

# Features - NXDRV-TKIT

## Features

- O/S independent
- Support of PCI / ISA and DPM based connections to the Hilscher DPM
- Support of memory and FLASH based devices
- 64 Bit support
- Basic interrupt functions included
- netX100/500, netX50, netX51/netX52 Bootstrap support ★
- Basic interrupt functions included
- Event handling for I/O and packet transfer functions
- Support of *Loadable Firmware Modules* (NXO files) consisting of a *Base OS Module* and *Loadable Protocol Stack Modules*
- Device time setting during start-up

### Options:

- Little Endian / Big Endian support (selectable via toolkit definition)
- DMA support for I/O data transfer (selectable via a toolkit definition, only for PCI devices where netX is directly connected to the PCI bus)
- Extended Parameter Check of Toolkit Functions (selectable via a toolkit definition)
- Device time setting during start-up
- Custom Hardware Access Interface (e.g. DPM via SPI, selectable via a toolkit definition)

## Restrictions

- Several functions must be implemented by the user, before being able to use the toolkit
- Basic Interrupt support is included. Only the start-up phase is done in polling mode. The interrupts will be activated after the device has been fully configured
- Hardware recognition like PCI scanning routines are not included
- On *Big Endian* CPUs, the user application will need to convert communication channel and send/receive packet content to/from *Little Endian* representation.  
This is NOT automatically done inside the toolkit.  
Only device global data from the system channel are converted by the toolkit.
- The sample project, created for Win32, does not allow PCI cards (CIFX50 / CIFX90 etc.) being completely restarted (Hardware Reset), because PCI registers are not accessible from a Win32 user application.