



1 Port Intelligent DeviceNet Master PCI Express Board

Features

- DeviceNet Version: Volume I & II, Release 2.0 Programmable Master MAC ID and Baud Rate Baud Rate: 125 kbps, 250 kbps, 500 kbps Support Group 2 and UCMM connection I/O Operating Modes: Poll, Bit-Strobe, Change of State ■ I/O Length: 512 Bytes max (Input/Output) per slave Slave Node : 63 nodes max Support Auto-Search slave device function
 - Support on-line adding and removing devices
 - Support Auto-detect Group 2 and UCMM device
 - Auto-Reconnect when the connection is broken



Introduction

DeviceNet is a simple low cost open industrial networking system. It provides the communication service needed by various types of applications such as sensor, switches, bar-code scanner, AC/DC drives etc. DeviceNet supports the Master/Slave connection model. The PEX-DNM100 module acts the DeviceNet master device and communicates with the remote slave devices. There is a complete DeviceNet protocol firmware within the PEX-DNM100. The users can easily access those slave devices via PEX-DNM100 by using DLL library functions and need not to deal with the complex DeviceNet protocol. The uses can use as easy as "Read/Write" functions to access slave I/O data.

Specifications

Model Name	PEX-DNM100-D	PEX-DNM100-T		
Bus Interface				
Туре	PCI Express bus			
Board No.	By DIP switch			
CAN Interface				
Controller	NXP SJA1000T built-in microprocessor			
Channel number	1			
Connector	9-pin male D-Sub (CAN_GND, CAN_L, CAN_ SHLD, CAN_H, N/A for others)	5-pin screwed terminal block (CAN_L, CAN_SHLD, CAN_H, N/A for others)		
Baud Rate (bps)	125 k, 250 k, 500 k			
Transmission Distance (m)	Depend on baud rate (for example, max. 1000 m at 50 kbps)			
Isolation	3000 VDC for DC-to-DC, 2500 Vrms for photo-cou	3000 VDC for DC-to-DC, 2500 Vrms for photo-couple		
Terminator Resistor	Jumper for 120 Ω terminator resistor			
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B			
Protocol	DeviceNet Volumn I ver2.0, Volumn II ver2.0			
LED				
Round LED	Green LED, Red LED	Green LED, Red LED		
Software				
Driver	Windows 7/8/10/11(32-bit/64-bit OS)			
Library	VB 6.0, VC++ 6.0, BCB 6.0, Visual Studio .NET			
Power				
Power Consumption	300 mA @ 5 V			
Mechanism				
Dimensions	131mm x 22mm x 98mm (W x L x H)			

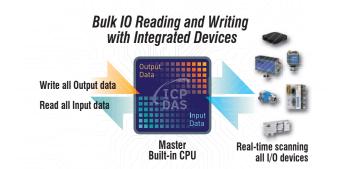
Environment	
Operating Temp.	0 ~ +60 °C
Storage Temp.	-20 ~70 °C
Humidity	5 ~ 95% RH, non-condensing

🖿 Pin Assignments

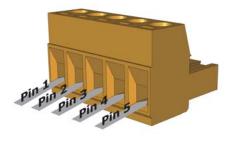


Pin No.	Signal	Description
1	N/A	No use
2	CAN_L	CAN_L bus line
3	CAN_GND	Ground
4	N/A	No use
5	CAN_SHLD	Optional CAN Shield
6	CAN_GND	Ground
7	CAN_H	CAN_H bus line
8	N/A	No use
9	N/A	No use

Internal I/O Structure



The DeviceNet Master is designed to support the function of bulk I/O read-and-write. It allows users to read and write data of all remote devices at one time, which is very convenient and efficient.



Pin No.	Signal	Description
1	CAN_GND	Ground
2	CAN_H	CAN_H bus line
3	CAN_SHLD	Optional CAN Shield
4	CAN_L	CAN_L bus line
5	N/A	No use

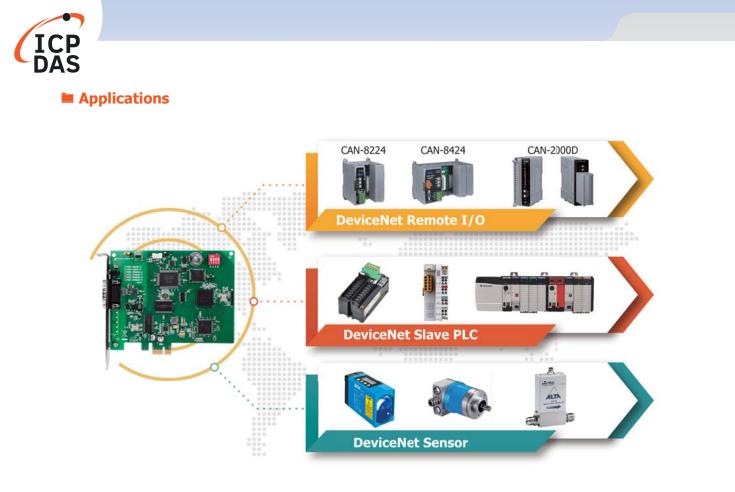
Utility Features



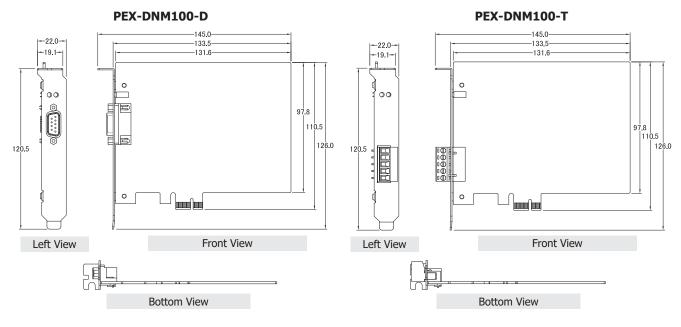
This utility supports to search all devices and specific devices in the network and can configure the I/O connection of the devices by searching devices or manual setting. It can easily to access the I/O data of all the slave devices.



Simple Steps



Dimensions (Units: mm)



Ordering Information

PEX-DNM100-D	1 Port Intelligent DeviceNet Master PCI Express Board (9-pin D-Sub Connector) (RoHS)	
PEX-DNM100-D	1 Port Intelligent DeviceNet Master PCI Express Board (5-pin Screw Terminal Connector) (RoHS)	