

## 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/HW-codesigned 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 6.1



[mdpi.com/si/46861](https://mdpi.com/si/46861)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto:electronics@mdpi.com)

[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)





# Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/journal/  
electronics](https://mdpi.com/journal/electronics)



## 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), CAPus /  
SciFinder, Inspec, Ei Compendex and other databases.

#### Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (Electrical and  
Electronic 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).