

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

2023 SYMPOSIUM ON VLSI TECHNOLOGY AND CIRCUITS

~ Rebooting Technology and Circuits for a Sustainable Future ~

Rihga Royal Hotel Kyoto, Japan
Sunday–Friday, June 11–16, 2023

June 11 Workshops
June 12 Short Courses
June 13–15 Technical Sessions
June 16 Forum



Paper Submission Deadline: 23:59 JST Wednesday, February 1, 2023
Details: www.vlsisymposium.org

Symposium Scope

The Symposium calls for papers in the following areas:

- **Advanced CMOS and interconnect technologies**
- **Advanced packaging, 2.5D and 3D integration**
- **Beyond CMOS, such as spin logic, optical and quantum computing**
- **Biomedical devices, circuits, and systems**
- **Data converters**
- **Devices and accelerators for machine learning**
- **Device physics, characterization, reliability, and modelling**
- **Digital circuits, hardware security, signal integrity, IOs**
- **DTCO and design enablement**
- **Frequency generation and clocking circuits**
- **Memory technologies, devices, circuits, and architectures**
- **Power, analog and mixed-signal devices, and circuits**
- **Advanced process and material for scaling and new devices**
- **Processors and SoCs**
- **Sensors, imagers, IoT, MEMS, display circuits**
- **Wireless and RF devices circuits and systems**
- **Wireline and optical transceivers, optical interconnects and processors**
- **Innovative Systems using FPGAs and COTS components**

Call for Workshops

The Symposium provides valuable opportunities for volunteers to apply to organize and host short workshops at the Symposium. The call for workshop proposals and details will be announced soon.

Contacts

(Asia and Japan) JTB Communication Design
vlsisymp@jtbcom.co.jp

(North America and Europe) Canfield Event Management
vlsi@vlsisymposium.org

Focus Sessions

In addition to the topics mentioned, the Symposium will highlight Focus Sessions on special topics.

Short Courses

Full-day short courses will offer in-depth lectures on VLSI-related topics given by distinguished experts from industry and academia.

Demo Session

A demo session will provide authors of selected papers to showcase posters/videos and demonstrate their work. The best demo paper will be awarded.

Forum

The VLSI Forum is planned to expand the scope of the Symposium, suggesting the future direction of the Symposium, introducing cutting-edge VLSI applications. World experts will share their perspectives on special topics.

Best Student Paper Award

Selection will be based on quality of the paper and presentation at the Symposium. The winning student will be presented with a certificate and monetary award at the 2024 VLSI Symposium opening session. **At time of submission, the student must be enrolled as a full-time student, be the leading author and presenter of the paper, and indicate consideration for the award.**

Paper Submission

Prospective authors must submit two-page paper abstracts to the Symposium website www.vlsisymposium.org. Accepted papers will be published *as-submitted* with **no revisions permitted**. Authors must follow detailed instructions provided in the “Authors” section of the website, including the Authors’ Guide and Pre-publication Policy. **Extended versions of outstanding papers will be invited for publication in the IEEE Transaction on Electron Devices, IEEE Journal of Solid-State Circuits, and IEEE Solid-State Circuits Letters.**



Symposium Chairs:
Katsura Miyashita, Toshiba Electronic Devices & Storage Co.
Yusuke Oike, Sony Semiconductor Solutions

Symposium Co-Chairs:
Gosia Jurczak, LAM Research
Borivoje Nikolić, University of California, Berkeley

Program Chairs:
Takaaki Tsunomura, Tokyo Electron Limited
Mototsugu Hamada, The University of Tokyo

Program Co-Chairs:
Vijay Narayanan, IBM
Ron Kapusta, Analog Devices, Inc.



Stay updated & informed by
joining the LinkedIn Group
VLSI Technology & Circuits

