+357 96 030922
info@marketpublishers.com

Global System Basis Chip Market Size Study & Forecast, by Vehicle Type (Passenger Cars, HCVs, Autonomous Vehicles, LCVs and AGVs) by Application (Powertrain, Body Electronics, Telematics & Infotainment, Safety, and Chassis) and Regional Forecasts 2025–2035

https://marketpublishers.com/r/G87CC528DA95EN.html
Date: November 2025
Pages: 285
Price: US$ 3,750.00 (Single User License)
ID: G87CC528DA95EN

Abstracts

The Global System Basis Chip (SBC) Market is valued at approximately USD 33.32 billion in 2024 and is expected to expand at a CAGR of 8.00% during the forecast period 2025–2035. A System Basis Chip serves as a vital component in automotive electronic control units (ECUs), integrating multiple functionalities such as voltage regulation, communication interfaces, and system monitoring into a single compact device. As the automotive industry pivots toward electrification, connectivity, and automation, SBCs have evolved into indispensable enablers of efficient vehicle communication and intelligent power management. The rapid penetration of advanced driver-assistance systems (ADAS), electric powertrains, and vehicle-to-everything (V2X) communication has significantly accelerated the adoption of system basis chips. Furthermore, the rising demand for energy-efficient semiconductors and the transition toward software-defined vehicles are expected to further stimulate market growth, as OEMs and Tier-1 suppliers strive for seamless integration and enhanced reliability in vehicle electronics.

The accelerating digital transformation across the automotive sector has amplified the significance of SBCs, which act as the “nervous system” connecting sensors, microcontrollers, and actuators within vehicles. The growing trend toward connected mobility and autonomous driving has led to an explosion in data transmission requirements, driving the need for scalable, high-performance chip architectures

+357 96 030922
info@marketpublishers.com

capable of supporting real-time processing and multi-protocol communication. According to the International Energy Agency (IEA), global electric vehicle sales surpassed 14 million units in 2023 and are projected to double by 2030, underscoring the critical role of SBCs in managing battery systems and power distribution networks efficiently. However, challenges such as chip shortages, high development costs, and supply chain disruptions have slightly constrained the market's momentum. Despite these headwinds, continuous innovation in 5nm and below semiconductor nodes and the rise of integrated safety and communication solutions are expected to reshape the competitive landscape of the SBC market over the next decade.

The detailed segments and sub-segments included in the report are:

By Vehicle Type:

Passenger Cars

Heavy Commercial Vehicles (HCVs)

Light Commercial Vehicles (LCVs)

Autonomous Vehicles

Automated Guided Vehicles (AGVs)

By Application:

Powertrain

Body Electronics

Telematics & Infotainment

Safety

Chassis

By Region:

+357 96 030922
info@marketpublishers.com

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

Middle East & Africa

UAE

Saudi Arabia

South Africa

Rest of Middle East & Africa

Passenger Cars Segment Expected to Dominate the Market

Among vehicle types, the passenger cars segment is projected to dominate the System Basis Chip market, accounting for the largest market share over the forecast period. The dominance stems from the surging integration of advanced electronic control systems in modern vehicles to enhance safety, comfort, and connectivity. SBCs are central to the architecture of next-generation passenger cars, facilitating communication between sensors and control units across various subsystems. The rise of electric and hybrid vehicles has further bolstered demand for SBCs in battery management and powertrain applications. Additionally, stringent emission standards and the push toward autonomous driving technologies are encouraging automakers to adopt SBCs that can deliver greater processing efficiency and lower power consumption, thereby driving sustained growth in this segment.

Telematics & Infotainment Segment Leads in Revenue Contribution

By application, the Telematics & Infotainment segment holds the largest revenue share in the market and is anticipated to maintain its lead during the forecast period. The segment's dominance is attributed to the rising adoption of connected car ecosystems and in-vehicle communication systems that rely heavily on efficient data transfer and processing. SBCs enable smooth integration of navigation, multimedia, and real-time telematics functionalities, thereby enhancing user experience and operational efficiency. As vehicles become increasingly software-centric, with features such as over-the-air updates, cloud-based analytics, and predictive diagnostics, SBCs have become fundamental in supporting these high-bandwidth operations. Meanwhile, the Safety and Powertrain segments are also witnessing accelerated adoption, driven by stringent regulatory frameworks and the demand for enhanced vehicle performance and reliability.

The key regions considered for the Global System Basis Chip Market study include North America, Europe, Asia Pacific, Latin America, and the Middle East & Africa. North America currently leads the global market, backed by robust technological infrastructure, high adoption of electric and autonomous vehicles, and extensive R&D investments from leading chip manufacturers. The region's well-established automotive electronics ecosystem continues to propel innovation, especially in vehicle networking and power management systems. Europe follows closely, driven by the region's strong emphasis on safety compliance, emissions regulations, and the rapid electrification of its automotive fleet. Meanwhile, the Asia Pacific region is anticipated to witness the fastest growth during the forecast period, fueled by expanding automotive production in China, India, and Japan, coupled with increasing government incentives for EV adoption. Latin America and the Middle East & Africa are expected to experience steady growth as connected mobility solutions gain traction in emerging economies.

Major market players included in this report are:

- NXP Semiconductors N.V.
- Infineon Technologies AG
- Texas Instruments Incorporated
- STMicroelectronics N.V.
- Microchip Technology Inc.
- Renesas Electronics Corporation
- ON Semiconductor Corporation
- Robert Bosch GmbH
- Toshiba Corporation

+357 96 030922
info@marketpublishers.com

Analog Devices Inc.

Rohm Semiconductor

Maxim Integrated Products Inc.

Continental AG

Denso Corporation

Melexis NV

Global System Basis Chip Market Report Scope:

Historical Data – 2023, 2024

Base Year for Estimation – 2024

Forecast Period – 2025–2035

Report Coverage – Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Regional Scope – North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope – Free report customization (equivalent to up to 8 analysts' working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values for the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within the countries involved in the study. The report also provides detailed information about crucial aspects, such as driving factors and challenges, which will define the future growth of the market. Additionally, it incorporates potential opportunities in micro-markets for

+357 96 030922
info@marketpublishers.com

stakeholders to invest, along with a detailed analysis of the competitive landscape and product offerings of key players. The detailed segments and sub-segments of the market are explained below:

Key Takeaways:

- Market Estimates & Forecast for 10 years from 2025 to 2035.
- Annualized revenues and regional-level analysis for each market segment.
- Detailed analysis of the geographical landscape with country-level analysis of major regions.
- Competitive landscape with information on major players in the market.
- Analysis of key business strategies and recommendations on future market approach.
- Analysis of the competitive structure of the market.
- Demand side and supply side analysis of the market.

Contents

CHAPTER 5. GLOBAL SYSTEM BASIS CHIP MARKET SIZE & FORECASTS BY VEHICLE TYPE 2025-2035

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

CHAPTER 8. COMPETITIVE INTELLIGENCE

+357 96 030922
info@marketpublishers.com

8.16. Melexis NV

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global System Basis Chip Market Size Study & Forecast, by Vehicle Type (Passenger Cars, HCVs, Autonomous Vehicles, LCVs and AGVs) by Application (Powertrain, Body Electronics, Telematics & Infotainment, Safety, and Chassis) and Regional Forecasts 2025–2035

Product link: https://marketpublishers.com/r/G87CC528DA95EN.html

Price: US$ 3,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G87CC528DA95EN.html