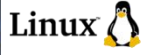# MEC-LAN-PL502

PCI-e 2 port 10GbE Low Profile Ethernet Card with PoE+ Module

- Quad-Lane (x4) PCI-Express with throughput up to 8 GT/s
- Fully compliant with PCI-Express Base Specification Rev. 3.0
- Integrated 100Mbps/1000Mbps/10Gbps transceiver
- Support dual isolated GbE LAN ports
- Dual independent PSE channels
- Complies with IEEE 802.3af
- Complies with IEEE 802.3at, up to 25.5W at 50V per PoE port w/ 6pin PCIE-ATX
- Supports power input 12V~24V from 6pin PCIE-ATX
- External PoE+ module power supply (optional)

Overview

MEC-LAN-PL502 is a dual isolated 10GbE LAN module for embedded PC. The card follows the PCI-e standard which is compliant with PCI Express x 4 classification. This board fits in any host computer that has PCI-e card slots. MEC-LAN-PL502 is a highly cost-effective solution to expand Gigabit network for your computer. External Power over Ethernet Plus (PoE+) module ensures reliable power and data transfer and supplies more power than standard PoE.

Top Performance

MEC-LAN-PL502 has two Ethernet ports that support auto-negotiation 100M/1000M/10Gbps Ethernet connection with IEEE 802.3x and IEEE 802.3z flow control.

Intel Ethernet Chipset

MEC-LAN-PL502 uses high performance, efficiency, and stability Intel X550 Gigabit Ethernet Controller.

High Usability

MEC-LAN-PL502 is designed with flexibilities for many different application and accessories (standard bracket and low profile bracket) are included in the standard package.

Specifications

General

PCI-Express Revision:
PCI-Express Base Specification Rev. 3.0
PCI-Express Electromechanical Revision:
PCI-Express Base Specification Rev. 3.0

Form Factor

Standard PCI-Express GEN3x4

Interface (Connector)

Ethernet 100M/1000M/10Gbps: 2 (RJ45)

Hardware

Controllers: Intel X550-AT2 x 1

Bus: Quad-Lane (x4) PCI-Express with throughput up to 8 GT/s

Technology

Standards:

- IEEE 802.3an for 10GBase-T
- IEEE 802.3u for 100Base-T(X)
- IEEE 802.3ab for 1000Base-T
- IEEE 802.3bz for NBASE-T(support for 2.5GbE and 5.0GbE),NBASE-T in Linux Only
- IEEE 801.1Q (VLAN)
- IEEE 802.1ad (Double VLAN)
- IEEE 1588
- IEEE 802.1AS
- Support for Data Center Bridging (DCB); (802.1Qaz, 802.1Qbb, 802.1p)

Flow Control:

IEEE 802.3x and IEEE 802.3z flow control

Wake On LAN: No

Isolated GbE LAN port: Yes

Isolated PoE+: No

Dimensions

Width x Length (mm): 167.65 x 68.90

Driver Support

Operating Systems:

Windows 10, 11
Windows Server 2016, 2019, 2022
Linux: RHEL 7.9 or later, SLES 12 SP5 or later, Ubuntu 18.04 LTS or later, FreeBSD 12.3 or later, VMware vSphere 2016 (ESXi 6.5) or later,
Stable Kernel version 5.x or later

