

# MEC-LAN-M602i

*Mini PCI-e 2-port 2.5GbE isolated Ethernet Board (-40°C ~ +85°C)*



- Single-Lane (x1) PCI-Express with throughput to 5.0/2.5GT/s
- Fully compliant with PCI-Express Base Specification Rev.2.1
- Integrated 10/100/1000/2500Mbps transceiver
- IEEE 802.3, IEEE802.3u, IEEE 802.3ab, IEEE 802.3z and IEEE 802.3bz compliant
- IEEE 802.3x and IEEE 802.3z 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



## Overview

MEC-LAN-M602i is a dual isolated 2.5GbE 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-M602i is a highly cost-effective solution to expand Gigabit network for your computer.

### Top Performance

MEC-LAN-M602i has two Ethernet port that supports auto-negotiation 10/100/1000/2500Mbps Ethernet connection with IEEE 802.3x and IEEE 802.3z flow control.

### Intel Ethernet Chipset

MEC-LAN-M602i uses high performance, efficiency, and stability Intel I226 Gigabit Ethernet Controller.

### High Usability

MEC-LAN-M602i is designed with flexibilities for many different application and accessories (daughter board, bracket, connection cable) are included in the standard package.

## MECFIX – Versatile

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. 2.1

#### PCI-Express Electromechanical Revision:

PCI-Express Mini Card Electromechanical Rev. 2.0

### Hardware

**Controllers:** Intel I226-IT x 2

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

### Interface (Connector)

**Ethernet 10/100/1000/2500:** 2 (RJ45)

\*\*Based on PCI-Express Mini Card Electromechanical specification, It is not able to operate at 2port 2.5GbE full speed simultaneously.

### Technology

#### Standards:

- IEEE 802.3 for 10BaseTE
- IEEE 802.3u for 100BaseTX
- IEEE 802.3ab for 1000BaseT
- IEEE 802.3bz for 2500BaseX

#### Time Sensitive Networking Capabilities:

IEEE 802.1Qbu 、 802.3br 、 802.1Qbv 、  
802.1AS-REV 、 802.1p/Q 、 802.1Qav

#### Flow Control:

IEEE 802.3x and IEEE 802.3z flow control

**Isolated GbE LAN port:** Dual

### Driver Support

**Operating Systems:** Win 10, Win 11

### Power Requirement

**Power Consumption:** 970mA@3.3V

### Dimensions

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

### Environmental Limits

**Operating Temperature:** -40°C ~ 85°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

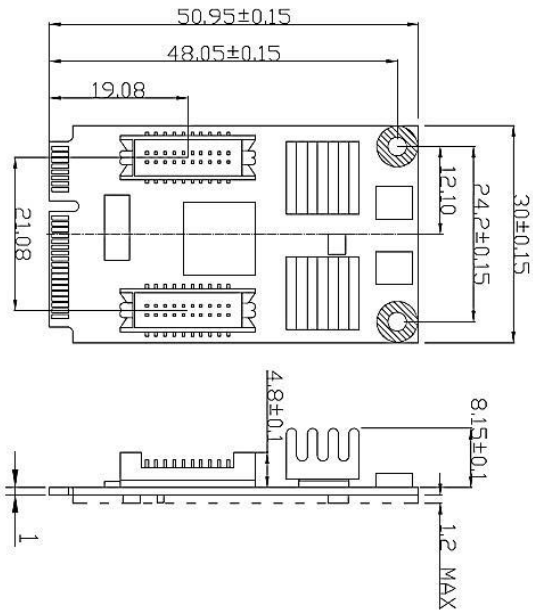
**EMS:** EN 55035, IEC 61000-4-2, IEC 61000-4-3,  
IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6,  
IEC 61000-4-8, IEC 61000-4-11

### Reliability

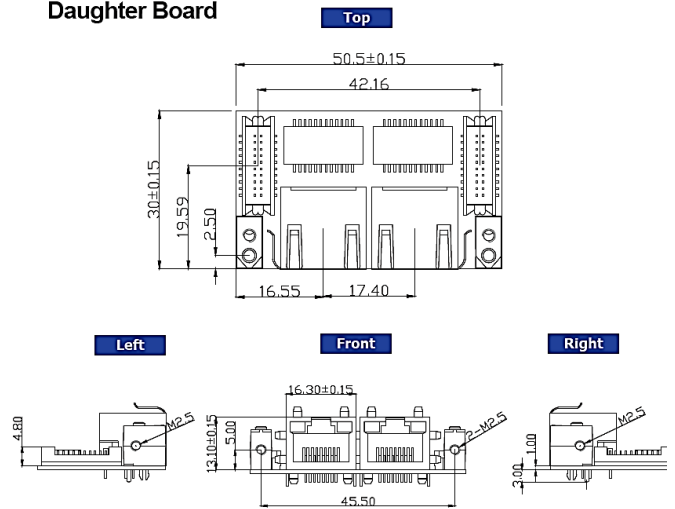
**Warranty:** 3 year

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

## Dimensions



## Daughter Board



## Package Checklist

- Mini PCI-e Card (with Heatsink x2) 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-M602i

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