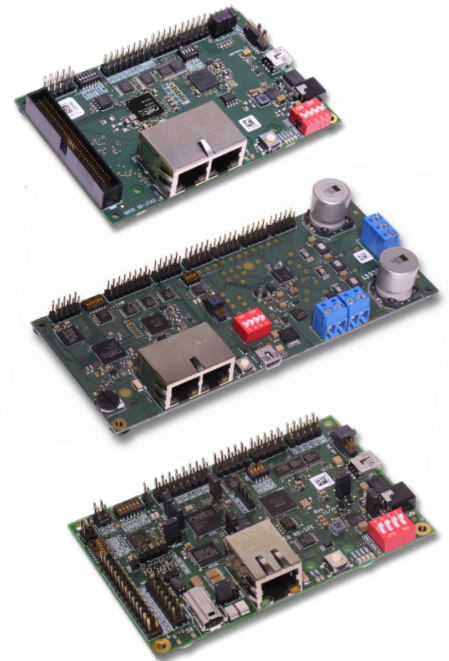


# NXHX

## netX Software Evaluation boards

- Target system with extensive peripheral functions
- Integrated debug interface
- netX Studio CDT software development and debug environment
- Evaluation of network protocols and applications on the netX
- Economical, easy to operate and complete



### NXHX Evaluation boards

The netX network controller with its 32 Bit ARM CPU provides a high degree of computing performance and comprehensive peripheral functions for stand-alone solutions in price-sensitive applications.

The simplest and most economic way of evaluating the compatibility of your prototypes to different industrial communication networks is with the netX software evaluation board. Besides a universal hardware, it also possesses an integrated debug interface and is supplied with the netX Studio CDT from Hilscher.

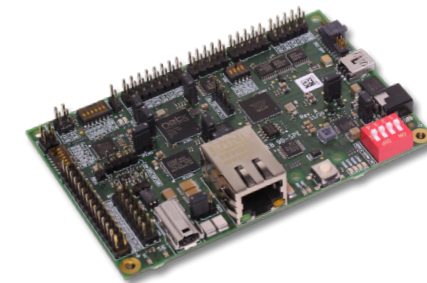
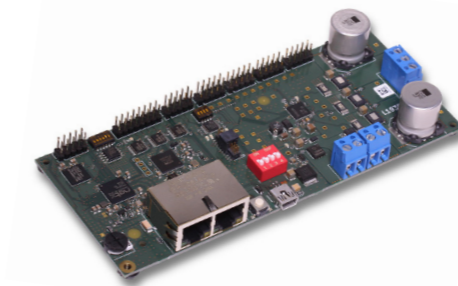
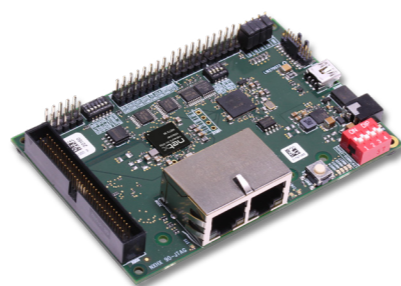
netX Studio further offers a comfortable development and debugging environment on top of the already incorporated toolchain. You will also receive the complete circuit diagram providing a basis for your hardware development.

On this hardware you will later connect, via the JTAG Interface, the MIPI20/JTAG Adapter from Hilscher and test or develop with the same user interface and functionality as on the evaluation board.



