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Guidebook of Electronic Circuits Electronic Circuits Encyclopedia of Electronic Circuits, Volume 7 Foundations of Analog and Digital Electronic Circuits Digital Electronic Circuits - The Comprehensive View Lessons in Electric Circuits: An Encyclopedic Text & Reference Guide (6 Volumes Set) Protection of Electronic Circuits from Overvoltages A Practical Introduction to Electronic Circuits Electronic Circuit Design and Application Electronic Circuit Analysis Electronic Circuits Electronic Circuits Sourcebook of Electronic Circuits Electronic Circuits for the Evil Genius 2/E Electronic Circuits Schaum's Outline of Electronic Devices and Circuits, Second Edition Electronic Circuits Troubleshooting Electronic Circuits: A Guide to Learning Analog Electronics Fundamentals of Layout Design for Electronic Circuits A Textbook of Electronic Circuits The Encyclopedia of Electronic Circuits Foundations of Electronics ELECTRONIC CIRCUITS AND APPLICATIONS Electronics in easy steps Getting Started with Electronics Computer Simulation of Electronic Circuits Schaum's Outline of Theory and Problems of Electronic Circuits Fundamentals of Electronics Getting Started with Electronics Electronic Devices and Circuits Electronic Circuit Design Ideas Introduction to PSpice Manual for Electric Circuits Fatigue of Electronic Materials Electronic Circuits for the Evil Genius 2/E Tolerance Design of Electronic Circuits Advanced Electronic Circuits Electronics For Dummies Electric Circuits Tolerance Analysis of Electronic Circuits Using MATLAB Handbook of Electronic Circuits

The foremost and primary aim of the book is to meet the requirements of students of Anna University, Bharathidasan University, Mumbai University as well as B.E. / B.Sc of all other Indian Universities. Extracted from the highly successful Foundations of Electrical Engineering by the same author, this book surveys the fundamental concepts of electronics for non-majors. The first chapter reviews circuit analysis techniques as related to the analysis of electronic circuits, and the remainder of the book covers electronic devices, digital circuits, analog circuits, instrumentation systems,

communication systems, and linear system theory based on complex frequency techniques. The presentation assumes knowledge of basic physics and calculus and is ideal for a one-semester survey of electronics for students knowing circuit theory. Used with *Foundations of Electric Circuits*, this book is ideal for a one-semester course in circuits and electronics for physics, engineering, or computer science students. **FEATURES/BENEFITS** Emphasis is placed on clear definitions of concepts and vocabulary. Problems are offered at three levels: "What if" problems extending examples in the text, with answers; "Check our understanding" problems after each major section, with answers, and extensive end-of-chapter problems identified with chapter sections, with answers for odd problems. Full pedagogical tools: chapter objectives, marginal aids, chapter summaries, chapter glossaries tied to context, and a complete index. *Electronic Circuit Design Ideas* covers a wide variety of electronic circuit design, which consists of a circuit diagram, waveforms, and an explanation of how the circuit works. This text contains 14 chapters and starts with a review of the principles of digital circuits and interface circuits frequently used in circuit design. The next chapters describe the commonly used timer, op-amp, and amplifier circuits. Other chapters present some examples of waveform generators and oscillators used in circuit design. This work also looks into other classifications of circuits, including phase-locked loop, power-supply, and voltage regulator circuits. The final chapters are devoted to the methods of controlling DC servomotors and stepper motors. These chapters also examine other design ideas, specifically the use of slotted optical sensor based revolution detector, photodiode and magnetic transducer detector, and FSK circuit. This book will prove useful to electrical engineers, electronics professionals, hobbyists, and students. This book covers the fundamental knowledge of layout design from the ground up, addressing both physical design, as generally applied to digital circuits, and analog layout. Such knowledge provides the critical awareness and insights a layout designer must possess to convert a structural description produced during circuit design into the physical layout used for IC/PCB fabrication. The book introduces the technological know-how to transform silicon into functional devices, to understand the technology for which a layout is targeted (Chap. 2). Using this core technology knowledge as the foundation, subsequent chapters delve deeper into

specific constraints and aspects of physical design, such as interfaces, design rules and libraries (Chap. 3), design flows and models (Chap. 4), design steps (Chap. 5), analog design specifics (Chap. 6), and finally reliability measures (Chap. 7). Besides serving as a textbook for engineering students, this book is a foundational reference for today's circuit designers. Ever wanted to know how things work, especially electronic devices? *Electronics in easy steps* tells you all about the building blocks that make up electronic circuits and the components that make an electronic device tick. It explains electronics in an easy to understand way and then takes you through some simple but useful circuits that you can build for yourself. Areas covered include:

