## LINUX - Driver for Model MCS6A / MPA4(T)

## Features:

- LINUX Driver to control up to three MCS6A (MPA4T) modules.
- Driver, Library and Sample program with Source code included.
- The Wine Windows emulator can be expanded by a DLL interfacing the driver to run a special version of the Windows MPANT software as a Linux program.
- Clearly structured software interface defined in one header file, seperated parameter structures for Board Properties, System Definition, Spectra Data, General Settings, Acquisition Status, Data format settings.
- Function library with source code allows to set and get all acquisition parameters, start, halt, erase, get status, write list and data files.
- Sequential mode with fast switching of acquisition segments implemented.
- Control of the Digital Input / Output and the DACs for the threshold of the input discriminators.
- RAM for spectra accumulation can be allocated from the library or the user program.
- Sample console-program with source code contains command interpreter, can be easily expanded by the user to implement customer-specific features.
- The software is tested with the Debian 6.0.2.1 (Squeeze) LINUX, Kernel version 2.6.32 and Debian 7.1 (Wheezy) Kernel 3.2.0 on the 32bit x86 platform, and Debian 8.0 (Jessie) Kernel 3.16.0 (x86 and amd64)
- Free updates will be provided for future kernel versions, if possible.

## **Description:**

LINUX is now established as a very stable operating system especially for the x86 PC hardware and is winning over enthusiastic adherents in many application areas. Especially customers developing their own applications like LINUX for its performance and stability and free compile- and debugging tools

We therefore support now with this new LINUX software interface especially those customers who want to use our devices of the P788x and MCS6 / MPA4(T) families on the x86 LINUX platform and adapt it to their own customer-specific applications.

The kernel device driver module supports up to three modules connected to one computer. A ready-to-use library module with source code provides direct access to the hardware and all board capabilities. The software interface is clearly structured and defined in one header file. A short console sample program with source code shows how to use the library. It contains a simple command interpreter, can be immediately used for actual measurements and easily expanded for own applications.

This manual describes in detail how to use the software interface.

The supplied MPANT Windows software runs fine under the Wine emulator expanded by a special DLL.

