

1. Record Nr.	UNINA9910635398003321
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Titolo	A Practical Approach to VLSI System on Chip (SoC) Design : A Comprehensive Guide // by Veena S. Chakravarthi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783031183638 9783031183621
Edizione	[2nd ed. 2022.]
Descrizione fisica	1 online resource (355 pages) : illustrations
Disciplina	621.395 621.3815
Soggetti	Electronic circuits Microtechnology Microelectromechanical systems Computer engineering Computer networks Microprocessors Computer architecture Electronic Circuits and Systems Microsystems and MEMS Computer Engineering and Networks Processor Architectures Sistema monoxip Circuits integrats a molt gran escala Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- SoC Design Methodology -- SOC Design Infrastructure -- System on Chip Components -- DFT and Synthesis -- Static Timing Analysis (STA) -- VLSI System Verification -- Physical Design -- Advanced Techniques -- Reference Design: Specification to Layout.
Sommario/riassunto	Now in a thoroughly revised second edition, this practical practitioner

guide provides a comprehensive overview of the SoC design process. It explains end-to-end system on chip (SoC) design processes and includes updated coverage of design methodology, the design environment, EDA tool flow, design decisions, choice of design intellectual property (IP) cores, sign-off procedures, and design infrastructure requirements. The second edition provides new information on SOC trends and updated design cases. Coverage also includes critical advanced guidance on the latest UPF-based low power design flow, challenges of deep submicron technologies, and 3D design fundamentals, which will prepare the readers for the challenges of working at the nanotechnology scale. A Practical Approach to VLSI System on Chip (SoC) Design: A Comprehensive Guide, Second Edition provides engineers who aspire to become VLSI designers with all the necessary information and details of EDA tools. It will be a valuable professional reference for those working on VLSI design and verification portfolios in complex SoC designs. A comprehensive practical guide for VLSI designers; Covers end-to-end VLSI SoC design flow; Includes source code, case studies, and application examples.

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