FILTERING AND ACQUISITION OF PCM FRAMES USING SYSTEM GENERATOR

Adrian Stacul & Edgardo Comas

Instituto De Investigaciones Cientificas Y Tecnicas Para La Defensa Buenos Aires, Argentina

ABSTRACT

The main purpose of this paper is the design, development, and implementation of a PCM bit-synchronizer based on a System Generator and Simulink model. The entire system will be applied to a ground station with an ad-hoc telemetric data acquisition system to be applied in unmanned aerial vehicles, atmospheric sounding rockets and nano-satellites monitoring. Based on this information, the ground station will be able to compute navigation parameters trajectories, velocities and attitudes. In particular, this PCM module was built to be used in atmospheric sounding vector evaluations by the Instituto de Investigaciones Científicas y Técnicas para la Defensa of Argentina.

KEYWORDS: *Bit-Synchronizer, FPGA, Ground Station, PCM Frame, System Generator*