Special Issue

Design and Application of Digital Circuit and Systems

Message from the Guest Editors

Rapid advances in AI/ML, edge computing, robotics, autonomous systems, 5G/6G, and cloud-to-edge infrastructures are reshaping the landscape of digital hardware. The main objective of this Special Issue, 'Design and Application of Digital Circuit and Systems' is to feature new works, recent developments, reviews, and results that advance the theory and practice of digital circuits and systems—from algorithms and architectures through RTL/GDSII to system-level deployment and on-hardware validation. Relevant topics include but are not limited to the following:

- Logic design, microarchitectures, and domain-specific accelerators (AI/ML, DSP, cryptography, communications).
- FPGA/ASIC methodologies; HLS-to-RTL flows; hardware–software co-design.
- Synthesis, physical design, timing closure, and PPA optimization, as well as low-power and energy-aware design.
- Reconfigurable, approximate, and asynchronous digital computing.
- RISC-V and open-hardware platforms.
- Memory hierarchies and controllers; in-/near-memory computing; emerging NVMs.
- On-chip interconnects and NoCs; chiplets; 2.5D/3D integration.

Guest Editors

Dr. Yafei Ning

Prof. Dr. Jie Su

Dr. Yanpeng Shi

Deadline for manuscript submissions

15 June 2026

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 guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).