

CANopen

for the **DACHS®** Product Suite
under **QNX 6.4**



For CANopen we cooperate with Port GmbH and are offering their CANopen Master stack for the RTOS QNX 6.4. It's running on top of our CAN Layer 2 drivers.

STEINHOFF supports CAN controller boards from different vendors and offers also adaptation of their CAN support under QNX for customized hardware.

DACHS CANopen Master software for QNX 6.4 is offered in single licenses for supported COTS boards or as stack incl. ANSI C sources.

DACHS CANopen Master Implementation for QNX 6.4

It's a port of the system independent ANSI C sources of the CANopen Master stack from Port GmbH.

- system independent CANopen Master/Slave stack in ANSI C sources (single line version) from Port GmbH
- Reference Manual from Port GmbH
- User Manual from Port GmbH with extensions for QNX from STEINHOFF
- QNX specific ANSI C stack sources for CANopen Master
- documented CANopen Master application in C sources for QNX 6.4 (template)
- native CANopen API for QNX 6.4
- CANopen driver interface modules for one DACHS CAN Layer2 driver with a controller from Phillips, Intel, Bosch, TI, or Motorola/Freescale - only one of these interfaces, specified with the order, belongs to the delivered package
- call back interface for confirmations and indications (error treatment, advanced real-time aspects etc.)
- Agreement and NDA

With this stack-software you are allowed to use the CANopen stack in your department **for unlimited numbers of projects** (applications) with royalty-free runtimes. It's not permitted to resell the sources or to pass it to customers, partners or 3rd parties. The licensee purchases the non-exclusive and non-transferable right to use the software on his facility (one location) **together with own devices and products he has developed himself or let develop or customize by contractor.**

More info about DACHS-CAN offerings running QNX at :
www.DACHS.info/CAN.htm

Technical data are subject to change without notice, prices regarding to our actual pricelist. All quotations, orders and invoices are subject to our standard terms and conditions. All prices net w/o tax EXW Elz.
For Germany plus 19% MwSt. 10/2009

CAN | CANopen | J1939

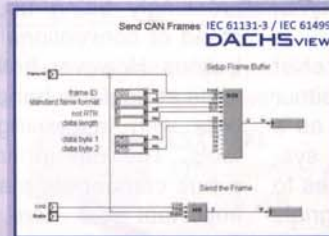
for **QNX®**

the stable and reliable real-time platform for
embedded & distributed systems

DACHS® Distributed Automation Control System

Standard DACHS® products for CAN

- CAN Layer2, CANopen, and J1939 in real-time
- high performance drivers and APIs
- CANopen stack with sources for **QNX 6.x**
- IEC 61131-3 / IEC 61499 programming
- **DACHSVIEW-SDL**



supported boards:

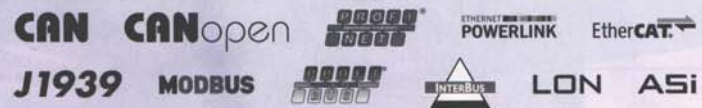
PC/104, PC/104-Plus, PCI, ISA, SBCs

supported CAN controllers:

SJA 1000, i82527 or Bosch CC770,
msCAN, HECC, TouCAN, etc.
for x86, PPC, ARM9, etc.

OEM solutions and adaption for OEM platforms

CONSULTING & ENGINEERING



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PC-BASED | REAL-TIME | FIELDBUSES

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DACHSview-SDL

is the answer on increasing complexity of development for industrial automation applications. It's an universal and modular Real-Time Soft-PLC which includes additional a GUI-development environment. It supports comfortable development by using pre-defined and user-defined Function Blocks for rapid time to market!

DACHSview-SDL, an **innovative IDE-tool** which is **based on a graphical function block language**, covers all aspects of today's industrial automation.

