

TECHNICAL INNOVATIONS. CMOS DEVICES AND CIRCUITS HAVE MORE INFLUENCE IN THIS EDITION AS WELL AS A REDUCED AMOUNT OF TEXT ON BiCMOS AND BIPOLAR INFORMATION. NEW CHAPTERS INCLUDE TOPICS ON FREQUENCY RESPONSE OF ANALOG ICs AND BASIC THEORY OF FEEDBACK AMPLIFIERS.

DIGITAL INTEGRATED CIRCUITS - JAN M. RABAAY 1996

BEGINNING WITH DISCUSSIONS ON THE OPERATION OF ELECTRONIC DEVICES AND ANALYSIS OF THE NUCLEUS OF DIGITAL DESIGN, THE TEXT ADDRESSES: THE IMPACT OF INTERCONNECT, DESIGN FOR LOW POWER, ISSUES IN TIMING AND CLOCKING, DESIGN METHODOLOGIES, AND THE EFFECT OF DESIGN AUTOMATION ON THE DIGITAL DESIGN PERSPECTIVE.

DIGITAL DESIGN AND COMPUTER ARCHITECTURE - SARAH HARRIS 2015-04-09

DIGITAL DESIGN AND COMPUTER ARCHITECTURE: ARM EDITION COVERS THE FUNDAMENTALS OF DIGITAL LOGIC DESIGN AND REINFORCES LOGIC CONCEPTS THROUGH THE DESIGN OF AN ARM MICROPROCESSOR. COMBINING AN ENGAGING AND HUMOROUS WRITING STYLE WITH AN UPDATED AND HANDS-ON APPROACH TO DIGITAL DESIGN, THIS BOOK TAKES THE READER FROM THE FUNDAMENTALS OF DIGITAL LOGIC TO THE ACTUAL DESIGN OF AN ARM PROCESSOR. BY THE END OF THIS BOOK, READERS WILL BE ABLE TO BUILD THEIR OWN MICROPROCESSOR AND WILL HAVE A TOP-TO-BOTTOM UNDERSTANDING OF HOW IT WORKS. BEGINNING WITH DIGITAL LOGIC GATES AND PROGRESSING TO THE DESIGN OF COMBINATIONAL AND SEQUENTIAL CIRCUITS, THIS BOOK USES THESE FUNDAMENTAL BUILDING BLOCKS AS THE BASIS FOR DESIGNING AN ARM PROCESSOR. SYSTEMVERILOG AND VHDL ARE INTEGRATED THROUGHOUT THE TEXT IN EXAMPLES ILLUSTRATING THE METHODS AND TECHNIQUES FOR CAD-BASED CIRCUIT DESIGN. THE COMPANION WEBSITE INCLUDES A CHAPTER ON I/O SYSTEMS WITH PRACTICAL EXAMPLES THAT SHOW HOW TO USE THE RASPBERRY PI COMPUTER TO COMMUNICATE WITH PERIPHERAL DEVICES SUCH AS LCDs, BLUETOOTH RADIOS, AND MOTORS. THIS BOOK WILL BE A VALUABLE RESOURCE FOR STUDENTS TAKING A COURSE THAT COMBINES DIGITAL LOGIC AND COMPUTER ARCHITECTURE OR STUDENTS TAKING A TWO-QUARTER SEQUENCE IN DIGITAL LOGIC AND COMPUTER ORGANIZATION/ARCHITECTURE.

COVERS THE FUNDAMENTALS OF DIGITAL LOGIC DESIGN AND REINFORCES LOGIC CONCEPTS THROUGH THE DESIGN OF AN ARM MICROPROCESSOR. FEATURES SIDE-BY-SIDE EXAMPLES OF THE TWO MOST PROMINENT HARDWARE DESCRIPTION LANGUAGES (HDLs)—SYSTEMVERILOG AND VHDL—WHICH ILLUSTRATE AND COMPARE THE WAYS EACH CAN BE USED IN THE DESIGN OF DIGITAL SYSTEMS. INCLUDES EXAMPLES THROUGHOUT THE TEXT THAT ENHANCE THE READER'S UNDERSTANDING AND RETENTION OF KEY CONCEPTS AND TECHNIQUES. THE COMPANION WEBSITE INCLUDES A CHAPTER ON I/O SYSTEMS WITH PRACTICAL EXAMPLES THAT SHOW HOW TO USE THE RASPBERRY PI COMPUTER TO COMMUNICATE WITH PERIPHERAL DEVICES SUCH AS LCDs, BLUETOOTH RADIOS, AND MOTORS. THE COMPANION WEBSITE ALSO INCLUDES APPENDICES COVERING PRACTICAL DIGITAL DESIGN ISSUES AND C PROGRAMMING AS WELL AS LINKS TO CAD TOOLS, LECTURE SLIDES, LABORATORY PROJECTS, AND SOLUTIONS TO EXERCISES.

