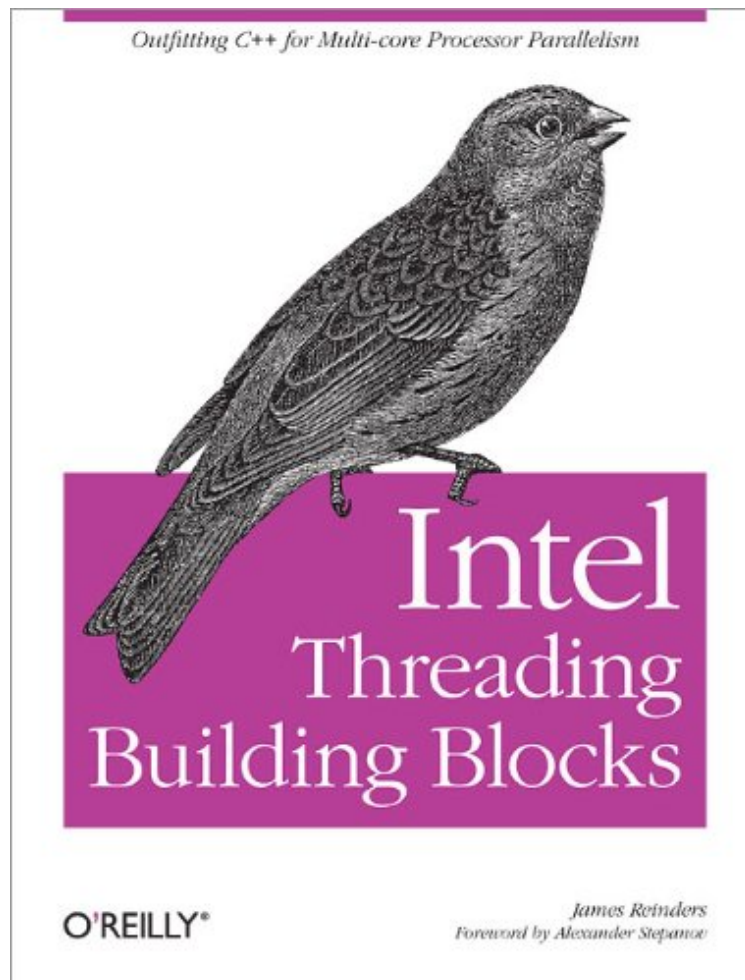


Intel Threading Building Blocks: Outfitting C++ for Multi-core Processor Parallelism

Von James Reinders

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before purchasing it in order to gage whether or not it would be worth my time, and all praised Intel Threading Building Blocks: Outfitting C++ for Multi-core Processor Parallelism:

KundenrezensionenHilfreichste Kundenrezensionen15 von 16 Kunden fanden die folgende Rezension hilfreich. Good overview, but some disappointmentsVon ogoellnerThis book about Intel Threading Building Blocks (TBB)disappoints me for several reasons.First there is no sourcecode on the o'reilly website. That means youhave to write off all examples by yourself. :(Another problem is that thereare no benchmarks to demonstrate how much speed you gain byusing this framework instead working without TBB.Just explaining Amdahl's Law is not enough.Maybe a quick introduction how to use profiler tooptimize your code using TBB would be nice for the "second edition".Especially if

you only want to deal with a few "bottlenecks" in your application. Instead there are some parts in the book like "Quick Introduction to Lambda Functions" which aren't very helpful, because much too short. Only one (!) page is not enough, even for a "quick introduction". Even if this book is for advanced programmers, a few links to further reading would help. Another example is "Mixing with Other Threading Packages" (OpenMP). Really interesting theme, but only scratched by 2 pages. Or chapter 8: "timing, computing wall clock times" to compute elapsed time. Otherwise this book gives you a really good overview of the TBB framework like concurrent containers, scalable memory allocation and of course mutexes and task scheduling. There are many nice examples which show you how to implement classic examples like "quicksort" or "game of life" using TBB. Maybe I expected too much from the book. But no source code on the o'reilly website is really annoying.

Kurzbeschreibung Multi-core chips from Intel and AMD offer a dramatic boost in speed and responsiveness, and plenty of opportunities for multiprocessing on ordinary desktop computers. But they also present a challenge: More than ever, multithreading is a requirement for good performance. This guide explains how to maximize the benefits of these processors through a portable C++ library that works on Windows, Linux, Macintosh, and Unix systems. With it, you'll learn how to use Intel Threading Building Blocks (TBB) effectively for parallel programming -- without having to be a threading expert. Written by James Reinders, Chief Evangelist of Intel Software Products, and based on the experience of Intel's developers and customers, this book explains the key tasks in multithreading and how to accomplish them with TBB in a portable and robust manner. With plenty of examples and full reference material, the book lays out common patterns of uses, reveals the gotchas in TBB, and gives important guidelines for choosing among alternatives in order to get the best performance. You'll learn how Intel Threading Building Blocks: Enables you to specify tasks instead of threads for better portability, easier programming, more understandable source code, and better performance and scalability in general Focuses on the goal of parallelizing computationally intensive work to deliver high-level solutions Is compatible with other threading packages, and doesn't force you to pick one package for your entire program Emphasizes scalable, data-parallel programming, which allows program performance to increase as you add processors Relies on generic programming, which enables you to write the best possible algorithms with the fewest constraints Any C++ programmer who wants to write an application to run on a multi-core system will benefit from this book. TBB is also very approachable for a C programmer or a C++ programmer without much experience with templates. Best of all, you don't need experience with parallel programming or multi-core processors to use this book.