

CALL FOR PAPERS

ISLPED' 06

INTERNATIONAL SYMPOSIUM ON LOW POWER ELECTRONICS AND DESIGN

<http://www.islped.org>

Tegernsee (Munich area), Germany

October 4-6, 2006



Executive Committee and Symposium Officers

General Co-Chairs:

Wolfgang Nebel
Carl v. Ossietzky University
nebel@informatik.uni-oldenburg.de

Mircea Stan
University of Virginia
mircea@virginia.edu

Vice General Chair:

Anand Raghunathan
NEC Labs America
anand@nec-labs.com

Program Co-Chairs:

Joerg Henkel
University of Karlsruhe
henkel@informatik.uni-karlsruhe.de

Diana Marculescu
Carnegie Mellon University
dianam@ece.cmu.edu

Treasurer:

Vijay Narayanan
Penn State University
vijay@cse.psu.edu

Publicity Chairs:

Farzan Fallah (US)
Fujitsu Labs. of America
farzan@fla.fujitsu.com

Reiner Hartenstein (Europe)
TU Kaiserslautern
hartens@rhrk.uni-kl.de

Jihong Kim (Asia)
Seoul Natl. Univ.
jihongq@da.uci.ac.kr

Local Arrangements Chair:

Ulf Schlichtmann
Technische Universität München
ulf.schlichtmann@tum.de

Design Contest Chair:

Barry Pangrle
ArchPro Design Automation
pangrle@archpro-da.com

Exhibits Chair:

Qing Wu
SUNY University, Binghamton
qw@binghamton.edu

Web Chair:

Tony Givargis
University of California, Irvine
givargis@uci.edu

Sponsored by **ACM SIGDA** and **IEEE Circuits and Systems Society** with technical co-sponsorship from the **IEEE Solid-State Circuits Society** and the **IEEE Electron Devices Society**.

The International Symposium on Low Power Electronics and Design (ISLPED) is the premier forum for presentation of recent advances in all aspects of low power design and technologies, ranging from process and circuit technologies, simulation and synthesis tools, to system level design and optimization. Specific topics include, but are not limited to, the following two main areas, each with three sub-areas:

1. Architecture, Circuits, and Technology	2. Design Tools, System and Software Design
1.1. Technologies and Digital Circuits Emerging logic and memory technologies, Device design, Low power low leakage circuits, Memory circuits, Cooling technologies, Battery technologies	2.1. Design Tools Energy simulation and estimation tools that operate at the circuit/gate level, RT level, behavioral level, and algorithmic level, Physical design and interconnects
1.2. Logic and Microarchitecture Design Processor core design, Cache design, Logic and RTL design, Arithmetic and signal processing circuits, Encryption technologies, Asynchronous design	2.2. System Design and Methodologies Microprocessor, DSP and embedded systems design, FPGA and ASIC designs, System level power management, Behavioral and system level design aids
1.3. Analog, MEMS and Mixed Signal Electronics RF circuits, Wireless, MEMS circuits, AD/DA Converters, Mixed-signal circuits, DC-DC conversion	2.3. Software Design and Optimization Power aware compiler and operating system design, Application level optimizations, Wireless and sensor networks

Submissions on new topics: emerging technologies, architectures/platforms, and applications are particularly encouraged.

TECHNICAL PAPER SUBMISSIONS DEADLINE: Full papers should be received by **March 3, 2006** and the abstracts are due by **February 24, 2006**.

Submissions should be full-length papers of up to 6 pages (double-column format, font size 9pt to 10pt), including all illustrations, tables, references and an abstract of no more than 100 words. Papers exceeding the six-page limit will not be reviewed. Electronic submission in *pdf* format only via the web is *required*. More information on electronic submission to ISLPED'06 can be found at <http://www.islped.org>.

Submitted papers must describe original work that will not be announced or published prior to the Symposium and that is *not being considered or under review by another conference* at the same time. Accepted papers will be presented in one of two parallel tracks: one focusing on architectures, circuits and technologies, the other on design tools and systems and software design for low power. Notification of paper acceptance will be mailed by **May 12, 2006** and the camera-ready version of the paper will be due by **July 30/31, 2006**. Accepted papers will be published in the Symposium Proceedings and included in the annual ACM SIGDA CD-ROM Publication Compendium. Authors of a few selected papers from the Symposium will also be given an opportunity to submit enhanced versions of their papers for publication in a special issue of a reputed journal. ISLPED'06 will present two Best Paper Awards based on the ratings of reviewers and an invited panel of judges.

INVITED TALK, PANEL, AND TUTORIAL PROPOSALS DEADLINE: RECEIVED by March 31, 2006.

There will be several invited talks by industry and academic leaders on key issues in low power electronics and design. All invited talks will be in plenary sessions. The Symposium also may include embedded tutorials to provide attendees with the necessary background to follow recent research results, as well as an evening panel on future directions and design/technology alternatives in low power electronics and design. Proposals for invited talks, embedded tutorials, and the panel should be sent to:

Diana Marculescu
Carnegie Mellon University
Pittsburgh, PA
dianam@cmu.edu

Joerg Henkel
University of Karlsruhe
Karlsruhe, Germany
henkel@informatik.uni-karlsruhe.de

Companies interested in exhibiting at the Symposium should contact the Exhibits Chair by July 28, 2006.

Other Members of the EC:

B. Barton, Texas Instruments
D. Blaauw, Univ. of Michigan
R. Brodersen, UC Berkeley
A. Chandrakasan, MIT
K. Choi, Seoul National Univ.

J. Cong, UCLA
V. De, Intel Corporation
G. DeMicheli, EPFL
C. Enz, CSEM
M. J. Irwin, Penn State Univ.

R. Joshi, IBM
E. Macii, Poli di Torino
F. Najm, University of Toronto
M. Pedram, USC
C. Pfluef, CSEM

J. Rabaey, UC Berkeley
K. Roy, Purdue University
T. Sakurai, Univ. of Tokyo
C. Svensson, Linkoping Univ.
V. Tiwari, Intel Corp.
I. Verbauwhede, K.U.Leuven