

# SERCOS III Communication in Motion

CONNECTED BY  
**netx**

**SERCOS**  
interface

## SERCOS III Slave released

Based in Ethernet, SERCOS III is the third generation of the SERCOS interface series. It incorporates all the requirements of modern drive technology such as cycling times up to 62.5µs, Jitter smaller than 1µs, Redundancy and Hot Plug.

For the netX the SERCOS III Slave Stack is now available in Version 1.1. This universal network controller with its 32Bit/200MHz ARM CPU incorporates the whole protocol and offers a simple access via Dual-Port-Memory to the cyclic data and the service channel. The synchronization of the motion application occurs via the output signal.

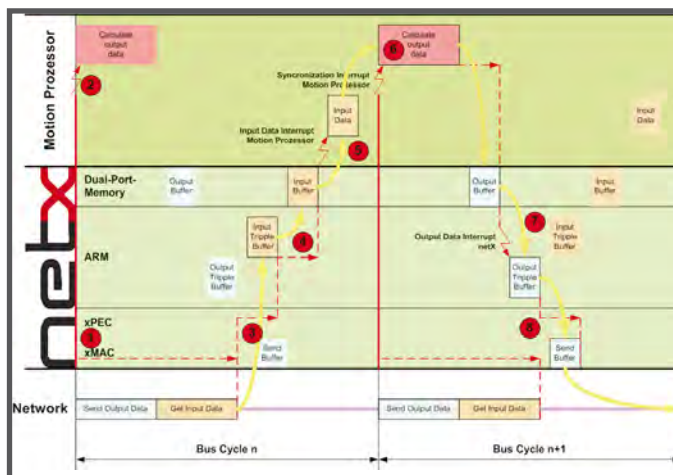
The SERCOS III Slave is offered as standard components in the formats PCI, PCI Express, Mini PCI, PCI-104, CompactPCI or as Communication Module.



## Customer specific designs or own development

All the information required for development of an own SERCOS III interface is available on the Internet. The protocol stack is obtainable as loadable Firmware, linkable Object Module or in Source Code.

If desired, we can carry out the overall development and will be happy to carry out the production on our own SMD line.

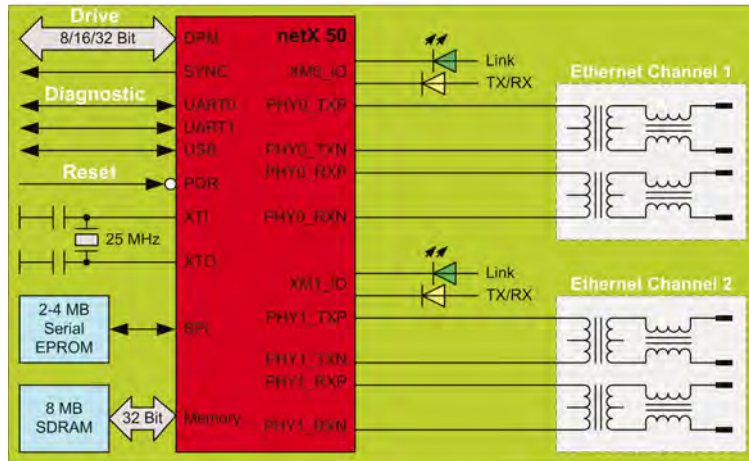


- 8 / 16 / 32 Bit Dual-Port-Memory
- Jitter less than 1µs
- Cycling times up to 62.5µs
- Standardized design process and production at fixed conditions
- 10 years guaranteed delivery

**hilscher**  
COMPETENCE IN  
COMMUNICATION

# SERCOS III

## Technical Data



The SERCOS III interface with the netX 50 requires a few external modules only.

### Protocol

SERCOS III Slave		SERCOS III Master (in development)	
Real-Time Data	max. 400 Bytes (incl. Device Control/Status, Connection Control)	Real-Time Data	max. 11520 Bytes (incl. Device Control/Status, Connection Control)
Acyclic Data	Service channel: Read/write/standard commands	Acyclic Data	Service channel: Read/write/standard commands
Functions	Phase startup (NRT, CP0, CP1, CP2, CP3, CP4) Synchronization Ring and line topology	Functions	Phase startup (NRT, CP0, CP1, CP2, CP3, CP4) Synchronization Ring and line topology
Maximum Cycle Time	62.5µs	Maximum Number of Slaves	511
Maximum Number of Device Addresses	1	Version	1.1
Version	1.1		

### Product Overview

#### cifX

Article Designation	Article Number	Article
CIFX 50-RE	1250.100	PCI Communication Interface - 2x RJ 45
CIFX 50E-RE	1251.100	PCI Express Communication Interface - 2x RJ 45
CIFX 80-RE	1280.100	CompactPCI Communication Interface - 2x RJ 45
CIFX 90-RE\F	1290.100	Mini PCI Communication Interface - Cable and AIFX-RE with 2x RJ 45
CIFX 104C-RE	1270.100	PCI-104 Communication Interface - 2x RJ 45
CIFX 104C-RE\F	1270.101	PCI-104 Communication Interface - Cable and AIFX-RE with 2x RJ 45
CIFX 104C-RE-R	1271.100	PCI-104 Communication Interface - 2x RJ 45, connection right
CIFX 104C-RE-R\F	1271.101	PCI-104 Communication Interface - Cable and AIFX-RE with 2x RJ 45, right

#### comX

Article Designation	Article Number	Article
COMX-CA-RE	1521.100	Communication Module netX for Real-Time-Ethernet, without loaded Firmware
COMX-CA-RE/S3S	1521.100/S3S	COMX-CA-RE with SERCOS III Slave Firmware

#### netX

Article Designation	Article Number
netX 50	2230.000
netX 100	2220.000
netX 500	2210.000

#### netSWITCH

Article Designation	Article Number	Article
NS-S3-1NRT	1790.160	netSWITCH SERCOS III and an Ethernet Port