

Development of Monitoring Blood Bank Center Based PIC Microcontroller Using CAN Communication

Authors : Kaiwan S. Ismael, Ergun Ercelebi, Majeed Nader

Abstract : This paper describes the design and implementation of a hardware setup for online monitoring of 24 refrigerators inside blood bank center using the microcontroller and CAN bus for communications between each node. Due to the security of locations in the blood bank hall and difficulty of monitoring of each refrigerator separately, this work proposes a solution to monitor all the blood bank refrigerators in one location. CAN-bus system is used because it has many applications and advantages, especially for this system due to easy in use, low cost, providing a reduction in wiring, fast to repair and easily expanding the project without a problem.

Keywords : control area network (CAN), monitoring blood bank center, PIC microcontroller, MPLAB IDE

Conference Title : ICEMS 2015 : International Conference on Electrical and Microelectronics Systems

Conference Location : Istanbul, Türkiye

Conference Dates : December 21-22, 2015