

MOCAN DK

Networkable CAN control unit



The **MOCAN-DK** is designed as decentralized mini-controller. A galvanically isolated CAN-Bus (2.0B) provides for I/O expansion, 2 serial ports are in the standard scope of supply. Optional Interfaces, a 10/100 Mbit Ethernet, Arcnet and an additional CAN Interface, facilitate easy integration of the **MOCAN-DK** in larger control systems.

Two digital highside outputs 24 V / 0.5 A as well as 4 digital inputs 24V are galvanically isolated from the controller core. One 7-segment LED and a pushbutton allow for local operating

The **MOCAN-DK** is based on the powerful MC68332 microcontroller. With the realtime operating system RTOS-UH and the programming languages ANSI-C, PEARL or IEC 61131-3 even complex control problems are solved quickly and reliably.

The **MOCAN-DK** is supplied ready to run in a sturdy steel sheet metal housing (227x57x102mm) for wall attachment (mounting plate) and requires a supply of 12..30 V_{DC}.

**CAN
Control**

Basic I/O

**With
Realtime**



Serial Interfaces

Both serial ports of the **MOCAN-DK** can be used for programming or data exchange:

- 1 interface RS-232, 3-wire, upto 115 kBaud
- 1 interface RS-232, 5-wire, galvanically isolated

Memory

The memory configuration of the **MOCAN-DK** can be adjusted to fit the requirements of the application:

- 1 (optionally upto 4) MByte FLASH, on-board programmable
- 1 (optionally 2) MByte SRAM, buffered by a back-up capacitor (approx. 1 month) or by a lithium battery.

Programming

The realtime operating system RTOS-UH with drivers for all system components is in the standard scope of supply. You can begin immediately with the actual application development – compilers and run time support for ANSI-C, PEARL-90, IEC 61131-3 or 68K-Assembler are available.

Options

I/O

Additional inputs and outputs for internal mounting in the **MOCAN-DK** provide:

- 8 opto-isolated inputs 24 V
- 6 opto-isolated High Side outputs 24 V / 0.5 A, short circuit protected and capable of driving inductive loads.

All connections are made with plug/screw-terminals.

Ethernet

A RJ-45 connector for the 10/100 MBit Ethernet interface of the **MOCAN-DK** assures problem-free integration both into standard networks as well as into Industrial Ethernet.

A TCP/IP stack is in the scope of supply; FTP, Telnet, http are available. An optional OSI stack serves for the integration into control concepts based on e.g. SINEC-H1.

2 LED's (link, Activity) show the status of the Ethernet interface.

Arcnet

A 2,5 MBit Arcnet-interface with HIT-transceiver is provided by a 9p-SubD connector. A packet driver is in the standard scope of supply.

CAN

A second, isolated CAN interface (2.0B) allows simultaneous integration of the **MOCAN-DK** into different CAN-segments.

Realtime clock

An optional real-time clock is buffered by the on-board buffer capacitor and supplies time and date.