Abstract

In order to save energy, several countries recently made laws related to standby power consumption. To success this exertion, we should consider not only power reduction of consumer electronics itself but also efficient automatic control in networked home environment. In this paper, a design approach and implementation result of control mechanism for standby power reduction is mentioned. Proposed mechanism has the Host-Agent based structure and
uses the bluetooth protocol for communication and security between Host and Agents. This paper verifies reliability of proposed mechanism and reduction effect of standby power; also, implemented devices scenario which is similar to user living pattern. Experimental results demonstrate that in the proposed mechanism, standby power consumption of Agent which is connected to consumer electronics can be reduced by 203mW.

References

- IEEE Std. 802.15.4 Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specification for Low-Rate Wireless Personal Area Networks, MAY 2003.
Optimization for Standby Power Reduction Control Mechanism using Bluetooth


Index Terms

Computer Science Networking

Keywords

Standby Power Reduction Networked Home Control Mechanism Bluetooth Home Automation