CANpari

Users Manual

Version 1.0

Contents

1 Introduction

CANpari is a CAN adapter for the PC printer port with a SJA1000 CAN controller from Philips. This permits processing of CAN messages with either 11-bit or 29-bit identifiers. Remote frames can be received and analyzed without limitations. Like all other CAN cards from Vector, CANpari can generate and detect Error Frames on the bus.

Figure 1: CANpari

Two of the most commonly used transceiver chips are included in CANpari. A jumper is used to activate either the Philips 82C250/1 Highspeed Transceiver or the Philips 82C252 Lowspeed Transceiver.

2 Connection to the PC

CANpari can be operated on the LPT1 or LPT2 printer port. It is important that the interrupt be activated for the specific printer port. Voltage is supplied via an adapter plug that is plugged into the mouse or keyboard port.
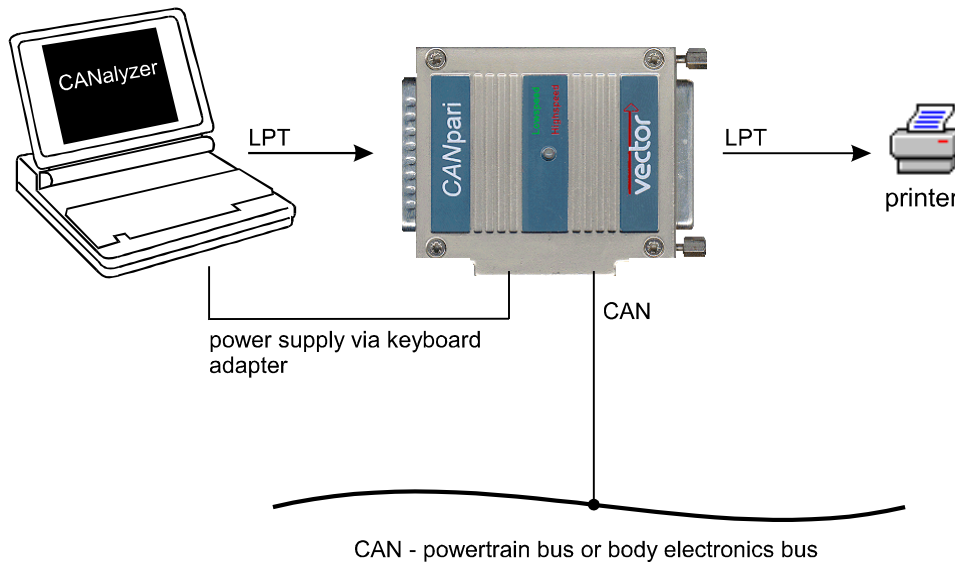

