

PORTABLE ARM PROCESSOR BASED WIRELESS ECG SYSTEM

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Abstract

Mobile telemedicine systems are becoming more important all the time, especially in the care of patients that are isolated or travelling, far from a reference hospital. These systems must be embedded in low cost, small devices with low power consumption, and should have an interface that is usable by the patient. Incorporating technologies such as Bluetooth, GPRS, GSM or Wi-Fi to these systems allows the wireless transmission to health or control centres. This paper describes a low cost, portable system with wireless transmission capabilities for the acquisition, processing, storing and visualization in real time of the electrical activity of the heart to a PC. Implementation of this system would be beneficial to all involved in the use of electrocardiography as access to, and movement of, the patient would not be impeded by the physical constraints imposed by the cables.