1. Record Nr. UNINA9910765997503321 Autore Kundu Santanu Titolo Network-on-chip: the next generation of system-on-chip integration / / Santanu Kundu, Santanu Chattopadhyay Pubbl/distr/stampa Boca Raton, Florida:,: CRC Press,, [2015] ©2015 **ISBN** 1-351-83196-8 1-315-21607-8 1-138-74935-4 1-4665-6527-6 Edizione [1st ed.] Descrizione fisica 1 online resource (380 p.) Disciplina 621.381531 Soggetti Networks on a chip Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto Front Cover; Contents; Preface; Authors; Chapter 1: Introduction; Chapter 2: Interconnection Networks in Network-on-Chip; Chapter 3: Architecture Design of Network-on-Chip; Chapter 4: Evaluation of Network-on-Chip Architectures: Chapter 5: Application Mapping on Network-on-Chip; Chapter 6: Low-Power Techniques for Network-on-Chip; Chapter 7: Signal Integrity and Reliability of Network-on-Chip; Chapter 8: Testing of Network-on-Chip Architectures; Chapter 9: Application-Specific Network- on-Chip Synthesis; Chapter 10: Reconfigurable Network-on-Chip Design Chapter 11: Three-Dimensional Integration of Network-on-ChipChapter 12: Conclusions and Future Trends; Back Cover Addresses the Challenges Associated with System-on-Chip Sommario/riassunto IntegrationNetwork-on-Chip: The Next Generation of System-on-Chip Integration examines the current issues restricting chip-on-chip communication efficiency, and explores Network-on-chip (NoC), a promising alternative that equips designers with the capability to produce a scalable, reusable, and high-performance communication backbone by allowing for the integration of a large number of cores on

a single system-on-chip (SoC). This book provides a basic overview of

topics associated with NoC-based design: communication infrastructure design