



Sanjay Churiwala (Ed.)

# Designing with Xilinx® FPGAs

## Using Vivado

- Emphasizes concepts, particularly which device characteristics are important, and how they influence a user's design realization
- Uses a systematic approach to achieving design target goals, such as Power and Timing
- Explores the various ways to enter design information and read back/analyze a design realization
- Demonstrates use of some of the most widely used IP Cores
- Explains debugging of designs on Xilinx devices and using Xilinx Tools

This book helps readers to implement their designs on Xilinx® FPGAs. The authors demonstrate how to get the greatest impact from using the Vivado® Design Suite, which delivers a SoC-strength, IP-centric and system-centric, next generation development environment that has been built from the ground up to address the productivity bottlenecks in system-level integration and implementation. This book is a hands-on guide for both users who are new to FPGA designs, as well as those currently using the legacy Xilinx tool set (ISE) but are now moving to Vivado. Throughout the presentation, the authors focus on key concepts, major mechanisms for design entry, and methods to realize the most efficient implementation of the target design, with the least number of iterations.

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