



# COOL Chips 23 Webinar

## 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 23 is to be presented only on the Web on April 15-17, 2020, 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 Webinars

April 15 (Wed) – 17 (Fri), 2020

### Keynote Presentations

- "How to Uplift the World with "Memory" ",  
*Kenichi Mori (Kioxia)*
- "Reconfigurable Cloud Scale AI",  
*Aaron Smith (Microsoft)*
- "An Extremely Quantized Deep Neural Network Accelerator for Edge Devices",  
*Hiroyuki Tokunaga (LeapMind)*
- "Disruptive Evolutions: Technology Challenges and Countermeasures",  
*Shinichi Yoshioka (Renesas)*

### Invited Presentations

- "Virtualization for Non-volatile Memory Devices",  
*Takahiro Hirofuchi (AIST)*
- "Intel Optane™ Data Center Persistent Memory – A True Breakthrough to Break the Traditional Memory-Storage Technologies Barriers",  
*Jane Jianping Xu / Kaushik Balasubramanian (Intel)*

### Special Session (invited lecture)

- "Using AI to Bridge the Gap Between AI Models and the Hardware of Today and Tomorrow",  
*Luis Ceze (University of Washington)*
- "Evolving Hardware Security Landscape in the AI Era",  
*Guru Prasad Venkataramani (George Washington University)*

(in alphabetical order)

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

Due to the uncertain situation with COVID-19, the organizing committee has decided to give up holding the conference normally at the original venue and have the COOL Chips 23 as in a web fashion. We appreciate your understanding and apologize to all of you for the inconvenience.

### Symposium Registration

In order to make a registration, please visit COOL Chips 23 web site: < <https://www.coolchips.org/> >

== **UPDATED 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 15-17, 2020.

(including tax)	Early Registration by April 10, 2020	Late Registration from April 11, 2020
Member of any of IEEE, IEICE or IPSJ	30,000 yen	36,000 yen
Student (Member)	10,000 yen	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	16,000 yen

== **PAYMENT** ==

Only credit cards via Whova Registration-site

Notes:

Credit card charges will be billed in Yen.

== **WEBINAR CHECK-IN** ==

Check-in information will be provided severally by email from COOL Chips 23 no later than April 14.

== **CONTACT to** ==

COOL Chips 23 Organizing Committee Secretaries

E-mail: cool\_23@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 30, 2020)