

# **Global Automotive Power Electronics Market Size study, by Device Type (Power Module, Power ICs, Power Discrete), by Application Type (Body Electronics, Safety and Security Electronics, Powertrain), by Drive Type (IC Engine Vehicle, Hybrid Vehicle, Pure Electric Vehicle), by Vehicle Type (Passenger Cars, Commercial Vehicles) and Regional Forecasts 2020-2027**

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## **Abstracts**

Global Automotive Power Electronics Market is valued at approximately USD 3.6 billion in 2019 and is anticipated to grow with a healthy growth rate of more than 4.7% over the forecast period 2020-2027. The emergence of high-frequency and high-power switching devices has created a broad application opportunity for power electronic converters in energy transformation and motion control. It is the technology in the wake of devices, including switching power supplies, motor drives, and power converters. Modern power electronics are extensively utilizing in automotive applications, and their use plays a significant role in controlling automotive electronics such as braking systems, electric power steering, advanced driver-assistance systems (ADAS), seat control, and others. Numerous key features in the modern automobile – the chassis, body electronics, safety systems, infotainment, telematics require power electronic components to function. This factor has led to high demand for automotive power electronics throughout the world. Moreover, concerns regarding the climate and emission from gas-powered engines has led to more individual turning their attention towards hybrid and electric vehicles. Therefore, this contributes further growth of the automotive power electronic market. According to the Edison Electric Institute (EEI), the global sales of electric vehicles (EVs) estimated around 312,000 units in Q1 2018, signifying an increase of 58% from

Q1 2017 (almost 197,000 units). Likewise, as per the Bloomberg New Energy Finance (BNEF) report 2019, the global sales of electric vehicle sale are set to reach approximately 54 million by 2040, which is nearly 32% of the world's passenger vehicles. Therefore, the robust growing sales of electric vehicles creating a high demand for power electronics to improve the switching speed whilst preventing power losses. In addition, the growing vehicle safety standards and government concerns to reduce carbon emission is also the a significant factor responsible for the high CAGR of the market during the forecast period. For instance, the European Commission (EC) has established an aim of decarbonization by 2050, with a few instant goals in 2020 and 2030, thereby driving the demand for automotive power electronics, globally. However, the high development cost of vehicle and complex design and integration process are the few factors impeding the market growth over the forecast period of 2020-2027.

The regional analysis of the global Automotive Power Electronics market is considered for the key regions such as Asia Pacific, North America, Europe, Latin America, and Rest of the World. Asia-Pacific is the leading/significant region across the world in terms of market share owing to the rise in focus of automobile manufacturers to reduce vehicle weight, and the presence of a significant number of market vendors in the region. Whereas Asia-Pacific is also anticipated to exhibit the highest growth rate / CAGR over the forecast period 2020-2027, owing to the rise in production of passenger vehicles and luxury cars across developing countries, such as China and India.

Major market player included in this report are:

Infineon Technologies AG

Texas Instruments Incorporated

Renesas Electronics Corp.

NXP Semiconductors

Microsemi Corporation

Vishay Intertechnology Inc.

STMicroelectronics

Semiconductor Components Industries LLC

Toyota Industries Corp.

Valeo Group

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming eight years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within each of the regions and countries involved in the study. Furthermore, the report also caters the detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, the report shall also incorporate available opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Device Type:

Power Module

Power ICs

Power Discrete

By Application Type:

Body Electronics

Safety and Security Electronics

Powertrain

By Drive Type:

IC Engine Vehicle

Hybrid Vehicle

Pure Electric Vehicle

By Vehicle Type:

Passenger Cars

Commercial Vehicles

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

Rest of the World

Furthermore, years considered for the study are as follows:

Historical year – 2017, 2018

Base year – 2019

Forecast period – 2020 to 2027

Target Audience of the Global Automotive Power Electronics Market in Market Study:

Key Consulting Companies & Advisors

Large, medium-sized, and small enterprises

Venture capitalists

Value-Added Resellers (VARs)

Third-party knowledge providers

Investment bankers

Investors

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NXP Semiconductors  
Microsemi Corporation  
Vishay Intertechnology Inc.  
STMicroelectronics  
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