FINAL ANNOUNCEMENT AND CALL FOR PAPERS

2017 SYMPOSIUM ON VLSI CIRCUITS

RIHGA Royal Hotel Kyoto, Japan

Monday – Thursday, June 5-8, 2017

June 5 Short Courses
June 6-8 Technical Sessions

NEW! VLSI Circuits starts on Monday June 5, Fully Overlapping with VLSI Technology

2017 VLSI SYMPOSIA THEME
Harmonious Integration toward Next Dimensions

The VLSI community needs to find some extra dimensions to continue the exponential growth that has been propelled so far by Moore's law. This might involve innovative devices or circuits, or it might be driven by emerging technologies or applications. A key for identifying such next dimensions is the tight collaboration between technology and circuits, which is exactly what the VLSI Symposia were designed for.

The 2017 Symposium on VLSI Circuits starts on Monday June 5, fully overlapping with the 2017 Symposium on VLSI Technology to showcase "Harmonious integration" of Circuits and Technology, and will be held in the same location. A single registration allows participants to attend both Symposia. The Symposium features Circuits Focus Sessions for Innovate System Directions, Joint Circuits and Technology Focus Sessions, Evening Panels, Short Courses, and a new Demo Session, along with Regular Paper Sessions for contributed papers.

Symposium Scope

Papers will be selected based on technical innovation, advances relative to previously published work, credibility of claims, and quality of writing and illustrations in the following areas:

- **Innovative system directions,** see in the right column
- **Digital circuits, processors and architectures, including circuits and techniques** for standalone and embedded processors
- **Memory circuits, architectures and interfaces** for volatile and nonvolatile memories, including emerging technologies
- **Frequency generation and clock circuits** for high-speed digital and mixedsignal applications
- **Analog and mixed-signal circuit,** including amplifiers, filters, and data converters
- **Wireline receivers and transmitters,** including circuits for interchip and longreach applications
- **Wireless receivers and transmitters,** including circuits for WAN, LAN, PAN, BAN inter-chip and mm-wave applications
- **Power conversion circuits,** including those for battery management, voltage regulation, and energy harvesting
- **Imagers, displays, sensors, VLSI circuits and systems,** including biomedical, healthcare and wearable applications

Best Student Paper Award

Best Student Paper Award selection will be based on quality and presentation of the paper at the Symposium. The winning student will be presented a monetary award and a certificate at the 2018 Symposium opening session. The student must be enrolled as a fulltime student at the time of submission, be the leading author and presenter of the paper, and indicate when submitting the paper that the paper should be considered for the award.

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.

Secretariat for VLSI Symposia (Asia and Japan)
c/o JTB Communication Design, Inc., Tokyo, Japan
+81-3-5657-0777, vlsisymp@jtbcom.co.jp

Secretariat for VLSI Symposia (America and Europe)
Widerkehr and Associates, Montgomery Village, MD, USA
+1-301-527-0900 ext.2, vlsi@vlsisymposium.org

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 mixedsignal circuits in advanced CMOS processes
- **Design enablement:** design for manufacturing, process-design cooptimization, on-die monitoring of variability and reliability
- **Embedded memory technology and design:** SRAM, DRAM, Flash, PCRAM, RRAM, MRAM, etc.
- **3D and heterogeneous integration:** power and thermal management, interchip communication, SiP architectures and applications

Innovative System Directions

Authors are encouraged to submit papers on "big integration" that showcase innovations that extend beyond a single IC and into the module level. These include focus areas of **Internet of Things, Industrial Electronics, Big data management, Biomedical Applications** and **Robotics and Smart cars.** New focus sessions comprising invited and contributed papers will be offered.

Symposia Demo Session   NEW!!

VLSI Symposia 2017 will host a new Joint Circuits and Technology Demo Session. The Session will be held during the Symposia Joint Circuits and Technology Reception on Monday. At the Demo Session, authors of selected papers will employ posters to augment their demonstration. The outstanding demonstration(s) will be recognized at the next Symposia. To be considered for participation in the Demo Sessions, authors must indicate their interest at the time of paper submission. Refer to the Symposia Website for further information.

Paper Submission

Prospective authors must submit two-page camera-ready 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. 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:
January 23 (Mon.) 2017
23:59 JST

For complete Symposium, author, and registration information, visit:
http://www.vlsisymposium.org/

Symposium Chair:
Masato Motomura / Hokkaido University
motomura@ist.hokudai.ac.jp

Symposium Co-Chair:
Gunther Lehmann / Infineon Technologies
gunther.lehmann@infineon.com

Program Chair:
Makoto Ikeda / The University of Tokyo
ikeda@silicon.u-tokyo.ac.jp

Program Co-Chair:
Ken Chang / Xilinx Inc.
ken.chang@xilinx.com

Join the Symposia on VLSI Technology & Circuits LinkedIn Group

2017 VLSI CIRCUITS SYMPOSIUM KYOTO

IEEE · SSCS · ELECTRON DEVICES SOCIETY · EiC