عنوان مقاله:

A Novel Vernier-based Time to Digital Converter for Low-power RFID Sensor Tags

محل انتشار:

مجله بین المللی پیشرفت در علوم کامپیوتر, دوره 3, شماره 6 (سال: 1393)

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خلاصه مقاله:

Power consumption is a key factor in analogue and digital design for portable devices. Radio Frequency Identification (RFID) is widely used in industry, military and medical purposes. Thistechnology operates with very low power consumption. Power consumption in passive tags is negligible and in fact, powerconsumption delimits the sensor tag’s life-time and range. Many methods are proposed to reduce the RFID's powerconsumption, but new researches are demanded due totechnological advancements and application growth. In this research, a new scheme for time-to-digital converter wasproposed which consumes a significant amount of energy in sensor tags. This method preserves accuracy and speed inmeasurement while reducing the area used by the circuit as well as power consumption by a significant amount

کلمات کلیدی:

RFID, Low Power Design, Tag, Time-To-Digital Converter, Verinier, Sensor, TDC