Special Issue

Low-Voltage Mixed-Signal CMOS Integrated Circuits for Emerging Applications

Message from the Guest Editors

Emerging electronic application fields have created a clear need for novel architectures and design methods that allow for mixed-signal integrated circuits to reliably operate in low-supply voltage conditions, ranging from just below one volt to a few hundred millivolts. Low-voltage operation is crucial to enable low-cost smart sensing systems for Internet of Things modules, wearable and implantable medical devices, and environmental monitoring nodes. Beyond these contexts, low-voltage design principles are also relevant to emerging cryogenic applications, such as space exploration, quantum computing and quantum sensing. This Special Issues welcomes both original research articles and reviews that focus on, but are not limited to, the following topics:

- Low-voltage analog and mixed-signal circuit blocks, including amplifiers, comparators, reference circuits, data converters, etc.;
- Digital circuits optimized for low-voltage and/or low-power applications;
- Low-power Internet of Things modules;
- Smart sensing devices;
- Wearable and implantable medical devices;
- Cryogenic CMOS circuits deploying techniques originally devised for low-voltage scenarios.

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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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