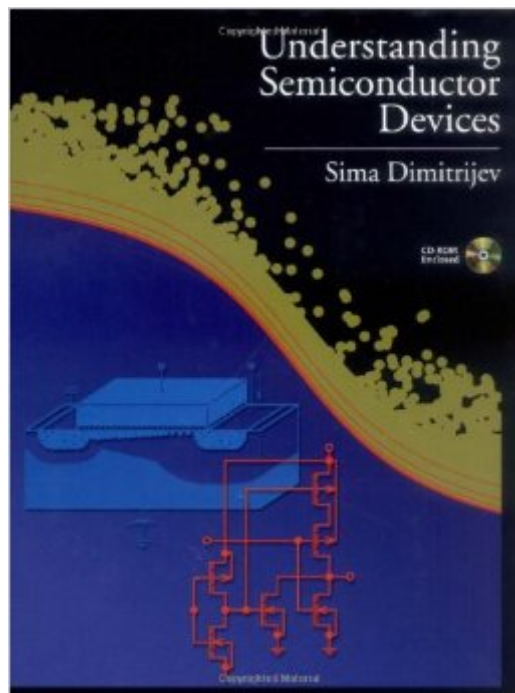


The book was found

Understanding Semiconductor Devices (The Oxford Series In Electrical And Computer Engineering)



Synopsis

Ideal for undergraduate and beginning graduate students in electrical engineering, *Understanding Semiconductor Devices* provides a solid grounding in both fundamental principles and practical skills. The text features intuitive explanations and a motivating "electronics-to-physics" approach that progresses from basic to more abstract concepts. It includes intriguing and diverse problems, review questions, and worked out examples.

- Part I: The Fundamentals introduces students to essential material (semiconductor theory, diodes, MOSFETs, and BJTs) without assuming extensive prerequisite knowledge.
- Part II: Advanced Topics covers the specifics of deep submicron MOSFET, photonic, microwave, and power devices and introduces advanced technologies, device reliability, and quantum mechanics.

Bridging the gap between theory and practice, *Understanding Semiconductor Devices* incorporates the "nuts and bolts" of SPICE (models and parameters) and provides links between theoretical principles and real-life issues like reliability and device parameter measurement.

Book Information

Series: The Oxford Series in Electrical and Computer Engineering

Hardcover: 592 pages

Publisher: Oxford University Press (February 24, 2000)

Language: English

ISBN-10: 019513186X

ISBN-13: 978-0195131864

Product Dimensions: 9.2 x 1.3 x 7.6 inches

Shipping Weight: 2.6 pounds

Average Customer Review: 5.0 out of 5 stars • See all reviews • (4 customer reviews)

Best Sellers Rank: #1,489,803 in Books (See Top 100 in Books) #37 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Solid State #193 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits > Integrated #263 in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Semiconductors

Customer Reviews

I have been using this book for my Electric Devices course. It is a really, really good book. I would very much recommend it to any professors to use it as their textbook for their class. It explains concepts very clearly, and easy to understand. A+ to the author!

This book is excellent. Every concept is clearly explained, pictures support every argument (I want to emphasise this: amazing). I have read many books about semiconductors, and again this one clarified just everything...The understanding that you get about Semiconductors through this book is just amazing. Very helpful for beginners and even better when you need to review some concepts that were poorly explained or badly learned in the past. Just excellent. Juan

As a graduate student going through the book by myself I found the content really useful as well as very understandable. I would highly recommend this book to anyone wishing to learn more about the basic as well as the more complex principles of semiconductor devices.

I am extremely happy to meet a most pedagogical textbook on device physics. His explanation is very comprehensive and illustrative. Drawing is a fantastic and explanation is intuitive and based on basic physics and mathematics thus it's very easy and comfortable to follow the book. This book is really recommended for undergraduate.

[Download to continue reading...](#)

Understanding Semiconductor Devices (The Oxford Series in Electrical and Computer Engineering)
Principles of Semiconductor Devices (The Oxford Series in Electrical and Computer Engineering)
Computer Architecture: From Microprocessors to Supercomputers (The Oxford Series in Electrical and Computer Engineering)
The Science and Engineering of Microelectronic Fabrication (The Oxford Series in Electrical and Computer Engineering)
Fabrication Engineering at the Micro- and Nanoscale (The Oxford Series in Electrical and Computer Engineering)
Linear System Theory and Design (The Oxford Series in Electrical and Computer Engineering)
Modern Digital and Analog Communication Systems (The Oxford Series in Electrical and Computer Engineering)
An Introduction to Mixed-Signal IC Test and Measurement (Oxford Series in Electrical and Computer Engineering)
Engineering (Hardcover) Electric Machinery and Transformers (The Oxford Series in Electrical and Computer Engineering)
Operation and Modeling of the MOS Transistor (The Oxford Series in Electrical and Computer Engineering)
Operation and Modeling of the MOS Transistor: Special MOOC Edition (The Oxford Series in Electrical and Computer Engineering)
Photonics: Optical Electronics in Modern Communications (The Oxford Series in Electrical and Computer Engineering)
Digital Control Systems (The Oxford Series in Electrical and Computer Engineering)
Design of Analog Filters 2nd Edition (The Oxford Series in Electrical and Computer Engineering)
CMOS Analog Circuit Design (The Oxford Series in Electrical and Computer Engineering)
Microelectronic

Circuits (The Oxford Series in Electrical and Computer Engineering) 7th edition Microelectronic
Circuits Revised Edition (Oxford Series in Electrical and Computer Engineering) Laboratory
Explorations to Accompany Microelectronic Circuits (The Oxford Series in Electrical and Computer
Engineering) Elements of Power Electronics (The Oxford Series in Electrical and Computer
Engineering) Analog Methods for Computer-Aided Circuit Analysis and Diagnosis (Electrical and
Computer Engineering)

[Dmca](#)