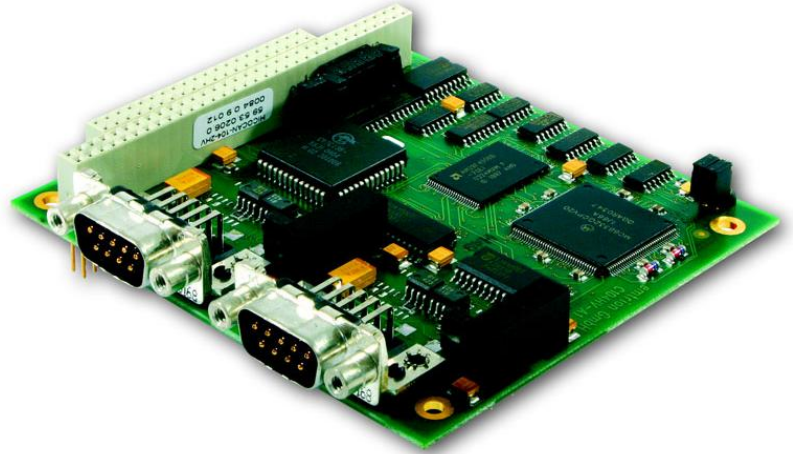


High Speed PC/104 CAN-Interface, 3kV electrical isolation HiCO.CAN-104-2HV



- 2 high-speed CAN interfaces with SJA 1000 CAN controller
- Galvanic isolation
- Electrical isolation of at least 3kV (for e.g. medical applications)
- Resources via jumpers
- Temperature range -0..+70°C, optional -40°C..+85°C
- Baud rate up to 1MBaud; 100% bus load
- Local controller 68332G, 20MHz
- Timestamps resolution 10µs
- Internal receive queues with 2048 telegrams each

Driver support for:

- DOS
- Microsoft Windows® 9x, Windows® ME/2000, Windows® NT 4.0, Windows®XP, Windows®CE,
- Linux 2.6, Linux 2.4

Order Code:

- HiCO.CAN-104-2HV PC/104 CAN-Interface, 2 CAN-channels, 3kV



Main Office Germany

Greschbachstraße 12
D-76229 Karlsruhe
Tel. +49 (721) 62725-0
Fax +49 (721) 62725-19
eMail: sales@emtrion.com
Visit us on the internet!
www.emtrion.com

32-Bit Performance

HiCO.CAN-104-2HV comes with a 68332 microcontroller with 20 MHz. This 32-bit wide controller is able to handle the CAN messages of two nodes at a bus speed of 1 Mbaud each.

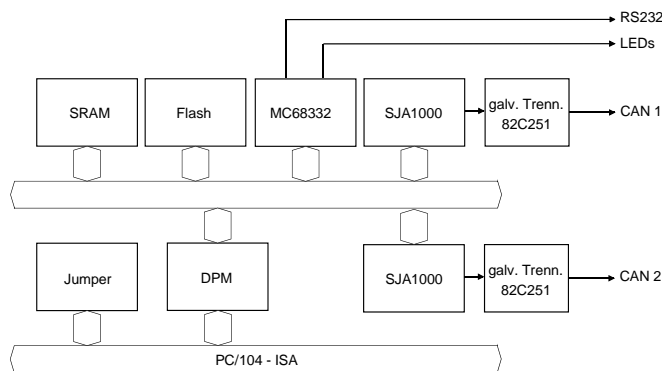
HiCOCAN-104-2HV provides a 512-kByte flash and 128-kByte SRAM both to forward the data and implement customer-specific applications.

A serial interface (RS232) is reserved for customer applications.

CAN Layers

The physical layer is in accordance with the ISO11898 standard. The two CAN buses are electrically isolated via optocouplers. The galvanic isolation is so realized that CAN nodes galvanically isolated from the control and from each other of 3 kV. Voltage is supplied by the integrated DC/DC converters (standard) or can be applied externally. All baud rates up to 1 Mbaud are supported.

The layer-2 implementation contains Basic (2.0A) and Extended (2.0B) CAN. As CAN controller the SJA1000 is used. The layer-2 firmware supports operation in BasicCAN and PeliCAN mode. In the PeliCAN mode mixed traffic of Basic and Extended CAN messages is possible.



Application Interface

The application interface supports DOS, Windows 9x/ME/2000, Windows XP, Windows CE, Windows NT 4.0 and Linux. In addition, it may easily be adapted to other operating systems.

The supplied libraries for 32-bit applications provide simple functions for both controlling the module and for receiving and transmitting messages. With reads timestamps are available. Interrupt-driven reads are also possible.

The libraries contain additional functions for polling the module's state and temporarily modifying the CAN parameters.

Communication between the driver layer on the PC and the firmware is via fast FIFOs in the DPM. For this, interrupts are used to ensure that the messages received or transmitted are processed in real time. The location of the DPM and the interrupt levels in the PC is controlled via jumpers, which allows the user to connect up to 4 HiCOCAN-104-HVs to a single PC/104 PC, without having to modify any settings.

In addition, software for specifying the user-defined parameters is supplied.

Customer-Specific Configuration

HiCO.CAN-104-2HV can be configured to your liking. For example, you may need only one CAN node; or you may wish to implement your own application on the HiCO.CAN-104-2HV that does not require a host PC; DC/DC converters might not be required; or in case you can do without the PC/104 bus interface. Please contact us. We provide you with the HiCO.CAN-104-2HV you need to meet your specific design challenges.

HiCO.CAN-104-2HV is also available as a module that plugs into the PCI bus slot (HiCO.CAN-PCI) of a standard PC or Compact-PCI bus slot (HiCO.CAN-CPCI) and also as low speed - 125 kBaud - fault tolerant PC/104 CAN module (HiCO.CAN-104-2L).



Main Office Germany

Greschbachstraße 12
D-76229 Karlsruhe
Tel. +49 (721) 62725-0
Fax +49 (721) 62725-19
eMail: sales@emtrion.com
Visit us on the internet!
www.emtrion.com