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| Sun 7 July | Welcome Reception | | | | |
| Mon 8 July | 9:00- Session 1 | Keynote (60 min) | Hideki Sugimoto | | Architecture Challenge for Future Automotive or Embedded Compute SoC |
| | Break | Mini-keynote (12 min) | Masaaki Kondo | | |
| | | Mini-keynote (12 min) | Eric Monchalain | | Are next Generation Architectures suitable? |
| | | Mini-keynote (12 min) | Andreas Herkersdorf | | Near Memory Accelerators for Efficient Inter-Tile Communication in Distributed-Shared-Memory Architectures |
| | | Mini-keynote (12 min) | Gerd Ascheid | | Scalability Aspects of a Many-Core ASIP Platform targeted at Convolutional Neural Networks |
| | | Mini-keynote (12 min) | Yoshifumi Sakamoto | | |
| | | Mini-keynote (12 min) | Masahiro Murakami | | AI acceleration technology with FPGA to support super-resolution processing of scan image |
| | | Panel | Yuji Okamoto | | |
| | 12:30- Lunch | | | | |
| Mon 8 July | 14:00- Session 2 | In-depth (30 min) | Arnaud Grasset | | A Look at Computer Architectures for Mission-Critical Embedded Systems |
| | | In-depth (30 min) | Timothée Levi | | Biomimetic Spiking Neural Network and Neurohybrid systems for AI and biomedical |
| | | In-depth (30 min) | K. Charles Janac | | |
| | | Break | | | |
| | | In-depth (30 min) | Atsushi Hasegawa | | |
| | | In-depth (30 min) | Hironori Kasahara | | Green Multicore Compiler |
| | | In-depth (30 min) | Kiyoung Choi | | Algorithms and Architectures for Efficient Neural Processing |
| | | Panel | | | |
| Tue 9 July | 9:00- Session 3 | Keynote (60 min) | Naim Ben-Hamida | | |
| | Break | Mini-keynote (12 min) | Marilyn Wolf | | |
| | | Mini-keynote (12 min) | Shuichi Yamane | | Scalable ARM server for shared nothing DB |
| | | Mini-keynote (12 min) | Masaki Gondo | | SHIM 2.0 - an update to the new way to describe hardware for software tools |
| | | Mini-keynote (12 min) | Wei Zhang | | Hi-ClockFlow: Multi-Clock Dataflow Automation and Throughput Optimization in High-Level Synthesis |
| | | Mini-keynote (12 min) | Frederic Rousseau | | Locality: a Scalable Synchronization Lock for MPSoCs |
| | | Panel | | | |
| | 12:30- Lunch | | | | |
| Tue 9 July | 14:00- Session 4 | In-depth (30 min) | Sunghyun Lee | | Making difference in SoC with high performance memory subsystem IP |
| | | In-depth (30 min) | Takashi Miyamori | | DNN-Accelerated Multi-core SoC for Automotive Applications |
| | | In-depth (30 min) | Koji Inoue | | Towards Ultra High-Speed Superconducting Computing |
| | | Break | | | |
| | | In-depth (30 min) | Ashkan Seyedi | | Recent advances on WDM Silicon Photonics Devices for HPC Applications |
| | | In-depth (30 min) | Benoît de Dinechin | | MPPA3 Massively Parallel Processor for Intelligent Systems |
| | | In-depth (30 min) | Gerhard P. Fettweis | | A first step to building a 6G HW/SW platform |
| | | Panel | | | |
| Wed 10 July | 9:00- Session 5 | Keynote (60 min) | Hiroyuki Kitayama | | Trend of advanced technologies such as AI, Blockchain, New Computing and applicability in the industry |
| | Break | Mini-keynote (12 min) | Victor Grimblatt | | An SoC for IoT Applied to Smart Agriculture |
| | | Mini-keynote (12 min) | Jiang Xu | | BOSIM: A Comprehensive Electro-Optical Model for Silicon Photonic Switches |
| | | Mini-keynote (12 min) | Yoshinori Takeuchi | | A new processor design method for MPSoC Era |
