عنوان مقاله:

A novel fault-tolerant scheduling of real-time tasks on multiprocessor system by genetic algorithm

محل انتشار:

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خلاصه مقاله:

Finding optimal schedule for a set of real-time task (RT) in a multiprocessor environment is a permutation based optimization problem.The primary-backup (PB) approach is often used as a fault-tolerant scheduling technique to guarantee real-time tasks to meet their deadline despite the presence of faults. In this paper, a novel scheduling algorithm using for fault-tolerant scheduling of real-time tasks by genetic algorithm (GA) is presented. This has significantly affected the implementation of the PBFTS by simplifying the design of the genetic operators as well as the overall algorithm by adopting simple chromosomal representation.

کلمات کلیدی:

fault tolerance, real-time system, genetic algorithm

لینک ثابت مقاله در پایگاه سیویلیکا: