Compact & Lightweight Aviation Power Electronics
Next Generation Power Electronics

As an application-oriented research institute, Fraunhofer IISB develops next generation power electronic systems of highest power densities, by using latest technologies like SiC and GaN Wide-Band-Gap (WBG) Devices.

Making use of 20 years of experience in delivering complete prototype systems for automotive applications, IISB is able to provide technologies for the complete High Voltage “Backbone” of a More/All Electric Aircraft, ranging from non-/isolating DC/DC converters and AC/DC motor/grid inverters to complete battery systems and DC grid control technologies.

Project Examples

Recent project examples illustrate technical possibilities of latest IISB developments at a glance. The novel WBG semiconductors with their reduced losses and advanced low-inductive system designs enable power-densities far beyond state-of-the-art, paving the way towards More and All Electric Aircrafts.

More and detailed information will be given upon request, and starting a technical discussion about your specific application is highly appreciated.

Collaboration

IISB is your research partner in power electronics for avionic applications, either in collaboration in public funded research projects, or in bilateral developments under complete NDA.