

# M2C2F00

M.2 to 2-port CAN FD Communication Card



## Introduction

SUNIX M2C2F00, 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 built-in SUNIX Digital-I/O controller, **QiuNiu**, and also built with many of SUNIX advanced features and technologies. In addition, SUNIX provides SocketCAN driver, allowing users to program under Linux operating systems. SUNIX M2C2F00 card enriches CAN/ 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 slot with Key-M or Key-B based on PCI Express communication.
- Equipped with high reliable SUNIX **QiuNiu** controller.
- Complies with CAN specifications 2.0B and FD
- CAN FD bit rates for the data field up to 8 Mbit/s
- Plug-n-Play, I/O address and IRQ assigned by system.
- Support proprietary SocketCAN driver, allowing users to program under Linux operating systems.

## Specifications

### Board Level

<b>Interface</b>	M.2 PCIe
<b>Controller</b>	SUNIX <b>QiuNiu</b> controller
<b>BUS</b>	PCI Express 2.0 x 1(single lane) M.2 2280 Type, 59-pin Key B+M Male
<b>IRQ &amp; IO</b>	Assigned by System
<b>ESD Protection</b>	±15KV IEC61000-4-2 Air Gap Discharge ±8KV IEC61000-4-2 Contact Discharge

### CAN Communication

<b>Type</b>	CAN 2.0 / CAN FD	<b>Channel</b>	2-channel
<b>Arbitration bit rate</b>	1 Mbit/s	<b>Data bitrate</b>	8 Mbit/s
<b>PCB Connector</b>	2 pcs x WAFER 2x5P pitch 1.0mm (180°)		

### Software Support

<b>Linux</b>	Linux 5.x
<b>Driver</b>	SocketCAN

### Declaration

<b>Green Product</b>	RoHS, WEEE
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### Regulatory Approvals

<b>Hardware</b>	CE / FCC / VCCI / BSMI
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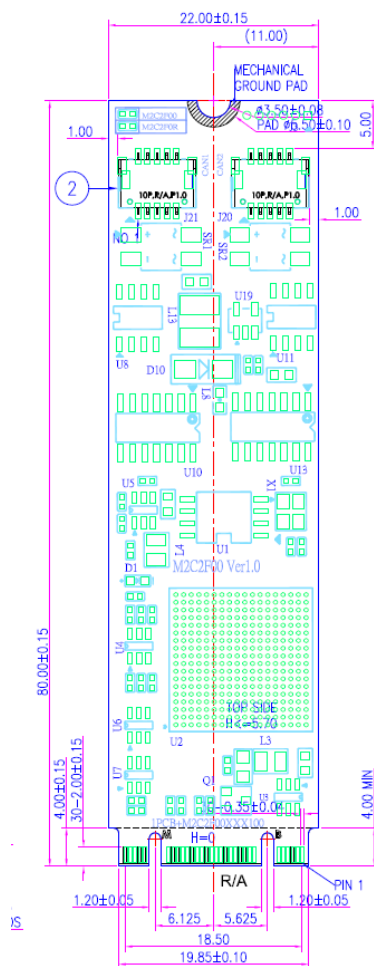
## Environment

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

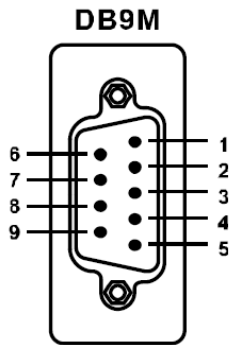
PCB Dimension	22 x 80 mm
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Unit : mm



## Pin Assignment

### ■ CAN interface



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

## Package

- M2C2F00 M.2 to 2-port CAN FD communication Card
- D-Sub 9-pin male with nuts on cable, 30 cm x 2pcs

