



MCSOC-15

IEEE 9th International Symposium on Embedded Multicore/Many-core
Systems-on-Chip

Politecnico di Torino, Turin, Italy
September 23-25, 2015



IEEE

Sponsored by IEEE, IEEE Computer Society, and
Politecnico di Torino. Technically supported by University of Aizu.

Symposium Overview

The IEEE 9th International Symposium on Embedded Multicore/Many-core Systems-on-Chip aims at providing the 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 paper of their works. 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

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

Embedded Multicore/Many-core 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.

Embedded Multicore/Many-core Design: Hardware specification, modeling, synthesis, low power simulation and analysis, reliability, variability compensation, thermal aware design, performance modeling, security issues.

Embedded Multicore/Many-core 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.

Embedded Multicore/Many-core Testing: Design-for-test, Test synthesis, Built-in-self-test, Embedded test for MCSOC.

Embedded Multicore/Many-core Packaging Technologies: 3D VLSI packaging Technology, Vertical Interconnections in 3D Electronics, Periphery Interconnection between Stacked ICs, Area Interconnection between Stacked ICs, Thermal management schemes.

Embedded Multicore/Many-core 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.

Embedded Multicore/Many-core Benchmarks and Applications: Parallel Benchmarks, Workload characterization and evaluation.

Embedded Multicore/Many-core Applications: Bio-medical, Health-care, Computational biology, Internet of Things, Smart Mobility, Electric Vehicles, Aviation, Automobile, Military, Consumer electronics, and Novel applications.

Important Dates

Full paper submission: **March 31, 2015**

Acceptance notification: May 29, 2015

Camera ready paper: June 30, 2015

Symposium: 23-25 September, 2015

Proceedings Publication and Indexing

MCSOC-15 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.

For more information please visit:

<http://www.mcsoc-forum.org/>



Contact:

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