



Factorial Delivers B-Samples of Lithium-Metal Solid-State Battery Cells to Mercedes-Benz

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- *This marks the world's first announced B-sample delivery of solid-state battery cells to a global automaker*
- *Factorial's solid-state batteries can significantly improve the range and performance of electric vehicles, while reducing overall vehicle cost*
- *The company leverages existing lithium-ion battery manufacturing processes and supply chains to produce its solid-state batteries, which can streamline the B-sample validation phase and accelerate advancement toward series production of passenger EVs*



WOBURN, Mass.--([BUSINESS WIRE](#))--[Factorial Inc.](#) (Factorial), an industry leader in the development of solid-state battery technology for electric vehicle (EV) applications, today announced the delivery of B-samples of its 106+Ah lithium-metal solid-state battery cells to Mercedes-Benz as part of their ongoing joint development agreement. This milestone marks the world's first announced B-sample shipment of solid-state battery cells to a global automotive OEM, showcasing progress toward product maturity and the series production of passenger EVs equipped with Factorial's solid-state battery technology.

Factorial has manufactured thousands of large-format solid-state batteries and shipped over 1,000 100+Ah solid-state battery cells to Mercedes-Benz as part of the A-sample phase, highlighting its capacity to produce high volumes of advanced battery cells. The B-samples will be integrated into modules and battery packs for extensive testing and optimization. This crucial phase involves validating the module and pack designs against Mercedes-Benz's strict performance specifications. Additionally, this step will confirm the robustness of Factorial's supply chain and its manufacturing processes, ensuring scalability for future vehicle testing.

"We are thrilled to advance to the B-sample phase and to mark this milestone with a global automotive leader like Mercedes-Benz," said Siyu Huang, CEO and Co-Founder of Factorial. "This swift progression from A-sample to B-sample delivery in under a year highlights Factorial's rapid innovation capabilities and we continue to push the envelope to accelerate the adoption of solid-state batteries in the automotive sector. As a U.S. cell maker, we believe our high energy density cell will help build more efficient and sustainable vehicles that will set new standards for electric vehicle range, cost and performance globally."

The solid-state battery cells utilize Factorial's proprietary FEST® (Factorial Electrolyte System Technology) platform that includes a lithium-metal anode, which is the lightest metal on earth and enables the high energy density of 391Wh/kg. Factorial's batteries are manufactured using existing equipment from lithium-ion battery production, requiring minimal modifications. This approach can streamline the manufacturing validation process and significantly reduce long-term operating costs.

"We are committed to leading in innovative battery technologies, and our partnership with Factorial is a significant part of this strategy," said Markus Schäfer, Member of the Board of Management at Mercedes-Benz Group AG, Chief Technology Officer. "These B-sample batteries give us the opportunity to further validate this next-generation battery technology with the goal of enhancing range and performance, reducing overall vehicle costs, and offering the most desirable electric vehicles to our customers."

This milestone establishes Factorial as a pivotal technology partner for leading automakers pursuing battery innovation to advance their EV portfolios. In addition to Mercedes-Benz, Factorial has joint development agreements with Stellantis and Hyundai Motor Company and Kia Corporation.

About Factorial Inc.

Founded and headquartered in the United States, Factorial is developing breakthrough solid-state batteries that offer longer range per charge and increased safety and aim to be cost-competitive with conventional lithium-ion batteries. The company's proprietary FEST® (Factorial Electrolyte System Technology) leverages a solid electrolyte material, which has the potential to enable safe and reliable cell performance with high-capacity cathode and anode materials. FEST® has been scaled in 100+Ah cells, works at room temperature, and is compatible with existing lithium-ion battery manufacturing equipment. The company has entered into joint

development agreements with Mercedes-Benz, Stellantis, and Hyundai Motor Company. More information can be found at www.factorialenergy.com. © 2024 Factorial Inc. All rights reserved. Factorial, the Factorial logo and FEST are registered trademarks in the United States and/or other countries. Other trademarks are property of their respective owners.

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