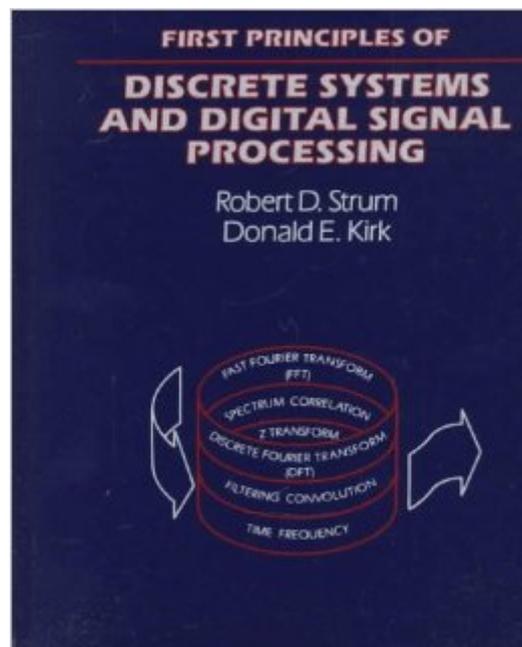# First Principles Of Discrete Systems And Digital Signal Processing (Addison-Wesley Series In Electrical Engineering)

## Synopsis

This textbook presents both discrete systems and digital signal processing in a conversational style that relies on a minimum of mathematics. The authors use carefully crafted pedagogy and detailed examples to improve students' problem solving skills, to help them see interrelationships and connections, and to integrate new material with what they have seen in previous chapters. The book also provides a number of computer-based methods for solving problems.

## Book Information

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Average Customer Review:  4.3 out of 5 starsÂ Â See all reviewsÂ (3 customer reviews)

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## Customer Reviews

This is one of the best DSP books on the market today. As the title "First principles of ..." indicates the focus of the book is on fundamentals, it is designed for the beginning student and the authors provide many, many clear examples and illustrations to guide the student through the material from discrete systems to more advanced signal processing algorithms.If you are the unfortunate victim of a course being taught with Oppenheim and Schafer's muddled text do yourself a favor and get this book as a supplement. It is complete with solved problems, questions with answers (to selected problems), it provides a necessary degree of mathematical rigor without becoming tedious and presents general numerical algorithms for solving major signal processing problems.I took a DSP course from the principal author while he was compiling the notes for this text (and eagerly awaited the publication of his book) and I must say the result is excellent (so was his course) and very highly recommended.One unfortunate attribute is the poor quality of this book's construction and the

reason I gave it 4 stars instead of 5. I purchased the book 10 years ago and the pages have yellowed very badly and the binding broke almost immediately. Although Addison-Wesley generally produces a superior quality book this one's binding is more like a typical Prentice Hall cheapo.

Not only this is the best DSP book I have used , but also thebest written engineering book I have experienced in my career. Subjects are presented clearly and the author prepares you well for the next lesson. I have been able to acquire the DSP knowledge I wanted in a few weeks and without any professors.Strum and Kirk are both great educators.

I came across this in a "signals & systems" course that was intentionally being kept gentle. This book worked well enough, for students who didn't need real analog analysis.Despite its title, this is a more of a "First Course" in discrete signals and systems. It does not, in fact, derive much at all from first principles. The Nyquist sampling theorem, for example, not proven but taken as a premise.If you want a quick view (or review) of digital signals and filter design without having to plod through proofs knee-deep, this might work for you - it works for me. It is not a title for the most serious student, though.

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*Dmca*