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Test results of CHICO2 C.Y. WU, LLNL, D. CLINE, A.B. HAYES, U. of Rochester, E. KWAN, A. CHYZH, LLNL, I.Y. LEE, LBNL — CHICO is a highly segmented 4π position-sensitive parallel-plate avalanche counter and has been used very successfully for many experiments as an auxiliary detector for Gammapshere. With the advent of the gamma-ray energy tracking array such as GRETINA, the development of a new generation of auxiliary detectors with a mating position resolution is absolutely needed. The upgrade of CHICO to CHICO2 with the matching position resolution for GRETINA is one of the coordinated efforts to accomplish this goal and is nearly complete. The test will be performed in the summer of 2012 with the new hardware and software. The new hardware includes the pixelated cathode board coupled with the delay-line readout for the position measurement and the 5-channel fast amplifier for processing both anode and cathode signals. The pulse height in addition to the time for the anode will be recorded for each event. The firmware for the new VME-based data acquisition system has been developed in anticipation of CHICO2 as an auxiliary detector for GRETINA and Gammasphere. The description of both hardware and software together with the test results will be presented. This work is supported by DOE, DE-AC52-07NA27344 (LLNL) and DE-AC02-05CH11231 (LBNL) as well as the NSF for U. of Rochester.

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