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WSN Based Healthcare Monitoring System using GSM and ARM7

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Abstract: The research paper, presents a Wireless Sensor Network (WSN) for monitoring a patient's physiological conditions continuously using gsm. In this Project we are 4 group members are made to do test. Person A was in the age group of 1-10 years. Person B was in the age group of 11-30 years and person C was in the age group of 31-80 years. Physiological conditions of these 3 groups of persons were monitored using physiological sensor. The output of physiological sensor has to be transmitted via gsm and the same has to be sent to the remote wireless monitor for acquiring the observed patient's physiological signal. The remote wireless monitor is constructed of gsm and Personal Computer (PC). The measured signal has to be sent to the PC, which can be data collection. is basically deals with measurement of the body temperature, ECGpattern simulated BP and heartbeat rate of patients and displays the figure on LCD display. We are going to three clamped type sensors out of which two are placed on wristof the hand and one is placed on any leg. Differential voltage from sensor is in mV range which is converted into volts by instrumentation amplifier designed for gain of 1000. The amplified signal is applied to low pass filter for faithful nature of ECG whosecut-off frequency is decided to be 150Hz..

Keywords: ARM7, GSM, LCD Display, LM35, ECG Sensor.

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