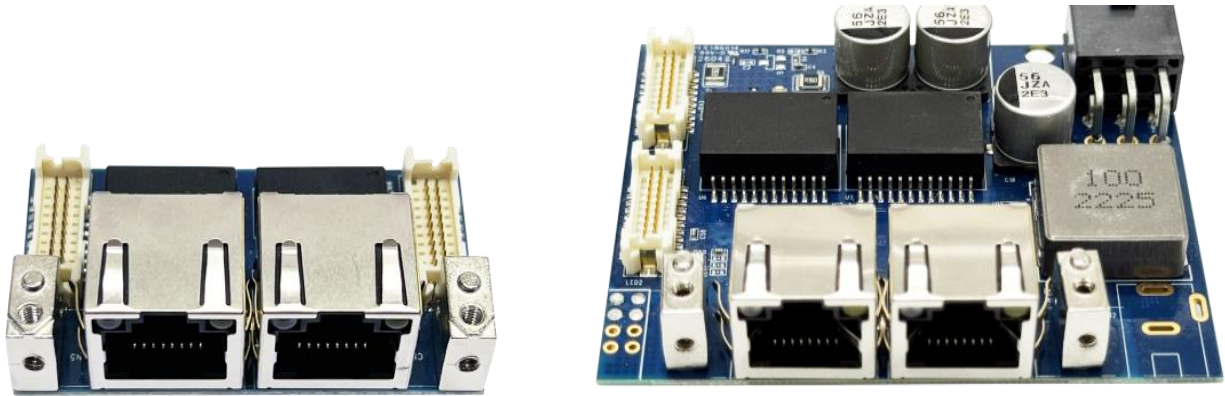
MEC-LAN-2002 features a 3-in-1 breakaway design, supporting 2242, 2260, and 2280 M.2 form factors, with modular daughter board ideal for space-constrained or multi-channel deployments. To support different installation requirements, MEC-LAN-2002 includes daughter board, bracket, and connection cables in the standard package for flexible system integration.

1.2 Feature

- Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5GT/s
- Fully compliant with PCI-Express Base Specification Rev.2.0
- Integrated 10/100/1000Mbps transceiver
- IEEE 802.3, IEEE802.3u, IEEE 802.3ab, and IEEE 802.3z compliant
- IEEE 802.3x Full-Duplex flow control
- Support Wake-on-LAN
- Complies with EN61000-4-2(ESD)Air-15kV, Contact-8kV
- Complies with EN61000-4-4(EFT)2kV
- Complies with EN61000-4-5 2kV Surge protection
- Two independent PSE channels

1.3 MECFIX – Versatile

MECFIX is the unique mounting mechanism designed especially for MEC daughter board. The feature of the mounting unit allows the following mounting options:



1. Standard PCI/PCIe Bracket
2. Low Profile PCI/PCIe Bracket
3. Internal Mounting inside of PC system from any position and angle.
4. Customizing Front/Rear Plate of PC system according to dimension of MEC daughter board.

