

Jan Haase
Editor

Models, Methods, and Tools for Complex Chip Design

Selected Contributions from FDL 2012

Lecture Notes in Electrical Engineering

Volume 265

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Models, Methods, and Tools for Complex Chip Design

Selected Contributions from FDL 2012

 Springer

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Jan Haase

Institute of Computer Technology

Vienna University of Technology

Vienna, Austria

ISSN 1876-1100

ISSN 1876-1119 (electronic)

ISBN 978-3-319-01417-3

ISBN 978-3-319-01418-0 (eBook)

DOI 10.1007/978-3-319-01418-0

Springer Cham Heidelberg New York Dordrecht London

Library of Congress Control Number: 2013946029

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Preface

This book is the latest contribution to the LNEE series, and it consists of selected papers presented at the Forum on Specifications and Design Languages (FDL) 2012, which took place in September 2012 at Vienna University of Technology, Vienna, Austria.

FDL is a well-established international forum devoted to dissemination of research results, practical experiences, and new ideas in the application of specification, design, and verification languages to the design, modelling, and verification of integrated circuits, complex hardware/software embedded systems, and mixed-technology systems. Modelling and specification concepts push the development of new design and verification methodologies to system level, thus providing a means for model-driven design of complex information processing systems in a variety of application domains. One of the principal advantages of FDL is that it brings together several related thematic areas and gives an opportunity to gain up-to-date knowledge in many broad areas of the fast evolving field of system design and verification. In 2012, some additional key areas were covered in the form of special sessions and tutorials included in the conference program.

This book presents a collection of the best papers from FDL 2012 and covers the following topic areas:

- Assertion Based Design, Verification and Debug (ABD)
- Language-Based System Design (LBSD)
- Embedded Analog and Mixed-Signal Design (EAMS)
- UML and MDE for Embedded System Specification & Design (UMES)
- Special Sessions of FDL 2012

The papers were selected by the topic area program chairs Dominique Borrione (responsible for ABD), Martin Radetzki (responsible for LBSD), Christoph Grimm (responsible for EAMS), and Julio Medina (responsible for UMES).

The chapters of this book present recent and significant research results in the areas of design and specification languages for embedded systems, SoC, and integrated circuits. The objective of the book is to serve as a reference text for

researchers and designers interested in the extension and improvement of the application of design and verification languages in the area of embedded systems.

I would like to take this opportunity to thank the members of the program committee who made a tremendous effort in revising and selecting the best papers for the conference and the most outstanding among them for this book. I would also like to thank all the authors for the extra work made in revising and improving their contributions to the book.

Finally, I would like to express my special thanks to Adam Morawiec and Jinnie Hinderscheit from ECSI, who made this book possible.

Vienna, Austria,

Jan Haase

Contents

1	Formal Plausibility Checks for Environment Constraints	1
	Binghao Bao, Jörg Bormann, Markus Wedler, Dominik Stoffel, and Wolfgang Kunz	
1.1	Introduction	2
1.2	Circuit Models	3
1.3	Properties of Circuits	3
1.4	Environment Constraints	6
1.4.1	Implementable Constraints	6
1.4.2	Composability	8
1.5	Plausibility Checks in Coverage Analysis for Property Sets	9
1.5.1	Complete Interval Property Checking (C-IPC)	10
1.5.2	Plausibility Checks	11
1.6	Experimental Results	13
1.7	Conclusions	15
	References	16
2	Efficient Refinement Strategy Exploiting Component Properties in a CEGAR Process	17
	Syed Hussein S. Alwi, Cécile Braunstein, and Emmanuelle Encrenaz	
2.1	Introduction	17
2.2	Our Framework	19
2.2.1	Concrete System Definition	20
2.2.2	Abstraction Definition	21
2.2.3	Initial Abstraction	23
2.3	Refinement	23
2.3.1	Properties of Good Refinement	23
2.3.2	Negation of the Counterexample	24
2.3.3	Ordering of Properties	27
2.3.4	Filtering Properties	29

