

CALL FOR PAPERS

www.cips-conference.de

Conference focus

In the next decades, power electronic system development will be driven by energy saving systems, intelligent energy management, power quality, system miniaturization and higher reliability. Monolithic and hybrid system integration will include advanced device concepts (including wide bandgap devices), dedicated ideas for system integration, new ideas on packaging technologies and the overall integration of actuators/drives (mechatronic integration).

CIPS is focused on the following main aspects:

- integration of hybrid systems and mechatronic systems with ultra-high power density
- systems and components operational behavior and reliability

Basic technologies for integrated power electronics systems as well as upcoming new important applications will be presented in interdisciplinary invited papers.

In 2016 the successful story of CIPS will continue.

The conference focus is today more important than ever, with the issue of increasing energy efficiency and system reliability by decreasing costs.

We invite all engineers coming from industry and academia engaged in:

- system development
- component development
- reliability engineering
- research

to share their research and technical achievements joining CIPS 2016.

Chairs

General Chairs

Leo Lorenz, ECPE e.V. / Infineon Technologies
Thomas Harder, ECPE e.V.

Technical Chairs

Andreas Lindemann, University of Magdeburg
Dieter Silber, University of Bremen
Eckhard Wolfgang, ECPE e.V.

Award Chairs

Andreas Lindemann, University of Magdeburg
Jochen Koszescha, ECPE e.V.

Organized by

The conference is organized by ETG, the Power Engineering Society in the VDE, and by ECPE European Center for Power Electronics.

VDE

Association for Electrical, Electronic & Information Technologies
VDE is one of the largest technical and scientific associations in Europe with more than 32 000 members.

www.vde.com/en/

ECPE

European Center for Power Electronics e.V.

The industry-driven Research Network for Power Electronics in Europe with more than 150 member organisations is promoting research, education & training and public relations in power electronics.

www.ecpe.org

Co-sponsored by

IEEE PELS

Power Electronics Society

The IEEE Power Electronics Society (PELS) helps in the development and effective application of power electronics technology. Activities within PELS include conferences and workshops to provide a forum for the latest advances in power electronics research. PELS also publishes the Transactions on Power Electronics and the PELS Newsletter for its members.

www.ieee-pels.org

ZVEI

the German Electrical and Electronic Manufacturers' Association

www.zvei.org/en/

Important Dates

Submission of Abstracts.....	June 15, 2015
Notification of acceptance.....	July 31, 2015
Submission of full papers	October 2, 2015
Notification of acceptance Full Paper.....	November 16, 2015
Deadline for early registration.....	January 31, 2016
Conference Begin.....	March 8, 2016

Conference topics

Applications and system integration developments address areas such as

- transportation: automotive, railway, aircraft
- power electronics in the grid, in particular for renewable energy: wind, solar ...
- drives and power supplies

1. Components to be integrated

- advanced Silicon devices and monolithic integration
- wide bandgap devices and monolithic integration
- drivers
- passive components
- sensors and actuators

2. General aspects of packaging

- system and component packaging
- assembly concepts, embedded power, 3D integration
- new materials and interconnects
- high voltage insulation
- design for high temperature applications
- cooling concepts
- interface materials
- multi-domain CAD (electrical, thermal, mechanical) as design tool

3. Package types

- bare chip packaging
- discrete semiconductor packages
- hermetic semiconductor packages
- semiconductor module packages
- packages with semiconductors and passives

4. Mechatronic systems and their applications

- integration with sensors and actuators
- integration of PE into E-machine
- overall system optimization

5. Reliability

- reliability requirements, mission profiles
- physics of failure, robustness validation
- prognostics and health management
- modeling and simulation of lifetime
- intelligent reliability testing
- failure analysis

6. Clean switching, EMC

- parasitics and interferences, low inductance design
- electrodynamically optimized design
- optimized control through driving scheme
- filters

Call for Papers

Experts from industries laboratories and institutes wishing to make a presentation on the results of their recent research are cordially invited to submit a paper. Accepted papers will be presented in either oral or poster sessions.

Please create a pdf formatted abstract in English, 2 pages, including figures, tables & references showing summary, motivation and results. The paper should be headed by:

Title, Author's names, Affiliations.

Please register your paper using the EDAS online registration at www.cips-conference.de. If you have already a personal account, please login with your username and password. Otherwise first create a new account, then register your Paper.

Please note:

- Accepted full papers will be published in proceedings as well as on a CD-ROM. A maximum of six pages of continuous text including pictures is accepted.
- The proceedings will be published by VDE Verlag and will also be available on the IEEE Conference Management Publications Program (CPP) and IEEE Xplore®.
- The authors of accepted full papers will be also allowed to submit the same paper for the Transactions of the IEEE Power Electronics Society. It will then undergo a further review process.
- By submitting your full paper we assume that you have accepted the copyright-statement: www.vde.com/typing-instructions.
- Each presentation including discussion will typically take 20 min.
- After the conference, the presentations will be made available for all participants on a password protected file server.

Paper Review

A two-stage review process will be applied:

1. The Technical Program Committee will review the abstracts and decide upon the acceptance.
2. Every full papers will be reviewed by peer reviewers. It shall be
 - within conference scope
 - fulfilling the requirements regarding clarity, presentation, innovation and possible realization, readable in the proper format as defined by IEEE.

If this would not be the case, the author will be requested to send a revised paper for further review.

Venue

Nuremberg is a lively city of about half a million inhabitants, with a visible history of al-most one thousand years. It is also a city „of wit“, where inventiveness and the researchers' curiosity have found a home.



Conference venue

Maritim Hotel Nürnberg
Frauentorgraben 11
90443 Nuremberg - Germany

Contact

VDE-Conference Services
Mrs. Hatice Altintas
Stresemannallee 15
60596 Frankfurt - Germany
Phone: +49 69 6308-477
Fax: +49 69 6308-144
hatice.altintas@vde.com