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	ISBN	1-68392-801-6 1-68392-800-8
	Descrizione fisica	1 online resource (xii, 651 pages) : illustrations
	Disciplina	621.3822
	Soggetti	Signal processing - Digital techniques Technology & Engineering / Mechanical
	Lingua di pubblicazione	Inglese
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	Note generali	Includes index.
	Nota di contenuto	Frontmatter -- Contents -- Preface -- Chapter 1: Introduction to Digital Signal Processing (DSP) -- Chapter 2: Review of Discrete—Time Signals and Systems -- Chapter 3: The z-Transform -- Chapter 4: Frequency Analysis Using DTFT -- Chapter 5: Discrete Fourier Transforms (DFTs) -- Chapter 6: Fast Fourier Transform (FFT) Algorithms -- Chapter 7: Implementation of Discrete-Time Systems -- Chapter 8: Digital Filters -- Chapter 9: Design and Analysis of Infinite Impulse Response (IIR) Digital Filters -- Chapter 10: Design and Analysis of Finite Impulse Response (FIR) Digital Filters -- Chapter 11: Statistical Digital Signal Processing -- Chapter 12: Multirate Digital Signal Processing (MDSP) -- Chapter 13: Applications of Digital Signal Processing to Speech -- Chapter 14: Applications of Digital Signal Processing to Radar -- Glossary -- Index
	Sommario/riassunto	Designed to cover the fundamental concepts of digital signal processing, the book introduces topics such as discrete-time signals, the z-transform, frequency analysis, discrete and fast Fourier transforms, digital filters, FIR, statistical DSP, applications, and more. DSP has been applied in most disciplines ranging from engineering to telecommunications, and from astronomy to medical imaging. This book focuses on the fundamentals of DSP, namely on the representation of signals by mathematical models and on the

processing of signals by discrete-time systems. FEATURES: Designed to cover the fundamental concepts of DSPIntroduces topics such as discrete-time signals, the z-transform, frequency analysis, discrete and fast Fourier transforms, digital filters, FIR, statistical DSP, applications, and moreFeatures a variety of exercises and a glossary