

PCIcan-HS, HS/HS

Data Sheet

KVASER

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Introduction

Scope of this document

This document describes the following standard variants of the PCIcan board:

Product Name	Part Number	Description
PCIcan-HS	733-0130-00082-7	1 x SJA1000, 82c251 driver
PCIcan-HS/HS	733-0130-00083-4	2 x SJA1000, 82c251 drivers

General Description

KVASER's PCIcan cards for CAN systems feature up to four CAN controllers.

The outputs from the CAN circuits are connected to a 9-pin DSUB via optocouplers.

The bus driver circuits of type 82C251 conforms to the physical layer specified by the ISO 11898 standard and can operate up to 1 Mbit/s.

A terminator may be connected if this board is at one end of the bus cable. ISO 11898

PCIcan Features

- Up to two CAN circuits on one card.
- Optical isolation between the card and the CAN buses.
- DC/DC power supply to galvanically isolated bus drivers.

Specifications

General	
Size	PCI-bus PC card (135 mm)
Power consumption	PCIcan: max 600 mA @ 5V.
CAN bus connector	9-pin DSUB, male, for PCIcan-HS CAN bus. 2 x 9-pin DSUB, male, for PCIcan-HS CAN buses.
CAN Controller(s)	
PCIcan-HS : 1 x SJA1000 PCIcan-HS/HS : 2 x SJA1000	
CAN Clock frequency: 16 MHz	
CAN Bus Driver(s)	
Drivers	PCIcan-HS, -HS/HS: Philips 82C251; compliant with the ISO 11898 standard.
Voltage feed	The drivers are galvanically separated (selectable by switches) from the power supply on the PC by on-board DC/DC converters.
Grounding	The ground of the CAN drivers is available at the DSUB connector.
Other Features	
<input type="checkbox"/> Fast optocouplers between CAN circuits and drivers. <input type="checkbox"/> CAN driver part fed by the PC through DC/DC-converters	

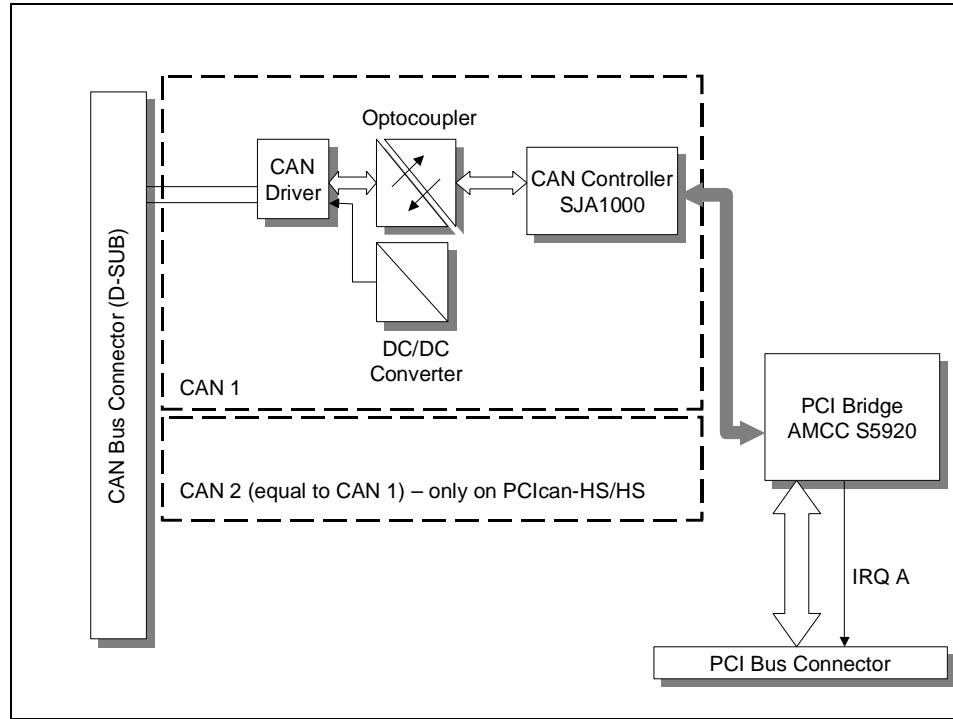


Figure 2: Block diagram for PClcan-HS, -HS/HS

Table 1. The 9-pin DSUB connector(s) on PCican-HS, -HS/HS

Pin	Function
2	CAN-L
7	CAN-H
3	Signal ground.

