

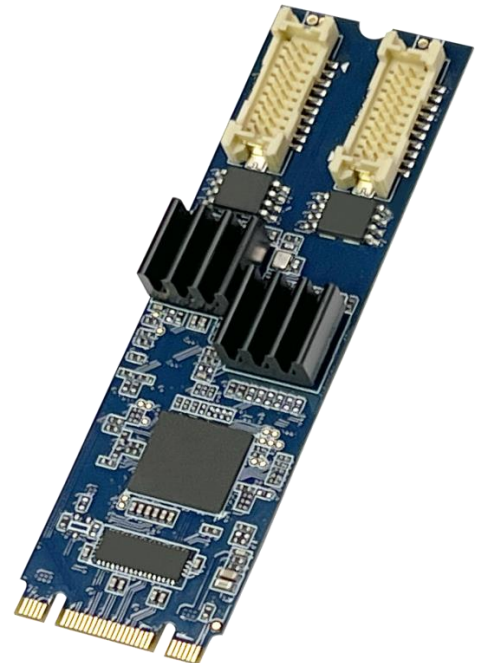


CERVOZ

MEC-LAN-2602i

M.2 2280 (B+M key) 2 port 2.5GbE isolated Ethernet board (-40°C ~+85°C)

Product Datasheet



Date: 2024.03.18

Revision: 1.0

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Revision History

Date	Revision	Description
2024.03.18	1.0	First Released



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1. Product Overview

1.1 Introduction

MEC-LAN-2602i is a dual isolated 2.5GbE LAN module for embedded PC. The card follows the M.2 standard which is compliant with PCI Express x 2 classification and M.2 form factor. This board fits in any host computer that has M.2 slots. MEC-LAN-2602i is a highly cost-effective solution to expand Gigabit network for your computer.

MEC-LAN-2602i has two Ethernet ports that support auto-negotiation 10/100/1000/2500Mbps Ethernet connection with IEEE 802.3x and IEEE 802.3z flow control.

MEC-LAN-2602i uses high performance, efficiency, and stability Intel I226 Gigabit Ethernet Controller.

MEC-LAN-2602i is designed with flexibilities for many different application and accessories (daughter board, bracket, connection cable) are included in the standard package.

1.2 Feature

- Dual-Lane (x2) PCI-Express with throughput up 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

1.3 MECFIX – Versatile

MECFIX is the unique mounting mechanism designed especially 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.

2. Product Specifications

General	
PCI-Express Revision	PCI-Express Base Specification Rev. 2.1
PCI-Express Electromechanical Revision	PCI-Express M.2 Electromechanical Rev. 1.1
Hardware	
Controller	Intel I226-IT x2
Bus	Dual-Lane (x2) PCI-Express with throughput up to 5.0/2.5GT/s
Interface (Connector)	
Ethernet 10/100/1000/2500Mbps	2 (RJ45)

