

RS232/USB to CAN bridge

Communication bridge for iCM4011



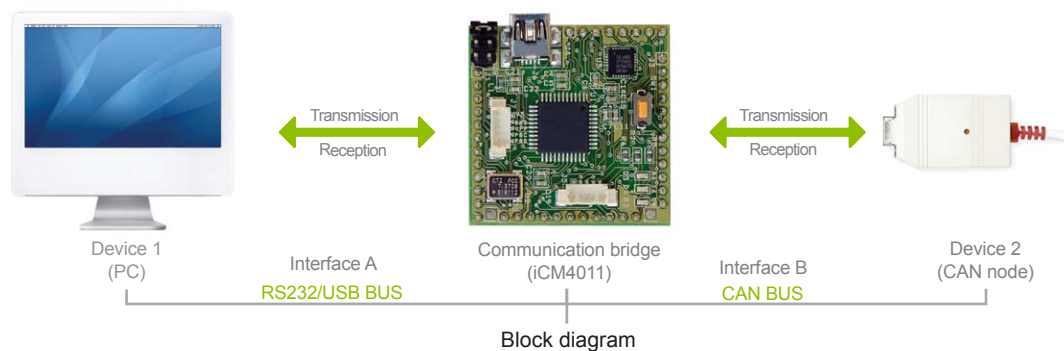
development tools

Overview

The CAN bus has become a communications standard in today's industry due to its high transfer ratio, ease of wiring and high noise immunity level, among other characteristics. For this reason, the need to connect several devices using a CAN interface may arise during the development of new applications. However, when working with machines which only have an RS232 or USB interface (such as a conventional PC, for example), an intermediate device which converts the protocols, known as a communication bridge, must be used.

The iCM4011 module programmed with RS232/USB to CAN bridge firmware acts as a communication bridge between the two devices. A communication bridge enables communication between two or more devices that use different interfaces, and acts as an interpreter between the two so that this difference can be overcome.

When the iCM4011 receives a message in ASCII format through the RS232 or USB interface, it converts it to CAN format and sends it using the bus. In the same way, when the iCM4011 receives a message through the CAN bus, it converts it to ASCII format and sends it through the RS232 or USB bus.



Main features

- Transmission and reception of CAN messages in ASCII format.
- Compatible with CAN 2.0A and CAN 2.0B.
- Communication speeds available:
 - RS232/USB Interface: fixed at 115200 bps.
 - CAN interface: 10, 20, 50, 125, 250, 500 and 1000 Kbps, configurable using ASCII commands.
- CAN configurable communication parameters:
 - Mask.
 - Filter.
 - Standard (11-bit identifier) or extended (29-bit identifier) mode.
 - Transfer speed.
- Complete report of communication errors.