2.4	Experimental Results.....	30
2.5	Negation of the Counterexample as a Complementary Strategy ...	33
2.6	Conclusion and Future Works	34
	References.....	35
3	Formal Specification Level	37
	Rolf Drechsler, Mathias Soeken, and Robert Wille	
3.1	Introduction.....	37
3.2	Preliminaries.....	40
	3.2.1 Unified Modeling Language	40
	3.2.2 Natural Language Processing	41
3.3	Formal Specification Level	43
3.4	Mapping Natural Language Specifications to the Formal Specification Level	44
	3.4.1 Determine the Structure of the Design	44
	3.4.2 Determine the Properties of the Design	45
3.5	Checking Correctness at the Formal Specification Level.....	47
	3.5.1 Verification of Static Aspects	47
	3.5.2 Invariant Removal	48
	3.5.3 Verification of Dynamic Aspects	48
3.6	Mapping from Formal Specification Level to the Electronic System Level	49
3.7	Tool Support.....	49
3.8	Conclusion.....	50
	References.....	51
4	TLM POWER3: Power Estimation Methodology for SystemC TLM 2.0	53
	David Greaves and Mehboob Yasin	
4.1	Introduction.....	53
4.2	Our Approach: TLM POWER3	56
	4.2.1 Extended Generic Payload: Distance + Hamming	57
	4.2.2 Output Reports.....	61
4.3	Performance	62
4.4	Accuracy.....	65
4.5	Conclusion.....	67
	References.....	67
5	SCandal: SystemC Analysis for Nondeterminism Anomalies	69
	Jan Henrik Weinstock, Christoph Schumacher, Rainer Leupers, and Gerd Ascheid	
5.1	Introduction.....	69
5.2	SystemC Simulation Concept.....	71
5.3	Related Work	72
5.4	Process Order Dependency Test	73
	5.4.1 Behavior Observation	74

5.4.2	Detectable Anomalies	77
5.4.3	Controlled Scheduling	78
5.4.4	PEO Dependency Analysis	78
5.5	Experiments and Case Studies	82
5.5.1	Synthetic Tests	83
5.5.2	SoClib	85
5.5.3	Parallel Simulation of Mixed-Level Multicore Platform	85
5.6	Conclusion and Outlook	86
	References	87
6	A Design and Verification Methodology for Mixed-Signal Systems Using SystemC-AMS	89
	Yao Li, Ramy Iskander, Farakh Javid, and Marie-Minerve Lou�rat	
6.1	Introduction	89
6.2	Unified Platform Architecture	91
6.2.1	SystemC AMS Extensions	92
6.2.2	CHAMS Sizing and Biasing Engine	93
6.3	Proposed Levels of Abstraction	96
6.4	Implementation of the Unified Platform	97
6.4.1	Comparator TDF Module	99
6.4.2	end_of_elaboration() function	100
6.4.3	initialize() function	101
6.4.4	processing() function	101
6.5	Transient Analysis Method	102
6.6	Experimental Results	103
6.6.1	Sizing and Biasing Procedure of the Two-Stage Comparator	103
6.6.2	Simulation Results of a Two-Stage Pipeline ADC	105
6.7	Conclusion	106
	References	106
7	Configurable Load Emulation Using FPGA and Power Amplifiers for Automotive Power ICs	109
	Manuel Harrant, Thomas Nirmaier, Christoph Grimm, and Georg Pelz	
7.1	Introduction	109
7.2	Related Work	110
7.3	First Experimental Setup	111
7.4	Load Modelling for Real-Time Evaluation	115
7.5	Evaluation of Lamp Model	119
7.6	Experimental Results	123
7.7	Conclusion and Outlook	125
	References	126

