Record Nr. UNINA9910824069603321 Autore Das Apurba Titolo Signal Conditioning [[electronic resource]]: An Introduction to Continuous Wave Communication and Signal Processing / / by Apurba Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2012 **ISBN** 9786613706614 1-280-79622-7 3-642-28818-9 Edizione [1st ed. 2012.] Descrizione fisica 1 online resource (324 p.) Signals and Communication Technology, , 1860-4862 Collana 520 Disciplina Soggetti Signal processing Image processing Speech processing systems Electrical engineering Signal, Image and Speech Processing Communications Engineering, Networks 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 Introduction to Signal Conditioning -- Fourier Series and its application -- Fourier Transform and spectral analysis of signals -- Z-Transform -- Amplitude modulation -- Angle modulation: Frequency and Phase modulation -- Analog multiplexing and multiple access -- Random signals and noise in communication system -- Noise performance of Analog Communication systems -- Upgrading communication systems from analog to digital -- Security issues in communication: digital vs. Analog. "Signal Conditioning" is a comprehensive introduction to electronic Sommario/riassunto signal processing. The book presents the mathematical basics including the implications of various transformed domain representations in signal synthesis and analysis in an understandable and lucid fashion and illustrates the theory through many applications

and examples from communication systems. The ease to learn is

supported by well-chosen exercises which give readers the flavor of the subject. Supplementary electronic materials available on http://extras. springer.com including MATLAB codes illuminating applications in the domain of one dimensional electrical signal processing, image processing and speech processing. The book is an introduction for students with a basic understanding in engineering or natural sciences.