BUILDING EMBEDDED SYSTEMS - CHANGYI GU 2016-05-26

DEVELOP THE SOFTWARE AND HARDWARE YOU NEVER THINK ABOUT. WE'RE TALKING ABOUT THE NITTY-GRITTY BEHIND THE BUTTONS ON YOUR MICROWAVE, INSIDE YOUR THERMOSTAT, INSIDE THE KEYBOARD USED TO TYPE THIS DESCRIPTION, AND EVEN RUNNING THE MONITOR ON WHICH YOU ARE READING IT NOW. SUCH STUFF IS TERMED EMBEDDED SYSTEMS, AND THIS BOOK SHOWS HOW TO DESIGN AND DEVELOP EMBEDDED SYSTEMS AT A PROFESSIONAL LEVEL.

BECAUSE YES, MANY PEOPLE QUIETLY MAKE A SUCCESSFUL CAREER DOING JUST THAT. BUILDING EMBEDDED SYSTEMS CAN BE BOTH FUN AND INTIMIDATING. PUTTING TOGETHER AN EMBEDDED SYSTEM REQUIRES SKILL SETS FROM MULTIPLE ENGINEERING DISCIPLINES, FROM SOFTWARE AND HARDWARE IN PARTICULAR. BUILDING EMBEDDED SYSTEMS IS A BOOK ABOUT HELPING YOU DO THINGS IN THE RIGHT WAY FROM THE BEGINNING OF YOUR FIRST PROJECT: PROGRAMMERS WHO KNOW SOFTWARE WILL LEARN WHAT THEY NEED TO KNOW ABOUT HARDWARE. ENGINEERS WITH HARDWARE KNOWLEDGE LIKewise WILL LEARN ABOUT THE SOFTWARE SIDE.

WHATEVER YOUR BACKGROUND IS, BUILDING EMBEDDED SYSTEMS IS THE PERFECT BOOK TO FILL IN ANY KNOWLEDGE GAPS AND GET YOU STARTED IN A CAREER PROGRAMMING FOR EVERYDAY DEVICES. AUTHOR CHANGYI GU BRINGS MORE THAN FIFTEEN YEARS OF EXPERIENCE IN WORKING HIS WAY UP THE LADDER IN THE FIELD OF EMBEDDED SYSTEMS. HE BRINGS KNOWLEDGE OF NUMEROUS APPROACHES TO EMBEDDED SYSTEMS DESIGN, INCLUDING THE SYSTEM ON PROGRAMMABLE CHIPS (SOPC) APPROACH THAT IS CURRENTLY GROWING TO DOMINATE THE FIELD. HIS KNOWLEDGE AND EXPERIENCE MAKE BUILDING EMBEDDED SYSTEMS AN EXCELLENT BOOK FOR ANYONE WANTING TO ENTER THE FIELD, OR EVEN JUST TO DO SOME EMBEDDED PROGRAMMING AS A SIDE PROJECT. WHAT YOU WILL LEARN PROGRAM EMBEDDED SYSTEMS AT THE HARDWARE LEVEL LEARN CURRENT INDUSTRY PRACTICES IN FIRMWARE DEVELOPMENT DEVELOP PRACTICAL KNOWLEDGE OF EMBEDDED HARDWARE OPTIONS CREATE TIGHT INTEGRATION BETWEEN SOFTWARE AND HARDWARE PRACTICE A WORK FLOW LEADING TO SUCCESSFUL OUTCOMES BUILD FROM TRANSISTOR LEVEL TO THE SYSTEM LEVEL MAKE SOUND CHOICES BETWEEN PERFORMANCE AND COST WHO THIS BOOK IS FOR EMBEDDED-SYSTEM ENGINEERS AND INTERMEDIATE ELECTRONICS ENTHUSIASTS WHO ARE SEEKING TIGHTER INTEGRATION BETWEEN SOFTWARE AND HARDWARE. THOSE WHO FAVOR THE SYSTEM ON A PROGRAMMABLE CHIP (SOPC) APPROACH WILL IN PARTICULAR BENEFIT FROM THIS BOOK. STUDENTS IN BOTH ELECTRICAL ENGINEERING AND COMPUTER SCIENCE CAN ALSO BENEFIT FROM THIS BOOK AND THE REAL-LIFE INDUSTRY PRACTICE IT PROVIDES.

