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Iowa State University
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IEEE Computer Society Technical Committee on VLSI
IEEE Circuits and Systems Society
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Message from the Program Co-chairs

Welcome to the 1996 Great Lakes Symposium on VLSI. As we have stated in the call for papers, the purpose of the symposium, the sixth in a series, is to provide a relaxed atmosphere for exchange of ideas and to promote research in the field of VLSI. Therefore, a two-day, dual track program is planned with a keynote speech and panel discussions.

Thanks to our distinguished program committee members, we are happy to report to you that we have continued the tradition of past GLSVLSI symposia to offer you a high-quality, exciting technical program. There were in total 96 papers submitted to this year's symposium. While the majority of these papers are from the great lake regions, we also received submissions from around the world, including Australia, Belgium, Canada, China, France, Germany, Italy, Korea, Latvia, Romania, Russia, Singapore, and Taiwan. This is a good indication that the high quality of this symposium has gained international recognition.

Each submission has been carefully reviewed by our distinguished program committee members. Three independent reviews were obtained before a decision was made. In order to fulfill the goal of providing an intimate, relaxed atmosphere for this symposium, the program committee had to make a very difficult decision to accept only 29 regular papers, and 25 short papers. We thank all those who have submitted a manuscript to us and the hard work of our program committee members, and qualified reviewers we requested to help review papers. We want to specifically congratulate those authors whose manuscripts have been accepted for contributing to the success of this symposium.

The accepted papers are arranged in six different subject areas: Physical design, Verification and synthesis, Testing, Low power design, High-level synthesis and special architecture, and Circuit design and FPGA architecture. We feel such divisions adequately address many current research focuses of VLSI research efforts. We are very grateful to Prof. C.K. Chen of UC San Diego for organizing a special session on “Issues in Performance Driven Layout” which consists of five excellent papers addressing the latest trend of layout methodology. We are honored to have Prof. Enrico Macii and Prof. Massimo Porcino give a conference tutorial on “Field Programmable Gate Arrays: The Solution to Rapid System Design,” and Prof. Enrico Macii to organize a panel session on FPGAs.

We are in debt to many colleagues, friends, and students who have helped to make this year's program successful. Prof. Sachin Sapatnekar helped with the special session, Prof. Marwan Hassoun helped to publicize the symposium, Prof. Randy Geiger in financial planning, and Prof. Edward Lee and Prof. Akhilesh Tyagi for local arrangements. In particular, we would like to thank Engineering Dean Prof. James Melsa and the department chair Prof. A.A. Fouad for their support. We also thank Dr. Sherwani of Intel and Prof. Edwin Sha of the University of Notre Dame for their encouragement and suggestions, and Gregg Cameron, Connie Middleton at Iowa State University and Jean Stover at University of Wisconsin for various aspects of conference managements and for processing the manuscripts. We also thank Prof. Gabriel Robins for setting up the conference homepage on the WWW, and Prasoon Surti for maintaining it.

We hope you will enjoy this technical program, and the hospitality of Iowa.

Liang-Fang Chao, Yu Hen Hu
Program Committee Co-Chairs
Message from the Steering Chair

On behalf of the Steering committee of Great Lakes Symposium on VLSI, it is indeed a great pleasure for me to welcome you to the Sixth Great Lakes Symposium on VLSI. The idea for GLSVLSI was conceived in 1989, and the symposium was started in 1991. The purpose of the symposium has been and will remain, to showcase the latest research in various fields of VLSI to an audience in the midwest. This area is not served by any major VLSI conference.

The Great Lakes Symposium is designed to provide a research-type atmosphere to attend, present, contribute, learn and teach others. There are no high-pressure presentations nor do we have any trade shows. This tradition continues in this symposium as we continue to strive for excellence in our ideal in research oriented symposiums.

The technical program committee has done an excellent job in selecting high quality papers and setting a solid technical program. I sincerely thank Professors Liang-Fang Chao and Yu Hen Hu for their hard work and dedication. Thanks are also due to the program committee members for their efforts. I would like to thank the Dean of College of Engineering of Iowa State University for his generous support and cooperation.

Next year, the symposium is planned to be held at the University of Illinois at Urbana-Champaign. Professors C.L. Liu and Steve Kang will be conference chairs.

I thank all the authors who have contributed to the conference. Thanks are also due to reviewers, who got all the papers reviewed in time. I hope that all of you will submit papers and contribute to the GLSVLSI'97 as well.

I thank the IEEE Computer Society Technical Committee on VLSI, the IEEE Circuits and Systems Society, and Iowa State University for co-sponsoring this symposium.

Thanks for coming to GLSVLSI'96 and I hope to see you all in March '97 in Urbana-Champaign at GLSVLSI'97.

Sincerely,
Naveed Sherwani
Chair, Steering Committee for Great Lakes Symposium on VLSI

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