Power Requirement

Power Consumption: 850mA@12V

PoE+: Maximum 5.6A @ 12V w/ 6 pin PCIE-ATX

Environmental Limits

Operating Temperature: 0°C ~ 55°C

Storage Temperature: -40°C ~ 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 55024, 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
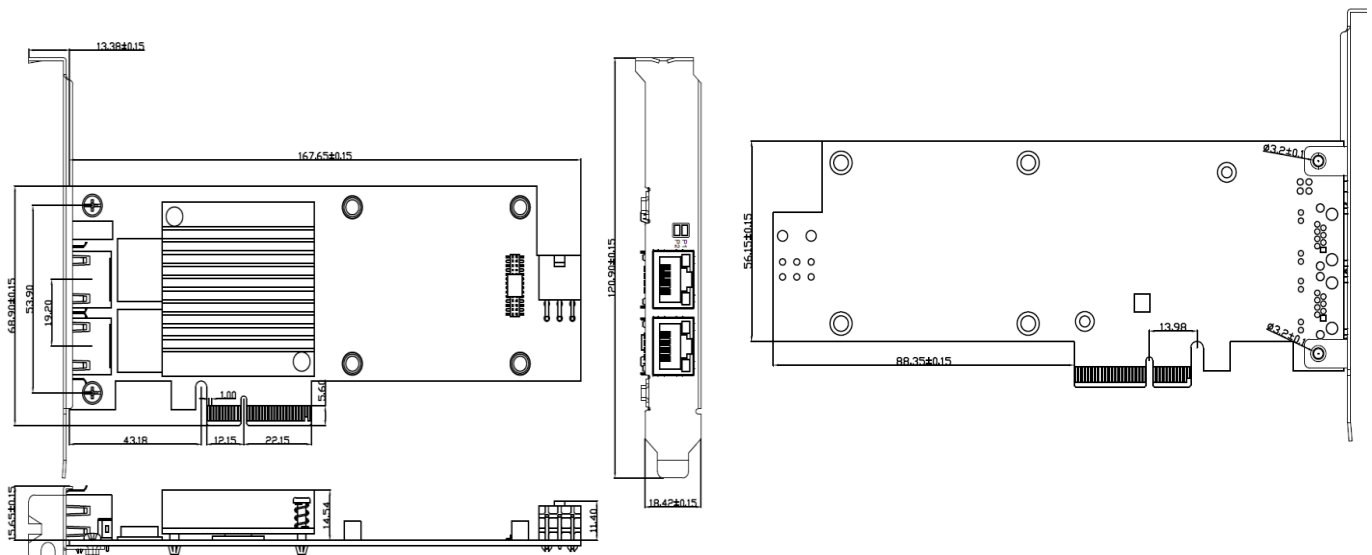
Reliability

