Abstract

The Batcher’s bitonic sorting algorithm is one of the best parallel sorting algorithms, for sorting random numbers in modern parallel machines. Load balancing property of bitonic sorting algorithm makes it unique among other parallel sorting algorithms. Contribution of bitonic sorting algorithm can be seen in various scientific and engineering applications. Research on a bitonic sorting algorithm has been reported by various researchers in order to improve up the performance of initial batcher’s bitonic sorting algorithm. In this paper, time estimation of bitonic sort algorithm is done in both sequential as well as in parallel domain.

References

- Stephan Olariu, Member, IEEE, M. Cristina Pinotti, Member, IEEE Computer Society,
Estimation of Execution Time and Speedup for Bitonic Sorting in Sequential and Parallel Environment


Index Terms

Computer Science

Algorithms

Keywords

Parallel Algorithm  Parallel Sorting algorithm  Bitonic Sort  Sorting Network  OpenMP