



Computer System Organization

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Product Description

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The key concepts of computer system organization are covered in this book. All the fundamental concepts of computer structures, control unit design arithmetic operations, microprocessor architecture. Assembly language programming, and memory interfacing with input-output devices are covered in the book. This book combines theoretical knowledge with practical applications. It also presents state-of-the-art experiments using Verilog HDL language, 8086 microprocessor, NASM assembler, and Gem5 simulator. Each topic can be studied further to advance levels by scanning QR codes provided in the chapters.

This book is written for diploma and undergraduate students of CSE, IT, ECE, and MCA to strengthen the ability to analyze and solve simple to complex computer system organization problems. In 'know more' section, notable Indian inventors as well as rich Indian Vedas knowledge and fundamental principles are presented for motivating readers to practice our valuable principles in modern lifestyle.

Salient features:

- Content of the book aligned with the mapping course outcomes, programs and Units Outcomes.
- In the beginning of each unit learning outcomes are listed to make the student understand what is expected out of him/her after completing that unit.
- Book provides lots of recent information, interesting facts, QR code for E-resources, QR code for use of ICT, projects, group discussion etc.
- Student and teacher centric subject materials included in book with balanced and chronological manner.

- Figures, tables, and software screen shots are inserted to improve clarity of the topics.
- Apart from essential information a 'know more' section is also provided in each unit to extend the learning beyond syllabus.
- Short questions, objective questions and long answer exercises are given for practice of students after every chapter.
- Solved and unsolved problems including numerical examples are solved with systematic steps.

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