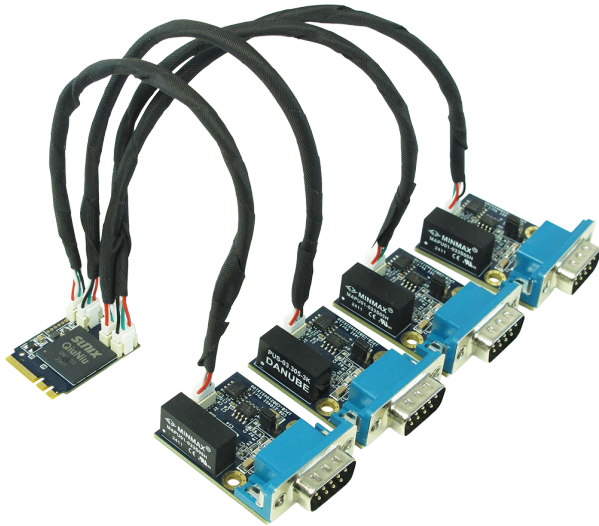




CAN-A2104SI

Industrial 4-port CAN FD M.2 Card w/Isolation,
Key-A/E 2230 Type



Introduction

The SUNIX CAN-A2104SI / CAN-B2104SI is an industrial-grade M.2 quad-port CAN FD communication card. Designed for UAVs, AGVs/AMRs, and EVs, it delivers reliable data transmission with robust hardware protection, including electrical isolation and surge suppression.

Certified to MIL-STD-810H standards, this card ensures stable performance in extreme environments. It features a SUNIX digital I/O controller and supports both Windows and Linux via SocketCAN drivers. With its high scalability, the CAN-A2104SI / CAN-B2104SI is the ideal solution for robotics and IVI (In-Vehicle Infotainment) applications.

Features

- **MIL-STD-810H Certified:** High shock and vibration resistance with $\pm 15\text{KV}$ / $\pm 8\text{KV}$ contact ESD protection.
- **Industrial-Grade Protection:** Paired with the CDB-2104SI module for 2.5K VDC isolation and 2KV surge protection, ideal for high-voltage and high-interference environments.
- **Flexible M.2 Design:** Native M.2 Key-B/M 2230 with break-away PCB for 2230/2242/2260/2280 compatibility; optimized for compact UAV and AGV/AMR chassis.
- **Broad Compatibility:** Powered by advanced SUNIX technology with full SocketCAN driver support for Windows and Linux.

Specifications

Communication

Product		
Model Name	CAN-A2104SI	CAN-B2104SI
Controller	QN2103	
Interface	PCI Express 2.0 x 1	
M.2 Type	Key-A/E	Key-B/M
M.2 Form Factor	2230	2230 (snap-off design supports 2230/2242/2260/2280)
Specification		
CAN Type	Complies with CAN 2.0 A/B and FD	
Channel	4 Channels, via connection cable and CDB-2104SI	
IRQ & IO	Assigned by System	
Arbitration Phase	1 Mbps	
Data Phase	8 Mbps	
Payload	64 Byte	
Termination	By jumper setting / each channel	
ESD	±15KV Air/ ±8KV Contact	
Surge	2KV on separated module (CDB-2104SI)	
Isolation	2.5K VDC on separated module (CDB-2104SI)	
EMC	CE/ UKCA/ FCC/ VCCI/ BSMI	
Operating Temp.	-40 to +85 °C (-40 to +185 °F)	

Drivers & API

Windows Client	Windows 10 / 11 (X86/X64)
Linux	Linux SocketCAN (Kernel 5.x / 6.x)

