MEC-USB-2002

M.2 2242/2260/2280 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-2002 is a USB 3.0 card for embedded PC. The card follows the M.2 standard which is complaint with PCI Express x 1 classification and M.2 form factor. This board fits in any host computer that has M.2 slots.



Top Performance

MEC-USB-2002 provides data transfer rate of 1.5/12/480/5000 Mbps while connecting to USB 3.0 compliant peripherals. MEC-USB-2002 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-2002 is designed with flexibilities for many different applications. The accessories (bracket, connection / power input cable) are included in the standard package.

Specifications

General

PCI-Express Revision:

PCI-Express Base Specification Rev 2.0

PCI-Express Electromechanical Revision:

PCI-Express M.2 Electromechanical Rev. 1.1

Power Requirement

Power Consumption: 198mA@3.3V

Dimensions

Width x Length (mm): 22.00 x 42.00

22.00 x 60.00 22.00 x 80.00



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:

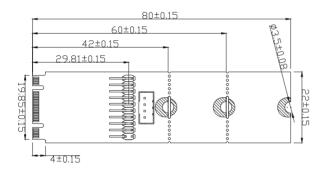
Data Transfer rate of 1.5 / 12 / 480 / 5000 Mbps. Low Speed (1.5Mbps), Full Speed(12Mbps), High Speed(480Mbps), Super Speed(5Gpbs)

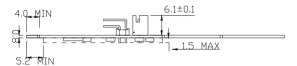
Driver Support

Operating Systems: Win 7, Win 8, Win 10

Dimensions

Unit: mm





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 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

Pac

Package Checklist

- M.2 Card x 1
- Bracket x 1
- 20Pin Internal Cable (25cm) x 1
- 4Pin Power Input Cable (30cm) x 1
 External power in *Needed when total power consumption exceed 5W
- Quick Installation Guide (Printed) x 1



Ordering Information



Available Models

MEC-USB-2002 M.2 2242/2260/2280 2-port USB 3.0 board