

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 22 is to be held in Yokohama on April 17-19, 2019, 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 17 (Wed) – 19 (Fri), 2019

Yokohama Joho Bunka Center, Yokohama, Japan
(Yokohama Media & Communications Center, Yokohama, Japan)

Keynote Presentations

- "GPU: A true AI Cool-Chip with High Performance/Power Efficiency and Full-Programmability",
Toru Baji (NVIDIA)
- "Quantum Computing at IBM - from hardware to software (Tentative)",
Patryk Gumann (IBM)
- "Vector Engine Processor of NEC's Brand-New Supercomputer SX-Aurora TSUBASA",
Yoshihiro Konno (NEC)
- "Architectures for efficient, low-power AI Edge processing",
Sanjay Patel (Wave Computing)

Invited Presentations

- "DLU and Domain Specific Computing",
Takumi Maruyama (Fujitsu)
- "A64FX High Performance Processor Architecture and its Design Challenges",
Shuji Yamamura (Fujitsu)

Panel Discussion

- Topics: "Where will the computer architecture go?",
Organizer/Moderator: **Yasunori Kimura (JST)**

Special Sessions (invited lectures)

- "Design, Compilation, and Acceleration for Deep Neural Networks in IoT Applications",
Deming Chen (UIUC)
- "Low Power Design: Facts, Myths, and Misunderstandings",
Youngsoo Shin (KAIST)

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

Symposium Registration

In order to make a registration, please visit COOL Chips 22 web site: < <http://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 17-19, 2019.

(including tax)	Early Registration by April 4, '19	Late Registration from April 5, '19
Member of any of IEEE, IEICE or IPSJ	44,000 yen	55,000 yen
Student (Member)	15,000 yen	19,000 yen
Life/Retired (Member)	15,000 yen	19,000 yen
Non-Member	55,000 yen	70,000 yen
Student (Non-Member)	19,000 yen	23,000 yen

== **PAYMENT** ==

- On-site cash payment
- Credit cards

Detailed information is available on the web site.

Notes:

1. Credit card charges will be billed in Yen.
2. Personal checks, bank drafts, and traveler's checks are not acceptable.

Accommodations

== **HOTEL RESERVATIONS** ==

A special group rate is available for COOL Chips 22 attendees for Hotel Monterey Yokohama and Hotel New Grand.

== **CONTACT to** ==

COOL Chips 22 Organizing Committee Secretaries
E-mail: cool_22@coolchips.org <http://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 February 5, 2019)