MULTICORE/MANY-CORE SYSTEMS-ON-CHIP

CALL FOR PAPERS

IEEE

IEEE 11th International Symposium on Embedded Multicore/Many-core Systems-on-Chip

Hana Square (Science & Engineering Complex)
Korea University, Seoul, Korea
September 18-20, 2017

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Symposium Overview

The IEEE 11th International Symposium on Embedded Multicore/Many-core Systems-on-Chip aims to provide world's premier forum of leading researchers in the embedded Multicore/Many-core SoCs software, tools and applications design areas for academia and industries. Prospective authors are invited to submit their contributions. Submission of a paper implies that at least one of the authors will have a full registration to the symposium upon acceptance of the paper.

Topic of Interests

Programming: Compilers, automatic code generation methods, cross assemblers, programming models, memory management, runtime management, object-oriented aspects, concurrent software.

Architectures: Multicore/Many-core re-configurable platforms, memory management support, communication, protocols, real-time systems, SoCs and DSPs, heterogeneous architectures with HW accelerators and GPUs, deep-learning and neural networks.

Design: Hardware specification, modeling, synthesis, low power simulation and analysis, reliability, variability compensation, thermal aware design, performance modeling, security issues.

Interconnection Networks: Electronic/Photonic/RF NoC architectures, Power and energy issues in NoCs, Application specific NoC design, Timing, Synchronous /asynchronous communication, RTOS support for NoCs, modeling, simulation, NoC support for MCSoC, NoC for FPGAs and structured ASICs, NoC design tools, photonic components, virtual fabrications, photonic circuits, routing, filter design.

Testing: Design-for-test, test synthesis, built-in-self-test, embedded test for MCSoC.

Packaging Technologies: 3D VLSI packaging technology, vertical interconnections in 3D Electronics, periphery interconnection between stacked ICs, area interconnection between stacked ICs, thermal management schemes.

Real-Time Systems: real-time system design, RTOS, compilation techniques, memory/cache optimization, interfacing and software issues, distributed real-time systems, real-time kernels, task scheduling, multitasking design.

Benchmarks: Parallel benchmarks, workload characterization and evaluation.

Applications: Bio-medical, health-care, computational biology, Internet of Things, smart mobility, electric vehicles, smart and connected cars, aviation, automobile, military, consumer electronics, and novel applications.

Special Sessions: please visit http://www.mcsoc-forum.org/

Proceedings Publication and Indexing

MCSoC-17 proceedings will be published by IEEE CS Press, which will be included in the Computer Society Digital Library CSDL and IEEE Xplore. All CPS conference publications are also submitted for indexing to EI's Engineering Information Index, Compendex, and ISI Thomson's Scientific and Technical Proceedings, ISTP/ISI Proceedings, and ISI Thomson.

Important Dates

Paper submission: April 15, 2017
Acceptance notification: June 23, 2017
Camera ready paper: July 14, 2017

Contact

For any questions, please contact: mcsoc17@mcsoc-forum.org

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