Analog Devices’ Wireless BMS Helps Lotus Cars Redefine Mobility in its Electric Vehicles

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WILMINGTON, Mass.--(BUSINESS WIRE)--Sep. 22, 2021-- Analog Devices, Inc. (Nasdaq: ADI) today announced that renowned British performance brand Lotus Cars is planning to incorporate ADI’s wireless battery management system (wBMS) in its next-generation electric vehicle (EV) architecture. ADI’s wBMS was selected for its increased design flexibility, battery repairability and lighter weight. The engineering collaboration will enable Lotus to safely propel its future EV fleet and continue pushing the limits of design and technology.

ADI’s wBMS technology eliminates the traditional wired harness, leading to a reduction of up to 90% in the wiring and 15% of the volume in the battery pack. It also improves design flexibility and manufacturability, without compromising range and state of charge accuracy over the life of the battery. ADI’s wBMS enables simplified assembly and disassembly of battery packs to ensure faulty battery cells can be removed and repaired quickly and efficiently.

“We worked closely with Analog Devices to integrate wBMS into our new Lightweight Electric Vehicle Architecture (LEVA), which will be the basis for all future Lotus EVs,” said Richard Lively, Director, Propulsion and Chassis Engineering, Lotus Cars. “The removal of the wire harness for wBMS ensures that Lotus can offer a lightweight solution that optimizes performance and is consistent with our brand of delivering powerful performance cars with exceptional handling.”

The body architecture of every Lotus car is designed for peak performance. The design flexibility of wBMS will enable Lotus’ engineers to freely design the vehicle and fit the battery pack into the design, instead of designing the car around it. Moreover, because ADI’s wBMS enables maximum energy use per cell required for optimized vehicle range, it aligns with Lotus’ focus on durability.

“Lotus has a stellar reputation for building high-performance, long-lasting race and road vehicles, and many reach classic status,” said Roger Keen, General Manager of E-Mobility Group at Analog Devices. “Together, we’ve reimagined what is possible and developed a game-changer for the electric vehicle industry: a new ultralightweight powertrain architecture and a wireless battery management system that enables peak performance as well as a more sustainable environment for a healthier planet.”

It is crucial that the battery keep up with the longevity of the Lotus vehicle. wBMS enables state-of-health measurement and simplified assembly and disassembly of battery packs to ensure faulty battery cells can be removed and repaired efficiently. With wBMS, serviceability is easier and faster for both road vehicles and trackside since the battery modules are software programmable for quick and convenient over the air updates. The cell controller lives with the battery module for life as one serviceable unit, furthering the simplified service model.

- To learn more about ADI’s wBMS, please visit: http://www.analog.com/electrification
- To learn more about Lotus Cars, please visit: https://www.lotuscars.com/en-US/

About Analog Devices

Analog Devices, Inc. (NASDAQ: ADI) operates at the center of the modern digital economy, converting real-world phenomena into actionable insight with its comprehensive suite of analog and mixed signal, power management, radio frequency (RF), and digital and sensor technologies. ADI serves 125,000 customers worldwide with more than 75,000 products in the industrial, communications, automotive, and consumer markets. ADI is headquartered in Wilmington, MA. Visit http://www.analog.com.

About Lotus

Lotus Cars is based in Hethel, Norfolk, UK, and is the global HQ for sports car and hypercar manufacturing operations, the Lotus Advanced Performance Centre and the iconic 2.2-mile test track. Lotus Cars builds world-class high-performance cars, born out of legendary success on the racetrack including 13 FIA Formula 1 world titles and many other championship honours. In July 2021 Lotus unveiled the all-new Lotus Emira, its last and best-of-breed petrol-powered sports car. The first customer cars will be delivered in 2022. In July 2019 it launched the Evija, the world’s first all-electric British hypercar. Customer deliveries will begin during 2021.

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