- the basic fundamentals of electricity
- getting started in electronics
- electronic theory explained
- resistors and capacitors – what they do
- transistors – how they work
- crystals and coils
- basic electronic building blocks
- simple circuits described and explained
- how a radio works
- designing simple circuits
- circuit design software
- making printed circuit boards
- building electronic circuits
- soldering techniques
- test equipment
- circuit testing and fault finding

Electronics in easy steps is ideal for anyone who has always wanted to know how electricity works and what electronic components do – from simple theory through to actually building, testing and troubleshooting useful and interesting circuits. Suitable for:

- Students
- DIY and Electronics Enthusiasts
- Hobbyists
- Radio Hobbyists
- Short Wave Listeners and Radio Amateur Foundation Exam students
- Members of the Cadets, Scouts, etc. and anyone with an inquisitive mind who wants to know how electricity and electronics works!

Publisher's Note: Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. *Debug, Tweak and fine-tune your DIY electronics projects* This hands-on guide shows, step by step, how to build, debug, and troubleshoot a wide range of analog electronic circuits. Written by electronics guru Ronald Quan, *Troubleshooting Electronic Circuits: A Guide to Learning Analog Circuits* clearly explains proper debugging techniques as well as testing and modifying methods. In multiple chapters, poorly-conceived circuits are analyzed and improved. Inside, you will discover how to design or re-design high-quality circuits that are repeatable and manufacturable. Coverage includes:

- An introduction to electronics troubleshooting
- Breadboards
- Power sources, batteries, battery

holders, safety issues, and volt meters • Basic electronic components • Diodes, rectifiers, and Zener diodes • Light emitting diodes (LEDs) • Bipolar junction transistors (BJTs) • Troubleshooting discrete circuits (simple transistor amplifiers) • Analog integrated circuits, including amplifiers and voltage regulators • Audio circuits • Troubleshooting analog integrated circuits • Ham radio circuits related to SDR • Trimmer circuits, including the 555 chip and CMOS circuits Fun and engaging electronics projects just for kids! Do you have a cunning kid who's curious about what goes on inside computers, phones, TVs, and other electronic devices? You may just have a budding Edison on your hands—and what better way to encourage their fascination with electronics than a book filled with projects they can complete on their own? In *Getting Started with Electronics*, your child will follow simple steps to safely create cool electronics projects using basic materials that can easily be found at online retailers or hobby shops. Just imagine your child's delight as they use clips, switches, resistors, capacitors, and more to create circuits that control light and sound! From building a nifty LED flashlight to tuning in to a local radio station using a homemade tuner—and more—your little electronic wiz's world is about to get a whole lot brighter! Features vivid designs and a short page count Focuses on your child experiencing a sense of accomplishment Projects introduce core concepts while keeping tasks simple Teaches electronics in a safe environment Built for the youngest of learners from the makers of the trusted *For Dummies* brand, you can feel good about giving your child a book that will spark their creativity. Unlike earlier electronic circuits, today's microelectronic devices demand that solder serve structural as well as electrical ends, and do so at relatively high temperature for years. Fatigue and failure of the solder has therefore become an issue in the industry. Nine studies from a May 1993 sympos Publisher's Note: Products purchased from Third Party sellers are not guaranteed by the publisher for quality, authenticity, or access to any online entitlements included with the product. 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. This book deals with key aspects of design of digital electronic circuits for different families of elementary electronic devices. Implementation of both simple and complex logic circuits are considered in detail, with special attention paid to the design of digital systems based on complementary metal-oxide-semiconductor (CMOS) and Pass-Transistor Logic (PTL) technologies acceptable for use in planar microelectronics technology. It is written for students in electronics and microelectronics, with exercises and solutions provided. Electronics explained in one volume, using both theoretical and practical applications. New chapter on Raspberry Pi Companion website contains free electronic tools to aid learning for students and a question bank for lecturers Practical investigations and questions within each chapter help reinforce learning Mike Tooley provides all the information required to get to grips with the fundamentals of electronics, detailing the underpinning knowledge necessary to appreciate the operation of a wide range of electronic circuits, including amplifiers, logic circuits, power supplies and oscillators. The fourth edition now offers an even more extensive range of topics, with extended coverage of practical areas such as Raspberry Pi. The book's content is matched to the latest pre-degree level courses (from Level 2 up to, and including, Foundation Degree and HND), making this an invaluable reference text for all study levels, and its broad coverage is combined with practical case studies based in real-world engineering contexts. In addition, each chapter includes a practical investigation designed to reinforce learning and provide a basis for further practical work. A new companion website at www.key2electronics.com offers the reader a set of spreadsheet