Physical & Environment

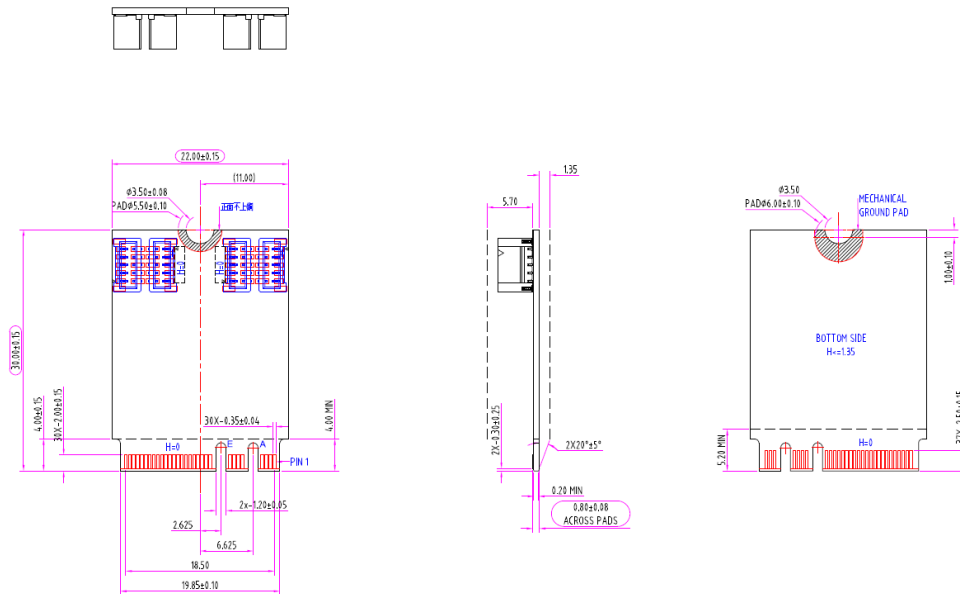
Operating Temp	-40 to 85°C (-40 to 185°F)
Storage Temp	-40 to 85°C (-40 to 185°F)
Humidity	5% to 95% RH (Non-condensing)
I/O Connector	DB9 Female (On-board)

Regulatory Approval

Certification	CE/FCC/VCCI/UKCA/BSMI Military Standard: MIL-STD-810H
Software	Microsoft WHQL Windows Windows Client: XP / Vista / 7 / 8.x / 10 (X86/X64) / 11 Windows Server: 2003 / 2008 / 2012 / 2016 / 2019 / 2022 (X64)

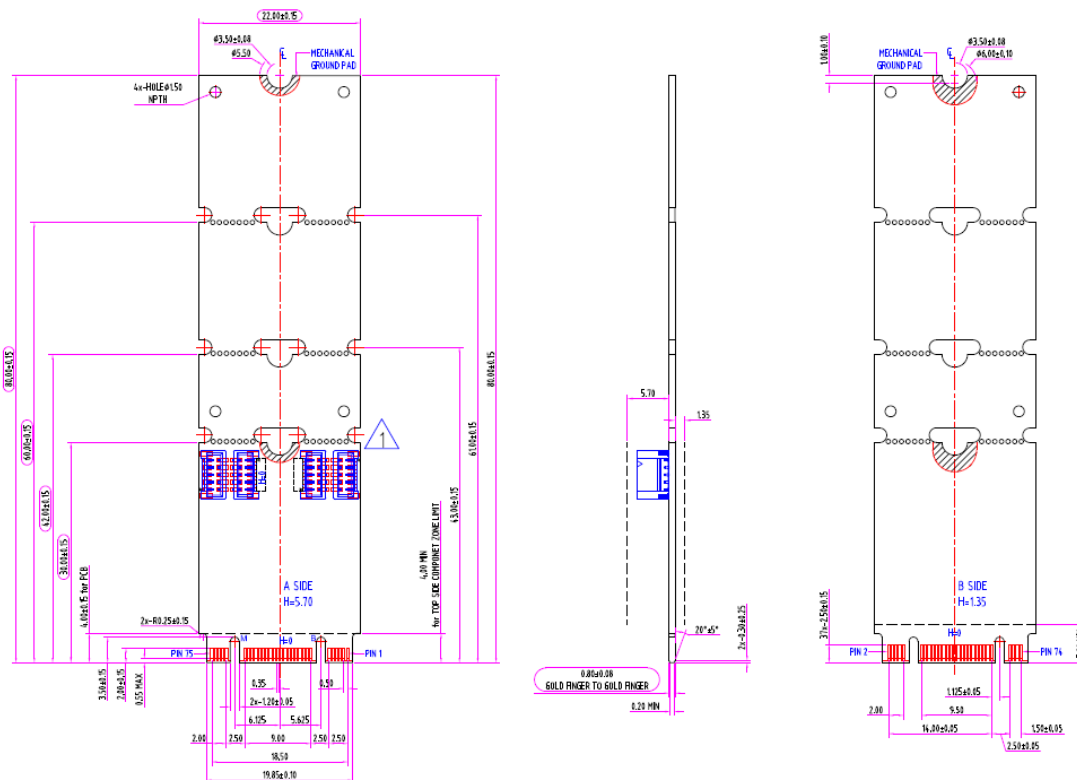
Mechanical Drawings (Unit = mm)

