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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction to SystemC -- Downloading, Configuring, Installing and Starting with SystemC -- SystemC Simulation Kernel, Data Types, Communication Primitives Concurrency Control and Main Language Constructs -- Primitive Channels -- Concurrency Control -- Modelling Combinational Logic Circuits, Implicit Events, Primitive Communication Channels and Combinations -- Modelling Sequential Logic Circuits, Implicit Events, Primitive Channels and their Combinations -- Explicit SystemC Events -- Notify-Wait -- Hierarchical Combinational-Sequential System Design -- Introduction to SystemC-AMS -- Downloading, Installing and Getting Started with SystemC-AMS -- SystemC-AMS Formalisms, Data Types and Main Language Constructs -- Small Signal, Linear Domain and Hybrid Models -- Timed Data Flow (TDF) in Practice and Theory -- Linear Signal Flow (LSF) in Practice and

Theory -- Electrical Linear Networks (ELN) in Practice and Theory -- Real-World Electrical Linear Networks (ELN), Linear Signal Flow (LSF) and Timed Data Flow (TDF) Combinations -- SystemC-AMS and SystemC Combinations.

Sommario/riassunto

This book describes how engineers can make optimum use of the two industry standard analysis/design tools, SystemC and SystemC-AMS (SystemC 2.3, 2.2 and SystemC-AMS 1.0). The authors use a system-level design approach, emphasizing how SystemC and SystemC-AMS features can be exploited most effectively to analyze/understand a given electronic system and explore the design space. The approach taken by this book enables system engineers to concentrate on only those SystemC/SystemC-AMS features that apply to their particular problem, leading to more efficient design. The presentation includes numerous, realistic and complete examples, which are graded in levels of difficulty to illustrate how a variety of systems can be analyzed with these tools. · Designed to meet the needs of system designers who need to find an effective/efficient solution in a reasonable period of time; · Uses a “hands-on” approach to demonstrate design examples that are complete, realistic and graded in level of difficulty; · Demonstrates the most effective use of SystemC/SystemC-AMS tool features, given a particular problem. .