CAN

CAN Module for ISA Bus

- **Extended receive buffer (64-byte FIFO)**
- **CAN 2.0B protocol compatibility**
- **Supports both 11-bit and 29-bit identifiers**
- **16 MHz clock frequency**
- **Drivers available for Windows® 98/ME/ 2000/XP, Linux and DOS**
- **Choice of either open-style screw terminals or DB-9 connector**
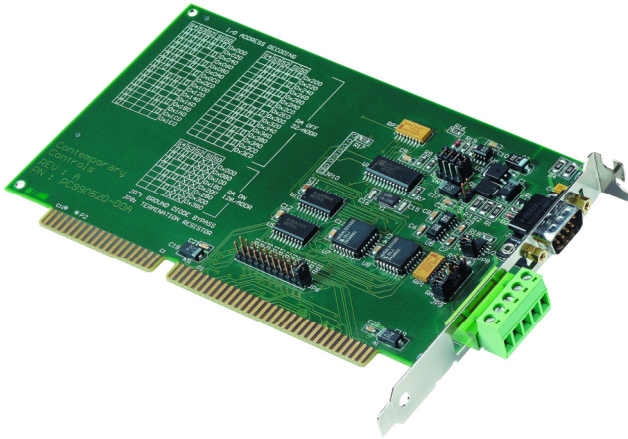- **Data rates up to 1 Mbps**
- **CE Mark**
- **RoHS**

- **Interfaces CAN to ISA-compatible computers**
- **Highly featured Philips SJA1000 controller**
- **Compatible PCA82C200 mode (defaults to BasicCAN mode)**

PRODUCT OVERVIEW

The CANISA functions as a Controller Area Network (CAN) adapter for ISA bus computers. This product supports 8-bit transfers and benefits from the additional interrupts on the expanded AT bus.

It incorporates the Philips SJA1000 CAN stand-alone controller chip which is widely-accepted in both automotive and industrial environments. The CANISA is backward compatible with its predecessor, the 82C200, but has more advanced features. The SJA1000 operates in either BasicCAN (11-bit identifiers) or the new mode called PeliCAN which supports the CAN 2.0B specification (29-bit identifiers). This controller chip maintains extended frame passivity while in the BasicCAN mode.

The SJA1000 is equipped with a 16 MHz clock, a larger receive buffer and better acceptance-filtering — including the ability to extend the acceptance mask to the data field. It can operate at data rates up to 1 Mbps.

The PeliCAN mode includes this list of features: error counters with read/write access; programmable error warning limit; last error code register; error interrupt for each CAN-bus error; arbitration lost interrupt with detailed bit position; single-shot transmission (no retransmission); listen-only mode (no acknowledge, no active error flags); acceptance-filter extension (4-byte mask); and reception of "own" messages (self-reception request).

Designed with the DeviceNet physical layer, it has an optically-isolated transceiver providing reverse-voltage and short-circuit protection. Field connectors include DeviceNet 5-position open-style and DB-9.

CONTEMPORARY CONTROLS®

CAN

Specifications

Environmental

Operating temperature	0°C to +60°C
Storage temperature	–40°C to +85°C

Power requirements

ISA bus	+5 V, 80 mA
CANbus	+24 V, 80 mA

Functionality

Data rate	Up to 1 Mbps
Dimensions	4.20" x 6.50" (106 mm x 165 mm)
Connectors	Male DB-9 and 5-position screw terminals are provided for CAN connection
Shipping weight	1 lb. (0.45 kg)
I/O mapping — BasicCAN	In BasicCAN mode, the CANISA can occupy any of the following 32-byte blocks of I/O space 000 020 040 060 080 0A0 0C0 0E0 100 120 140 160 180 1A0 1C0 1E0 200 220 240 260 280 2A0 2C0 2E0 300 320 340 360 380 3A0 3C0 3E0
I/O mapping — PeliCAN	In PeliCAN mode, the CANISA can occupy any of the following 128-byte blocks of I/O space 000 080 100 180 200 280 300 380
Interrupt lines	Supports selection of IRQ2 through IRQ15
Compliance	CAN 2.0A and CAN 2.0B

CAN

Connector Diagrams
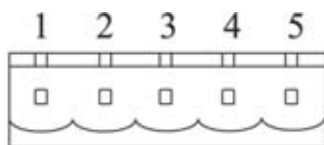
5-Pin Connector
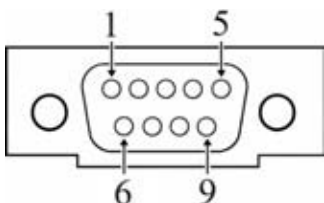
9-Pin Connector (male)
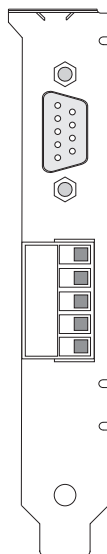
CANISA Connectors

Connector Pin Assignments

Screw Terminal	Usage	DB-9
1	V–	3, 6
2	CAN_L	2
3	Drain	5
4	CAN_H	7
5	V+	9
–	Not Used	1, 4, 8

Ordering Information

Model	Description
CANISA-DN	SJA1000 CANISA NIM

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