

1st IEEE International conference on

Design, Test & Technology of Integrated Systems

November 1 - 4, 2023, Gammarth, Tunisia



General Chairs:

- Salem Abdennadher (INTEL, USA)
- Mohamed Masmoudi (ENIS, TN)

Program Chair:

• Hassene Mnif (ENET'Com, TN)

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IEEE DTTIS'2023 Call For Papers



Aim of the Conference:

IEEE DTTIS conference (International Conference on Design, Test and Technology of Integrated Systems) is the result of merging two established IEEE conferences: DTIS (International Conference on Design and Technology of Integrated Systems in nanoscale era), and DTS (International Conference on Design and Test of Integrated Systems).

The aim of the conference is to cope with the rapidly progressing technology which, today, reaches the nanometer scale. The areas of interest include design, test and technology of electronic products, ranging from integrated circuit modules, chiplets and printed circuit boards to full systems and microsystems, as well as the methodologies and tools used in the design, verification and validation of such products. DTTIS will show innovations in system and platform design, which extend beyond a single integrated circuit. These platforms may include 2.5D/3D chiplet based system-in-package, system-on-interposer, and multi-die integrations. It will be an opportunity for researchers to present and discuss their latest work. DTTIS is, by design, a forum for engineers, researchers, graduate students and professors, to cross the design-technology boundary by bringing design, test, technology, and process experts together.

DTTIS will be organized annually in a Mediterranean country. The first edition is scheduled to be held in Tunis, Tunisia in the region of Gammarth. All accepted and presented papers will be published on the DTTIS Conference Proceedings and submitted for publication in IEEE Xplore. Best papers will be submitted for possible publication in a special issue of well-known journal.

Papers are solicited in, but not limited to, the following topics:

Integrated Systems Design

- Analog, digital, mixed, and RF circuits design
- System-on-a-chip (SoC) & System of Chips (SoC), MPSoC, NoC, SIP, and NIP design
- Embedded/ multiprocessor systems
- Hardware design for AI
- Al accelerators
- MEMS, NEMS and MOEMS systems design
- Synthesis (physical, logic,...)
- Simulation, Validation & Verification
- Bio-engineering & Bio-chip design
- · Electronics for energy harvesting
- Wireless communication systems design
- Opto-electronic System Design
- Biomedical Circuit & Systems
- Power electronics and systems design
- Sensory Systems Design
- Chiplet and disaggregation

- Defect and Fault Modeling
- Analog, digital circuit test • Mixed, and RF circuit testing
- MEMS/NEMS/MOEMS Testing
- 3D/2.5D Test
- Memory test
- Repair and diagnosis
- Reliability
- DFT, BIST and BISR
- Alternatives test strategies
- Fault Simulation, ATPG
- Yield Optimization
- Automotive reliability and test
- Reliability failures and modeling
- Electronic System Reliability
- Test and Security Issues
- ATF issues
- On-line Testing and fault Tolerance
- Delay testing

Integrated Systems Testing Integrated Systems Technology

- Process technologies
- Device modeling
- Material characterization
- Failure analysis
- Emerging technologies • ICs Packaging
- Process technology Reliability issues
- 2.5 & 3D integration
- Circuit integrity

Key Dates for Scientific Papers:

Paper pdf Submission Deadline: Notification of acceptance: Final version due date:

May 15th, 2023 July 20th, 2023

July 04th, 2023

August 08th, 2023 July 01st, 2023 August 23rd, 2023



Online submission: https://www.dttis.org/



























