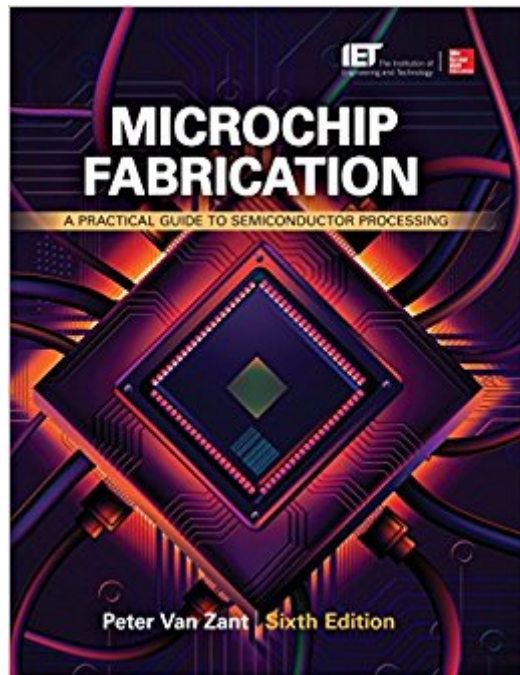


The book was found

Microchip Fabrication, Sixth Edition: A Practical Guide To Semiconductor Processing



Synopsis

The most complete, current guide to semiconductor processing Fully revised to cover the latest advances in the field, *Microchip Fabrication, Sixth Edition* explains every stage of semiconductor processing, from raw material preparation to testing to packaging and shipping the finished device. This practical resource provides easy-to-understand information on the physics, chemistry, and electronic fundamentals underlying the sophisticated manufacturing materials and processes of modern semiconductors. State-of-the-art processes and cutting-edge technologies used in the patterning, doping, and layering steps are discussed in this new edition. Filled with detailed illustrations and real-world examples, this is a comprehensive, up-to-date introduction to the technological backbone of the high-tech industry. **COVERAGE INCLUDES:** The semiconductor industry Properties of semiconductor materials and chemicals Crystal growth and silicon wafer preparation Wafer fabrication and packaging Contamination control Productivity and process yields Oxidation The ten-step patterning process--surface preparation to exposure; developing to final inspection Next generation lithography Doping Layer deposition Metallization Process and device evaluation The business of wafer fabrication Devices and integrated circuit formation Integrated circuits Packaging

Book Information

Hardcover: 576 pages

Publisher: McGraw-Hill Education; 6 edition (January 7, 2014)

Language: English

ISBN-10: 0071821015

ISBN-13: 978-0071821018

Product Dimensions: 7.7 x 1.4 x 9.5 inches

Shipping Weight: 2.5 pounds (View shipping rates and policies)

Average Customer Review: 3.8 out of 5 stars [See all reviews](#) (4 customer reviews)

Best Sellers Rank: #395,273 in Books (See Top 100 in Books) #14 in [Books > Engineering & Transportation > Engineering > Materials & Material Science > Extraction & Processing](#) #55 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits > Integrated](#) #64 in [Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Semiconductors](#)

Customer Reviews

This is a 6th edition but the updating is erratic. There are many sections where you will see the

discussion of methods end with 0.35 micron processes. Yes, other sections go further, but it leaves you guessing about the usefulness of the information. There are also places where there are typos and diagrams with wrong labels that must have been there for a decade. I don't feel at all like I understand how a 22nm process works, or even 65 nm. For example the thinnest spin-on coating discussed is about 10x thicker than what I see discussed in research papers and you will not find any clue how that is achieved. As an introductory text it has the advantage of giving you an all-around view of how complicated the industry is. You will find discussions of everything from coating your shoes to coating high aspect contacts, from super pure chemicals to super-small self aligned processes. At the end of the book you probably know most of the processes in use. You will, however, probably not feel confident you have learned how the most modern chips are produced. This book requires a total overhaul if it is to remain relevant, now just tinkering.

This book is OK, but there are many typos and some wrong information in the book.

Almost through chapter 6. Great overview of the wafer fab process. Reads easily.

Excellent book

[Download to continue reading...](#)

Microchip Fabrication, Sixth Edition: A Practical Guide to Semiconductor Processing
Microchip Fabrication: A Practical Guide to Semiconductor Processing
Learn to Weld: Beginning MIG Welding and Metal Fabrication Basics - Includes techniques you can use for home and automotive repair, metal fabrication projects, sculpture, and more
Beginner's Guide to Programming the PIC24/dsPIC33: Using the Microstick and Microchip C Compiler for PIC24 and dsPIC33 (Volume 1)
What Your Sixth Grader Needs to Know: Fundamentals of a Good Sixth-Grade Education, Revised Edition (Core Knowledge Series)
Intelligent Sensor Design Using the Microchip dsPIC (Embedded Technology)
Demystifying The Microchip PIC Microcontroller For Engineering Students: Following The KISS Principle
Microcontroller Programming: The Microchip PIC The Chip : How Two Americans Invented the Microchip and Launched a Revolution
Microchip Manufacturing The Juvenile Justice System: Delinquency, Processing, and the Law 6th (sixth) edition
Practical Crime Scene Processing and Investigation, Second Edition (Practical Aspects of Criminal and Forensic Investigations)
Study Guide for Jeffus/Burris' Welding and Metal Fabrication
VLSI Fabrication Principles: Silicon and Gallium Arsenide, 2nd Edition
Handbook of Optics, Third Edition Volume II: Design, Fabrication and Testing, Sources and Detectors, Radiometry and Photometry
Digital Signal

Processing with Examples in MATLAB®[®], Second Edition (Electrical Engineering & Applied Signal Processing Series) Discrete-Time Signal Processing (3rd Edition) (Prentice-Hall Signal Processing Series) The Science and Engineering of Microelectronic Fabrication (The Oxford Series in Electrical and Computer Engineering) Fabrication Engineering at the Micro- and Nanoscale (The Oxford Series in Electrical and Computer Engineering) Photomask Fabrication Technology (Professional Engineering)

[Dmca](#)