Industrial Members/Partners of ECPE
The Vision of ECPE

Improving the Competitiveness of the European Industry

- Improved performance, reliability, efficiency, costs, and miniaturization of power electronics systems,
- Safety and sustainability in the power supply infrastructure “from producer to consumer”,
- Improving design and production technologies that the focus remains in Europe (or becomes a focus in Europe again).

Europe is taking the lead in energy saving, in the use of environmentally friendly materials, and in recyclable systems.

Europe is focussing at power electronic systems for industry, automation and automotive applications.
ECPE Research Funds

**Principal Partners**

- Project Proposal
- Project Decision
- IP and Patent licenses

**ECPE e.V.**
100% Shareholder of ECPE GmbH

- support
- ECPE label
- project coord.

**Research and IP Agreements**

**ECPE GmbH**

**Competence Centers**
Universities, Research Institutes

**Representative / Partner**
Managing Director

**Project**
Funds

**€ - Members**

**€ - HTO**

**Technical Societies**

**€ Public Funds**
ECPE Seminar Program
⇒ 3 – 4 events per year, typical 80 – 100 attendees
⇒ Technical program (speakers and topics) with Technical Chairman

ECPE Online Course ´Power Electronics´
⇒ In cooperation with Prof. Kolar, Dr. Drofenik from ETH Zurich
⇒ Available for ECPE members and for universities

ECPE Activities in Power Electronics Conferences
⇒ Co-organiser of CIPS 2006 (with ETG)
⇒ PCIM Conference, …
Pre-competitive Topics for Joint Research

System II
Automotive

Demonstrator: Integrated Motor
System Packaging
HV-Technology
System Integration

System III
HF-Power Electronics

3D passive Integration
Ultra High Power Density
Demonstrator: Power Supply (50W/cm³)

Cost
Life Time Reliability
Recycling
Manufacturability
High Temperature Modeling/EMV

Motor design for electronic integr.
Thermal Management

HV-IC-Technology
Diagnose
PE-Circuits

System I
Industry

compact and low loss
motor drive systems

Demonstrator: Power Supply (50W/cm³)

Mechatronics
PE-Circuit
Sensoric
HV-IC-Smart
Interconnects

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### Further Activities Planned: Working Groups Projects

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<tr>
<th>Topic</th>
<th>Details</th>
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<tr>
<td><strong>Power Electronics Technology Roadmaps</strong></td>
<td>for different applications: automotive, motor drives, traction, energy systems, high frequency power electr., renewable energy sources (+ generic summary roadmap)</td>
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<tr>
<td><strong>Energy Saving by Power Electronics</strong></td>
<td>in different applications: motor drives, power supplies, power conversion, lighting, …</td>
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<tr>
<td><strong>SiC User Forum</strong></td>
<td>ECPE seminar on SiC in PE systems/applications as kick-off for the user group</td>
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<tr>
<td><strong>Basic Needs for Power Electronics Future Development</strong></td>
<td>long term (visionary) research topics, cross functional topics</td>
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