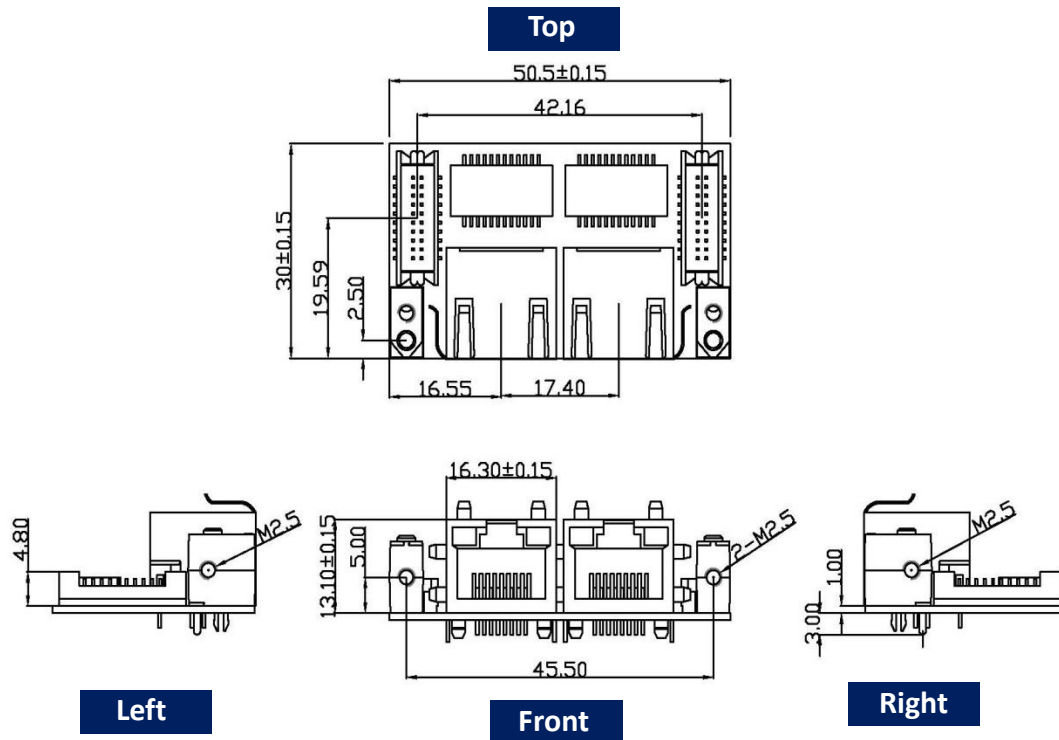
2. Product Specifications

General	
PCI-Express Revision	PCI-Express Base Specification Rev. 2.0
PCI-Express Electromechanical Revision	PCI-Express M.2 Electromechanical Rev. 1.1
Hardware	
Controller	Intel I210 x2
Bus	Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5GT/s
Interface (Connector)	
Ethernet 10/100/1000Mbps	2 (RJ45)

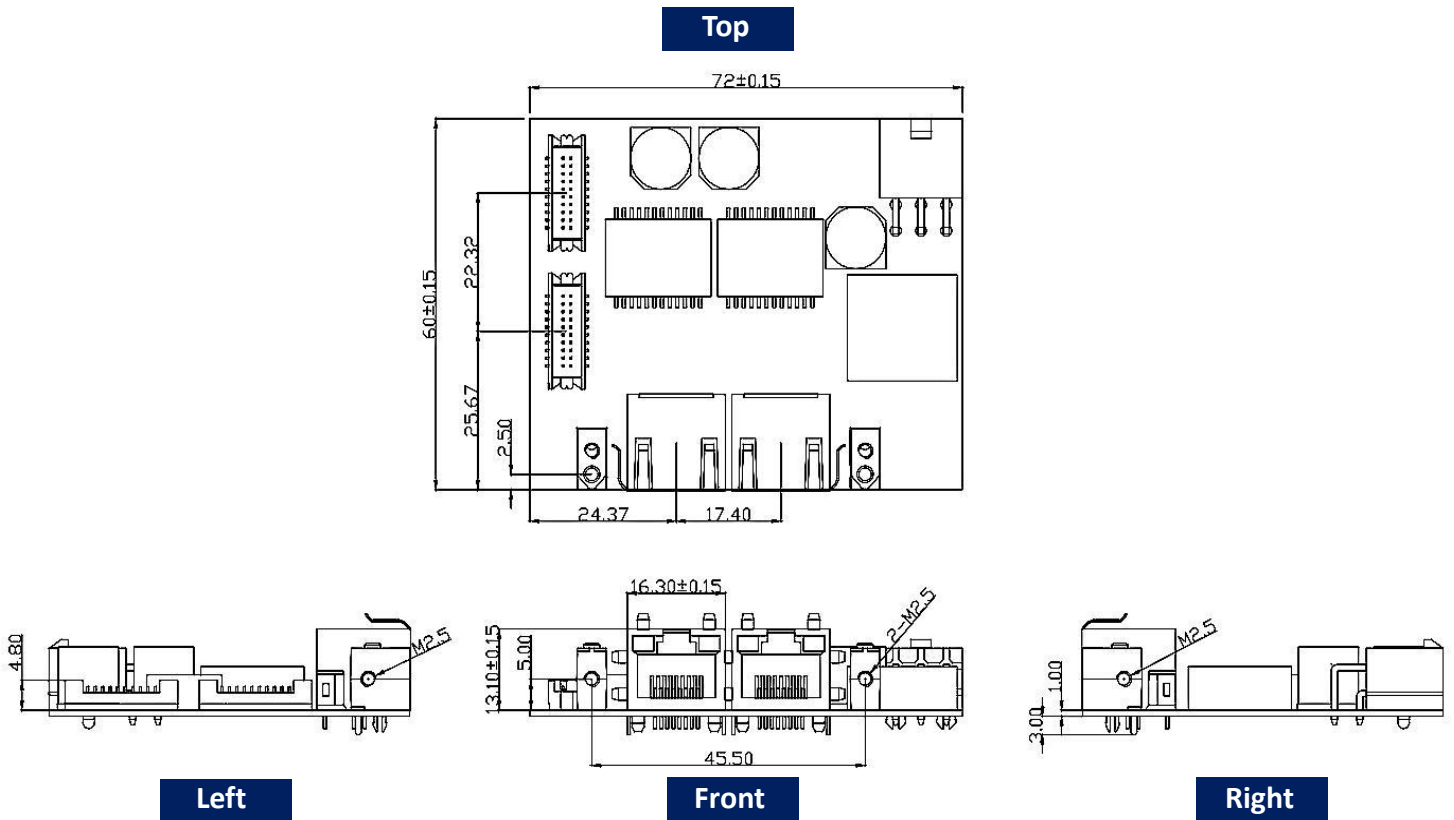
Technology	
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z for 1000BaseX
Flow Control	IEEE 802.3x flow control
Driver Support	
Operating Systems	Win 10, Win 11
Power Requirement	
Power Consumption	625mA@3.3V
PoE+	Maximum 5.5A @ 12V w/ 6 pin PCIE-ATX
Dimensions	
Width x Length (mm)	22.00 x 42.00 / 22.00 x 60.00 / 22.00 x 80.00
Environmental Limits	
Operating Temperature	MEC-LAN-2002 : -40 ~ 85°C MEC-LAN-2002-S : 0 ~ 70°C
Storage Temperature	-40 ~ 125°C
Humidity (non-condensing)	5% ~ 95%
Regulatory Approvals	
EMC	CE, FCC, UKCA
EMI	EN 55032, EN61000-3-2, EN61000-3-3, FCC Part 15 Subpart B, Class B
EMS	EN 55035, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Reliability	
Warranty	3 years
MTBF	>20,161,919



