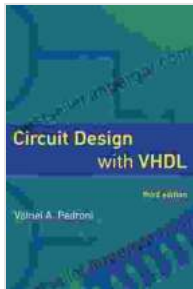


Circuit Design with VHDL: Unlock the Power of Digital Design

In the realm of digital design, VHDL (VHSIC Hardware Description Language) stands as a powerful tool, enabling engineers to describe and implement complex electronic circuits in a comprehensive and efficient manner. The third edition of our highly acclaimed book, "Circuit Design with VHDL," arms you with the knowledge and skills necessary to master this essential language and elevate your digital design capabilities.



Circuit Design with VHDL, third edition by Volnei A. Pedroni

★★★★☆ 4.6 out of 5

Language : English
File size : 117232 KB
Text-to-Speech : Enabled
Screen Reader : Supported
Enhanced typesetting : Enabled
Print length : 583 pages

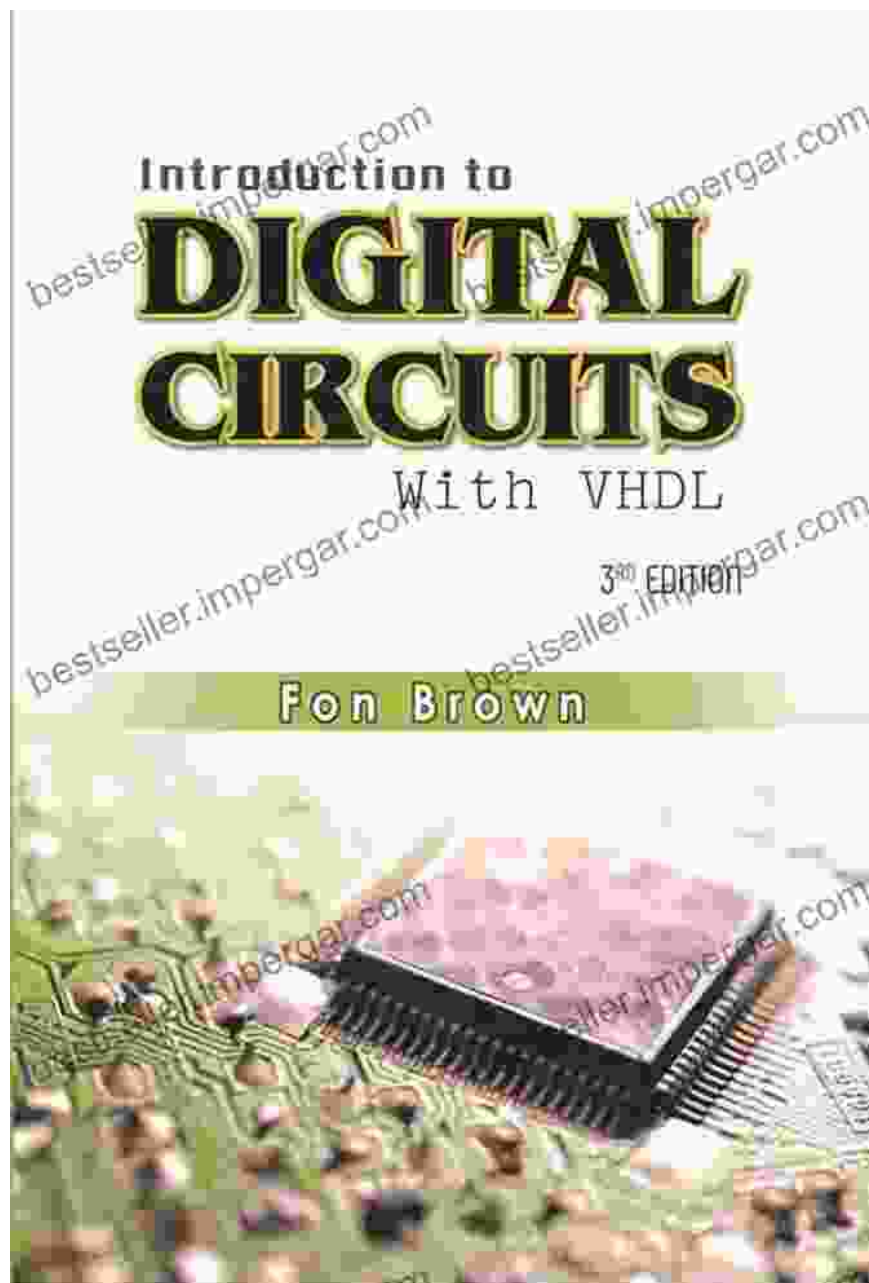


What's New in the Third Edition?