design tools that can be used to simplify circuit calculations, as well as circuit models and templates that will enable virtual simulation of circuits in the book. These are accompanied by online self-test multiple choice questions for each chapter with automatic marking, to enable students to continually monitor their own progress and understanding. A bank of online questions for lecturers to set as assignments is also available. Build your electronics workbench—and begin creating fun electronics projects right away Packed with hundreds of diagrams and photographs, this book provides step-by-step instructions for experiments that show you how electronic components work, advice on choosing and using essential tools, and exciting projects you can build in 30 minutes or less. You'll get charged up as you transform theory into action in chapter after chapter! Circuit basics — learn what voltage is, where current flows (and doesn't flow), and how power is used in a circuit Critical components — discover how resistors, capacitors, inductors, diodes, and transistors control and shape electric current Versatile chips — find out how to use analog and digital integrated circuits to build complex projects with just a few parts Analyze circuits — understand the rules that govern current and voltage and learn how to apply them Safety tips — get a thorough grounding in how to protect yourself—and your electronics—from harm P.S. If you think this book seems familiar, you're probably right. The Dummies team updated the cover and design to give the book a fresh feel, but the content is the same as the previous release of *Electronics For Dummies* (9781119117971). The book you see here shouldn't be considered a new or updated product. But if you're in the mood to learn something new, check out some of our other books. We're always writing about new topics! This textbook for core courses in *Electronic Circuit Design* teaches students the design and application of a broad range of analog electronic circuits in a comprehensive and clear manner. Readers will be enabled to design complete, functional circuits or systems. The authors first provide a foundation in the theory and operation of basic electronic devices, including the diode, bipolar junction transistor, field effect transistor, operational amplifier and current feedback amplifier. They then present comprehensive instruction on the design of working, realistic electronic circuits of varying levels of complexity, including power amplifiers, regulated power supplies, filters, oscillators and waveform generators. Many

examples help the reader quickly become familiar with key design parameters and design methodology for each class of circuits. Each chapter starts from fundamental circuits and develops them step-by-step into a broad range of applications of real circuits and systems. Written to be accessible to students of varying backgrounds, this textbook presents the design of realistic, working analog electronic circuits for key systems; Includes worked examples of functioning circuits, throughout every chapter, with an emphasis on real applications; Includes numerous exercises at the end of each chapter; Uses simulations to demonstrate the functionality of the designed circuits; Enables readers to design important electronic circuits including amplifiers, power supplies and oscillators. *Electronic Circuits* covers all important aspects and applications of modern analog and digital circuit design. The basics, such as analog and digital circuits, on operational amplifiers, combinatorial and sequential logic and memories, are treated in Part I, while Part II deals with applications. Each chapter offers solutions that enable the reader to understand ready-made circuits or to proceed quickly from an idea to a working circuit, and always illustrated by an example. Analog applications cover such topics as analog computing circuits. The digital sections deal with AD and DA conversion, digital computing circuits, microprocessors and digital filters. This editions contains the basic electronics for mobile communications. The accompanying CD-ROM contains PSPICE software, an analog-circuit-simulation package, plus simulation examples and model libraries related to the book topics. This textbook serves as a tutorial for engineering students. Fundamental circuit analysis methods are presented at a level accessible to students with minimal background in engineering. The emphasis of the book is on basic concepts, using mathematical equations only as needed. Analogies to everyday life are used throughout the book in order to make the material easier to understand. Even though this book focuses on the fundamentals, it reveals the authors' deep insight into the relationship between the phasor, Fourier transform, and Laplace transform, and explains to students why these transforms are employed in circuit analysis. A text for a two-semester electronics sequence for majors in electrical engineering, serving the special needs of computer engineers by allowing readers to advance to digital topics and skip linear applications. Assumes prior knowledge of circuit theory, Laplace