→ NXHX  
Service-Hotline: +49 (0) 6190 9907-90  
[www.hilscher.com](http://www.hilscher.com)

# Technical Data - NXHX



Technical Data	NXHX 90-JTAG	NXHX 90-MC	NXEB-90-SPE
	<b>netX 90 Starterkit - easy access to networks and apps</b>	<b>netMOTION Evaluation board - quickly to the networked drive solution</b>	<b>netX Evaluation board - for 10 Mbps Single-Pair-Ethernet Solutions</b>
Operating temperature	±0° ... +55° C	±0° ... +55° C	±0° ... +55° C
Operating voltage	+24 V / 150 mA	+12 V - 43 V / depending on motor	+24 V / 150 mA
Dimensions (L x W x H)	100 × 65 × 20 mm	155 × 65 × 22,2 mm	100 × 65 × 20 mm
Network Controller	netX 90	netX 90	netX 90
External Memory	4 Mbyte Quad SPI Flash	8 Mbyte SDRAM, 4 Mbyte Quad SPI Flash	8 Mbyte SDRAM, 4 Mbyte Quad SPI Flash
CD Card Slot	-	-	-
PIN Connectors	Host Interface, ADC, CAN, ENDCODER, UART, MMIO*	SPM, HALL, ENCODER, MOTOR BRAKE / SUPPLY / 3-PHASES	SPM, UART, MII, MMIO, ADC
Communication Interface	2x Ethernet 100 BASE-TX, RJ45 1x Fieldbus interface optional	2x Ethernet 100 BASE-TX, RJ45 1x Fieldbus interface optional	1x Ethernet 100 BASE-TX, RJ45 1x Ethernet 10 BASE-T1L. IEC63171-6 1x Fieldbus interface optional
USB Mini-B Receptable	USB Interface for On-board Debugger / Configuration / Diagnostics	USB Interface for On-board Debugger / Configuration / Diagnostics	USB Interface for On-board Debugger / Configuration / Diagnostics
USB Type B Receptable	✗	✗	✗
Push Button	Reset	Reset	Reset
DIP Switch	Bootmode, Hostmode, MMIO*	Bootmode	Bootmode
Jumper	✗	✗	✗
Onboard debugger	✓	✓	✓
Debug Interface	JTAG / TPIU	JTAG / TPIU	JTAG / TPIU
Inputs	4 DIP Switches	4 DIP Switches	4 DIP Switches
Outputs	4 LEDs	4 LEDs	4 LEDs
LEDs	Status / Link / Activity / Communication	Status / Link / Activity / Communication	Status / Link / Activity / Communication

\* MMIO = Multiplex Matrix Pins could be used as standard IOs, PWM, GPIO, Fieldbus, SPI, UART, CAN, I2C, Trigger

Note: All technical data may be changed without further notice.



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# Product Information

## Product Overview

### Product Overview - Evaluation boards

**NXHX 90-JTAG**  
7833.000 | netX 90 Software Evaluation board with JTAG

**NXHX 90-MC**  
7833.100 | netX 90 Motor Control Demoboard

**NXEB 90-SPE**  
7832.300 | netX 90 Evaluation board with 10BASE-T1L PHY

### Accessories Fieldbus Interface

**NXHX-DP**  
7923.410 | PROFIBUS Interface (RS-485)

**NXHX-CO**  
7923.500 | CAN/CANopen Interface

**NXHX-DN**  
7923.510 | DeviceNet Interface

**NXHX-RS**  
7923.010 | RS-232 Interface

**NXHX-CC**  
7923.740 | CC-Link Interface

### Product Overview - Accessories Host Interface NXHX

**NXHX-IO**  
7703.010 | 16 Digital Inputs (DIL Switch) & Outputs (LED)

**NXHX-SDR**  
7703.020 | 32-bit SDRAM with 64 MBit

**NXHX-SDRSPM**  
7703.080 | 16-bit SDRAM with 64 MBit; SPM Interface

**NXHX-FTDI**  
7703.050 | USB Desktop Adapter for SPM Interface

**NXHX 52-RE**  
7773.000 | netX 52 Host Interface Board

### 90-JTAG

### 90-MC

### 90-SPE

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### Product Overview - Accessories App Interface NXHX

**NXHX-ENC**  
7924.000 | BiSS/EnDat/SSI encoder interface adapter

**NXHX-DH**  
7924.100 | Digital halls/quadrature encoder interface adapter

**NXHX-IOL**  
7923.640 IO-Link Interface

### 90-JTAG

### 90-MC

### 90-SPE

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