MEC-CAN-2802i

M.2 2280 dual isolated CAN bus 2.0B board (-40 $^{\circ}$ ~+85 $^{\circ}$)



- Single-Lane (x1) PCI-Express with throughput to 5.0/2.5 GT/s
- Fully compliant with PCI-Express Base Specification Rev.2.0
- Meet the Requirements of the ISO 11898 High Speed Standard
- CAN bus 2.0B EFF backward compatible with 2.0A SFF
- Support baud rate 10/20/50/100/125/250/500/800/1000K
- Support CAN message acceptance filter
- Compliant with EN61000-4-2 (ESD) Air-15kV, Contact-8kV
- Split Termination resistor enabled/disabled by switch
- Support Card ID and Silent mode setting by switch
- Provide software SDK for Application layer develop
- Support port to computer isolation 2.5kV
- Support Linux SocketCAN

















Overview

MEC-CAN-2802i is a dual CAN bus module 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-CAN-2802i provides two DB9 connectors that come with 11898-1 and 11898-2 layer protocol support of CAN bus 2.0A/B. The wide operating temperature and 2.5 kV isolation make MEC-CAN-2802i suitable for use on harsh industrial environments.



High Usability

MEC-CAN-2802i is designed with flexibilities for many different application and accessories (bracket and DB9 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: 400mA@3.3V

Dimensions

Width x Length (mm): 22.00 x 80.00

Hardware

Bus: Single-Lane (x1) PCI-Express with throughput

up to 5.0/2.5 GT/s

Output I/F: CAN bus 2.0B

Interface (Connector)

CAN bus: 2 (DB9 male)

Communications

CAN Controllers: F81601 **CAN Transceiver:** ADM3057E **Protocol:** CAN bus 2.0 A/B

Signal Support: CAN-H \ CAN-L

Speed: 10/20/50/100/125/250/500/800/1000K

CAN Frequency: 24MHz

Termination Resistor: 120 OHM

(split termination mode)

Serial Line Protection

ESD Protection: 15kV on board

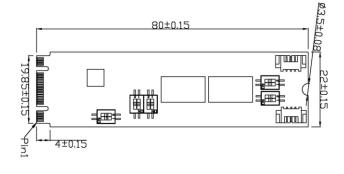
Galvanic Isolation

Voltage: 2.5kV

Performance

Baud Rate: up to 1Mbps

Dimensions





Driver Support

Download driver and Software Development Kit (SDK)

Operating Systems:

Windows 11

Windows 10 32-Bit and 64-Bit Windows 8.1 32-Bit and 64-Bit Windows 8 32-Bit and 64-Bit Windows 7 32-Bit and 64-Bit Linux Kernel 3.4 and above

Environmental Limits

Operating Temperature: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$ Storage Temperature: $-40^{\circ}\text{C} \sim 95^{\circ}\text{C}$ Humidity (non-condensing): $5\% \sim 95\%$

Regulatory Approvals

EMC: CE, FCC, UKCA

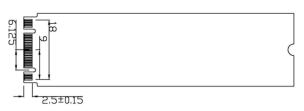
EMI: EN 55022, EN61000-3-2, EN61000-3-3,

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 62368-1

Reliability

Warranty: 3 year **MTBF:** >20,161,919





Package Checklist

- M.2 2280 Card x 1
- Bracket x 1
- DB9 Male Cable (30cm) x 2
- Quick Installation Guide (Printed) x 1



Ordering Information



Available Models

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