

## SiC Power Center – co-operation and competence integration

SiC Power Center is a platform for co-operation between industry, research institutes and academia with the objective to promote the introduction of SiC power electronics in the applications where high energy efficiency, compactness and high-temperature operation provides significant system advantages. Main target areas are energy converters for transportation systems and the future distributed power grid. The center is led by RISE Acreo in co-operation with KTH, Swerea-Kimab and industrial partners.

Combining and developing competences in areas of SiC devices, power modules, systems and applications for future SiC based electronics.

### SiC Power Center offers full scale competence and knowledge in power electronics:

- Device, module and circuit design
- Electrical and thermo-mechanical simulation
- Device testing
- Prototype evaluation
- Experience and knowledge exchange
- Development co-funding



### Partners have opportunity to participate in:

- Precompetitive R&D projects
- Projects run by partners

### The center hosts PhD students working with key aspects of SiC electronics:

- Device design and simulation
- Packaging technology
- System design and implementation

### Silicon Carbide

The main focus of the Silicon Carbide activities at Acreo is the development, modeling and evaluation of efficient rectifying and switching devices and power modules. Devices are manufactured by the spin-off company Ascatron in the Electrum laboratory in Kista, Stockholm, where a complete process line, starting with epitaxial material growth and ending with wafer dicing is available for 100 mm wafers.

### Center Co-operation

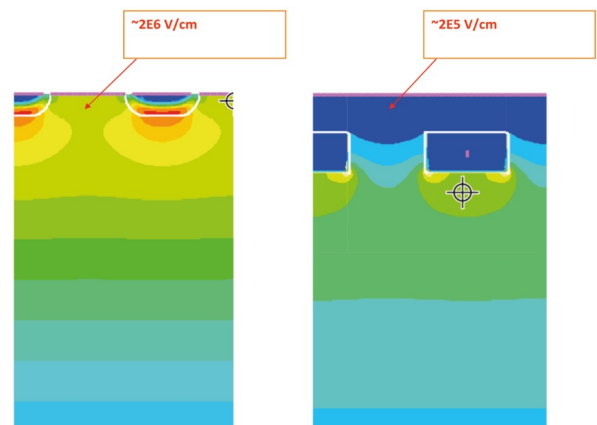
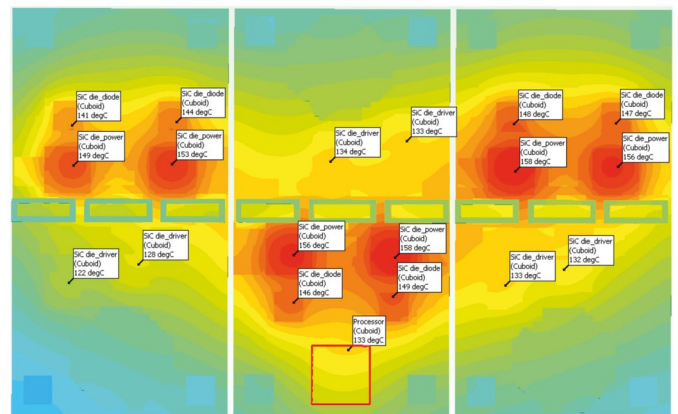
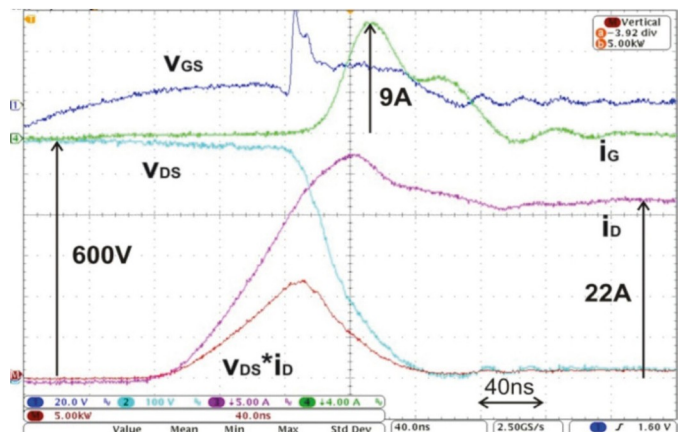
The main objectives of the center co-operation is to explore the full potential of SiC electronics and to share and combine resources, competences and knowledge for future applications, increased competitiveness and sustainable development.

### Center partners

SiC Power Center is an initiative by RISE Acreo, KTH and Swerea Kimab. The center welcomes industry partners, product and system owners, throughout the whole value chain.

### Financial support

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