



VLSI-SoC 2022 is the 30th in a series of international conferences sponsored by the International Federation for Information Processing Technical Committee 10 Working Group 5, IEEE CEDA, and IEEE CASS, which explore the state-of-the-art in the areas of Very Large Scale Integration (VLSI) and System-on-Chip (SoC) design. The purpose of VLSI-SoC is to provide a forum to exchange ideas and showcase academic as well as industrial research in architectures, circuits, devices, design automation, verification, test, and security, within digital, analog, and mixed-signal systems.

VLSI-SoC 2022 will be held under the theme "SoCs for 5G Evolution and 6G," exploring the design and optimization challenges around 5G+6G communication systems and devices embedded systems, security, low power circuits, powered by CMOS and beyond CMOS-technologies.

While the event is expected to be in presence, its format will be decided at a later date depending on the COVID-19 pandemic evolution.



Paper Submission: Papers should present original research and industrial results not published or submitted for publication in other forums. Electronic submission in PDF format to the <http://www.vlsi-soc.com> website is required.

The proceedings will be published by IEEE and will be made available through IEEE Xplore. A selection of the conference best papers will be invited to submit an extended version to be included as chapters of a book to be published by Springer.

Paper Format: Papers should not exceed 6 pages (single-spaced, 2 columns, 10pt font). Submissions should be camera-ready, following the IEEE proceedings specifications.

Paper Publication and Presenter Registration: Papers will be accepted for regular or poster presentation at the conference. Every accepted paper **MUST** have at least one author registered at the conference by the time the camera-ready paper is submitted; the registered author is also expected to attend the conference and present the paper. A limited number of travel grants are available to needy PhD students from emerging countries.

Ph.D. and Student Forums: Ph.D. and Student Forums with dedicated poster sessions will be included in the technical program and will be co-located with the main conference.

Topics of interest include, but are not limited to:

- ▶ Analog mixed-signal, sensors, and RF
- ▶ VLSI circuits and SoC design
- ▶ Embedded systems design and software
- ▶ EDA tools and methodologies for digital IC design
- ▶ Verification, modeling and prototyping
- ▶ Design for testability, reliability and fault-tolerance
- ▶ Hardware security
- ▶ Emerging technologies and new computing paradigms
- ▶ AI acceleration
- ▶ Approximate Computing
- ▶ Circuits for quantum computing
- ▶ Cryogenic processors



- General co-chairs:** Odysseas Koufopavlou (University of Patras, GR), Graziano Pravadelli (University of Verona, IT)
- Program co-chairs:** Vassilis Paliouras (University of Patras, GR), Lech Jozwiak (Eindhoven University of Technology, NL)
- Special session co-chairs:** Dimitrios Soudris (National Technical University of Athens, GR), Apostolis Fournaris (Monash University, AU)
- Ph.D. & Student forum co-chairs:** Ricardo Reis (Universidade Federal do Rio Grande do Sul, BR), Alexandra Zimpeck (UCPel, BR)
- Industrial chair:** Victor Grimblatt (Synopsys, CL)
- Local chair:** Nicolas Sklavos (University of Patras, GR)
- Publication chair:** Paris Kitsos (University of Peloponnese, GR)
- Publicity co-chairs:** Yuanqing Cheng (Beihang University, CN), Claudio Diniz (UFRGS, BR), Matthew Guthaus (UC Santa Cruz, USA), Athanasios Kakarountas (University of Thessaly, GR), Salvador Mir (TIMA, FR), Thanos Stouraitis (Khalifa University, UAE), George Theodoridis (University of Patras, GR)
- Finance chair:** Ioannis Kouretas (University of Patras, GR)
- Website chair:** Luis Miguel Silveira (INESC ID, PT), Chi-Ying Tsui (HKUST, Hong Kong, CN), Fatih Ugurdag (Ozyegin University, TR)
- Steering committee:** Ibrahim Elfadel (Khalifa University, UAE), Masahiro Fujita (University of Tokyo, JP), Manfred Glesner (TU Darmstadt, DE), Matthew Guthaus (UC Santa Cruz, USA), Salvador Mir (TIMA, FR), Ian O'Connor (ECL, FR), Graziano Pravadelli (University of Verona, IT), Ricardo Reis (UFRGS, BR), Luis Miguel Silveira (INESC ID, PT), Chi-Ying Tsui (HKUST, Hong Kong, CN), Fatih Ugurdag (Ozyegin University, TR)

