

SEMICONDUCTOR COMPANIES TYING WITH AUTOMOTIVE MANUFACTURERS TO DELIVER SOLUTIONS/PRODUCTS OF ENHANCED GRAPHICS AND ADVANCED MULTI-MEDIA TO MEET THE CUSTOMER EXPECTATIONS OF PREMIUM VEHICLES



OVERVIEW:

A semiconductor is a type of electronic component that has the capacity to conduct electricity in specific situations. Semiconductors are used in automobiles to guarantee that the connected component functions properly at all times. The fundamental elements needed for the effective operation of car electronics are silicon and germanium, which are utilized to make semiconductors used in automobiles. The installation of semiconductors in automobiles helps to regulate a variety of functions, including maintaining the safety of the vehicle and managing the air conditioning system. Modern technologies have been increasingly incorporated into the mass manufacturing of automobiles in recent years. Applications for 3D mapping, E.V. batteries, enhanced graphics, advanced multimedia, and augmented reality technology have all seen advancements. The sector's newest generation of mobility solutions has also been made possible by 5G networks. All these factors are boosting the growth in demand for semiconductors in the automotive industry.

CLIENT CHALLENGES/REQUIREMENTS:

The client from the semiconductor industry wanted to analyze opportunities for business collaboration or partnership with premium automotive manufacturers and the demand for various semiconductor technologies in the automotive industry.

The client approached Data Bridge Market Research to understand the current automotive semiconductor market scenario. The client asked for the following information/requirements:

- Potential/addressable market size for their product portfolio
- Overall qualitative and quantitative information related to semiconductor usage in the automotive industry
- Future growth rate for the required market
- Key factors such as drivers, opportunities, restraints and challenges which are influencing the growth of market
- Competitive analysis of leading market players
- Current and future technological trends related to automotive electronics
- Emerging applications of semiconductors in the automotive sector
- Regulatory factors for launching new product and business collaborations with automotive players
- Factors influencing the supply chain of automotive semiconductor
- List of potential semiconductor buyers from the premium automotive industry

DBMR APPROACH/RESEARCH METHODOLOGY:

Data Bridge Market Research followed in-depth market research to provide valuable insights based on client requirements. DBMR's approach or research methodology for automotive semiconductor market is explained below:

Market Trend Analysis: We conducted an in-depth analysis of the semiconductor market within the automotive industry, including the study of industry reports, and global, regional, and country-level analysis of market trends, supply chain analysis, key drivers, restraints, opportunities, and challenges which can impact the overall market growth of automotive semiconductor market

Competitive Analysis: We conducted an analysis of major market competitors based on various metrics such as company revenue analysis, market share analysis, vendor positioning grid, and application coverage grid, among others

Application/Use Case Identification: Through close collaboration with the client's stakeholders, we identified specific applications or use cases where semiconductors could bring significant value in the automotive sector. These included developing technologies for heads-up displays, autonomous driving aids, sensors, cell phone, and communication integration, and high-performance elements in automotive engines, among others

Technology Evaluation: We assessed various semiconductor technologies available in the automotive market, evaluating their compatibility with the client's objectives and requirements. Advanced Automotive electronics have emerged as the driving force behind the rapid technological advancements in the automotive sector. Various technological advancements such as miniaturized and flexible semiconductors were studied during the research

Regulatory Assessment: We conducted a thorough assessment of the regulatory landscape and safety considerations in automotive semiconductor technology

End User Analysis: We conducted in-depth research to analyze potential customers for semiconductors in the automotive industry along with possible applications

OUTCOME AND BUSINESS IMPACT:

The outcome and business impact of this research include:

- DBMR provided addressable market size along with future growth rate for the global addressable market
- DBMR also provided factors influencing the adoption of automotive semiconductors along with the impact of various factors on the semiconductor supply chain
- The report includes recent technological advancements along with future scope for improvements in the market-related products
- Potential buyers of automotive semiconductors were also disclosed in the research work
- Company share analysis part helped the client to understand the regional as well as country-level market competition for their product offerings
- In-depth market size in terms of products and solutions has helped the client to understand market potential in each segment of the market
- Analysis of regional and country level regulatory factors for launching new products and business collaborations has helped the client to make different strategies before entering or investing into the untapped markets
- DBMR delivered overall insights on futuristic trends of automotive semiconductor market to the client

Conclusion:

A large portion of the invention and development process for automobiles is accelerated by semiconductors, which also serve as a driving factor for expanding consumer demand globally. Data Bridge Market Research was able to provide in-depth qualitative as well as quantitative market analysis with the help of market research methodology, AI-driven analytical tools, and technologies. All parameters required by the client such as market trend analysis, technological advancements, competitive analysis, and study of potential customers among others were included in the research study. DBMR provided the client with actionable intelligence against its major competitors and changing market dynamics which helped the client to analyze the company's growth changes in terms of penetration, technology, and future endeavors enabling the client to make business strategies.

