

## Registration (Fax Reply)

To: Engineering Center for Power Electronics e.V.  
Att.: Ingrid Bollens

**Fax: +49 (0)911 / 81 02 88 - 28**

### Registration

Register before May 17<sup>th</sup>, 2004

**Participation fee:** €350,- \*  
The fee includes dinner, lunch and coffee/soft drinks, seminar handouts. With the confirmation of seminar registration you will receive the invoice.

\* Three participants from each ECPE member company free of charge. Allocation in sequence of registration.

Sender:

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title, given name, name

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company, department

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full address

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phone, fax

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E-Mail

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Date, signature

## Organisational information

Organiser: ECPE e.V.  
D-90443 Nürnberg  
[www.ecpe.org](http://www.ecpe.org)

Chair of seminar: Dr. Amina Hamidi, ABB  
Thomas Harder, ECPE

Organisation: Ingrid Bollens, ECPE  
+49 (0)911 / 81 02 88 – 10  
[ingrid.bollens@ecpe.org](mailto:ingrid.bollens@ecpe.org)

Place of seminar: ABB Switzerland Ltd  
Corporate Research  
Segelhof  
CH-5405 Baden-Dättwil,

Hotels in Baden  
with ABB rates  
Hotel Du Parc, [www.duparc.ch](http://www.duparc.ch)  
Hotel Limmathof, [www.limmathof.ch](http://www.limmathof.ch)  
Hotel Linde, [www.linde-baden.ch](http://www.linde-baden.ch)  
Hotel Blume, [www.blume-baden.ch](http://www.blume-baden.ch)

### How to reach ABB Corporate Research in Dättwil

Airport is in Zürich Kloten which has a train station and direct trains going to Baden ([www.sbb.ch](http://www.sbb.ch)) (about 45 minutes to Dättwil).

Train station in Baden (about 15 minutes to Dättwil)

Dättwil can be reached by bus number 7; from Baden direction Birmenstorf; get off the bus at station 'Segelhof' which is right in front of the ABB building ([www.rvbw.ch](http://www.rvbw.ch)).

Further information and maps will be provided after registration.



## Power Electronics Packaging Seminar (PEPS)

**June 7<sup>th</sup> - 8<sup>th</sup>, 2004**  
in Baden-Dättwil,  
Switzerland

**ECPE Seminar  
in cooperation with  
ABB Switzerland Ltd  
Corporate Research**



## Introduction

# ECPE Power Electronics Packaging Seminar (PEPS)

June 7<sup>th</sup> - 8<sup>th</sup>, 2004  
ABB Switzerland Ltd, Corporate Research  
Baden-Dättwil

The field of power electronics packaging poses complex and multidisciplinary challenges. Diverse aspects such as thermal management, mechanical design, electromagnetic issues, materials and interconnect technologies strongly influence system cost, reliability, performance and size.

This first ECPE seminar will present packaging issues that power electronics designers, manufacturers and users come across in various applications, and it will provide an overview of the state-of-the-art and emerging technologies in the field.

The main goal of this seminar is to offer high-level education and information to participants, as well as create a proper environment for discussing the challenges in this multidisciplinary field. At the end of the seminar, we expect that both high and low power packaging approaches benefit from the synergies existing between each other.

Dr. Amina Hamidi (ABB) will chair the seminar with support from Mr. Thomas Harder (ECPE). All presentations and discussions will be in English.

## Program

### Monday, June 7<sup>th</sup>, 2004

- 17:30 Venue and registration
- 18:00 **Introduction to the seminar**  
**A. Hamidi**, ABB CH, Corporate Research
- 18:15 **Presentation of Engineering Center for Power Electronics (ECPE)**  
**T. Harder**, ECPE e.V.
- 18:30 Departure to dinner place
- 19:00 Dinner together

### Tuesday, June 8<sup>th</sup>, 2004

- 8:30 **Introduction to Packaging aspects in Power Electronics**  
**A. Hamidi**, ABB CH, Corporate Research
- 9:10 **Thermal management in Power Electronics systems**  
**L. Meysenc**, ABB CH, Corporate Research
- 9:50 **Reliability & lifetime issues in Power Electronics**  
**M. Ciappa**, ETH Zürich
- 10:30 *Coffee break*
- 10:50 **Advanced integration technologies**  
**J.A. Ferreira**, Delft Univ. of Technology
- 11:20 **Electromagnetic and thermal integration for high power converter systems**  
**F. Biela**, ETH Zürich
- 11:50 **Packaging and integration, the CPES view**  
**P. Barbosa**, ABB CH, Corporate Research

## Program

- 12:20 *Lunch*
- 13:30 **Embedding thermal modelling in power electronic circuit simulation**  
**U. Drofenik**, ETH Zürich
- 14:00 **Thermal design of power modules in electrical power steering applications**  
**R. Eisele**, Danfoss Silicon Power GmbH
- 14:30 **High temperature packaging**  
**B. Plikat**, Infineon Technologies AG
- 15:00 **Advanced drive system for vehicle application**  
**P. Beckedahl**, Semikron Elektronik GmbH
- 15:30 *Coffee break*
- 15:50 **IGBT modules vs. press-packs, for what applications?**  
**S. Linder**, ABB CH, Semiconductors
- 16:20 **IGBT module technology with high partial discharge resistance**  
**G. Mitic**, Siemens AG
- 16:50 Lab tour
- High Power Electronics Packaging clean room facility
  - Partial discharge test facility
- 17:30 *End*

Remark: 10 minutes discussion will follow every presentation.