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Abstract

In this paper we present novel methods of energy efficient environment sensing in a very cost effective manner by a method called smart sensor switching. We have extracted the requirements of sensor switching and implemented various intelligent energy efficient protocols like dynamic sensor switching, sensor handover in the hardware platform which makes the sensing mechanism uninterrupted and highly energy efficient. The prototype hardware consists of five different gas sensors which are operated by centralized peripheral interface controller (PIC) based embedded system platform. The paper also describes a practical sensor switching mechanism with real time data, various dynamic and non dynamic sensor parameters have been considered in the designing scenario.

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Index Terms

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Keywords

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