

Rimac Chooses Analog Devices to Enable Precision Battery Management in High Performance Electric Vehicles

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NORWOOD, Mass.--(BUSINESS WIRE)--Dec. 2, 2019-- Analog Devices. Inc. (ADI) today announced that Rimac Automobili is planning to incorporate ADI's precision battery management system (BMS) integrated circuits (ICs) into Rimac's BMS. ADI's technology provides Rimac's BMS with the ability to extract maximum energy and capacity out of its batteries by calculating reliable State of Charge and other battery parameters at any given time.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20191202005139/en/



Rimac Chooses Analog Devices to Enable Precision Battery Management in High Performance Electric Vehicles (Photo: Business Wire)

"Rimac is a technology powerhouse in the field of high-performance electric vehicles," said Rimac CEO Mate Rimac. "We develop and manufacture key electrification systems for many global automotive companies and raise the bar for performance electric vehicles with our own hypercars. Our application of BMS is among the most demanding in the world, requiring the highest accuracy, massive current and voltage draws over very short time scales, and rapid dynamic adjustment within the battery management control system. We have decided to adopt the Analog Devices portfolio of battery management ICs across our complete product line of battery management systems. ADI's ICs are an integral part of our in-house developed BMS that we are using in our own vehicles, but also for many global car brands. We have benchmarked these ICs in the market and selected Analog Devices for superior precision measurement accuracy and product robustness over the lifetime of the vehicle. We look forward to working with Analog Devices in the future to achieve high performance BMS in our vehicles and battery packs."

The Rimac C_Two is a fully electric hypercar capable of speeds of up to 258 miles per hour. With 1,914 horsepower under the hood, the C_Two accelerates 0-60 mph in 1.85 seconds and 0-186 mph in 11.8 seconds. To support these high-performance outputs, the Rimac team designs and engineers superior underlying technologies, such as electric drivetrain and battery packs.

BMS technology acts as the "brains" behind battery packs by managing the output, charging and discharging as well as providing precision measurements during vehicle operation. A BMS also provides vital safeguards to protect the battery from damage. A battery pack consists of groups of individual battery cells that work seamlessly together to deliver maximum power output to the car. If the cells go out of balance, the cells can get stressed leading to premature charge termination and a reduction in the battery's overall lifetime. ADI's battery management ICs deliver the highly accurate measurements, resulting in safer vehicle operation and maximizing vehicle range per charge.

"High performance electric vehicles require high precision electronics," said Patrick Morgan, Vice President, Automotive Electrification and Infotainment, Analog Devices. "Precision accuracy directly translates to maximizing battery capacity and range with fast charging time. We are

pleased to support Rimac with our precision battery management ICs for its leading-edge electric vehicle systems with the goal of achieving some of the best performance in the world."

Analog Devices offers a broad portfolio of precision battery management ICs serving multiple cell configurations and battery types across a wide range of applications in multiple industries. In addition to electric vehicle battery management systems, applications include on-board chargers (OBCs), high power electrical storage systems (ESS), backup battery systems, and high voltage data acquisition systems.

To learn more about Analog Devices' battery management solutions, visit https://www.analog.com/en/products/power-management/battery-management/battery-stack-monitor.html

About Analog Devices

Analog Devices (Nasdaq: ADI) is a leading global high-performance analog technology company dedicated to solving the toughest engineering challenges. We enable our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure, power, connect and interpret. Visit http://www.analog.com.

About Rimac Automobili

Rimac Automobili was founded in 2009 by Mate Rimac (then 21 y/o), converting his first Guinness-World-Record breaking electric car in a garage. Today, Rimac develops and manufactures key electrification systems for many global automotive companies, and at the same time, raises the bar for performance EVs with their own electric hypercars. This technology powerhouse with headquarters on the outskirts of Zagreb, Croatia, employs around 600 people, with plans for strong future growth. The company is vertically integrated with many of the components produced in-house. The next challenge is to grow from a low volume manufacturer of complex high-end electrification components, to an established Tier-1 supplier for the industry. Rimac plans to open new high-volume production lines for battery packs, powertrain systems and the C_Two hypercar for production starting in 2020 at new facilities currently being established. More information on Rimac Automobili: www.rimac-automobili.com.

Forward-Looking Statements

This release may be deemed to contain forward-looking statements intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than historical facts are considered forward-looking statements, including, without limitation, statements regarding Rimac's plans to incorporate ADI's products into its electric vehicle systems. The statements contained in this press release are not guarantees of future performance, are inherently uncertain, involve certain risks, uncertainties, and assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed in such forward-looking statements, and such statements should not be relied upon as representing Analog Devices' expectations or beliefs as of any date subsequent to the date of this press release. Important factors that could cause actual results to differ materially from the results described, implied or projected in any forward-looking statements include Rimac's decision to use ADI as a supplier and other risk factors described in ADI's most recent filings with the Securities and Exchange Commission. We do not undertake any obligation to update forward-looking statements made by us.

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Source: Analog Devices, Inc.

Linda Kincaid

Analog Devices, Inc.

<u>Linda.Kincaid@analog.com</u>