

## The Network oriented IEEE1394 Viewer

The Pionsys® 1394 Topology Viewer is a software tool for the visualization of IEEE1394 (FireWire) based systems. With the help of the 1394 Topology Viewer the user is able to display the currently present IEEE1394 devices and to perform simple communications with each device.

The 1394 Topology Viewer offers a lot of information about the chosen IEEE1394 bus and its connected IEEE1394 devices. Further important device functions (such as read-, write- and lock-transactions) can be tested and the available device information (e.g. self-ID packets, vendor and model name, GUID) are displayed by the 1394 Topology Viewer clearly arranged.

### Areas of Application:

- introduction and training in IEEE1394
- analysis and visualization of complex IEEE1394 networks
- error tracking within IEEE1394 networks
- displaying of the pictures from IEEE1394 cameras

The main tasks of the 1394 Topology Viewer are shown below:

- flexible visualization of the present IEEE1394 buses and devices
- extensive analysis of IEEE1394 buses and devices
- displaying of the pictures from IEEE1394 cameras

## Flexible Visualization

In order to provide flexible visualizations, the 1394 Topology Viewer provides two different views onto the currently present IEEE1394 devices. The views differ in the amount of displayed details and the number of IEEE1394 devices which can be displayed onto one screen simultaneously. During runtime the user is able to switch between those views and to adapt the behavior of the program to his requirements. Several IEEE1394 buses can be displayed at a time and the program also allows to open two different views onto the same bus.

To achieve best visualization results and highest readability of information, the 1394 Topology Viewer supports zooming and scrolling.

## Extensive Analysis

Via the built-in functionality of the 1394 Topology Viewer the user is able to send read, write and lock commands to the present IEEE1394 devices and to get general and specific information about the currently selected bus and all of its IEEE1394 devices. This information includes bus statistics, the topology map and speed information as well as the available isochronous resources and detailed identification information about each device.

## Displaying of the Pictures from IEEE1394 Cameras

Another feature is the IEEE1394 camera viewer, which is used to display the moving pictures of IEEE1394 cameras:

- several IEEE1394 camera viewer dialogs can be opened at a time
- the pictures of multiple IEEE1394 cameras can be displayed simultaneously

All of the dialogs of the 1394 Topology Viewer can be used at the same time. In addition, the user is able to open various instances of the available dialogs in order to adapt the functionality of the program to his current requirements.