CMOS DIGITAL INTEGRATED CIRCUITS - SUNG-MO KANG 1999

THE SECOND EDITION OF THIS COMPREHENSIVE TEXT CONTAINS EXTENSIVE REVISIONS TO REFLECT RECENT ADVANCES IN TECHNOLOGY AND IN CIRCUIT DESIGN PRACTICES. RECOGNIZING THAT THE AREA OF DIGITAL INTEGRATED CIRCUIT DESIGN IS EVOLVING AT AN INCREASINGLY FAST PACE, EVERY EFFORT HAS BEEN MADE TO PRESENT STATE-OF-THE-ART MATERIAL ON ALL SUBJECTS COVERED IN THE BOOK. THIS BOOK IS PRIMARILY DESIGNED AS A COMPREHENSIVE TEXT FOR SENIOR LEVEL AND FIRST-YEAR GRADUATE LEVEL DIGITAL CIRCUIT DESIGN

CLASSES, AS WELL AS A REFERENCE FOR PRACTICING ENGINEERS IN THE AREAS OF IC DESIGN AND VLSI.

SCIENTIFIC AND TECHNICAL BOOKS IN PRINT - 1972

SCIENTIFIC AND TECHNICAL BOOKS AND SERIALS IN PRINT - 1989

DIGITAL DESIGN 2ND EDITION WITH RTL DESIGN, VHDL, AND VERILOG AND VERILOG FOR DIGITAL DESIGN SET - FRANK VAHID 2010-02-18

DIGITAL DESIGN 2ND EDITION WITH RTL DESIGN, VHDL, AND VERILOG AND VHDL FOR DIGITAL DESIGN SET - FRANK VAHID 2010-02-18

ENGINEERING EDUCATION - 1989

SOLUTION MANUAL TO ACCOMPANY CMOS DIGITAL INTEGRATED CIRCUITS : ANALYSIS AND DESIGN, SECOND EDITION - SUNG-MO KANG 1999

CMOS - R. JACOB BAKER 2008

THIS EDITION PROVIDES AN IMPORTANT CONTEMPORARY VIEW OF A WIDE RANGE OF ANALOG/DIGITAL CIRCUIT BLOCKS, THE BSIM MODEL, DATA CONVERTER ARCHITECTURES, AND MORE. THE AUTHORS DEVELOP DESIGN TECHNIQUES FOR BOTH LONG- AND SHORT-CHANNEL CMOS TECHNOLOGIES AND THEN COMPARE THE TWO.

ANALYSIS AND DESIGN OF DIGITAL INTEGRATED CIRCUITS - DAVID A. HODGES 2003

THE THIRD EDITION OF HODGES AND JACKSON'S ANALYSIS AND DESIGN OF DIGITAL INTEGRATED CIRCUITS HAS BEEN THOROUGHLY REVISED AND UPDATED BY A NEW CO-AUTHOR, RESVE SALEH OF THE UNIVERSITY OF BRITISH COLUMBIA. THE NEW EDITION COMBINES THE APPROACHABILITY AND CONCISE NATURE OF THE HODGES AND JACKSON CLASSIC WITH A COMPLETE OVERHAUL TO BRING THE BOOK INTO THE 21ST CENTURY. THE NEW EDITION HAS REPLACED THE EMPHASIS ON BI-POLAR WITH AN EMPHASIS ON CMOS. THE OUTDATED MOS TRANSISTOR MODEL USED THROUGHOUT THE BOOK WILL BE REPLACED WITH THE NOW STANDARD DEEP SUBMICRON MODEL. THE MATERIAL ON MEMORY HAS BEEN EXPANDED AND UPDATED. AS WELL THE BOOK NOW INCLUDES MORE ON SPICE SIMULATION AND NEW PROBLEMS THAT REFLECT RECENT TECHNOLOGIES. THE EMPHASIS OF THE BOOK IS ON DESIGN, BUT IT DOES NOT NEGLECT ANALYSIS AND HAS AS A GOAL TO PROVIDE ENOUGH INFORMATION SO THAT A STUDENT CAN CARRY OUT ANALYSIS AS WELL AS BE ABLE TO DESIGN A CIRCUIT. THIS BOOK PROVIDES AN EXCELLENT AND BALANCED INTRODUCTION TO DIGITAL CIRCUIT DESIGN FOR BOTH STUDENTS AND PROFESSIONALS.

