Controlling Home and Office Appliances with the Bluetooth of Smartphone

Abstract

Remote control for appliances at home and office based on smart phone is more useful for the users that equipped with special facilities to enable occupants to control home electronic devices, including televisions, fan, light switches, cameras, air-condition. It used to provide convenience for user to remotely control the appliances and it provides a better use of electricity. The efficient use of electricity makes the home automation to play an important role in daily life. All smart phones come with the ability to communicate over the cellular networks, and built-in short-range communication capabilities, such as Bluetooth, that could allow them to communicate and control appliances in their surrounding environment.

Developing a proposed system with low cost that allows users to interact with appliances. A proposed system includes a microcontroller (AVR) ATmega8 configured with CVAVR software and Bluetooth sensor to connect with the Bluetooth of smart phone by using application software installed in the smart phone. To access the control unit, the user should send a number from the software application to the framework that use to turn on /off the device. This
article describes in detail, the design and implementation of the control system.

References


Index Terms

Computer Science Wireless

Keywords
Appliance control system, AVR atmega8, Bluetooth sensor, smart phones, Remote control.