CAN-A2104SI

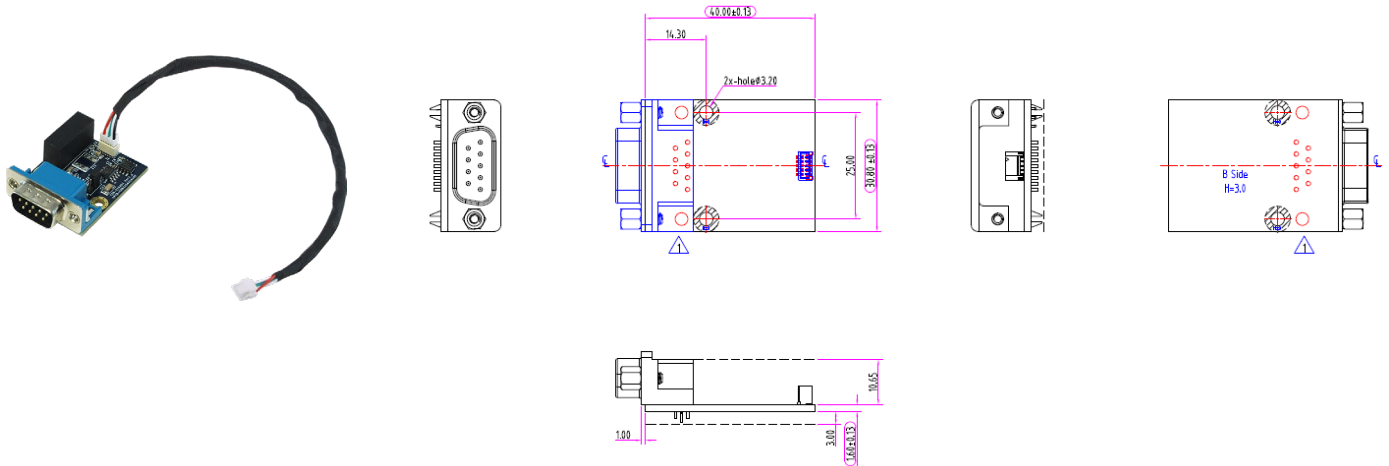


CAN-B2104SI

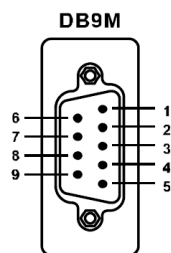
(Snap-off design)



CDB-2104SI (daughter board)



Pin Assignment



PIN	DB9M
1	
2	CAN L
3	GND
4	
5	
6	GND
7	CAN H
8	
9	

Packing List

- **CAN-A2104SI** – Industrial 4-port CAN FD M.2 Card **x1**, Key-A/E 2230 Type
- **CDB-2104SI** (Daughter board) – 1-port CAN FD Board w/D-Sub 9pin Male **x4**
- 4 Pin Daughter board connecting cable **x4**
- Quick Installation Guide **x1**