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| **Title:** | Design and Implementation of a Low-Cost Blood Pressure Measuring Device | | |
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| **Abstract:** |  |
| Blood pressure (BP) is one of the most significant fundamental parameters of cardiac and vascular conditions of human body. Till present, many techniques and devices have been developed to measure and monitor the BP and a variety of different BP measurement devices used in the hospitals and pre-hospital settings. People can measure their BP by using their own electronic devices. But in developing countries, automated BP measurement devices are scarce and expensive. To measure manually using Stethoscope and Sphygmomanometer is the most accurate and inexpensive BP measurement method. But it requires a trained person for measurement accuracy. In most of the electronic BP measurement devices use the oscillometric method. In this paper, we have reported about a microcontroller based low-cost BP measurement device that is able to measure the BP using a hand cuff. The device comprises mainly three parts, such as, hardware (viz. hand-cuff, pressure valve and LCD screen), electronic interface circuit and a microcontroller unit. Test results show good agreement with the results obtained by using conventional BP measurement device. | |