Digital Circuit Design for Computer Science Students

By Wirth, Niklaus

Book Condition: New. Publisher/Verlag: Springer, Berlin | An Introductory Textbook | This textbook provides a thorough and systematic introduction to designing digital circuits. The author is the leading programming language designer of our time and in this book, based on a course for 2nd-year students at the Federal Institute of Technology (ETH) in Zurich, he aims to close the gap between hardware and software design. He encourages the student to put the theory to work in exercises that include lab work culminating in the design of a simple yet complete computer.The lab work is based on a workstation equipped with a single field programmable gate array chip and software tools for entering, editing, and analyzing designs.This text is a modern introduction to designing circuits using state-of-the-art technology and a concise, easy to master hardware description language (Lola) | 1. Transistors and Gates.- 1.1. Gates with Bipolar Transistors.- 1.2. Gates with Field Effect Transistors.- 1.3. Electrical Characteristics of Gates.- 2. Combinational Circuits.- 2.1. Boolean Algebra.- 2.2. Graphical Notations.- 2.3. Circuit Simplification.- 2.4. The Decoder or Demultiplexer.- 2.5. The Multiplexer.- 2.6. The Adder.- 2.7. The Adder with Fast Carry Generation.- 2.8. The Multiplier.- 2.9. The Read-Only Memory (ROM).- 2.10. The Combinational PLD.- ...

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Extensive guideline! Its this sort of excellent read. it had been writtern quite properly and helpful. You can expect to like just how the writer create this book.
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This book will never be straightforward to start on reading through but quite enjoyable to learn. Better then never, though i am quite late in start reading this one. Your lifestyle span will probably be convert once you complete reading this publication.
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