



# **DACHS<sup>®</sup> CAN**

## **Runtime for CAN Layer 2** Vers. 1.0.1

for **QNX<sup>®</sup> Neutrino<sup>®</sup> RTOS v. 6.3**

for the for the dual CAN **Janus-MM** PC/104 Board  
from Diamond Systems

Order No.:  
CAN2-SJA1000-104-RT-JAN-NT0-[1.0.1-NT06.3]



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## 1 Preface

The DACHS CAN resource manager for QNX Neutrino RTOS v.6.3 supports individual SJA1000 CAN controllers of the Janus-MM board. Supported are reading and writing of frames, filter management as well as other controller management functions. The internal receive FIFO can hold 128 frames.

## 2 Installation

Installation of the resource manager software must be done by using the standard gzip and pax utilities of QNX:

- Place the **driver CD** into the CD drive, mount the CDROM and copy the archive to the root directory.
- Unzip the archive with 'gunzip' and use 'pax -rv -f <archive>.tar' in order to install the driver software
- After receiving the license file which must be requested after the first driver start, please copy the license file into the working directory of the driver
- After the first driver start you will get displayed the **12 digits of the license**. Please, request the key file for your license from [support@steinhoff-automation.com](mailto:support@steinhoff-automation.com)
- After receiving the license file please, copy it into the working directory of the driver

### 3 Driver Start

The DACHS CAN driver (resource manager) for the CAN Layer 2 can be started with several options:

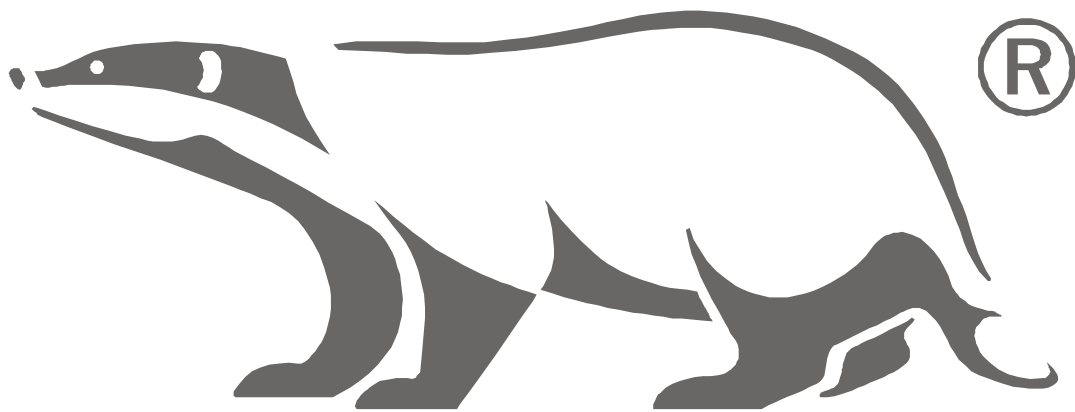
Start command : **can [ options ] &**

Options:

<b>-n</b>	<b>driver_name</b>	default: CANDRV
<b>-c</b>	<b>controller number</b>	number of the CAN controller (1 ..2)
<b>-d</b>	<b>board number</b>	default: 1 ( 1 ..4 )
<b>-B</b>	<b>BTR0</b>	channel 1, default: 0 (500 kb/s) Appendices A.1, list parameter <b>BTR0</b>
<b>-b</b>	<b>BTR1</b>	channel 1, default: 0x1C (500 kb/s) Appendices A.1, list parameter <b>BTR1</b>
<b>-m</b>	<b>base address</b>	default 0xD0000
<b>-i</b>	<b>IRQ</b>	default: 11
<b>-p</b>	<b>task prio</b>	default: 15
<b>-P</b>	<b>prio interrupt thread</b>	default: 40

#### A.1 Bit timing parameters

Baud Rate kb/s	BTR0	BTR1	(SJW)
1000.00	0x00	0x14	0
800.00	0x00	0x16	0
500.00	0x00	0x1C	0
400.00	0x00	0x2F	0
200.00	0x01	0x2F	0
100.00	0x04	0x1C	0
50.00	0x07	0x2F	0
1000.00	0x40	0x14	1
800.00	0x40	0x16	1
500.00	0x40	0x1C	1
400.00	0x40	0x2F	1
200.00	0x41	0x2F	1
100.00	0x43	0x2F	1
50.00	0x47	0x1C	1



# DACHS

...the better Idea!