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Data acquisition system for the n^{3}He experiment LATIFUL KABIR, Univ of Kentucky, THE N3HE COLLABORATION — The n^{3}He experiment at the Spallation Neutron Source will measure the parity violating spin asymmetry of the recoil proton in the reaction n+^{3}He$\rightarrow$p +T+765 KeV. This is sensitive to ΔI=0 and 1 components of the Hadronic Weak Interaction (HWI), and is expected to be extremely small (of the order 10^{-7}).Protons from the reaction are recorded in current mode in order to achieve a statistical sensitivity of 10^{-8} in a reasonable amount of time.In addition instrumental asymmetries must be suppressed by an additional order of magnitude.The asymmetry is measured as a function of time-of-flight of the neutron to study the energy dependence of any systematic effects.We will present details and preliminary tests of the 144 channel data acquisition system designed to meet these requirements.

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