



Contribution ID: 456

Type: talk

Development of the electromagnetic calorimeter waveform digitizers for the Fermilab Muon g-2 experiment

Friday 24 July 2015 10:45 (15 minutes)

We present the design of the uTCA-based waveform digitizers that will instrument the electromagnetic calorimeters deployed for the E989 Muon g-2 experiment at Fermilab. Each uTCA advanced mezzanine card (AMC) consists of a custom made 5-channel 12-bit 800 MSPS digitizer with dedicated 1Gbit memory buffers. The digitizer communicates with the CMS designed AMC13 module to receive the synchronous triggers and the 40 MHz master clock that will be up-converted for the sampling clock. The AMC13 also collects the digitized data and transfers it to the data acquisition system.

Author: CHAPELAIN, Antoine (Cornell University)

Presenter: CHAPELAIN, Antoine (Cornell University)

Session Classification: Detector R&D and Data Handling

Track Classification: Detector R&D and Data Handling