Special Issue

FPGA Designs and Architectures for Communications Applications

Message from the Guest Editor

In this Special Issue, we aim to delve into how the flexibility of FPGAs makes them a prime platform for developing novel networking technologies and for deploying already established networking technologies in new and innovative ways. A non-exhaustive list of topics that could be examined is provided as follows.

- Intra-FPGA network architectures:
  - Network-on-chip (NoC) for parallel computing applications;
  - Shared memory architectures;
  - Reconfigurable and partial reconfigurable communication paths.
- Inter-FPGA network architectures:
  - Multi-FPGA fabric clusters for distributed computing;
  - Low footprint FPGA-FPGA communication designs.
- FPGA-based networking technology:
  - Network protocol designs and implementations;
  - Network security applications;
  - Traffic monitoring and prediction;
  - High-bandwidth and/or low-latency FPGA-based networking;
  - Low-energy/resource-constrained FPGA-based networking;
  - FPGA-based platforms for software-defined networking (SDN) or software-defined radio (SDR).

We invite authors to propose research topics within the scope of this Special Issue, and we look forward to receiving your contributions.

Guest Editor

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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

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