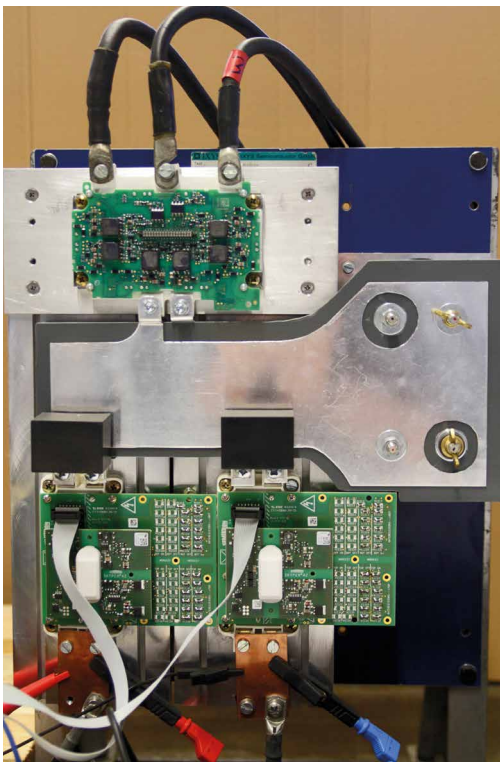
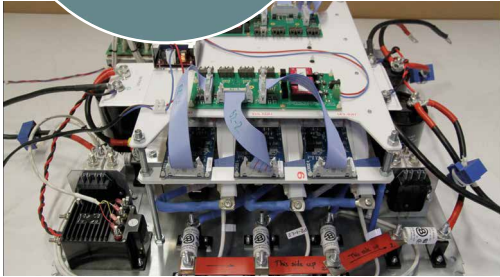
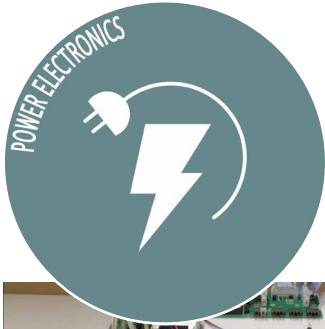


# POWER ELECTRONICS & ELECTRIC MACHINES

## DRIVING YOUR ENERGY-EFFICIENT PROPULSION SYSTEMS



From the integrated design and development of power electronics converters for electric and hybrid vehicles to the optimised energy management of emerging drivetrains. Our comprehensive knowledge of rechargeable energy storage systems, power electronics components and electric machines makes us your ideal partner when developing energy-efficient drivetrain systems. MOBI is a Core Lab in Motion Products Cluster within Flanders Make towards energy-efficient drivetrains.

### ADVANCED POWER ELECTRONICS

- Efficient and modular converters (incl. SiC, GaN) that can be used for charging and drive systems
- A co-design framework that results in cost-effective and compact drivetrain systems
- Accurate electrical and thermal modelling
- Development of power electronics topologies for battery management systems
- Development of Grid-to-Vehicle and Vehicle-to-Grid technological concepts

### ELECTRIC MACHINE CONTROL AND TESTING

Our state-of-the-art test facilities with a capacity of up to 800kVA enable us to comprehensively characterise and test a wide range of electric machines. We apply highly advanced control algorithms and dynamic models in order to identify opportunities for improving control strategies and improving the efficiency of your design under a wide variety of load conditions.

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