



DeviceNet

CIF®

Communication Interface

DeviceNet

- Explicit messaging, polling, change of state, bit strobe and cyclic connections
- Online diagnostic interface
- Direct access to the process data in the dual-port memory
- Graphic System Configurator with unified 'look and feel' for all fieldbus systems and comprehensive diagnostic and start-up functions
- Identical 'easy-to-use' application interface on all Communication Interfaces
- OPC Server
- Device Driver for Windows 95, Windows NT and Windows CE
- Drivers for all leading SoftPLCs
- Tool Kit with C source code for developing own driver



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Description

In automation, there is a marked trend to open PC based systems. SoftPLCs, i.e. PLC logic which is processed directly on the PC and fieldbus systems for exchanging the process data are the central products of this technology.

We have recognised this trend early and are today in the position of being able to offer the Communication Interface between PC and fieldbus system for all relevant fieldbus systems. These can be provided as PC, PC/104 or PCMCIA card with ISA and PCI bus connections, which has the decisive advantage of unified application interfaces for all interfaces and fieldbus systems.

The process data is held directly in a 7 kByte sized process image within the dual-port memory of the Communication Interface.

From this process image the Master Interface sends the output data depending on the type of connection either cyclic, bit strobed, polled or if it has changed to the configured slave devices. Incoming process data coming from the devices are stored in the input process image transparently. Furthermore the established explicit message channel can be used to transport ayclic data to the slave simultaneously.

The Slave Interface supports the explicit connection as well as the polled and change

of state I/O connections. The slave can handle in maximum up to 255 Byte input and output process data in these I/O connections.

On the part of the PC application it is possible to access it directly or by means of our C drivers. For this purpose, 32 Bit drivers are available for the Windows 95, Windows NT and Windows CE operating systems.

An OPC Server can be supplied for connection of visualisation systems.

The configuration of the card is carried out with the aid of our System Configurator SyCon®. This has individual configuration menus for the various fieldbus systems. With this, the device data is retrieved from the EDS (electronic data sheet) files and used as the basis of the configuration. This latter is comfortably carried out under the Windows desktop. Subsequently, the configuration is transferred via the dual-port memory or the serial diagnostic port to the interface and stored in a FLASH- EPROM in a zero-voltage manner.

The start-up of the bus system is carried out by the same interface, for which purpose SyCon® offers comprehensive assistance.

Product Overview

| Type | Function | Card Format | Bus Interface | Controller | I/O-Data | Note |
|-------------|----------|---------------|---------------|------------|----------|-----------|
| CIF 30-DNM | Master | PC | ISA | SJA1000 | 7 KByte | |
| CIF 50-DNM | Master | PC | PCI | SJA1000 | 7 KByte | |
| CIF 60-DNM | Master | PCMCIA Type 2 | PCMCIA | SJA1000 | 7 KByte | |
| CIF 104-DNM | Master | PC/104 | ISA | SJA1000 | 7 KByte | |
| CIF 30-DNS | Slave | PC | ISA | SJA1000 | 510 Byte | certified |
| CIF 50-DNS | Slave | PC | PCI | SJA1000 | 510 Byte | |
| CIF 60-DNS | Slave | PCMCIA Type 2 | PCMCIA | SJA1000 | 510 Byte | |
| CIF 104-DNS | Slave | PC/104 | ISA | SJA1000 | 510 Byte | |

Related Products

| Type | Article |
|------------|---|
| SYCON-DN | System Configurator, user licence |
| CIF-TKIT/E | Tool Kit for developing own Device Driver with C-function library for MS/DOS and Windows 3.11 in source code, documentation about the dual-port memory interface in English |
| CIF-DRV/E | Device Driver for the operating systems Windows 95 and Windows NT, documentation in English |
| CIF-WICE/E | Device Driver for the operating system Windows CE in source code, documentation in English |
| CIF-DDE | DDE Server, CIF licence |
| CIF-OPC | OPC Server, CIF licence |
| KAB-DN | DeviceNet cable to connect one slave to the master |
| KAB-SRV | Service cable |

Technical Data

DeviceNet Master

Explicit peer to peer messaging, bit strobe, polling, cyclic, change-of-state

DeviceNet Slave

Explicit peer to peer messaging, bit strobe, polling, cyclic, change-of-state

CAN Interface

ISO 11898, optically isolated
5-pin CombiCon
Alternative: CIF 104
10-pin square post connector

Transmission Rate

Max. 500 kBaud

Diagnostic Interface not at CIF 60

RS232C, non-isolated
9-pin DSub male connector
Alternative: CIF 104
10-pin square post connector

Operating Voltage

5 V/max. 650 mA
+12 V/max. 50 mA CIF 30/CIF 50
- 12 V/max. 50 mA CIF 30/CIF 50

Operating Temperature

0°C – 55°C

Dimensions (L x W x H)

134 x 107 x 20 mm CIF 30
134 x 107 x 20 mm CIF 50
86 x 55 x 5,5 mm CIF 60
90 x 96 x 23 mm CIF 104

CE Sign



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