

# **Study of Frequency Shift Keying (FSK) digital modulation technique and implementation on FPGA**

## **Abstract**

This project involves study, literature survey of Frequency Shift Keying (FSK) digital modulation technique, Spartan7 FPGA basics (such as I/Os, LUTs - resources), understanding of FPGA programming and design flow. The project also involves basic VHDL programming, test bench simulation and prototype implementation, testing on hardware of FPGA.

## **Academic Project Requirements:**

**1) Required No. of student(s) for academic project: 2**

**2) Name of course with branch/discipline: B.E./B.Tech. Electronics and Instrumentation Engineering**

**3) Academic Project duration:**

**(a) Total academic project duration: 8 Weeks**

**(b) Student's presence at IPR for academic project work: 3 Full working Days per week**

**Email to: jasraj@ipr.res.in[Guide's e-mail address] and  
project\_ece@ipr.res.in [Academic Project Coordinator's e-mail address]**

**Phone Number: 079 -23962206,23964212 [Guide's phone number]**