transforms and transfer functions, and ideal logic gates. Covers instrumentation-oriented topics, emphasizing operational amplifiers, and integrates SPICE modeling throughout the text. Includes summaries, problems, and b&w illustrations. Annotation c. Book News, Inc., Portland, OR (booknews.com). Covering principles and applications of analog and digital electronics, this volume is an ideal pre-degree text covering major areas of 21st century electronics. This updated version of its internationally popular predecessor provides an introductory problem-solved text for understanding fundamental concepts of electronic devices, their design, and their circuitry. Providing an interface with Pspice, the most widely used program in electronics, new key features include a new chapter presenting the basics of switched mode power supplies, thirty-one new examples, and twenty-three PS solved problems. Diagrams and describes the basic circuits used in alarms, switches, voltmeters, battery chargers, modulators, receivers, transmitters, oscillators, amplifiers, converters, pulse generators, and field strength meters The Fiendishly Fun Way to Master Electronic Circuits! Fully updated throughout, this wickedly inventive guide introduces electronic circuits and circuit design, both analog and digital, through a series of projects you'll complete one simple lesson at a time. The separate lessons build on each other and add up to projects you can put to practical use. You don't need to know anything about electronics to get started. A pre-assembled kit, which includes all the components and PC boards to complete the book projects, is available separately from ABRA electronics on Amazon. Using easy-to-find components and equipment, Electronic Circuits for the Evil Genius, Second Edition, provides hours of rewarding--and slightly twisted--fun. You'll gain valuable experience in circuit construction and design as you test, modify, and observe your results--skills you can put to work in other exciting circuit-building projects. Electronic Circuits for the Evil Genius: Features step-by-step instructions and helpful illustrations Provides tips for customizing the projects Covers the underlying electronics principles behind the projects Removes the frustration factor--all required parts are listed, along with sources Build these and other devious devices: Automatic night light Light-sensitive switch Along-to-digital converter Voltage-controlled oscillator Op amp-controlled power amplifier Burglar alarm Logic gate-based toy Two-way intercom using transistors and op amps Each fun, inexpensive Genius project includes a detailed list of

materials, sources for parts, schematics, and lots of clear, well-illustrated instructions for easy assembly. The larger workbook-style layout and convenient two-column format make following the step-by-step instructions a breeze. Make Great Stuff! TAB, an imprint of McGraw-Hill Professional, is a leading publisher of DIY technology books for makers, hackers, and electronics hobbyists. Fun and engaging electronics projects just for kids! Do you have a cunning kid who's curious about what goes on inside computers, phones, TVs, and other electronic devices? You may just have a budding Edison on your hands—and what better way to encourage their fascination with electronics than a book filled with projects they can complete on their own? In *Getting Started with Electronics*, your child will follow simple steps to safely create cool electronics projects using basic materials that can easily be found at online retailers or hobby shops. Just imagine your child's delight as they use clips, switches, resistors, capacitors, and more to create circuits that control light and sound! From building a nifty LED flashlight to tuning in to a local radio station using a homemade tuner—and more—your little electronic wiz's world is about to get a whole lot brighter! Features vivid designs and a short page count Focuses on your child experiencing a sense of accomplishment Projects introduce core concepts while keeping tasks simple Teaches electronics in a safe environment Built for the youngest of learners from the makers of the trusted *For Dummies* brand, you can feel good about giving your child a book that will spark their creativity. *Electronics explained in one volume, using both theoretical and practical applications. Mike Tooley provides all the information required to get to grips with the fundamentals of electronics, detailing the underpinning knowledge necessary to appreciate the operation of a wide range of electronic circuits, including amplifiers, logic circuits, power supplies and oscillators. The 5th edition includes an additional chapter showing how a wide range of useful electronic applications can be developed in conjunction with the increasingly popular Arduino microcontroller, as well as a new section on batteries for use in electronic equipment and some additional/updated student assignments. The book's content is matched to the latest pre-degree level courses (from Level 2 up to, and including, Foundation Degree and HND), making this an invaluable reference text for all study levels, and its broad coverage is combined with practical case studies based in real-world engineering*