Figure 2: CANpari Connection Scheme

2.1 Switching Transceivers

To set the active transceiver chip, first the CANpari housing must be opened, then the three jumpers must be reconfigured. To open the housing remove the four screws and lift the cover off. The jumpers are located along the edge of the PC-board between board terminations for the two voltage supply lines and the CAN connector (see Figure 3).
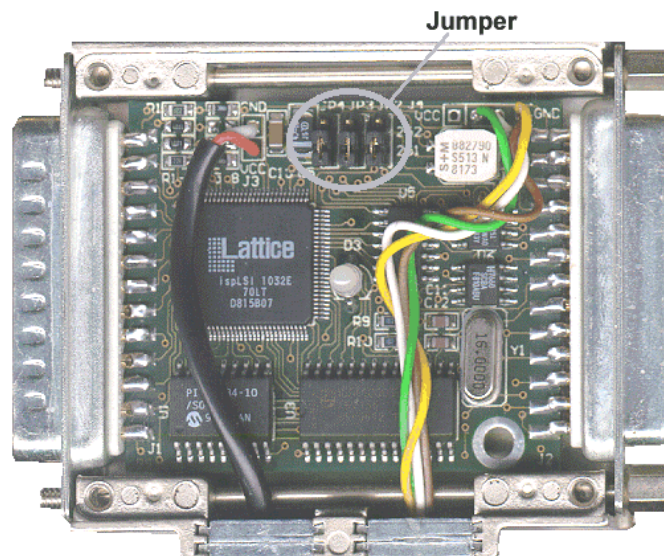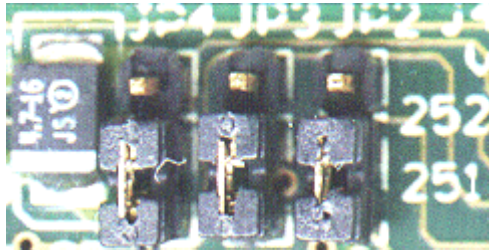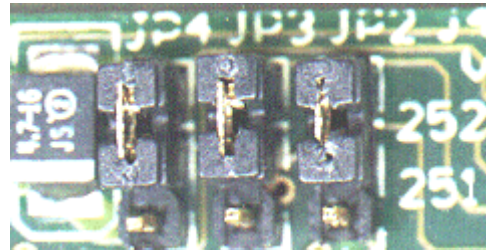

Figure 3: Jumpers for Selecting the Transceiver

There are two jumper positions marked "251" for Highspeed and "252" for Low-speed. All three jumpers must always be set to the same position.

Jumper setting for Highspeed   Jumper setting for Lowspeed

The configured transceiver mode is recognizable by the color of the LED. Green for Lowspeed, red for Highspeed.

2.2 Meaning of LED

When voltage is being supplied to CANpari the LED illuminates. The LED color indicates the transceiver mode that is configured: Green for Lowspeed, red for High-speed. The LED turns off after CANpari has been initialized by the system. When the chip is activated by software (e.g. CANalyzer) the LED starts to flash.

2.3 D-SUB Connector

Figure 4: D-SUB Connector

The CAN bus is connected to CANpari via the 9-pin D-SUB connector (see Figure 4).

3 Pin Assignments of the D-SUB Connector

D-SUB Pin Number	Function
1	-
2	CAN-Low
3	GND
4	-
5	-
6	GND
7	CAN-High
8	-
9	-

4 Conformity Declaration

$$C\,\epsilon$$

CONFORMITY DECLARATION

This declaration applies to products identified as follows:

      Product type: CAN adapter for PC printer port
      Product name: CANpari

We hereby declare that this product conforms to the following standards:

      EN 55022:   1994
      EN 50082-1: 1992

This declaration is provided for the manufacturer

      Vector Informatik GmbH
      Friolzheimer Straße 6
      70499 Stuttgart

by its authorized quality management representative

      Peter Lampert

      Quality Management

Stuttgart, 28. September 1998

      Peter Lampert

      Quality Management

5 Technical Data

Technical Data

Hardware

- CAN Channels   1 (V2.0B extended format).

- CAN Transceiver   80C251 (Highspeed) or 80C252 (Lowspeed) selectable by jumpers.

- CAN Controller   1 Phillips SJA 1000

- Max. Baud Rate   1000kbit/s

- Time Resolution   1ms

- Error Frame   -Detection   Yes
  -Generation   Yes

- Hardware   IBM PC AT or 100% compatible with Centronics Requirements printer port

- PC Interface   25-pin D-Sub, printer port is passed through.

- Software Requirement   Windows 95/98/NT

- Configuration   IRQ7 => LPT1; IRQ5 => LPT2

- Dimensions   75mm x 55mm x 18mm

- Temperature Range   Operating: 0 - 55 °C, Shipping/Storage: -65 - 125 °C

6   Important Notes

- Do not apply excessive force when inserting the CANpari device or adapter plug in the computer.

- Do not remove the CANpari device from the computer by pulling on its connection cords.

- Make sure that the CANpari and its connection cords are fastened securely.