

1.	Record Nr.	UNISA990000893320203316
	Titolo	Regioni autonome in uno stato unitario nella nuova Europa
	Pubbl/distr/stampa	Venezia : Associazione degli ex consiglieri del consiglio regionale del Veneto, 1992
	Descrizione fisica	174 p ; 24 cm
	Disciplina	352.
	Soggetti	Regioni - Italia - Studi
	Collocazione	352 REG 1 (ISP VI 119)
	Lingua di pubblicazione	Italiano
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910463225903321
	Autore	Halang Wolfgang A. <1951->
	Titolo	Real-time systems [[electronic resource] ] : implementation of industrial computerised process automation / / Wolfgang A. Halang, Krzysztof M. Sacha, with contributions by Marek Drozd ... [et al.]
	Pubbl/distr/stampa	Singapore ; ; River Edge, NJ, : World Scientific, c1992
	ISBN	1-283-97141-0 981-281-246-6
	Descrizione fisica	1 online resource (379 p.)
	Altri autori (Persone)	SachaKrzysztof M
	Disciplina	629.8/95
	Soggetti	Real-time data processing Process control - Automation Electronic books.
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Description based upon print version of record.
	Nota di bibliografia	Includes bibliographical references (p. 335-344) and index.
	Nota di contenuto	Contents; Preface; List of Figures; List of Tables; Authors; Chapter 1 Real-Time Computing and Industrial Process Automation; 1.1

Introduction; 1.2 Industrial Control Systems; 1.3 Example: A Chemical Process; 1.4 Historical Perspective; Chapter 2 Conceptual Foundations; 2.1 Real-Time System Characteristics; 2.2 Continuous and Discrete Time; 2.3 Engineering Approach to Hard Real-Time System Design; Chapter 3 Digital Control of Continuous Processes; 3.1 Introduction; 3.2 Linear System Theory; 3.3 Control System Analysis and Design; 3.4 Digitising Analogue Signals; 3.5 New Developments Chapter 4 Hardware Architectures 4.1 Classical Process Automation; 4.2 Centralised Direct Digital Control; 4.3 Redundant Configurations; 4.4 Multi-Level Control Systems; 4.5 Network-based Distributed Systems; 5.3 Analogue Outputs; 5.4 Analogue Inputs; 5.5 Serial Interface; Chapter 6 Communication Networks; 6.1 Network Architecture; 6.2 LAN Technology; 6.3 LAN Medium Access Control; 6.4 LAN Logical Link Control; 6.5 MAP /TOP Protocol; Chapter 7 Real-Time Operating Systems Principles; 7.1 Operating System Requirements; 7.2 Synchronous and Asynchronous Task Execution 7.3 Multi-Tasking 7.4 Task Synchronisation and Communication; 7.5 Time and Event Handling; 7.6 Distributed Operating Systems; Chapter 8 Comparison of Some Real-Time Operating Systems; 8.1 System iRMX88; 8.2 System iRMX; 8.3 System QNX; 8.4 System PORTOS; 8.5 Comparison of Real-Time Operating Systems; Chapter 9 High Level Real-Time Programming; 9.1 Real-Time Features in High Level Languages; 9.2 A Closer Look at Ada and PEARL; 9.3 Requirements for New High Level Language Features; 9.4 High-Integrity PEARL; 9.5 Advanced Features of High-Integrity PEARL Chapter 10 Schedulability Analysis 10.1 Schedulability Analyser; 10.2 Front-End of the Schedulability Analyser; 10.2.1 A Segment Tree Example; 10.2.2 Front-End Statistics; 10.3 Back-End of the Schedulability Analyser; 10.4 Program Transformation; 10.5 Empirical Evaluation; Chapter 11 System and Software Life Cycle; 11.1 System Development; 11.2 Software Life Cycle; 11.3 Software Development Economy; 11.4 Classical Software Development Methods; 11.5 Prototyping; 11.6 Object-Oriented Development; 11.7 Transformational Implementation; 11.8 Evaluation of the Development Paradigms Chapter 12 Software Quality Assurance 12.1 Software Quality Assurance Planning; 12.2 Reviews and Audits; 12.3 Structured Walkthrough and Inspections; 12.4 Software Testing; Chapter 13 Computer Aided Software Engineering Tools; 13.1 Software Development Environments; 13.2 The EPOS System; 3.3 Example: A Chemical Process; Chapter 14 Formal Specification and Verification Methods; 14.1 Introduction; 14.2 Sequential and Parallel Description; 14.3 Petri Nets; 14.4 Properties of Petri Nets; 14.5 Temporal Logic; 14.6 Correctness Verification Using Temporal Logic Chapter 15 Programmable Logic Controllers

## Sommario/riassunto

This book represents the first comprehensive text in English on real-time and embedded computing systems. It is addressed to engineering students of universities and polytechnics as well as to practitioners and provides the knowledge required for the implementation of industrial computerized process control and manufacturing automation systems. The book avoids mathematical treatment and supports the relevance of the concepts introduced by practical examples and case studies. Special emphasis is placed on a sound conceptual basis and on methodologies and tools for the development of high quality