

# 2016 SYMPOSIUM ON VLSI Technology

Hilton Hawaiian Village, HONOLULU, Hawaii, USA  
Monday – Thursday, June 13-16, 2016  
(June 13 Short Course,  
June 14-16 Technical Sessions)

The 2016 Symposium on VLSI Technology welcomes the submission of original papers on all aspects of IC and IoT technology. The VLSI Circuits Symposium will be held at the same location with two days of overlap. A single registration allows participants to attend both Symposia, to synergize on topics of joint interest and to gain an excellent overview of the interactive technology-circuits fields.

## 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. The scope includes:

- **IoT Systems and Technologies** including ultra-low power technologies; heterogeneous integration; sensors, display, connectivity; power management; digital/analog, micro-controllers and application processors.
- **Stand-Alone and Embedded Memories** technology and reliability for DRAM, SRAM, Non-Volatile, Emerging Memories.
- **CMOS Technology, Microprocessors and SoCs** including scaling, VLSI manufacturing concepts, and yield optimization.
- **RF / Analog / Digital Technologies** for mixed-signal SoC; RF front end; analog, mixed-signal, I/O, high-voltage, imaging, MEMS, integrated sensors.
- **Process and Material Technologies** including advanced transistor process and architecture, modeling and reliability; alternate channel; advanced lithography, high-density patterning; SOI and III-V technologies; photonics; local interconnects and Cu/optical interconnects scaling.
- **Packaging Technologies and System-in-Package (SiP)** including through-silicon-vias (TSVs) and 3D-system integration.
- **Photonics Technology and Beyond CMOS Devices**

## 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 2017 Symposium opening session. The student must be enrolled as a full-time 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 (America and Europe):** Widerkehr & Associates, Montgomery Village, MD, USA

+1-301-527-0900 ext.2, [vlsi@vlsisymposium.org](mailto:vlsi@vlsisymposium.org)

**Secretariat for VLSI Symposia (Japan and Asia):** c/o ICS Convention Design, Inc., Tokyo, Japan

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## Joint Technology and Circuits Focus Sessions

Joint technology and circuits 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
- **Embedded memory technology and design:** SRAM, DRAM, Flash, PCRAM, RRAM, MRAM, etc.
- **3D and heterogeneous integration:** power and thermal management, inter-chip 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, and Robotics and Smart cars**. New focus sessions comprising invited and contributed papers will be offered.

## Paper Submission

Prospective authors must submit two-page papers and abstracts using the Symposia's website, [www.vlsisymposium.org](http://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.

Paper Submission  
Deadline: 23:59 PST  
Monday, January 25,  
2016

For complete conference, author,  
and registration information, visit:  
<http://www.vlsisymposium.org/>



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