Record Nr. UNINA9910437878303321 Autore Mohan P.V. Ananda Titolo VLSI Analog Filters: Active RC, OTA-C, and SC // by P.V. Ananda Mohan Pubbl/distr/stampa Boston, MA:,: Birkhäuser Boston:,: Imprint: Birkhäuser,, 2013 **ISBN** 0-8176-8358-5 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (634 p.) Collana Modeling and Simulation in Science, Engineering and Technology, 2164-3725 Disciplina 621.395 Soggetti Electrical engineering Engineering design Computer science - Mathematics Mathematics **Engineering mathematics** Engineering - Data processing Mathematical physics Electrical and Electronic Engineering Engineering Design Mathematical Applications in Computer Science Applications of Mathematics Mathematical and Computational Engineering Applications Mathematical Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto I. Introduction -- II. Active RC filters -- III. OTA-C filters -- IV. SC filters -- V. Practical designs of VLSI analog filters -- Appendix A --Appendix B. Sommario/riassunto Great strides have been made in the development of analog filters over the past few decades. The first book to treat these recent advances in depth, VLSI Analog Filters provides a comprehensive guide for

researchers and upper-level graduate students, fully preparing readers for professional work. In particular, the work covers active RC filters, OTA-C filters, and Switched-capacitor filters, including advanced

design techniques for low power and high-speed designs, analysis and compensation of non-idealities, and practical case studies of contemporary designs. Throughout the book, exercises are included to reinforce understanding of concepts, and simulations are used to enhance connections to practical applications. This advanced textbook is suitable for engineering graduate students studying analog filter design, offering a full course that may feed seamlessly to employment in industry. At the same time, it serves as an extremely valuable reference for researchers and engineers looking to gain a deeper understanding of the field.