A GENERAL-PURPOSE PARALLEL SORTING ALGORITHM

ANDREW TRIDGELL AND RICHARD P. BRENT

Abstract

A parallel sorting algorithm is presented for general purpose internal sorting on MIMD machines. The algorithm initially sorts the elements within each node using a serial sorting algorithm, then proceeds with a two-phase parallel merge. The algorithm is comparison-based and requires additional storage of order the square root of the number of elements in each node. Performance of the algorithm on the Fujitsu AP1000 MIMD supercomputer is discussed.

Comments

Only the Abstract is given here. The full paper appeared as [6] and a preliminary version appeared as [4]. For related work, see [1, 2, 3, 5].

References

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Computer Sciences Laboratory, Australian National University, Canberra, ACT 0200
E-mail address: {tridge,rpb}@cslab.anu.edu.au

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