

| | |
|-------------------------|--|
| 1. Record Nr. | UNINA9910791788603321 |
| Autore | Levesque John M. |
| Titolo | High performance computing : programming and applications // John Levesque ; with Gene Wagenbreth |
| Pubbl/distr/stampa | Boca Raton, Fla : , : CRC Press, , 2011 |
| ISBN | 0-429-14458-X 1-4200-7706-6 |
| Descrizione fisica | 1 online resource (240 p.) |
| Collana | Chapman & Hall/CRC computational science series |
| Altri autori (Persone) | WagenbrethGene |
| Disciplina | 004.1/1 |
| Soggetti | High performance computing Supercomputers - Programming |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | A Chapman & Hall book. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Front cover; Contents; Introduction; Chapter 1. Multicore Architectures; Chapter 2. The MPP; Chapter 3. How Compilers Optimize Programs; Chapter 4. Parallel Programming Paradigms; Chapter 5. A Strategy for Porting an Application to a Large MPP System; Chapter 6. Single Core Optimization; Chapter 7. Parallelism across the Nodes; Chapter 8. Node Performance; Chapter 9. Accelerators and Conclusion; Appendix A: Common Compiler Directives; Appendix B: Sample MPI Environment Variables; References; Back cover |
| Sommario/riassunto | High Performance Computing: Programming and Applications presents techniques that address new performance issues in the programming of high performance computing (HPC) applications. Omitting tedious details, the book discusses hardware architecture concepts and programming techniques that are the most pertinent to application developers for achieving high performance. Even though the text concentrates on C and Fortran, the techniques described can be applied to other languages, such as C++ and Java. Drawing on their experience with chips from AMD and systems, interconnects, and software from C |