EMBEDDED SoPC DESIGN WITH NIOS II PROCESSOR AND VHDL EXAMPLES - PONG P. CHU 2011-09-26

THE BOOK IS DIVIDED INTO FOUR MAJOR PARTS. PART I COVERS HDL CONSTRUCTS AND SYNTHESIS OF BASIC DIGITAL CIRCUITS. PART II PROVIDES AN OVERVIEW OF EMBEDDED SOFTWARE DEVELOPMENT WITH THE EMPHASIS ON LOW-LEVEL I/O ACCESS AND DRIVERS. PART III DEMONSTRATES THE

DESIGN AND DEVELOPMENT OF HARDWARE AND SOFTWARE FOR SEVERAL COMPLEX I/O PERIPHERALS, INCLUDING PS2 KEYBOARD AND MOUSE, A GRAPHIC VIDEO CONTROLLER, AN AUDIO CODEC, AND AN SD (SECUREDIGITAL) CARD. PART IV PROVIDES THREE CASE STUDIES OF THE INTEGRATION OF HARDWARE ACCELERATORS, INCLUDING A CUSTOM GCD (GREATEST COMMON DIVISOR) CIRCUIT, A MANDEL BROTT SET FRACTAL CIRCUIT, AND AN AUDIO SYNTHESIZER BASED ON DDFS (DIRECT DIGITAL FREQUENCY SYNTHESIS) METHODOLOGY. THE BOOK UTILIZES FPGA DEVICES, NIOS II SOFT-CORE PROCESSOR, AND DEVELOPMENT PLATFORM FROM ALTERA CO., WHICH IS ONE OF THE TWO MAIN FPGA MANUFACTURERS. ALTERA HAS A GENEROUS UNIVERSITY PROGRAM THAT PROVIDES FREE SOFTWARE AND DISCOUNTED PROTOTYPING BOARDS FOR EDUCATIONAL INSTITUTIONS (DETAILS AT [AHREF="HTTP://WWW.ALTERA.COM/UNIVERSITY"](http://www.altera.com/university) "HTTP://WWW.ALTERA.COM/UNIVERSITY/SPAN/A). THE TWO MAIN EDUCATIONAL PROTOTYPING BOARDS ARE KNOWN AS DE1 (\$99) AND DE2 (\$269). ALL EXPERIMENTS CAN BE IMPLEMENTED AND TESTED WITH THESE BOARDS. A BOARD COMBINED WITH THIS BOOK BECOMES A "TURN-KEY" SOLUTION FOR THE SoPC DESIGN EXPERIMENTS AND PROJECTS. MOST HDL AND C CODES IN THE BOOK ARE DEVICE INDEPENDENT AND CAN BE ADAPTED BY OTHER PROTOTYPING BOARDS AS LONG AS A BOARD HAS SIMILAR I/O CONFIGURATION.

