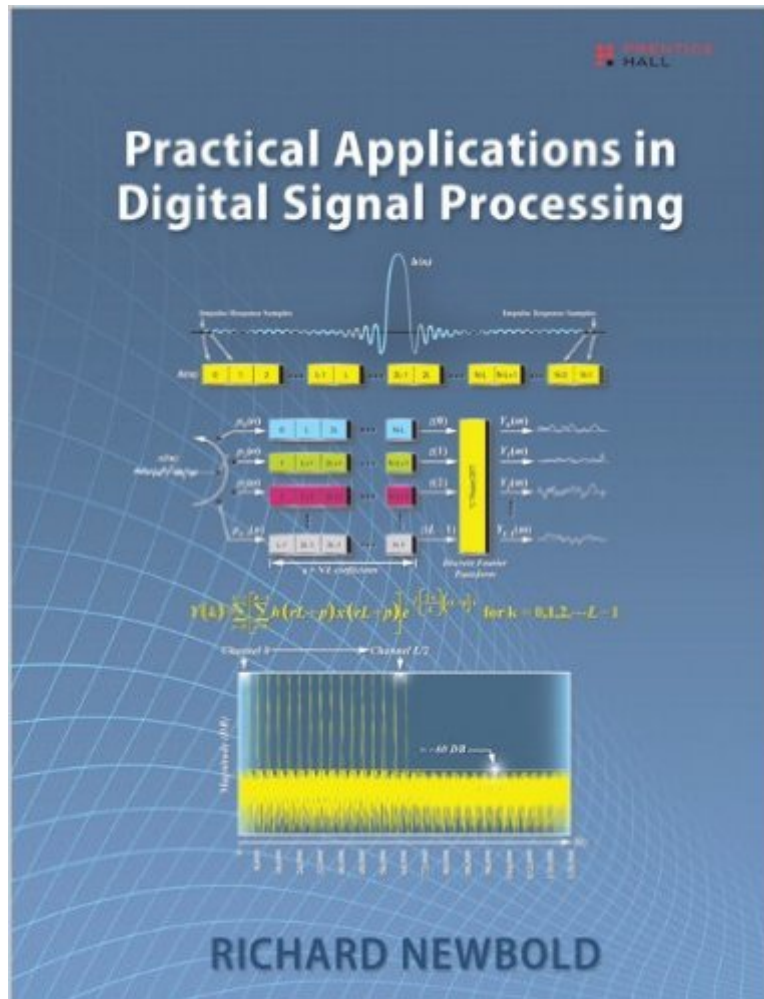## The book was found

Practical Applications In Digital Signal Processing

Synopsis

The Only DSP Book 100% Focused on Step-by-Step Design and Implementation of Real Devices and Systems in Hardware and Software   Practical Applications in Digital Signal Processing is the first DSP title to address the area that even the excellent engineering textbooks of today tend to omit. This book fills a large portion of that omission by addressing circuits and system applications that most design engineers encounter in the modern signal processing industry. This book includes original work in the areas of Digital Data Locked Loops (DLLs), Digital Automatic Gain Control (dAGC), and the design of fast elastic store memory used for synchronizing independently clocked asynchronous data bit streams. It also contains detailed design discussions on Cascaded Integrator Comb (CIC) filters, including the seldom-covered topic of bit pruning. Other topics not extensively covered in other modern textbooks, but detailed here, include analog and digital signal tuning, complex-to-real conversion, the design of digital channelizers, and the techniques of digital frequency synthesis. This book also contains an appendix devoted to the techniques of writing mixed-language C\C++ Fortran programs. Finally, this book contains very extensive review material covering important engineering mathematical tools such as the Fourier series, the Fourier transform, the z transform, and complex variables. Features of this book include â ¢ Thorough coverage of the complex-to-real conversion of digital signals â ¢ A complete tutorial on digital frequency synthesis â ¢ Lengthy discussion of analog and digital tuning and signal translation â ¢ Detailed coverage of the design of elastic store memory â ¢ A comprehensive study of the design of digital data locked loops â ¢ Complete coverage of the design of digital channelizers â ¢ A detailed treatment on the design of digital automatic gain control â ¢ Detailed techniques for the design of digital and multirate filters â ¢ Extensive coverage of the CIC filter, including the topic of bit pruning â ¢ An extensive review of complex variables â ¢ An extensive review of the Fourier series, and continuous and discrete Fourier transforms â ¢ An extensive review of the z transform Â

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Customer Reviews

Far and away the best book on DSP I've read. AoE for DSP: friendly writing, absolutely geared towards giving a feel for the material. Thorough heuristic walkthroughs followed by mathematical analysis, with plenty of fully worked-out examples and lots of space devoted to diagrams and graphs. Math is handled very logically and fully worked out so it's easy to follow.

His chapter on channelization is one of the best presentations I've read in an engineering text. He clearly has a wealth of experience.

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