

ZIG BEE A GOOD WIRELESS TECHNOLOGY

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ABSTRACT

In every process something new should be there which will make the system more efficient. in any system it is require to have less complication and a better performance . To achieve such systems technical science has to work for developing such easy going systems. Before some years back everything was based on wires system. But now with the development everything is wireless from small gadgets to big systems all prefer wireless communication systems. Because they are easy going , easy to handle, more efficient and less complicated.

INTRODUCTION

ZigBee is an IEEE 802.15.4 standard for data communications dealing business and consumer devices. Low power consumption could be achieved with zig bee .enabling batteries to last forever. The advantage Zig Bee standard is that it provides security, application support, network services operating on top of the IEEE 802.15.4 Medium Access Control (MAC) and Physical Layer wireless standard. It employs technologies to enable scalable again self-organizing and self-healing networks that can manage various data traffic patterns. Zig

Bee has feature like it is a low-cost and low-power, wireless mesh networking standard, which allows technology to be widely deployed in wireless control and monitoring applications, because of its low power-usage it allows longer life with smaller batteries, and the mesh networking which gives high reliability and larger range.

RELATED WORK

The name refers to the waggle dance of honey bees after their return to the beehive. ZigBee is a low-cost, low-power, wireless mesh network standard. The low cost allows the technology to be widely deployed in wireless control and monitoring applications. Low power-usage allows longer life with smaller batteries. Mesh networking provides high reliability and more extensive range. ZigBee chip vendors typically sell integrated radios and microcontrollers with between 60 KB and 256 KB flash memory.[1] ZigBee is a specification for a suite of high level communication protocols using tiny, low-power digital radios based on an IEEE 802 standard for personal area networks. ZigBee has a defined rate of 250 Kbit/s best suited for periodic or irregular data or a single signal transmission from a sensor or input

device. ZigBee based traffic management system have also been implemented.[2]

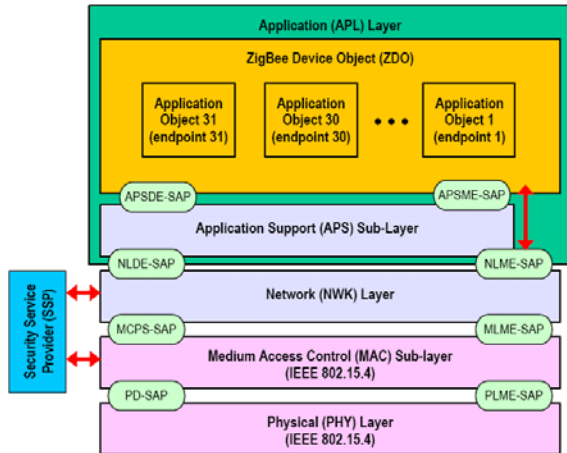


Figure 1: Layered Architecture of Zig Bee[1]

PROPOSED METHODOLOGY

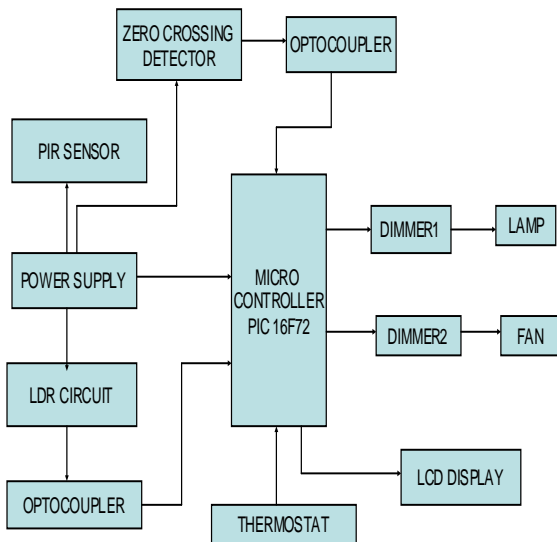


Figure 2: block diagram of system

The above diagram shows the basic system of project in which various components are connected to the microcontroller. The communication is the main part in this project between the various part of the system. If this communication breaks then the system could not work properly. In wire communication it may happens sometime that the connection will be loose and hence the communication will be disturbed. And hence a wireless technology is more useful. It is very much efficient in all manner. And hence system will work properly and the aim of this project could be achieved with less complications.

CONCLUSION

From the above studies it is seen that the use of such effective tool like zig bee technology will make the things simple and hence the result could be obtained with more ease. The communication will be simple. It is seen that the better system can be developed with wireless technology.

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