Special Issue

Software/Hardware Codesign for Embedded Multicore Systems

Message from the Guest Editor

This Special Issue calls for innovative work to design, analyze, optimize the use, and solve the challenges of using multicore systems using software/hardware codesign approaches. Topics of interest include, but are not restricted to the following:

- HW/SW partitioning, interfaces and synthesis
- Handling heterogeneity in codesigned multicores
- Memory hierarchies, scratchpad, and caches in multicore systems
- Communication and synchronization for multicore systems
- Modeling, analysis, and multi-criteria optimizations of non-functional properties
- Security, dependability, and fault tolerance of SW/HWcodesigned multicores
- Automatic parallelization and compilation approaches for multicores
- SW/HW codesign for in- and near-memory computing
- Hypervisor and operating systems for multicores
- Architecture-compiler-operating system codesign
- Runtime adaptive and reconfigurable systems
- WCET/WCEC analysis for multicore systems
- Networks-on-Chip (NoCs) for codesigned multicore systems
- Design space exploration, virtual platforms, and cosimulation

Guest Editor

Dr. Michael Engel

Department of Computer Science, Faculty of Information Technology and Electrical Engineering, Norwegian University of Science and Technology, Høgskoleringen 1, 7491 Trondheim, Norway

Deadline for manuscript submissions

closed (31 December 2020)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.3



mdpi.com/si/46861

Electronics
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

mdpi.com/journal/ electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 5.3



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Control and Systems Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the second half of 2024).

