Abstract

Industrial safety needs to pay more attention as there is risk of human life in most of the industrial places. So there should be less human intervention. For this purpose we need to automate the industrial processes. Industrial engineers need a more flexible development infrastructure. The structure should be such that it has ability to build in more function with higher processing speeds. It should be versatile. It should be such that the cost of infrastructure should be less. Onther aspect of this paper is to present the idea of light energy optimization. This is achieved by automatically controlling the streetlights. In this paper we present an idea of industrial automation and streetlight illumination by using FPGA. The proposed idea helps for rapid detection of dangerous situations. It uses twenty four hour real time monitoring and remote control of industrial devices. The system is based on GSM (Global System for Mobile). It sends a SMS (Short Message Servicing) to the operator in case of emergency. The design has been described using FPGA. FPGAs are used as they are flexible than other processors available. Also they can be configured on field. The cost is also less. It uses different sensors for monitoring physical parameters such as temperature, CO2 etc. For controlling the streetlights we
are using IR sensors and LDR. We are also using Bluetooth technology for in room operation.

References

4. Supriya Rai, A. P. Thakare “ Implementation of ReliableWireless Real Time Automation System Based on Android Mobile Phone and FPGA” International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064

Index Terms

Computer Science Communications

Keywords
FPGA, GSM, SMS, IR Sensors, LDR, Bluetooth, Remote control