



In last few years, the revolutionary advancement is taking place in the technology that embeds low level processing hardware and the application specific software into a chip, resulting into smart embedded systems. It is the electronic design, dedicated to the particular task. It also addresses the issues of the response time constraints of various tasks of the system. Microcontroller based embedded system may either be an independent system or a part of larger system. Due to high reliability and greater flexibility in the upgradation of the functionality, the microcontroller based embedded systems find wide spectrum of applications in the various fields such as test & measurement instrumentation, process control, automobile & consumer electronics, domestic appliances, industrial and R & D applications, etc. The area is ubiquitous and rather more pervasive. Therefore, many researchers are showing interest in this field. Keeping in touch with the state of art technology, based on microcontroller, an embedded system is designed to measure magnetic permeability of the materials and the results regarding the hardware and software designing and implementation presented in this book.



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Electronic Instrumentation for Initial Permeability

Sensor design, A Practical Perspective of 8051
Design, Calibration and Testing



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