



MONITORING TEMPERATURE USING CLOUD SENSOR

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Abstract

The proposed device has a ZigBee module interfaced with P89V51RD2 Microprocessor and LM35 sensor. An LM35, temperature sensor senses the temperature of a baby/person and it is transmitted by the Zigbee transmitter. Temperature data is received by the Zigbee receiver and is connected the host computer via RS-232. By the host computer, the received data is uploaded to the cloud so that the persons health condition can be monitored anywhere from the world .This data is then worked upon by the ZigBee Health Vigilance Software which monitors the data continuously and if the temperature of the baby/person is more than the critical level, it will send a message to the doctor via an App created for WP7 and it will send all the data report to the doctor via E-mail. It will save the patient profile and all the necessary data log with timeline.

Keywords - Zigbee module, Zigbee Health vigilance software, cloud, data log , P89V51RD2 Microprocessor and LM35 Temperature sensor.

Introduction

In the current world it is difficult for the doctor to monitor the patients' health frequently. Some time it is not possible for a doctor to check the patient in night and he may not be able to reach the patient. Cloud computing sensor and self-diagnosis using mobile phones is an reasonably priced solution for this problem. The LM35 temperature sensor is used to monitor the body temperature. This data is transmitted using Zigbee module to the host computer. Then, Temperature data is fed in Excel sheets and it is synchronised with the cloud. An alert message is made to the doctor when the body condition of the patient is not normal. Health monitoring and self-diagnosis is an essential technology in today's world.

Experimental Setup

The Temperature sensor LM35 sensor which senses the temperature of the human body and Temperature data it is sent to P89V51RD2 Microprocessor which is transmitted using Zigbee to a host computer which synchronises the heat data with the cloud. Doctor can monitor

the patient with his mobile phone using the cloud sensor.

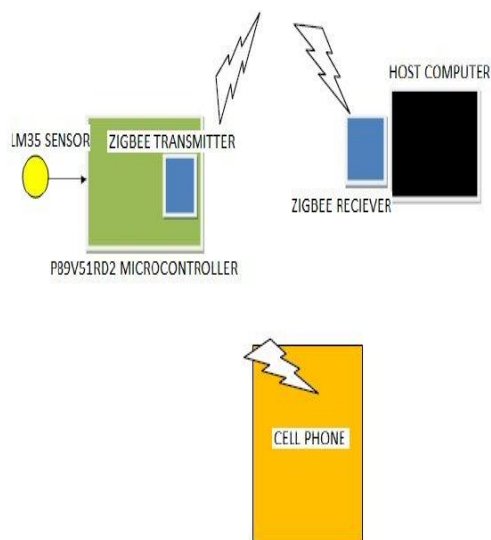


Figure. No: 1 Experimental setup



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