Warranty: 3 years
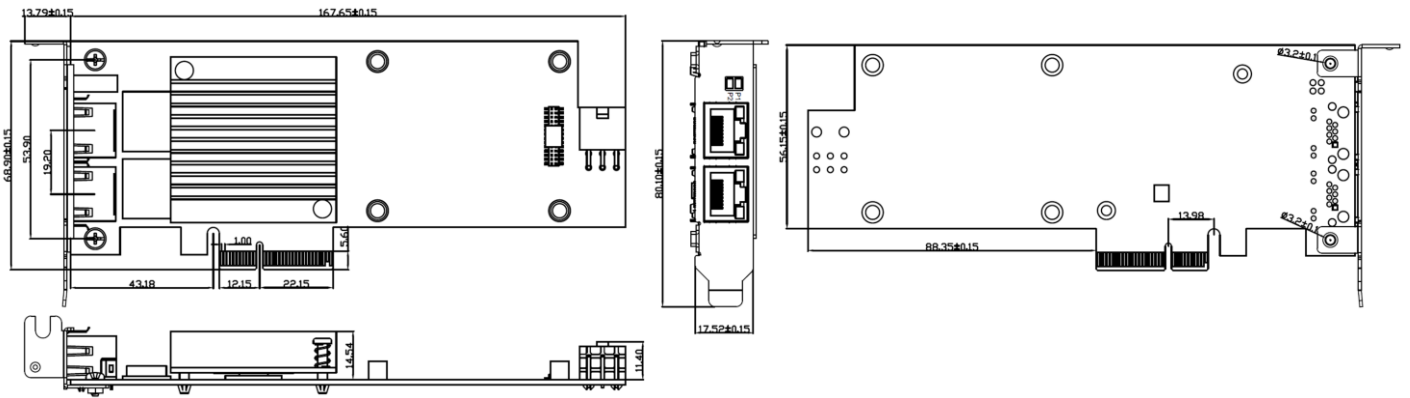
MTBF: 6,329,507 Hours

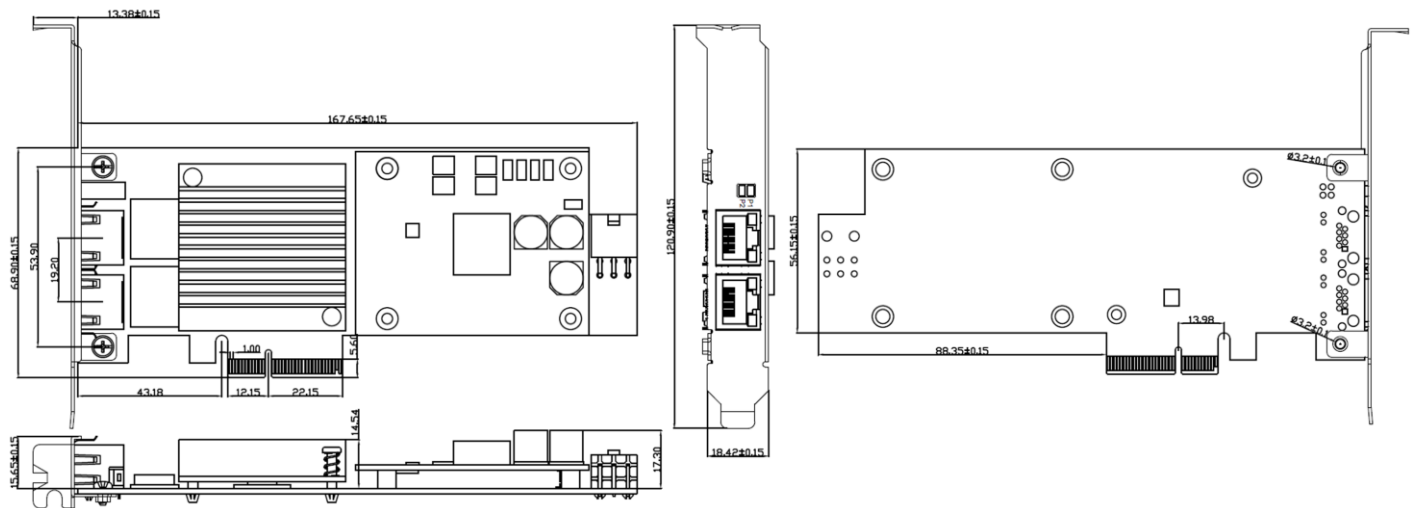# Dimensions

MEC-LAN-PL502

with standard bracket
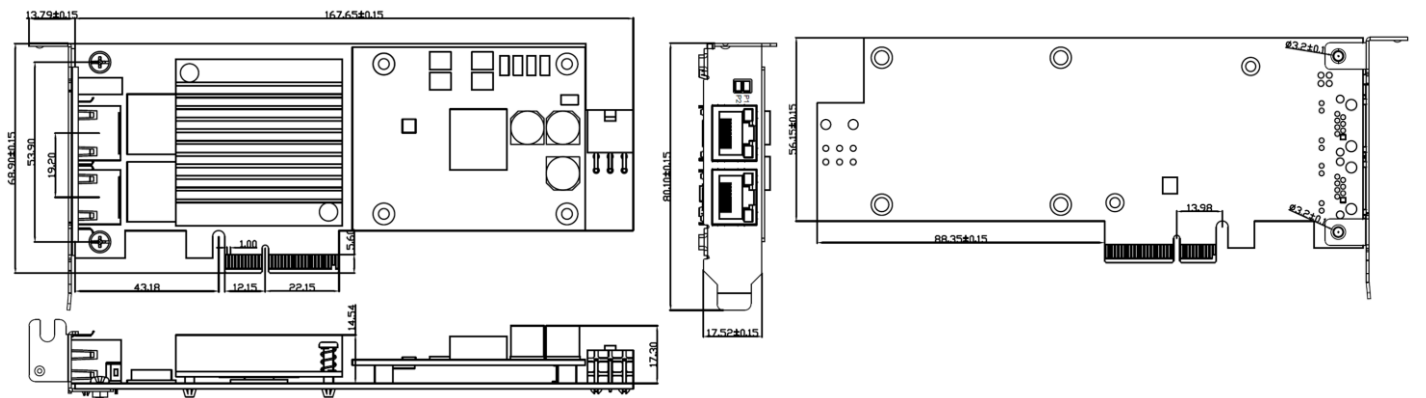
MEC-LAN-PL502

with low profile bracket

MEC-LAN-PL502P

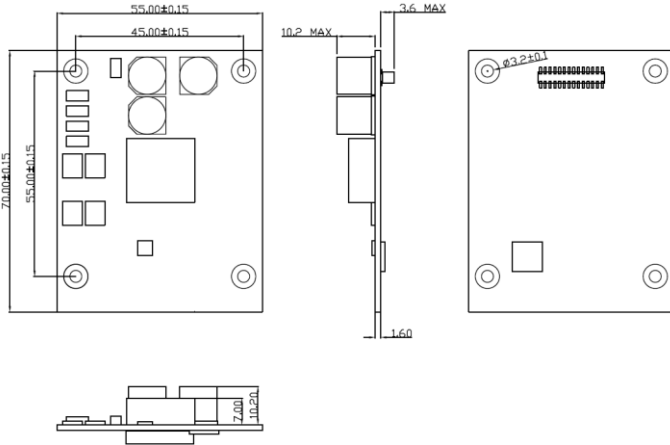with standard bracket

MEC-LAN-PL502P

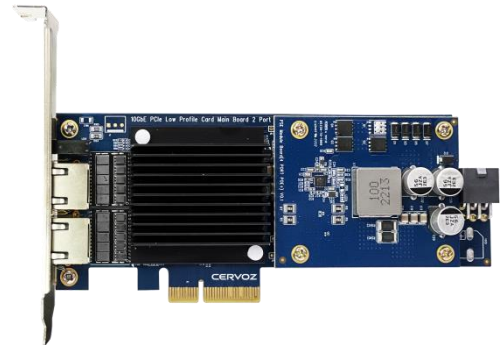with low profile bracket
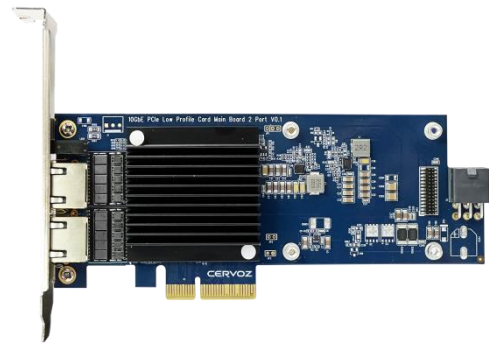
PoE+ Module

Package Checklist

MEC-LAN-PL502

- PCI-e Low Profile LAN Card (with Heatsink x1) x 1
- Standard Bracket x 1
- Low Profile Bracket x 1
- Quick Installation Guide (Printed) x 1

MEC-LAN-PL502P

- PCI-e Low Profile LAN Card (with Heatsink x1) x 1
- PoE+ Module x 1
- Standard Bracket x 1
- Low Profile Bracket x 1
- Quick Installation Guide (Printed) x 1

Ordering Information

Available Models

MEC-LAN-PL502	PCI-e 2 port 10GbE Low Profile Ethernet Card (0℃~+55℃)
MEC-LAN-PL502P	PCI-e 2 port 10GbE Low Profile Ethernet Card (0℃~+55℃) with PoE+ Module