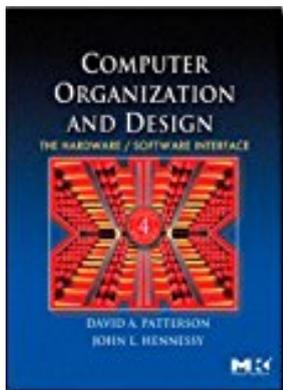


# **[PDF] Computer Organization And Design, Fourth Edition: The Hardware/Software Interface (The Morgan Kaufmann Series In Computer Architecture And Design)**

**David A. Patterson, John L. Hennessy - pdf download free book**

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## **Description:**

### **Review**

*Patterson and Hennessy have greatly improved what was already the gold standard of textbooks. In the rapidly-evolving field of computer architecture, they have woven an impressive number of recent case studies and contemporary issues into a framework of time-tested fundamentals.*--Fred Chong, University of California, Santa Barbara

*The new coverage of multiprocessors and parallelism lives up to the standards of this well-written classic. It provides well-motivated, gentle introductions to the new topics, as well as many details and examples drawn from current hardware.*--John Greiner, Rice University

### **From the Back Cover**

#### **Computer Organization and Design**

##### **The Hardware/Software Interface**

David A. Patterson and John L. Hennessy

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The best-selling computer organization book is thoroughly updated to provide a new focus on the revolutionary change taking place in industry today: the switch from uniprocessor to multicore microprocessors. This new emphasis on parallelism is supported by updates reflecting the newest technologies, with examples highlighting the latest processor designs and benchmarking standards. As with previous editions, a MIPS processor is the core used to present the fundamentals of hardware technologies, assembly language, computer arithmetic, pipelining, memory hierarchies and I/O. Sections on the ARM and x86 architectures are also included.

A companion CD provides a toolkit of simulators and compilers along with tutorials for using them, as well as advanced content for further study and a search utility for finding content on the CD and in the printed text.

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- Covers the revolutionary change from sequential to parallel computing, with a new chapter on parallelism and sections in every chapter highlighting parallel hardware and software topics.
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- Includes new content on Flash memory and Virtual Machines.
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- Features the AMD Opteron X4 and Intel Nehalem as real-world examples throughout the book.
- Updates all processor performance examples using the SPEC CPU2006 suite.

Online support materials for this book are available at [textbooks.elsevier.com/9780123744937](http://textbooks.elsevier.com/9780123744937)

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