





Digital Signal Processing John G. Proakis Dimitris K. Manolakis Fourth Edition





Pearson New International Edition

Digital Signal Processing
John G. Proakis Dimitris K. Manolakis
Fourth Edition

Digital Signal Processing

Table of Contents

Cover

Table of Contents

- 1. Introduction
- 2. Discrete-Time Signals and Systems
- 3. The z-Transform and Its Application to the Analysis of LTI Systems
- 4. Frequency Analysis of Signals
- 5. Frequency-Domain Analysis of LTI Systems
- 6. Sampling and Reconstruction of Signals
- 7. The Discrete Fourier Transform: Its Properties and Applications
- 8. Efficient Computation of the DFT: Fast Fourier Transform Algorithms
- 9. Implementation of Discrete-Time Systems
- 10. Design of Digital Filters
- 11. Multirate Digital Signal Processing
- 12. Linear Prediction and Optimum Linear Filters
- 13. Adaptive Filters
- 14. Appendix: Random Number Generators
- 15. Appendix: Tables of Transition Coefficients for the Design of Lnear-Phase FIR Filters
- 16. References and Bibliography

Index