| | | Mini-keynote (12 min) | Ittetsu Taniguchi | | Challenges for online optimization of drone path planning (Tentative) |
| | | Mini-keynote (12 min) | Norbert Wehn | | Channel Coding for Tb/s Communications |
| | | Mini-keynote (12 min) | Frédéric Pétrot | | A Scalable Sharing Set Management Approach for Large Scale MPSoC |
| | | Panel | | | |
| | 12:30- Lunch | | | | |
| Wed 10 July | 14:00- Session 6 | In-depth (30 min) | Hideki Takase | | mROS: How to integrate ROS components into the embedded device |
| | | In-depth (30 min) | Tamon Sadasue | | Scalable Logic Architecture for Accelerating Gradient Boosted Tree Learning |
| | | Mini-keynote (12 min) | Kees van Berkel | | Exascale Computing for Radio Astronomy, Using Dataflow |
| | | Mini-keynote (12 min) | Shinya Takamaeda | | Model/Architecture Co-design for Accurate Binary Neural Network |
| | | Mini-keynote (12 min) | Jishen Zhao | | |
| | | Panel | | | |
| | 16:30- Speaker's Meeting | | | | |
| Thu 11 July | 9:00- Session 7 | Keynote (60 min) | Masanao Yamaoka | | An In-memory Computing Accelerator, CMOS Annealing Machine, to Solve Combinatorial Optimization Problems |
| | Break | Mini-keynote (12 min) | Pierre Paulin | | Scaling Deep Neural Network Accelerator Performance |
| | | Mini-keynote (12 min) | Kees Vissers | | Versal: The new Xilinx Adaptive Compute Acceleration Platforms (ACAP) in 7nm |
| | | Mini-keynote (12 min) | Youn-Long Lin | | SoC Design of a Neural Network for Real-Time Semantic Segmentation of 2Kx1K@60fps Video |
| | | Mini-keynote (12 min) | Lorena Anghel | | On Dependability of Spiking Neural Networks |
| | | Mini-keynote (12 min) | Song Yao | | |
| | | Panel | | | |
| | 12:30- Lunch | | | | |
| Thu 11 July | 14:00- Session 8 | In-depth (30 min) | Akihiko Shinya | | |
| | | In-depth (30 min) | Yankin Tanurhan | | Evolving Vision and Deep Neural Network Processors for Emerging Applications in the Edge |
| | | Break | | | |
| | | Mini-keynote (12 min) | Gabriela Nicolescu | | |
| | | Mini-keynote (12 min) | Fumio Arakawa | | Trusted Execution Environment (TEE) with Open Processor Cores |
| | | Mini-keynote (12 min) | Tsuyoshi Isshiki | | CNN Training HW Architecture Design Using C2RTL SoC Synthesis/Verification Framework |
| | | Mini-keynote (12 min) | Tohru Ishihara | | Near-Threshold Cache Architecture for Ultra-Low Energy Computing |
| | | Mini-keynote (12 min) | Hiroyuki Tomiyama | | Static Scheduling of Parallel Tasks |
| | | Mini-keynote (12 min) | Nicolas Ventroux | | Let's FACE the Future of Automotive E/E Architectures |
| | | Panel | | | |
| Fri 12 July | 9:00- Session 9 | In-depth (30 min) | Yuichi Nakamura | | Real Quantum Annealing, Architecture and Applications |
| | | In-depth (30 min) | Yukoh Matsumoto | | Challenges on Designing Parallel Processing for realizing Real-Time Applications |
| | | Break | | | |
| | | Mini-keynote (12 min) | Masatoshi Ishii | | On-chip trainable spike-based neuromorphic core using phase change memory as synapse |
| | | Mini-keynote (12 min) | Sungjoo Yoo | | Reinforcement learning-based optimization for solid state disks |
| | | Mini-keynote (12 min) | Hiroki Matsutani | | An On-Device Learning Approach for Unsupervised Anomaly Detection |
| | | Mini-keynote (12 min) | John Goodacre | | Reusable Arm computational chiplet with 128bit shared global address space access |
| | | Panel | | | |
| | 12:30- Lunch | | | | |