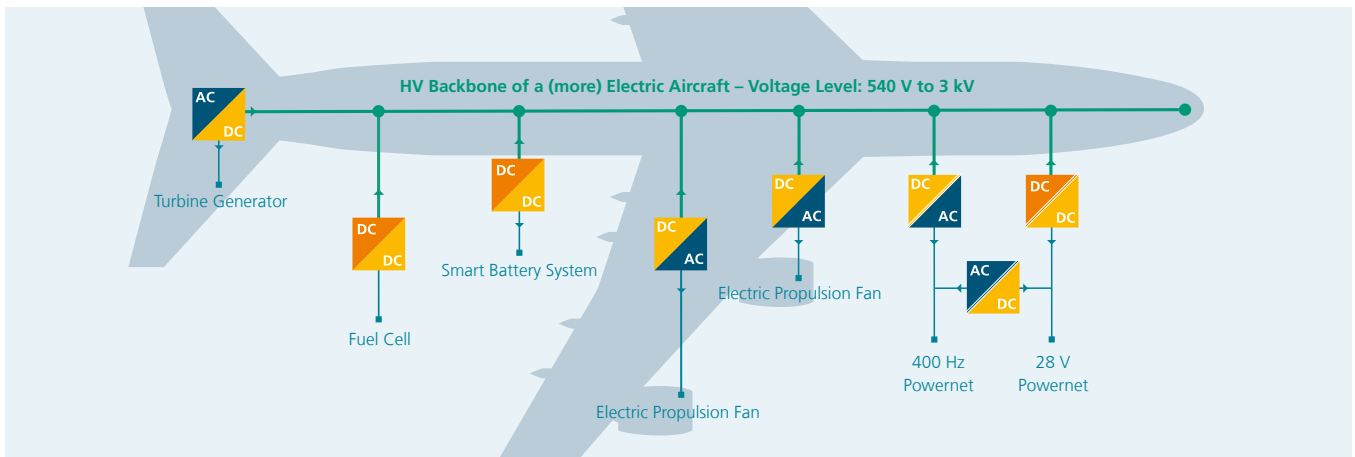


Compact & Lightweight Aviation Power Electronics

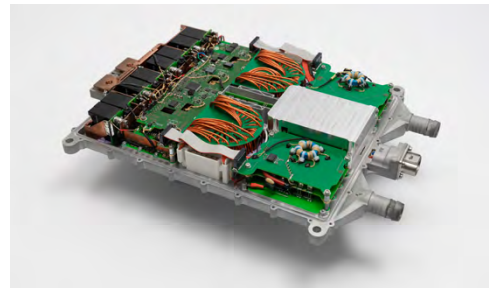
**Power Electronics with High Power Densities
Enable Environmentally-Friendly Flying**



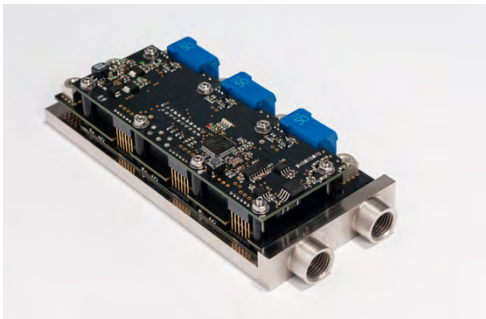
Project Examples

Recent project examples illustrate the technical possibilities of the latest IISB developments. The novel WBG semiconductors with their reduced losses together with advanced low-inductive system designs enable power densities far beyond state-of-the-art, paving the way towards more- and all-electric aircrafts.

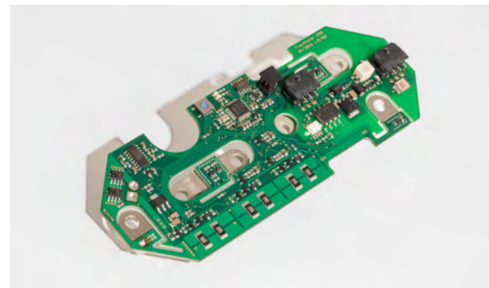
We will gladly provide you with further and detailed information upon request. You are more than welcome to contact us for a technical discussion about your specific application.



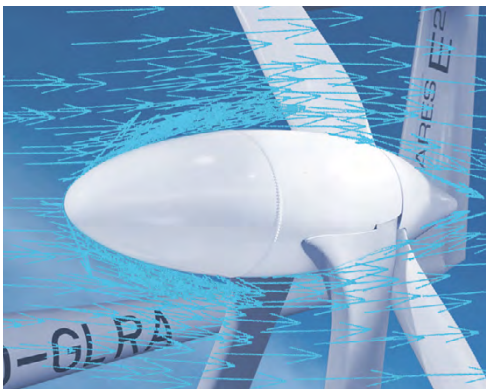
11.2 kW insulating HV/LV DC/DC converter for aircraft applications with galvanic isolation – weight less than 6 kg
© Elisabeth Iglhaut / Fraunhofer IISB



60 kW SiC-based drive inverter powerstage for high-speed drives with volumetric power density of 160 kW/l
© Thomas Richter / Fraunhofer IISB



Battery monitoring circuit (UTM4) designed for certificate of airworthiness from the European Aviation Safety Agency (EASA)
© Thomas Richter / Fraunhofer IISB



15 kW aviation 6-phase motor drive inverter with passive laminar flow air cooling and fail operation capabilities – weight 1.5 kg
© Florian Hilpert / Fraunhofer IISB

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