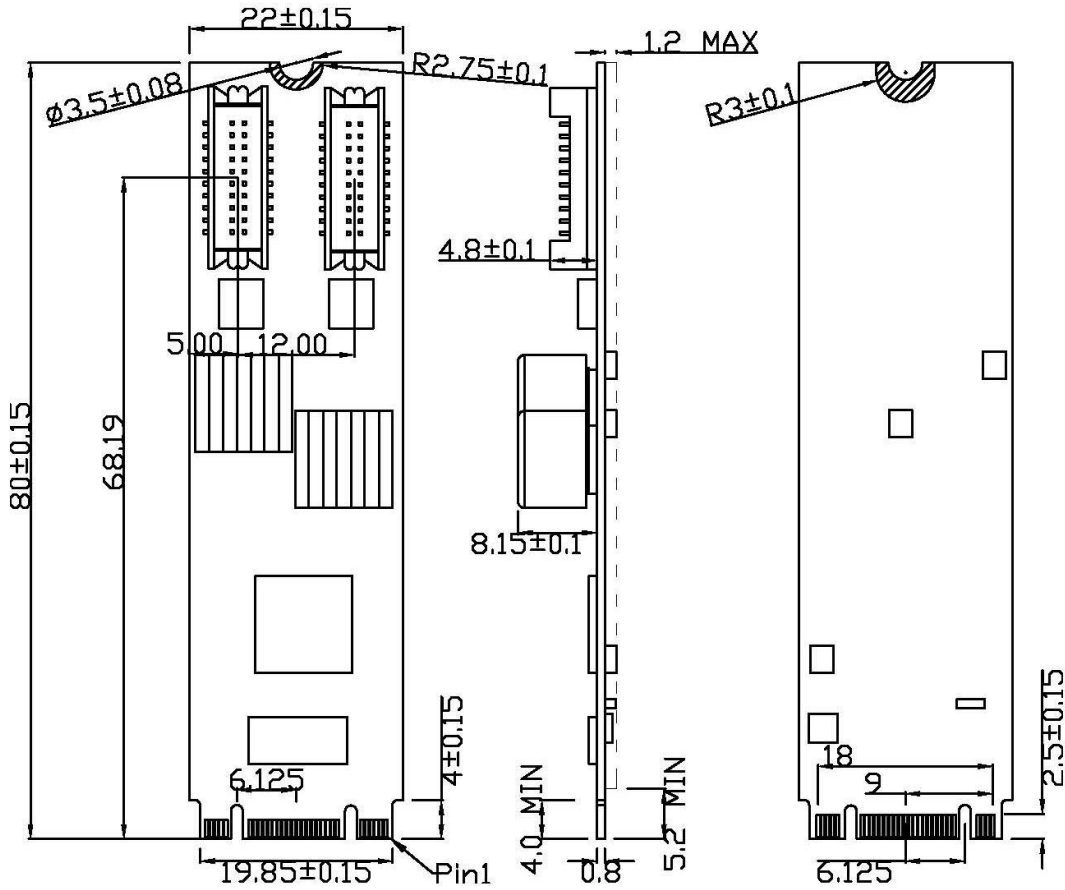


Technology	
Standards	IEEE 802.3 for 10Base-TE IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3bz for 2500Base-T
Time Sensitive Networking Capabilities	IEEE 802.1Qbu 、 802.3br 、 802.1Qbv 、 802.1AS-REV 、 802.1p/Q 、 802.1Qav
Flow Control	IEEE 802.3x and d IEEE 802.3z flow control
Isolated GbE LAN port	Dual
Driver Support	
Operating Systems	Win 10, Win 11
Power Requirement	
Power Consumption	990mA@3.3V
Dimensions	
Width x Length (mm)	22.00 x 80.00
Environmental Limits	
Operating Temperature	-40 ~ 85°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

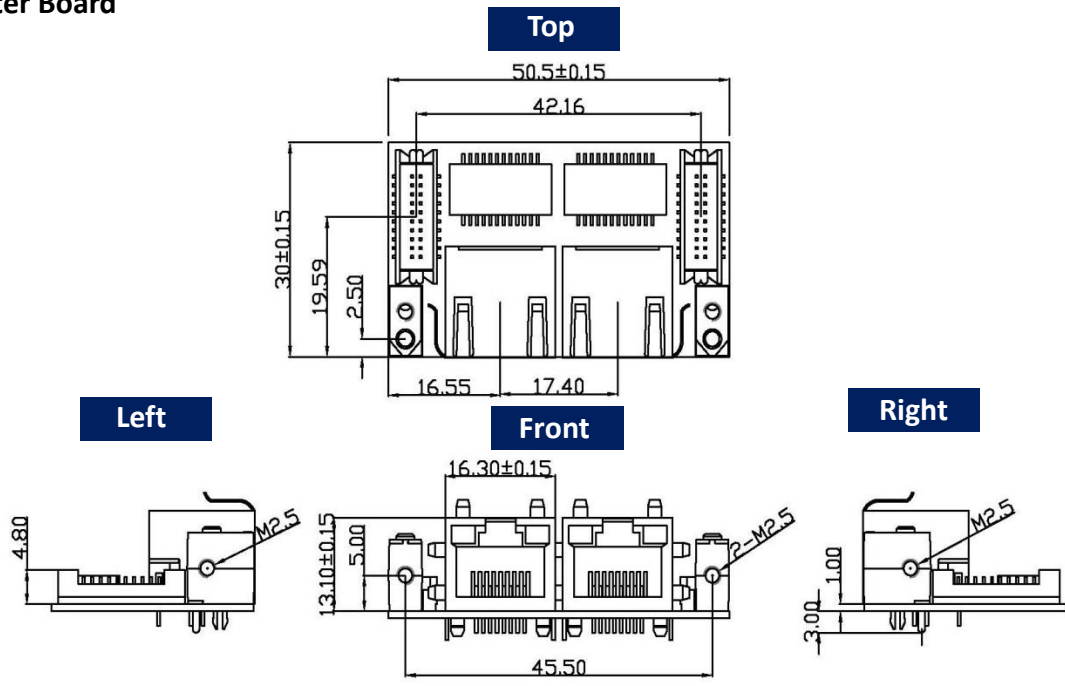


3. Dimensions

3.1 Main Board



3.2 Daughter Board





4. Package Checklist

- M.2 2280 Card (with Heatsink x2) 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

