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ISPD'06

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Foreword

We welcome you to the *2006 International Symposium on Physical Design (ISPD).* This is the 10th ISPD meeting; in the past decade, the symposium has evolved from a series of intermittent ACM/SIGDA Physical Design Workshops into the premier venue for this type of research. Paper selection for ISPD is always competitive, drawing in the best work from around the world. The scope of the symposium includes many aspects of physical layout design; the proceedings feature papers ranging from high-level exploration of solution spaces down to low level electrical analysis. Variability of device behavior, and the different ways in which circuits can fail, have become key concerns in physical design. Traditional topics such as placement and routing are also well represented.

Over the years, ISPD has been home to a number of groundbreaking papers, and this year looks to be no exception. There were 72 papers submitted, of which only 25 were accepted. These excellent papers, and the talks by both the authors and the invited speakers, should make for an interesting and enjoyable program. In addition to the papers themselves, slides for most of the talks are also available through the symposium web site:

http://www.ispd.cc

The symposium begins with a keynote talk by Ted Vucurevich, from Cadence. The talk presents a forward looking view of the challenges and opportunities in commercial computer-aided design. Monday also features invited talks on failure mechanisms for leading edge designs – design tools must now account for these issues if we are to move forward with Moore's law. Tuesday features invited talks on how industry vendors are handling extremely large designs; additionally, we have the ISPD Placement Contest on this day, which is in some respects the academic response to large scale design. This is the second year for the placement contest; the first year was a rousing success, and we expect that this year will be even more interesting. The nine teams from last year are back for another round of competition, with one new team joining the group. Wednesday features talks on modern clocking methods in industry designs, and concludes with talks on one of the fundamental areas of physical design: placement.

We would like to thank the reviewers, who worked quickly and carefully to ensure that high quality papers could be selected and published with a minimum of delay. The fast turn-around of the ISPD review cycle helps attract the best papers. We also thank the sponsors of the symposium, ACM SIGDA and IEEE Circuits and Systems. Generous support has been provided by Cadence, IBM, Intel, Magma, Sierra, Synopsys, Tabula, and IEEE/CEDA.

On behalf of the Technical Program Committee, we hope that you find the 2006 edition of ISPD useful and informative. From past experience, we are sure that ISPD will also be a great deal of fun!

Lou Scheffer
ISPD 2006 General Chair

Patrick H. Madden
Technical Program Chair

Table of Contents

Session 4: Power and Noise

Session Chair: C. Chen *(University of Wisconsin)*

Session 5: Optimized Interconnect

Session Chair: P. Saxena *(Synopsys)*

Session 6: Chip-Level Timing and Wiring

Chair: P. McGuinness *(Freescale)*

Session 7: Big Designs and the ISPD06 Placement Contest

Session Chair: B. Halpin *(Synplicity)*

Session 8: Industrial Clocking

Session Chair: D. Pan *(University of Texas)*

Session 9: Placement

Session Chair: B. Swartz *(InternetCAD)*

Session: 2006 ISPD Placement Contest Papers

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