VLSI Implementation of Smart Health Care System

P.M. Bharath, E. Manikandan
Department of Embedded System Technologies
Rajalakshmi Engineering College
bharathmannappan1@gmail.com,manikandan.e@rajalakshmi.edu.in

Abstract: In recent trends, the small issues in health care systems (delay in transmission line and small errors) may cause loss of several lives. With the improvements in VLSI technologies, microcontroller usage has been decreased drastically. The adaptive VLSI designs have several advantages like reduce the size of device, cost of device, power consumption, speed of operation, reliability and more functionality. An attempt has been made to design and implement an advanced health care system using Zigbee enabled RFID technology. The current status of each patient is displayed in the LCD screen, in the presence of doctor's room. In this system patient's security, nurse presence and doctor's regular rounds are maintained and recorded in a database. Xilinx ISE Simulator has been used to simulate the processor module and the hardware of the processor has been implemented up to the RTL schematic level and in order to substantiate our design we have used high performance FPGA board.