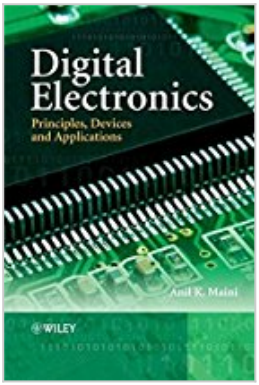

Digital Electronics: Principles, Devices and Applications

By Anil K. Maini

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The fundamentals and implementation of digital electronics are essential to understanding the design and working of consumer/industrial electronics, communications, embedded systems, computers, security and military equipment.

Devices used in applications such as these are constantly decreasing in size and employing more complex technology. It is therefore essential for engineers and students to understand the fundamentals, implementation and application principles of digital electronics, devices and integrated circuits. This is so that they can use the most appropriate and effective technique to suit their technical need.

This book provides practical and comprehensive coverage of digital electronics, bringing together information on fundamental theory, operational aspects and potential applications. With worked problems, examples, and review questions for each chapter, *Digital Electronics* includes:

- information on number systems, binary codes, digital arithmetic, logic gates and families, and Boolean algebra;
- an in-depth look at multiplexers, de-multiplexers, devices for arithmetic operations, flip-flops and related devices, counters and registers, and data conversion circuits;
- up-to-date coverage of recent application fields, such as programmable logic devices, microprocessors, microcontrollers, digital troubleshooting and digital instrumentation.

A comprehensive, must-read book on digital electronics for senior undergraduate and graduate students of electrical, electronics and computer engineering, and a valuable reference book for professionals and researchers.

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Digital Electronics: Principles, Devices and Applications By Anil K. Maini Bibliography

- Sales Rank: #1710966 in Books
- Brand: Brand: Wiley
- Published on: 2007-09-11
- Original language: English
- Number of items: 1
- Dimensions: 9.90" h x 1.81" w x 6.83" l, .0 pounds
- Binding: Hardcover
- 752 pages

Editorial Review

Review
"It is easy to read, well structured, and will be a rich resource and valuable study companion for students of electrical and computer engineering." (*Computing Reviews*, February 6, 2008)

"There is a particularly notable section on numerical systems and conversions from one radix system to another that, along with the presentation of binary coding and interpretation schemes, demonstrates the clarity and extent of Maini's work to construct a definitive road map..." (*CHOICE*, March 2008)

From the Back Cover
Digital Electronics

Anil K. Maini

Laser Science and Technology Center, Delhi, India

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About the Author
Anil K. Mainiis a senior scientist and Associate Director at Laser Science and Technology Centre, an R&D establishment under Defence Research and Development Organization (DRDO), India. He has worked on a

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He has eight books to his credit including Satellite Technology: Principles and Applications, Microwaves and Radar, Handbook of Electronics, Electronics and Communication Simplified, Electronics for Competitions, Television Technician’s Course, Electronics Projects for Beginners and Facing the Interview Board for Electronics Professionals. He has also authored about 150 technical articles and papers in national and international magazines and conferences and has two patents (Patent pending) to his credit. He is Life Fellow of Institution of Electronics and Telecommunication Engineers (IETE) and Life Member of Indian Laser Association

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