

Abstract

With the development of computer and information technology, information and network will be the inevitable trend of smart home which aims to offer a comfortable, efficient and convenient home.

In this thesis, the background, developments and limitations of smart home systems will be described. Wired and wireless technologies applied on the smart home network will be analyzed and a comparison of them will be made. Finally, the ZigBee technology is selected to design the wireless communication network.

In the section safety of activity the assessment of illumination and possible extreme cases will be considered.

In economic part costs of the equipment, of payment of work of staff are calculated. The analysis of term of payback and economic efficiency of the wireless ZigBee technology is carried out.