

Test Technology Newsletter

June 2023



The Newsletter of the Test Technology Technical
Community
of the IEEE Computer Society

Editor: Stefano Di Carlo

TTTC News

The TTTC website always lists the latest features and information for its visitors! To find out more, please visit the website at <http://www.ieee-ttcc.org/>

PAST EVENTS REPORTS

The International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) 2023

May 3-5, 2023

Tallinn, Estonia

<http://www.ddecs.org/>

The International Symposium on Design and Diagnostics of Electronic Circuits and Systems (DDECS) provides a forum for exchanging ideas, discussing research results, and presenting practical applications in the areas of design, test, security and diagnosis of electronic digital and analog circuits and systems. The 26th edition of the DDECS Symposium was held in Tallinn, Estonia's capital and one of the best-preserved medieval cities in Europe. The symposium was organized by Tallinn University of Technology (TalTech) and technically co-sponsored by IEEE Council on Electronic Design Automation (CEDA).

28th IEEE European Test Symposium 2023 (ETS)

May 22-26

Venice, Italy | Hybrid conference

<https://cas.polito.it/ETS23/>

The IEEE European Test Symposium (ETS) is Europe's premier forum dedicated to presenting and discussing scientific results, emerging ideas, hot topics, and new trends, industrial case-studies and applications, in the area of electronic-based circuits and system testing, reliability, safety, security and validation. The 2023 edition of ETS was held in the beautiful Venice in Italy.

ETS'23 was organized jointly by CNRS-INL and Politecnico di Torino, which co-sponsored the event together with the IEEE Council on Electronic Design Automation (CEDA). ETS'23 was technically sponsored by the IEEE Computer Society – Test Technology Technical Council (TTTC). The program included keynotes, scientific paper presentations, panels, tutorials, fringe workshops and highlights/demos from industry. Linked to the main ETS'23 symposium, the Test Spring School was also organized.

CLOSE EVENTS

The 29th IEEE International Symposium on On-Line Testing and Robust System Design (IOLTS) 2023

July 3rd - 5th, 2023

Chania (Crete), Greece

<https://iolts.ttcc-events.org/>

Issues related to Online testing techniques, and more generally to design for robustness, are increasingly important in modern electronic systems. In particular, the huge complexity of electronic systems has led to growth in reliability needs in several application domains and pressure for low-cost products. There is a corresponding increasing demand for cost-effective design for robustness techniques. These needs have increased dramatically with the introduction of nanometer technologies, which impact adversely noise margins; process, voltage, and temperature variations; aging and wear-out; soft error and EMI sensitivity; power density and heating; and make mandatory the use of design for robustness techniques for extending, yield, reliability, and lifetime of modern SoCs.

Design for reliability becomes also mandatory for reducing power dissipation, as voltage reduction, often used to reduce power, strongly affects reliability by reducing noise margins and thus the sensitivity to soft errors and EMI, and by increasing circuit delays and thus the severity of timing faults. There

is also a strong relation between Design for Reliability and Design for Security, as security attacks are often fault-based. The International Symposium on On-Line Testing and Robust System Design (IOLTS) is an established forum for presenting novel ideas and experimental data on these areas. The Symposium is sponsored by the IEEE Council on Electronic Design Automation (CEDA) and by the IEEE Computer Society Test Technology Technical Council (TTTC). The 2023 edition is organized by the Politecnico di Torino and the University of Athens.

Design Automation Conference (DAC) 2023

July 23-25, 2023

Bengaluru, India

<https://itctestweekindia.org>

For 60 years, DAC has been the premier destination for the entire ecosystem devoted to the design and design automation of electronic circuits and systems. DAC offers the electronic design ecosystem outstanding education, training, exhibits and networking opportunities for a worldwide community of chip & system designers, researchers, academics, executives, and electronic design tool vendors to engage and reconnect. The conference is sponsored by the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE) and is supported by ACM's Special Interest Group on Design Automation (SIGDA) and IEEE's Council on Electronic Design Automation (CEDA). Don't miss your chance to attend and see DAC in action with top presentations.

IEEE International Test Conference India (ITC INDIA) 2023

July 23-25, 2023

Bengaluru, India

<https://itctestweekindia.org>

International Test Conference is the world's premier venue dedicated to the electronic test of devices, boards and systems-covering the complete cycle from design verification, design-for-test, design-for-manufacturing, silicon debug, manufacturing test, system test, diagnosis, reliability and failure analysis, and back to process and design improvement. At ITC India, design, test, and yield professionals can confront

challenges faced by the industry, and learn how these challenges are being addressed by the combined efforts of academia, design tool and equipment suppliers, designers, and test engineers.

UPCOMING PAPER SUBMISSION DEADLINES

The 32nd IEEE Asian Test Symposium (ATS) 2023

Oct.14-17, 2023

Beijing, China

<https://ats2023.casconf.cn>

Submission deadline: June, 11th 2023

NEWSLETTER EDITOR'S INVITATION

I would appreciate input and suggestions about the newsletter from the test community. Please forward your ideas, contributions, and information on awards, conferences, and workshops to Stefano Di Carlo, Control and Computer Engineering Department, Politecnico di Torino, I-10129, Torino, Italy; stefano.dicarlo@polito.it.

Stefano Di Carlo

Editor, TTTC Newsletter

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CONTRIBUTIONS TO THIS NEWSLETTER: Send contributions to

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