THE LINPACK BENCHMARK ON THE AP1000

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Abstract

We describe an implementation of the Linpack Benchmark on the Fujitsu AP 1000. Design considerations include communication primitives, data distribution, use of blocking to reduce memory references, and effective use of the cache. Some details of our blocking strategy appear to be new. The results show that the Linpack Benchmark can be implemented efficiently on the AP 1000, and it is possible to attain about 80 percent of the theoretical peak performance for large problems.

Comments

Only the Abstract is given here. The full paper appeared as [2]. For related work see [3].

References

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[3] R. P. Brent and P. E. Strazdins, "Implementation of the BLAS level 3 and Linpack benchmark on the AP 1000", *Fujitsu Scientific and Technical Journal* 29, 1 (March 1993), 61–70. rpb136.

[4] P. E. Strazdins and R. P. Brent, "The implementation of BLAS level 3 on the AP 1000: Preliminary report", in [1, H1–H17]. rpb131.

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