

Preface

This book contains extended and revised versions of the highest quality papers, which were presented during the 23rd IFIP/IEEE WG10.5 International Conference on Very Large Scale Integration (VLSI-SoC), a global System-on-Chip Design & CAD conference. The 23rd conference was held at the Daejeon Convention Center, South Korea, during October 5–7, 2015. Previous conferences have taken place in Edinburgh, Scotland (1981); Trondheim, Norway (1983); Tokyo, Japan (1985); Vancouver, Canada (1987); Munich, Germany (1989); Edinburgh, Scotland (1991); Grenoble, France (1993); Chiba, Japan (1995); Gramado, Brazil (1997); Lisbon, Portugal (1997); Montpellier, France (2001); Darmstadt, Germany (2003); Perth, Australia (2005); Nice, France (2006); Atlanta, USA (2007); Rhodes Island, Greece (2008); Florianopolis, Brazil (2009); Madrid, Spain (2010); Kowloon, Hong Kong (2011), Santa Cruz, USA (2012), Istanbul, Turkey (2013), and Playa del Carmen, Mexico (2014).

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 by IEEE Circuits and Systems Society, with the 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 has brought new challenges both at the physical and system design levels, as well as in the test of these systems. VLSI-SoC conferences aim to address these exciting new issues.

The quality of submissions (117 regular papers from 28 countries, excluding PhD Forum and special sessions) made the selection process a very difficult one. Finally, 44 submissions were accepted as full papers and 17 as posters. Out of the 44 full papers presented at the conference, 10 papers were chosen by a selection committee to have an extended and revised version included in this book. 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 chapters of this book have authors from China, Denmark, France, Germany, Hong Kong, Italy, Ireland, South Korea, The Netherlands, Switzerland, and the USA. The Technical Program Committee comprised 92 members from 24 countries.

VLSI-SoC 2015 was the culmination of the work of many dedicated volunteers: paper authors, reviewers, session chairs, invited speakers, and various committee chairs. We thank them all for their contribution.

This book is intended for the VLSI community, mainly those persons 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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