

CAN-M2102SI

M.2 2280 to 2-port CAN FD Card
With Surge and Isolation



Introduction

SUNIX CAN-M2102SI, industrial M.2 to 2-port high speed CAN FD communication card, is designed for Edge Computer that enables CAN FD and CAN bus data communication capability for electric vehicle industry application. This board not only built-in SUNIX Digital-I/O controller but also built with many of SUNIX advanced features and technologies. In addition, SUNIX provides Windows and SocketCAN drivers, allowing users to use this card on Windows and Linux operating systems. SUNIX CAN-M2102SI card enriches CAN 2.0/ CAN FD interface expandable capacity; it is the best CAN bus communication solution for electric vehicle and AVG/AMR, IVI (In-Vehicle Infotainment) applications.

Features

- Suitable for M.2 2280 Key-M or Key-B based on PCI Express communication
- Equipped with high reliable SUNIX **CAN FD** controller
- Complies with CAN specifications 2.0 and FD
- CAN FD bit rates for the data field up to 8 Mbit/s
- Isolation on the each CAN channel up to 500V
- Surge protection up to 1KV
- Plug-n-Play, I/O address and IRQ assigned by system
- Support Windows and Linux SocketCAN drivers

Specifications

Board Level

Interface	M.2 PCIe
Controller	SUNIX CAN FD controller
BUS	PCI Express 2.0 x 1(single lane) M.2 2280 Type, 59-pin Key B+M Male
IRQ & IO	Assigned by System
Protection	±15KV IEC61000-4-2 Air Gap Discharge ±8KV IEC61000-4-2 Contact Discharge Isolation on each channel 500V Surge 1KV

CAN Communication

Type	CAN 2.0 / CAN FD	Channel	2-channel
Isolation	500 VDC	Arbitration bit rate	1 Mbit/s
Pin Define	CAN H, CAN L, GND	Data bit rate	8 Mbit/s
Termination	120Ω configured by jumper setting		
PCB Connector	2 pcs x WAFER 2x5P pitch 1.0mm (180°)		

Software Support

Windows	Windows 10 (32/64 bit) /11 (64bit)
Linux	Linux Kernel 4.11 above / 5.x / 6.x

Declaration

Green Product	RoHS, WEEE
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Regulatory Approvals

Hardware	CE / FCC / VCCI / BSMI
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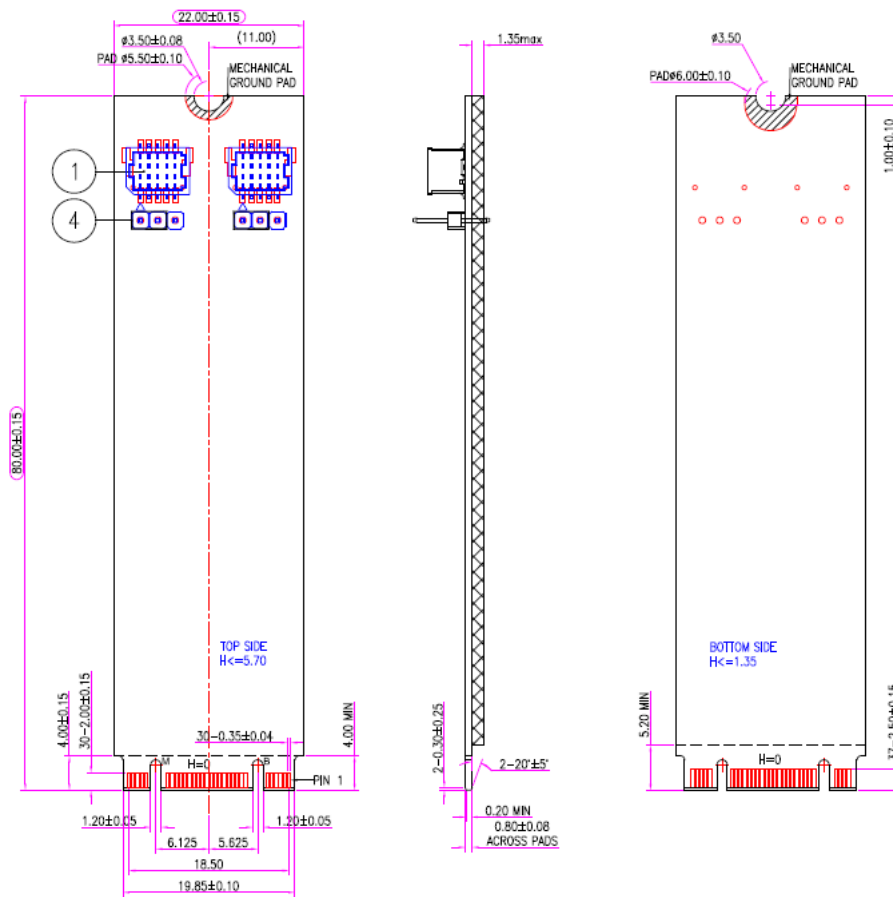
Environment

Operation Temperature	-20 to 70°C (-4 to 158°F)
Operation Humidity	5 to 95% (non-condensing)
Storage Temperature	-20 to 85°C (-4 to 185°F)

Dimension

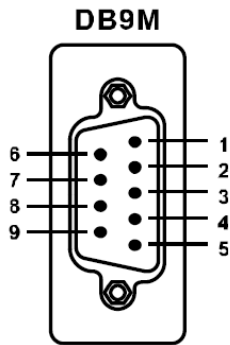
PCB Dimension	22 x 80 mm
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Unit : mm



Pin Assignment

■ CAN interface



PIN	Signal
1	-
2	CAN L
3	GND
4	-
5	-
6	GND
7	CAN H
8	-
9	-

Package

- CAN-M2102SI M.2 to 2-port CAN FD Card
- D-Sub 9-pin male with nuts on cable, 30 cm x 2pcs



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