

# MEC-LAN-M102i

## Mini PCI-e 2-port 10/100/1000 isolated Ethernet board



- 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, IEEE 802.3u, IEEE 802.3ab, and IEEE 802.3z compliant
- IEEE 802.3x Full-Duplex flow control
- 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



## Overview

MEC-LAN-M102i is a dual isolated GbE LAN module for embedded PC. The card follows the Mini PCI-e standard which is compliant with PCI Express x 1 classification and small form factor (30×50.95 mm). This board fits in any host computer that has Mini PCI-e card slots. MEC-LAN-M102i is a highly cost-effective solution to expand Gigabit network for your computer.

### Top Performance

MEC-LAN-M102i has two Ethernet ports that support auto-negotiation 10/100/1000Mbps Ethernet connection with IEEE 802.3x flow control.

### Intel Ethernet Chipset

MEC-LAN-M102i uses high performance, efficiency, and stability Intel I210 Gigabit Ethernet Controller.

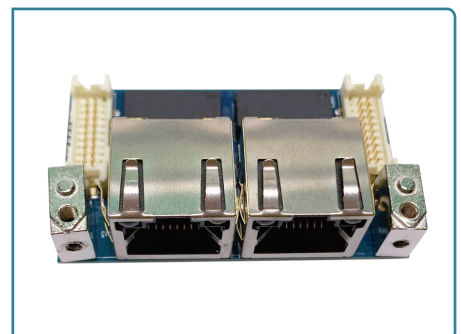
### High Usability

MEC-LAN-M102i is designed with flexibilities for many different application and accessories (daughter board, bracket, connection cable) are included in the standard package.

### MECFIX – Versatile Mounting

MECFIX is the unique mounting mechanism designed specially for MEC daughterboard. 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 daughterboard.



# Specifications

## General

### PCI-Express Revision:

PCI-Express Base Specification Rev. 2.0

### PCI-Express Electromechanical Revision:

PCI-Express Mini Card Electromechanical Rev. 2.0

## Hardware

**Controllers:** Intel I210 x 2

**Bus:** Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5GT/s

## Interface (Connector)

**Ethernet 10/100/1000:** 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 7, Win 8, Win 10

## Power Requirement

**Power Consumption:** 705mA@3.3V

## Dimensions

**Width x Length (mm):** 30.00 x 50.95

## Environmental Limits

### Operating Temperature:

MEC-LAN-M102i : -40°C ~ 85°C

MEC-LAN-M102i-S : 0°C ~ 70°C

**Storage Temperature:** -40°C ~ 125°C

**Humidity (non-condensing):** 5% ~ 95%

## Regulatory Approvals

**EMC:** CE, FCC

**EMI:** EN 55032, EN61000-3-2, EN61000-3-3, FCC Part 15 Subpart B Class B

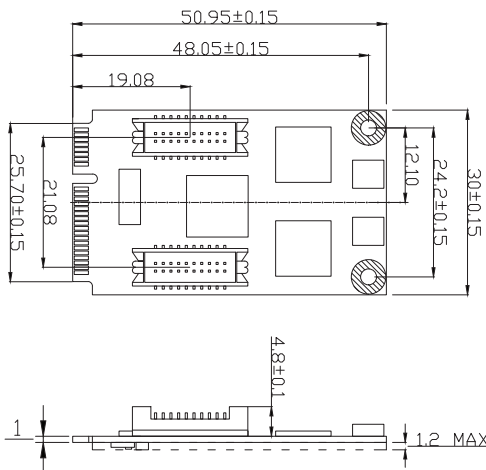
**EMS:** EN 55035, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11

## Reliability

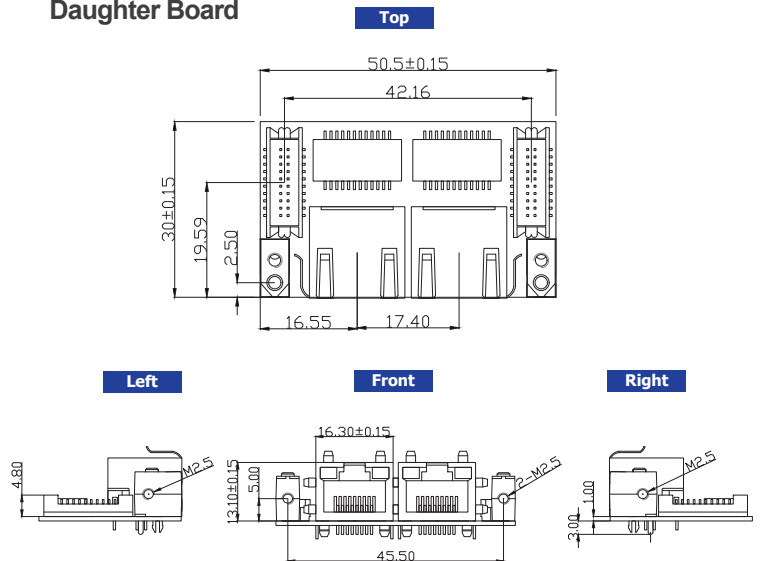
**Warranty:** 3 years

**MTBF:** >20,161,919

## Dimensions



## Daughter Board



## Package Checklist

- Mini PCI-e Card x 1
- Daughter Board x1
- Bracket x 1
- M2.5 Screw x 2
- 20Pin Internal Cable (30cm) x 2
- Quick Installation Guide (Printed) x 1

# Ordering Information

## Available Models

MEC-LAN-M102i Mini PCI-e 2-port 10/100/1000 isolated Ethernet board (-40°C ~ 85°C)

MEC-LAN-M102i-S Mini PCI-e 2-port 10/100/1000 isolated Ethernet board (0°C ~ 70°C)

