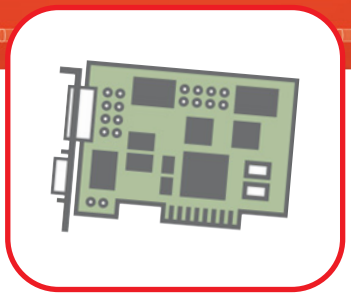
CIF – Communication Interface



PC cards as fieldbus interface

- All PC board formats can be supplied
- Identical ‘easy to use’ application interface for all leading fieldbusses
- One driver for all fieldbusses and board types
- One configuration software
- ‘Plug and play’ kits for SCADA and Soft SPSen of all leading manufacturers

Fieldbus integration for PC-based systems

Whether as Master or Slave, fieldbus systems have been proven themselves excellently in PC-based automation. For more than 10 years, the CIF communication interface cards from the Hilscher Company are used successfully in the most varied areas of application and are now a standard in the market.

PC cards in all formats

With the CIF communication interface, the user will have a unified standard for all the fieldbus systems on different hardware platforms.
We supply our PC communication cards with ISA or PC/104 respectively PCI busses in standard, PC/104+, PCI-104, Compact PCI or PMC format respectively as PCMCIA card for all leading fieldbus systems.

hilscher
COMPETENCE IN COMMUNICATION

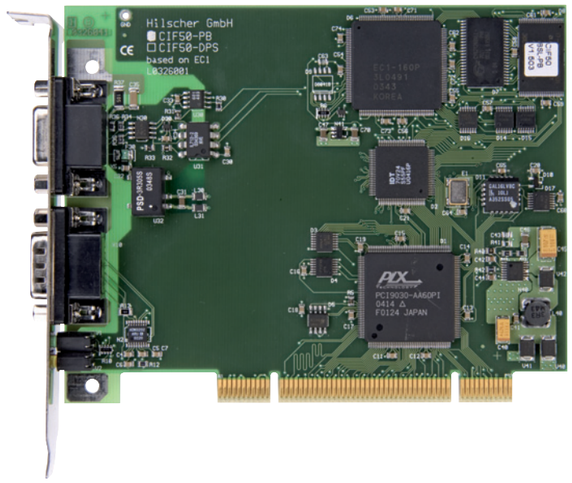
CIF – Communication Interface

Communication for PC based Automation

Fieldbus systems made easy

With a fieldbus card as a fieldbus Master, one always has the current process image of all configured Slave devices.
With a CIF card for fieldbus Slave communication, the Dual port memory of the card serves as a process image which can be accessed from both sides at the same time.
In both variants the user program need not concern itself with the actual fieldbus communication as this task is automatically undertaken by the CIF card, thanks to its own communication processor.

ISA | PCI | PCMCIA | Compact PCI | PC/104 | PC/104+ | PCI-104 | PMC-Modul



All card formats

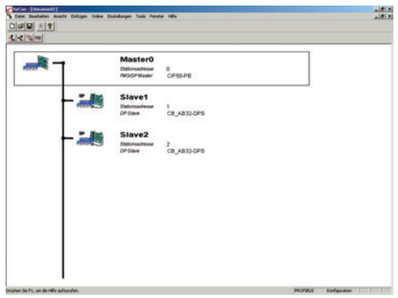
Whether Soft programmable control system, CNC control, Industry terminal, decentralized I/O module or intelligent drive, every application based on a PC standard can be equipped with a CIF card for industrial communication.

Diagnostic Interface

Serial RS 232 Interface for configuration and online diagnostic.

LED status displays

The operational condition of the CIF card and the communication activities on the fieldbus interface are displayed.



One configuration for all fieldbusses

The SyCon system configurator allows the uniform configuration of the communication relationship between fieldbus Slave devices and the Master.
The configuration of the communication relationship to the individual Slave devices and the respective fieldbus Master are stored permanently down in the configuration memory of the CIF card.

Drivers

The universal CIF Device Driver and the function library DRV-TKIT present the basis for the execution of the fieldbus integration on the application level independently of the selected hardware platform. An integration once developed can then be used with every available fieldbus system. Drivers for many Soft PLC´s are available.

OPC
OLE for Process Control

The CIF OPC-Server is available for every fieldbus standard and all Windows-based operating systems.
There are finished drivers available for many visualizing systems and with these the CIF cards can be accessed directly.

CIF – Technical Information

Special Developments

Do you need a special card with a special protocol?
We are in a position to meet your special needs. Challenge us ...

