Registration (Fax Reply)

To: ECPE e.V.
Att.: Ingrid Bollens

Fax: +49 (0)911 / 81 02 88 – 28

Register before **16 November 2007**

Participation fee:

- **€ 480,-***
- **€ 380,-*** for university members
  The fee includes dinner, lunch, coffee/soft drinks and seminar handouts.
- **€ 120,-*** for students (shortened seminar package)

With the confirmation of seminar registration you will receive the invoice. (* plus 19 % VAT)
In case of cancellation after 16 November 2007 or non-attendance 50 % of the participation fee are payable.

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

Sender:

_____
title, given name, name

_____
company, department

_____
full address

_____
phone, fax

_____
e-mail

_____
date, signature

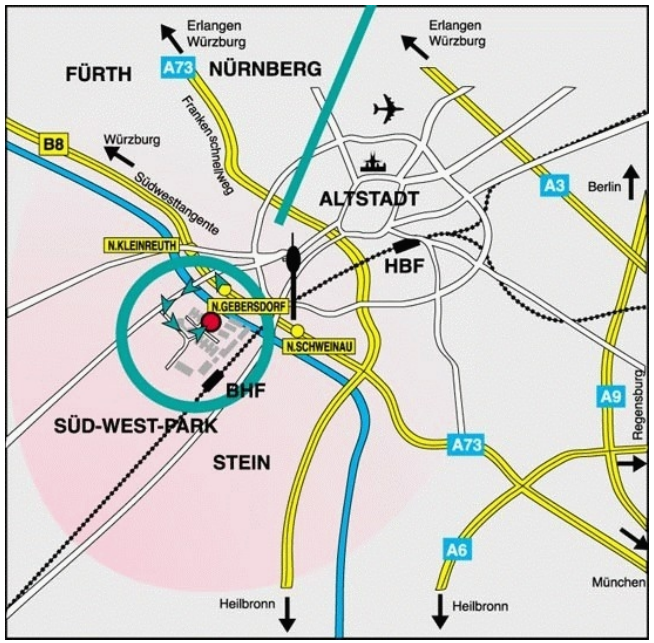
Organisational information

Organiser: ECPE e.V.
90443 Nürnberg, Germany
www.ecpe.org

Chair of seminar: Prof. Manfred Albach, Friedrich-Alexander-Universität Erlangen
Wolfgang Sammet, EPCOS AG
Thomas Harder, ECPE e.V.

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

Place of seminar: Süd-West-Park Conference Centre
Südwestpark 35, Building 35
90449 Nürnberg, Germany



Further information (hotel list and maps) will be provided after your registration.

ECPE European Center for Power Electronics e.V.

Seminar

Passive Components in Power Electronics

22 – 23 November 2007
Süd-West-Park Conference Centre
Nürnberg, Germany

in cooperation with

Friedrich-Alexander-Universität Erlangen-Nürnberg

EMF

EPE EUROPEAN POWER ELECTRONICS AND DRIVES

EPCOS

Introduction

ECPE Seminar

Passive Components in Power Electronics

22 – 23 November 2007
Nürnberg, Germany

Power electronics is the key technology for effective power processing and distribution. In the past the main focus in the research areas in power electronics has been on active devices, both on power semiconductors and on the integration of control, protection and driving circuits with the main switches. Due to the already achieved progress in this field a further miniaturisation and increase in power conversion efficiency is more and more expected from the passive components and subassemblies.

The main goal of this seminar is to bring together experts from industry and university to present and discuss the current trends and the new developments related to the field of passive components. Improvements in the design of inductive and capacitive components can be expected from new materials and technologies, from innovative cooling concepts, but also from better understanding and improved analysis of the underlying loss mechanisms. Another challenging research area is the possibility of passive integration, e.g. by utilising parasitic components as part of the needed functionality or by integration of the components in substrate materials. The final part of this seminar deals with sub-assemblies like filters, with interconnection problems and recent developments in PCB technology for high current applications.

Prof. Manfred Albach, Friedrich-Alexander-Universität Erlangen will chair the seminar together with Mr. Wolfgang Sammet (EPCOS) and Mr. Thomas Harder (ECPE). All presentations and discussions will be in English.

Programme

Thursday, 22 November 2007

10:00 **Start of Registration**

10:30 **Opening, Welcome Address and Introduction**
T. Harder, ECPE, M. Albach, University Erlangen, W. Sammet, EPCOS

Inductive Components

11:00 **High Permeability Materials**
H.-J. Pöss, Magnetec (D)

11:30 **New Power Materials and Products – Capita Selecta**
E. J. Pateer, Ferroxcube, (NL)

12:00 **Innovations in Soft Magnetic Products for Actual – and Future – Power Applications**
D. J. Huisman, Magnetics (NL)

12:30 **Lunch**

13:30 **The Prediction and Measurement of Different Loss Mechanisms in Ferrite Cores**
A. Stadler, University Erlangen (D)

14:00 **Heat Transfer in Medium Frequency Transformers**
C. Gulden, STS (D)

Integration, Combination

14:30 **Liquid Electronic Cooling**
U. Barucca, Aavid Thermalloy (I)

15:00 **Coffee Break**

15:30 **Passive Component Integration Example: Converter Technology**
J.A. Ferreira, Technical University Delft (NL)

16:00 **Magnetics on Silicon for Miniaturised Inductors for Future and Emerging Power Supply on Chip Platforms**
T. O'Donnell, Tyndall National Institute (IRL)

16:30 **Printed Circuit Board Integrated Passive Components for Power Electronic Applications**
E. Waffenschmidt, Philips Research (D)

17:30 End of 1st Day´s Programme

19:30 **Dinner**

Programme

Friday, 23 November 2007

Capacitive Components

9:00 **Power Capacitor Chips (PCC) for Low-Capacitance IGBT DC Links**
H. Vetter, EPCOS (D)

9:30 **Ceramic Multilayer Capacitors in DC Link of Frequency Converters**
M. März, Fraunhofer Institute IISB (D)

10:00 **New Concepts for Energy Storage in Mobile Applications**
G. Sartorelli, J. Auer, Maxwell (CH)

10:30 Coffee Break

11:00 **The Key Role of Dielectric and Insulating Materials in Power Electronics Integration**
T. Lebey, CNRS, Université Paul Sabatier Toulouse (F)

11:30 **Dry Technology High Voltage Capacitors used in HVDC & SVC Light Power Transmission Technologies**
H. Fuhrmann, ABB Switzerland (CH)

12:00 **Lunch**

Subassemblies, Modules, Applications

13:00 **EMC Filter and Frequency Converters**
C. Paulwitz, EPCOS (D)

13:30 **Device Connectivity for Higher Currents Example: Decentralized Automation Systems**
A. Naß, HARTING Electric (D)

14:00 **High Current PCB's and Suitable Connection Techniques**
M. Poech, Fraunhofer Institute ISIT (D)

14:30 **Current Handling Capability on PCBs**
C. Lehnberger, ANDUS Electronic GmbH

15:15 End of seminar