

IGBT and Super Junction MOSFET Market Size is Anticipated to Reach US\$ 50.78 Billion Witnessing 12.1% CAGR by 2034

The growing electric vehicle (EV) industry is driving the demand for IGBTs and super junction MOSFETs.

NEW YORK CITY, NY, UNITED STATES, March 19, 2025 /EINPresswire.com/ --
 The IGBT and Super Junction MOSFET market size is anticipated to reach US\$ 50.78 billion by 2034, witnessing a CAGR of 12.1% from 2024 to 2034.

IGBTs and MOSFETs are high-voltage switching devices usually utilized in high-power electronic instruments such as converters, inverters, and power supplies. MOSFETs operate by

differing the width of a channel amidst the source and drain nodes along with charge carriers flow. The voltage that is administered across the gate regulates the size of the channel, which decides the current flow into the drain. IGBTs are current regulators generating a magnetic field instead of an electric field and a few carrier-dominant currents. There is a growing demand for elevated presentation power compound semiconductors that reinforce speedy switching speeds, decreased heat generation, and enhanced productive system productivity with speedy acquisition of EVs is pushing the IGBT and super junction MOSFET market growth.



IGBT and super junction MOSFET market to hit USD 50.78 billion by 2034."

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IGBT and Super Junction MOSFET Market

IGBT and Super Junction MOSFET Market Size is Anticipated to Reach US\$ 50.78 Billion Witnessing 12.1% CAGR by 2034

https://www.polarismarketresearch.com/industry-analysis/igbt-and-super-junction-mosfet-market/request-for-sample?utm_source=EIN&utm_medium=EIN&utm_campaign=EIN&utm_id=01

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The IGBT and super junction MOSFET market segmentation is based on type, application, and region.

By type, the IGBT segment dominated the market in 2024 due to its extensive acquisition of elevated power acquisitions such as industrial automation, renewable energy systems, and electric vehicles. IGBTs provide better productivity in managing high voltage and high current functions, rendering them a favored option for power transformation and motor regulatory applications.

By application, the electric vehicle segment is expected to witness the fastest growth driven by global transformation towards green conveyance. IGBTs and SJ-MOSFETs play an important part in EV power trains, sanctioning productive energy transformation and motor regulation while lessening power losses.

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Asia Pacific led the IGBT and super junction MOSFET market in 2024 due to robust industrialization, speedy urbanization, and a strong electronics manufacturing habitat. The existence of spearheading semiconductor manufacturers, together with growing funding in green energy projects and electric vehicle generation, has notably assisted in the regional market expansion. For instance, a 2024 report by IEA signified that approximately 14 million contemporary electric cars were recorded globally in 2023, escalating the aggregate on roads to 40 million.

North America is anticipated to witness the fastest growth due to growing funding in electric movability, green energy amalgamation, and data center augmentation. The region's robust concentration on technological progressions and extensive acquisition of energy-efficient power electronics in industrial and commercial applications is driving the market growth.

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What is the growth rate of the [□□□□ □□□ □□□□□□ □□□□□□□□ □□□□□□](https://www.polarismarketresearch.com/industry-analysis/igbt-and-super-junction-mosfet-market/inquire-before-buying?utm_source=EIN&utm_medium=EIN&utm_campaign=EIN&utm_id=01) market?

The global market is projected to register a CAGR of 12.1% during the forecast period.

Which segment, by type, dominated the IGBT and super junction MOSFET market in 2024?

The IGBT segment dominated the market expansion in 2024.

What is IGBT and super junction MOSFET?

IGBTs and MOSFETs are high voltage switching devices usually utilized in high power electronic instruments such as converters, inverters and power supplies.

How is the market segmented?

The market is segmented on the basis of type, application, and region.

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