

1. Record Nr.	UNINA9910299230203321
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Titolo	Guide to DataFlow Supercomputing : Basic Concepts, Case Studies, and a Detailed Example // by Veljko Milutinovi, Jakob Salom, Nemanja Trifunovic, Roberto Giorgi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-16229-2
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (136 p.)
Collana	Computer Communications and Networks, , 1617-7975
Disciplina	003.3 004 004.6 005.1 006.312
Soggetti	Input-output equipment (Computers) Data mining Software engineering Architecture, Computer Input/Output and Data Communications Data Mining and Knowledge Discovery Software Engineering Computer System Implementation
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 and index.
Nota di contenuto	The DataFlow Paradigm -- Selected Case Studies -- An Example Application: Fourier Transform -- Using the WebIDE.
Sommario/riassunto	This unique text/reference describes an exciting and novel approach to supercomputing in the DataFlow paradigm. The major advantages and applications of this approach are clearly described, and a detailed explanation of the programming model is provided using simple yet effective examples. The work is developed from a series of lecture courses taught by the authors in more than 40 universities across more than 20 countries, and from research carried out by Maxeler

Technologies, Inc. Topics and features: Presents a thorough introduction to DataFlow supercomputing for big data problems Reviews the latest research on the DataFlow architecture and its applications Introduces a new method for the rapid handling of real-world challenges involving large datasets Provides a case study on the use of the new approach to accelerate the Cooley-Tukey algorithm on a DataFlow machine Includes a step-by-step guide to the web-based integrated development environment WebIDE Draws from the authors' extensive experience in both academic teaching and industrial research Students, lecturers, and researchers in industry will find this concise book to be an ideal supplementary text for courses and seminars on VLSI, multi-core systems, and DataFlow computing. Dr. Veljko Milutinovi is a Professor in the Department of Computer Engineering at the University of Belgrade, Serbia. His publications include the Springer title Application and Multidisciplinary Aspects of Wireless Sensor Networks. Dr. Jakob Salom is a member of the Mathematical Institute of the Serbian Academy of Sciences and Arts. Nemanja Trifunovic is a Project Manager at Maxeler Technologies, Palo Alto, CA, USA. Dr. Roberto Giorgi is an Associate Professor of Computer Engineering at the University of Siena, Italy.
