

# VLSI-SoC 2021

October 4-8, 2021

Singapore

Nanyang Technological University



The option of a virtual conference will be explored  
considering the evolution of the pandemic situation.



**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

### General co-chairs:

Anupam Chattopadhyay (NTU, SG)  
Andrea Calimera (Politecnico di Torino, IT)

### Program co-chairs:

Chip Hong Chang (NTU, SG) - Victor Grimblatt (Synopsys, CL)

**Special session co-chairs:** Francesco Regazzoni (University of Amsterdam, NL & Università della Svizzera italiana, CH) - Mohammed Sabry (NTU, SG)

### PhD forum chair:

Shivam Bhasin (Temasek Labs NTU, SG) - Trevor Carlson (NUS, SG)

### Industrial chair:

Annamalai Muthu (CMElabs, SG)

### Local co-chairs:

Manimuthu Arunmozhி (NTU, SG) - Nandeesh Veeranna (ST Microelectronics, SG)

### Publication chair:

Nicola Bombieri (University of Verona, IT)

### Finance chair:

Debjyoti Bhattacharjee (IMEC, BE)

### Publicity co-chairs:

Swaroop Ghosh (Penn State, USA) - Shahar Kvatinsky (Technion, IL)  
Farhad Merchant (RWTH Aachen, DE) - Ian O'Connor (ECL, FR)  
Graziano Pravadelli (University of Verona, IT)

### Website co-chairs:

Valentino Peluso - Roberto G. Rizzo (Politecnico di Torino, IT)

### 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)

Abstract registration :

April 19, 2021

Full paper submission:

April 26, 2021

Special session proposal:

April 26, 2021

Notification of acceptance:

June 21, 2021

Camera ready:

July 12, 2021