

VME BASED DATA ACQUISITION SYSTEMS

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The data acquisition systems (DAQs) should meet requirements of the modern nuclear physics experiments including investigations with radioactive ion beams. We want to show on two examples how this can be implemented in DAQs based on VME standard. First example is the DAQ [1] developed together with GSI experts for the new in-flight fragment separator ACCULINNA-2 [2], which have possibility to work with several crates in VME, CAMAC and other standards. The main advantage of this system is that it allows the remote DAQ (event collector) to be located at the distances up to 100 meters far from the main event builder. The mode of operation of this DAQ is configurable depending on running experiments. As second example, VME based DAQ with USB controller [3] will be reported as well. It is effective for applied physics and for experiments with limited numerical parameters (several hundreds).

1. R.S.Slepnev *et al.* // *Instrum. Exp. Tech.* 2012. V.55(6). P.645.
2. <http://aculina.jinr.ru/acc-2.php>
3. <http://www.wiener-d.com/sc/modules/vme--modules/vm-usb.html>