FOREWORD

Special Section on Reconfigurable Systems

Rapid advances of field programmable devices have made the research field of reconfigurable systems important and widespread. Instead of customized SoCs (System-on-a Chip), reconfigurable FPGAs (Field Programmable Gate Array) have been utilized in various types of embedded systems. Even the field of supercomputing, FPGAs have become a major player. Partial and dynamic reconfiguration has become a common design choice rather than challenging techniques. Also, coarse grained reconfigurable architectures have been embedded into real consumer devices as a flexible low power accelerators. Also, C-level programming using the HLS (High Level Synthesis) has become popular first for the reconfigurable devices. Important techniques on reconfigurable systems are widely spread to application, system software, design tools, computer architecture and device technology.

We planned a special section in order to sum up the recent technical trend of various areas on reconfigurable systems. In response to the call for papers for this special section, 17 regular papers and a letter papers were submitted. Through the same review and editorial process as the regular section, 10 papers were accepted for publication. The selected papers will give readers the latest results of researches in various fields on reconfigurable systems.

The special section editorial committee members listed below wish to thank all of those who submitted papers, as well as the reviewers for their thoughtful comments and suggestions. As the guest editor, I would like to express my sincere thanks to the editorial committee members for their efforts to maintain the quality of the selected papers high.

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Hideharu Amano (Keio University), Guest Editor-in-Chief

Hideharu Amano (Member) is a professor in the Department of Information and Computer Science at Keio University. His research interests include parallel architectures and reconfigurable systems. He has a PhD in electric engineering from Keio University. He is a member of IEEE, the ACM and IPSJ.

