

The Fraunhofer Institute for Reliability and Microintegration IZM is one of the leading institutes in the field of microelectronics and microsystem packaging worldwide. The institute's main competencies lie in the fields of material science and characterization, design and simulation, high density interconnect and wafer level packaging, chip and board interconnection technologies, 3D-packaging and vertical chip integration, mechatronics, micromechanical systems, reliability and failure analysis, environmental engineering, polymer materials and composites, polytronic and flexible systems.

### **Key Research Fields & Competence Areas in Power Module Packaging:**

- Electrical System & Circuit Design
- Interconnection Technologies
- Thermal Management
- Electromagnetic Compatibility
- Quality and Reliability

### **Institute Highlights in the Field of Power Module Packaging:**

- Design & Technology from one source
- Combined Electrical, Thermal and Mechanical Simulation and Verification by Testing
- Die Bond and Substrate Soldering, Heavy Wire and Ribbon Bonding, Encapsulation Technologies
- Labs: EMC, Thermal Measurements, Active Power Cycling, Quality and Reliability Testing, Material Characterisation

### **Contact Information:**

Fraunhofer Institute for Reliability and Microintegration IZM

Gustav-Meyer-Allee 25

13355 Berlin

Phone +49 (0) 30 / 464 03 1 00

Fax +49 (0) 30 / 464 03 111

[info@izm.fraunhofer.de](mailto:info@izm.fraunhofer.de)

<http://www.izm.fraunhofer.de>