



COOL Chips 28

CALL FOR PARTICIPATION

COOL Chips is an International Symposium initiated in 1998 to present advancement of low-power and high-speed chips and systems. The symposium covers leading-edge technologies in all areas of microprocessors and their applications. The COOL Chips 28 is to be held on April 16-18, 2025, and is targeted at the architecture, design and implementation of chips with special emphasis on the areas listed below.

- **Low Power-High Performance Processors and Systems for AI, IoT, Multimedia, Digital Consumer Electronics, Mobile, Graphics, Encryption, Robotics, Automotive, Networking, Medical, Healthcare, and Biometrics.**
- **Novel Architectures and Schemes for Single Core, Multi-Core, Embedded Systems, Reconfigurable Computing, Grid, Ubiquitous, Dependable Computing, GALS and Wireless.**
- **Cool Software including - Parallel Schedulers, Embedded Real-time Operating System, Binary Translations, Compiler Issues and Low Power Application Techniques.**

Dates and Location

April 16 (Wed) – 18 (Fri), 2025

Takeda Hall, The University of Tokyo, Bunkyo-ku, Tokyo, Japan

Keynote Presentations

- "Advanced Package Substrate Technology for Heterogenous Integration", *Sriram Dattaguru (Intel)*
- "The Challenges of Delivering Power to and Cooling the Cerebras Wafer-Scale Engine",
Jean-Philippe Fricker (Cerebras Systems)
- "Open Source RiscV CPU and AI for Edge Applications", *Jim Keller (Tenstorrent)*
- "A Content-Addressable Engine for Associative Processing", *José Martínez (Cornell Univ.)*
- "Specialized Hardware and Open-Source Tools for Scientific Computing and Instruments",
Kazutomo Yoshii (Argonne National Lab.)

Invited Presentation

- "Device-Algorithm Co-optimization for Analog In-Memory Computing",
Sangbum Kim (Seoul National Univ.)

Panel Discussion

- Topics: "Sustainable AI: Emerging Architectures, Devices, and Quantum Computing Towards Future Computing",
Moderator: Tohru Ishihara (Nagoya Univ.)
Panelists: TBD

Special Sessions (invited lectures)

- "Next-Generation Quantum Computing: A Computer Architect's Perspective",
Jangwoo Kim (Seoul National Univ.)
- "Reliability and Efficiency in Deep Learning Processing Systems", *Alex Orailoglu (UC San Diego)*

(in alphabetical order)

For detailed and up-to-date information, please visit
< <https://www.coolchips.org/> >

Symposium Registration

In order to make a registration, please visit COOL Chips 28 web site: < <https://www.coolchips.org/> >

== REGISTRATION FEES ==

Registration Fees include a copy of the proceedings (copies of speakers' slides) of all plenary and technical sessions and special sessions presented on April 16-18, 2025.

(including tax)	Early Registration by April 9, 2025 *2	Late Registration from April 10, 2025
Member of any of IEEE, IEICE or IPSJ	48,000 yen	60,000 yen
Student (Member)	16,000 yen *1	20,000 yen *1
Life/Retired (Member)	16,000 yen	20,000 yen
Non-Member	60,000 yen	75,000 yen
Student (Non-Member)	20,000 yen *1	25,000 yen *1

*1 FREE (0 yen) for non-author students *2 Extended

== PAYMENT ==

Only credit cards via Whova Registration-site
Note: Credit card charges will be billed in Yen.

== PARTICIPATION ==

Participation information will be provided severally by email from COOL Chips 28 no later than April 15.

== CONTACT to ==

Organizing Committee Secretaries
E-mail: cool_28@coolchips.org
<https://www.coolchips.org/>

Sponsored by the Technical Committees on Microprocessors and Microcomputers and Computer Architecture of the IEEE Computer Society.
In cooperation with the IEICE Electronics Society and IPSJ.



(As of April 3, 2025)