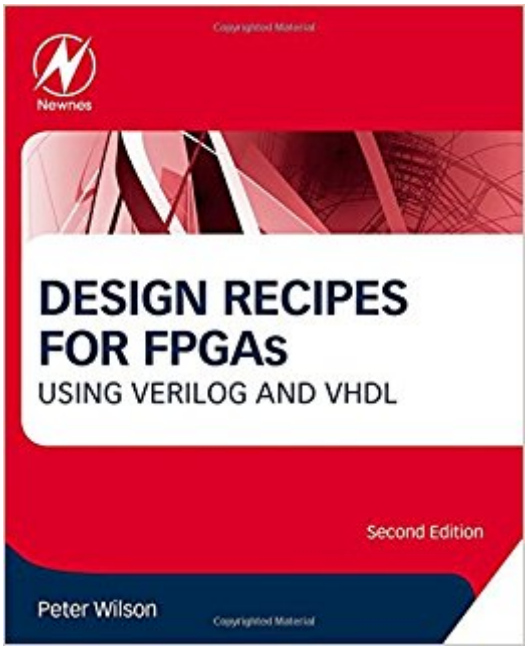
Design Recipes For FPGAs, Second Edition: Using Verilog And VHDL



Synopsis

This book provides a rich toolbox of design techniques and templates to solve practical, every-day problems using FPGAs. Using a modular structure, it provides design techniques and templates at all levels, together with functional code, which you can easily match and apply to your application. Written in an informal and easy to grasp style, this invaluable resource goes beyond the principles of FPGAs and hardware description languages to demonstrate how specific designs can be synthesized, simulated and downloaded onto an FPGA. In addition, the book provides advanced techniques to create Ã¢â ¬Ëœreal worldÃ¢â ¬â„¢ designs that fit the device required and which are fast and reliable to implement. Examples are rewritten and tested in Verilog and VHDLDescribes high-level applications as examples and provides the building blocks to implement them, enabling the student to start practical work straight awaySingles out the most important parts of the language that are needed for design, giving the student the information needed to get up and running quickly

Book Information

Paperback: 392 pages

Publisher: Newnes; 2 edition (October 9, 2015)

Language: English

ISBN-10: 0080971296

ISBN-13: 978-0080971292

Product Dimensions: 9.1 x 7.4 x 0.7 inches

Shipping Weight: 12.6 ounces (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #326,396 in Books (See Top 100 in Books) #30 inÃ Â Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design > Microprocessor Design #63 inÃ Â Books > Engineering & Transportation > Engineering > Industrial, Manufacturing & Operational Systems > Industrial Design > Products #99 inÃ Â Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics

Customer Reviews

"...a great book for someone wanting to learn HDL design as the examples are crystal-clear, and it can be hard to find real-world HDL examples on the Ã¢â ¬Ëœnet. The chapter on a CPU design alone will teach one a lot about coding for FPGAs." --Embedded.com, Design Recipes for FPGAs, Second Edition "...a great book for someone wanting to learn HDL design as the examples are crystal-clear, and it can be hard to find real-world HDL examples on the Ã¢â ¬Ëœnet. The chapter

on a CPU design alone will teach one a lot about coding for FPGAs." --Embedded, Design Recipes for FPGAs, Second Edition "Design Recipes for FPGAs is an excellent volume for engineers who work with FPGAs either regularly or occasionally... the book provides a handy shelf reference with examples for many useful functional blocks, ranging from relatively small illustrative syntactic and structural examples to more complex concepts. Whether you work in VHDL occasionally or every day, you'll find practical help in this book." --Lewin Edwards, Design Engineer and Technical Author

A rich toolbox of practical FPGA design techniques and templates that will enable you to solve practical problems using FPGAs Ã¢â ¬â œ now updated with examples in Verilog This book provides a rich toolbox of design techniques and templates to solve practical, every-day problems using FPGAs. Using a modular structure, it provides design techniques and templates at all levels, together with functional code, which you can easily match and apply to your application. Written in an informal and easy to grasp style, this invaluable resource goes beyond the principles of FPGAs and hardware description languages to demonstrate how specific designs can be synthesized, simulated and downloaded onto an FPGA. In addition, the book provides advanced techniques to create Ã¢â ¬Ëœreal worldÃ¢â ¬â„¢ designs that fit the device required and which are fast and reliable to implement. Key Features Include: Examples are rewritten and tested in Verilog and VHDL Describes high-level applications as examples and provides the building blocks to implement them, enabling the student to start practical work straight away Singles out the most important parts of the language that are needed for design, giving the student the information needed to get up and running quickly Updates to this edition include: All examples are rewritten and tested in Verilog Additional Examples and Updates to previous Code New mixed signal material in VHDL-AMS and Verilog-AMS

Arrived quickly and was exactly as described.

Design Recipes for FPGAs, Second Edition: Using Verilog and VHDL Digital Design (Verilog): An Embedded Systems Approach Using Verilog Digital Design with RTL Design, VHDL, and Verilog Digital Integrated Circuit Design Using Verilog and Systemverilog RTL Hardware Design Using VHDL: Coding for Efficiency, Portability, and Scalability Advanced Digital Logic Design Using VHDL, State Machines, and Synthesis for FPGA's Digital Design Using VHDL: A Systems Approach Digital Systems Design Using VHDL Learning FPGAs: Digital Design for Beginners with Mojo and Lucid HDL Digital Design: With an Introduction to the Verilog HDL 5th Ed. By Morris Mano (International

Economy Edition) Fundamentals of Digital Logic with Verilog Design Introduction to Logic Circuits & Logic Design with Verilog Verilog Digital System Design with CDROM (McGraw-Hill Professional Engineering) Digital Logic and Microprocessor Design with VHDL Circuit Design and Simulation with VHDL (MIT Press) Digital Design with CPLD Applications and VHDL Introduction to Logic Circuits & Logic Design with VHDL Fundamentals of Digital Logic with VHDL Design Circuit Design with VHDL Make: FPGAs: Turning Software into Hardware with Eight Fun and Easy DIY Projects