ABSTRACT

Digital electrocardiograph (ECG) based on 8-bit microcontroller is one of an alternative device with a lower cost. The digital ECG data was integrated with data of computer, so it is easier to manage and monitor the data of patient health. To add amenity of digital ECG that was made available, so it was needed a monitoring system of wireless digital ECG. Its implementation can use various methods which one of them based on the wireless computer network (wireless LAN 802.11b).

By monitoring system of wireless digital ECG with wireless LAN is expected can facilitating cardiologist for monitoring heart health of patient. Beside that, there's another point in this monitoring act, it can reach broader area in wireless LAN area coverage.

In this final task, a monitoring application as receiver of digital ECG at cardiologist computer based on wireless LAN will be implemented. This application is made by using a network programming, they are Borland Delphi 7 based on socket to support network programming. And it will support receiving of data from transmitter that is inculcated at digital ECG to deliver data about heart condition that was captured by digital ECG, and display the result through the form of electrocardiogram graph.

Keywords   : Electrocardiograph, Telemedicine, Wireless LAN 802.11b,
                     Network Application.