ABSTRACT

Now, there is much of devices to be a medical instrument, that makes every diagnose of health become much easier. Cardiac Disease has much of responsibility for cause of death in the world. It make the author to deeped study on device for measure the activity of heart, that is Electrocardiograph(ECG).

ECG device measure and make a signal based on electrical activity of heart using electrode placed on chest. ECG signal have some parameter that become reference of diagnose of disease. QRS Comple is one of that parameter whos clearly visible by eyes. Measuring of QRS complex today limited by it's hardware and software.

The author look for opportunity to make innovation on QRS Complex detection. Raspberry Pi is a microcontroller with high compute power compared on it's size, it can be a Desktop PC with installed OS. On a research, the result of detection has an accuration more than 98%, the compute included the value of R peak & QRS interval on ECG signal, and also classification of signal which had a anomaly based on value of R peak & QRS interval.

Keywords: ECG(Electrocardiograph), Heart, Raspberry Pi, QRS Complex