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2.12 Quantizing error; 2.13 Dither
 2.14 Introduction to digital processing 2.15 Logic elements; 2.16 Storage elements; 2.17 Binary coding; 2.18 Gain control; 2.19 Floating-point coding; 2.20 Multiplexing principles; 2.21 Packets; 2.22 Statistical multiplexing; 2.23 Timebase correction; References; 3 Processing for compression; 3.1 Introduction; 3.2 Transforms; 3.3 Convolution; 3.4 FIR and IIR filters; 3.5 FIR filters; 3.6 Interpolation; 3.7 Downsampling filters; 3.8 The quadrature mirror filter; 3.9 Filtering for video noise reduction; 3.10 Warping; 3.11 Transforms and duality; 3.12 The Fourier transform
 3.13 The discrete cosine transform (DCT) 3.14 The wavelet transform; 3.15 The importance of motion compensation; 3.16 Motion-estimation techniques; 3.16.1 Block matching; 3.16.2 Gradient matching; 3.16.3 Phase correlation; 3.17 Motion-compensated displays; 3.18 Camera-shake compensation; 3.19 Motion-compensated de-interlacing; 3.20 Compression and requantizing; References; 4 Audio compression; 4.1 Introduction; 4.2 The deciBel; 4.3 Audio level metering; 4.4 The ear; 4.5 The cochlea; 4.6 Level and loudness; 4.7 Frequency discrimination; 4.8 Critical bands; 4.9 Beats
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 5.6 Progressive or interlaced scan?

Sommario/riassunto

A complete, professional 'bible' on all aspects of audio and video compression using MPEG technology, including the MPEG-4 standard and, in this second edition, H-264. The clarity of explanation and depth of technical detail combine to make this book an essential and definitive reference work. THE MPEG HANDBOOK is both a theoretical and practical treatment of the subject. Fundamental knowledge is provided alongside practical guidance on how to avoid pitfalls and poor quality. The often-neglected issues of reconstructing the signal timebase at the decoder and of
