Special Issue

IC Design Techniques for Power/Energy-Constrained Applications

Message from the Guest Editors

Power- and/or energy-constrained applications are critical tasks in IC design. Cases like the Internet of Things (IoT) or Implanted Medical Devices (IMDs), in many practical cases, cannot be utilized if the constituting circuits do not involve adequately scaled electronic engineering (in terms of power/voltage performance). To accomplish these challenges, design techniques for integrated circuits need particular refinements and new approaches/topologies need to be defined. Small area occupation, low design effort, and technology/design portability are among the keywords in this framework. So, this Special Issue aims to attract reviews and original research submissions related to the design and application of ultra-low-voltage/power, analog/digital, or mixed-signal-based integrated circuits.

Guest Editors

Dr. Andrea Ballo

Department of Electrical, Electronics and Computer Engineering (DIEEI), University of Catania, 95125 Catania, CT, Italy

Dr. Orazio Aiello

Department of Electrical, Electronic, Telecommunications Engineering and Naval Architecture (DITEN), University of Genoa, Via Opera Pia 11a, I-16145 Genova, Italy

Deadline for manuscript submissions

31 August 2025

Chips

an Open Access Journal by MDPI

Indexed in Scopus

mdpi.com/si/204580

Chips
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
chips@mdpi.com

mdpi.com/journal/chips

Chips

an Open Access Journal by MDPI

Indexed in Scopus

mdpi.com/journal/chips

About the Journal

Message from the Editor-in-Chief

Chips is a new journal with the aim to become a leading reference on all aspects of the IC domain. The journal is devoted to publishing rigorously peer-reviewed articles (such as original research, reviews, and communications) with the specific target to disseminate novelties in terms of research and knowledge as well as the most advanced state of the art on IC technologies, design, testing, and production. The journal offers the opportunity to actively spread new concepts and advancements in the IC domain and its increasing interrelated and multidisciplinary areas in a timely manner. More specifically, the journal will cover chip design, including CAD tools, chip production, and their wide spectrum of applications.

Editor-in-Chief

Prof. Dr. Gaetano Palumbo
Dipartimento di Ingegneria Elettrica Elettronica e Informatica, Università di Catania, I-95125 Catania, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23.3 days after submission; acceptance to publication is undertaken in 4.2 days (median values for papers published in this journal in the first half of 2025).