SECOND ANNOUNCEMENT AND CALL FOR PAPERS

2014 SYMPOSIUM ON VLSI CIRCUITS

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

Hilton Hawaiian Village, Honolulu, Hawaii
Tuesday – Friday, June 10th – 13th, 2014
(June 10th Short Course, June 11th – 13th Technical Sessions)

The 2014 Symposium on VLSI Circuits will provide integrated circuit designers an outstanding opportunity to present and discuss important new work in all aspects of VLSI circuits. The Symposium offers an especially warm environment that brings together industry and academic leaders from Asia, America, and Europe. The 2014 Symposium on VLSI Technology (please see the reverse side) will be held at the same location with two days of overlap. **A single registration allows participants to attend both VLSI Circuits Symposium and VLSI Technology Symposium sessions**, and offers excellent opportunities for synergistic interactions among circuit experts and technology experts on topics of mutual 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 data converters, sensor interface circuits, and amplifiers
• **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 battery management circuits, voltage regulators, energy harvesting circuits, and circuits for renewable energy applications
• **Application-oriented circuits and VLSI systems**, including biomedical applications, and including SoC and SiP architectures and implementations

JOINT CIRCUITS AND TECHNOLOGY FOCUS SESSIONS
Joint circuit and technology focus sessions will be offered covering special topics of joint interest. Paper submissions highlighting major innovations and advances in circuits, designs, tools and methodologies in the following areas are strongly encouraged:
• **Design in scaled technologies:** scaling of digital, memory, analog, and mixed-signal circuits using advanced CMOS processes, especially processes with novel device and interconnect materials and structures
• **Design enablement:** design for manufacturing and robustness, process-design co-optimization for ultra-low voltage and power, and on-die measurement and monitoring of variability and reliability
• **Memory technology and design:** embedded and standalone SRAM, DRAM, Flash, PCRAM, RRAM, MRAM, etc.
• **3D (TSV) and heterogeneous integration:** power and thermal management, inter-chip communication, and 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 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 PST Monday January 27th, 2014

BEST STUDENT PAPER AWARD
Best Student Paper Award selection will be based on quality of the papers and the presentations at the Symposium. The student who receives the award will be presented a monetary award and a certificate at the opening session of the 2015 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 one-day short courses on major topics of current interest, instructed by selected international experts. The short courses will be held on June 10th, 2014. Details will be posted on the web by the middle of April, 2014.

INFORMATION AND REGISTRATION
The Symposia 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.