

MATLAB SIMULATION AND HDL IMPLEMENTATION OF DVB-S2 MODULATOR

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in

VLSI Design And Embedded System

by

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Electronics and Communication Department
M.Tech (Branch: VLSI Design and Embedded System)

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ABSTRACT

Ongoing improvements in the region of satellite communication are making conceivable minimal effort information transmission and TV broadcasting to gently populated zones spread over a huge environmental district. As a result of direct and non-direct manner of satellite subsystems and station, audio and video transmissions through satellite transponders face corruption. These damages make an antagonistic impact on the end to end interface execution. This Project is centered on reproduction of the Digital Video Broadcasting – Satellite second era computerized TV transmission. MATLAB is produced an application for DVB-S2 simulation. It tends to be utilized for re-enactment of entire preparation in DVB-S2 transmitter including stream adjustment, FEC coding with interleaving, modulation, channel damage & also opposite tasks in the receiver. The main aim of this model is to manage Digital Video Broadcasting – Satellite second era parameters using filter in different modulation scheme like QPSK, 8PSK, 16APSK and 32APSK, to get better roll off factor, with all the possible code rates, Hardware Description Language is used to prepare DVB-S2 model, using this technic will implement cost efficient model and also enables the user for the customized code rates.