Morris Mano Digital Design 2nd Edition

Books in PrintContemporary Logic DesignDigital Design, Global EditionDigital Design and Computer OrganizationAdvanced Digital Design with the Verilog HDLAfternoons with Mr. HoganAlgebra and Computer ScienceDigital Design: Principles And Practices, 4/EDigital DesignDigital TechniquesDigital Principles & System DesignDigital Logic & Computer DesignComputer System ArchitectureComputer Logic DesignDigital Logic and Computer DesignDigital Principles & Logic DesignDigital DesignThe HolodeckDigital Design, Preview Ed.Programming in CThe Motorola MC68000 Microprocessor FamilyRecording for the Blind & Dyslexic, Catalog of BooksDigital LogicIntroduction to Logic Circuits & Logic Design with VerilogThe Proceedings of the International Conference on Information Engineering, Management and Security 2014Computer System ArchitectureAmerican Book Publishing RecordSolaris 10 Security EssentialsDigital ElectronicsMicroprocessor SystemsDigital Systems Design Using VerilogStarter'S Guide To Verilog 2001Arm Assembly Language - An Introduction (Second Edition)SWITCHING THEORY AND LOGIC DESIGNDigital DesignModeling, Synthesis, and Rapid Prototyping with the Verilog HDLDigital DesignLogic and Computer Design FundamentalsIntroduction to Logic Design, Second EditionDigital Logic Design and Computer Organization with Computer Architecture for Security

Books in Print

This textbook for courses in Digital Systems Design introduces students to the fundamental hardware used in modern computers. Coverage includes both the classical approach to digital system design (i.e., pen and paper) in addition to the modern hardware description language (HDL) design approach (computer-based). Using this textbook enables readers to design digital systems using the modern HDL approach, but they have a broad foundation of knowledge of the underlying hardware and theory of their designs. This book is designed to match the way the material is actually taught in the classroom. Topics are presented in a manner which builds foundational knowledge before moving onto advanced topics. The author has designed the presentation with learning Goals and assessment at its core. Each section addresses a specific learning outcome that the student should be able to “do” after its completion. The concept checks and exercise problems provide a rich set of assessment tools to measure student performance on each outcome.

Contemporary Logic Design

This book presents the basic concepts used in the design and analysis of digital systems and introduces the principles of digital computer organization and design.

Digital Design, Global Edition

In the decade since the first edition of this book was published, the technologies of digital design have continued to evolve. The evolution has run along two related tracks: the underlying physical technology and the software tools that facilitate the application of new devices. The trends identified in the first edition have continued

and promise to continue to do so. Programmable logic is virtually the norm for digital designers and the art of digital design now requires the software skills to deal with hardware description languages. Hardware designers now spend the majority of their time dealing with software. Specifically, the tools needed to efficiently map digital designs onto the emerging programmable devices that are growing more sophisticated. They capture their design specifications in software with language appropriate for describing the parallelism of hardware; they use software tools to simulate their designs and then to synthesize it into the implementation technology of choice. Design time is radically reduced, as market pressures require products to be introduced quickly at the right price and performance. Although the complexity of designs is necessitating ever more powerful abstractions, the fundamentals remain unchanged. The contemporary digital designer must have a much broader understanding of the discipline of computation, including both hardware and software. This broader perspective is present in this second edition.

Digital Design and Computer Organization

Number systems, Binary, Octal, Hexadecimal, Conversion methods. Binary addition, Subtraction 1's complement method.Concept of coding, BCD codes, 8421, EXCESS-3, Grey code, Codes with more than four bits, ASCII codes.Error Detecting and Correcting Codes : Parity bits, Matrix representation of linear-block codes and its capabilities, Hamming code, Binary cyclic code, Burst code.De-Morgan theorem, Canonical and standard forms, Dependency notation, Minimization of logic functions, Karnaugh maps upto 4 variables, SOP and POS forms, Don't care conditions, Quine MC-Clusky method upto 4 variables, Multiple output minimization.Logic Families : TTL NAND gate, Specifications, Tristate TTL, Bus organised computer principle, ECL, MOS, CMOS families and their interfacing.Combinational Logic : Code conversion, Arithmetic circuits, Half and full adder and subtractor, Binary serial and parallel adder, IC 7483, BCD adder, Excess-3 adder, Digital comparator.Multiplexer, Demultiplexer, Encoder, Decoder and their applications, Design of ALU.Sequential Logic Circuits : S-R, Clocked S-R, JK and Master-Slave JK flip-flops, Flip-Flop conversion, Edge triggered flip-flops, Design of Algorithmic State Machines (ASM) for simple applications. Design of ripple and synchronous counters, Shift register and pulse train generator, Pseudo Random Binary Sequencing (PRBS) generator.Analysis of clocked sequential circuits.Semiconductor Memories : RAM, ROM, PROM, EPROM, EEPROM, NVRAM, SRAM, DRAM; Concept of PLA, PAL.

