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Ideal Power to Sample B-TRAN™ Bi-Directional Power Switches with Top 10 Global Automaker

AUSTIN, Texas, July 20, 2021 (GLOBE NEWSWIRE) -- [Ideal Power Inc.](#) (Nasdaq: IPWR), pioneering the development and commercialization of highly efficient and broadly patented B-TRAN™ bi-directional power switches, today announced that a top 10 global automaker will be sampling B-TRAN™ devices for electric vehicle (EV) drivetrain, power conversion, circuit protection and other EV applications. This represents Ideal Power's first sampling announcement in the EV space, already the largest segment in the \$6 billion power switch market, a market forecasted to grow to \$11 billion by 2026.

After substantial technical and commercial briefings on B-TRAN™ and its capabilities, the global automaker will bring resources from their advanced technology engineering team to test and evaluate B-TRAN™ and its driver for EV applications. The feedback and data from this testing will be shared with Ideal Power for incorporation into our commercial intelligent power module and potentially custom modules for EV applications.

"We are excited to make the first of what we expect to be several announcements for the evaluation and potential adoption of B-TRAN™ for electric vehicle applications," stated Dan Brdar, President and Chief Executive Officer of Ideal Power. "Based on our discussions with large global automobile manufacturers and their Tier 1 suppliers, we believe B-TRAN™ can have a meaningful impact on the drivetrain efficiency and range of electric vehicles and potentially enable more economic and efficient new drivetrain architectures. As B-TRAN™ can offer substantial performance improvements over conventional power semiconductors in applications across many sectors, we are also engaged in ongoing engineering sampling discussions with power equipment manufacturers, both large and small, in renewable energy, data centers and other industrial and utility applications."

Ideal Power's patented semiconductor power switch, the Bi-directional Bipolar Junction Transistor, or B-TRAN™, reduces power losses by 50% or more over conventional power switches, depending on the application. B-TRAN™'s higher efficiency results in less heat being generated and therefore significantly lower thermal management requirements, requiring significantly smaller surface area to dissipate heat and giving rise to potentially smaller OEM products. B-TRAN™ offers the industry's only symmetric bi-directional operation, reducing the number of components required for application by 75% as compared to a conventional bi-directional switch utilizing IGBTs and diodes. This highly efficient and unique symmetric operation provides a strong competitive advantage in bi-directional applications, which are growing rapidly as transportation electrifies and power generation shifts to renewable energy coupled with energy storage.

About Ideal Power Inc.

Ideal Power (NASDAQ: IPWR) is pioneering the development of its broadly patented bi-directional power switches, creating highly efficient and ecofriendly energy control solutions for electric vehicle, electric vehicle charging, renewable energy, energy storage, UPS / data center and other industrial and military applications. The Company is focused on its patented Bi-directional, Bi-polar Junction Transistor (B-TRAN™) semiconductor technology. B-TRAN™ is a unique double-sided bi-directional AC switch able to deliver substantial performance improvements over today's conventional power semiconductors. Ideal Power believes B-TRAN™ modules will reduce conduction and switching losses, complexity of thermal management and operating cost in medium voltage AC power switching and control circuitry. For more information, visit www.IdealPower.com.

Forward-Looking Statements

All statements in this release that are not based on historical fact are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. While Ideal Power’s management has based any forward-looking statements included in this release on its current expectations, the information on which such expectations were based may change. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of Ideal Power’s control that could cause actual results to materially differ from such statements. Such risks, uncertainties, and other factors include, but are not limited to, the risks and uncertainties associated with market conditions, our expectation that we will have several announcements for the evaluation and potential adoption of B-TRAN™ for EV applications and the expected performance benefits of B-TRAN™ in EV applications, as well as risks and uncertainties set forth in Ideal Power’s quarterly, annual and other reports filed with the SEC. Furthermore, Ideal Power operates in a highly competitive and rapidly changing environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward-looking statements as a prediction of actual results. Ideal Power disclaims any intention to, and undertakes no obligation to, update or revise forward-looking statements.

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