

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

Models, Methods, and Tools for Complex Chip Design

Selected Contributions from FDL 2012

Haase, J. (Ed.)

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