4.2 MEC-LAN-2002i Daughter Board



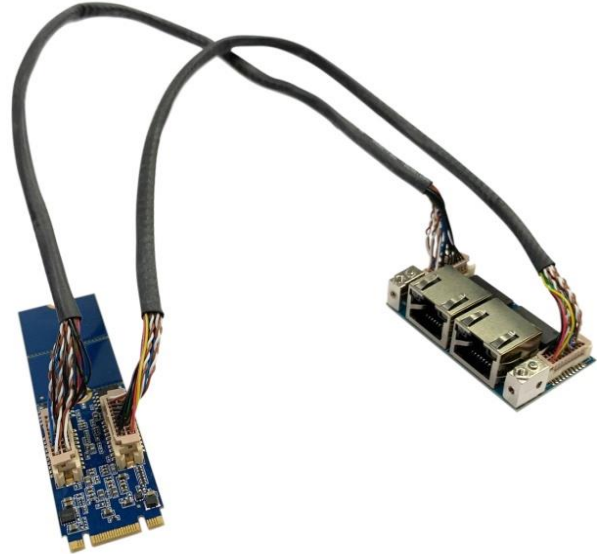
4.3 MEC-LAN-2002P Daughter Board



5. Package Checklist

MEC-LAN-2002i / MEC-LAN-2002i-S

- M.2 2242/2260/2280 Card x 1
- Daughter Board x 1
- Bracket x 1
- M2.5 Screw x 2
- 20Pin Internal Cable (30cm) x 2
- Quick Installation Guide (Printed) x 1



MEC-LAN-2002P / MEC-LAN-2002P-S

- M.2 2242/2260/2280 Card x 1
- PoE+ Daughter Board x 1
- Bracket x 1
- M2.5 Screw x 2
- 20Pin Internal Cable (30cm) x 2
- Quick Installation Guide (Printed) x 1