contexts. In addition, each chapter includes a practical investigation designed to reinforce learning and provide a basis for further practical work. A companion website at <http://www.key2electronics.com> offers the reader a set of spreadsheet design tools that can be used to simplify circuit calculations, as well as circuit models and templates that will enable virtual simulation of circuits in the book. These are accompanied by online self-test multiple choice questions for each chapter with automatic marking, to enable students to continually monitor their own progress and understanding. A bank of online questions for lecturers to set as assignments is also available. Subtitle: Over 3,000 modern electronic circuits complete with values of all parts, organized in 100 logical chapters for quick reference and convenient browsing. Published 1968. Written for the practicing electronics professional, *Tolerance Analysis of Electronic Circuits Using MATLAB* offers a comprehensive, step-by-step treatment of methods used to perform analyses essential to the design process of circuit cards and systems of cards, including: worst-case analysis, limits for production testing, component stress analysis, determining if a design meets specification limits, and manufacturing yield analysis This book, *Electronic Devices and Circuit Application*, is the first of four books of a larger work, *Fundamentals of Electronics*. It is comprised of four chapters describing the basic operation of each of the four fundamental building blocks of modern electronics: operational amplifiers, semiconductor diodes, bipolar junction transistors, and field effect transistors. Attention is focused on the reader obtaining a clear understanding of each of the devices when it is operated in equilibrium. Ideas fundamental to the study of electronic circuits are also developed in the book at a basic level to lessen the possibility of misunderstandings at a higher level. The difference between linear and non-linear operation is explored through the use of a variety of circuit examples including amplifiers constructed with operational amplifiers as the fundamental component and elementary digital logic gates constructed with various transistor types. *Fundamentals of Electronics* has been designed primarily for use in an upper division course in electronics for electrical engineering students. Typically such a course spans a full academic year consisting of two semesters or three quarters. As such, *Electronic Devices and Circuit Applications*, and the following two books, *Amplifiers: Analysis and Design* and *Active Filters and*

Amplifier Frequency Response, form an appropriate body of material for such a course. Secondary applications include the use in a one-semester electronics course for engineers or as a reference for practicing engineers. There have been many advances in electronics since the publication of the first edition of Dr Jones' highly successful introduction to electronic circuits. This is reflected in two completely new chapters on digital techniques and computers which present in an easily digestible form the important relationship of the microcomputer chip to other circuits. In the remainder of the book many detailed, changes have updated it without destroying the original logical structure. The book remains a full account of the subject, starting with basic concepts such as amplification and progressing to analogue and digital IC chip applications. Practical rules and strategies designed to protect electronic systems from damage by transient overvoltages include symptoms and threats, remedies, protective devices and their applications, and validation of protective measures. 1989 edition. The fourth edition of this work continues to provide a thorough perspective of the subject, communicated through a clear explanation of the concepts and techniques of electric circuits. This edition was developed with keen attention to the learning needs of students. It includes illustrations that have been redesigned for clarity, new problems and new worked examples. Margin notes in the text point out the option of integrating PSpice with the provided Introduction to PSpice; and an instructor's roadmap (for instructors only) serves to classify homework problems by approach. The author has also given greater attention to the importance of circuit memory in electrical engineering, and to the role of electronics in the electrical engineering curriculum. In the earlier stages of integrated circuit design, analog circuits consisted simply of type 741 operational amplifiers, and digital circuits of 7400-type gates. Today's designers must choose from a much larger and rapidly increasing variety of special integrated circuits marketed by a dynamic and creative industry. Only by a proper selection from this wide range can an economical and competitive solution be found to a given problem. For each individual case the designer must decide which parts of a circuit are best implemented by analog circuitry, which by conventional digital circuitry and which sections could be microprocessor controlled. In order to facilitate this decision for the designer who is not familiar with all these subjects, we have arranged

the book so as to group the different circuits according to their field of application. Each chapter is thus written to stand on its own, with a minimum of cross-references. To enable the reader to proceed quickly from an idea to a working circuit, we discuss, for a large variety of problems, typical solutions, the applicability of which has been proved by thorough experimental investigation. Our thanks are here due to Prof. Dr. D. Seitzer for the provision of excellent laboratory facilities. The subject is extensive and the material presented has had to be limited. For this reason, we have omitted elementary circuit design, so that the book addresses the advanced student who has some background in electronics, and the practising engineer and scientist. Tolerance design techniques are playing an increasingly important role in maximizing the manufacturing yield of mass-produced electronic circuits. *Tolerance Design of Electronic Circuits* presents an account of design and analysis methods used to minimize the unwanted effects of component tolerances. Highlights of the book include • An overview of the concepts of Tolerance Analysis and Design • A detailed discussion of the Statistical Exploration Approach to tolerance design • An engineering discussion of the Monte Carlo statistical method • A presentation of several successful examples of the application of tolerance design This book will be highly appropriate for professional Electronic Circuit Designers, Computer Aided Design Specialists, Electronic Engineering undergraduates and graduates taking courses in Advanced Electronic Circuit Design.

