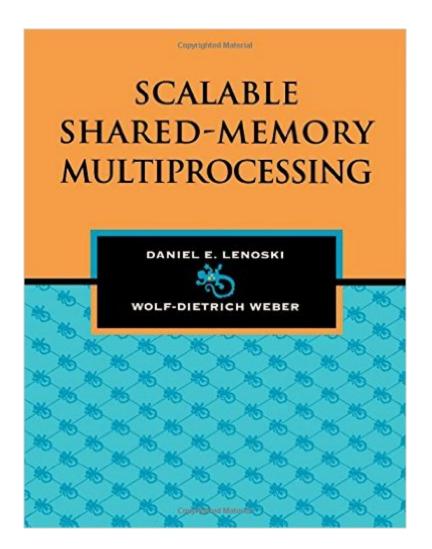
The book was found

# Scalable Shared-Memory Multiprocessing





### Synopsis

Dr. Lenoski and Dr. Weber have experience with leading-edge research and practical issues involved in implementing large-scale parallel systems. They were key contributors to the architecture and design of the DASH multiprocessor. Currently, they are involved with commercializing scalable shared-memory technology.

## **Book Information**

Hardcover: 341 pages Publisher: Morgan Kaufmann (June 15, 1995) Language: English ISBN-10: 1558603158 ISBN-13: 978-1558603158 Product Dimensions: 9.6 x 7.8 x 0.9 inches Shipping Weight: 1.8 pounds Average Customer Review: 5.0 out of 5 stars Â See all reviews (1 customer review) Best Sellers Rank: #3,717,659 in Books (See Top 100 in Books) #54 in Books > Computers & Technology > Programming > Algorithms > Memory Management #1488 in Books > Computers & Technology > Hardware & DIY > Design & Architecture #1822 in Books > Computers & Technology > Hardware & DIY > Microprocessors & System Design

#### **Customer Reviews**

This book on cache coherence and shared memory multi-processor systems should be on every OS developer's desk; in fact, it should be well worn and marked up with lots of highlighting, underlining, and phrases of "Oh so THAT's how it works!" written in the margins. The authors do a wonderful job describing the principles of cache coherence and the difference between message passing (or distributed) systems and shared memory systems. The rest of the book, of course, is spent on the latter, and the authors delve into such topics as: memory latency (and how to reduce/hide latency), NUMA and COMA architectures (and different interconnect networks), memory prefetch, memory bandwidth, various cache consistency models, and a lot of examples of various applications and the cache invalidation patterns those applications exhibit. And that's all just in the first 3 chapters of the book!The book describes the architectures of several of the scalable shared memory systems that existed in the mid-90's, and then it goes on to describe a system called DASH that was implemented by the authors and folks at Stanford. At first I thought I was going to be put off by the focus on DASH, but it actually had the opposite effect. The chapters on

DASH did a great job of going through all the details and clearly showing me how all this works "in practice." I'm a software guy, and this book was recommended to me by a hardware guy, and I think it's a must for anyone doing software development for large complex multi-processor systems. The writing is very clear and straight-forward, though it's not something I can read while the television is on (in other words, I've got to concentrate while reading this book). Not only would this book be useful as a college CS Architecture textbook, but it's proving to be highly useful in the workplace!

#### Download to continue reading...

Scalable Shared-Memory Multiprocessing Memory Exercises: Memory Exercises Unleashed: Top 12 Memory Exercises To Remember Work And Life In 24 Hours With The Definitive Memory Exercises Guide! (memory exercises, memory, brain training) Shared With The Bull: An Interracial Wife Sharing Story (Interracial Bulls And Shared Wives) Shared by the Sheikhs: A Wife Sharing Romance Novel (Hotwife and Cuckold Erotica) (The SHARED BY Cuckolding Series Book 2) UNIX Systems for Modern Architectures: Symmetric Multiprocessing and Caching for Kernel Programmers Distributed Shared Memory: Concepts and Systems The Cache Coherence Problem in Shared-Memory Multiprocessors: Software Solutions (Systems) BRAIN: 51 Powerful Ways to Improve Brain Power, Enhance Memory, Intelligence and Concentration NATURALLY! (MEMORY, Memory Improvement, Learning, Brain Training) Quantum Memory: Learn to Improve Your Memory with The World Memory Champion! Building a Scalable Data Warehouse with Data Vault 2.0 Guerrilla Capacity Planning: A Tactical Approach to Planning for Highly Scalable Applications and Services Frontend Architecture for Design Systems: A Modern Blueprint for Scalable and Sustainable Websites uC/OS-III, The Real-Time Kernel, or a High Performance, Scalable, ROMable, Preemptive, Multitasking Kernel for Microprocessors, Microcontrollers & DSPs (Board NOT Included) The Art of Scalability: Scalable Web Architecture, Processes, and Organizations for the Modern Enterprise (2nd Edition) Programming Google App Engine with Python: Build and Run Scalable Python Apps on Google's Infrastructure Practical Node.js: Building Real-World Scalable Web Apps Introducing Go: Build Reliable, Scalable Programs Web Development with Go: Building Scalable Web Apps and RESTful Services Building Scalable Web Sites: Building, Scaling, and Optimizing the Next Generation of Web Applications 7-BOOK BUNDLE - Women Shared: MFMM Ménage Pack

<u>Dmca</u>