netJACK

Powerful Exchangeable Module for Embedded Designs

- All major industrial protocols
- Master and Slave
- One hardware for all Real-Time Ethernet protocols
- Host interface via PCI Express, Dual-Port-Memory or SPI
- Easy slide-in mounting without tools
- Locks and connects without additional components on the baseboard

The PCI Express communication module

The universal communication module netJACK with its PCI Express interface addresses in particular the embedded market with high-performance CPUs e.g. Intel Atom®. Alternatively there are options with traditional Dual-Port-Memory and fast serial SPI interface.

All types have a compact design as closed IP 40 module, which can be mounted without tools. As connector and mounting rails are formed as contact area and cut-outs on the baseboard, there are no additional costs for the device.

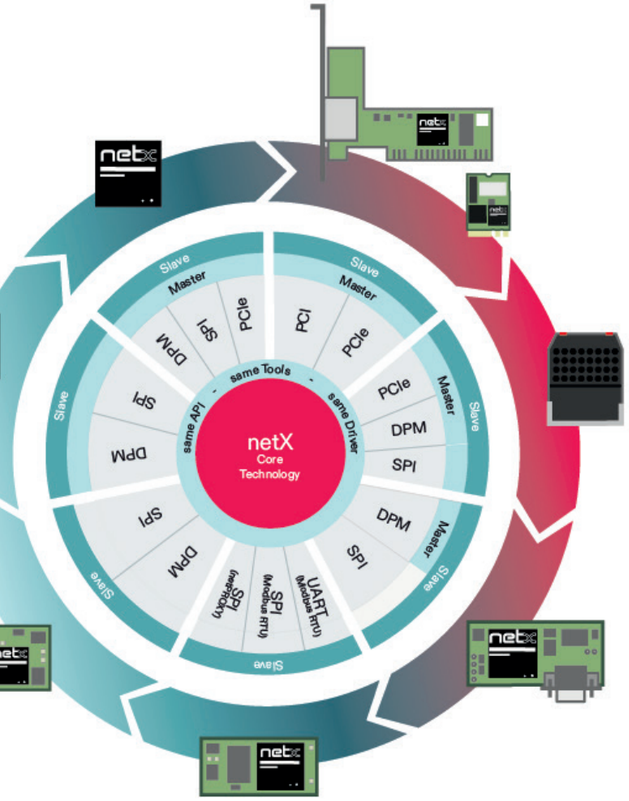
netJACK can be mounted quick and easy immediate before shipment - or even by the end customer.

With netJACK customers can realize the full range of communication solutions of e.g. drives, HMI or ident systems. At the same time additional functionalities as PLC or Visualisation are possible. For customer specific requirements Hilscher offers an optimized Design- and Production service at reasonable costs.

Due to own network controller netX a 10-year guarantee of delivery is granted.

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

Pluggable Communication Module for Real-Time Ethernet & Fieldbus – netJACK



Same Function - Same API - Same Tools

The Hilscher Platform Strategy provides the whole range of communication solutions to the user – from standardized PC card up to the integration of the multi-protocol chip netX. All solutions – whether Master or Slave – have the same interface to the application and use the same tools.

After single integration of the application interface the change to a different hardware format or a different physical host interface is a purely hardware optimization process without fundamental changes of the software structure.

Real-Time Ethernet & Fieldbus protocols

As specialist for industrial communication Hilscher offers the largest selection of protocols used in the factory automation. Besides traditional Fieldbus all major Real-Time Ethernet protocols are available - and that‘s as Master or Slave.

For selected Real-Time Ethernet protocols the firmware update can be done via an integrated Webserver. Furthermore the data excange via Ethernet or TCP/IP is supported.

EtherCAT · EtherNet/IP · ETHERNET POWERLINK · PROFINET · PROFIBUS · CANopen · Modbus · sercos the automation bus · DeviceNet · CC-Link IE Field Basic · CC-Link · VARAN

NJ 52D-COS

NJ 52D-DNS

NJ 100EN-RE

NJ 51D-RE

NJ 100EN-DP

NJ 100DN-DP

Multi Network Design

All netJACK modules have the same dimensions and are pin-compatible to each other. Thus you can cover the whole range of network protocols with exactely one baseboard design. Thanks to common interfaces you can react quickly and most flexible to new market requirements - with a maximum of time- and costsavings.

Universal Module or Slave only

The Hilscher netJACK modules are available as universal modules or as slave only modules. The universal module can be used both as Master and as Slave. The host interfaces provided are PCI Express or Dual-Port-Memory. The Slave modules are specifically designed for demanding field devices and provide a Dual-Port-Memory interface as well as a fast SPI interface.

Easiest handling & design

Fixing and connecting a netJACK doesn‘t need any connectors or mounting rails. With metal clamps and a latch mechanism on the module a shock- and vibration-proof installation is ensured. As true option module there are no hidden costs in the baseboard design.

Easiest integration

For a quick and easy integration Hilscher offers a wide range of device drivers. Besides a C-Toolkit free of charge, drivers for all relevant operating systems are available – in most cases as source code.

QNX Partner Network · QNX · Linux · INtime · Windows · OPC OLE for Process Control · IntervalZero · VxWorks · KW software · IBHsoftec · CODESYS · Windows CE

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empowering communication

Productinformation

Technical Data

Technical Data	
Operating Temperature -20 ... +65 °C	**Noise Immunity** EN 61131-2:2003
Operating Voltage +3.3 V / 300 - 800 mA	**Mounting** by cut out on the base board
Dimensions (L x W x H) 53,4 × 25,2 × 19,2 mm / front plate 60 × 50,4 × 19,2 mm / module	**Connector** Samtec FSI-120-03-G-D-AB for NJ 100EN Samtec FSI-130-03-G-D-AB for NJ 10D / 50D
Processor netX 51 / netX 52 / netX 100	**LED Indicators** SYS, COM 0, COM 1, APL, Link, Rx/Tx
System Interface 8-/16 bit DPM or 50 MHz SPI	**Shock and Vibration** EN60068-2-6 Fc / EN60068-2-27 Ea
Weight max. 80 g	**SPI** 50 MHz (NJ 10, NJ 51)
Certification CE, RoHS, Reach, UL, UKCA	**Dual-Port-Memory** 8-/16 bit
Emission CISPR 11 Class A	**PCIe** One-Lane-Port 1,5 GHz

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

Product Overview

NJEB-D Evaluationboard for Dual-Port-Memory	**NJEB-E** Evaluationboard for PCI Express

Product	Slave only	Universal Module (Master & Slave)	CANopen	DeviceNet	PROFIBUS	EtherCAT	EtherNet/IP	ETHERNET POWERLINK 1)	Modbus	PROFINET	CC-Link IE Field Basic	sercos the automation bus	VARAN 1)	SPI	DPM	PCIe
netJACK 51 **NJ 51D**	✓	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✗
netJACK 52 **NJ 52D** 2)	✓	✗	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗
netJACK 100 **NJ 100DN**	✗	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗
netJACK 100 **NJ 100EN**	✗	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓

1) Slave only 2) Function compatible to NJ 10D

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