



**KOPF**



## AUTOMOTIVE INTERFACE AI3

AI3 BASIC HARDWARE WITH CAN AND USB-INTERFACE FOR THE AUTOMOTIVE AREA



# AUTOMOTIVE INTERFACE AI3

BASIC HARDWARE WITH CAN AND  
USB-INTERFACE FOR THE  
AUTOMOTIVE AREA



- ▶ Spontaneous and cyclical sending from CAN-Frames
- ▶ Implementation of complete communication stencils (on request)
- ▶ Interface for PC-communication(RS232 & USB)
- ▶ Online Bus Trace (screen)
- ▶ Monitoring the Bus information on screen and in a file
- ▶ High accuracy of the system time reference
- ▶ Timing analysis of the data telegrams with a dissolution of 10us
- ▶ Efficient hardware (HCS12) with expandabilities
- ▶ Availability of the Source code for customer adjustments
- ▶ Flash-Update via PC-Software
- ▶ USB-Integration via DLL-Interface including completely Source-Codes
- ▶ 2 SPI-Master/Slave Ports

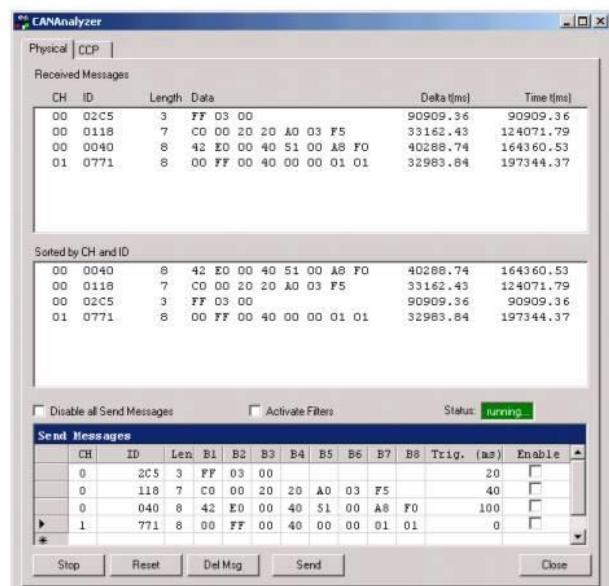
## Range of functions

Use finds the AI in the scope of development and inspection of the car manufacturers and their supplier.

CAN & LIN MONITOR &  
SIMULATION

## PC Software

The communication between PC and AI2 takes place with the help of a dynamic Link Library (DLL) via the USB-Interface. In the basic scope of supply of the AI2 is the application buswatch V3 (Vista, Win7, Win8, Win10) inclusively Source-Code (C#).



## Range of functions Buswatch:

- ▶ Cycle and spontaneous sending procedures
  - ▶ Support of max. 2 CAN-channels
  - ▶ Minutes-recordings in file
  - ▶ Windows Vista, Windows 7, Windows 8, Windows 10
  - ▶ Basic implementation CCP-communication
  - ▶ Filter for receipt messages
  - ▶ Source-Code without restrictions available
- In configuration files attitudes can be stored for different simulations- and/or test environments.



## CAN & LIN MONITOR & SIMULATION

USB-Interface Dynamic Link Library (AID.DLL)

### KCAN\_Open

Syntax: uint32 KCAN\_Open()

Open for the USB-Interface of the AI3

Return value: 1: Interface activ

### KCAN\_Init

Syntax: uint32 KCAN\_Init (byte channel, uint32 baudrate)

Initialization for the CAN Interface „channel“ (0,1) with the Baud rate „baud rate“ (50000..1000000).

Return value: 0: Initialization implemented

### KCAN\_Reset

Syntax: uint32 KCAN\_Reset()

Reset for the USB-Interface and delete of the CAN-Puffers.

Return value: 0: KCAN\_Reset implemented

### KCAN\_Send

Syntax:

uint32 KCAN\_Send (byte channel, uint32 id, uint32 dlc, byte \*data)

Send a CAN telegrams on the CAN interface „channel“. Extended-Frames are marked by an active Highest-Bit (Bit31) of the Identifiers.

Return value: 0: Telegram dispatched

### KCAN\_Receive

Syntax:

uint32 KCAN\_Receive(byte \*channel, uint32 \*id, uint32 \*dlc, byte \*data, ulong \*time) Received of a CAN Telegrams of the CAN Interface „channel“. Extended-Frames are marked by an active Highest-Bit (Bit31) of the Identifiers. Dissolution of „time“ amounts to 10us. Return value: 0: Telegram received

### KCAN\_Receive\_Status

Syntax: uint32 KCAN\_Receive\_Status()

Return value: Number of CAN Telegrams in the buffer

### KCAN\_Close

Syntax: uint32 KCAN\_Close()

Close for the USB-Interface of the AI2

Return value: 0: Interface closed



### Technical data in overview

Voltage supply	USB
CAN-Interface	2x TJA1050 (82C251) 1x TJA1054
RS232-Interface	1x HIN202 (PC,SPS)
USB-Interface	1x FTI245
Dimensions (LxBxH)	112x60x20 mm
Weight	0,1 kg
Temperature range	-40°C – 85 °C (0°C-50°C USB)
Processor	MC9S12DP256/25 MHz
System Memory	256 kB Flash-EPROM (Update over PC) 12 kB RAM

### Order and price information\*

Automotive Interface 3	490,00 €
<b>070 010 193 A</b>	
Automotive Interface 3	578,00 €
Aluminium Case with Top Hat Rail <b>070 010 194 A</b>	
Connection cable AI 3CAN	29,30 €
<b>070 010 186</b>	

\* All the prices indicated are subject to VAT at the prevailing rate.

