1. Record Nr. UNINA9910742483003321 Autore Palani S Titolo Discrete Time Systems and Signal Processing / / by S. Palani Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 3-031-32421-8 **ISBN** Edizione [2nd ed. 2023.] Descrizione fisica 1 online resource (806 pages) Disciplina 621.3822 Soggetti **Telecommunication** Signal processing Computer engineering Computer networks Communications Engineering, Networks Signal, Speech and Image Processing Computer Engineering and Networks Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Representation of Discrete Signals and Systems -- The z-transform Nota di contenuto Analysis of Discrete Time Systems -- Discrete Fourier Transform and Computation -- Design of IIR Digital Filters -- Design of Finite Impulse Response (FIR) Digital Filters -- Digital Signal Processor -- Index. Sommario/riassunto This book is designed to serve as a textbook for courses offered to undergraduate students enrolled in the Electrical, Electronics. Communications, and Instrumentation Engineering disciplines. The book presents a clear and comprehensive introduction to digital signal processing. For easier comprehension, the course contents of all the chapters are in sequential order. A variety of examples and solved problems are included in the book to enable application and ease of understanding of theoretical concepts. Every chapter contains several homework problems with answers followed by question-and-answertype assignments. The detailed coverage and pedagogical tools make

this an ideal textbook for students and researchers enrolled in

electrical engineering and related programs.