Map2MPSoC ✦ SCOPES

Proceedings of the

5th Workshop on
Mapping of Applications to MPSoCs

and

15th International Workshop on
Software and Compilers for Embedded Systems

Map2MPSoC/SCOPES 2012

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Map2MPSoC/SCOPES 2012

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Editor

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Table of Contents

Preface

Dear Colleague,

Welcome to Sankt Goar and the Map2MPSoC/SCOPES workshop. After having been co-located for four years, the workshop on Mapping of Applications to MPSoCs (Map2MPSoC) and the workshop on Software and Compilers for Embedded Systems (SCOPES) have joint forces. This year we are presenting a combined Map2MPSoC/SCOPES workshop program that features many interesting talks on all aspects related to the design of modern embedded systems. I hope that you will find our program interesting, stimulating and exciting.

The influence of embedded systems is constantly growing. Increasingly powerful and versatile devices are developed and put on the market at a fast pace. Their functionality and number of features is increasing, and so are the constraints on the systems concerning size, performance, energy dissipation and timing predictability. To meet all these constraints, multi-processor systems on a chip (MPSoCs) are becoming popular in embedded systems. In order to meet the performance and energy constraints of embedded applications, heterogeneous architectures incorporating functional units optimized for specific functions are commonly employed. This technological trend has dramatic consequences on the parallelization, mapping, compiler and design technology used to develop these systems. The Map2MPSoC/SCOPES workshop focuses on the software generation process for these modern embedded systems. Topics of interest include all aspects of the compilation and mapping process of embedded single and multi-processor systems.

Map2MPSoC/SCOPES received a total of 17 papers coming from many different countries in Europe, North- and South-America, Asia, and Australia. Each paper has been reviewed by at least four independent reviewers to ensure the quality of the workshop. Each reviewer provided a score together with detailed comments and suggestions on how to improve the overall quality of each paper. After an on-line meeting, the program committee has decided to accept 7 papers out of these 17 submissions. This gives an acceptance rate of 41% which is in-line with earlier editions of the Map2MPSoC and SCOPES workshops. It also reflects our commitment to only select high quality papers for presentation at our workshop.

In addition to the research papers, the workshop features also 7 research presentations. The idea of research presentations was previously used at the Map2MPSoC workshop and has been continued in the joint workshop program. Research presentations show research results relevant to the topics addressed by the workshop. These presentations may be based on on-going work or research results that have previously been presented in other forums. Research presentations do not include a publication in the Map2MPSoC/SCOPES proceedings, but they should stimulate discussion at the workshop.

In conclusion, I would like to thank the members of the program committee and the external reviewers for their contribution to the quality of this workshop. I would also like to thank all authors for choosing Map2MPSoC/SCOPES as the workshop where to report your research and your contributions to the scientific community. Finally, I would like to thank our sponsors for their support to Map2MPSoC/SCOPES 2012. I wish all of you a fruitful conference and a pleasant stay in Sankt Goar.

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