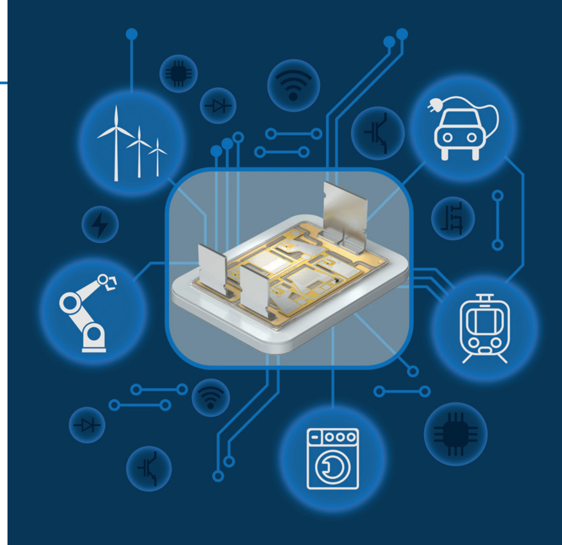
Call for Papers



Picture: Sarah Rugen + (center module) Semikron Danfoss

CIPS 2026

14th International Conference on Integrated Power Electronics Systems

March 10 – 12, 2026, Dresden/Germany

Conference focus

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

CIPS is consequently focused on the following main aspects:

- **assembly and interconnect technology for power electronic devices and converters**
- **integration of hybrid systems and mechatronic systems with high power density**
- **systems‘ and components‘ operational behaviour, reliability and availability**

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

In 2026 the successful story of CIPS will continue as the conference's focus is today more important than ever – increasing functionality, energy efficiency and system reliability while decreasing cost.

We invite all engineers and scientists coming from industry and academia engaged in power electronics-related

- system development
- component development
- reliability engineering
- basic and applied research

to share their research and technical achievements joining CIPS 2026.

www.cips.eu

Conference topics

Applications are wide spread over areas such as power supplies and drives

- to feed all kinds of loads – consumer electronics, industrial equipment, data centres, ...
- from the grid or to feed electrical energy from solar or wind generators to the grid
- for transportation – railway, automotive, aircraft

1. **Components to be integrated**
   - advanced silicon devices and monolithic integration
   - wide bandgap devices and monolithic integration
   - gate drivers
   - passive components
   - sensors and actuators
2. **General aspects of packaging**
   - system and component packaging
   - assembly concepts, embedded power, 3D integration
   - new materials incl. interface materials and interconnects
   - additive manufacturing
   - high voltage insulation
   - design for high temperature applications
   - cooling concepts
   - multidomain CAD and design tools
3. **Power packages and modules**
   - bare chip packaging
   - discrete semiconductor packages
   - hermetic semiconductor packages
   - power semiconductor modules
   - heterogeneous integration, power system-in-package
4. **System and application aspects**
   - mechatronic systems and their applications
   - integration of power electronics into electric machines
   - challenges of fast switching on circuit/system level – winding insulation, bearing currents, earth leakage, touch current, ...
   - integration with sensors and actuators
   - overall system optimisation
5. **Reliability and availability**
   - reliability requirements, mission profiles
   - intelligent reliability testing
   - modelling and simulation of lifetime
   - prognostics and health management
   - robustness validation, testing for abnormal conditions and related modeling
   - physics of failure, failure analysis
   - fault tolerant designs and applications
6. **Design for high frequency and electromagnetic compatibility**
   - high and very high frequency power electronics
   - characterisation and optimisation of layout and device parasitics
   - reduction of electromagnetic interference: optimised control, integration and shielding, active and passive EMI filters
   - integrated sensors, high frequency measurement techniques
   - high frequency modelling, simulation and control of power electronic devices and circuits

Please select the most appropriate topic for your contribution. Please submit even if you cannot find the perfectly fitting topic. As long as they are interesting enough, all contributions are welcome!

VDE ETG

Call for Papers

Experts from industry, research institutes and universities wishing to present results of their recent research are cordially invited to submit a paper:

Please submit an abstract, headed by title, authors' names and affiliations, followed by a summary and an explanation of the motivation, the approach and major results. The abstract shall be in English and two pages long including figures, tables and references. The document in pdf format can be submitted to the CIPS conference via the EDAS online registration available at www.cips.eu.

The Technical Programme Committee will review the abstracts and decide upon the preliminary acceptance for lecture or poster presentation.

The authors of accepted abstracts will be asked to subsequently submit the full paper with a length of four to eight pages.

Each full paper will again be peer-reviewed. It shall

- be within the scope of the conference,
- fulfil the requirements regarding clarity, presentation, innovation and possible realisation,
- be readable and formatted according to the appropriate template for IEEE conference papers.

As a result of this second review step, a full paper can be accepted or returned for revision or rejected.

All accepted full papers will be part of the proceedings of the CIPS conference and additionally be published in IEEE Xplore.

Enhanced versions can later be submitted to the IEEE Transactions on Power Electronics (TPEL) or – for an open access publication – to the IEEE Open Journal of Power Electronics (OJPEL). In this case, according to the IEEE Submission Policies, amongst others the original paper presented at the CIPS conference needs to be referenced.

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Important dates

Deadline for abstract submission 23.09.2025
Notification of preliminary acceptance........ 21.11.2025
Deadline for full paper submission 19.12.2025
Notification of acceptance of full paper 16.02.2025
Conference start 10.03.2026

Organised by

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

ECPE European Center for Power Electronics e.V.

The industry-driven research network for power electronics in Europe with more than 230 member organisations is promoting research, education, training and public relations in power electronics.

www.ecpe.org

Conference venue

The CIPS 2026 will take place at Bilderberg Bellevue Hotel Dresden, Große Meißner Straße 15, 01097 Dresden, Germany

Discover Dresden

Dresden is the capital city of the state of Saxony in southeastern Germany, known for its rich cultural heritage and stunning baroque architecture. Often referred to as the „Florence on the Elbe", it boasts la ndmarks like the Frauenkirche, Zwinger Palace, and the Semper Opera House. The city was heavily damaged during World War II but has since been meticulously rebuilt. Dresden is a hub of art, history, and education, with a vibrant cultural scene and beautiful parks along the Elbe River.

Dresden is often referred to as „Semiconductor Valley" due to its central role in Europe's electronics industry. With a rich network of research institutions, world-renowned universities, and high-tech companies, Dresden is at the forefront of semiconductor production and innovation.

Contact

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Sign up for the Exhibition!

The CIPS Conference will be accompanied by an exhibition which is well appreciated by the conference delegates. It gives all attendees and exhibiting companies enough space for networking. Do not miss the chance to book your space on time.

Details at: **www.cips.eu**