《计算机组成与设计》

图书基本信息

书名：《计算机组成与设计》

13位ISBN编号：9787111412373

10位ISBN编号：7111412370

出版时间：2013-2

出版社：机械工业出版社

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页数：688

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内容概要

《计算机组成与设计》

作者简介

David A. Patterson　加州大学伯克利分校计算机科学系教授，美国国家工程研究院院士，IEEE和ACM会士，曾因成功的启发式教育方法被IEEE授予James H. Mulligan，Jr教育奖章。他因为对RISC技术的贡献而荣获1995年IEEE技术成就奖，而在RAID技术方面的成就为他赢得了1999年IEEE Reynold Johnson信息存储奖。2000年他和John L. Hennessy分享了John von Neumann奖。
John L. Hennessy　斯坦福大学校长，IEEE和ACM会士，美国国家工程研究院院士及美国科学艺术研究院院士。Hennessy教授因为在RISC技术方面做出了突出贡献而荣获2001年的Eckert-Mauchly奖章，他也是2001年Seymour Cray计算机工程奖得主，并且和David A. Patterson分享了2000年John von Neumann奖。

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章节摘录

版权页： 插图： Part of the power of the Intel x86 is, the prefixes that can modify the execution ofthe following instruction. One prefix can repeat the following instruction untila counter counts down to 0. Thus, to move data in memory, it would seem thatthe natural instruction sequence is to use move with the repeat prefix to perform 32-bit memory-to-memory moves. An alternative method, which uses the standard instructions found in all computers, is to load the data into the registers and then store the registers back tomemory. This second version of this program, with the code replicated to reduceloop overhead, copies at about 1.5 times faster. A third version, which uses thelarger floating-point registers instead of the integer registers of the x86, copies atabout 2.0 times faster than the complex move instruction. Fallacy: Write in assembly language to obtain the highest performance.At one time compilers for programming languages produced naive instructionsequences; the increasing sophistication of compilers means the gap betweencompiled code and code produced by hand is closing fast. In fact, to competewith current compilers, the assembly language programmer needs to understandthe concepts in Chapters 4 and 5 thoroughly (processor pipelining and memoryhierarchy).

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精彩短评

1、内容不多说印刷，纸张都很好。虽然是黑白的不过阅读感觉也很好
2、这本书呢...还是不错的，就是课程有点麻烦....
3、书的印刷还好，没有破损，没有像其他人说的那么差，书里的插图丰富，每页都留有足够空白位置做笔记，但为什么不像CSAPP那样双色印刷呢？就算贵一点也没关系
4、书页太薄了，每一页都能看到反面的内容，看起来太费劲了。
5、从封面中间开始，有深达30多页的压痕。书送来时有气袋保护，推断不是运输造成；也就是说发货的书就有问题。不厚道！
6、第一、定位目前已有很多书可以替代本书。例如：Computer systems: A programmer's perspective Introduction to Computing Systems: From Bits and Gates to C and Beyond Computer... 阅读更多

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