
CES Simulation Board Development for Vehicle Dynamic Simulator

Yong-Bok Kim, Seon-ho Lee,
Jo-Ryeong Yim, and Seung-Wu Rhee

Satellite Control System Department, Satellite Technology Division,
Korea Aerospace Research Institute.

The VDS(Vehicle Dynamic Simulator), which try to make the real situation as possible as the On-board processor will undergo after launch, is one of major simulators. This report provides the design and function of CES (Conical Earth Sensor) simulation board for the Attitude & Orbit control subsystem Test set, VDS. This CES Simulation Board consists of FPGA, which has the circuit that reset the hardware by software logic, set the serial I/O Data length and check the state of Health by using the D-sub connector, and GLUE Logic, which writes Data through the Send FIFO, reads Data through the Receiver FIFO and acts as a bridge between VMEBus Signal and Program Logic.