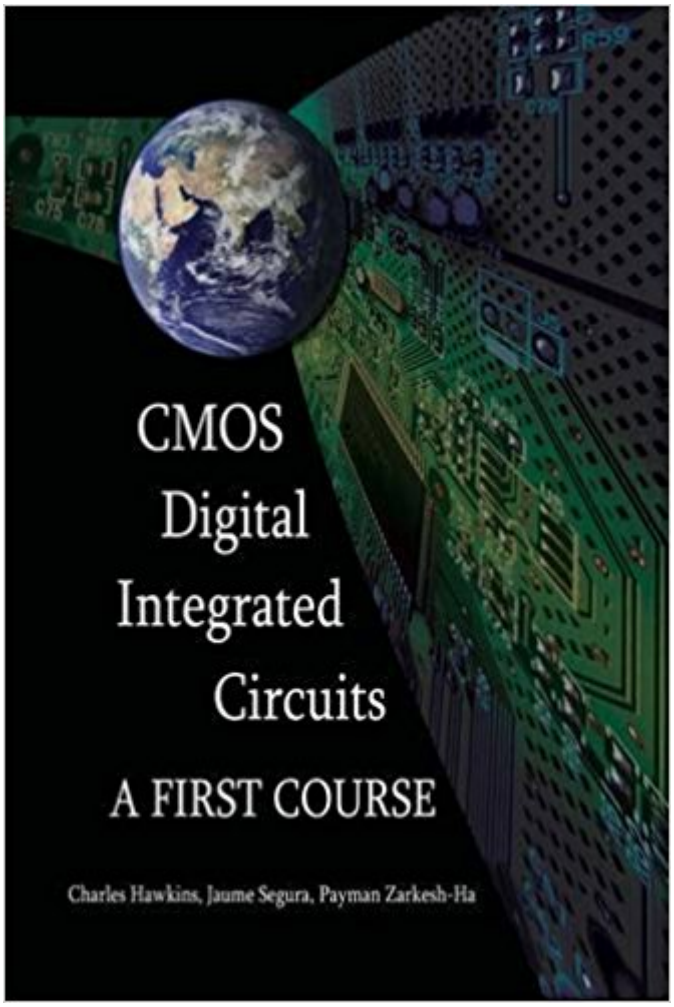
CMOS Digital Integrated Circuits: A First Course (Materials, Circuits And Devices)



Synopsis

CMOS Digital Integrated Circuits: A First Course teaches the fundamentals of modern CMOS technology by focusing on central themes and avoiding overwhelming details. Extensive examples, self-exercises, and end-of-chapter problems assist in teaching the current practices of industry and subjects taught by graduate courses in microelectronics. Computer engineering curriculums can remove the analog electronics prerequisite altogether when adopting this book. This book is also unique in that it presents timing, the most difficult of the computer designer's tasks, and an issue that is avoided by all other textbooks. The remaining chapters describe memory, metal thermal and capacitive properties, FPGAs, layout, and then concludes with a chapter on how circuits are made in a chip factory. Supplementary materials for professors are available upon request via email to books@theiet.org.

Book Information

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