CAN/CAN-Gateway CG-ARM7/D/E

Special Features

- Connection of CAN subnetworks with differing data rates
- Filtering and buffering of data traffic
- Support for 11-bit and 29-bit identifier
- Microcontroller NXP LPC2119 with two internal CAN controllers
- USB interface for configuration and firmware download
- Extended supply voltage range
- Extended temperature range
- Version HS/LS with one transceiver PCA82C251 and one transceiver TJA1054
- Version LS/LS with two transceiver TJA1054

Description

The CAN/CAN gateway CG-ARM7/D/E is designed for applications where there is a demand for higher flexibility. Both the supply voltage range and the operating temperature range are extended in a way that the use in automotive applications is possible. With the development kit and the ability to use its USB interface to configure the device, to download new firmware and to supply power, CG-ARM7/D/E performs as a versatile development platform for CAN/CAN gateway applications. Firmware, which has been developed on this device can also be run on CG-ARM7 and CG-ARM7/GTI.

Among the available functions of the standard firmware are data rate adaption, message filtering as well as identifier conversion between the coupled busses. The restriction of the maximum data rate depending on cable length for single CAN segments can be abolished for the over-all system by use of CG-ARM7/D/E.

CG-ARM7/D/E is available in versions HS/LS and LS/LS allowing the conversion of high speed to low speed and low speed to low speed CAN.

Technichal Data

Layout and Connection

The connection of the CAN bus is done by a D-Sub9 male and female plug. These are also used as default power supply connection. An USB interface is provided for configuration, firmware download and optional power supply purposes.

Limiting Values

Parameter	Minimal	Maximal	Unit
Storage temperature	-40	+80	°C
Operating temperature	-40	+70	°C
Supply voltage	-40	+35	V
Voltage on bus connections	-30	+30	V
Admissible power consumption (at 60 °C)	-	2000	mW

Any (also temporary) stress in excess of the limiting values may cause permanent damage on CG-ARM7/D/E and other connected devices. Exposure to limiting conditions for extended periods may affect the reliability and shorten the life cycle of the device.

Nominal Values

Parameter	Minimal	Typical	Maximal	Unit
Current consumption (running idle)		tbd		mA
Supply voltage	6	24	30	V

All values, unless otherwise specified, refer to a supply voltage of 24 V and an environmental temperature of 20°C.

Scope of Delivery

• CAN/CAN gateway CG-ARM7/D/E
• User manual
• Configuration software