Advanced Digital Design with the Verilog HDL

The second edition of this text provides an introduction to the analysis and design of digital circuits at a logic, instead of electronics, level. It covers a range of topics, from number system theory to asynchronous logic design. A solution manual is available to instructors only. Requests must be made on official school stationery.

Afternoons with Mr. Hogan

Algebra and Computer Science

Ben Hogan's former ball shagger recounts firsthand stories of the golf legend—andreveals, for the first time, Hogan's Swing Secret, a source of mystery to golfers for more than fifty years. Ben Hogan's pro golf record is legendary. A four-time PGA Player of the Year, he celebrated sixty-three tournament wins and became known as a man of few words and fewer close friends. Most of what we know about Hogan has been based on myth and speculation. Until now. In the 1960s, though Hogan's competitive career was over, he kept the practice habits that made him famous and remade modern competitive golf. He hired seventeen-year-old Jody Vasquez to help. Each day, after driving to a remote part of the course at Shady Oaks Country Club, Hogan would spend hours hitting balls and Vasquez would retrieve them. There, and over the course of their twenty-year friendship, Hogan taught Jody the mechanics of his famous swing and shared his thoughts on playing, practicing, and course management—unknowingly revealing much about his character, values, and beliefs, and the events that shaped them. In Afternoons with Mr. Hogan, Jody Vasquez shares dozens of stories about Hogan, from the way he practiced, selected his clubs, and interacted with other star players to his little-known humor and generosity. Combining the gentle insight of Tom Kite's A Fairway to Heaven (which recalls Kite's golf education under Harvey Penick) with the sage perspective of Penick's own Little Red Book, Vasquez's tribute is funny, poignant, and full of advice for golfers of all levels.

Digital Design: Principles And Practices, 4/E

This book is about a requirements specification for a Holodeck at a proof of concept level. In it I introduce optical functions for a optical processor and describe how they map to a subset of the Risc-V open instruction set. I describe how parallelism could be achieved. I then describe a possible layered approach to an optical processor motherboard for the datacenter and for a personal Holodeck. I describe Volumetrics in brief and show how its evolution to Holodeck volumetrics could be done with bend light technology and the possibility of solidness to touch. I describe in detail the architecture of a Holodeck covering several approaches to Holodecks from static scene to scrolling scene to multi-user same complex to networked multi-user Holodecks.

Digital Design

Learn FileMaker® Pro 10 provides an excellent reference to FileMaker Inc.'s award-winning database program for both beginners and advanced developers. From converting files created with previous versions of FileMaker Pro and sharing data on the web to creating reports and sorting data, this book offers a hands-on approach to getting the most out of your FileMaker Pro databases.Learn how to use the completely redesigned Status area, now known as the Status toolbar; send e-mail right from FileMaker with the SMTP-based Send Mail option; build reports quickly and easily with the Saved Finds feature; automate your database with scripts and activate those scripts with the new script trigger feature; integrate your Bento data into your FileMaker files; work with the enhanced Web viewer.

Digital Techniques

Designed for the first digital course for four-year electrical engineering majors and for the second course (following basic logic) for four-year electrical and electronic engineering technology majors. Features a classical approach to the subject. Provides a thorough explanation of the design process. Includes real-world examples with real-world parts. Extensive problem sets. PLD coverage.