Technical Data

AS-Interface		**Master**
		2 Channels each with
		62 Slaves
		248 Input Bits/186 Output Bits
CANopen	**Slave**	**Master**
		126 Nodes
	510 Byte I/O Data	7168 Byte I/O Data
	Min. Boot up	Min. Boot up
	COB ID Distribution:	COB ID Distribution:
	default/via SDO	default/via SDO
	Emergency Message	Emergency Message
	Node/Life Guarding, Heartbeat	Node/Life Guarding, Heartbeat
	Event Trigger	Event Trigger
	PDO: Async	PDO: Cyclic, Acyclic, Async
	Remote Request	Remote Request
	32 Rx-/32 Tx-PDOs	
CC-Link	**Slave**	
	Max. 4 Stations each with	
	64 Bit I/O Data	
	8 Words I/O Data	
	Polling	
DeviceNet	**Slave**	**Master**
		63 Slaves
	510 Byte I/O Data	7168 Byte I/O Data
	Explicit, Polling,	Explicit, Polling, Bit-strobe,
	Bit-strobe, Cyclic,	Cyclic, Change of State
	Change of State	UCMM via Group 1, 2, 3,
	Predefined Connection Set	Predefined Connection Set
InterBus	**Slave**	**Master**
		128 Slaves
	20 Words I/O Data	1024 Byte I/O Data
	PCP Channel, 2 Words	PCP Channel
		InterBus Loop
		Generation 4
Open Modbus/TCP		
	Client/Server	
PROFIBUS-DP	**Slave**	**Master**
		125 Slaves
	368 Byte I/O Data	7168 Byte I/O Data
	DPV1 Extensions	DPV1 Extensions
	Class 1 and 2 Services	Class 1 and 2 Services
		MPI functions
SERCOS	**Passiv**	**Master**
	SERCON 816	Max. 8 Drives
Diagnostic Interface		
	RS232C, Non isolated	
	A diagnostic interface ist not available on the following	
	devices: CIF 60, PMC, CIF xx-IBS and CIF xx-SCEB.	
Operating Voltages / Operating Temperature		
	CIF 30	+5 V ±5 % / 500-650 mA
		±12 V ±5 % / 50 mA
	CIF 50	+3,3 V ±5 % / 350-1410 mA
		+5 V ±5 % / 250-580 mA
	CIF 50-SCM	+5 V ±5 % / 400 mA
	CIF 60	+5 V ±5 % / 650 mA
	CIF 80	+3,3 V ±5 % / 500-560 mA
		+5 V ±5 % / 300-500 mA
	CIF 104	+5 V ±5% / 300-650 mA
	CIF 104P, CIF 104C, PMC	+3,3 V ±5 % / 400 mA
		+5 V ±5 % / 50-300 mA
	CIF xx-SCEB	+5 V ±5 % / 250 mA
	0 ... 55 °C	

Product Overview

Fieldbus	ISA	Slave	Master
AS-Interface	CIF 30		-ASM
CANopen	CIF 30	-COS	-COM
DeviceNet	CIF 30	-DNS	-DNM
InterBus	CIF 30	-IBS	-IBM
Modbus Plus	CIF 30-MBP		
PROFIBUS	CIF 30	-DPS	-PB
Fieldbus	**PCI**	**Slave**	**Master**
AS-Interface	CIF 50		-ASM
CANopen	CIF 50	-COS	-COM
CC-Link	CIF 50	-CCS	
DeviceNet	CIF 50	-DNS	-DNM
InterBus	CIF 50	-IBS	-IBM
Modbus Plus	CIF 50-MBP		
PROFIBUS	CIF 50	-DPS	-PB
SERCOS	CIF 50-SCM*		
SERCOS	CIF 50-SCEB passiv*		
Fieldbus	**PCMCIA**	**Slave**	**Master**
CANopen	CIF 60	-COS	-COM
DeviceNet	CIF 60	-DNS	-DNM
PROFIBUS	CIF 60	-DPS	-PB
SERCOS	CIF 60-SCEB passiv*		
Fieldbus	**Compact PCI**	**Slave**	**Master**
CANopen	CIF 80	-COS	-COM
DeviceNet	CIF 80	-DNS	-DNM
PROFIBUS	CIF 80	-DPS	-PB
Fieldbus	**PC/104**	**Slave**	**Master**
AS-Interface	CIF 104		-ASM
CANopen	CIF 104	-COS	-COM
CC-Link	CIF 104	-CCS	
DeviceNet	CIF 104	-DNS	-DNM
InterBus	CIF 104	-IBS	-IBM
Modbus Plus	CIF 104-MBP		
PROFIBUS	CIF 104	-DPS	-PB
SERCOS	CIF 104-SCEB passiv*		
Fieldbus	**PC/104+**	**Slave**	**Master**
CANopen	CIF 104P	-COS	-COM
DeviceNet	CIF 104P	-DNS	-DNM
PROFIBUS	CIF 104P	-DPS	-PB
Fieldbus	**PCI-104**	**Slave**	**Master**
CANopen	CIF 104C	-COS	-COM
DeviceNet	CIF 104C	-DNS	-DNM
PROFIBUS	CIF 104C	-DPS	-PB
Fieldbus	**PCI Mezzanine Card**	**Slave**	**Master**
CANopen	PMC	-COS	-COM
DeviceNet	PMC	-DNS	-DNM
PROFIBUS	PMC	-DPS	-PB

* CIF 50-SCM, CIF 50-SCEB, CIF 60-SCEB, CIF 104-SCEB are not supported by the CIF Device Driver. These devices need an own driver.

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