

Power Electronics and Motor Drive Systems

By Stefanos Manias



Power Electronics and Motor Drive Systems By Stefanos Manias

Power Electronics and Motor Drive Systems is designed to aid electrical engineers, researchers, and students to analyze and address common problems in state-of-the-art power electronics technologies. Author Stefanos Manias supplies a detailed discussion of the theory of power electronics circuits and electronic power conversion technology systems, with common problems and methods of analysis to critically evaluate results.

These theories are reinforced by simulation examples using well-known and widely available software programs, including SPICE, PSIM, and MATLAB/SIMULINK. Manias expertly analyzes power electronic circuits with basic power semiconductor devices, as well as the new power electronic converters. He also clearly and comprehensively provides an analysis of modulation and output voltage, current control techniques, passive and active filtering, and the characteristics and gating circuits of different power semiconductor switches, such as BJTs, IGBTs, MOSFETs, IGCTs, MCTs and GTOs.

- Includes step-by-step analysis of power electronic systems
- Reinforced by simulation examples using SPICE, PSIM, and MATLAB/SIMULINK
- Provides 110 common problems and solutions in power electronics technologies





Power Electronics and Motor Drive Systems

By Stefanos Manias

Power Electronics and Motor Drive Systems By Stefanos Manias

Power Electronics and Motor Drive Systems is designed to aid electrical engineers, researchers, and students to analyze and address common problems in state-of-the-art power electronics technologies. Author Stefanos Manias supplies a detailed discussion of the theory of power electronics circuits and electronic power conversion technology systems, with common problems and methods of analysis to critically evaluate results.

These theories are reinforced by simulation examples using well-known and widely available software programs, including SPICE, PSIM, and MATLAB/SIMULINK. Manias expertly analyzes power electronic circuits with basic power semiconductor devices, as well as the new power electronic converters. He also clearly and comprehensively provides an analysis of modulation and output voltage, current control techniques, passive and active filtering, and the characteristics and gating circuits of different power semiconductor switches, such as BJTs, IGBTs, MOSFETs, IGCTs, MCTs and GTOs.

- Includes step-by-step analysis of power electronic systems
- Reinforced by simulation examples using SPICE, PSIM, and MATLAB/SIMULINK
- Provides 110 common problems and solutions in power electronics technologies

Power Electronics and Motor Drive Systems By Stefanos Manias Bibliography

Rank: #3094180 in Books
Published on: 2016-12-16
Original language: English

• Dimensions: 9.02" h x 1.99" w x 5.98" l,

• Binding: Paperback

• 1008 pages

Download Power Electronics and Motor Drive Systems ...pdf

Read Online Power Electronics and Motor Drive Systems ...pdf

Download and Read Free Online Power Electronics and Motor Drive Systems By Stefanos Manias

Editorial Review

From the Back Cover

- Includes step-by-step analysis of power electronic systems
- Reinforced by simulation examples using SPICE, PSIM, MATLAB/SIMULINK
- Provides 110 common problems and solutions in power electronics technologies

Power Electronics and Motor Drive Systems is designed to aid electrical engineers, researchers and students to analyse and address common problems in state-of-the-art power electronics technologies.

Stefanos Manias supplies a detailed discussion of the theory of power electronics circuits and electronic power conversion technology systems, with common problems and methods of analysis to critically evaluate results. These theories are reinforced by simulation examples using well-known and widely available software programs, including SPICE, PSIM and MATLAB/SIMULINK. Manias expertly analyses power electronic circuits with basic power semiconductor devices, as well as the new power electronic converters. He also clearly and comprehensively provided an analysis of modulation and output voltage, current control techniques, passive and active filtering, and the characteristics and gating circuits of different power semiconductor switches such as BJTs, IGBTs, MOSFETs, IGCTs, MCTs and GTOs.

About the Author

Dr. Manias is an IEEE Fellow and the Chapter Chairman of IEEE Greece section of the joint societies IAS-PELS-IES. His research interests include Power Electronics conversion topologies, Battery Energy Storage Systems (BESS) and motor drive systems.

Users Review

From reader reviews:

John Jacquez:

What do you with regards to book? It is not important together with you? Or just adding material when you need something to explain what yours problem? How about your spare time? Or are you busy particular person? If you don't have spare time to do others business, it is gives you the sense of being bored faster. And you have free time? What did you do? All people has many questions above. They need to answer that question because just their can do that. It said that about publication. Book is familiar on every person. Yes, it is suitable. Because start from on jardín de infancia until university need this specific Power Electronics and Motor Drive Systems to read.

Adam Allen:

Typically the book Power Electronics and Motor Drive Systems has a lot associated with on it. So when you check out this book you can get a lot of benefit. The book was compiled by the very famous author. This articles author makes some research ahead of write this book. That book very easy to read you will get the

point easily after reading this book.

Beverly Harrison:

Your reading 6th sense will not betray anyone, why because this Power Electronics and Motor Drive Systems book written by well-known writer whose to say well how to make book which can be understand by anyone who else read the book. Written in good manner for you, dripping every ideas and publishing skill only for eliminate your own personal hunger then you still hesitation Power Electronics and Motor Drive Systems as good book not merely by the cover but also by content. This is one book that can break don't assess book by its deal with, so do you still needing one more sixth sense to pick that!? Oh come on your reading through sixth sense already said so why you have to listening to yet another sixth sense.

Barbra Poole:

Beside this specific Power Electronics and Motor Drive Systems in your phone, it may give you a way to get more close to the new knowledge or details. The information and the knowledge you may got here is fresh through the oven so don't possibly be worry if you feel like an outdated people live in narrow commune. It is good thing to have Power Electronics and Motor Drive Systems because this book offers for your requirements readable information. Do you often have book but you seldom get what it's about. Oh come on, that wil happen if you have this in your hand. The Enjoyable arrangement here cannot be questionable, including treasuring beautiful island. Use you still want to miss the item? Find this book along with read it from right now!

Download and Read Online Power Electronics and Motor Drive Systems By Stefanos Manias #QD8GXKH2U6C

Read Power Electronics and Motor Drive Systems By Stefanos Manias for online ebook

Power Electronics and Motor Drive Systems By Stefanos Manias Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Power Electronics and Motor Drive Systems By Stefanos Manias books to read online.

Online Power Electronics and Motor Drive Systems By Stefanos Manias ebook PDF download

Power Electronics and Motor Drive Systems By Stefanos Manias Doc

Power Electronics and Motor Drive Systems By Stefanos Manias Mobipocket

Power Electronics and Motor Drive Systems By Stefanos Manias EPub

QD8GXKH2U6C: Power Electronics and Motor Drive Systems By Stefanos Manias