Programmable Embedded Systems

Introduction

XILINX®

Course Objectives

After completing this course, you will be able to:

- Describe general FPGA architectures
- Describe the Xilinx design flow
- Target and optimize the designs for Xilinx FPGAs
- Use ChipScope-Pro to perform an on-chip verification
- Describe the various tools that encompass the Xilinx Embedded Development Kit (EDK)
- Describe the Xilinx DSP Design Flow

Course Outline
Day 1

- Basic FPGA Architecture
- Xilinx Tool Flow
  - Lab 1: Xilinx Tool Flow
- Targeting Xilinx FPGA
- ChipScope Pro Analyzer

Course Outline
Day 2

- EDK Overview
  - Lab 2: ChipScope Pro on chip verification flow
  - Lab 3: Simple Hardware Design
- Xilinx DSP design flow demonstration

Prerequisites

- Basic HDL knowledge (VHDL or Verilog)
- Digital design knowledge and experience
- Basic C programming
- Basic understanding of processor-based system