

# MEC-USB-M002

## Mini PCI-e 2-port USB 3.0 board



- PCI Express x 1 compliant
- 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-M002 is a USB 3.0 card for embedded PC. The card follows the Mini PCI-e standard which is compliant with PCI Express x 1 classification and small form factor (30.00 x 50.95 mm). This board fits in any host computer that has Mini PCI-e card slots.

### Top Performance

MEC-USB-M002 provides data transfer rate of 1.5/12/480/5000 Mbps while connecting to USB 3.0 compliant peripherals. MEC-USB-M002 supports Hot-Swap and Plug-n-Play functions which allow devices to be plugged in or removed while bus is active.

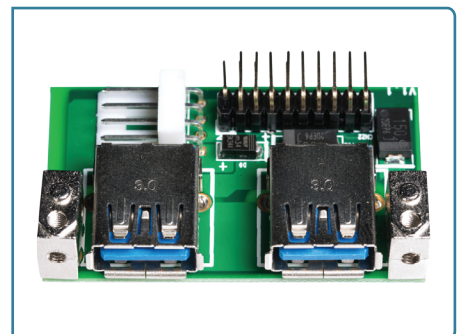
### High Usability

MEC-USB-M002 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

## Hardware

**Controllers:** Renesas (NEC)  $\mu$ PD720200A  
**Bus:** PCI Express X1

## 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(5Gbps)

## Driver Support

**Operating Systems:** Win 2003, Win XP,  
Win Vista, Win 7, Win 8

## Power Requirement

**Power Consumption:** 290mA@3.3V

## Dimensions

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

## Environmental Limits

**Operating Temperature:** -20°C ~ 70°C

**Storage Temperature:** -20°C ~ 85°C

**Humidity:** 5% ~ 95%

## Regulatory Approvals

**EMC:** CE, FCC

**EMI:** EN 55022, 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

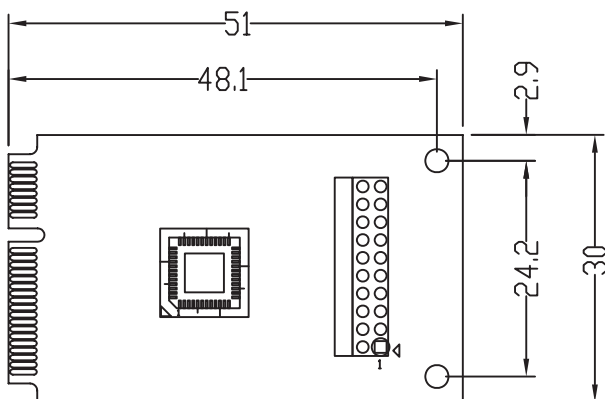
## Reliability

**MTBF:** 2,942,474 hr

**Warranty:** 3 years

## Dimensions

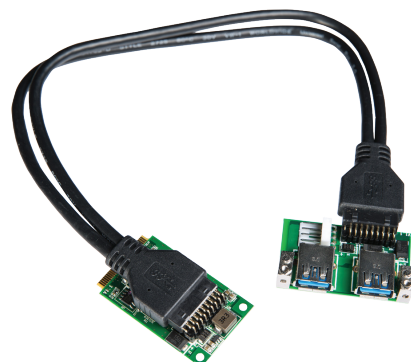
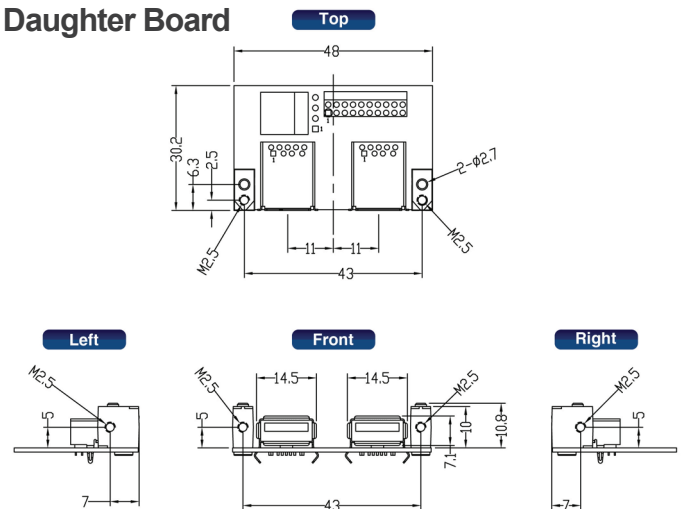
Unit: mm



## 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

## Daughter Board



# Ordering Information

## Available Models

MEC-USB-M002    Mini PCI-e 2-port USB 3.0 board