- Updated to VHDL 2019, the latest version of the language
- Expanded coverage of FPGA (Field-Programmable Gate Array) and ASIC (Application-Specific Integrated Circuit) design
- New chapters on advanced topics such as memory design and floating-point arithmetic
- Hundreds of new examples and exercises to reinforce understanding

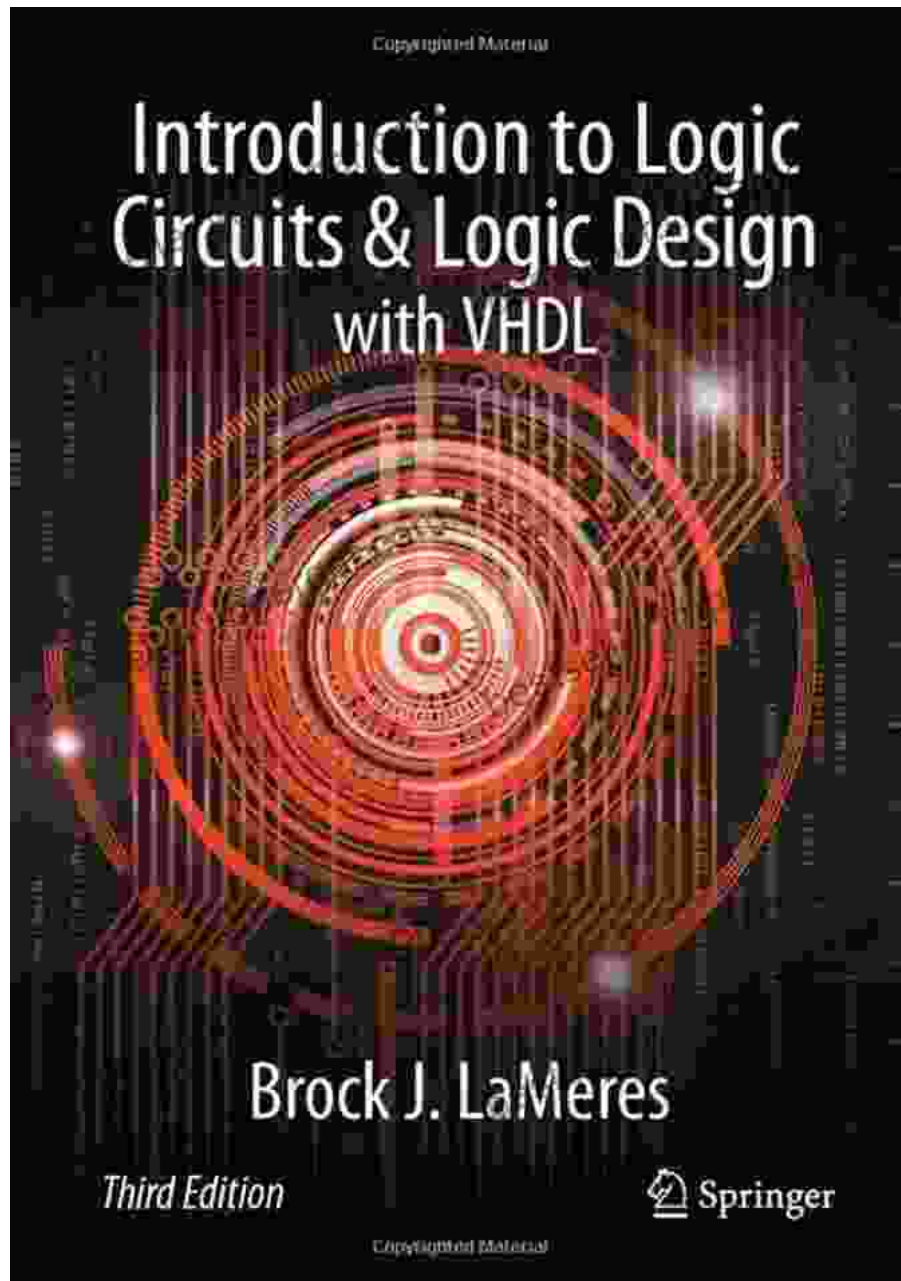
Chapter Highlights

Chapter 1: to VHDL



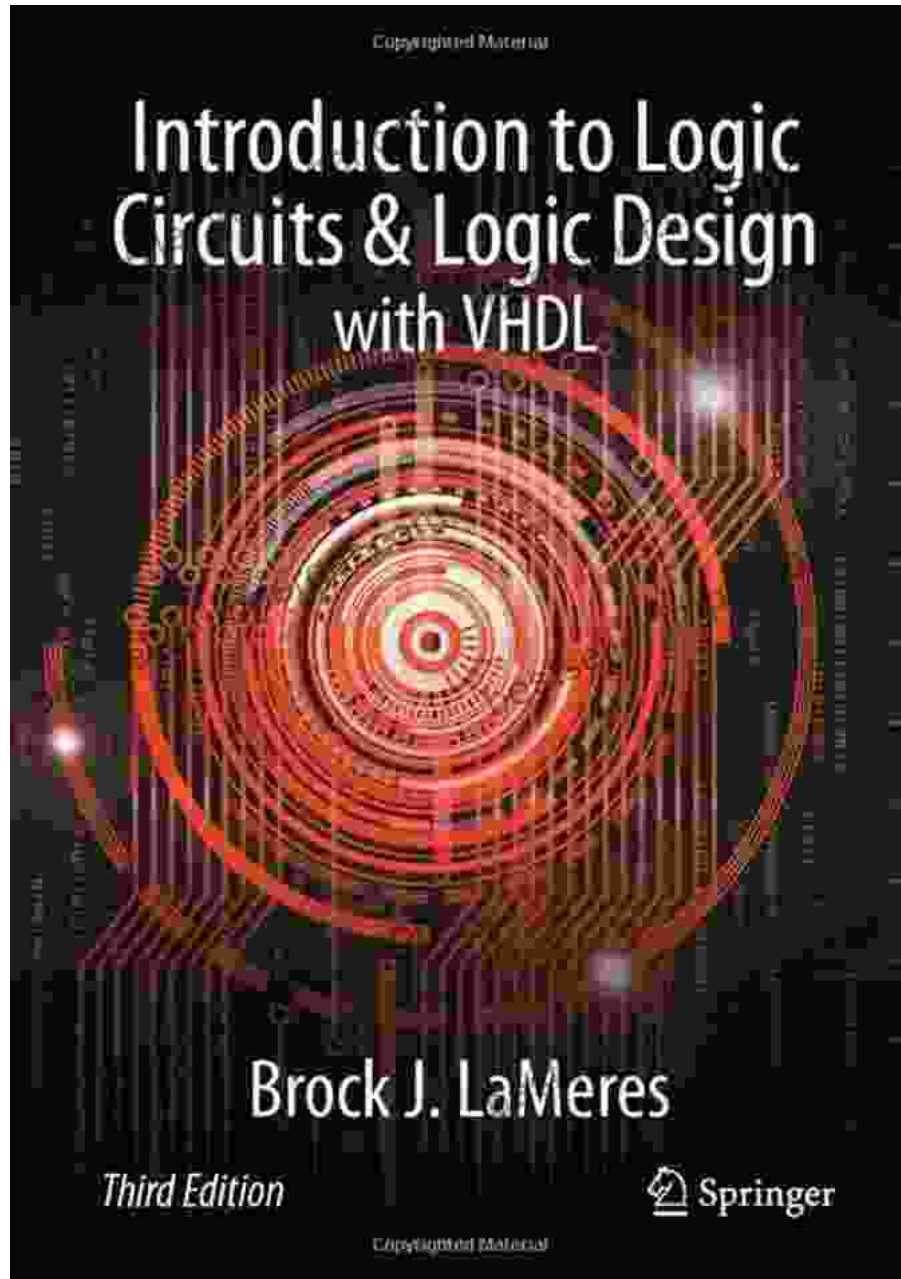
This chapter provides a comprehensive overview of VHDL, its history, syntax, and key concepts. It lays the foundation for your journey into digital design with VHDL.

