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Teresa Riesgo
Massimo Conti
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Introduction

The book you have in your hands contains the papers presented at the sixth edition of the Conference on VLSI Circuits and Systems, embedded in SPIE's Microtechnologies event. Once again, you have the opportunity to read excellent research works covering different topics in the field of electronic systems design and technology, integration, etc.

Browsing the proceedings of previous editions of the conference, one can observe the rapid evolution of topics in this field, which are directly followed by the event every two years. Many of the works directly related with VLSI design are focused to the analog and mixed-signal area, where there is still much work to do to make the designers' lives easier. On the other hand, many of the papers related with digital systems are focused on complex architectures based on Many-Cores, Network-on-Chip, with special attention to aspects such as reconfigurability and reliability. There are still many research opportunities in modeling, simulation, testability and power efficiency in both aspects, analog and digital. Applications where complexity is an issue, like multimedia, communications and signal processing, are still challenging and newer aspects of system design, like wireless sensor networks, appear on stage to show us how the electronic designers are interested in applications that involve different technologies and disciplines.

As conference chairs, we would like to thank all the authors, chairs and attendees for their contribution to the event. Special thanks to the program committee members who have helped us a lot in the paper selection and session setup. Many thanks to SPIE staff for their continuous support, patience, and help in editing this book.

We hope to meet you soon, in two years more or less, and let's work together to make the future event as successful as this one.

Teresa Riesgo
Massimo Conti