ECG Sensor and Mobile Phone System
JQ1a - 03

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Cardiac disease is one of the top killers in developed countries. Fortunately, with the help of advanced technology and medicine, the threat posed by heart disease has been declining steadily. One way to protect a patient from a deadly heart attack is to monitor his/her heart condition closely with the use of an ECG (Electrocardiogram) system. Yet, such equipment is bulky, expensive, and is difficult to use by persons not medically trained.

The problem can be resolved completely by replacing the ECG analyzer with a mobile phone. With a tiny external ECG circuit, the patient can measure his or her ECG signals at home, or perform the same health checking procedure while traveling, via a portable mobile phone.

In this project, going a step ahead of the already developed tele-ECG analyzer already available on the market, we designed, and then implanted, a program capable of doing ECG analysis into a mobile phone.
Fig 1 Block Diagram of ECG System
Results

User-friendly Graphics on Mobile Screen

Portable Real-time Diagnostic ECG System