

straints and costs), and selected advanced topics (I_{DDQ} and delay faults.) We kept that list in mind while writing the book and we hope the teachers of VLSI design and electronic testing courses will too.

We are all too familiar with incompleteness of software debugging and hardware design verification. No “formal” method was used to verify the material in this book either. Despite all efforts to remove errors, we cannot guarantee that the readers will not find them. We will greatly appreciate the generosity of our readers if they inform us about any errors. We will make such findings available to all readers through our websites until the publisher gives us an opportunity to make corrections, with due acknowledgment to those who have pointed them out.

We have taught a course on testing at Rutgers University for the past ten years. Interaction with the students in the course and our master’s and doctoral students had the greatest influence on our understanding of the subject. We would like to thank them. Special mention should be made of the class of Spring 2000, which used the draft and pointed out corrections and improvements. We are indebted to colleagues at Bell Labs and Rutgers for their advice and counsel. The enthusiasm and support of the world-wide test professionals was exceptional. A partial list of those we thank includes: Miron Abramovici, Prathima Agrawal, Mark Barber, Dilip Bhavsar, Shawn Blanton, Amy Bushnell, Tapan Chakraborty, Srimat Chakradhar, Xinghao Chen, Dochan C. Choi, Rick Chruscial, Don Denburg, José de Sousa, Shaun Erickson, David Fessler, Hideo Fujiwara, Paul Glick, John Hayes, Michael Hsiao, James Jacob, Neil Kelly, Bill Kish, Kozo Kinoshita, Ken Lanier, Yuhai Ma, Pinaki Mazumder, Cliff Miller, Karen Panetta, Janusz Rajski, Elizabeth Rudnick, Manoj Sachdev, Kewal Saluja, Sharad Seth, and Lakshman Yagati. We thank our publisher Carl Harris for always encouraging us to proceed ahead and for being patient through schedule slips. We are thankful for the support of Al Aho, Dennis Ritchie, and Tom Szymanski, research managers at Bell Labs, and David Daut and Jim Flanagan of Rutgers University. We also wish to thank the LTX Corporation, the Advantest Corporation, Samsung Electronics Company, Ltd., IBM, and Lucent Technologies for their cooperation in providing data for this book. In describing technical contributions we have tried our best to cite correctly. From those who find their work incorrectly cited, we beg forgiveness because such errors, caused by our ignorance, were unintentional.

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