

# **Design and Implementation of hardware interfaces using Xilinx Zed Board.**

## **Abstract**

The project involves a hands-on implementation and evaluation of embedded system design using Xilinx Zed Board, a Zynq -7000 SoC based development platform. The objective of the work is to integrate programmable logic (PL) with the processing System (PS) to develop and test a real-time hardware and software applications. It will involve creating hardware architecture in Vivado and software in vitis and interfacing them with the external peripherals, thus exploring the external interfaces also. The key tasks involved in this project will be –IP Integration, HDL module design , constraint configuration, bitstream generation and final hardware-software co-simulation.

## **Academic Project Requirements:**

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

**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: 5 Full working Days per week**

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

**Phone Number: 079 -2152 [Guide's phone number]**