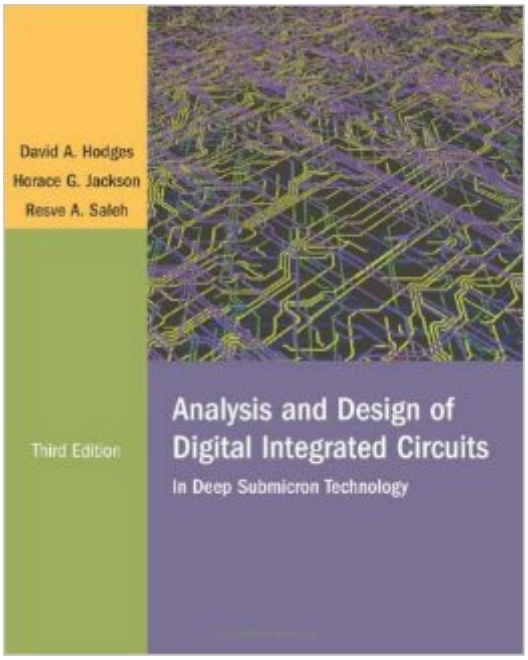
Analysis And Design Of Digital Integrated Circuits



Synopsis

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 Bipolar with an emphasis on CMOS. The book focuses on the latest CMOS technologies and uses standard deep submicron models throughout the book. 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.

Book Information

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Customer Reviews

This is a very readable and complete book on Design and Analysis of Digital Integrated Circuits. It has many great examples and in depth explanations. The book compares the differences between different technologies and the general trends for deep submicron circuits. It is also very complete as it covers subjects from fabrication and layout, memory design, high speed CMOS logic design as well as power grid and clock design. This book is a must in the library of anyone interested in digital

circuit design.

I bought this book for my nephew, he got it for one of his classes in college, I assume it is pretty good, but as I said before, I did not read it. My nephew though seems to like it very much and suggested that I give it 5 stars, and after all, he is the one using it so he should know. But, I'm sorry I cannot give any more details on this book.

This book covers the basics well, but does not cover any concept in depth. This book might be good for undergrad class for introduction class, but not a good one for grad level and one interested in advanced topics in VLSI.

This text book was a rquirement to a class I'm still taking. So I'm not completely through the text yet. The careful crafting of the chapter's stucture gently leads this student through the tortuous details of modeling the highly non-linear sub-micron mosfet. Particularly useful are the end of chapter summaries that highlight the most critical and useful topics and equations. I do wish there were some problems at the end of the chapter that included answers. When the math gets this convoluted, it's nice to know if you should recheck your work. It would also help to use some standard units. An equation with the mixed length units of 60 *10^-6cm, 42 angstroms and 0.3 nm seems like just a trap for a student.

I found this book very helpful. After reading the book (and comprehending the material), I gained a profound insight into analysis and design of digital circuits.

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