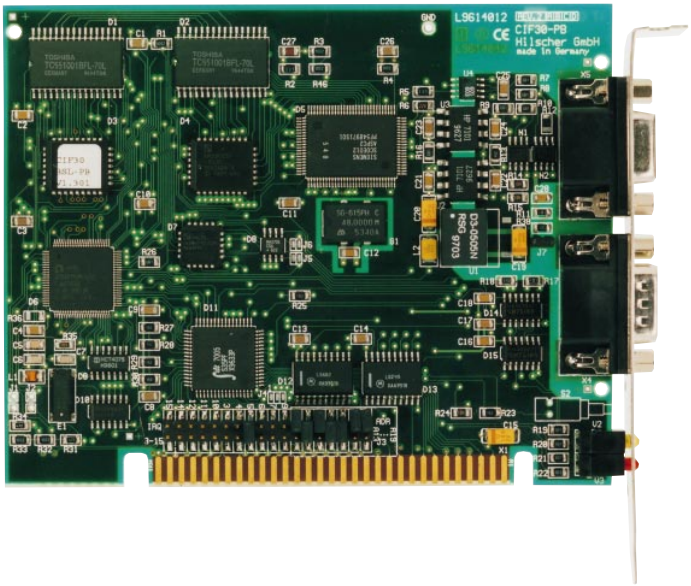
hilscher

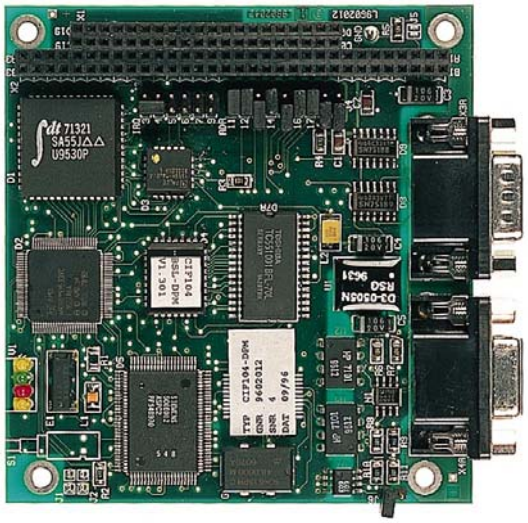
COMPETENCE IN COMMUNICATION

PROFI® PROCESS FIELD BUS BUS

CIF®
Communication Interface

PROFIBUS-FMS
PROFIBUS-FDL
PROFIBUS-DP





- Newest ASIC technology with ASPC2 and SPC3
- Transmission rate up to 12 MBaud
- DP / FMS Combi-Master operation
- DPV1 extension
- Certified
- Online diagnostic interface
- Direct access to the process data in the dual-port memory
- Data consistency by means complete bus cycle
- Graphic System Configurator with unified 'look and feel' for all fieldbus systems and comprehensive diagnostic and start-up functions
- Identical 'easy-to-use' application interfaces 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

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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 various communication variants of the PROFIBUS are taken into account in the corresponding firmware and boards.
In the DP Master operation, a process image is held in the dual-port memory. Here the output data of the application is stored and passed on independently to the Slave participants of the PROFIBUS-DP by the Communication Interface. In this way, the transmission can be carried out cyclically or can be initiated on the part of the user by means of a synchronisation variable. Parallel to the output, the PROFIBUS-DP input data are read in and made available to the user in the process picture. In the DP Slave operation, a process image is also kept in the dual-port memory to which the Master has read and write access. The FMS operation works in a message-oriented manner. For this purpose, two mailboxes are provided in the dual-port memory into which the PROFIBUS services are directed.

The configuration of the PROFIBUS is carried out with the aid of our System Configurator SyCon® under Windows 95 or Windows NT. This reads the basic data of the device from the standard GSD files and structures the configuration dialogue upon it. The user places the various bus participants on the screen, configures and parameterise the Slaves or the FMS connection and the object directory. After determining the baud rate, SyCon calculates all the bus parameters. Subsequently the configuration is transferred to the CIF® by means of the dual-port memory or the serial diagnostic interface and stored in a FLASH-EPROM.The start-up of the bus system is also carried out over the same interface, for which purpose SyCon® offers comprehensive help.

Product Overview

Type	FMS	DP-Master	DP-Slave	Card Format	Bus Interface	Controller	I/O-Data	Note
CIF 30-PB	■	■		PC	ISA	ASPC2	7 KByte	Combi-Master certified
CIF 50-PB	■	■		PC	PCI	ASPC2	7 KByte	Combi-Master
CIF 60-PB	■	■		PCMCIA Type 2	PCMCIA	ASPC2	7 KByte	Combi-Master
CIF 104-PB	■	■		PC/104	ISA	ASPC2	7 KByte	Combi-Master
CIF 30-FMS	■			PC	ISA	ASPC2	–	
CIF 104-FMS	■			PC/104	ISA	ASPC2	–	
CIF 30-DPM		■		PC	ISA	ASPC2	1 KByte	
CIF 104-DPM		■		PC/104	ISA	ASPC2	1 KByte	
CIF 30-DPS			■	PC	ISA	SPC3	368 Byte	certified
CIF 50-DPS			■	PC	PCI	SPC3	368 Byte	
CIF 60-DPS			■	PCMCIA Type 2	PCMCIA	SPC3	368 Byte	
CIF 104-DPS			■	PC/104	ISA	SPC3	368 Byte	

Related Products

Type	Article
SYCON-PB	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-PB	PROFIBUS cable
KAB-SRV	Service cable

Technical Data

PROFIBUS-FMS

read-, write-, event-, information-, status-, identify-, get OD-services
MMAC, MSAC, MSCY, BRCT, MULT
4 Parallel services
32 Communication references

PROFIBUS-DP Master

Max. 125 Slaves
Max. 244 byte per Slave
DPV1 extension — only CIF xx-PB

PROFIBUS-DP Slave

Max. 244 byte input
Max. 244 byte output
Total max. 368 byte
DPV1 extension

PROFIBUS Interface

RS485 optically isolated
9-pin DSub female connector, EN 50170
Alternative: — CIF 104
10-pin Square post connector

Transmission Rate

9,6 kBaud – 12 MBaud

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 B 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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