New Semiconductors Will Drive Future Power Electronics in Electric & Hybrid Vehicles

GaN Systems

GaN Systems [1] (Ottawa, Ontario) is presenting a paper on new wide-bandgap semiconductors and their role in transforming automotive power electronics at the Electric & Hybrid Vehicle Conference & Expo in Michigan 17 - 19 September. Manufacturers are currently designing vehicles to be launched onto the market in 2018, coinciding with the timeframe leading forecasters are predicting that gallium nitride semiconductors will attain price parity with silicon devices. This development will overcome the limitations of silicon and tranform power electronics in EHVs.

Julian Styles, Director Business Development USA, will join speakers from leading players in the EHV industry for the 3-day conference. Styles will explain the technological advances in semiconductor materials which herald the replacement of traditional silicon in power converters for new generation electric and hybrid vehicles. The audience will gain insight into how wide-bandgap power semiconductors based on gallium nitride bring benefits including greater efficiency, weight reduction, and lower cost to power electronics for EHVs. He will also give the audience a valuable insight into devices available now and in the near future, plus share the trends which are driving technological advances in semiconductors for electric and hybrid vehicle applications.

Comments Girvan Patterson, CEO of GaN Systems, “EHVs are full of power electronics, from battery management, auxiliary power, braking, valve timing, cruise control, security systems, instrument clusters – all of which are currently suffering the limitations imposed by silicon, as it doesn’t switch quickly or cope with elevated temperatures. New generation gallium nitride and SiC semiconductors overcome these difficulties and are lighter, smaller, and easier to package. These new devices will lead to dramatic improvements in automotive power electronics and present a major opportunity for the industry.”

For more information, please visit www.gansystems.com [1]

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