Abstract

Minimization of energy consumption in the battery operated system is become a major issue. Most of the real-time systems consist of a battery operated microprocessor system with a limited battery life. So, energy consumption is becoming a critical issue in the design of embedded systems because of the popularity of portable devices such as mobile devices and personal digital assistants. In this paper we propose a approach to handle task synchronization for Real Time Systems with energy efficiency consideration. Our proposed approach is a variation of the well known priority ceiling protocol (PCP) which is to enforce mutually exclusive access to shared resources. We are using the concept of speed locking in proposed approach so that we can save the energy consumption.

References

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Energy-Efficient Improved Priority Ceiling Protocol for Real Time System


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