# MEC-USB-2012

### M.2 2280 (B+M key) 2 port USB3.2 board



- Dual-Lane (x2) PCI-Express with throughput to 5.0/2.5 GT/s
- Fully compliant with PCI-Express Base Specification Rev.2.0
- Support individual two USB devices running 5Gbps at full speed
- Support simultaneous operation of multiple USB 1.1, USB 2.0, and USB 3.2 GEN1x1 devices
- USB data transfer rate of 1.5/12/480/5000 Mbps
- Universal Serial Bus 3.2 specification Revision 1.0 compliant
- Support Hot-Swap function













# Overview

MEC-USB-2012 is a USB 3.2 Gen1x1 card 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.



## **Top Performance**

MEC-USB-2012 provides data transfer rate of 1.5/12/480/5000 Mbps while connecting to USB 3.2 compliant peripherals. MEC-USB-2012 supports two USB devices run at 5Gbps at the same time. Hot-Swap and Plug-n-Play functions which allow devices to be plugged in or removed while bus as active.



# **High Usability**

MEC-USB-2012 is designed with flexibilities for many different applications. The accessories (bracket, connection and 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: 809mA@3.3V

#### **Dimensions**

Width x Length (mm): 22.00 x 80.00

#### Hardware

#### **Controllers:**

Renesas (NEC) μPD720202K8-701-BAA-A x2

**Bus:** Dual-Lane (x2) PCI-Express with throughput

up to 5.0/2.5 GT/s

#### Interface (Connector)

**USB 3.2:** 2 (USB)

#### **Performance**

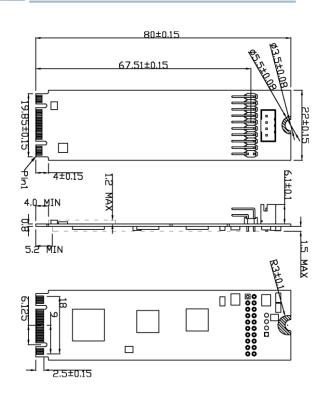
#### **Data Transfer Rate:**

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**



# **Ordering Information**

**Available Models** 



#### **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, 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



# **Package Checklist**

- M.2 2280 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

