Fast Facts

ECU-Electronic Control Unit / E-Mobility

The customer specific inverter for E-drives contains the required hard and software components for controlling the synchronous engine as well as the control of the complete vehicle. An integrated DC / DC converter supplies the 12 V vehicle system voltage for light, water pump, E-Gas reporting, dashboard etc.. The heat reduction of the power stage is done via water cooling system.

Typical applications
This customer specific inverter was developed for an all-electric motorcycle.

Special features
• Thermal management at 0.1 K/W
• Scalable power stage
• Project handling and integration of hard and software according to ISO26262 ASIL-C level
• Specific power density: 11.7 kW/kg

Application specific data
• Voltage range: 200 V - 303 V
• Continuous current: 39.4 Aeff
• Peak current: 137.9 Aeff
• Rotation speed: max. 6,600 rpm
• Lifetime: 1,000 h / 10 years

Special application: KTM Freeride E Motocross Bike
AB Mikroelektronik was involved in the development of the KTM Freeride E from an early stage. The bike has already been ridden by impressed motorbike trade journalists and is scheduled for market launch in 2014. Since becoming involved in the project in 2008, AB Mikroelektronik has taken responsibility for transforming the bike’s main electronic control unit from the prototype built by KTM in conjunction with its research partner into a robust and reliable module suitable for series production.

General Note This Fast Fact does not give any information on product availability. The information given is just meant to describe the product and is not to be considered as guaranteed characteristics in the legal sense. All products are subject to design changes in the interest of further technical development.

Copyright: AB Elektronik GmbH (GER) • info@abelektronik.de • www.abelektronik.com