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   Nota di contenuto   Large Scale Network-Centric Distributed Systems; Contents; Preface;
                         Acknowledgments; List of Figures; List of Tables; List of Contributors;
                         Part1: Multicore and Many-Core (MC) Systems-on-Chip; 1 A
                         Reconfigurable On-Chip Interconnection Network for Large Multicore
                         Systems; 1.1 Introduction; 1.1.1 Multicore and Many-Core Era; 1.1.2
                         On-Chip Communication; 1.1.3 Conventional Communication
                         Mechanisms; 1.1.4 Network-on-Chip; 1.1.5 NoC Topology
                         Customization; 1.1.6 NoCs and Topology Reconfigurations; 1.1.7
                         Reconfigurations Policy; 1.2 Topology and Reconfiguration; 1.3 The
                         Proposed NoC Architecture
                         1.3.1 Baseline Reconfigurable NoC1.3.2 Generalized Reconfigurable
                         NoC; 1.4 Energy and Performance-Aware Mapping; 1.4.1 The Design
                         Procedure for the Baseline Reconfigurable NoC; 1.4.1.1 Core-to-
                         Network Mapping; 1.4.1.2 Topology and Route Generation; 1.4.2
                         Mapping and Topology Generation for Cluster-Based NoC; 1.5
                         Experimental Results; 1.5.1 Baseline Reconfigurable NoC; 1.5.2
                         Performance Evaluation with Cost Constraints; 1.5.3 Comparison
                         Cluster-Based NoC; 1.6 Conclusion; References; 2 Compilers,
                         Techniques, and Tools for Supporting Programming Heterogeneous

Many/Multicore Systems

Sommario/riassunto	A highly accessible reference offering a broad range of topics and insights on large scale network-centric distributed systems Evolving from the fields of high-performance computing and networking, large scale network-centric distributed systems continues to grow as one of the most important topics in computing and communication and many interdisciplinary areas. Dealing with both wired and wireless networks, this book focuses on the design and performance issues of such systems. Large Scale Network-Centric Distributed Systems provides in-depth coverage ranging from ground-level hardware issues (such as buffer organization, router delay, and flow control) to the high-level issues immediately concerning application or system users (including parallel programming, middleware, and OS support for such computing systems). Arranged in five parts, it explains and analyzes complex topics to an unprecedented degree.