onsemi Silicon Carbide Power Module for Traction Inverters Selected for Hyundai Motor Group's High Performance Electric Vehicles

January 04, 2023

onsemi's EliteSiC silicon carbide (SiC) modules increase the efficiency and lower the weight of the South Korean automaker's traction inverters, extending electric vehicle (EV) range and improving performance

PHOENIX--(BUSINESS WIRE)--Jan. 4, 2023-- **onsemi** (Nasdaq: ON), a leader in intelligent power and sensing technologies, today announced that onsemi's EliteSiC family of silicon carbide (SiC) power modules has been selected for Kia Corporation's EV6 GT model. The electric vehicle (EV) accelerates from zero to 60 mph in 3.4 seconds and reaches top speed at 161 mph. Within the traction inverter of a high performance EV, the EliteSiC power module enables high-efficiency power conversion from the DC 800 V of the battery to the AC drive for the rear axle. onsemi continues to collaborate with Hyundai Motor Company and Kia Corporation (HMC/KIA) to use the EliteSiC technology for the upcoming high performance EVs based on HMC/KIA's Electric – Global Module Platform (E-GMP).

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20230104005743/en/

onsemi technology increases performance of Hyundai Motor Group's high performance electric vehicles. (Photo: Business Wire)

onsemi's high-power density SiC power module delivers the most innovative package technology to minimize parasitics and thermal resistance and offers robust package reliability using innovative interconnects. This leads to reduced power losses associated with DC to AC conversion along with reduced size and weight of the traction inverter, increasing performance and EV range by 5%.

With decades of superior packaging expertise in high-density power solutions for automotive applications, onsemi differentiated power module technology delivers industry-leading power traction solutions. Exceptional packaging technology alongside an evolutionary path from planar to trench cell structures in SiC enable onsemi to provide highly robust and reliable solutions to industry leader HKMC/KIA.

"Our collaboration with HMC/KIA is rooted in the superior performance of our EliteSiC technology," said Simon Keeton, executive vice president and general manager, Power Solutions Group, onsemi. "As important is our quickly growing, vertically integrated SiC supply chain that allows onsemi to plan for the necessary scale to support high-volume production for EVs."

For more information visit EliteSiC Power Modules.

About onsemi

onsemi (Nasdaq: ON) is driving disruptive innovations to help build a better future. With a focus on automotive and industrial end-markets, the company is accelerating change in megatrends such as vehicle electrification and safety, sustainable energy grids, industrial automation, and 5G and cloud infrastructure. **onsemi** offers a highly differentiated and innovative product portfolio, delivering intelligent power and sensing technologies that solve the world's most complex challenges and leads the way to creating a safer, cleaner, and smarter world. **onsemi** is recognized as a Fortune 500® company and included in the S&P 500® index. Learn more about **onsemi** at www.onsemi.com.

View source version on businesswire.com: https://www.businesswire.com/news/home/20230104005743/en/

Stefanie Cuene
Head of Public Relations
onsemi
(602) 315-3778
Stefanie.Cuene@onsemi.com

Parag Agarwal
Vice President - Investor Relations & Corporate Development
onsemi
(602) 244-3437
investor@onsemi.com

Source: onsemi