Home switch automation system based on ultra low power wireless solution

ABSTRACT

Throughout the ubiquitous technology, different wireless approaches have been successfully introduced in various fields, aim to provide convenience especially in our own comfort. One such technology is the wireless based home automation system. Although it was widely implemented, there are many issues yet to be solved such as power consumption. With the advent of technologies, we reexamine these problems by means of nRF24L01 device. This paper proposed to deploy the ultra-low power wireless-based chip, nRF24L01 for home transceiver within the smart home environment. Our contribution includes hardware design, protocol design and operational algorithm for the system.