8	Model Based Design of Distributed Embedded Cyber Physical Systems	127
	Javier Moreno Molina, Markus Damm, Jan Haase, Edgar Holleis, and Christoph Grimm	
8.1	Introduction	128
8.1.1	Model-Based Design Approach	128
8.1.2	Multi-domain Simulation	129
8.2	Previous Work	130
8.3	Methodology	131
8.3.1	Requirements	132
8.3.2	Functional Model	132
8.3.3	Hardware/Software Co-design	133
8.3.4	Deployment	133
8.4	Models Implementation	133
8.4.1	Functional Node Model	135
8.4.2	Embedded Platform Model	136
8.4.3	Propagation Model	137
8.4.4	Network Protocol Stack	137
8.4.5	Environment Interaction	138
8.5	Simulating the Energy Management Application	139
8.6	Conclusion and Future Work	142
	References	142
9	Model-Driven Methodology for the Development of Multi-level Executable Environments	145
	Fernando Herrera, Pablo Penil, Hector Posadas, and Eugenio Villar	
9.1	Introduction	146
9.2	Related and Previous Work	147
9.3	Environment Modelling Methodology	149
9.3.1	Environment Structure and Connection to the System	149
9.3.2	Levels of Abstraction in the Specification of Environment Behaviour	157
9.3.3	Modeling Several Scenarios	158
9.4	Toolset	158
9.4.1	SystemC Generation	159
9.4.2	File Structure Generation	159
9.5	SystemC Simulation with the System Performance Model	160
9.6	Example	160
9.7	Conclusions	162
9.8	Future Work	162
	References	163
10	GREEN HOME: The Concept and Study of Grid Responsiveness ...	165
	Slobodanka Tomic, Jan Haase, and Goran Lazendic	
10.1	Introduction	165
10.2	Home Gateway Functions	168
10.3	Demand Response	169

10.4	Grid Responsiveness Concept	170
10.4.1	The Day-Ahead Exchange	171
10.4.2	The Intra-day Exchange	172
10.4.3	User Responsiveness	172
10.5	The Model of Home Activities	173
10.6	Forecasting of the Uncertainty Level	174
10.7	The Test Bed	174
10.8	Conclusions	177
	References	178
11	Polynomial Metamodel-Based Fast Optimization of Nanoscale PLL Components	179
	Saraju P. Mohanty and Elias Kougianos	
11.1	Introduction	180
11.2	Proposed Novel Fast Analog/Mixed-Signal Design Flow	181
11.3	Related Prior Research	184
11.4	Design of PLL Component Circuits	184
11.4.1	Phase Detector	185
11.4.2	Loop Filter and Charge Pump	185
11.4.3	LC Voltage Controlled Oscillator	185
11.4.4	Frequency Divider	186
11.5	Proposed Approach for Generation of Fast and Layout-Accurate Metamodels	187
11.5.1	Data Sampling	189
11.5.2	Data Centering	190
11.5.3	Stepwise Regression	190
11.5.4	Verification of the Metamodel	190
11.6	Proposed Metamodel Based Design Optimization	192
11.7	Experimental Results	193
11.8	Summary, Conclusions, and Future Direction of Research	196
	References	198
12	Methodology and Example-Driven Interconnect Synthesis for Designing Heterogeneous Coarse-Grain Reconfigurable Architectures	201
	Johann Glaser and Clifford Wolf	
12.1	Introduction	201
12.2	Development of Reconfigurable Hardware	202
12.2.1	Pre-silicon Phase	203
12.2.2	Post-silicon Phase	203
12.3	Design Methodology	203
12.3.1	Specification	204
12.3.2	Application Analysis	204
12.3.3	Merge	206
12.3.4	Implementation	206
12.3.5	Verification	206

- 12.3.6 Post-silicon Phase 207
- 12.3.7 Tools..... 207
- 12.4 Interconnect for Reconfigurable Modules..... 207
 - 12.4.1 Common Topologies 207
 - 12.4.2 A Tree Topology..... 208
 - 12.4.3 Analysis of the Tree Topology 210
- 12.5 Interconnect Synthesis 211
 - 12.5.1 Optimization Algorithm..... 212
 - 12.5.2 Implementation Details..... 214
- 12.6 Evaluation of InterSynth 214
 - 12.6.1 Filter Networks 215
 - 12.6.2 Logic Networks..... 217
- 12.7 Yosys..... 218
- 12.8 Conclusion..... 218
- References..... 220