Chapter 2: Combinational Logic Design



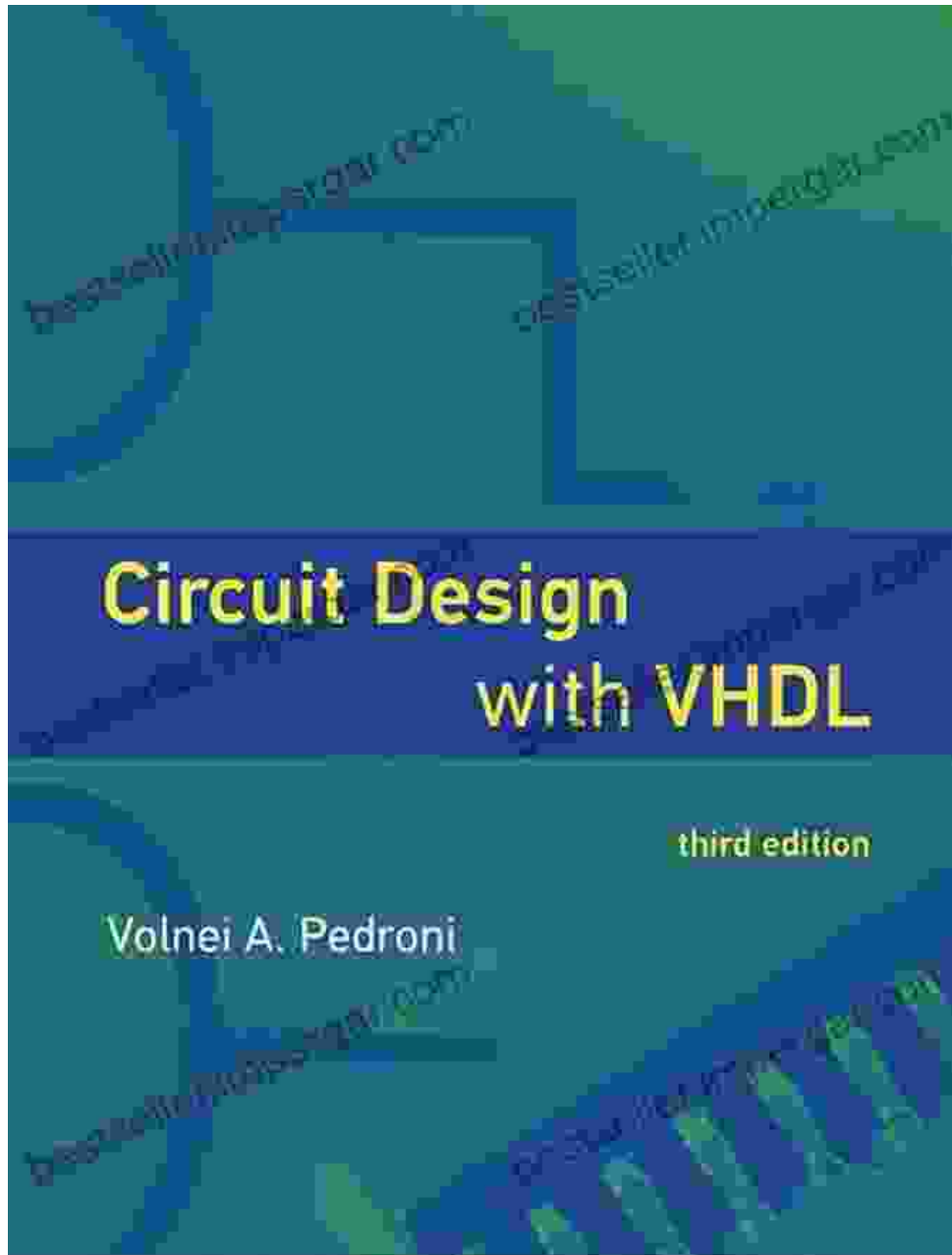
Master the fundamentals of combinational logic design, including Boolean algebra, truth tables, and gate-level implementation using VHDL.

Chapter 3: Sequential Logic Design



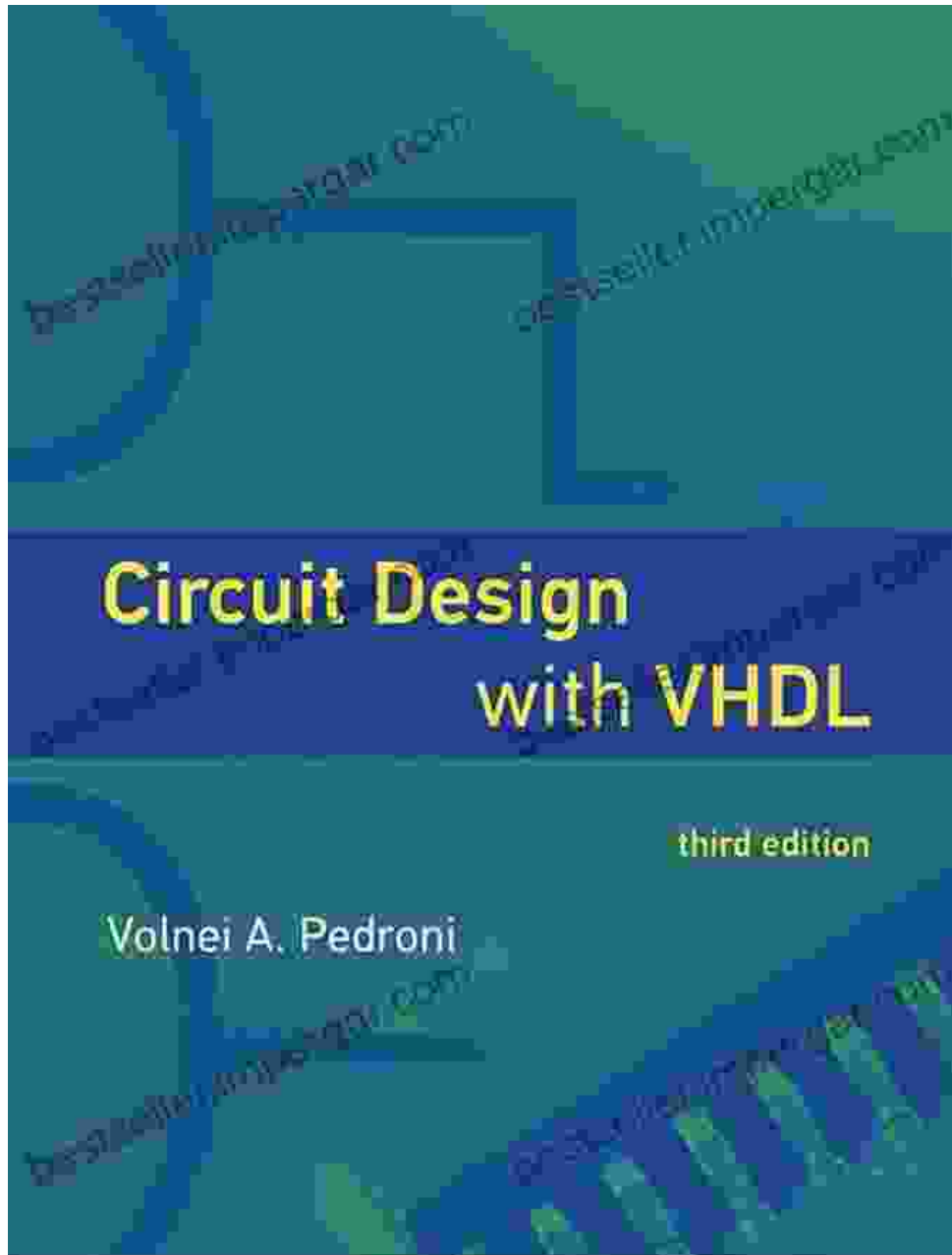
Explore the world of sequential logic design, covering flip-flops, registers, counters, and state machines, all implemented with VHDL.

