Contents

Preface vii

Editor-in-Chief ix

Contributors xi

SECTION I Computer Aided Design and Optimization

1 Modeling of Circuit Performances **1**-1
Sung-Mo Kang and Abhijit Dharchoudhury

2 Symbolic Analysis Methods **2**-1
Benedykt S. Rodanski and Marwan M. Hassoun

3 Numerical Analysis Methods **3**-1
Andrew T. Yang

4 Design by Optimization **4**-1
Sachin S. Sapatnekar

5 Statistical Design Optimization **5**-1
Maciej A. Styblinski

6 Physical Design Automation **6**-1
Naveed A. Sherwani

7 Design Automation Technology **7**-1
Allen M. Dewey

8 Computer-Aided Analysis **8**-1
J. Gregory Rollins and Peter Bendix

9 Analog Circuit Simulation **9**-1
J. Gregory Rollins

SECTION II Design Automation

10 Internet-Based Microelectronic Design Automation Framework **10**-1
Moon-Jung Chung and Heechul Kim

11 System-Level Design **11**-1
Alice C. Parker, Yosef Tirat-Gefen, and Suhrid A. Wadekar

12 Performance Modeling and Analysis Using VHDL and SystemC **12**-1
Robert H. Klenke, Jonathan A. Andrews, and James H. Aylor

13 Embedded Computing Systems and Hardware/Software Codesign **13**-1
Wayne Wolf

14 Design Automation Technology Roadmap **14**-1
Donald R. Cottrell

Index **IN-1**