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Sommario/riassunto

"Respected authors Phil Allen and Doug Holberg bring you the third edition of their popular textbook, CMOS Analog Circuit Design. Working from the forefront of CMOS technology, Phil and Doug have combined their expertise as engineers and academics to present a cutting-edge and effective overview of the principles and techniques for designing circuits. Their two main goals are: * to mix the academic and practical viewpoints in a treatment that is neither superficial nor overly detailed * to teach analog integrated circuit design with a hierarchically organized approach Most of the circuits, techniques, and principles presented in CMOS Analog Circuit Design come directly from the authors' industrial experience, making the book a valuable resource for both practicing engineers and students taking courses in analog electronics or CMOS analog design. The trademark approach of Phil and Doug's textbook is its design recipes, which take readers step-by-step through the creation of real circuits, explaining and demystifying complex design problems. The book provides detailed coverage of often-neglected areas and deliberately leaves out bipolar analog circuits, since CMOS is the dominant technology for analog integrated circuit design. Appropriate for advanced undergraduates and graduate students with background knowledge in basic electronics--including biasing, modeling, circuit, analysis, and frequency response--CMOS Analog Circuit Design, Third Edition, presents a complete picture of design (including modeling, simulation, and testing) and enables readers to undertake the design of an analog circuit that can be implemented by CMOS technology. New to This Edition * An updated Chapter 2 that reflects the latest technology on twin-well shallow-trench-isolation CMOS * Expanded coverage of such topics as frequency response, feedback, distortion, noise, bootstrapped voltage references, and photosensitivity * A new appendix on layout techniques"--

"A textbook for 4th year undergraduate/first year graduate electrical engineering students"--