Chapter 4: Dataflow Modeling



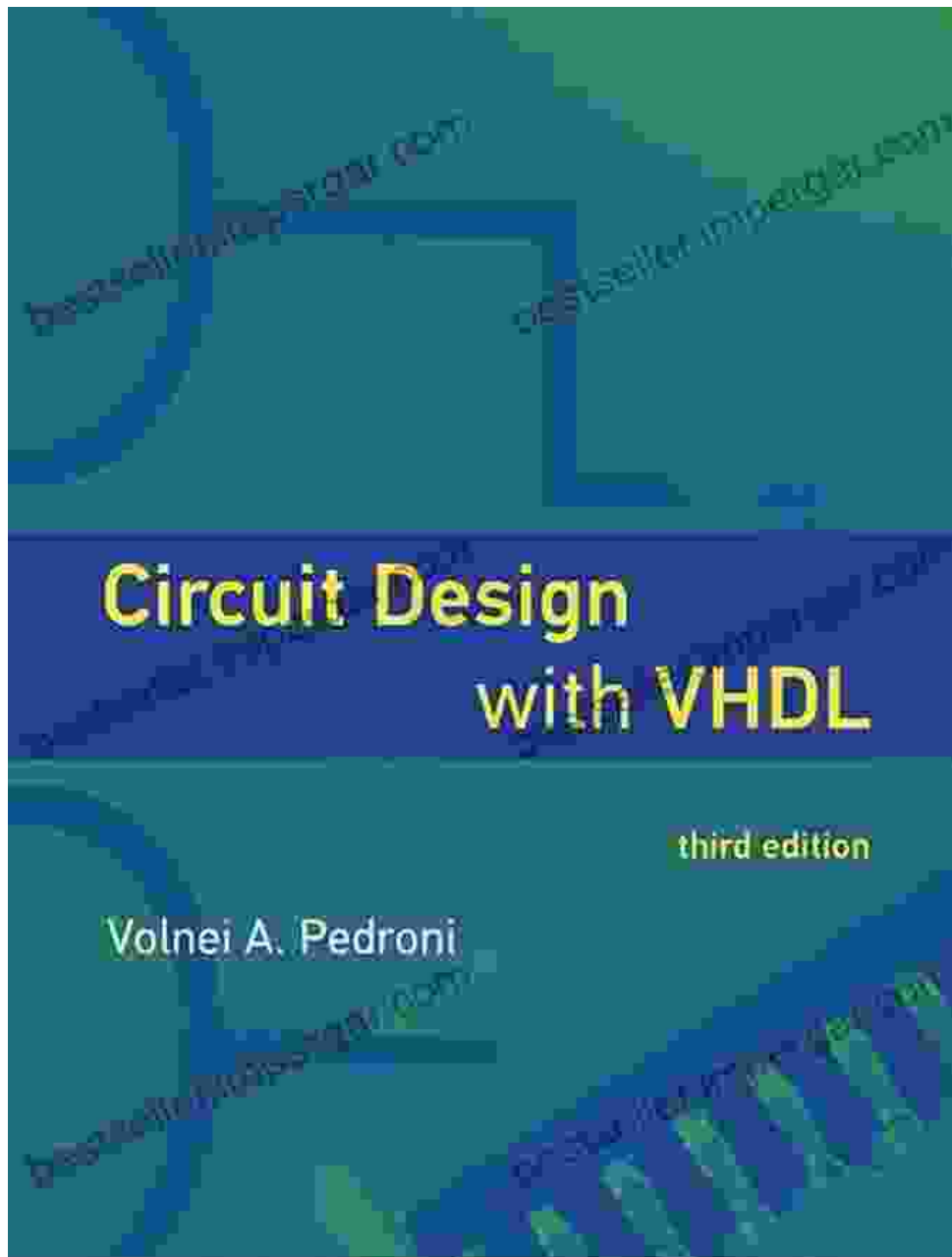
Learn about dataflow modeling in VHDL, a powerful technique for describing digital systems at a higher level of abstraction.