Contents: The Problem Concepts and Representations Tolerance Analysis The Monte Carlo Method Tolerance Sensitivity An Overview of Tolerance Design Simple Methods Using Performance Calculations Methods Using Yield Gradients The Use of Sensitivity Analysis Questions and Answers

Readership: Professional electronic circuit designers, computer-aided design specialists, electronic engineering, undergraduates and graduates taking courses in advanced electronic circuit design. Special Features: • The book comprehensively covers fundamentals, operational aspects and applications of discrete semiconductor devices such as diodes, bipolar transistors, field effect transistors, unijunction transistors, and thyristors and optoelectronic devices in the discrete devices category and detail explanation of operational amplifiers is covered in the linear integrated circuits category. • The text is written in a lucid style and uses reader-friendly language. • The layout of the text is very

methodical with sections and sub-sections, making reading easy and interesting from beginning to end of each chapter. Each chapter concludes in a comprehensive self-evaluation exercise comprising objective-type questions (with answers), review questions and numerical problems (with answers). The text has sufficient worked problems, design examples, review questions and self-evaluation exercises for each chapter. Adequate study material and self-evaluation exercises are included to help students in both conventional and competitive exams.

About The Book: Understanding basic operational and applications of electronic devices is fundamental in understanding the functional and design aspects of electronics techniques, sub-system or system irrespective of whether it is analog or digital. The study of electronics devices and circuits is essential since majority of electronics systems have both analog and digital content. Though present day electronics is dominated by linear and digital integrated circuits, the importance of discrete devices cannot be undervalued as they continue to be used in large numbers in a variety of electronic circuits. In addition, understanding operational basics of these devices makes it easier to understand more complex integrated circuits. This textbook covers electronic devices and circuits in entirety, for undergraduate and graduate level courses. This study is pertinent for students of electronics, electrical, communication, instrumentation and control, information technology and even computer science engineering. The Fiendishly Fun Way to Master Electronic Circuits! Fully updated throughout, this wickedly inventive guide introduces electronic circuits and circuit design, both analog and digital, through a series of projects you'll complete one simple lesson at a time. The separate lessons build on each other and add up to projects you can put to practical use. You don't need to know anything about electronics to get started. A pre-assembled kit, which includes all the components and PC boards to complete the book projects, is available separately from ABRA electronics on Amazon. Using easy-to-find components and equipment, Electronic Circuits for the Evil Genius, Second Edition, provides hours of rewarding--and slightly twisted--fun. You'll gain valuable experience in circuit construction and design as you test, modify, and observe your results--skills you can put to work in other exciting circuit-building projects. Electronic Circuits for the Evil Genius: Features step-by-step instructions and helpful illustrations Provides tips for customizing the

projects Covers the underlying electronics principles behind the projects Removes the frustration factor--all required parts are listed, along with sources Build these and other devious devices: Automatic night light Light-sensitive switch Along-to-digital converter Voltage-controlled oscillator Op amp-controlled power amplifier Burglar alarm Logic gate-based toy Two-way intercom using transistors and op amps Each fun, inexpensive Genius project includes a detailed list of materials, sources for parts, schematics, and lots of clear, well-illustrated instructions for easy assembly. The larger workbook-style layout and convenient two-column format make following the step-by-step instructions a breeze. Make Great Stuff! TAB, an imprint of McGraw-Hill Professional, is a leading publisher of DIY technology books for makers, hackers, and electronics hobbyists. This Book On A Very Topical Subject Is Aimed At Engineers Who Either Use Or Develop Cad Tools For Circuit Design, Be It At The Discrete Device Level Or At The Lsi/Vlsi Level. The Book Is Unique In The Sense That It Covers Analog Circuit Simulation, Device Models, Logic Simulation And Fault Simulation. These Topics Traditionally Belong To Different Areas Of Electrical Engineering And Are Therefore Not Covered In One Book. However, A Person Doing Circuit Design On A Computer Today Needs To Know All Aspects Of The Simulation. This Book Attempts To Satisfy This Need. Many Examples Of Programs As Well As Applications Are Given. Every Chapter Contains Solved As Well As Unsolved Problems. In Addition, Programming Assignments Are Included. Mathematics Has Been Kept To A Minimum And An Intuitive Approach Has Been Taken. The Background Required Is That Of Final Year Undergraduate In Electrical Engineering. It Is Expected That Much Of This Material Would Percolate Down To More Basic Courses In Future Years. Contains more than thirty-six hundred recently published circuit diagrams together with information on component values, performance, and applications.