MICROELECTRONIC CIRCUITS - MUHAMMAD H. RASHID 2011

CMOS DIGITAL INTEGRATED CIRCUITS - SUNG-MO KANG 2002

THE FOURTH EDITION OF CMOS DIGITAL INTEGRATED CIRCUITS: ANALYSIS AND DESIGN CONTINUES THE WELL-ESTABLISHED TRADITION OF THE EARLIER EDITIONS BY OFFERING THE MOST COMPREHENSIVE COVERAGE OF DIGITAL CMOS CIRCUIT DESIGN, AS WELL AS ADDRESSING STATE-OF-THE-ART TECHNOLOGY ISSUES HIGHLIGHTED BY THE WIDESPREAD USE OF NANOMETER-SCALE CMOS TECHNOLOGIES. IN THIS LATEST EDITION, VIRTUALLY ALL CHAPTERS HAVE BEEN RE-WRITTEN, THE TRANSISTOR MODEL EQUATIONS AND DEVICE PARAMETERS HAVE BEEN REVISED TO REFLECT THE SIGNIFICANT CHANGES THAT MUST BE TAKEN INTO ACCOUNT FOR NEW TECHNOLOGY GENERATIONS, AND THE MATERIAL HAS BEEN REINFORCED WITH UP-TO-DATE EXAMPLES. THE BROAD-RANGING COVERAGE OF THIS TEXTBOOK STARTS WITH THE FUNDAMENTALS OF CMOS PROCESS TECHNOLOGY, AND CONTINUES WITH MOS TRANSISTOR MODELS, BASIC CMOS GATES, INTERCONNECT EFFECTS, DYNAMIC CIRCUITS, MEMORY CIRCUITS, ARITHMETIC BUILDING BLOCKS, CLOCK AND I/O CIRCUITS, LOW POWER DESIGN TECHNIQUES, DESIGN FOR MANUFACTURABILITY AND DESIGN FOR TESTABILITY.

THE BRITISH NATIONAL BIBLIOGRAPHY - ARTHUR JAMES WELLS 1990

A COMPUTER-AIDED DESIGN AND SYNTHESIS ENVIRONMENT FOR ANALOG INTEGRATED CIRCUITS - GEERT VAN DER PLAS 2006-04-18

THIS TEXT ADDRESSES THE DESIGN METHODOLOGIES AND CAD

TOOLS AVAILABLE FOR THE SYSTEMATIC DESIGN AND DESIGN AUTOMATION OF ANALOGUE INTEGRATED CIRCUITS. TWO COMPLEMENTARY APPROACHES DISCUSSED INCREASE ANALOGUE DESIGN PRODUCTIVITY, DEMONSTRATED THROUGHOUT USING DESIGN TIMES OF THE DIFFERENT DESIGN EXPERIMENTS UNDERTAKEN.

EMBEDDED SoPC DESIGN WITH NIOS II PROCESSOR AND VERILOG EXAMPLES - PONG P. CHU 2012-05-14

EXPLORES THE UNIQUE HARDWARE PROGRAMMABILITY OF FPGA-BASED EMBEDDED SYSTEMS, USING A LEARN-BY-DOING APPROACH TO INTRODUCE THE CONCEPTS AND TECHNIQUES FOR EMBEDDED SoPC DESIGN WITH VERILOG AN SoPC (SYSTEM ON A PROGRAMMABLE CHIP) INTEGRATES A PROCESSOR, MEMORY MODULES, I/O PERIPHERALS, AND CUSTOM HARDWARE ACCELERATORS INTO A SINGLE FPGA (FIELD-PROGRAMMABLE GATE ARRAY) DEVICE. IN ADDITION TO THE CUSTOMIZED SOFTWARE, CUSTOMIZED HARDWARE CAN BE DEVELOPED AND INCORPORATED INTO THE EMBEDDED SYSTEM AS WELL—ALLOWING US TO CONFIGURE THE SOFT-CORE PROCESSOR, CREATE TAILORED I/O INTERFACES, AND DEVELOP SPECIALIZED HARDWARE ACCELERATORS FOR COMPUTATION-INTENSIVE TASKS. UTILIZING AN ALTERA FPGA PROTOTYPING BOARD AND ITS NIOS II SOFT-CORE PROCESSOR, *EMBEDDED SoPC DESIGN WITH NIOS II PROCESSOR AND VERILOG EXAMPLES* TAKES A “LEARN BY DOING” APPROACH TO ILLUSTRATE THE HARDWARE AND SOFTWARE DESIGN AND DEVELOPMENT PROCESS BY INCLUDING REALISTIC PROJECTS THAT CAN BE IMPLEMENTED AND TESTED ON THE BOARD. EMPHASIZING HARDWARE DESIGN AND INTEGRATION THROUGHOUT, THE BOOK IS DIVIDED INTO FOUR MAJOR PARTS: PART I COVERS HDL AND SYNTHESIS OF CUSTOM HARDWARE PART II INTRODUCES THE NIOS II PROCESSOR AND PROVIDES AN OVERVIEW OF EMBEDDED SOFTWARE DEVELOPMENT PART III DEMONSTRATES THE DESIGN AND DEVELOPMENT OF HARDWARE AND SOFTWARE OF SEVERAL COMPLEX I/O PERIPHERALS, INCLUDING A PS2 KEYBOARD AND MOUSE, A GRAPHIC VIDEO CONTROLLER, AN AUDIO CODEC, AND AN SD (SECURE DIGITAL) CARD PART IV PROVIDES SEVERAL CASE STUDIES OF THE INTEGRATION OF HARDWARE ACCELERATORS, INCLUDING A CUSTOM GCD (GREATEST COMMON DIVISOR) CIRCUIT, A MANDELBROT SET FRACTAL CIRCUIT, AND AN AUDIO SYNTHESIZER BASED ON DDFS (DIRECT DIGITAL FREQUENCY SYNTHESIS) METHODOLOGY WHILE DESIGNING AND DEVELOPING AN EMBEDDED SoPC CAN BE REWARDING, THE LEARNING CAN BE A LONG AND WINDING JOURNEY. THIS BOOK SHOWS THE TRAIL AHEAD AND GUIDES READERS THROUGH THE INITIAL STEPS TO EXPLOIT THE FULL POTENTIAL OF THIS EMERGING METHODOLOGY.

