

# PISO-DNM100

Standalone intelligent CAN bus communication board



PISO-DNM100-D



PISO-DNM100-T

## Functional Description

The PISO-DNM100 gives a very powerful and economic solution of an active DeviceNet master device with one CAN channel. It uses the Phillips SJA1000T and 82C250 as the CAN controller and transceiver, to provide bus arbitration, error detection with auto correction and re-transmission function. The 16-bit on-board microcontroller allows, among many other features, the filtering, preprocessing, and storage (with timestamp) of CAN messages as well as the real-time transmission of DeviceNet messages. Under the effect of the powerful microcontroller, this card can be made for one CAN controllers without losing data, even in systems with a high PCI bus load. Therefore, the DeviceNet critical process can be implemented directly by DeviceNet firmware in the PISO-DNM100. In addition, users can development their DeviceNet applications by using the DeviceNet library. Therefore, users can apply the PISO-DNM100 PCI card to build a rapid, powerful and economic DeviceNet application.

## Applications

- Automotive
- Food & Beverage
- Material Handling
- Packaging
- High-speed Assembly
- Semiconductor Fabrication
- Control system

## Hardware Features

- Microprocessor: 80186, 80Mhz.
- CAN interface: 1 or 2 separate network interfaces based on the CAN 2.0A/2.0B specification with CAN controller SJA 1000.
- CAN bus driver: 1 or 2 CAN high-speed interfaces in accordance with ISO 11898 by programmable transfer rate up to 1 Mbit/s.
- On board memory: 512K Byte SRAM, 512K byte FLASH ROM.

## Firmware Features

- Explicit messaging, polling, change of state, bit strobe and cyclic connections
- Direct access to the process data in the dual-port memory
- Get Protocol States
- Messaging to pre-defined master/slave connection set
- Selectable data rates: 125K, 250K, 500K bps
- Simultaneous execution of Group 2 Client (master) and Server (slave) operation
- Load EDS file

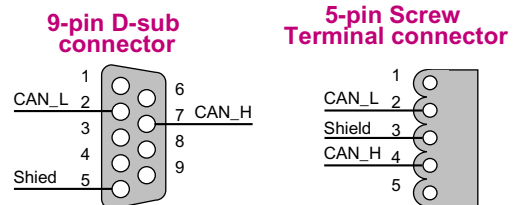
- CAN bus interface :ISO/IS 11898-2, Sub D9 connector or 5-pin screw terminal with on-board optical isolators protection.
- PCI interface with DPRAM memory automatic assignment.
- Jumper select 120Ω terminator resistor for each port.
- 33MHz 32bit 5V PCI bus (V2.1) plug and play.
- CAN controller: Phillip SJA1000T
- CAN transceiver: Phillip 82C250/251
- Signal support: CAN\_H, CAN\_L
- 16 MHz CAN controller frequency
- Connector: 5-pin screw terminal connector or 9-pin D-sub connector

- Isolation voltage: 2500Vrms

## General Specifications

- Operating temperature: 0 ~ 60°C
- Operating humidity: 10 ~ 90% non-condensing
- Storage temperature: -20 ~ 70°C
- Storage humidity: 5 ~ 95% non-condensing
- Dimensions: 130 mm x 110 mm

## Pin Assignment



## Ordering Information

**PISO-DNM100-D:** DeviceNet firmware inside and one standalone intelligent CAN Communication Board with D-sub 9-pin connector

**PISO-DNM100-T:** DeviceNet firmware inside and One standalone intelligent CAN Communication Board with 5-pin screw terminal connector