

# CAN4000-8S

Quad CAN / 8 channel serial for PC/104-Plus



**Advanced Micro  
Peripherals**

THE EMBEDDED VIDEO EXPERTS

The Advanced Micro Peripherals CAN4000-8S provides four independent CANbus 2.0B controller channels (with galvanic isolation) and eight non-isolated RS-422 / 485 serial ports on a standard PC/104-Plus card.



The CAN4000-8S uses four industry standard Philips SJA1000 CANbus Controllers with advanced features for use in telematics and industrial control applications. The CAN4000-8S supports both BasicCAN mode (power up default) and the enhanced functionality of the PeliCAN mode. In the PeliCAN mode the CAN4000-8S handles all CANbus frame types according to CAN Specification 2.0B and provides a number of error analysis functions to support diagnosis, system maintenance and performance optimization.

The 8 channel serial port controller provides RS-422 / RS-485 communications up to 10Mbps. Each channel includes jumper selectable termination resistors on each receiver.

Robust  
networking  
in  
automotive  
and  
industrial  
environments

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## Applications

Data Acquisition

Machine Control

Machine networks

Test and Measurement

Industrial Process Monitoring

Building and Lift Management

Road Traffic Signalling and Control

Speed Cameras and Traffic Monitoring

Vending Machines, POS, ATM Systems

Automotive Instrumentation and Metering

High-speed

galvanically

isolated

CANBus

channels

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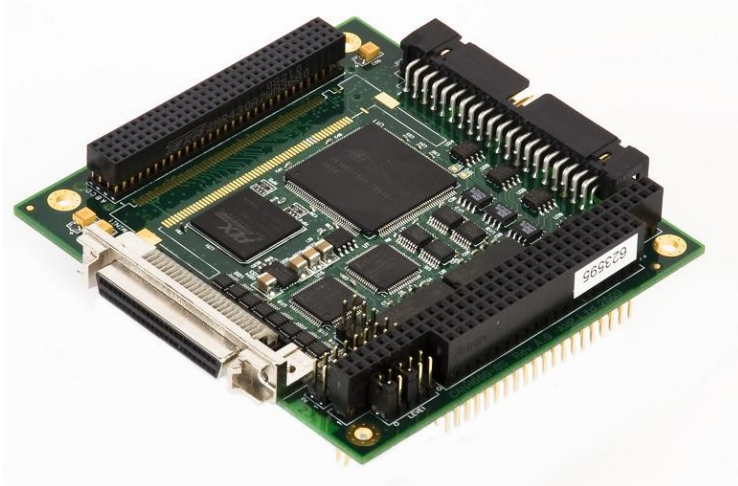
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**CAN4000**

## Features

- 4 independent CANbus controllers.
- BasicCAN and PeliCAN support
- Full galvanic isolation
- CAN bit rates up to 1Mbits/sec
- Supports 11-bit and 29-bit identifiers
- 8 independent serial ports
- RS-422 / RS-485 operation
- Serial rates up to 10Mbits/sec
- Standard PC/104plus form factor
- Extended Temperature version available
- Single +5V power supply

8 independent

RS-422/485

serial ports

up to

10Mbps

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## CAN Channels

- Quad SJA1000 CAN 2.0B Controller
- Basic CAN Mode support
- Extended CAN Mode (PELICAN Mode) support
- Four independent full-duplex channels
- Full galvanic isolation for each channel (input to output and channel to channel).
- Isolated CANbus channels powered from external +5v supply

## CAN Modes

### Basic Mode

- Extended Receive Buffer (64-byte receive FIFO)
- Up to 1MBit/sec data rates
- Support for 11-bit and 29-bit identifiers

### PELICAN Mode Extensions

- Error counters with read/write access
- Error warning limit
- Error Interrupts
- Listen-only capability
- Hot-plugging support

## Serial Ports

- Eight RS/422 / RS485 ports at up to 10Mbps
- Jumper selectable termination resistors

## PC/104-Plus

- 133MB/sec bus bandwidth
- PC/104-Plus bus master/initiator
- Universal add-on board compliant with 3.3V PC/104-Plus bus signalling (with 5v tolerance).
- Jumper selectable PC/104-Plus stack level.

## Physical

- Single +5V at less than 350mA
- Operating Temp 0°C to 60°C
- Operating Temp -40°C to +85°C (extended temp option)
- Standard 3.6 x 3.8in PC/104+ form factor

## Ordering Information

CAN4000-8S	4-Channel CANBus / 8 channel serial (0 to 60°C)
CAN4000-8S-Ext	4-Channel CANBus / 8 channel serial (-40 to 85°C)
Cable-CAN4000	Cable set for CAN4000

