esd electronics CANopen protocol stack library

- The esd electronics CANopen protocol libraries are intended to easily extend an application with CANopen manager/slave capabilities or to develop stand-alone manager/slave devices. The libraries offer an API to the applications and are written in pure ANSI-C optimized for performance. All CANopen specific communication tasks are handled as autonomously as possible and the application is only notified if necessary. Both libraries offer support for several physical CAN networks and may be integrated in the application at the same time. All hardware and operating system specific interfaces are located in separate libraries.

CANopen Slave Library

The slave library complies with the CiA 301 V.4 and supports additional extensions defined in CiA 302 V.3. An application can use the library to create one or more software CANopen slave nodes with individual object dictionary layout, PDO configuration, NMT error control mechanisms, etc.

CANopen Manager Library

The manager library complies to the CiA 301 V4 and CiA 302 V3. An application can use the library to perform the system boot up as defined in CiA 302 and to control the remote nodes with NMT error control mechanisms. The integrated configuration manager is based on DCF files as defined in CiA 306. The manager library supports remote slave nodes that comply with CiA 301 revision V3.x and V4.x.

Implementations for many operating systems, which are supported by esd-VME interfaces and esd-PC CAN interfaces, are available. Porting the libraries to customer specific hardware and/or operating systems is supported by esd.

CAN/ CANopen Software Tools

For the comprehensive range of CAN interfaces there are layer-2 drivers available for most kinds of operating systems. Perfect portability is provided by means of esd's universal NTCAN-API, which is identical for all operating systems. The usability of higher layer CAN protocols at these operating systems is also ensured, because they are based on this API. The NTCAN-API is included in the scope of delivery of the CAN modules. The corresponding SDK (software development kit) and the CAN Tools for Windows and Linux are also included free of charge. Updates can be downloaded from the website.

Contact

esd electronics gmbh
Vahrenwalder Str. 207
DE-30165 Hannover
Email: info@esd.eu
Phone: +49-511-37298-0
Fax: +49-511-37298-68
Web: http://www.esd.eu

Sales and Technical contact
Dirk Flege
Phone: +49-511-37298-0
Fax: +49-511-37298-68
Email: dirk.flege@esd.eu

Subsidiaries

USA/Canada
esd electronics Inc.
70 Federal Street, Suite #2
US-01301 Greenfield, MA
Phone: +1-413-772-317-0
Fax: +1-413-772-317-1
Email: us-sales@esd-electronics.com

Distributors

Japan: Opsoc Ink.
Email: cansales@opsoc.jp

China: Shanghai ESD Electric Technology Co., Ltd.
Email: isabella.shi@esd-electronics.com

France: Milexia SAS
Email: info@milexia.fr

Italy: Telestar srl.
Email: telestar@telestar-automation.it

Israel: DAN-EL Technologies Ltd.
Email: rene@danel.co.il

Peru, Ecuador, Colombia, Venezuela, Chile: MES Sigma E.I.R.L.
Email: info@mes-sigma.net

South Korea: Realtimewave Co. Ltd.
Email: sales@realtimewave.com

Please ask for your local representative outside these countries.

Features

No features listed.