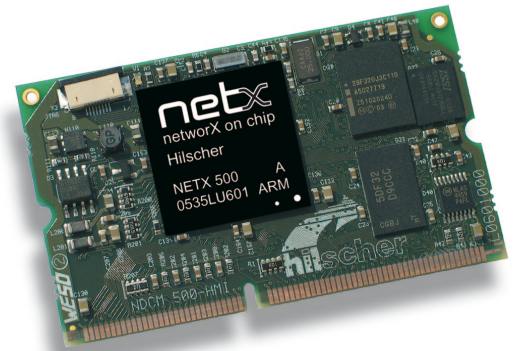


# netDIMM

## Finished netX Design in standardized DIMM-PC format

### Highlights

- Target platform for own netX based applications
- With netX technology for all Fieldbus and Real-Time Ethernet systems usable
- Comprehensive accessories like licensed protocol stack modules and Board Support Packages available
- Compact dimensions according DIMM 144 pin standard
- Read-to-use solutions with visualization or control as development service



### Complete netX Design for own applications as expansion module

netDIMM is a plug-in module in the well-known 144 pin DIMM-PC format and the simplest solutions to expand automation devices with network technology and own netX based applications.

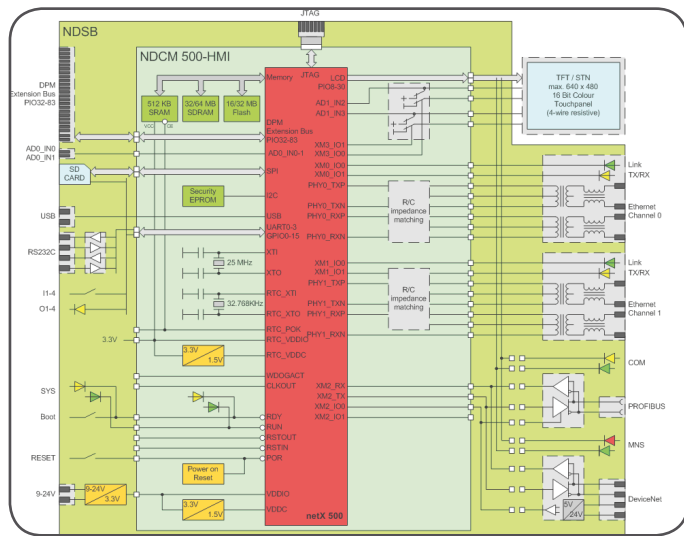
The netDIMM platform is a complete netX controller design and contains all necessary operating components such as memory, oscillator, reset generator and voltage converter. The communication signals, the peripheral bus, USB, LCD and LED signals are provided on the DIMM interface. The corresponding electrical connections have to be applied and interconnected on the base board.

netDIMM is available in the variants -NET and -HMI. The -NET variant has its focus on applications needing communication. It provides the corresponding Fieldbus/Ethernet signals to the base board.

The -HMI type is designed for the visualization market and delivers additional LCD- and touch controller signals. Thus it is possible to build a Windows-CE or Linux based terminal with soft-keys, SD/MMC-card and USB interface with minimum effort. All other applications are developed under the real-time operating system rcX where licensed protocol stacks modules can be acquired on demand for own integrations.

For a quick evaluation and development a starter board is available that provides all physical communication interfaces to the user. Next to the slot for the netDIMM module connectors for Ethernet, PROFIBUS, DeviceNet as well as RS232C, USB and JTAG are assembled and provided. Hardware extensions can be adapted via the extension bus that is made accessible via pin strips. For the -HMI type a TFT display and a SD/MMC Card slot is assembled additionally.

# Technical Data/ Product Overview



The block diagram shows the netDIMM 500 module together with the starter board.

## netDIMM - Getting started

netDIMM is a platform for own netX based applications and will come without any software or protocol stack.

Depending on the application customers can acquire a wide range of licensed Protocol Stacks for netX as linkable object module as well as several Board Support Packages.

Together with the netDIMM Starter Board and an appropriate development environment, customers can easily create their netX application, without any netX specific hardware design.

## netDIMM & Starter Board

Parameter	Value
Processor	netX 500 with 200 MHz ARM*926EJ-S
Memory	16/32 MB Flash, 32/64 MB SDRAM 512 KB SRAM, buffered externally
LCD-Controller	640x480, 16-Bit Color TFT/STN, Touch
Interfaces	USB 1.1, SPI, 3x UART or 16x GPIO, JTAG,
AD-Converter	2 Channels, 10-Bit, 1MS/s, S&H
2 Ethernet-Ports	10BASE-T/100BASE-TX, integrated PHYs, IEEE 1588 EtherCAT with 3 FMMUs and 4 SyncManager EtherNet/IP
Fieldbus Controller	Powerlink, integrated Hub, Response Delay max. 1µs PROFINET, integrated Switch
Extension	CANopen, DeviceNet, PROFIBUS
Dimensions	Dual-Port Memory, Extension Bus or 52x IO
Power Consumption	67,6 x 40 mm, DIMM-Module Standard 600 mA @ 3.3 V

## Optional Accessories

Article Description	Article
NXLOM-DPM /-DPS	PROFIBUS-DP Master or Slave
NXLOM-DNM /-DNS	DeviceNet Master or Slave
NXLOM-COM /-COS	CANopen Master or Slave
NXLOM-CCS	CC-Link Slave
NXLOM-MPI	PROFIBUS DP MPI
NXLOM-ECM /-ECS	EtherCAT Master or Slave
NXLOM-EIM /-EIS	EtherNet/IP Scanner or Adapter
NXLOM-OMB	OpenModbus Client/Server
NXLOM-PLS	Powerlink Controlled Node
NXLOM-PNM /-PNS	PROFINET I/O Controller or Device
NXLOM-S3M /-S3S	SERCOS Master or Slave
NXLOM-VRS	VARAN Client

Note: To acquire netX protocol stacks a corresponding license agreement is needed.

Technical Data

Linkable Object Modules

Overview

Article Description	Article Number	Article
NDCM 100-NETV4D8	1820.340	netDIMM CPU Modul NET
NDCM 500-HMIF16D32	1811.560	netDIMM CPU Modul HMI
NDSB-HMI	5800.100	netDIMM Starter Board HMI
NDSB-NET	5800.000	netDIMM Starter Board Network

BSP

Article Description	Article Number	Article
NXBSP 500-WINCE	7410.101	Board Support Package Win-CE
NXBSP 500-LINUX	7411.101	Board Support Package LINUX
NXPSB 500-VXWORKS	7413.101	Board Support Package VxWorks
NXBSP-RCX	7412.101	Board Support Package rcX

Note: All technical data can be altered without notice.

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