Abstract

Sorting is one of the frequent used operations in computer science. Due to highly parallel computing nature of GPU architecture; it can be utilized for sorting purpose. We have considered the input array that is to be sorted in a 2D matrix form and applied a modified version of merge sort on that matrix. This modification leads to a much efficient sorting algorithm with reduced complexity. Therefore a lot of work has already been done to improve the efficiency of sorting algorithms. In this paper We have used the GPU architecture for solving the sorting problem.

References

GPU Matrix Sort (An Efficient Implementation of Merge Sort)

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Index Terms

Computer Science

Algorithms

Keywords

Sorting    Multi-Core    CUDA    Quicksort.