Google Drive



OpenCL Parallel Programming Development Cookbook

Raymond Tay

Download now

Click here if your download doesn"t start automatically

OpenCL Parallel Programming Development Cookbook

Raymond Tay

OpenCL Parallel Programming Development Cookbook Raymond Tay

In Detail

OpenCL (Open Computing Language) is the first royalty-free standard for cross platform, parallel programming of modern processors found in personal computers, servers, mobiles, and embedded devices. OpenCL greatly improves speed and responsiveness for a wide spectrum of applications in numerous market categories, from gaming and entertainment to scientific and medical software. OpenCL has proved itself to be versatile in that it now runs on not only operating systems like Windows and Linux powered by Intel and AMD processors, but also on low power chips like ARM, and it has also been adopted by processor manufacturers like ARM Corp, Vivante, and Altera, among others.

OpenCL Parallel Programming Development Cookbook was designed to be practical so that we achieve a good balance between theory and application. Learning to program in a parallel way is relatively easy, but to be able to take advantage of all of the resources available to you efficiently is quite different. You need to be shown not only application, but also the theory behind it.

This book is roughly in two parts, where the first part is the fundamentals of OpenCL parallel development and the second part is the various algorithms we will explore with you. Each part is packed with many code samples and illustrations to demonstrate various concepts. The first part is essential for a beginner to not only program in parallel, but also to think in parallel and become equipped with the mental model with which to tackle parallel programming. The second part consists of seven different algorithms that the author has identified; you will learn various parallel programming techniques that experts have used in the past 60 years that are applicable to OpenCL.

This book will demonstrate how you think in parallel by illustrating and demonstrating programming techniques like data partitioning, thread coarsening, register tiling, data pre-fetching, and algorithm transformation. These techniques are demonstrated in the seven algorithms you'll be shown, from image processing and solving sparse linear systems to in-memory sorting.
OpenCL Parallel Programming Development Cookbook combines recipes, illustrations, code, and explanations to allow you to learn the essentials of parallel programming in OpenCL, and the author has added in enough math so that the readers understand the motivation and can also lay the foundation upon which they will begin their own exploration.

Approach

OpenCL Parallel Programming Development Cookbook will provide a set of advanced recipes that can be utilized to optimize existing code. This book is therefore ideal for experienced developers with a working knowledge of C/C++ and OpenCL.

Who this book is for

This book is intended for software developers who have often wondered what to do with that newly bought CPU or GPU they bought other than using it for playing computer games; this book is also for developers

who have a working knowledge of C/C++ and who want to learn how to write parallel programs in OpenCL so that life isn’t too boring.

Download OpenCL Parallel Programming Development Cookbook ...pdf

Read Online OpenCL Parallel Programming Development Cookbook ...pdf

Download and Read Free Online OpenCL Parallel Programming Development Cookbook Raymond Tay

---

From reader reviews:

Gale Kizer:

The book OpenCL Parallel Programming Development Cookbook can give more knowledge and information about everything you want. So just why must we leave the good thing like a book OpenCL Parallel Programming Development Cookbook? A number of you have a different opinion about publication. But one aim that will book can give many data for us. It is absolutely right. Right now, try to closer along with your book. Knowledge or info that you take for that, you could give for each other; you could share all of these. Book OpenCL Parallel Programming Development Cookbook has simple shape but you know: it has great and massive function for you. You can appearance the enormous world by available and read a publication. So it is very wonderful.

Charles Ginter:

Here thing why this kind of OpenCL Parallel Programming Development Cookbook are different and dependable to be yours. First of all reading a book is good but it really depends in the content of it which is the content is as tasty as food or not. OpenCL Parallel Programming Development Cookbook giving you information deeper including different ways, you can find any e-book out there but there is no publication that similar with OpenCL Parallel Programming Development Cookbook. It gives you thrill examining journey, its open up your own personal eyes about the thing that will happened in the world which is probably can be happened around you. You can easily bring everywhere like in playground, café, or even in your means home by train. For anyone who is having difficulties in bringing the published book maybe the form of OpenCL Parallel Programming Development Cookbook in e-book can be your substitute.

Michael Greene:

Now a day folks who Living in the era everywhere everything reachable by talk with the internet and the resources included can be true or not need people to be aware of each information they get. How people have to be smart in obtaining any information nowadays? Of course the answer is reading a book. Examining a book can help persons out of this uncertainty Information especially this OpenCL Parallel Programming Development Cookbook book since this book offers you rich data and knowledge. Of course the data in this book hundred percent guarantees there is no doubt in it you may already know.

Kirk Nutter:

You can get this OpenCL Parallel Programming Development Cookbook by browse the bookstore or Mall. Simply viewing or reviewing it could possibly to be your solve issue if you get difficulties for the knowledge. Kinds of this e-book are various. Not only by means of written or printed but also can you enjoy this book through e-book. In the modern era including now, you just looking of your mobile phone and searching what their problem. Right now, choose your personal ways to get more information about your book. It is most important to arrange yourself to make your knowledge are still update. Let's try to choose

appropriate ways for you.

Download and Read Online OpenCL Parallel Programming Development Cookbook Raymond Tay #O2EUBFX1WSD

Read OpenCL Parallel Programming Development Cookbook by Raymond Tay for online ebook

OpenCL Parallel Programming Development Cookbook by Raymond Tay 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 OpenCL Parallel Programming Development Cookbook by Raymond Tay books to read online.

Online OpenCL Parallel Programming Development Cookbook by Raymond Tay ebook PDF download

OpenCL Parallel Programming Development Cookbook by Raymond Tay Doc

OpenCL Parallel Programming Development Cookbook by Raymond Tay Mobipocket

OpenCL Parallel Programming Development Cookbook by Raymond Tay EPub