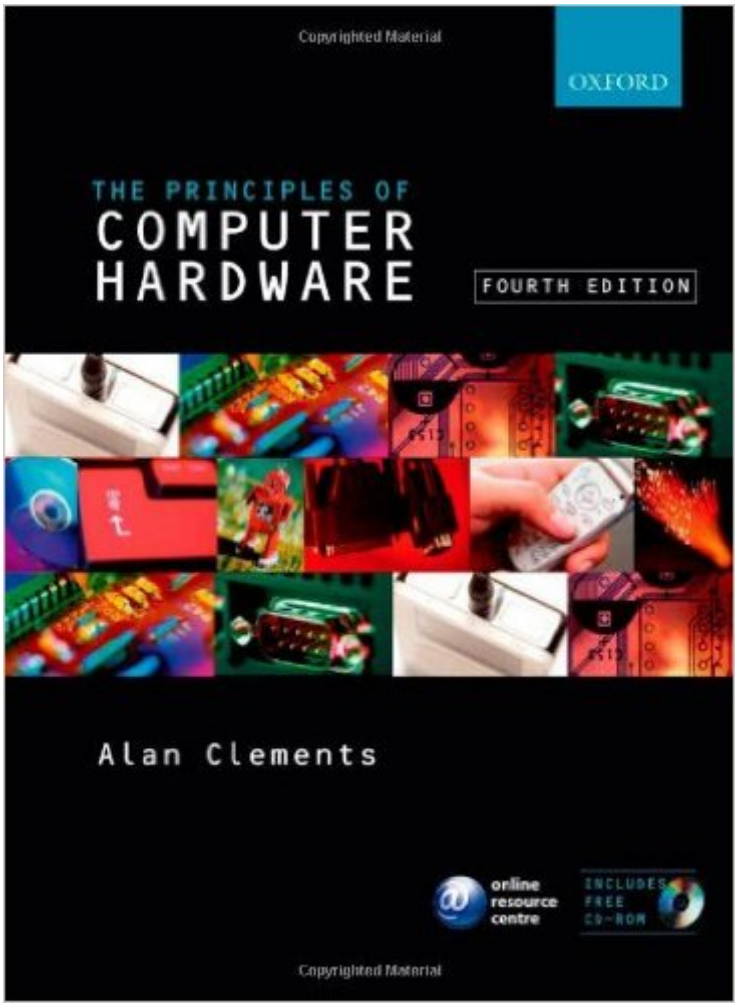
Principles Of Computer Hardware



Synopsis

Completely updated and revised throughout, the fourth edition of Principles of Computer Hardware explores the fundamentals of computer structure, architecture, and programming.The book opens with an introduction to the fundamental concepts behind computer architecture: gates, circuits, logic, and computer arithmetic. It goes on to discuss computer operation from instruction set architecture and assembly language programming to the central processing unit. Then, the text builds on these foundations; explaining how the hardware interfaces with its surroundings, introducing computer memory, operating systems, and computer peripherals.With clear, concise explanations throughout, Principles of Computer Hardware, Fourth Edition, is ideal for undergraduate courses in computer architecture.Student CD--Included with Every Copy of the TextÂ Features a Windows-based simulator for the student to explore the design of digital circuitsÂ Includes Windows and DOS-based 68K simulators for students to investigate the operation of the 68K processorÂ Contains an ARM simulator that allows students to write programs for a RISC processor and run them on a PCCompanion WebsiteÂ Provides a bank of multiple-choice testsÂ Lists downloadable files of all figures from the book as well as solutions to problems featured in the text

Book Information

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Customer Reviews

I used this book for my introduction to electronics class.It was pretty good, but sometimes the explanations were a bit fuzzy.It’s not a horrible book, but it’s now a good bit out-of-date.

I had to use this textbook for my college principles of computer hardware class, but I found myself reading it when I didn’t even have to by the end of the semester. Some complex ideas are discussed in here, but the authors lay it out to the reader in a friendly and easy-to-grasp manner.On the downside, as the other reviewer mentioned, there are quite a few errors in the logic diagrams, Karnaugh maps, and truth tables presented in the book. Also, the chapter order can be somewhat unintuitive, although that may be a matter of personal preference.If you have to get this book for a class, consider yourself lucky-- and if you are just looking to learn by yourself about computer hardware from the ground up, this book is a great way to go.

pros: it is written in an approachable way. the examples are good, and it seems to be thorough.cons: there are some mistakes in the exercises, and no way to know if you are doing the problem right since they don’t give answers to selected problems/ offer a solutions manual. without that i can’t really give the book any higher rating than 2 stars.

I am a Computer Science student at Tallinn University of Technology, and I bought this book for Computer hardware class. It is the main book that our Computer Hardware teacher uses in class.I used this book (Principles of Computer Hardware, 4th edition) along with Tanenbaum’s "Structured computer organization" and I have to say it is a perfect combination.I was amazed how easy to understand the information in this book was. It is not the simplicity of "for dummies" books, but somehow the author managed to explain complicated subjects in an easy to understand way. It is well structured and organized, the material is covered thoroughly (there were quite a few explanations that helped me understand what Tanenbaum meant in his book :-)), there are a lot of very easy to understand illustrations with comments that truly help in understanding the material. The complicated topics are clearly presented, so I REALLY enjoyed reading it. I have to say that I learned a lot from this book, and many topics became really clear to me after reading it.Well, of course, as in almost every book, there were a few misprints in the book, but I think these are not critical to understanding the material.I am so glad I bought this book. So if you are a Computer Science student or just want a book that would help you with your self-education in Computer Hardware, don’t hesitate and buy this book.I’m giving it 5 stars !

Structured and easy understandable book. Programs provided on enclosed to the book CD couldn’t be run on windows 7 unfortunately.

This is an excellent book for general reading or for reference since it covers quite a bit of stuff.I found this book very useful if you are looking for understanding the Comp H/W from all perspectives.I would recommend this book to every Com Science student.

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