Contribution ID : **161**   Type : **Poster**

Development of the protocol of the interface of data exchange with the GBTX chip

Friday, 14 October 2016 09:30 (30)

The structure of the interface of data exchange with the GBTX chip for the CBM experiment is considered. The interface generate data package, consisting of the digital codes of signal amplitude, of signal superposition in peak detector, of signal arrival time and channel number, wherein the event has occurred, generated by the readout blocks of IC. The created data package is coded according to the 8b/10b format for transferring to the GBTX chip. The package of control date (warnings on error and desynchronisation) of registers for a correct exchange (correspondence) under the GBTX protocol. The adjustment of the quantity of channels, generating data packages, connected to the GBTX chip, is possible. The interface has been design according to the 180nm CMOS technology of UMC.

Primary author(s) : Mr. SHUMKIN, Oleg (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute))

Co-author(s) : Mr. NORMANOV, Dmitry (NRNU Mephi); Mr. IVANOV, Pavel (NRNU MEPhI)

Presenter(s) : Mr. SHUMKIN, Oleg (National Research Nuclear University MEPhI (Moscow Engineering Physics Institute))

Session Classification : Poster session - V

Track Classification : Methods of experimental physics