

# VLSI-SoC 2021

October 4-8, 2021

Singapore

Nanyang Technological University



Virtual Conference



**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.

**PhD and Student Forum:** A PhD and Student Forum with dedicated poster sessions will be included in the technical program and will be co-located with the main conference.



VLSI-SoC 2021 is the 29th 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 2021 will be held under the theme "Intelligent and Secure Edge Computing," exploring the design and optimization challenges around AI, machine learning, and cybersecurity on distributed and heterogeneous low-power circuits and systems powered by CMOS and beyond-CMOS technologies.**

VLSI-SoC 2021 will be held in Singapore.



### 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
- ▶ CAD tools and methodologies for digital IC design and optimization
- ▶ Verification, modeling and prototyping
- ▶ Design for testability, reliability and fault tolerance
- ▶ Hardware security
- ▶ Emerging technologies and new computing paradigms

<b>General co-chairs:</b>	Anupam Chattopadhyay (NTU, SG) Andrea Calimera (Politecnico di Torino, IT)
<b>Program co-chairs:</b>	Chip Hong Chang (NTU, SG) - Victor Grimblatt (Synopsys, CL)
<b>Special session co-chairs:</b>	Francesco Regazzoni (University of Amsterdam, NL & Università della Svizzera italiana, CH) - Mohammed Sabry (NTU, SG)
<b>PhD forum chair:</b>	Shivam Bhasin (Temasek Labs NTU, SG) - Trevor Carlson (NUS, SG)
<b>Industrial chair:</b>	Annamalai Muthu (CMElabs, SG)
<b>Local co-chairs:</b>	Manimuthu Arunmozhi (NTU, SG) - Nandeesh Veeranna (ST Microelectronics, SG)
<b>Publication chair:</b>	Nicola Bombieri (University of Verona, IT)
<b>Finance chair:</b>	Debjyoti Bhattacharjee (IMEC, BE)
<b>Publicity co-chairs:</b>	Swaroop Ghosh (Penn State, USA) - Shahar Kvatinisky (Technion, IL) Farhad Merchant (RWTH Aachen, DE) - Ian O'Connor (ECL, FR) Graziano Pravadelli (University of Verona, IT) Srinivas Katkooori (University of South Florida, USA)
<b>Website co-chairs:</b>	Valentino Peluso - Roberto G. Rizzo (Politecnico di Torino, IT)
<b>Steering committee:</b>	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 Sequeira (INESC ID, PT) - Chi-Ying Tsui (HKUST, Hong Kong, CN) Fatih Ugurdag (Ozyegin University, TR)



[www.vlsi-soc.com](http://www.vlsi-soc.com)

Abstract registration : **April 26, 2021**  
Full paper submission: **May 03, 2021**  
Special session proposal: **May 03, 2021**  
Notification of acceptance: **July 05, 2021**  
Camera ready: **July 29, 2021**