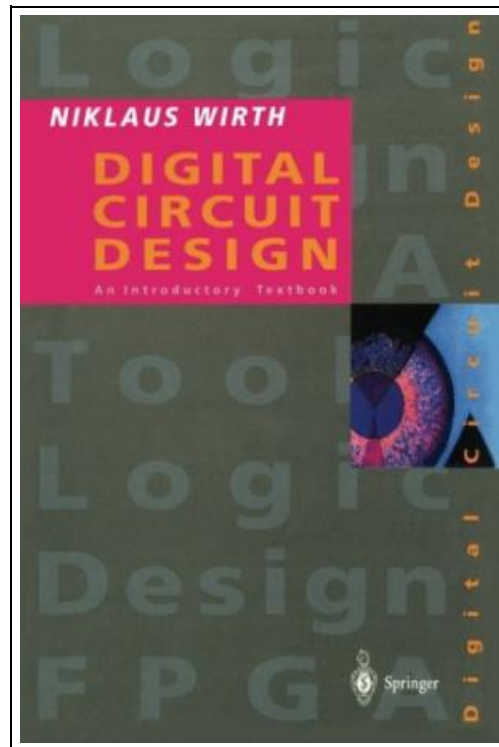


## Digital Circuit Design for Computer Science Students



Filesize: 4.12 MB

### **Reviews**

*This pdf is indeed gripping and interesting. It is definitely simplistic but shocks within the 50 percent of your book. Once you begin to read the book, it is extremely difficult to leave it before concluding.*

**(Michael Spinka)**

## DIGITAL CIRCUIT DESIGN FOR COMPUTER SCIENCE STUDENTS

DOWNLOAD



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.- 2.11. The Programmable Gate Array.- 2.12. Dynamic Behaviour of Combinational Circuits.- 3. Latches and Registers.- 3.1. The SR-Latch.- 3.2. The D-Latch.- 3.3. The D-Register.- 3.4. The JK Register.- 4. Synchronous, Sequential Circuits.- 4.1. The State Machine.- 4.2. The Shift Register.- 4.3. The Synchronous Binary Counter.- 4.4. A Design Methodology for State Machines.- 4.5. The PLD and the FPGA with Registers.- 4.6. Timing and Practical Considerations.- 5. Bus Systems.- 5.1. The Concept of a Bus.- 5.2. The Open-Collector Circuit.- 5.3. The Tri-state Gate.- 6. Memories.- 6.1. Static Memories.- 6.2. Dynamic Memories.- 6.3. Dual-Port Memories.- 7. Formal Description of Synchronous Circuits.- 7.1....



[Read Digital Circuit Design for Computer Science Students Online](#)



[Download PDF Digital Circuit Design for Computer Science Students](#)

## Other PDFs



**Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .**

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can usually...

[Download PDF »](#)



**TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2)(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

[Download PDF »](#)



**TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

[Download PDF »](#)



**JA] early childhood parenting :1-4 Genuine Special(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2006-01-01 Pages: 179 Publisher: the China Pictorial Our book is all...

[Download PDF »](#)



**TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (3-5 years) Intermediate (3)(Chinese Edition)**

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

[Download PDF »](#)

**Chicken Licken - Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd, United Kingdom, 2013. Paperback. Book Condition: New. 226 x 152 mm. Language: English . Brand New Book. In this classic fairy tale, a nut falls on Chicken Licken s head and he

[Download Book »](#)

**The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, The Tale of Jemima Puddle-Duck - Read it Yourself with Ladybird: Level 2, This is a gentle adaptation of the classic tale by Beatrix Potter. Jemima

[Download Book »](#)

**Rumpelstiltskin - Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, Rumpelstiltskin - Read it Yourself with Ladybird: Level 2, In this classic fairy tale, a miller's daughter has to spin straw into gold for the king.

[Download Book »](#)

**Superhero Max- Read it Yourself with Ladybird: Level 2**

Penguin Books Ltd. Paperback. Book Condition: new. BRAND NEW, Superhero Max- Read it Yourself with Ladybird: Level 2, Superhero Max - Max is an ordinary boy, but he is also Swooperman, a superhero! When the

[Download Book »](#)

**Pickles To Pittsburgh: Cloudy with a Chance of Meatballs 2**

Atheneum Books for Young Readers, 2000. Paperback. Book Condition: New. No Jacket. New paperback print book copy of Pickles to Pittsburgh: Cloudy with a Chance of Meatballs 2 written by Judi Barrett. Drawn by Ron

[Download Book »](#)