Special Issue

Electronic Circuits for Automotive Applications: Challenges and Advances

Message from the Guest Editor

In recent years, the design of circuits for automotive applications has been of paramount importance. There are typically hundreds of electronic components found within newly developed vehicles. Various examples include several sensors with dedicated conditioning circuits, complex systems like GPS navigation systems, advanced driver assistance systems (ADAS), entertainment systems, circuits for the motion control of the actuators, and so on. The large amount of electronics creates an array of challenges in their development, from communication issues to power distribution and hybrid drives, embedded and mixed signal modeling, simulating and prototyping, and EMI compatibility design.

- The theory and design of signal conditioning mixed circuits for automotive sensors, including amplifiers, ADCs and DACs, filters, and RF circuits.
- The theory and design of motor driving systems, including low-voltage motors and actuators.
- Modeling, simulations, and design techniques to achieve highly robust functionality, yield, and reliability.
- Modeling, simulations, and design techniques for EMI compatibility design.

Guest Editor

Dr. Anna Richelli

Department of Information Engineering, Università degli Studi di Brescia, 25123 Brescia, Italy

Deadline for manuscript submissions

closed (15 July 2024)

Electronics

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Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/191246

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

mdpi.com/journal/electronics

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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

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