



Contribution ID: 13

Type: poster

## Evaluation of Libera as field control module

*Tuesday, 11 October 2005 10:11 (3 minutes)*

Libera is a product family targeting instrumentation and controls applications on particle accelerators. So far three members have been introduced and very well accepted by the accelerator community. Libera's hardware architecture presents a universal platform that has all the hardware interfaces to convert signals from analog to digital and vice versa. In between there is a big FPGA that offers abundant computing power for loop control.

This article presents a possible application of Libera as a field control module in a LLRF control system. It first describes in details the main hardware building blocks. The article continues with a description of simulations and discussions of results of a mathematical model of a feedback control system comprising of a basic klystron, RF cavity, cable of certain length and field control module. Conclusion discusses the applicability of Libera as a LLRF field control module.

**Primary author:** Mr MAVRIC, Uros (Instrumentation Technologies)

**Presenter:** Mr MAVRIC, Uros (Instrumentation Technologies)

**Session Classification:** Poster Session with Author Participation