



# COOL Chips 26

## 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 26 is to be held on April 19-21, 2023, 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 19 (Wed) – 21 (Fri), 2023**

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

### Keynote Presentations

- "Sustainability and Fleet Manageability Innovations with 4th Gen Intel Xeon processor",  
*Arijit Biswas and Pankaj Kumar (Intel)*
- "RISC-V Robust Ecosystem",  
*Mark Himmelstein (RISC-V International)*
- "Next Generation Cryogenic Superconductor Computing ~ From Classic to Quantum ~",  
*Koji Inoue (Kyushu University)*
- "AI Software stack: enabling co-optimizations on Deep Learning frameworks", *Kazuaki Ishizaki (IBM)*
- "Compute Express Link (CXL): Shaping the compute landscape", *Debendra Das Sharma (Intel)*

### Panel Discussion

- Topics: "The Past, Present, and Future of COOLChips",  
*Moderator: Fumio Arakawa (Univ. of Tokyo)*  
*Panelists: Tadao Nakamura (Keio Univ.), Hiroaki Kobayashi (Tohoku Univ.), Hideharu Amano (Keio Univ.), Kunio Uchiyama (AIST), Makoto Ikeda (Univ. of Tokyo)*

### Special Sessions (invited lectures)

- "Vortex: An open-source RISC-V based GPGPU accelerator", *Hyesoon Kim (Georgia Tech)*
- "The Parameter and Chip Wars: Shifting the Focus from Model-centric to Data-centric AI",  
*Vijay Janapa Reddi (Harvard University)*

(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 26 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 19-21, 2023.

(including tax)	Early Registration by <b>April 10, 2023</b>	Late Registration from April 11, 2023
Member of any of IEEE, IEICE or IPSJ	44,000 yen	55,000 yen
Student (Member)	15,000 yen *1	19,000 yen *1
Life/Retired (Member)	15,000 yen	19,000 yen
Non-Member	55,000 yen	70,000 yen
Student (Non-Member)	19,000 yen *1	23,000 yen *1

\*1 Non-author students are FREE (0 yen)

== **PAYMENT** ==

Only credit cards via Whova Registration-site

**Notes:** Credit card charges will be billed in Yen.

== **ONLINE CHECK-IN** ==

Check-in information will be provided severally by email from COOL Chips 26 no later than April 18.

== **CONTACT to** ==

Organizing Committee Secretaries

E-mail: cool\_26@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 13, 2023)