



SECOND ANNOUNCEMENT AND CALL FOR PAPERS

2015 SYMPOSIUM ON VLSI CIRCUITS

Sponsored by the Japan Society of Applied Physics and the IEEE Solid-State Circuits Society
In Cooperation with the Institute of Electronics, Information and Communication Engineers
and the IEEE Electron Devices Society

Rihga Royal Hotel Kyoto, Kyoto, Japan

Tuesday - Friday, June 16th - 19th, 2015

(June 16th Short Course, June 17th - 19th Technical Sessions)

www.vlsisymposium.org

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Short Course Chair:
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Short Course Co-Chair:
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Evening Panel Chair:
Hiroki Ishikuro (Japan)
Keio University

Evening Panel Co-Chair:
Pavan Hanumolu (USA)
University of Illinois,
Urbana-Champaign



The 2015 Symposium on VLSI Circuits welcomes the submission of original papers on all aspects of VLSI Circuits. The VLSI Technology Symposium (reverse side) will be held at the same location with two days of overlap. **A single registration allows participants to attend both Symposia**, and offers excellent opportunities to synergize on topics of joint interest.

SYMPOSIUM SCOPE

The scope of the Symposium on VLSI Circuits includes innovations and advances in the following areas:

- **Digital circuits and processor techniques**, including circuits and techniques for standalone and embedded processors
- **Memory circuits, architectures, and interfaces** for volatile and non-volatile memories, including emerging memories
- **Clock generation and distribution** for high-frequency digital and mixed-signal applications
- **Analog and mixed-signal circuits**, including amplifiers, filters, and data converters
- **Wireline receivers and transmitters**, including circuits for inter-chip and long-reach applications
- **Wireless receivers and transmitters**, including circuits for WAN, LAN, PAN, BAN, and inter-chip applications
- **Power management circuits**, including those for battery management, voltage regulation, and energy harvesting
- **Application-oriented VLSI systems**, imagers, displays, sensors, and biomedical and healthcare applications

EMERGING SYSTEM DIRECTIONS

This year, the Symposium will feature innovative VLSI system directions. Submission of papers on “big integration,” not limited to circuits inside a chip but also on module/chassis level, in following focus areas are highly welcome: 1) **IoT sensing modules**, 2) **Industrial electronics**, 3) **Big data processing/storage systems**, and 4) **Robotics and smart cars**. New focus sessions comprising invited and contributed papers will be offered. Details will be posted on the Symposium’s web site.

JOINT CIRCUITS AND TECHNOLOGY FOCUS SESSIONS

Joint circuits and technology focus sessions will be offered in the following special topics of joint interest:

- **Design in scaled technologies**: scaling of digital, memory, analog and mixed-signal circuits in advanced CMOS processes
- **Design enablement**: design for manufacturing, process-design co-optimization, on-die monitoring of variability and reliability
- **Memory technology and design**: embedded and stand-alone SRAM, DRAM, Flash, PCRAM, RRAM, MRAM, etc.
- **3D and heterogeneous integration**: power and thermal management, inter-chip communication, SiP architectures and applications

PAPER SUBMISSION

Papers will be selected based on technical innovation, advances relative to previously published work, credibility of claims, and quality of writing and illustrations. Prospective authors must submit two-page papers and abstracts using the Symposia’s website, www.vlsisymposium.org. Accepted papers will be published as submitted, with **no revisions permitted**. Authors must follow detailed instructions provided within the “Authors” section of the website, including the Authors’ Guide and Pre-publication Policy. The technical content beyond the abstract of the accepted paper must not be announced, published, or in any way put in the public domain prior to the Symposium. Partial travel expense support for students who are presenting papers is available upon request. Extended versions of selected papers from the Symposium will be published in a **Special Issue of the IEEE Journal of Solid-State Circuits**.

Paper Submission Deadline: 23:59 JST (14:59 GMT), Monday January 26th, 2015

BEST STUDENT PAPER AWARD

Best Student Paper Award selection will be based on quality of the papers and the presentations at the Symposium. The winning student will be presented a monetary award and a certificate at the opening session of the 2016 Symposium. The student must be enrolled as a full-time student at the time of submission, must be the leading author and the presenter of the paper, and must indicate when submitting the paper that the paper should be considered for the award.

VLSI CIRCUITS SHORT COURSES

The Symposium offers two full-day short courses on major topics of current interest, instructed by selected international experts. The short courses will be held on June 16th, 2015. Details will be posted on the website by middle of April, 2015.

INFORMATION AND REGISTRATION

The Symposia’s website provides additional information, including information regarding Symposium registration and hotel reservations. To obtain assistance with any aspect of the Symposium, please contact the appropriate Secretariat.

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