IEEE Symposium on Low-Power and High-Speed Chips and Systems

COOL Chips 25

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 25 is to be held on April 20-22, 2022, 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 of Hybrid Symposium (ONSITE & ONLINE)

April 20 (Wed) – 22 (Fri), 2022

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

Keynote Presentations

- "Heterogeneity with oneAPI: A Play in two acts", ***Joseph Curley*** *and* ***Timothy Mattson*** *(Intel)*
- "Software-Defined Architecture and platforms - automotive and beyond", ***Masaki Gondo*** *(eSOL)*
- "The IBM Telum enterprise-class processor", ***Christian Jacobi*** *(IBM)*
- "NanoBridge-based FPGA for Space Applications", ***Makoto Miyamura*** *(NanoBridge Semiconductor)*
- "Xilinx 7nm Edge Processors", ***Juanjo Noguera*** *(Xilinx)*
- "Universal Chiplet Interconnect Express (UCIe): Poised to change the Compute Landscape", ***Debendra Das Sharma*** *(Intel)*
- "RISC-V-based parallel processor IP with vector extension for embedded systems", ***Shotaro Shintani*** *(NSITEXE)*

Invited Presentation

- "AMD Ryzen 6000 Series Processor", ***Jim Gibney*** *(AMD)*

Panel Discussion

- Topics: "The future of Mission-critical, mixed-criticality high-performance embedded systems", *Moderator:* ***Masaki Gondo*** *(eSOL)*

Special Sessions (invited lectures)

- "Closing the Gap between Quantum Algorithms and Machines with Hardware-Software Co-Design", ***Fred Chong*** *(University of Chicago)*
- "title: TBD", ***Yan Solihin*** *(University of Central Florida)*

(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 25 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 20-22, 2022.

(including tax)	**Early** Registration by **April 8,** 2022 ***1**	Late Registration from April 9, 2022
Member of any of IEEE, IEICE or IPSJ	30,000 yen	36,000 yen
Student (Member)	10,000 yen ***2**	12,000 yen
Life/Retired (Member)	10,000 yen	12,000 yen
Non-Member	40,000 yen	48,000 yen
Student (Non-Member)	14,000 yen ***2**	16,000 yen

***1** Early registrations are required to attend ONSITE
***2** Non-author students are FREE (0 yen) to attend ONLINE

== 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 25 no later than April 19.

== CONTACT to ==

Organizing Committee Secretaries
E-mail:cool_25@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 March 25, 2022)