Lecture Notes in Computer Science 5349

Commenced Publication in 1973
Founding and Former Series Editors:
Gerhard Goos, Juris Hartmanis, and Jan van Leeuwen

Lars Svensson José Monteiro (Eds.)

Integrated Circuit and System Design

Power and Timing Modeling, Optimization and Simulation

18th International Workshop, PATMOS 2008
Lisbon, Portugal, September 10-12, 2008
Revised Selected Papers

Springer

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Library of Congress Control Number: 2009920524

CR Subject Classification (1998): B.7, B.8, C.1, C.4, B.2, B.6, J.6

LNCS Sublibrary: SL 1 – Theoretical Computer Science and General Issues

ISSN 0302-9743
ISBN-10 3-540-95947-5 Springer Berlin Heidelberg New York
ISBN-13 978-3-540-95947-2 Springer Berlin Heidelberg New York

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India
Printed on acid-free paper SPIN: 12609772 06/3180 5 4 3 2 1 0

Preface

Welcome to the proceedings of PATMOS 2008, the 18th in a series of international workshops. PATMOS 2008 was organized by INESC-ID / IST - TU Lisbon, Portugal, with sponsorship by Cadence, IBM, Chipidea, and Tecmic, and technical co-sponsorship by the IEEE.

Over the years, PATMOS has evolved into an important European event, where researchers from both industry and academia discuss and investigate the emerging challenges in future and contemporary applications, design methodologies, and tools required for the development of the upcoming generations of integrated circuits and systems. The technical program of PATMOS 2008 contained state-of-the-art technical contributions, three invited talks, and a special session on reconfigurable architectures. The technical program focused on timing, performance and power consumption, as well as architectural aspects with particular emphasis on modeling, design, characterization, analysis and optimization in the nanometer era.

The Technical Program Committee, with the assistance of additional expert reviewers, selected the 41 papers presented at PATMOS. The papers were organized into 7 oral sessions (with a total of 31 papers) and 2 poster sessions (with a total of 10 papers). As is customary for the PATMOS workshops, full papers were required for review, and a minimum of three reviews were received per manuscript.

Beyond the presentations of the papers, the PATMOS technical program was enriched by a series of speeches offered by world-class experts, on important emerging research issues of industrial relevance. Ted Vucurevich of Cadence spoke about "Power and Profit: Engineering in the Envelope;" Sani Nassif of IBM spoke about "Model to Hardware Matching for nm Scale Technologies;" and Floriberto Lima of Chipidea - MIPS spoke about "Integration of Power Management Units onto the SoC."

We would like to thank our colleagues who voluntarily worked to make this edition of PATMOS possible: the expert reviewers, The members of the Technical Program and Steering Committees, and the invited speakers; and last but not least the local personnel who offered their skill, time, and extensive knowledge to make PATMOS 2008 a memorable event.

September 2008

Lars Svensson
José Monteiro

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