Digital Principles & System Design

Solaris™ 10 Security Essentials describes the various security technologies contained in the Solaris operating system. The book describes how to make installations secure and how to configure the OS to the particular needs of your environment, whether your systems are on the edge of the Internet or running a data center. The authors present the material in a straightforward way that makes a seemingly arcane subject accessible to system administrators at all levels. The strengths of the Solaris operating system's security model are its scalability and its adaptability. It can protect a single user with login authentication or multiple users with Internet and intranet configurations requiring user-rights management, authentication, encryption, IP security, key management, and more. This book is written for users who need to secure their laptops, network administrators who must secure an entire company, and everyone in between. The book's topics include Zones virtualization security System hardening Trusted Extensions (Multi-layered Security) Privileges and role-based access control (RBAC) Cryptographic services and key management Auditing Network security Pluggable Authentication Modules (PAM) Solaris™ 10 Security Essentials is the first in a new series on Solaris system administration. It is a superb guide to deploying and managing secure computer environments.

Digital Logic & Computer Design

Programming in C, Third Edition is a revised edition of a classic programming title. Author Stephen Kochan's style and thorough explanations have earned him a place among the most respected of computer book authors. Although the C programming language hasn't undergone any major changes, it's enjoying new life among game programmers and small device programmers, where its simple elegance makes it the ideal choice for small fast programs. Large game developers, such as Nintendo, use C almost exclusively. This edition combines the time-tested instructional style of Stephen Kochan with updated and.

Computer System Architecture

Digital Design and Computer Organization introduces digital design as it applies to the creation of computer systems. It summarizes the tools of logic design and their mathematical basis, along with in depth coverage of combinational and sequential circuits. The book includes an accompanying CD that includes the majority of circuits highlig

Computer Logic Design

An introductory text describing the ARM assembly language and its use for simple programming tasks.

Digital Logic and Computer Design

Verilog aims to introduce new users to the language of Verilog with instruction on how to write hardware descriptions in Verilog in a style that can be synthesized by readily available synthesis tools. Offers clear exposition of the Verilog hardware description language. This book is written in a style that allows the user who has no previous background with hardware description languages (HDLs) to become skillful with the language. Features treatment of synthesis-friendly descriptive styles. An excellent book for self-study, reference, seminars, and workshops on the subject.

Digital Principles & Logic Design

This volume contains the proceedings of three special sessions: Algebra and Computer Science, held during the Joint AMS-EMS-SPM meeting in Porto, Portugal, June 10–13, 2015; Groups, Algorithms, and Cryptography, held during the Joint Mathematics Meeting in San Antonio, TX, January 10–13, 2015; and Applications of Algebra to Cryptography, held during the Joint AMS-Israel Mathematical Union meeting in Tel-Aviv, Israel, June 16–19, 2014. Papers contained in this volume address a wide range of topics, from theoretical aspects of algebra, namely group theory, universal algebra and related areas, to applications in several different areas of computer science. From the computational side, the book aims to reflect the rapidly emerging area of algorithmic problems in algebra, their computational complexity and applications, including information security, constraint satisfaction problems, and decision theory. The book gives special attention to recent advances in quantum computing that highlight the need for a variety of new intractability assumptions and have resulted in a new area called group-based cryptography.

Digital Design

For one- to two-semester Computer Science and Engineering courses in logic and digital design at the sophomore/junior level. Featuring a strong emphasis on the fundamentals underlying contemporary logic design using hardware description languages, synthesis, and verification, this book focuses on the ever-evolving applications of basic computer design concepts with strong connections to real-world technology.

The Holodeck

Focused primarily on hardware design and organization and the impact of software on the architecture this volume first covers the basic organization, design, and programming of a simple digital computer, then explores the separate functional units in detail. FEATURES: develops an elementary computer to demonstrate by example the organization and design of digital computers. uses a simple register transfer language to specify various computer operations.

Digital Design, Preview Ed.

A COMPREHENSIVE GUIDE TO THE DESIGN & ORGANIZATION OF MODERN COMPUTING SYSTEMS Digital Logic Design and Computer Organization with Computer Architecture for Security provides practicing engineers and students with a clear understanding of computer hardware technologies. The fundamentals of digital logic design as well as the use of the Verilog hardware description language are discussed. The book covers computer organization and architecture, modern design concepts, and computer security through hardware. Techniques for designing both small and large combinational and sequential circuits are thoroughly explained. This detailed reference addresses memory technologies, CPU design and techniques to increase performance, microcomputer architecture, including "plug and play" device interface, and memory hierarchy. A chapter on security engineering methodology as it applies to computer architecture concludes the book. Sample problems, design examples, and detailed diagrams are provided throughout this practical resource. COVERAGE INCLUDES: Combinational circuits: small designs Combinational circuits: large designs Sequential circuits: core modules Sequential circuits: small designs Sequential circuits: large designs Memory Instruction set architecture Computer architecture: interconnection Memory system Computer architecture: security

