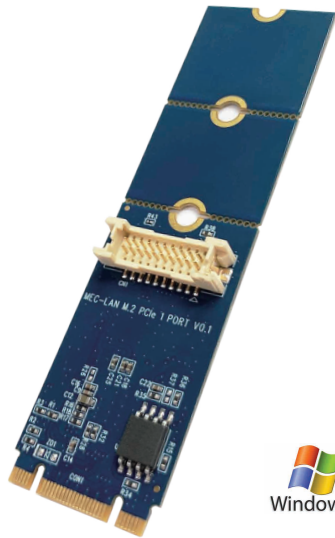# MEC-LAN-2001i

M.2 2242/2260/2280 1-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-2001i is a single isolated GbE LAN module for embedded PC. The card follows the M.2 standard which is compliant with PCI Express x 1 classification and M.2 form factor. This board fits in any host computer that has M.2 slots. MEC-LAN-2001i is a highly cost-effective solution to expand Gigabit network for your computer.

Top Performance

MEC-LAN-2001i has one Ethernet port that supports auto-negotiation 10/100/1000Mbps Ethernet connection with IEEE 802.3x flow control.

Intel Ethernet Chipset

MEC-LAN-2001i uses high performance, efficiency, and stability Intel I210 Gigabit Ethernet Controller.
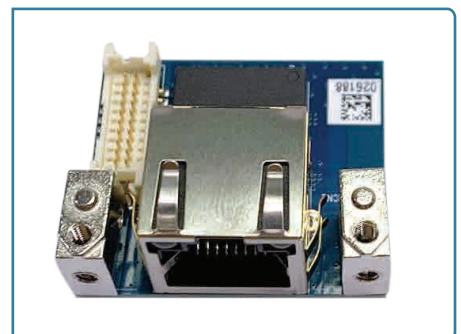
High Usability

MEC-LAN-2001i 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 M.2 Electromechanical Rev. 1.1

Hardware
Controllers: Intel I210 x 1
Bus: Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5GT/s

Interface (Connector)
Ethernet 10/100/1000: 1 (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: 190mA@3.3V

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-2001i   : -40°C ~ 85°C
  MEC-LAN-2001i-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
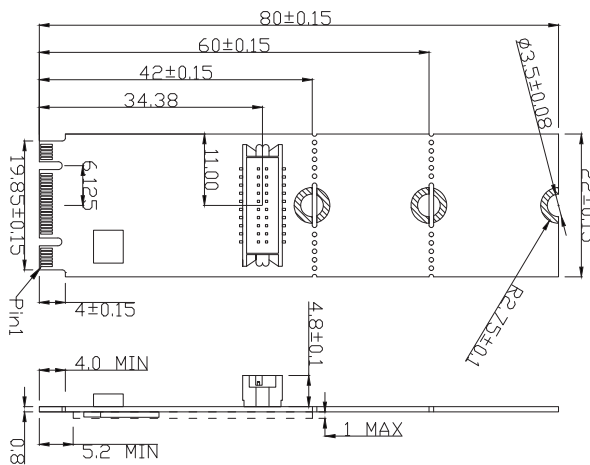Class B
EMS: EN 55035, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
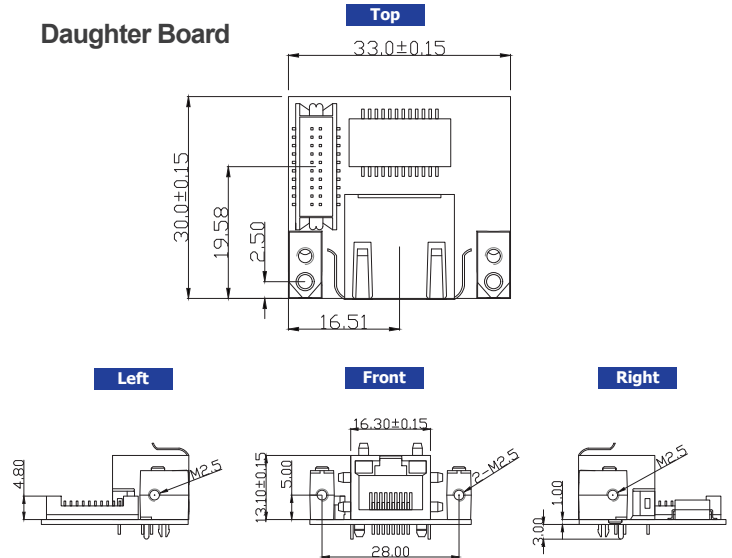
Reliability
Warranty: 3 years
MTBF: >20,161,919

Dimensions

Daughter Board

Package Checklist

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

Ordering Information

Available Models

MEC-LAN-2001i	M.2 2242/2260/2280 1-port 10/100/1000 isolated Ethernet board (-40°C ~ 85°C)
MEC-LAN-2001i-S	M.2 2242/2260/2280 1-port 10/100/1000 isolated Ethernet board (0°C ~ 70°C)