BASIC OPERATIONAL AMPLIFIERS AND LINEAR INTEGRATED CIRCUITS - THOMAS L. FLOYD 1999

THIS BOOK OFFERS COMPREHENSIVE COVERAGE OF A WIDE, RELEVANT ARRAY OF OPERATIONAL AMPLIFIER TOPICS. KEY TOPICS: THE BOOK INTEGRATES THEORY, PRACTICAL CIRCUITS, AND TROUBLESHOOTING CONCEPTS, KEEPING MATHEMATICAL DETAILS TO A MINIMUM. DELVING MORE DEEPLY INTO COVERAGE OF OPERATIONAL AMPLIFIERS, THE BOOK GUIDES READERS THROUGH A SYSTEM OF PEDAGOGICAL TOOLS THAT BOTH REINFORCES AND CHALLENGES THEIR

UNDERSTANDING. AN ESSENTIAL REFERENCE IN ELECTRONIC TECHNOLOGY.

BOOKS IN PRINT - 1994

COMMUNITY AND JUNIOR COLLEGE JOURNAL - 1976

DIGITAL INTEGRATED CIRCUITS - JOHN E. AYERS 2018-09-03

EXPONENTIAL IMPROVEMENT IN FUNCTIONALITY AND PERFORMANCE OF DIGITAL INTEGRATED CIRCUITS HAS REVOLUTIONIZED THE WAY WE LIVE AND WORK. THE CONTINUED SCALING DOWN OF MOS TRANSISTORS HAS BROADENED THE SCOPE OF USE FOR CIRCUIT TECHNOLOGY TO THE POINT THAT TEXTS ON THE TOPIC ARE GENERALLY LACKING AFTER A FEW YEARS. THE SECOND EDITION OF *DIGITAL INTEGRATED CIRCUITS: ANALYSIS AND DESIGN* FOCUSES ON TIMELESS PRINCIPLES WITH A MODERN INTERDISCIPLINARY VIEW THAT WILL SERVE INTEGRATED CIRCUITS ENGINEERS FROM ALL DISCIPLINES FOR YEARS TO COME. PROVIDING A REVISED INSTRUCTIONAL REFERENCE FOR ENGINEERS INVOLVED WITH VERY LARGE SCALE INTEGRATED CIRCUIT DESIGN AND FABRICATION, THIS BOOK DELVES INTO THE DRAMATIC ADVANCES IN THE FIELD, INCLUDING NEW APPLICATIONS AND CHANGES IN THE PHYSICS OF OPERATION MADE POSSIBLE BY RELENTLESS MINIATURIZATION. THIS BOOK WAS CONCEIVED IN THE VERSATILE SPIRIT OF THE FIELD TO BRIDGE A VOID THAT HAD EXISTED BETWEEN BOOKS ON TRANSISTOR ELECTRONICS AND THOSE COVERING VLSI DESIGN AND FABRICATION AS A SEPARATE TOPIC. LIKE THE FIRST EDITION, THIS VOLUME IS A CRUCIAL LINK FOR INTEGRATED CIRCUIT ENGINEERS AND THOSE STUDYING THE FIELD, SUPPLYING THE CROSS-DISCIPLINARY CONNECTIONS THEY REQUIRE FOR GUIDANCE IN MORE ADVANCED WORK. FOR PEDAGOGICAL REASONS, THE AUTHOR USES SPICE LEVEL 1 COMPUTER SIMULATION MODELS BUT INTRODUCES BSIM MODELS THAT ARE INDISPENSABLE FOR VLSI DESIGN. THIS ENABLES USERS TO DEVELOP A STRONG AND INTUITIVE SENSE OF DEVICE AND CIRCUIT DESIGN BY DRAWING DIRECT CONNECTIONS BETWEEN THE HAND ANALYSIS AND THE SPICE MODELS. WITH FOUR NEW CHAPTERS, MORE THAN 200 NEW ILLUSTRATIONS, NUMEROUS WORKED EXAMPLES, CASE STUDIES, AND SUPPORT PROVIDED ON A DYNAMIC WEBSITE, THIS TEXT SIGNIFICANTLY EXPANDS CONCEPTS PRESENTED IN THE FIRST EDITION.

