

ISSUE: July 2017

Symposium Presents Best Practices, Latest Advances In ESD Control Technology

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Now in its 39th year, the 2017 EOS/ESD Symposium presents the latest research on EOS and ESD in the rapidly changing world of electronics. This international gathering, which is jointly sponsored by the IEEE, the EMC Society, the Electron Devices Society and the Reliability Society, offers a unique opportunity for engineers in industry and academia to learn best practices and the newest advances in technology for ESD control protection and design. It addresses EOS/ESD at the device, board and system level with attention to both design and manufacturing issues. This year's event, which will be held September 10-15 at the beautiful Westin La Paloma Resort in Tucson, Ariz. offers an expanded technical program that includes new and updated tutorials, an added

parallel track on EOS/ESD in Manufacturing and a total of 16 new sessions.

As electronics continue to become commonplace in every aspect of our lives, including medical applications, the control of our homes and our cars, cost and reliability are of utmost importance. To accommodate these requirements and overcome challenges from the sensibility of advanced technologies, progress has to be made in the form of creative ESD design, innovative, comprehensive, and predictive verification, of the control standards and methods. The 2017 EOS/ ESD Symposium addresses

39thAnnual EOS/ESD Symposium
Westin La Paloma, Tucson, AZ, USA
September 10-15
2017
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these matters and more with tutorials, workshops, technical sessions, invited talks, and through the products and services presented in the industry exhibits.

In the tutorials, a dedicated team of experts, in all areas of EOS and ESD, has been working diligently all year to prepare the tutorial program. Tutorials are offered on Sunday, Monday, and Thursday. The EOS/ESD Association continues to enhance the tutorial program every year to capture the latest technology trends and new application challenges, and have them addressed by the recognized experts in the areas of ESD, EOS, EMC, and latch-up. This year, several new tutorials are introduced for the first time, including, Control of Charged Board Event (CBE); Basics of EMI and EOS in Manufacturing Environment and First Mitigation; Integrated ESD Device and Board Level Design; and ESD Challenges in Advanced FinFET and Gate-All-Around Nanowire CMOS Technologies. Many previously offered tutorials have been refreshed with updated material.

The industry exhibits display a wide variety of ESD solutions from established products to leading-edge innovations. Representatives from many different companies welcome you in the exhibit hall to demonstrate their products and services, starting with the welcome reception on Monday evening and continuing until the exhibits close on Wednesday afternoon. The exhibits offer a unique opportunity to find what you have been looking for or a chance to talk to the professionals with hands-on experience in static control methods, evaluation techniques, ESD testing hardware, and many other ESD solutions.

For the first time, our technical program, the heart of the symposium, has introduced two parallel tracks to accommodate your diverse interests: the On-Chip ESD Design track, and the EOS/ESD in Manufacturing track. The newly introduced Manufacturing track has adapted a dynamic format to include discussion group sessions and hands-on sessions to foster active involvement, while the On-Chip ESD Design track continues to present the newest technical findings and innovative designs from the industry and academia.

The main technical program, which starts after the awards breakfast and the keynote on "The Mission and some Challenges" by Dr. Alicia Allbaugh, includes 49 outstanding presentations of 48 peer reviewed and one invited paper, addressing the latest innovations in the area of EOS and ESD. These will be presented Tuesday through Thursday in 14 sessions covering hot topics in the areas of manufacturing, advanced CMOS, RF/ high voltage, system level ESD, ESD case studies, on-chip ESD physics, EOS/ESD EDA tools, and ESD testing.

The papers are presented by experts working on leading-edge research and development in these areas. The audience is invited to meet the authors to discuss the presented research work at the author's corners following each technical session. This year's technical program again features two year-in-review presentations. On



Wednesday morning, Theo Smedes will present "TLP Testing for ESD," and on Thursday morning, Kevin Duncan will present "The Birth and the Life of an ESDA Standard."

The seven symposium workshops taking place on Tuesday and Wednesday afternoon offer an interactive forum for sharing experiences, exchanging knowledge, and jointly searching for and defining possible solutions. All workshops are centered on relevant and timely technical topics, each workshop allows participants the opportunity to learn about different perspectives from other colleagues in the field and allow the discussion of sometimes controversial topics in an informal environment.

The popular world café style workshop will return this year, with a topic on ESD and EMI codesign for both IC and PCB designers. With this many carefully selected options happening in Tucson it provides an experience both impressive and rewarding, for each member traveling from all around the world. The symposium is a truly international event and we welcome you to this exciting forum to enjoy all the technical achievements from your peers, and continue to form the special life-long bond with people, instruments, and the word of EOS/ESD! For more information, see the EOS/ESD Symposium website.