

Circuit Design for CMOS VLSI

Filesize: 6.03 MB

Reviews

Simply no words and phrases to spell out. it was writtern extremely perfectly and useful. I am easily could possibly get a satisfaction of looking at a composed publication. (Prof. Maudie Ziemann)

CIRCUIT DESIGN FOR CMOS VLSI

DOWNLOAD PDF

ഹ

Book Condition: New. Publisher/Verlag: Springer, Berlin | During the last decade, CMOS has become increasingly attractive as a basic integrated circuit technology due to its low power (at moderate frequencies), good scalability, and rail-to-rail operation. There are now a variety of CMOS circuit styles, some based on static complementary con ductance properties, but others borrowing from earlier NMOS techniques and the advantages of using clocking disciplines for precharge-evaluate se quencing. In this comprehensive book, the reader is led systematically through the entire range of CMOS circuit design. Starting with the in dividual MOSFET, basic circuit building blocks are described, leading to a broad view of both combinatorial and sequential circuits. Once these circuits are considered in the light of CMOS process technologies, impor tant topics in circuit performance are considered, including characteristics of interconnect, gate delay, device sizing, and I/O buffering. Basic circuits are then composed to form macro elements such as multipliers, where the reader acquires a unified view of architectural performance through par allelism, and circuit performance through careful attention to circuit-level and layout design optimization. Topics in analog circuit design reflect the growing tendency for both analog and digital circuit forms to be combined on the same chip, and a careful treatment of BiCMOS forms introduces the reader to the combination of both FET and bipolar technologies on the same chip to provide improved performance. | 1 Introduction to CMOS.- 1.1 Why Study CMOS?.- 1.2 Basic Concepts.- 1.2.1 Switch Logic.- 1.2.2 Logic Transmission.- 1.2.3 Data storage.- 1.2.4 Dynamic CMOS.- 1.2.5 CMOS System Design.- 1.3 Plan of the Book.- 1.4 References.- 2 MOSFET Characteristics.- 2.1 Threshold Voltage.- 2.1.1 Body-Bias.- 2.2 Current-Voltage Characteristics.- 2.2.1 Square-Law Model.- 2.2.2 Bulk-Charge Model.- 2.3 p-Channel MOSFETs.- 2.4 MOSFET Capacitances.- 2.4.1 MOS-Based Capacitances.- 2.4.2 Depletion Capacitance.-2.4.3 Channel Capacitances.- 2.4.4 Device Model.- 2.5 Junction...

Read Circuit Design for CMOS VLSI Online

Download PDF Circuit Design for CMOS VLSI

Other PDFs

٢	Ρ
	=1
	=
L	

Would It Kill You to Stop Doing That?

Book Condition: New. Publisher/Verlag: Little, Brown Book Group | A Modern Guide to Manners | A laugh-out-loud guide to modern manners by acclaimed humorist, author, and Vanity Fair columnist Henry Alford. | A few years...

Download PDF »

Yearbook Volume 15

RareBooksClub. Paperback. Book Condition: New. This item is printed on demand. Paperback. 58 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.This historic book may have numerous typos and missing text. Purchasers can usually download a free... **Download PDF** »

$\neg \land$	

Violet Rose and the Surprise Party

Book Condition: New. Publisher/Verlag: Nosy Crow | With activities, 3D press-out models and over 175 stickers! Plus free games and printables online! | When busy rabbit, Violet Rose, discovers that her friend Lily has a...

Download PDF »

ſ	\exists
	=

TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3) (Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

Download PDF »

Γ	P
	_

DK Readers Animal Hospital Level 2 Beginning to Read Alone

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.9in. x 5.8in. x 0.1in.This Level 2 book is appropriate for children who are beginning to read alone. When Jack and Luke take an injured...

Download PDF »