

Registration Form

To: ECPE e.V.
Att.: Ingrid Bollens, ingrid.bollens@ecpe.org

Please **e-mail** a scanned copy of the completed form or send a fax to +49 (0)911 / 81 02 88 - 28.

Register before **12 November 2010**

Participation fee:

- €350.00* for industry
- €260.00* for university members
The fee includes dinner, lunch, coffee/soft drinks and a CD with the workshop presentations. A printed version of the workshop handout is available on request (€42.00).
- €80.00* for students (shortened seminar package)

With the confirmation of seminar registration you will receive the invoice (* plus 19% VAT).
In case of cancellation after 12.11.2010 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
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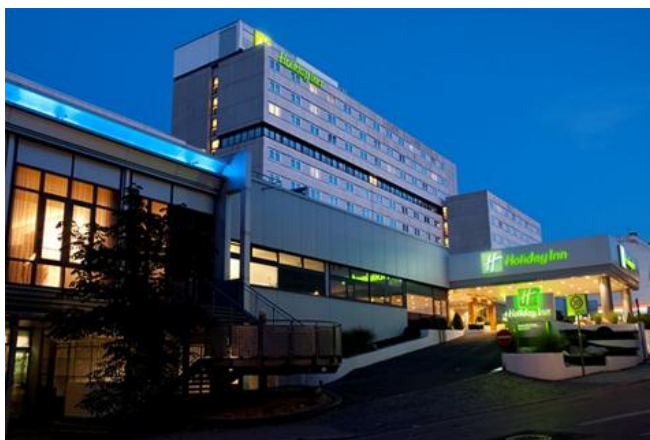
Organisation

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

Chairmen: **Prof. Dr. Florin Udrea**,
University of Cambridge, UK
Dr. Patrick Leteinturier,
Infineon Technologies, D
Dr. Ulrich Kirchenberger,
STMicroelectronics, D

Organisation: Ingrid Bollens, ECPE e.V.
+49 (0)911 / 81 02 88 – 10
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Place of seminar: Holiday Inn Munich City Centre
Hochstrasse 3
81669 Munich, Germany



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



**ECPE European Center for
Power Electronics e.V.**

ECPE Workshop

Smart Power - Technologies and Applications

18 (evening) - 19 Nov. 2010
Holiday Inn Munich City Centre
Munich, Germany

in cooperation with



Introduction

ECPE Workshop Smart Power - Technologies and Applications

18 (evening) - 19 Nov. 2010
Munich, Germany

Power ICs are integrated circuits containing at least one power device as their heart and CMOS based intelligence to control and protect its operation for optimum efficiency and reliability. Power ICs are based on a diversity of technologies such as standard BCD (Bipolar CMOS DMOS), Off-line BCD, HVCMOS, BiCMOS, SOI and use advanced high voltage device concepts such as RESURF, trench, Superjunction, LDMOSFET, LIGBT etc.

This workshop will give an introduction to the state-of-the-art technologies of Power IC and focus on applications of power ICs to different power systems. There are three main targeted areas:

- (i) Power supplies and lighting
- (ii) Consumer and industrial electronics and
- (iii) Smart Power for automotive.

The market analysts forecast a strong growth (more than 10% pa) from 2010-2013, recovering from the downturn in 2009. New applications such as LED lighting and PFCs will complement the more traditional sectors such as automotive and power supplies.

The workshop should appeal to power system and IC designers as well as product and application engineers in power management, power supplies, lighting, motor control etc. The content of the workshop is also highly suitable for academics and postgraduate students from universities or power electronics researchers from research institutes.

The workshop is chaired by Prof. Dr. Florin Udrea (University of Cambridge) together with Dr. Ulrich Kirchenberger (STMicroelectronics) and Dr. Patrick Leteinturier (Infineon Technologies).

All presentations and discussions will be in English

Programme

Thursday, 18 November 2010

17.30 **Start of Registration**
Holiday Inn City Centre, Hochstr. 3,
81669 Munich, Germany

Opening Session

17.50 **Opening, Welcome**
L. Lorenz, T. Harder, ECPE e.V.

18.00 **Overview and Comparison of Basic Power IC Technologies**
F. Udrea, Univ. of Cambridge (UK)

18.45 **Fundamental Circuits as Building Blocks for Smart Power**
R. Gariboldi, ST/Politecnico di Torino (I)

19.30 **Discussion**

19.45 **Dinner**
Holiday Inn Munich City Centre

Friday, 19 November 2010

Session 1: Smart Power for Power Supplies & Lighting

Session Chairman: Florin Udrea

8.30 **HV-SOI Technology in CFL Lighting Application**
F. Sluijs, NXP Semiconductors (NL)

9.00 **High Performance Primary Side Regulation in AC-DC Converters**
T. Werner, Cambridge Semiconductor (UK)

9.30 **Power ICs for LED Lighting**
S. Zudrell-Koch, Tridonic (A)

10.00 **Coffee break**

Programme

Session 2: Industry and Consumer Applications

Session Chairman: Ulrich Kirchenberger, STMicroelectronics

10.30 **Smart Power for AC Drive Applications**
J. Chen, International Rectifier

11.00 **Coreless Transformer Driver IC for HV Motor Applications**
L. Beaudenaut, Infineon Technologies (D)

11.30 **Low Voltage Smart Power ICs for Motion Control Applications**
R. Aletti, DORA/STMicroelectronics Group (I)

12.00 Discussion

12.15 Lunch

Session 3: Smart Power for Automotive

Session Chairman: Patrick Leteinturier, Infineon Technol.

13.15 **Flexible & Intelligent Automotive Driver for a Wide Range of Powertrain Applications**
A. Manzone, P. Santero, Fiat CRF (I)

13.45 **Enhancing Smart Power Capabilities using Advanced Control Strategies**
M. Leiss, R. Makowitz, Freescale Semi. (D)

14.15 **Turnkey Solutions for Automotive LED Lighting**
Prem. K. Sharma, NXP Semiconductors (UK)

14.45 **Variable Force Solenoid Smart Power for Automotive Transmission Applications**
J. Funiyak, P. Leteinturier, Infineon Technol. (US)

15.15 Coffee break

Session 4: Packaging & Reliability

15.45 **Reliability Issues in Smart Power ICs**
P. Moens, ON Semiconductor (B)

16.15 **Power Packaging Evolution and their Thermal Management: is there a Possible Compromise?**
V. Motta, C.-M. Villa, STMicroelectronics (I)

16:45 **End of Workshop**