Contributors

Syed Hussein S. Alwi Université Pierre et Marie Curie Paris 6, LIP6-SOC (CNRS UMR 7606), Paris, France

Gerd Ascheid Institute for Communication Technologies and Embedded Systems, RWTH Aachen University, Aachen, Germany

Binghao Bao University of Kaiserslautern, Kaiserslautern, Germany

Jörg Bormann University of Kaiserslautern, Germany

Cécile Braunstein Université Pierre et Marie Curie Paris 6, LIP6-SOC (CNRS UMR 7606), Paris, France

Markus Damm Technische Universität Kaiserslautern, Kaiserslautern, Germany

Rolf Drechsler Group of Computer Architecture, University of Bremen, Bremen, Germany

Cyber-Physical Systems, DFKI GmbH, Bremen, Germany

Emmanuelle Encrenaz Université Pierre et Marie Curie Paris 6, LIP6-SOC (CNRS UMR 7606), Paris, France

Johann Glaser Institute for Computer Technology, Vienna University of Technology, Vienna, Austria

David Greaves Computer Laboratory, University of Cambridge, Cambridge, UK

Christoph Grimm Technische Universität Kaiserslautern, Kaiserslautern, Germany

Jan Haase Vienna University of Technology, Institute of Computer Technology, Vienna, Austria

Manuel Harrant Infineon Technologies AG, Neubiberg, Germany

Fernando Herrera University of Cantabria, ETSIIT, Santander, Spain

- Edgar Holleis** Tridonic, Dornbirn, Austria
- Ramy Iskander** Université Pierre et Marie Curie, LIP6, Paris, France
- Farakh Javid** Université Pierre et Marie Curie, LIP6, Paris, France
- Elias Kougianos** Engineering Technology, University of North Texas, Denton, TX, USA
- Wolfgang Kunz** University of Kaiserslautern, Kaiserslautern, Germany
- Goran Lazendic** FTW Forschungszentrum Telekommunikation Wien GmbH, Austria
- Rainer Leupers** Institute for Communication Technologies and Embedded Systems, RWTH Aachen University, Aachen, Germany
- Yao Li** Université Pierre et Marie Curie, LIP6, Paris, France
- Marie-Minerve Louërat** Université Pierre et Marie Curie, LIP6, Paris, France
- Saraju P. Mohanty** Computer Science and Engineering, University of North Texas, Denton, TX, USA
- Javier Moreno Molina** Technische Universität Kaiserslautern, Kaiserslautern, Germany
- Thomas Nirmaier** Infineon Technologies AG, Neubiberg, Germany
- Georg Pelz** Infineon Technologies AG, Neubiberg, Germany
- Pablo Penil** University of Cantabria, ETSIIT, Santander, Spain
- Hector Posadas** University of Cantabria, ETSIIT, Santander, Spain
- Christoph Schumacher** Institute for Communication Technologies and Embedded Systems, RWTH Aachen University, Aachen, Germany
- Mathias Soeken** Group of Computer Architecture, University of Bremen, Bremen, Germany
- Cyber-Physical Systems, DFKI GmbH, Bremen, Germany
- Dominik Stoffel** University of Kaiserslautern, Kaiserslautern, Germany
- Slobodanka Tomic** FTW Forschungszentrum Telekommunikation Wien GmbH, Vienna, Austria
- Eugenio Villar** University of Cantabria, ETSIIT, Santander, Spain
- Markus Wedler** University of Kaiserslautern, Kaiserslautern, Germany
- Jan Henrik Weinstock** Institute for Communication Technologies and Embedded Systems, RWTH Aachen University, Aachen, Germany

Robert Wille Group of Computer Architecture, University of Bremen, Bremen, Germany

Cyber-Physical Systems, DFKI GmbH, Bremen, Germany

Clifford Wolf Institute for Computer Technology, Vienna University of Technology, Vienna, Austria

Mehboob Yasin Computer Laboratory, King Faisal University, Al-Ahasa, Saudi Arabia