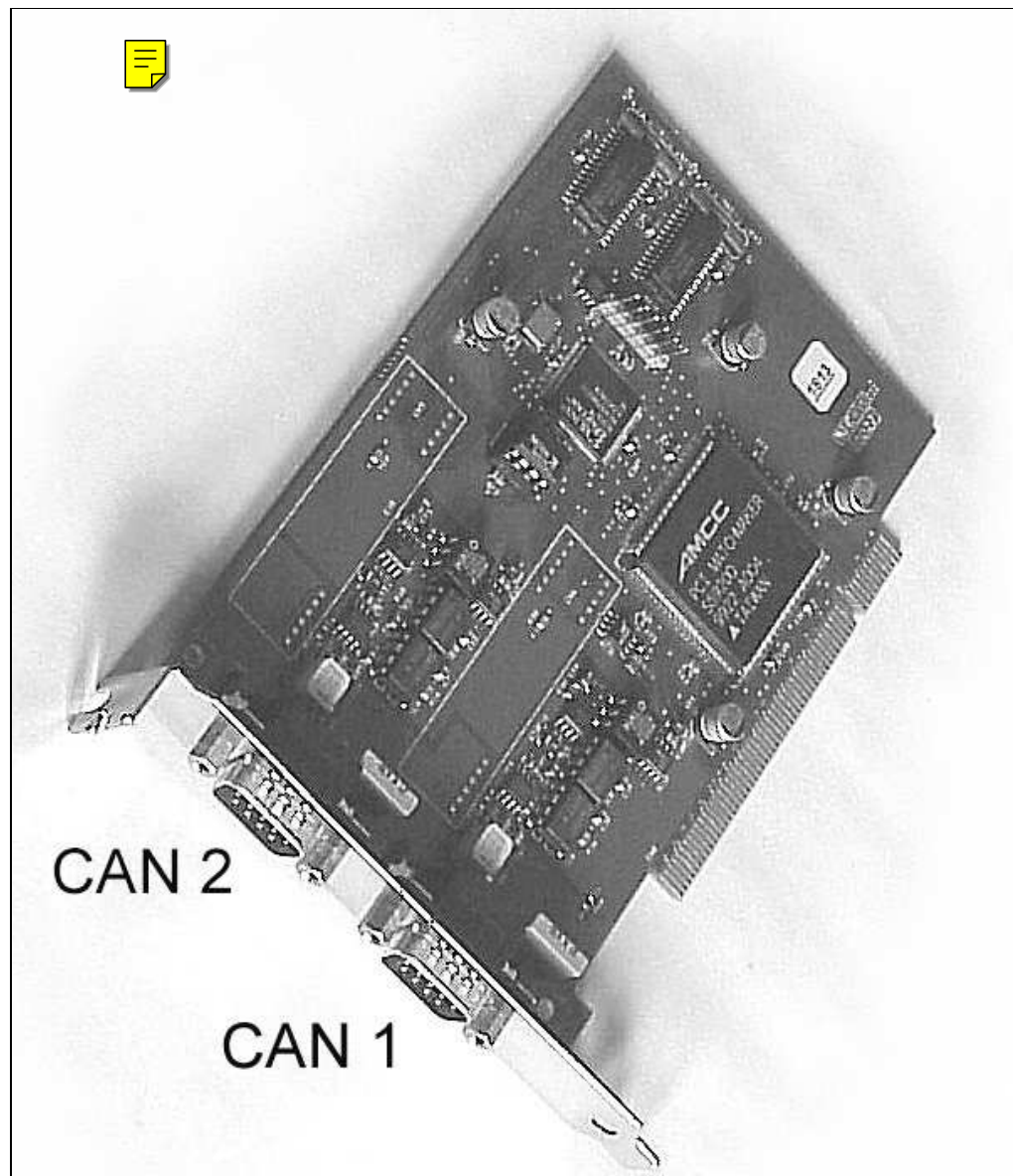


Figure 4: The CAN buses on the PCican-HS/HS. On the -HS, the “CAN2” connector is not present.

Software Support

The PCIcan boards are supported by driver routines and program examples for Windows 95/98/ME and Windows NT/2000/XP.

The software is distributed separately and is not further documented here. Please refer to the documentation that is packaged with the software.

<p>The software and its documentation are available from the web.</p>

Support is available from our Web site, <http://www.kvaser.com>.

References

AMCC	PCI Products Data Book S5920 / S5933 (1998) Also available on the web (www.amcc.com) in the file pciprod.pdf .
Philips	SJA1000 Stand-Alone CAN Controller. Preliminary Specification. 1997 Nov 04. Also available on the web.
Shanley, T., and Anderson, D.	PCI system architecture, fourth edition. MindShare, Inc. ISBN 0-201-30974-2. Available from e.g. Annabooks, www.annabooks.com .

<http://www.kvaser.com> contains much information on CAN and has many links to other sites with CAN information. You can also download new versions of the software for PClcan here.

EMC Tests

The equipment has been tested for compliance with the EN 50 081-2:1993 (emission) and the EN 50 082-2:1995 (immunity) standards.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