Programming in C

Digital Design provides a modern approach to learning the increasingly important topic of digital systems design. The text's focus on register-transfer-level design and present-day applications not only leads to a better appreciation of computers and of today's ubiquitous digital devices, but also provides for a better understanding of careers involving digital design and embedded system design.1. Introduction2. Combinational Logic Design3. Sequential Logic Design-Controllers4. Datapath Components5. Register-Transfer Level (RTL) Design6. Optimizations and Tradeoffs7. Physical Implementation8. Programmable Processors9. Hardware Description Languages

The Motorola MC68000 Microprocessor Family

This popular volume provides a solid foundation in the elements of basic digital electronics and switching theory that are used in most practical digital design today -- and builds on that theory with discussions of real-world digital components, design methodologies, and tools. Covers a full range of topics -- number systems and codes, digital circuits, combinational logic design principles and practices, combinational logic design with PLDs, sequential logic design principles and practices, sequential logic design with PLDs, memory, and additional real-world topics (e.g., computer-aided engineering tools, design for testability, estimating digital system reliability, and transmission lines, reflections, and termination). This edition introduces PLDs as soon as possible, emphasizes CMOS logic families and introduces digital circuits in a strongly technology-independent fashion, covers the latest Generic Array Logic (GAL) devices, offers expanded coverage of ROM and RAM system-level design, and provides additional design examples. For those needing a solid introduction or review of the principles and

practices of modern digital design. Previously announced in Oct. 1992 PTR Catalogue.

Recording for the Blind & Dyslexic, Catalog of Books

For introductory courses on digital design in an Electrical Engineering, Computer Engineering, or Computer Science department. A clear and accessible approach to teaching the basic tools, concepts, and applications of digital design. A modern update to a classic, authoritative text, Digital Design, 6th Edition teaches the fundamental concepts of digital design in a clear, accessible manner. The text presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications. Like the previous editions, this edition of Digital Design supports a multimodal approach to learning, with a focus on digital design, regardless of language. Recognising that three public-domain languages-Verilog, VHDL, and SystemVerilog-all play a role in design flows for today's digital devices, the 6th Edition offers parallel tracks of presentation of multiple languages, but allows concentration on a single, chosen language.

Digital Logic

Introduction to Logic Circuits & Logic Design with Verilog

For introductory courses on digital design in an Electrical Engineering, Computer Engineering, or Computer Science department. A clear and accessible approach to the basic tools, concepts, and applications of digital design A modern update to a classic, authoritative text, Digital Design, 5th Edition teaches the fundamental concepts of digital design in a clear, accessible manner. The text presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications. Like the previous editions, this edition of Digital Design supports a multimodal approach to learning, with a focus on digital design, regardless of language. Recognizing that three public-domain languages--Verilog, VHDL, and SystemVerilog--all play a role in design flows for today's digital devices, the 5th Edition offers parallel tracks of presentation of multiple languages, but allows concentration on a single, chosen language.

The Proceedings of the International Conference on Information Engineering, Management and Security 2014

This comprehensive text on switching theory and logic design is designed for the undergraduate students of electronics and communication engineering, electrical and electronics engineering, electronics and instrumentation engineering, telecommunication engineering, computer science and engineering, and information technology. It will also be useful to AMIE, IETE and diploma students. Written in a student-friendly style, this book, now in its Second Edition, provides an in-depth knowledge of switching theory and the design techniques of digital circuits. Striking a balance between theory and practice, it covers topics ranging from number systems, binary codes, logic gates and Boolean algebra to minimization using K-maps and tabular method, design of combinational logic

circuits, synchronous and asynchronous sequential circuits, and algorithmic state machines. The book discusses threshold gates and programmable logic devices (PLDs). In addition, it elaborates on flip-flops and shift registers. Each chapter includes several fully worked-out examples so that the students get a thorough grounding in related design concepts. Short questions with answers, review questions, fill in the blanks, multiple choice questions and problems are provided at the end of each chapter. These help the students test their level of understanding of the subject and prepare for examinations confidently. NEW TO THIS EDITION • VHDL programs at the end of each chapter • Complete answers with figures • Several new problems with answers

Computer System Architecture

This important revision introduces both students and practicing computer professionals to the characteristics of the Motorola 68000 family of processors. It has been widely applauded in previous editions as a text that is practical, easy to read, and designed to educate readers on the concepts as well as applied theory. In addition to its use as a learning aid, the text serves as a valuable reference in which topics are organized according to function and importance for the design of programs, interfaces or systems. This Second Edition has been updated to cover the most recent, relevant advances and developments affecting the MC68000 family of microprocessors.

