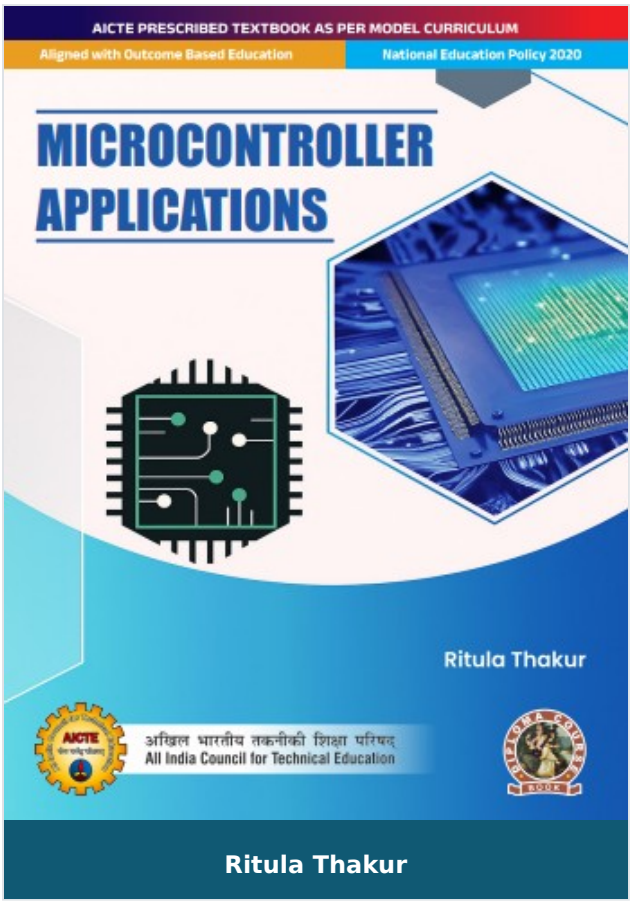


Microcontroller Applications

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Product Description

Microcontroller Applications

The Microcontroller Applications has been designed to serve as a textbook for diploma students enrolled in Electrical, Electronics, and Instrumentation & Control branches. It will also serve well as reference to engineers and hobbyists working with the 8051. The detailed coverage of this book includes an introduction microcontroller, history of development of microcontrollers. It mainly covers 8051, along with its architecture and pin diagram. Assembly language programming of 8051 has been covered in detail gaining insight into how instructions are classified. A special chapter has been dedicated to Embedded C programming for the 8051 microcontroller, delving into essential aspects crucial for programming for embedded system. The book also explores various software development tools required for developing projects based on Assembly language and Embedded C programming of 8051.

Salient Features

- Introduction to 8051 microcontroller, its architecture, pin Diagram and SFRs.
- Classification of instructions for 8051 and detailed programs with explanation.
- Advanced concepts such as Timer/Counters, Serial Communication, Interrupts.
- Step-by-step guide to create Hex file using Keil Compiler.
- Detailed steps guidance for burning Hex file into microcontroller using Flashmagic.
- Unit-wise summary to revise important points highlighting key points of each unit.
- QR codes in each chapter to give student more insight into the subject.

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