Chapter 5: Behavioral Modeling



Delve into behavioral modeling in VHDL, a flexible approach for describing the behavior of digital systems without explicitly specifying their implementation.

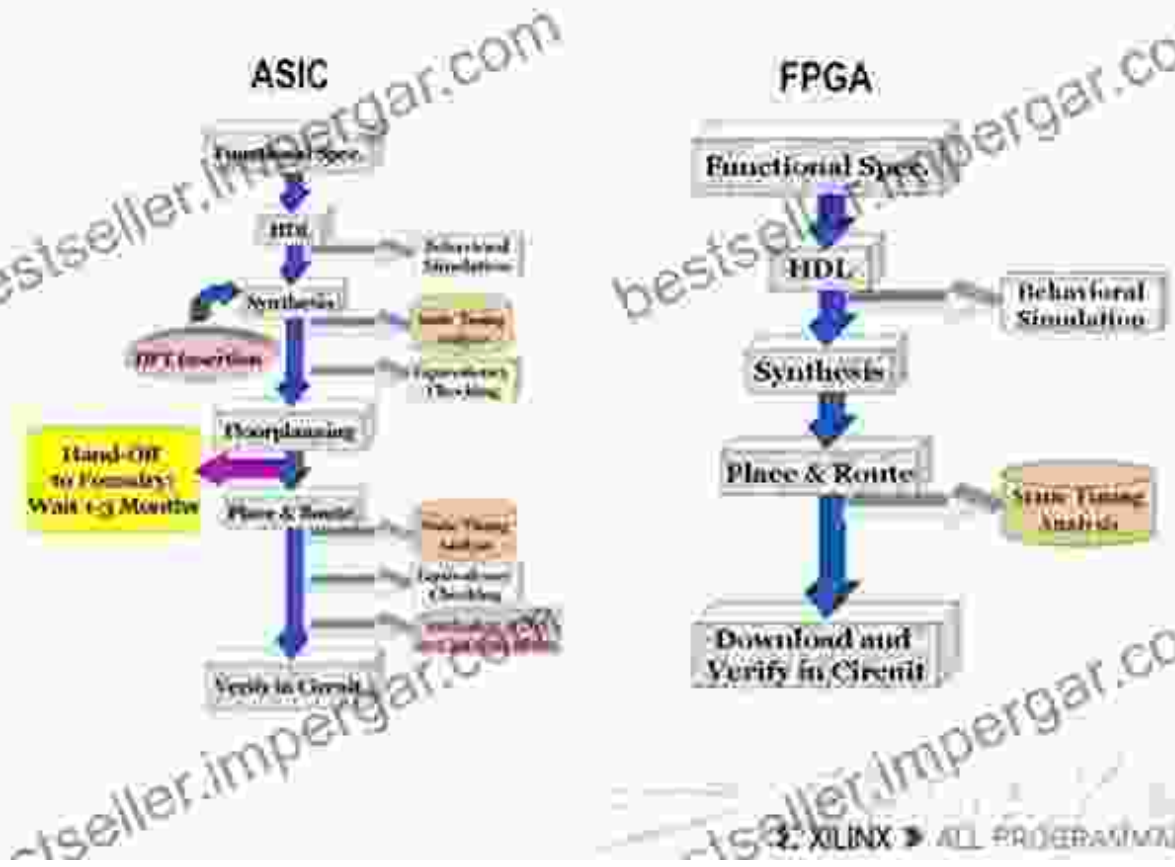
Chapter 6: Structural Modeling



Understand structural modeling in VHDL, a technique for representing digital systems as a hierarchy of interconnected components.

