

## VIRTUAL ACCELERATOR CONTROL SYSTEM

W. Zhang, S. Gou, G. H. Li, W. F. Liu, W. M. Qiao, Y. P. Wang, Y. J. Yuan, IMP, Lanzhou

### Abstract

The article introduce a control system used in HIRFL-CSRm. The control system realized virtual accelerator on CSRm. The FPGA+ARM-linux+DSP architecture are mainly used in power supply control of CSRm control system. All data of virtual accelerator saved in Database (ORACLE). When we will use one data, we can use an event(we defined in our control system) to trigger DSP card designed by ourselves and DSP card will output voltage wave that we wished to power supply. So we can control power supply to output different current. In this control system, ARM card designed by ourselves transfers wave data from Database to DSP card.. In Database, we saved all data of different energy.

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