## Contents

### Part I  Co-simulation for Automotive Systems

1 Virtual Hardware-in-the-Loop Co-simulation for Multi-domain Automotive Systems via the Functional Mock-Up Interface ................................. 3  
Ròbert Lajos Bücs, Luis Murillo, Ekaterina Korotcenko,  
Gaurav Dugge, Rainer Leupers, Gerd Ascheid, Andreas Ropers,  
Markus Wedler, and Andreas Hoffmann

2 Standard Compliant Co-simulation Models for Verification of Automotive Embedded Systems ................................................. 29  
Martin Krammer, Helmut Martin, Zoran Radmilovic, Simon  
Erker, and Michael Karner

### Part II  Reconfigurable Systems and FPGAs

3 Building a Dynamically Reconfigurable System Through a High-Level Development Flow ........................................... 51  
David de la Fuente, Jesús Barba, Julián Caba, Pablo Peñil,  
Juan Carlos López, and Pablo Sánchez

4 A Special-Purpose Language for Implementing Pipelined FPGA-Based Accelerators .................................................. 75  
Cristiano B. de Oliveira, Ricardo Menotti, João M.P. Cardoso,  
and Eduardo Marques

### Part III  Clocks and Temporal Issues

5 Enabler-Based Synchronizer Model for Clock Domain Crossing Static Verification ................................................. 103  
M. Kebaili, K. Morin-Allory, J.C. Brignone, and D. Borrione
6 Temporal Decoupling with Error-Bounded Predictive Quantum Control ............................................................ 125
   Georg Gläser, Gregor Nitsche, and Eckhard Hennig

Part IV AMS Circuits and Systems

7 SystemC-AMS Simulation of Conservative Behavioral Descriptions .  151
   Sara Vinco, Michele Lora, and Mark Zwolinski

8 A System-Level Power Model for AMS-Circuits ......................... 175
   Xiao Pan, Javier Moreno Molina, and Christoph Grimm
Languages, Design Methods, and Tools for Electronic System Design
Selected Contributions from FDL 2015
Drechsler, R.; Wille, R. (Eds.)
2016, VIII, 193 p. 109 illus., 90 illus. in color., Hardcover
ISBN: 978-3-319-31722-9