

Introduction to microprocessor and microcontroller systems, architecture of 8088/8086 microprocessors and fundamentals of operation, architecture of microcontrollers and fundamentals of operation, hardware and software techniques for real-time applications incorporating electrical, electronic, and electromechanical systems, hardware-software interactions, programming internal peripherals, and real-time control and conditioning of external devices using microprocessors and microcontrollers such as Motorola, Microchip, Intel, or any other equivalent product.