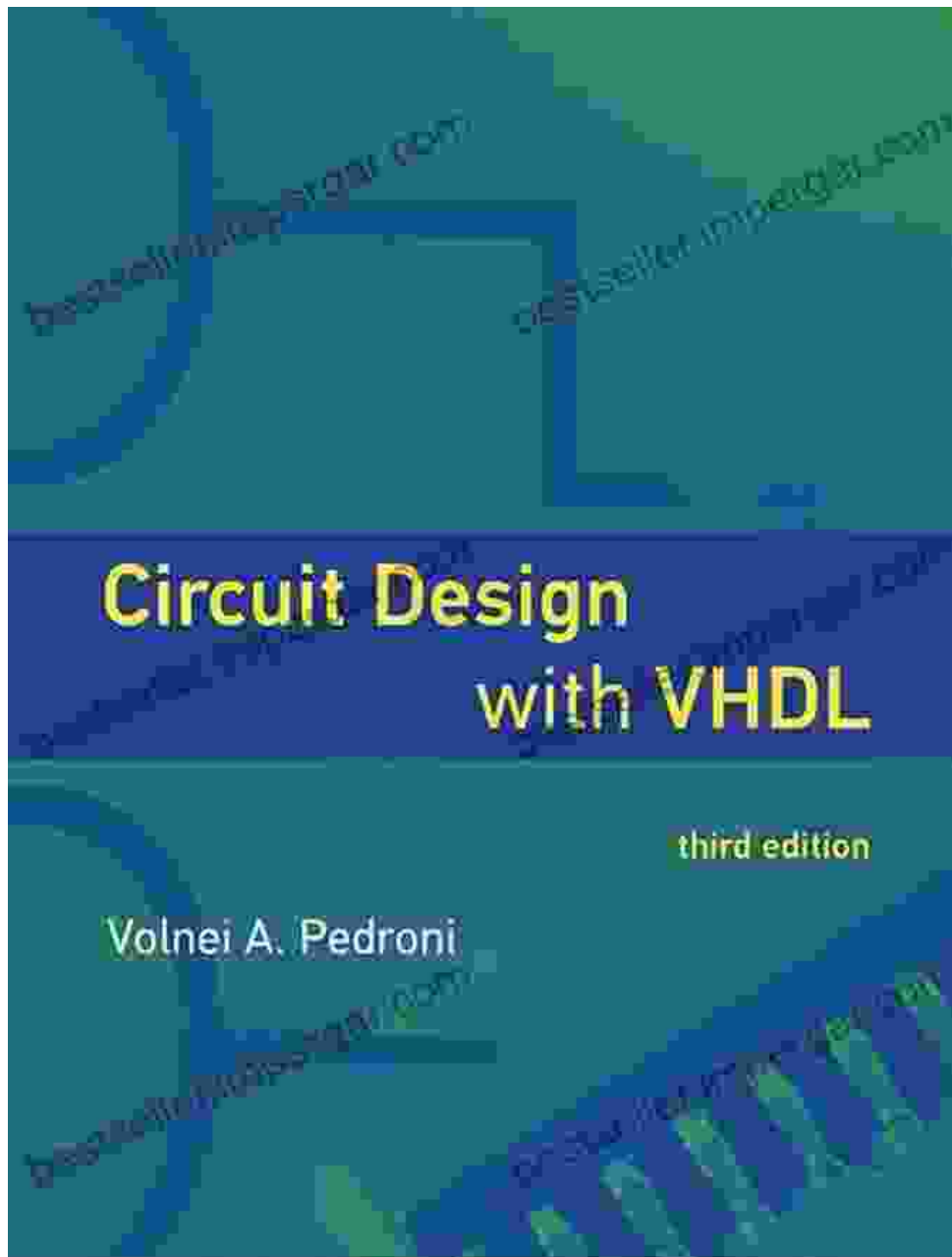
Chapter 7: FPGA and ASIC Design

Design Flow Comparison



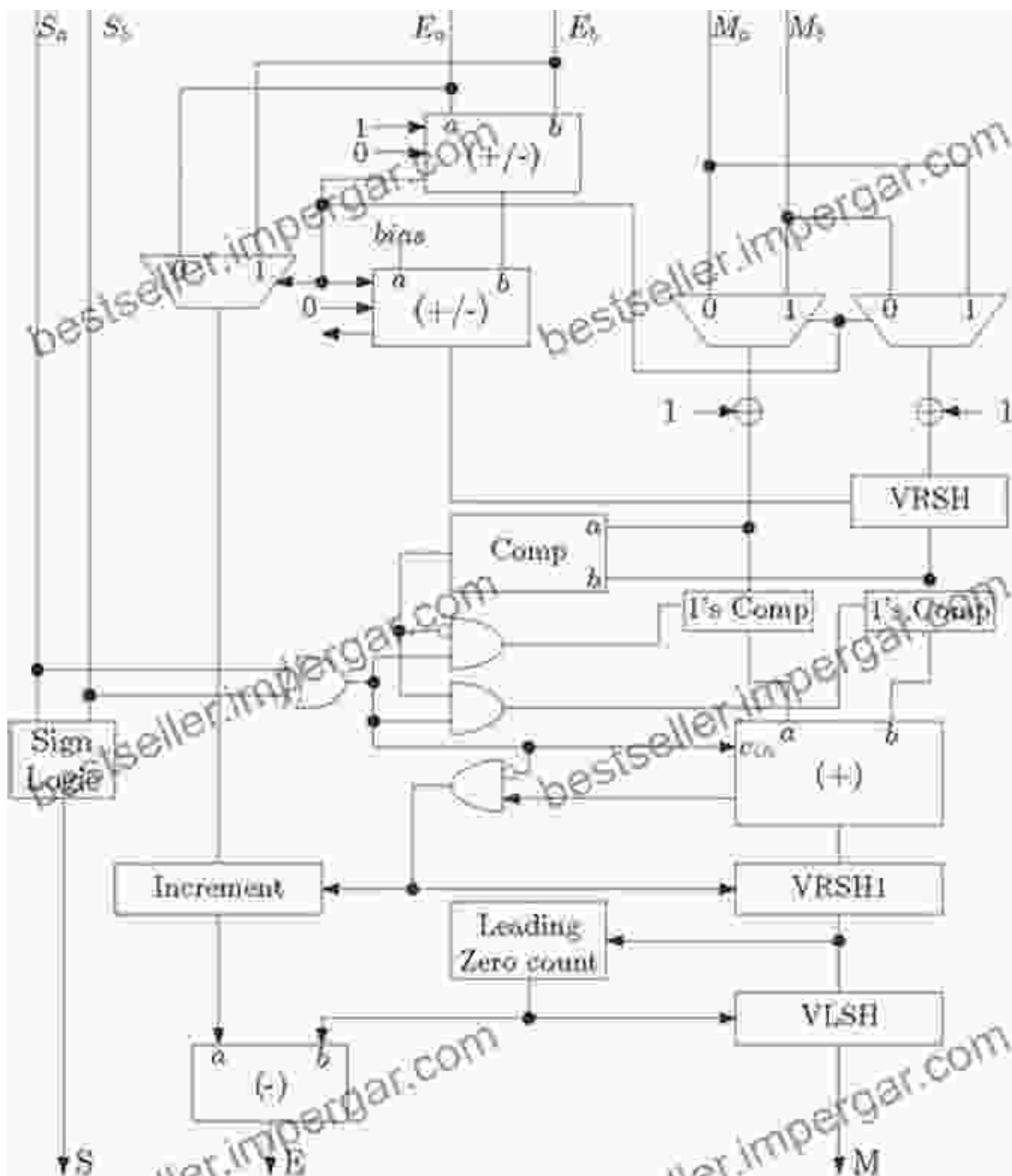
Get hands-on experience with FPGA and ASIC design using VHDL, exploring the practical aspects of implementing digital systems on real-world hardware.

Chapter 8: Memory Design



Master memory design with VHDL, covering various types of memories, their implementation, and their use in digital systems.

Chapter 9: Floating-Point Arithmetic



Learn about floating-point arithmetic in VHDL, its representation, operations, and its application in digital signal processing and other areas.

Benefits of Using This Book

- Learn from industry experts with decades of experience in digital design
- Grasp the fundamentals of VHDL and apply them to real-world projects

- Develop proficiency in designing and implementing complex digital circuits
- Enhance your understanding of FPGA and ASIC design methodologies
