

MEC-COM-2032i

M.2 2242/2260/2280 2-port RS-232/422/485 isolated serial board



- Single-Lane (x1) PCI-Express with throughput up to 5.0 / 2.5Gbps
- Fully compliant with PCI-Express Base Specification Rev. 2.0
- Top serial transmission performance up to 921.6 Kbps baud rate
- FIFO 256 Bytes, 15 KV ESD protections on board
- H/W, S/W automate flow control supported
- RS-232/422/485 mode selectable by DIP switch setting
- Support port to computer isolation 2.5kV



Overview

MEC-COM-2032i is a serial communication card for embedded PC. The card follows the M.2 standard which is compliant 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-COM-2032i has 2 RS-232/422/485 serial ports, each individual port supports 921.6 Kbps baud rate. The combination features 15KV ESD protection, FIFO 256 Bytes, HW/SW automated flow control and extended operating temperature which enhances the board's reliability and performance.

High Usability

MEC-COM-2032i is designed with flexibilities for many different applications. The serial RS-232/422/485 mode can be configured by DIP switches. The accessories (bracket, connection / 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

Hardware

Controllers: XR17V352 (16C550C compatible)

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

Interface (Connector)

RS-232/422/485: 2 (DB9 male)

Serial Line Protection

ESD Protection: 15 KV on board

Galvanic Isolation

Voltage: 2.5 kV

Performance

Baud Rate: Asynchronous baud rates up to 921.6 Kbps

Serial Communication Parameters

Data Bits: 5, 6, 7, 8

Stop Bits: 1, 1.5, 2

Parity:

- No Parity bit
- Even Parity bit
- Odd Parity bit
- Parity bit forced to 1
- Parity bit forced to 0

Flow Control: RTS/CTS, XON/XOFF

Serial Signals

RS-232: TXD, RXD, RTS, CTS, DTR, DSR, DCD, GND, RI

RS-422: TXD+, TXD-, RXD+, RXD-

RS-485: DATA+, DATA-

Driver Support

Operating Systems: Win 7, Win 8, Win 10

Power Requirement

Power Consumption: 155mA@3.3V

Dimensions

Width x Length (mm): 22.00 x 42.00
22.00 x 60.00
22.00 x 80.00

Environmental Limits

Operating Temperature: -40°C ~ 85°C

Storage Temperature: -40°C ~ 95°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

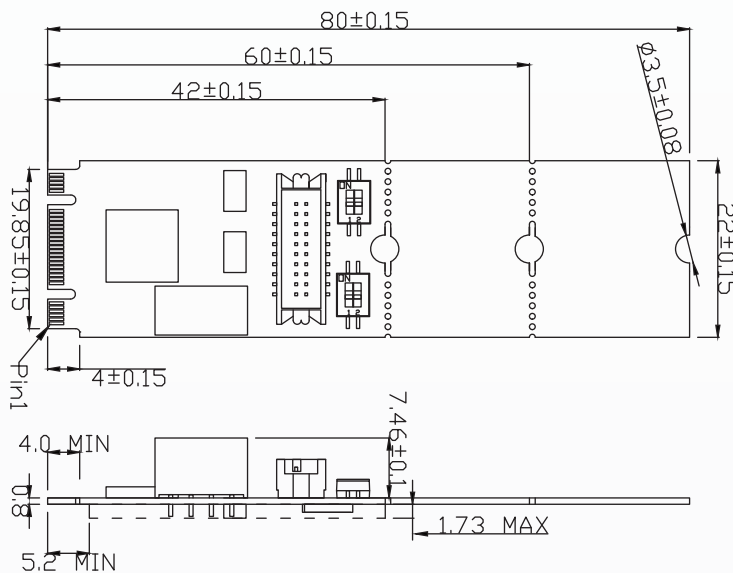
EMS: EN 55035, IEC 61000-4-2, IEC 61000-4-3,
IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6,
IEC 61000-4-8, IEC 61000-4-11, IEC-60950

Reliability

Warranty: 3 years

Dimensions

Unit: mm



Ordering Information

Available Models

MEC-COM-2032i

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Package Checklist

- M.2 Card x 1
- Bracket x 1
- 20Pin Internal Cable w/ two DB9 Male Connectors (30cm) x 1
- Quick Installation Guide (Printed) x 1

