SIMULATOR FOR SYNTHETIC MODULE

A SUMMER INTERN REPORT

Submitted by

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CERTIFICATE

Certified that the summer internship project report on ***Simulator for Synthetic Module*** is bonafide work of ***G.Suresh***, Roll No: ***B081195***, 3rd Year B.Tech in Electronics & Communication Engineering of RGUKT Basar. Campus of Rajiv Gandhi University of Knowledge Technologies (RGUKT), Andhra Pradesh carried out under my supervision during 29.04.2013 to 29.06.2013.

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ABSTRACT

The simulator for a synthetic module is a PC based simulator test jig for testing a subsystem called synthetic channel of an Electronic Warfare system. Synthetic module generates the modulated RF in the frequency range of 8-18GHz. Required RF generation and modulation is selected from PC. Based on the selection from PC, related Address, Data and controls are generated from Processor module and given to the Synthetic module for RF Generation. The required RF modulation data is to be selected from the PC. PC communicates to the micro-controller through the RS232 interface. PC gives the required data to the microcontroller of simulator PCB through the level-converter (RS-232 standard). Microcontroller generates the address, data and controls on the address, data, I/O bus of micro controller based on the selection from PC. FPGA latches the required address, data and controls and gives different lines of address (10 bits) data (16 bits) and controls (8 bits) to the synthetic module through inter-connecting cable.

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