Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation)

Barbara Chapman, Gabriele Jost, Ruud van der Pas

Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation)

Barbara Chapman, Gabriele Jost, Ruud van der Pas

Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) Barbara Chapman, Gabriele Jost, Ruud van der Pas
"I hope that readers will learn to use the full expressibility and power of OpenMP. This book should provide an excellent introduction to beginners, and the performance section should help those with some experience who want to push OpenMP to its limits." -- from the foreword by David J. Kuck, Intel Fellow, Software and Solutions Group, and Director, Parallel and Distributed Solutions, Intel CorporationOpenMP, a portable programming interface for shared memory parallel computers, was adopted as an informal standard in 1997 by computer scientists who wanted a unified model on which to base programs for shared memory systems. OpenMP is now used by many software developers; it offers significant advantages over both hand-threading and MPI. *Using OpenMP* offers a comprehensive introduction to parallel programming concepts and a detailed overview of OpenMP. *Using OpenMP* discusses hardware developments, describes where OpenMP is applicable, and compares OpenMP to other programming interfaces for shared and distributed memory parallel architectures. It introduces the individual features of OpenMP, provides many source code examples that demonstrate the use and functionality of the language constructs, and offers tips on writing an efficient OpenMP program. It describes how to use OpenMP in full-scale applications to achieve high performance on large-scale architectures, discussing several case studies in detail, and offers in-depth troubleshooting advice. It explains how OpenMP is translated into explicitly multithreaded code, providing a valuable behind-the-scenes account of OpenMP program performance. Finally, *Using OpenMP* considers trends likely to influence OpenMP development, offering a glimpse of the possibilities of a future OpenMP 3.0 from the vantage point of the current OpenMP 2.5. With multicore computer use increasing, the need for a comprehensive introduction and overview of the standard interface is clear. *Using OpenMP* provides an essential reference not only for students at both undergraduate and graduate levels but also for professionals who intend to parallelize existing codes or develop new parallel programs for shared memory computer architectures.

Download and Read Free Online Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) Barbara Chapman, Gabriele Jost, Ruud van der Pas

---

From reader reviews:

Tracie Wright:

Do you have favorite book? For those who have, what is your favorite's book? Publication is very important thing for us to find out everything in the world. Each publication has different aim or goal; it means that guide has different type. Some people sense enjoy to spend their time and energy to read a book. They can be reading whatever they consider because their hobby is actually reading a book. Why not the person who don't like examining a book? Sometime, person feel need book whenever they found difficult problem or maybe exercise. Well, probably you will require this Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation).

Christopher Hannah:

This Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) book is simply not ordinary book, you have it then the world is in your hands. The benefit you will get by reading this book is information inside this e-book incredible fresh, you will get data which is getting deeper anyone read a lot of information you will get. That Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) without we know teach the one who looking at it become critical in contemplating and analyzing. Don't end up being worry Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) can bring any time you are and not make your handbag space or bookshelves' turn into full because you can have it within your lovely laptop even telephone. This Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) having excellent arrangement in word and layout, so you will not really feel uninterested in reading.

Orville Norman:

Here thing why this particular Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) are different and dependable to be yours. First of all examining a book is good nevertheless it depends in the content than it which is the content is as delightful as food or not. Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) giving you information deeper and different ways, you can find any e-book out there but there is no reserve that similar with Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation). It gives you thrill looking at journey, its open up your own personal eyes about the thing that will happened in the world which is maybe can be happened around you. You can easily bring everywhere like in recreation area, café, or even in your method home by train. In case you are having difficulties in bringing the printed book maybe the form of Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) in e-book can be your option.

Sonia Cancel:

Reading a book to get new life style in this yr; every people loves to learn a book. When you read a book you can get a wide range of benefit. When you read guides, you can improve your knowledge, since book has a lot of information in it. The information that you will get depend on what sorts of book that you have read. In order to get information about your analysis, you can read education books, but if you want to entertain yourself you can read a fiction books, this sort of us novel, comics, along with soon. The Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) will give you new experience in looking at a book.

Read Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas for online ebook

Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas books to read online.

Online Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas ebook PDF download

Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas Doc

Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas Mobipocket

Using OpenMP: Portable Shared Memory Parallel Programming (Scientific and Engineering Computation) by Barbara Chapman, Gabriele Jost, Ruud van der Pas EPub