MEC-USB-M102

Mini PCI-e 2-port USB 3.0 Board



- Single-Lane (x1) PCI-Express with throughput up to 5.0/2.5Gbps
- Fully compliant with PCI-Express Base Specification Rev. 2.0
- Two USB3.0 Super-Speed ports
- Support simultaneous operation of multiple USB 1.1, USB 2.0, and USB 3.0 devices
- USB data transfer rate of 1.5/12/480/5000 Mbps
- Universal Serial Bus 3.0 specification Revision 1.0 compliant
- Support Hot-Swap function















Overview

MEC-USB-M102 is a USB 3.0 card for embedded PC. The card follows the Mini PCI-e standard which is complaint with PCI Express x 1 classification and small form factor (30.00 x 50.95 mm). This board fits in any host computer that has Mini PCI-e card slots.



Top Performance

MEC-USB-M102 provides data transfer rate of 1.5/12/480/5000 Mbps while connecting to USB 3.0 compliant peripherals. MEC-USB-M102 supports Hot-Swap and Plug-n-Play functions which allow devices to be plugged in or removed while bus is active.



High Usability

MEC-USB-M102 is designed with flexibilities for many different applications. The accessories (daughter board, bracket, connection / power input 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: Renesas (NEC) µPD720202K8-701-BAA-A

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

Interface (Connector)

USB 3.0: 2 (USB)

Performance

Data Transfer Rate:

Data Transfer rate of 1.5 / 12 / 480 / 5000 Mbps. Low Speed (1.5Mbps), Full Speed(12Mbps), High Speed(480Mbps), Super Speed(5Gpbs)

Driver Support

Operating Systems: Win 7, Win 8, Win 10

Power Requirement

Power Consumption: 215mA@3.3V

Dimensions

Width x Length (mm): 30.00 x 50.95

Environmental Limits

Operating Temperature: $0^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Storage Temperature: $-40^{\circ}\text{C} \sim 95^{\circ}\text{C}$ Humidity (non-condensing): $5\% \sim 95\%$

Regulatory Approvals

EMC: CE. FCC

EMI: EN 55032, EN61000-3-2, EN61000-3-3,

FCC Part 15 Subpart B

Class B

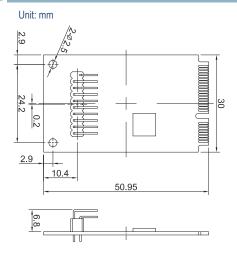
EMS: En 55024, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6,

IEC 61000-4-8, IEC 61000-4-11

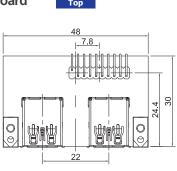
Reliability

Warranty: 3 years

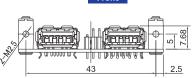
Dimensions

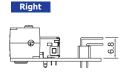


Daughter Board











Package Checklist

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

Ordering Information



Available Models

MEC-USB-M102

Mini PCI-e 2-port USB 3.0 board