SUBJECT GUIDE TO BOOKS IN PRINT - 1990

VLSI FOR WIRELESS COMMUNICATION - BOSCO LEUNG 2011-11-06

VLSI FOR WIRELESS COMMUNICATION, SECOND EDITION, AN ADVANCED LEVEL TEXT BOOK, TAKES A SYSTEM APPROACH STARTING WITH AN OVERVIEW OF THE MOST UP TO DATE WIRELESS SYSTEMS AND THE TRANSCEIVER ARCHITECTURE AVAILABLE TODAY. WIRELESS STANDARDS ARE FIRST INTRODUCED (UPDATED TO INCLUDE THE MOST RECENT 3G/4G STANDARDS IN THE SECOND EDITION), AND TRANSLATES FROM A WIRELESS STANDARD TO THE IMPLEMENTATION OF A TRANSCEIVER. THIS SYSTEM APPROACH IS PARTICULARLY IMPORTANT AS THE LEVEL OF INTEGRATION IN VLSI INCREASES AND COUPLING BETWEEN SYSTEM AND

COMPONENT DESIGN BECOMES MORE INTIMATE. VLSI FOR WIRELESS COMMUNICATION, SECOND EDITION, ILLUSTRATES DESIGNS WITH FULL DESIGN EXAMPLES. EACH CHAPTER INCLUDES AT LEAST ONE COMPLETE DESIGN EXAMPLE THAT HELPS EXPLAIN THE ARCHITECTURE/CIRCUITS PRESENTED IN THIS TEXT. THIS BOOK HAS CLOSE TO 10 HOMEWORK PROBLEMS AT THE END OF EACH CHAPTER. A COMPLETE SOLUTIONS MANUAL IS AVAILABLE ON-LINE. VLSI FOR WIRELESS COMMUNICATION, SECOND EDITION, IS DESIGNED AS A PRIMARY TEXT BOOK FOR UPPER-UNDERGRADUATE LEVEL STUDENTS AND GRADUATE LEVEL STUDENTS CONCENTRATING ON ELECTRICAL ENGINEERING AND COMPUTER SCIENCE. PROFESSIONAL ENGINEERS AND RESEARCHERS WORKING IN WIRELESS COMMUNICATIONS, CIRCUIT DESIGN AND DEVELOPMENT WILL FIND THIS BOOK VALUABLE AS WELL.

FOUNDATIONS OF ANALOG AND DIGITAL ELECTRONIC CIRCUITS - ANANT AGARWAL 2005-07-01

UNLIKE BOOKS CURRENTLY ON THE MARKET, THIS BOOK ATTEMPTS TO SATISFY TWO GOALS: COMBINE CIRCUITS AND ELECTRONICS INTO A SINGLE, UNIFIED TREATMENT, AND ESTABLISH A STRONG CONNECTION WITH THE CONTEMPORARY WORLD OF DIGITAL SYSTEMS. IT WILL INTRODUCE A NEW WAY OF LOOKING NOT ONLY AT THE TREATMENT OF CIRCUITS, BUT ALSO AT THE TREATMENT OF INTRODUCTORY COURSEWORK IN ENGINEERING IN GENERAL. USING THE CONCEPT OF "ABSTRACTION," THE BOOK ATTEMPTS TO FORM A BRIDGE BETWEEN THE WORLD OF PHYSICS AND THE WORLD OF LARGE COMPUTER SYSTEMS. IN PARTICULAR, IT ATTEMPTS TO UNIFY ELECTRICAL ENGINEERING AND COMPUTER SCIENCE AS THE ART OF CREATING AND EXPLOITING SUCCESSIVE ABSTRACTIONS TO MANAGE THE COMPLEXITY OF BUILDING USEFUL ELECTRICAL SYSTEMS. COMPUTER SYSTEMS ARE SIMPLY ONE TYPE OF ELECTRICAL SYSTEMS. +BALANCES CIRCUITS THEORY WITH PRACTICAL DIGITAL ELECTRONICS APPLICATIONS. +ILLUSTRATES CONCEPTS WITH REAL DEVICES. +SUPPORTS THE POPULAR CIRCUITS AND ELECTRONICS COURSE ON THE MIT OPENCOURSE WARE FROM WHICH PROFESSIONALS WORLDWIDE STUDY THIS NEW APPROACH. +WRITTEN BY TWO EDUCATORS WELL KNOWN FOR THEIR INNOVATIVE TEACHING AND RESEARCH AND THEIR COLLABORATION WITH INDUSTRY. +FOCUSES ON CONTEMPORARY MOS TECHNOLOGY.

