

NXHX

netX Software Development Board

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

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 development board. Besides a universal hardware, it also possesses an integrated debug interface and is supplied with the netX Studio CDT from Hilscher.

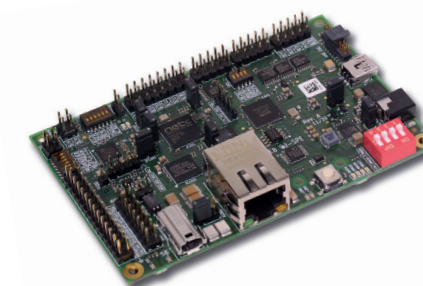
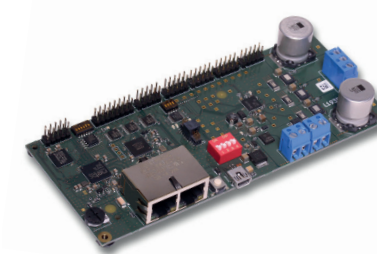
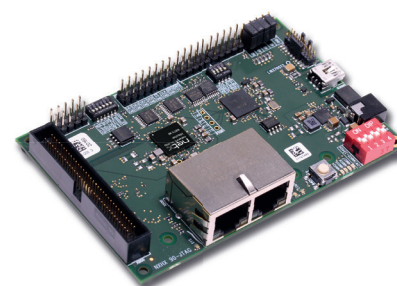
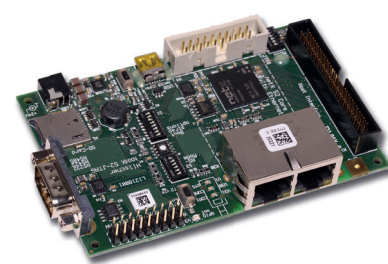
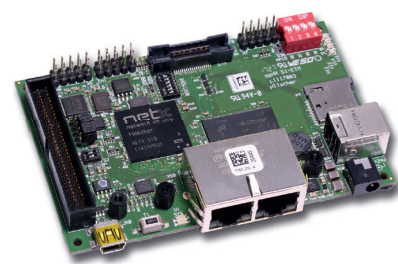
netX Studio further offers a comfortable development and debugging environment on top of the already incorporated toolchain. You will also receive the complete circuit diagram providing a basis for your hardware development.

On this hardware you will later connect, via the JTAG Interface, the NXJTAG-USB from Hilscher and test or develop with the same user interface and functionality as on the development board.



→ QR Code Link: NXHX
Service-Hotline: +49 (0) 6190 9907-90
www.hilscher.com

Technical Data - NXHX



Technical Data	NXHX 51-ETM	NXHX 52-JTAG	NXHX 90-JTAG	NXHX 90-MC	NXEB-90-SPE
	netX 51/ netX52 Starterkits - Network development made easy		netX 90 Starterkit - easy access to networks and apps	netMOTION development board - quickly to the networked drive solution	netX development board - for Single-Pair-Ethernet Solutions
Operating temperature	±0° ... +55° C	±0° ... +55° C	±0° ... +55° C	±0° ... +55° C	±0° ... +55° C
Operating voltage	+24 V / 150 mA	+24 V / 150 mA	+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	100 × 65 × 20 mm	100 × 65 × 20 mm	155 × 65 × 22,2 mm	100 × 65 × 20 mm
Network Controller	netX 51	netX 52	netX 90	netX 90	netX 90
External Memory	8 Mbyte SDRAM, 4 Mbyte Quad SPI Flash	4 Mbyte Quad SPI Flash	4 Mbyte Quad SPI Flash	4 Mbyte Quad SPI Flash	8 Mbyte SDRAM, 4 Mbyte Quad SPI Flash
CD Card Slot	Mirco SD / MMD	Mirco SD / MMC	-	-	-
PIN Connectors	Host Interface, UART, MMIO*	Host Interface, UART, MMIO*	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 2x Fieldbus interface optional	2x Ethernet 100 BASE-TX, RJ45 2x Fieldbus interface optional	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, HARTING T1 1x Fieldbus interface optional
USB Mini-B Receptable	Configuration / Diagnostics	Configuration / Diagnostics	USB Interface for On-board Debugger / Configuration / Diagnostics	USB Interface for On-board Debugger / Konfiguration / Diagnose	USB Interface for On-board Debugger / Konfiguration / Diagnose
USB Type B Receptable	USB Interface for On-board Debugger	USB Interface for On-board Debugger	-	-	-
Push Button	Power-on Reset	Power-on Reset, MMIO*	Reset	Reset	Reset
DIP Switch	Bootmode, Hostmode, MMIO*	Bootmode, Hostmode, MMIO*	Bootmode, Hostmode, MMIO*	Bootmode	Bootmode
Jumper	Host Interface	-	-	-	-
Onboard debugger	yes	no	yes	yes	yes
Debug Interface	ETM / JTAG	JTAG	JTAG / TPIU	JTAG / TPIU	JTAG / TPIU
Inputs	4 DIP Switches	-	4 DIP Switches	4 DIP Switches	4 DIP Switches
Outputs	4 LEDs	1 LEDs	4 LEDs	4 LEDs	4 LEDs
LEDs	Status / Link / Activity / Communication	Status / Link / Activity / Communication	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

Article Overview

Article Overview - Development Boards

NXHX 51-ETM 7763.200 netX 51 Software Development board with ETM
NXHX 52-JTAG 7773.300 netX 52 Software Development board with JTAG*
NXHX 90-JTAG 7833.000 netX 90 Software Development board with JTAG
NXHX 90-MC 7833.100 netX 90 Motor Control Demoboard
NXEB 90-SPE 7832.300 netX 90 Testboard with ext. SPE 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

*without Onboard Debugger

Article Overview - Accessories Host Interface	NXHX	90-JTAG	90-MC	90-SPE	51-ETM	52-JTAG	500-ETM
NXHX-IO 7703.010 16 Digital Inputs (DIL Switch), 16 Digital Outputs (LED)		✗	✗	✗	✓	✓	✓
NXHX-SDR 7703.020 32-bit SDRAM with 64 MBit		✗	✗	✗	✓	✓	✗
NXHX-SDRSPI 7703.070 16-bit SDRAM with 64 MBit; SPM Interface		✓	✗	✗	✓	✓	✗
NXHX-PHY 7703.030 External PHY Interface, SPM Interface		✗	✗	✗	✓	✓	✗
NXHX-PHYSDR 7703.040 16-bit SDRAM with 64 MBit External PHY Interface		✗	✗	✗	✓	✓	✗
NXHX-FTDI 7703.050 USB Desktop Adapter for SPM Interface		✓	✗	✗	✓	✓	✗
NXPCA-PCI 7902.100 PCI Desktop Adapter Card for DPM Interface		✓	✗	✗	✓	✓	✓
NXHX 52-RE 7773.000 netX 52 Host Interface Board		✗	✗	✗	✓	✓	✓

Article Overview - Accessories App Interface	NXHX	90-JTAG	90-MC	90-SPE	51-ETM	52-JTAG
NXHX-ENC		✓	✓	✗	✗	✗
NXHX-DH		✗	✓	✗	✗	✗
NXHX-IOL		✓	✗	✗	✗	✗



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