- Stay up-to-date with the latest advancements in VHDL and digital design

Who Should Read This Book?

This book is an invaluable resource for:

- Electrical and computer engineering students
- Digital designers
- FPGA and ASIC engineers
- Hardware engineers
- Anyone interested in mastering circuit design with VHDL

Free Download Your Copy Today!

Don't wait any longer to unlock the power of VHDL and elevate your circuit design skills. Free Download your copy of "Circuit Design with VHDL: Third Edition" today and embark on a transformative learning journey.

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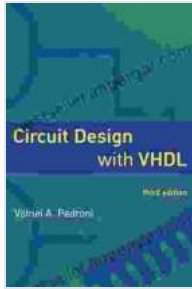
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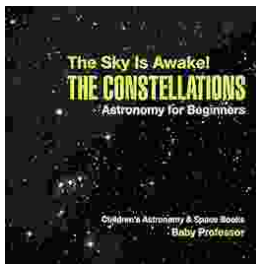
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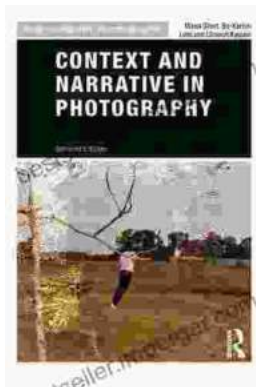


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