Performance Evaluation of Twofish Algorithm on IMAN1 Supercomputer

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Abstract

Now-a-days data is needed to be exchanged through networks in secure manner. Hence for secure communication required cryptography algorithms. Among these algorithms is Twofish cryptographic algorithm. In this paper the Sequential and parallel implementation have been implemented in IMAN1 supercomputer using Message Passing Interface (MPI). The parallel implementation has been evaluated in terms of execution time, speedup, and efficiency. The simulation results show that 256 key lengths in 4 processors get best efficiency up to 37% while 192 and 128 key length achieves up to 33% and 29% in order.

References

3. M. Qatawneh, "Multilayer Hex-Cells: A New Class of Hex-Cell Interconnection Networks"

Index Terms

Computer Science  Algorithms

Keywords

Twofish Algorithm, Parallel, Supercomputer, MPI.