DACHSview-SDL comes with Function Block Libraries for:

- **2D graphics:** calls of the libraries SDL and SDL-Gfx, SDL_ttf, TinySDGL and Agar as pre-defined function blocks (FBs) incl. higher level FBs for easy handling of complex visualization tasks
- **3D graphics:** OpenGL (SDGL)
- **Standard controls:** GUI buttons, control elements, etc.
- **SQL, historical data base:** SQLite for extending DACHSview-SDL for processing mass data or for SCADA requirements
- **International fonts:** TTF support

Options, FB Libraries for:

- **Fieldbuses** - for processing I/O-data with PROFINET-IRT, Ethernet POWERLINK, EtherCAT, Modbus, PROFIBUS-DP, CAN, CANopen, INTERBUS, etc.
- **additional interfaces** like OPC and TCP/IP-based middleware (SDL-net, PVM e.g.)

All these FBs are provided by the libraries of the MS-Windows based Workbench for the programming tool DACHSview-SDL, and are included in a specific DACHSview-SDL Target for QNX Neutrino RTOS 6.x. **User-defined function blocks can be built, too. C-applications can even be integrated by message-passing.** DACHSview-SDL is supporting graphical functions combined with Soft-PLC tasks.

Important Features of DACHSview-SDL:

- **by mouse-click definition of complex and re-usable GUI-components**, based on pre-defined and user-defined function blocks.
- **access from a single pixel up to a complex virtual instrument** by graphical libraries
- **minimized complexity** by abstraction of details of interfaces in high-level-function blocks
- **higher efficiency in development and shorter time to market** because of developers have no longer to care for details of the system
- **hierarchical definitions of composite, and application specific function blocks**
- **instantiation** of library- and composite function blocks.
- **easy recycling of function blocks**
- **minimized coding errors** by code-reuse
- **support of semaphores**
- **freely parameterizable function blocks** for bar graphs, meters, trend graphs.
- **visualization functions combined with Soft-PLC tasks**
- **development of control applications** by access to hardware interfaces, fieldbus systems and libraries for graphical elements.
- **seamless data flow between subsystems** like SQL data base or fieldbus-I/Os
- **processing in threads: system threads** and internal managed threads according IEC 61131-3
- **blocking function blocks in system threads (IEC 61499-processing)**, therefore response time on real-time events in microseconds and not in milliseconds!
- **access to shared-memory, I/O ports, interrupts, and fast message-passing**
- **development of device drivers** by hierarchical defined function blocks

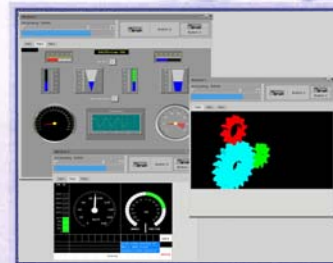
more: www.DACHS.info/DACHSview-SDL_E.pdf

DACHSview

the graphical way of real-time programming for rapid time to market

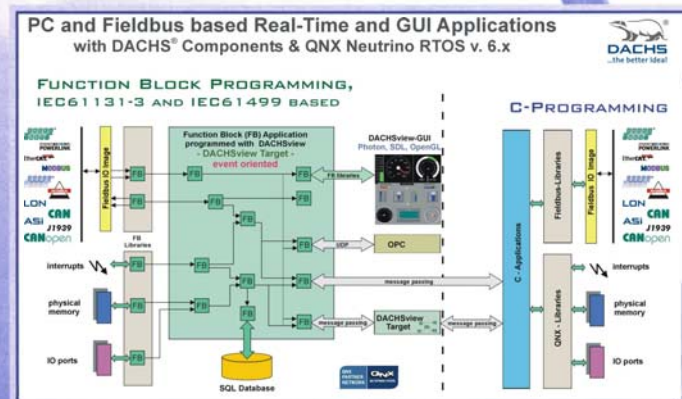
DACHSview-SDL

is the first »all-in-one« programming & GUI tool with seamless development environment for different **QNX**-based event-oriented applications in real-time. One tool for accessing I/O ports, physical memory, fieldbus I/O points, SQL data bases, and single pixels on the screen of a visualization.



QNX
PARTNER
NETWORK

QNX
SOFTWARE SYSTEMS



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