



Safe and reliable

Linux driver

Real Time with RTAI

Comedi Interface

Tailored developments

Linux driver

Through continuous development Linux has won in maturity and stability. Thank to this stability Linux is dedicated to tasks in the automation and can realise high-performance systems cost-effectively. ADDI-DATA as manufacturer of reliable PC plug-in boards supports the user which has decided to implement this new kind of operating system.

For almost all of its PCI measurement boards ADDI-DATA supplies free Linux drivers from the kernel version 2.4. These drivers can be downloaded at any time from the web www.addi-data.com and are also delivered on the standard driver CD-ROM.

To program your ADDI-DATA board in a more flexible way, you can choose from two possibilities:

The direct driver allows you to communicate with the functionalities of the different components. On the other side the COMEDI interface has been developed allowing standardised accesses to different resources. The use of various kinds of measurement boards in a single system is then facilitated.

Tailored developments can be realised on request: for instance the drivers can be used for the real-time extensions under Linux such as RTAI and RT-Linux or any other kernel version.

The drivers are supplied under the GNU public license and are available as open source for any specific application.

COMEDI driver

COMEDI is a driver library for plug-in PC boards of all types. The drivers are developed as a Linux kernel module with common functionalities and own low-level driver modules. Linux-specialised software engineers have developed specific drivers for the numerous features of the ADDI-DATA boards.

The principle of the COMEDI driver for ADDI-DATA boards is based on a common interface programmed for several boards (source code and kernel driver). Specific functions are called up from the Comedilib Library depending on the "device" type (numbers and types of resources) of the boards installed in the system.

Features of the COMEDI driver

- Integrated real-time support
- High-level functions library (Comedilib)
- For the following Linux kernel versions: 2.4.2
- Samples of Comedilib functions:
 - `comedi_get_n_subdevices`
 - `comedi_get_board_name`
 - `comedi_get_subdevice_type`
 - `comedi_find_subdevice_by_type`

The kernel and the source code with the specific functions for the use of ADDI-DATA boards under COMEDI are supplied for free under GPL (General Public License).

Numerous analog and digital boards are already implemented with the COMEDI driver for Linux. Further boards are in preparation.

Some of the boards supported with Linux drivers (non exhaustive):

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