

Preface

This book contains extended and revised versions of the highest-quality papers that were presented during the 21st edition of the IFIP/IEEE WG10.5 International Conference on Very Large Scale Integration (VLSI-SoC), a global system-on-chip design and CAD conference. This edition of the conference was held at Novotel Hotel in Istanbul, Turkey (October 6–9, 2013). Previous conferences have taken place in Edinburgh, Trondheim, Vancouver, Munich, Grenoble, Tokyo, Gramado, Lisbon, Montpellier, Darmstadt, Perth, Nice, Atlanta, Rhodes, Florianopolis, Madrid, Hong Kong, and Santa Cruz.

The purpose of this conference, which was sponsored by IFIP TC 10 Working Group 10.5, the IEEE Council on Electronic Design Automation (CEDA), and the IEEE Circuits and Systems Society, and In-Cooperation of ACM SIGDA, was to provide a forum for the exchange of ideas and presentation of industrial and academic research results in the field of microelectronics design. The current trend toward increasing chip integration and technology process advancements have brought new challenges both at the physical and system design levels as well as in the test of these systems. The VLSI-SoC conference aims to address these exciting new issues.

The quality of submissions (244 papers from 48 countries, excluding PhD Forum and embedded tutorials) made the selection process a very difficult one. Finally, 49 were accepted as full papers (6 pages in the proceedings), 19 as short papers (4 pages), and 14 as extended abstracts (2 pages). Out of the 48 full papers presented at the conference, 11 papers were chosen by a selection committee to have an extended and revised version included in this book. An extended version of a previously unpublished high-quality paper from VLSI-SoC 2012 is also included. The selection process of these papers considered the evaluation scores during the review process as well as the review forms provided by members of the technical program committee and session chairs as a result of the presentations. The Technical Program Committee comprised 97 members.

The chapters of this book have authors from Algeria, France, Germany, Greece, Italy, Japan, Sweden, Switzerland, United Arab Emirates, and USA.

VLSI-SoC 2013 was the culmination of the work of many dedicated volunteers: paper authors, reviewers, session chairs, invited speakers, and various committee chairs and members, especially the local organizers. We thank them all for their contributions. We also thank Aydin Dirican, Cagatay Ozmen, and Nurettin Tan (University of Massachusetts Lowell) for their critical help in the revision of the book chapters.

This book is intended for the VLSI community, mainly those who did not have the chance to attend the conference. We hope you will enjoy reading this book and that you will find it useful in your professional life and for the development of the VLSI community as a whole.

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