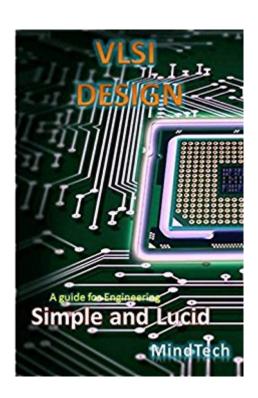
The book was found

VLSI DESIGN SIMPLE AND LUCID EXPLANATION





Synopsis

This book explains Very Large Sytem Integration (VLSI) in a simple and lucid style. The book is very beneficial for engineering students. It is divided into 5 modules: Module 1 Process steps in IC fabrication: Silicon wafer preparation-Diffusion of impurities-physical mechanism-ion implantation-Annealing process-Oxidation process-lithography-Chemical Vapour Deposition -epitaxial growth â "reactors-metallization-patterning-wire bonding -packaging Module 2 Monolithic components: Isolation of components-junction isolation and dielectric isolation. Monolithic diodes- schottky diodes and transistors-buried layer-FET structures- JFET-MOSFET-PMOS and NMOS. Control of threshold voltage- silicon gate technology- monolithic resistors-resistor design-monolithic capacitors- design of capacitors- IC crossovers and vias. Module 3 CMOS technology: CMOS structure-latch up in CMOS, CMOS circuits-combinational logic circuit-invertor- NAND-NOR-complex logic circuits, full adder circuit. CMOS transmission gate(TG)T-realization of Boolean functions using TG. Complementary Pass Transistor Logic (CPL)-CPL circuits: NAND, NOR-4 bit shifter. Basic principle of stick diagrams. Module 4 CMOS sequential logic circuits: SR flip flop, JK flip flop, D latch circuits. BiCMOS technology-structure-BiCMOS circuits: inverter, NAND, NOR-CMOS logic systems-scaling of MOS structures-scaling factors-effects of miniaturization. Module 5 Gallium Arsenide Technology: Crystal structure-doping process-channeling effect- MESFET fabrication-Comparison between Silicon and GaAs technologies. Introduction to PLA and FPGA

Book Information

File Size: 331 KB

Print Length: 170 pages

Simultaneous Device Usage: Unlimited

Publisher: MINDTECH (March 2, 2016)

Publication Date: March 2, 2016

Sold by: A Digital Services LLC

Language: English

ASIN: B01CHBYIPM

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #511,171 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #38
in Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits > VLSI
& ULSI #99 in Kindle Store > Kindle eBooks > Engineering & Transportation > Engineering >
Electrical & Electronics > Circuits #240 in Books > Engineering & Transportation > Engineering >
Electrical & Electronics > Circuits > Design

Customer Reviews

simple and easy to understand . usefull for engineers . great work !!

It is a very helpful textbook that I think this book will benefit the students to know more about VLSI design

Download to continue reading...

VLSI DESIGN SIMPLE AND LUCID EXPLANATION Lucid Dreaming: Learn How To Control Your Dreams In 10 Easy Steps - Lucid Dreaming Techniques (Lucid Dreaming, Astral Projection, Visualization Techniques) Dreams: Interpreting Your Dreams and How to Dream Your Desires-Lucid Dreaming, Visions and Dream Interpretation (Dreams, Lucid dreaming, Visions,) Dreams: Discover the Meaning of Your Dreams and How to Dream What You Want - Dream Interpretation, Lucid Dreaming, and Dream Psychology (+BONUS) (Dream Analysis, Dream Meanings, Lucid Dream) Dreams: Lucid Dreaming - Lucid Dreams - New Age Dreams: A Beginner's Guide Book on How to Become Conscious in Your Dreams: Dream and Sleep, Volume 2 How to Master Lucid Dreaming: Your Practical Guide to Unleashing the Power of Lucid Dreaming Circuits. Interconnections, and Packaging for VIsi (Addison-Wesley VLSI systems series) The Really Good Fun Cartoon Book of NLP: A simple and graphic(al) explanation of the life toolbox that is NLP VLSI Chip Design with the Hardware Description Language VERILOG: An Introduction Based on a Large RISC Processor Design Learning FPGAs: Digital Design for Beginners with Mojo and Lucid HDL Dodd-Frank Wall Street Reform and Consumer Protection Act: Law, Explanation and Analysis Law and the Disordered: An Explanation in Mental Health, Law, and Politics Stick and Rudder: An Explanation of the Art of Flying Heal Thyself: An Explanation of the Real Cause and Cure of Disease The True and Invisible Rosicrucian Order: An Interpretation of the Rosicrucian Allegory & An Explanation of the Ten Rosicrucian Grades The School of Fencing: With a General Explanation of the Principal Attitudes and Positions Peculiar to the Art Examples & Explanation: Criminal Procedure Constitution & Police, Seventh Edition (Examples & Explanations) The Everything U.S. Constitution Book: An easy-to-understand explanation of the foundation of American government

(Everything®) Know Yourself: An Explanation of the Oneness of Being VLSI Digital Signal

Processing Systems: Design and Implementation

<u>Dmca</u>