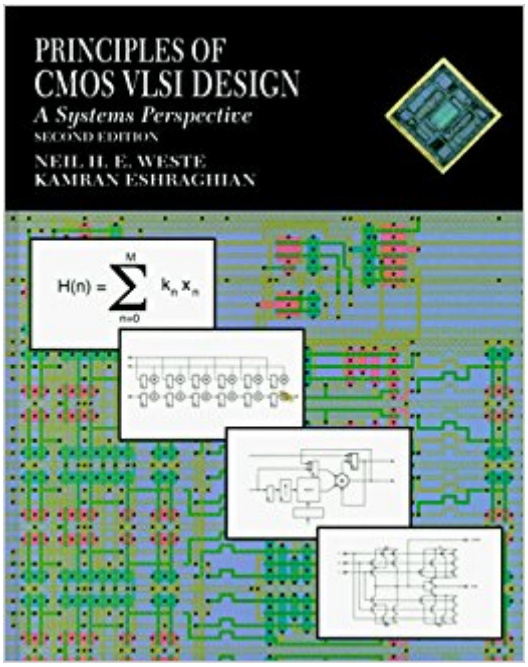
Principles Of CMOS VLSI Design



Synopsis

With this revision, Weste conveys an understanding of CMOS technology, circuit design, layout, and system design sufficient to the designer. The book deals with the technology down to the layout level of detail, thereby providing a bridge from a circuit to a form that may be fabricated. The early chapters provide a circuit view of the CMOS IC design, the middle chapters cover a sub-system view of CMOS VLSI, and the final section illustrates these techniques using a real-world case study.

Book Information

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technology, circuit design, layout, and system design sufficient to feel confident with the technology. The book deals the technology down to the layout level of detail, thereby providing a bridge from a circuit to a form that may be fabricated. The early chapters provide a circuit view of the CMOS IC design, the middle chapters cover a sub-system view of CMOS VLSI, and the final section illustrates these techniques through the use of a case study. This capstone section ties together the preceding chapters and gives the student a feel for real-world design.FeaturesUpdates all the technology sections to sub-micron CMOS, technology that has played an increasingly important part in the integrated circuit industry. Emphasizes semi-custom and other design approaches. Expands the subsystem section to include more building blocks. Provides an introductory section to familiarize the reader with the terminology and some important building blocks. Covers performance estimation in detail.Features New to this EditionAddresses the growing need designers to produce a VLSI product correctly and within a specified time frame and budget. Expanded section on testing.

Professor Kamran Eshraghian is an internationally renowned scientist and co-inventor of the bionic microchip, Professor Eshraghian’s pioneering work in CMOS VLSI technology has been encapsulated in a standard text now used by more than four hundred universities throughout the world. It is this technology that has revolutionised the development of the personal computer. Professor Eshraghian has held academic positions around the world, has been granted numerous patents and has co-authored many books. His contributions have recently been further recognised by his appointment as Adjunct Professor at The University of Adelaide.

I own many engineering books and most of the authors of these books have a hard time getting the point across. However, "Principles of CMOS VLSI Design" by Weste is an excellent book: very comprehensive, very detailed, and very clear in his explanations of the various topics covered in this book. As an undergraduate, I recommend this book to all engineering students. Also, I am currently interning at this engineering company and most of the engineers that work there own this book.

I have read the 1th ed. of this book and reading the 2ed ed. now. This books is so easyly to be understood, even by a foreigner. This book emphasis the principles learned in college. Andintroduce more trends about the CMOS technology. After readed the books, let me become a experienced IC designer quickly with layout,circut,subsystem, especially the system concept that general not learned in college.This books is the best choicefor IC design beginner just comming from college.

For those who seek a comprehensive look at CMOS design this is a great text. It goes into excellent depth with regard to basic circuit rules all the way to systems and testing. It’s a great way to "dive in" but it does not allow you to "put it down" for any length of time. It needs full attention to get the depth of its text.

This book is based on simple examples and permit to beginners to get used with the basics of CMOS VLSI design. It shows how complicated circuits can be implemented simply and gives an overview of imortant tricks used by professionals. "Buy this book" was probably the only clever thing my micro-electronic teacher said !

If you are interested in CMOS VLSI design, this is the first book you need to read carefully. The first

several chapters give you lot of detailed and fundamental knowledge about CMOS, and the second part of this book contains everything you need in system design.

I strongly recommend this book after I read the first half one.It contains lots of stuffs you need to understand if you are a circuit designer, or device engineer designing test structures.The format in this book is very comfortible to readers, and you can also make notes on each page (lots of space for readers)!

Great book for beginners. I would recommend reading the first half of the book and then reading "Skew Tolerant Circuit Design" and then "Logical Effort." These books will give a circuit designer the basic tools to circuit design.

A good starting point if you want to transition from the discrete to the integrated. A useful book if you quickly move on to more advanced books such as Logical Effort and Skew-tolerant Circuit Design. The later edition of this book is more voluminous and up to date (and more muddled as well).