

cifX

reduced to the maximum

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netX

PC-Card & netX

Description

Ethernet in industrial automation technology promised transfer of huge amounts of data through all levels of the communication pyramid and, at the same time, to benefit from low cost office components. The reality is that various industrial automation systems demand determinism, minimal jitter and a line topology. This implies the use of additional hardware, so standard Ethernet components cannot be used throughout these applications. Often a ten-year commitment of availability for these products is requested by the industry and therefore specific PC hardware is used in automation applications.

The cifX PC card series offers a solution that supports a broad variety of real-time Ethernet systems. It utilizes the netX controller chip and a SDRAM and provides maximum performance, functionality and flexibility for a fair price.

Highlights

- One PC Card for all Real-time Ethernet Systems
- One PC Card that runs Master and Slave Protocols
- Data Exchange via Dual-Port Memory (DPM) or Direct Memory Access (DMA)
- Unified User Interface for Various Protocols
- PCI or PCI Express
- Ten-year Commitment of Availability
- SYCON.net Configuration Tool based on FDT/DTM Technology



The protocols for cifX are delivered as loadable firmware on the provided CD. If the cifX driver finds a loadable firmware during system start-up, it loads this firmware into the board. This approach provides a simple way to reconfigure the system for different Ethernet protocols. A license code is required for master applications or used together with an OPC server. The license can be purchased with the cifX or later on and is stored on the board.

This means reduction to one type of PC card and therefore less diversity in terms of purchase management. Additionally, this approach reduces cost for warehouse, logistic, engineering, setup and maintenance.

Distribución: **ER-SOFT, S.A.** Email: er@er-soft.com, Tel: +34 916 408 408


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Technical Information

Protocol

EtherCAT	Slave
Cyclic Data	max. 400 Bytes
Acyclic Data	SDO Master/Slave SDO Slave/Slave
Functions	COE (CANopen over EtherCAT) Emergency Complex Slave 3 FMMUs and 4 SYNC-Manager

EtherCAT	Master
Cyclic Data	max. 11520 Bytes
Acyclic Data	CoE (CANopen over EtherCAT)Up-/Download
Functions	Get OD List Emergency Topologie: Linie

EtherNet/IP	Adapter/Slave
Cyclic Data	max. 1008 Bytes
Unscheduled Data	max. 1400 Bytes per Telegram
Functions	max. 8 Connections one E/A Connection Cyclic Connection UCMM supported DHCP, BOOTP
Server Services	Get_Attribute_All/Single Set_Attribute_All/Single

EtherNet/IP	Scanner/Master
Cyclic Data	max. 11520 Bytes
Unscheduled Data	max. 504 Bytes per Telegram
Functions	max. 64 Connections Cyclic Connection UCMM supported DHCP, BOOTP
Client Services	Get_Attribute_Single/All Set_Attribute_Single/All

PROFINET	IO Device
Cyclic Data	max. 2048 Bytes (IOCR)
Acyclic Data	Read/Write Record, max 1024 Bytes/Telegramm
Functions	Process- and Diagnostic Alarm DCP VLAN- and Priority-Tagging Context Management over CLRPC Diagnostic, max 200 Bytes/Telegramm target-actual comparison configuration max. 244 modules 1 Submodul

PROFINET IO	Controller
Cyclic Data	max. 6144 Bytes
Acyclic Data	Read/Write Record, max. 4096 Bytes/Request
Functions	max. 32 Devices minimum cycle time 1 ms Alarmtreatment DCP Context Management over CLRPC Pro Device one Puffer available for Diagnostic Data

Modbus TCP/IP	Server
Functions Codes	1, 2, 3, 4, 5, 6, 15, 16
Register (16-Bit)	max. 120 or 125 Register per Telegram
Coil (1-Bit)	max. 1968 or. 2000 Coils per Telegram
Message Mode	Server In/Out-Data Image not used
E/A-Modus Server	max. 11520 Byte E/A Daten

PowerLink Controlled Node/Slave	
Cyclic Data	max. 2980 Bytes
Acyclic Data	SDO Up-/Download
Functions	SDO over ASND and UDP
Poll Request/Response	Response Time 1µs
Version	V2

SERCOS III	Slave
Realtime Data	max. 2800 Bytes
Acyclic Data	Service Channel Read/Write/Standard Kommands
Functions	Phase Run Up Synchronization Ring and Line Topology Max. 8 Subdevices
Version	V1.1

Note: The protocols are delivered as loadable Firmware on the provided CD.

Technical Data

Article	System Interface	Operating Voltage	Operating Temperature	Dimensions(LxWxH)
CIFX 50-RE	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	120 x 72 x 18 mm
CIFX 50E-RE	PCI, Single-Lane Port	3,3 V / max. 800 mA	0 ... 55°C	120 x 77 x 18 mm
CIFX 80-RE	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	160 x 100 x 20 mm
CIFX 90-REIF	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	60 x 45 x 4,5 mm
CIFX 104C-RE	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	97 x 93 x 26 mm
CIFX 104C-REIF	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	97 x 93 x 26 mm
CIFX 104C-RE-R	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	97 x 93 x 26 mm
CIFX 104C-RE-RIF	PCI, 33MHz DPM	3,3 V / max. 650 mA	0 ... 55°C	97 x 93 x 26 mm

Product Overview

Article description	Article number	Article
CIFX 50-RE	1250.100	PCI Communication Interface netX for Real-Time-Ethernet - 2x RJ 45
CIFX 50E-RE	1251.100	PCI Express Communication Interface netX for Real-Time-Ethernet - 2x RJ 45
CIFX 80-RE	1280.100	CompactPCI Communication Interface netX for Real-Time-Ethernet - 2x RJ 45
CIFX 90-REIF	1290.100	Mini PCI Communication Interface netX for Real-Time-Ethernet - Cable and AIFX-RE with 2x RJ 45
CIFX 104C-RE	1270.100	PCI-104 Communication Interface netX for Real-Time-Ethernet - 2x RJ 45
CIFX 104C-REIF	1270.101	PCI-104 Communication Interface netX for Real-Time-Ethernet - Cable and AIFX-RE with 2x RJ 45
CIFX 104C-RE-R	1271.100	PCI-104 Communication Interface netX for Real-Time-Ethernet - 2x RJ 45, Connection right

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