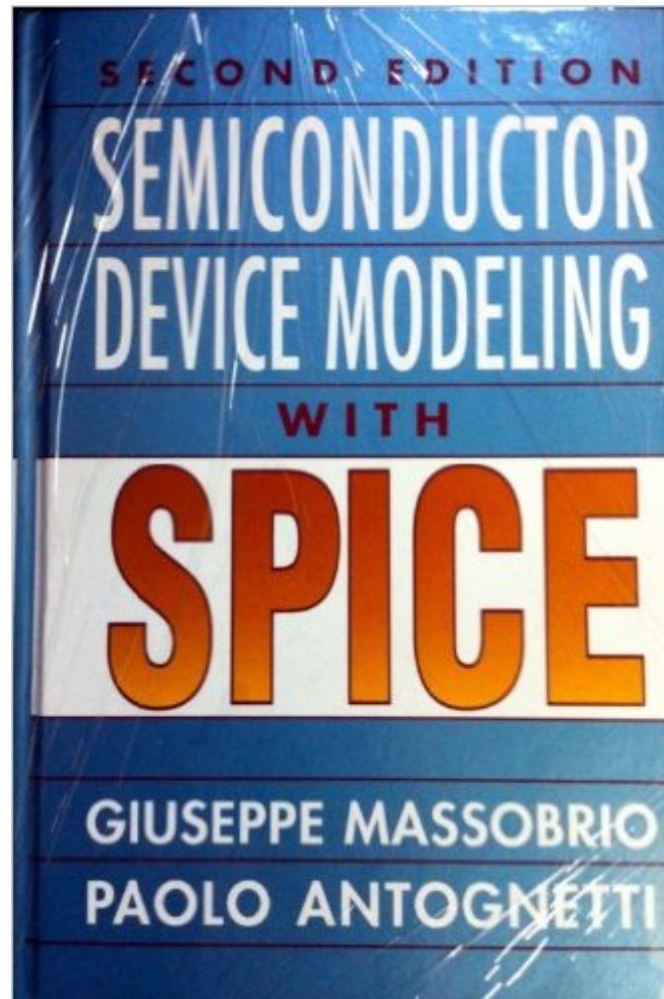


The book was found

Semiconductor Device Modeling With Spice



Synopsis

SPICE (Software Program with Integrated Circuit Emphasis) is a powerful design aid that electronics engineers learn and is the world standard for circuit simulation. And when circuit designers are using the various versions of SPICE to simulate circuits prior to fabrication and accurately predict future performance, this guide could be a useful reference. This revised version explains the ins and outs of SPICE, plus gives new data on modelling advanced devices such as MESFETs, ISFETs, and thyristors. The book should help readers gain maximum value from SPICE, also covering both MOS and FET models. Step by step, it takes the reader through the modelling process, providing complete information on a variety of semiconductor devices for designing specific circuit applications. These include: Pn junction and Schottky diodes; bipolar junction transistor (BJT); junction field effect transistor (JFET); metal oxide semiconductor field effect transistor (MESFET); ion sensitive field effect transistor (ISFET); and semiconductor controlled rectifier (SCR-thyristor). Given the immense and growing acceptance of SPICE, this revision should appeal to the audience of engineers, technicians, and students who use this design program.

Book Information

Hardcover: 479 pages

Publisher: McGraw-Hill Professional Publishing; 2 Sub edition (April 1, 1993)

Language: English

ISBN-10: 0070024693

ISBN-13: 978-0070024694

Product Dimensions: 9.3 x 6.3 x 1.3 inches

Shipping Weight: 1.9 pounds

Average Customer Review: 3.5 out of 5 stars [See all reviews](#) (2 customer reviews)

Best Sellers Rank: #1,143,854 in Books (See Top 100 in Books) #24 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Solid State](#) #196 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Semiconductors](#) #198 in [Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Logic](#)

Customer Reviews

Spice is a software package that become a de facto standar in circuit simulation. But as in any other circuit simulator we need to define the accurate input model to get the accurate results. And this book describe in more detail the components that is used in almost any electronic circuit, i.e.

semiconductor devices. The value that is a credit point for this book is not just how detail the description of the semiconductor model is in order to get the accurate parameters but also how to use those parameters in Spice. So, for you who new to this circuit simulator there is no need to worry because this book explain how the circuit model is built using Spice. And for you who need the basic theory of semiconductor model the book gives two nice appendices on that one. One chapter that is need to be explored in more detail is about noise and distortion (hopefully in the next edition the editor could have more on that topic). Finally, this is a "must be read" book for you who want to get excellent results in modelling electronic circuit.(For you who understand more clearly in Indonesian) Spice adalah sebuah paket aplikasi yang secara defacto merupakan standar untuk simulai dan analisa rangkaian elektronik. Namun secara umum berlaku pula bahwa untuk menghasilkan simulasi rangkaian elektronik secara akurat dibutuhkan parameter-parameter yang akurat pula untuk setiap modelnya. Buku ini memberikan ulasan mendalam tentang parameter-parameter bagi pemodelan device semikonduktor. Kelebihan yang dimiliki buku ini tidak hanya pada bagaimana penghitungan dan pengukuran parameter untuk model tersebut tetapi bagaimana menggunakannya pada simulasi rangkaian menggunakan SPICE.

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

Semiconductor Device Modeling with Spice Introduction to Semiconductor Device Yield Modeling (Artech House Materials Science Library) Introductory Semiconductor Device Physics Semiconductor Material and Device Characterization Semiconductor Device and Failure Analysis : Using Photon Emission Microscopy Dry Spice Mixes: Top 50 Most Delicious Spice Mix Recipes [A Seasoning Cookbook] (Recipe Top 50's Book 104) Swap Meets (Volume 2): A 13 Book Excite Spice Hotwife Erotica MEGA Bundle (Excite Spice Boxed Sets) Chromecast: Chromecast Easy Guide: Master Your Chromecast Device and Enjoy TV Entertainment With Low-Cost Media Streamer (Chromecast, Chromecast User Guide, Chromecast books, Chromecast Device) How to Add A Device To My Account: How to Add a Device MOSFET Modeling With SPICE: Principles and Practice Introduction to Device Modeling and Circuit Simulation Microsoft Excel 2013 Data Analysis and Business Modeling: Data Analysis and Business Modeling (Introducing) 3D Modeling For Beginners: Learn everything you need to know about 3D Modeling! Introduction to the Numerical Modeling of Groundwater and Geothermal Systems: Fundamentals of Mass, Energy and Solute Transport in Poroelastic Rocks (Multiphysics Modeling) Geochemical Modeling of Groundwater, Vadose and Geothermal Systems (Multiphysics Modeling) Mathematical Modeling of Collective Behavior in Socio-Economic and Life Sciences (Modeling and Simulation in Science, Engineering and Technology) Student Solutions Manual for Differential Equations: Computing and

Modeling and Differential Equations and Boundary Value Problems: Computing and Modeling
Fault-Tolerance and Reliability Techniques for High-Density Random-Access Memories (Prentice
Hall Modern Semiconductor Design Series) Understanding Semiconductor Devices (The Oxford
Series in Electrical and Computer Engineering) Microchip Fabrication, Sixth Edition: A Practical
Guide to Semiconductor Processing

[Dmca](#)