American Book Publishing Record

Solaris 10 Security Essentials

Provides an introduction to microprocessor systems, their operation and design. The text covers topics needed by engineers and computer scientists who are interested in applying microprocessors in practical situations, such as computer hardware, software, and the design and testing of systems.

Digital Electronics

Microprocessor Systems

For courses on digital design in an Electrical Engineering, Computer Engineering, or Computer Science department. Digital Design, fifth edition is a modern update of the classic authoritative text on digital design. This book teaches the basic concepts of digital design in a clear, accessible manner. The book presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications.

Digital Systems Design Using Verilog

DIGITAL SYSTEMS DESIGN USING VERILOG integrates coverage of logic design principles, Verilog as a hardware design language, and FPGA implementation to

help electrical and computer engineering students master the process of designing and testing new hardware configurations. A Verilog equivalent of authors Roth and John's previous successful text using VHDL, this practical book presents Verilog constructs side-by-side with hardware, encouraging students to think in terms of desired hardware while writing synthesizable Verilog. Following a review of the basic concepts of logic design, the authors introduce the basics of Verilog using simple combinational circuit examples, followed by models for simple sequential circuits. Subsequent chapters ask readers to tackle more and more complex designs. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Starter'S Guide To Verilog 2001

Arm Assembly Language - An Introduction (Second Edition)

SWITCHING THEORY AND LOGIC DESIGN

The Proceedings of the International Conference on Information Engineering, Management and Security 2014 which happened at Christu Jyoti Institute of Technology.

Digital Design

MultivibratorsAstable (fixed and variable), bistable, monostable multivibrators, schmitt trigger (discrete circuits).Number systems and codes Binary, decimal, hexadecimal floating point numbers and their conversion methods, BCD, EXCESS 3, Gray codes, hamming and other 4 and 5 bit codes, ASCII and ISCII codes, arithmetic operations.Logic hardwareDigital integrated circuits, levels of integration, concept of RTL, DTL, ECL, TTL, PMOS, CMOS, HMOS, NMOS with detail comparison of TTL and CMOS logic and their characteristics, worst case design and interfacing of different families.Synchronous logic and registersSR, JK, MSJK, T.D types of flip-flops, static and dynamic shift registers, reading and writing of registers, tri state logic and its use in computers.Combinational logicMinimization techniques using Karnaugh maps and tabular methods.CountersAsynchronous, synchronous, binary, programmable, presettable, up-down counters, calculation of maximum operation frequency of counters and realization of counters usings ICs.Decoders, drivers, encoders, multiplexers, demultiplexers, buffers, latches, tranceivers, bar code and bar code readers, 7 segment and Alpha numeric displays.Digital storage devicesROM, RAM, EPROM, PAL, PAL programming, static and dynamic RAMs, CCDs, EPROM programming bubble memories, CD-ROMS.Function realization using ICsDigital clock, time and frequency counters etc. Programmable delay logic ICs, crystal clock oscillators.State diagram representation and realization using counters and shift registers.

Modeling, Synthesis, and Rapid Prototyping with the Verilog HDL

Digital Design

This first edtion book covers the key design problems of modeling, architectural tradeoffs, functional verification, timing analysis, test generation, fault simulation, design for testablility, logic synthesis, and post-synthesis verification. The author's focus is on developing, verifying, and synthesizing designs of digital circuits rather than on the Verilog language. Some of the topics covered in this book include Digital Design Methodology, Combinational Logic, Sequential Logic Design, Logic Design with Verilog, and Programmable Logic and Storage Devices. For professional engineers interested in learning Verilog by example, in the context of its use in the design flow of modern integrated circuits.

Logic and Computer Design Fundamentals

Introduction to Logic Design, Second Edition

Digital Logic Design and Computer Organization with Computer Architecture for Security