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Nota di contenuto	Chapter 1. Basics of Low-Pass Modulation -- Chapter 2. Linear Processing of Delta-Modulated Bit-Stream -- Chapter 3. Rectification of a Delta-Sigma Modulated Signal -- Chapter 4. Multiplication of Two - Bit-Streams -- Chapter 5. Digital Architecture for - RMS-to-DC Converter -- Chapter 6. Companding Circuits and Systems Based on - Modulation -- Chapter 7. A - Digital Stereo Multiplexing-Demultiplexing System -- Chapter 8. - Digital Amplitude Modulation System -- Chapter 9. - Methods for Frequency Deviation Measurement of a Known Nominal Frequency -- Chapter 10. - Automatic Gain Controller -- Chapter 11. - Integrator and Differentiator Circuits. .
Sommario/riassunto	This book discusses non-conventional digital signal processing based on direct processing of delta-sigma modulated bit-stream. The main attributes of low-pass delta-sigma analog-to-digital converters are: simple and inexpensive design, robustness of design to component tolerances, low-power consumption, high input impedance, high

resolution (more than 20 bits) and possibility of direct arithmetic operation on its bit-stream. The author presents a number of theoretical and simulation results related to newly proposed linear and non-linear circuits such as delta-sigma adders, delta-sigma rectifiers, delta-sigma RMS and AGC circuits, delta-sigma frequency deviation meters, etc. The proposed circuits are not application limited and can be used in instrumentation, sensor application, bio-medical application, communications, etc. Presents novel linear and nonlinear circuits for direct processing of delta-sigma modulated bit-stream; The proposed circuits are supported by theoretical and simulation results; Recommends potential applications of the proposed circuits, and proposes ideas for further investigation.
