Performance of 2nd generation CALICE ASICs (HARDROC, MICROROC, SKIROC & SPIROC)

Abstract content

In the framework of CALICE, EUDET and AIDA programs, technological prototypes for ILC calorimetry have been developped. They rely dout ASIC on highly integrated readout ASICs to perform signal readout, auto-trigger and energy measurement over several millions of channels. Ultra-low power is achieved thanks to power pulsing, which must maintain calorimetric performance. The chips developped for the various types of calorimeters (RPCs, Micromegas, Si diodes or SiPMs) have now been tested extensively on test bench and test beam and the most sallient features will be presented.