

Record 1 of 1

**Title:** Sensor-Level Real-Time Support for XBee-Based Wireless Communication

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**Abstract:** The ZigBee standard is focused on low-cost, low-power, wireless mesh networking, having a wide applicability mainly in the field of wireless sensor networks. A growing number of such applications require real-time behavior, both at the wireless communication and at the sensor levels. This paper proposes a solution to the problem of providing sensor-level real-time support for wireless platforms using ZigBee-based devices such as the XBee module. The discussion of the experimental results proves the predictable behavior of the XBee sensor platform used as a case study.

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