EtherCAN/2

CAN-Ethernet-Gateway

CAN Gateway and Bridge Function

- Host driver integrates the remote EtherCAN/2 gateway in the same way as a local CAN board
- Two EtherCAN/2 gateways can be configured as autonomous CAN-to-CAN bridge via TCP/IP

Well-proven esd Software Packages

- Programming via the common esd NTCAN-API
- Usage of esd's protocol stacks (CANopen®, J1939, etc.) and tools (CAN SDK, CANreal, etc.)
- Web interface

Additional Features

- Support of UDP based disclosed and documented Ethernet Low Level Socket Interface (ELLSI) protocol
- Optional software package available to connect an S7-300/400 to CAN via UDP

Description

The EtherCAN/2 is a gateway to transmit data between CAN and Ethernet. The module is designed for hat-rail mounting in a control enclosure as a backward compatible replacement for the EtherCAN gateway (C.2050.02). In Bridge Mode two EtherCAN/2 can be used to connect two CAN nets via TCP/IP.

Interfaces

One Ethernet interface (10/100 Mbit/s, RJ45) and one CAN high speed (ISO 11898-2) compatible interface (20 kBit/s up to 1 Mbit/s) based on the CAN controller integrated in MCU.

Configuration and Maintenance

The gateway has a build-in HTTP server which allows Web based configuration and maintenance. Diagnostic events and messages during runtime can be optionally indicated using the syslog protocol or by sending an email. The gateway firmware can also be updated via the Web interface.

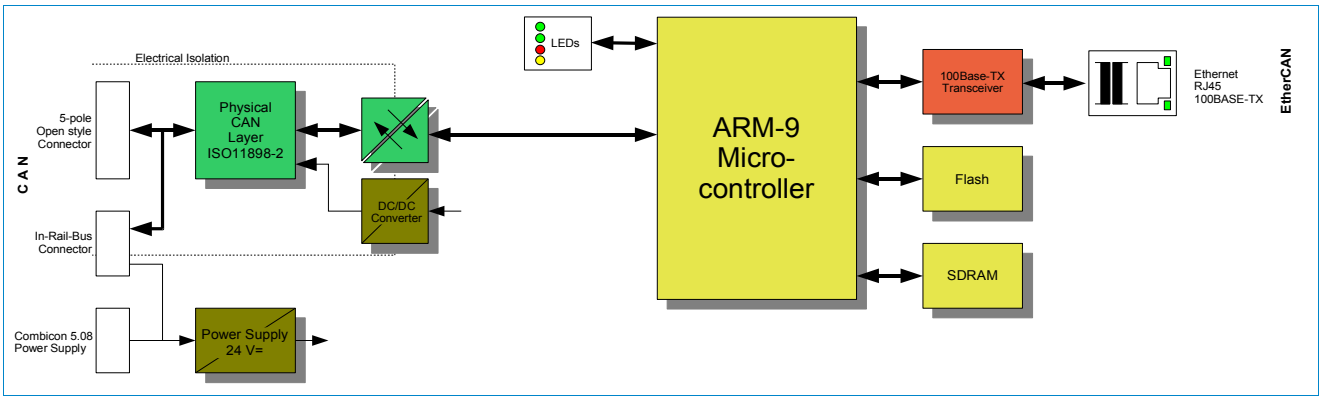
Software Support

Host drivers for Windows and Linux are available which integrate the CAN gateway as a virtual CAN device on the host, programmed via the common NTCAN-API available for all esd CAN adapter. This allows using all applications, CAN protocol stacks (CANopen, J1939, etc.) and tools (CAN SDK, CANreal, etc.) available for the host platform.
In addition the gateway supports the UDP based disclosed and documented Ethernet Low Level Socket Interface (ELLSI) protocol for host platforms which are currently not covered with a dedicated driver.

Improvements

Compared to the EtherCAN gateway the following technical improvements are implemented:

- Increased I/O performance
- Improved diagnostics via the Web interface (e.g. CAN bus diagnostics)
- Improved usage of the NTCAN-API (e.g. hardware timestamps)
- Simple Network Management Protocol (SNMP) support
- Create CAN-to-CAN bridge with two gateways



Technical Specifications:

CPU:	
Microcontroller	ARM9, 200 MHz
Interfaces:	
Ethernet	100BASE-TX, IEEE802.3, RJ45-connector
CAN interface	5-pin open style 3.81 (CiA DR 303-1), 20 kBit/s up to 1 Mbit/s, ISO 11898-2, electrically isolated
General:	
Supply voltage	Nom. 24 VDC / 100 mA min./max.: 18 VDC / 32 VDC
Operating temp.	0...70° C
Humidity	Max. 90 % non-condensing
Dimensions [mm]	22 x 112 x 113
Connectors	CAN: 5-pin open style 3.81 Ethernet: RJ45 Power: 4-pin spring force plug 5.08

Order Information:

Hardware		Order No.
EtherCAN/2	CAN-Ethernet-Gateway	C.2051.02
EtherCAN/2-S7	Industrial Ethernet/UDP Gateway, incl S7 example project with function modules to interface a S7-300/400	C.2051.07

CAN layer 2 drivers for Windows and Linux are included in delivery.

Software Support	
Higher CAN layer protocols[1]:	
CANopen-LCD Windows/Linux	C.1101.06
J1939 stack for Windows	C.1130.10
J1939 stack for Linux	C.1130.11

1 For detailed information about driver availability for your operating system please contact our sales team.

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