DIGITAL INTEGRATED CIRCUITS - THOMAS A. DEMASSA

1996

CONTAINS THE MOST EXTENSIVE COVERAGE OF DIGITAL INTEGRATED CIRCUITS AVAILABLE IN A SINGLE SOURCE. PROVIDES COMPLETE QUALITATIVE DESCRIPTIONS OF CIRCUIT OPERATION FOLLOWED BY IN-DEPTH ANALYTICAL ANALYSES AND SPICE SIMULATIONS. THE CIRCUIT FAMILIES DESCRIBED IN DETAIL ARE TRANSISTOR-TRANSISTOR LOGIC (TTL, STTL, AND ASTTL), EMITTER-COUPLED LOGIC (ECL), NMOS LOGIC, CMOS LOGIC, DYNAMIC CMOS, BICMOS STRUCTURES AND VARIOUS GASFET TECHNOLOGIES. IN ADDITION TO DETAILED PRESENTATION OF THE BASIC INVERTER CIRCUITS FOR EACH DIGITAL LOGIC FAMILY, COMPLETE DETAILS OF OTHER LOGIC CIRCUITS FOR THESE FAMILIES ARE PRESENTED.

BOOKS IN SERIES - 1985

VOLS. FOR 1980- ISSUED IN THREE PARTS: SERIES, AUTHORS, AND TITLES.

DIGITAL DESIGN WITH RTL DESIGN, VHDL, AND VERILOG - FRANK VAHID 2010-03-09

AN EAGERLY ANTICIPATED, UP-TO-DATE GUIDE TO ESSENTIAL DIGITAL DESIGN FUNDAMENTALS OFFERING A MODERN, UPDATED APPROACH TO DIGITAL DESIGN, THIS MUCH-NEEDED BOOK REVIEWS BASIC DESIGN FUNDAMENTALS BEFORE DIVING INTO ~~AMERICAN BOOK PUBLISHING COMPANY~~ APPLICATION. YOU BEGIN WITH AN EXAMINATION OF THE LOW-LEVELS OF DESIGN, NOTING A CLEAR DISTINCTION BETWEEN DESIGN AND GATE-LEVEL MINIMIZATION. THE AUTHOR THEN PROGRESSES TO THE KEY USES OF DIGITAL DESIGN TODAY, AND HOW IT IS USED TO BUILD HIGH-PERFORMANCE ALTERNATIVES TO SOFTWARE. OFFERS A FRESH, UP-TO-DATE APPROACH TO DIGITAL DESIGN, WHEREAS MOST LITERATURE AVAILABLE IS SORELY OUTDATED PROGRESSES THROUGH LOW LEVELS OF DESIGN, MAKING A CLEAR DISTINCTION BETWEEN DESIGN AND GATE-LEVEL MINIMIZATION ADDRESSES THE VARIOUS USES OF DIGITAL DESIGN TODAY ENABLES YOU TO GAIN A CLEARER UNDERSTANDING OF APPLYING DIGITAL DESIGN TO YOUR LIFE WITH THIS BOOK BY YOUR SIDE, YOU'LL GAIN A BETTER UNDERSTANDING OF HOW TO APPLY THE MATERIAL IN THE BOOK TO REAL-WORLD SCENARIOS.

- 1993

COMPUTER BOOKS AND SERIALS IN PRINT - 1985

UNIFORM TRADE LIST ANNUAL - 1995