

# PISO-CM100

Standalone intelligent CAN bus communication board



PISO-CM100-D



PISO-CM100-T

## Functional Description

The CAN (Controller Area Network) is a serial communication network and efficiently supports distributed real-time control with a very high level of security. It is especially suited for networking "intelligent" devices, sensors, actuators within a system or sub-system. In CAN networks, there is no addressing of subscribers or stations in the conventional sense, but the prioritized messages are transmitted instead.

The PISO-CM100 is a very powerful and economic solution for a wide range of CAN applications. It is an active CAN board with one CAN channel. The 16-bit on-board microcontroller allows the filtering, preprocessing, and storage (with timestamp) of CAN messages as well as the real-time transmission of CAN messages. PISO-CM100 also uses the new Phillips SJA1000T controller and 82C250/251 transceiver to provide bus arbitration and error detection with auto correction and re-transmission function. Under the effect of the powerful microcontroller this card can be made for one or two CAN controllers simultaneously without losing any data, even in systems with a high bus load. Besides, equipped with integrated intelligence, the PISO-CM100 makes it possible to preprocess and buffer CAN data streams, thus relieving a considerable burden of the PC. As a result, the real-time requirements on the PC applications are drastically reduced. Due to the state-of-the-art design, it can be installed in a slot of 32-bit 5V PCI bus and supports the truly "Plug & Play" technology.

## Applications

- DeviceNet, CANopen, CAN J1939, SDS (System Wide Network) protocol Application
- CAN Bus Communication Application
- Industry Automation

## Features

- Micro controller: 80186, 80Mhz.
- CAN interface: one separate network interfaces based on the CAN 2.0B/2.0A specification with CAN controller SJA 1000
- CAN bus driver: 1 high-speed CAN interface, programmable transfer rate up to 1 Mbit/s
- On-board memory: 512K bytes SRAM, 512K bytes Flash ROM
- CAN bus interface: ISO/IS 11898-2, Sub D9 connector according to DS 102, On-board optical isolators protection
- PCI interface with DPRAM memory automatic assignment
- Jumper-selected 120Ω terminator resistor for each port
- 33MHz 32-bit 5V PCI bus (V2.1) plug & play

- Semiconductor fabrication application
- Building automation
- Industrial machine control
- High-speed assembly application

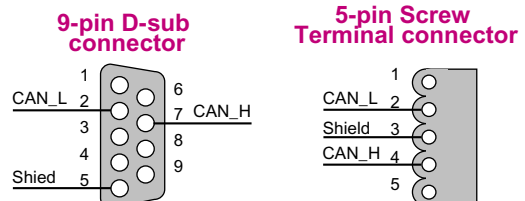
## Specifications

- 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-CM100-D:** One standalone intelligent CAN communication board with 9-pin D-sub connector

**PISO-CM100-T:** One standalone intelligent CAN communication board with 5-pin screw terminal connector