

Rising Demand in Automotive Power Electronics – Market to Expand from \$5 Billion to \$8.1 Billion at 5.1% CAGR by 2032

WILMINGTON, NEW CASTLE, DE, UNITED STATES, March 10, 2025 /EINPresswire.com/ -- According to a new report published by Allied Market Research, titled, "[Automotive Power Electronics Market](#) Size, Share, Competitive Landscape and Trend Analysis Report, by Device, by Application, by Drive Type : Global Opportunity Analysis and Industry Forecast, 2023-2032".

□□□□□□□□□□ □□□□□ □□□□□□□□□□□□ □□□□□□ □□□□□□□□, □□□□ :

The global [automotive power electronics market size](#) was valued at \$5 billion in 2022, and is projected to reach \$8.1 billion by 2032, growing at a CAGR of 5.1% from 2023 to 2032.

□□□ □□□□□□□□ □□□□□□ □□□□□□ □□□□□ : <https://www.alliedmarketresearch.com/request-sample/4285>

Automotive power electronics is a part of electrical and electronic systems used in automobiles for controlling, converting, and distributing electrical power supply within a vehicle. Application of power electronic component used in a vehicle ensures effective transfer of electric energy to all the necessary components of an automobile along with ensuring that all the associated components are operating in an efficient manner. In addition, with the introduction of suitable power electronics to be used in vehicles, the demand for smarter & efficient automotive components has increased which has created a wider scope for the growth of the market across the globe. In addition, automotive components such as semiconductors, ICs, safety components & others operate on power electronics which also proves to be a factor supplementing the growth of the automotive power electronics market across the globe.

Power electronics includes the structure, and implementation of numerous electronic components and systems, such as AC/DC converters, inverters, vehicle motors, vehicle battery management systems, and other electrical control units, which finds an increased application of power electronics. The power electronic system used in vehicle helps in optimizing the performance of the vehicle through proper battery management & consumption along with ensuring efficient electric propulsion & at the same time maintaining proper vehicle safety.

With the advancement in technology, the global automotive industry has experienced an increased support for developing effective automotive components. This has enabled numerous

companies to develop & offer components to be used in automotive industry thus supplementing the growth of the market across the globe. Nations heavily reliant on crude oil imports, which represent a substantial portion of their expenditures, are now observing a remarkable surge in the adoption of electric vehicles. Moreover, electric vehicles utilize electricity as a cleaner energy source, making them an attractive and sustainable transportation solution for countries grappling with both dependence on imported crude oil and the challenges posed by escalating carbon emissions. Owing to the rising demands of electric vehicles, key market players are expanding their business presence to meet these demands. For instance, in February 2023, Infineon Technologies AG announced that it was starting the construction of its new plant in Dresden, Germany. The plant specialized in the manufacturing of analog/mixed-signal technologies and power semiconductors. Furthermore, the plant was to begin production by 2026. This allowed Infineon to strengthen their capabilities and product presence in the automotive power electronics market size.

Moreover, with the advancement in technology, there has been developments carried out by the key players towards offering a wider range of automotive power electronic system & associated components which creates numerous opportunities for the growth of the market across the globe. In addition, vehicle safety features such as anti-lock braking systems (ABS), electronic stability control (ESC), adaptive cruise control (ACC), and lane departure warning (LDW) rely on advanced power electronic components which enables companies to offer effective components thus creating a wider scope for the growth of the market across the globe.

□□□□□□ □□□□□□ □□□□□□ □□□□ □□ :

<https://www.alliedmarketresearch.com/automotive-power-electronics-market/purchase-options>

Developments have been carried out by the key players & government organizations to offer subsidies & support the automobile industry infrastructure which has created a wider scope for the growth of the market across the globe. For instance, in September, 2022, Government of India's Ministry of Road Transport and Highways mandated the vehicle manufacturers to install six air bags in a vehicle in order to ensure safety of the passengers in a vehicle. Similarly, organizations across Europe & America have implemented regulations & standards such as Euro NCAP, NHTAS to ensure safety on roads.

For instance, in January 2023, STMicroelectronics introduced a new automotive safety microcontroller aimed at enhancing the reliability and functionality of advanced driver assistance and autonomous driving systems. The microcontroller, developed with 40nm FD-SOI process technology, features multiple redundant CPUs, memory protection units, and hardware-based safety mechanisms to ensure high-performance, secure, and fail-safe operation. Furthermore, it complies with various safety standards such as ISO 26262 and ASIL-D, making it suitable for deployment in safety-critical applications within the automotive industry.

□□□□□□ □□□□□ □□□□□□ :

BorgWarner Inc.,

Continental AG,

Danfoss A/S,

Denso Corporation,

Infineon Technologies AG,

Mitsubishi Electric Corporation,

NXP Semiconductors,

ON Semiconductors,

Renesas Electronics Corporation

Robert Bosch.

□□□□□□ □□□□□□ □□□□□□ : <https://www.alliedmarketresearch.com/purchase-enquiry/4285>

□□□ □□□□□□□□ □□ □□□ □□□□□□ :

By device, the Module/Discrete segment dominated the Automotive Power Electronics Market in terms of growth rate.

By application, the Module/Discrete segment is anticipated to exhibit a remarkable growth during the forecast period.

By drive type, the Electric Vehicle segment is anticipated to exhibit a remarkable growth during the forecast period.

By region, the North America region is anticipated to exhibit a remarkable growth during the forecast period.

□□□□ □□□□ □□□□□□□□ :

Automotive AC Compressor Market :

<https://www.alliedmarketresearch.com/automotive-ac-compressor-market-A10325>

Automotive Hypervisor Market :

<https://www.alliedmarketresearch.com/automotive-hypervisor-market-A11740>

Automotive Semiconductor Market :

<https://www.alliedmarketresearch.com/automotive-semiconductor-market-A14477>

Automotive LED Lighting Market :

<https://www.alliedmarketresearch.com/automotive-led-lighting-market-A10752>

□□□□ □□ :

Allied Market Research (AMR) is a full-service market research and business-consulting wing of Allied Analytics LLP based in Wilmington, Delaware. Allied Market Research provides global enterprises as well as medium and small businesses with unmatched quality of "Market Research Reports" and "Business Intelligence Solutions." AMR has a targeted view to provide business insights and consulting to assist its clients to make strategic business decisions and achieve sustainable growth in their respective market domain.

We are in professional corporate relations with various companies, and this helps us in digging out market data that helps us generate accurate research data tables and confirms utmost accuracy in our market forecasting. Each and every data presented in the reports published by us is extracted through primary interviews with top officials from leading companies of domain concerned. Our secondary data procurement methodology includes deep online and offline research and discussion with knowledgeable professionals and analysts in the industry.

David Correa

Allied Market Research

+15038946022 ext.

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

[YouTube](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/792386759>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.