

Automotive 48V System Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

<https://marketpublishers.com/r/AB7BF335FFF9EN.html>

Date: October 2024

Pages: 150

Price: US\$ 4,850.00 (Single User License)

ID: AB7BF335FFF9EN

Abstracts

The Global Automotive 48V System Market was valued at USD 4.8 billion in 2023 and is expected to grow at a robust CAGR of 24.1% from 2024 to 2032. This growth is largely driven by the increasing demand for hybrid and electric vehicles (HEVs). The global electric vehicles market is anticipated to exceed USD 700 billion in 2023, with projections of reaching a market value of USD 1 trillion by 2030. As governments impose stricter emission standards and consumers become more eco-conscious, automakers continuously adopt hybrid technologies to decrease fuel consumption and production. The 48V system provides an efficient, cost-effective solution for mild hybrid vehicles (MHEVs), serving as a middle ground between traditional internal combustion engine (ICE) vehicles and fully electric vehicles (EVs). The growing popularity of MHEVs, particularly in regions such as Europe, Asia-Pacific, and North America, drives the demand for 48V systems.

These systems offer enhanced fuel efficacy, reduced emissions, and better performance, making them an appealing choice for both manufacturers and consumers focused on greener transportation. Stringent regulations surrounding fuel efficiency are a key factor in the market growth. Governments worldwide enforce tougher emission standards to combat climate change and reduce air pollution, compelling automakers to adopt technologies that improve fuel economy and lower carbon emissions. 48V systems used in mild hybrid vehicles enhance fuel efficiency through features like start-stop technology and regenerative braking, which optimize energy usage.

In 2023, the belt-driven segment captured over 40% of the market share and is projected to surpass USD 15 billion by 2032. This dominance is due to the cost-efficacy, simplicity, and integration of architecture with existing ICE designs. The belt-driven

starter generator (BSG) system is connected to the engine through a belt, offering a more straightforward and cost-effective solution compared to architectures such as in-wheel motors or fully electric drivetrains. When segmented by vehicle type, the passenger car sector accounted for approximately 84% of the market share in 2023. Passenger cars, including sedans, SUVs, and hatchbacks, are produced in larger volumes compared to commercial vehicles, which contributes to the greater adoption of 48V systems. These systems significantly improve fuel efficiency and align with stringent global regulations, especially in Europe and Asia Pacific.

The Asia Pacific region led the automotive 48V system market with over 41% of the market share in 2023 and is anticipated to exceed USD 14 billion by 2032. This growth is supported by the strong automotive manufacturing sector and government initiatives promoting vehicle electrification. China helps drive the adoption of 48V systems as it encourages lower carbon emissions and stricter environmental regulations

Contents

Report Content

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Research design
 - 1.1.1 Research approach
 - 1.1.2 Data collection methods
- 1.2 Base estimates and calculations
 - 1.2.1 Base year calculation
 - 1.2.2 Key trends for market estimates
- 1.3 Forecast model
- 1.4 Primary research & validation
 - 1.4.1 Primary sources
 - 1.4.2 Data mining sources
- 1.5 Market definitions

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry 360° synopsis, 2021 - 2032

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
- 3.2 Supplier landscape
 - 3.2.1 Raw material suppliers
 - 3.2.2 Component manufacturers
 - 3.2.3 System integrators
 - 3.2.4 Tier 1 suppliers
 - 3.2.5 OEMs (original equipment manufacturers)
- 3.3 Profit margin analysis
- 3.4 Price analysis of 48V system components
- 3.5 Technology & innovation landscape
- 3.6 Key news & initiatives
- 3.7 Regulatory landscape
- 3.8 Impact forces
 - 3.8.1 Growth drivers
 - 3.8.1.1 Rising demand for hybrid and electric vehicles globally

- 3.8.1.2 Increasing fuel efficiency regulations
- 3.8.1.3 Advancements in 48V technology
- 3.8.1.4 Growing integration with advanced driver assistance systems (ADAS)
- 3.8.2 Industry pitfalls & challenges
 - 3.8.2.1 High initial cost
 - 3.8.2.2 Limited range and performance
- 3.9 Growth potential analysis
- 3.10 Porter's analysis
- 3.11 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2023

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

CHAPTER 5 MARKET ESTIMATES & FORECAST, BY ARCHITECTURE, 2021 - 2032 (\$BN, UNITS)

- 5.1 Key trends
- 5.2 Belt-driven
- 5.3 Crankshaft-mounted
- 5.4 Dual-clutch
- 5.5 Transmission-mounted
- 5.6 Transmission output shaft

CHAPTER 6 MARKET ESTIMATES & FORECAST, BY VEHICLE, 2021 - 2032 (\$BN, UNITS)

- 6.1 Key trends
- 6.2 Passenger cars
- 6.3 Commercial vehicles
 - 6.3.1 Trucks
 - 6.3.2 Vans
 - 6.3.3 Buses

CHAPTER 7 MARKET ESTIMATES & FORECAST, BY COMPONENT, 2021 - 2032 (\$BN, UNITS)

- 7.1 Key trends
- 7.2 48V battery
- 7.3 Electric motor/generator
- 7.4 Power inverter
- 7.5 DC/DC converter
- 7.6 Others

CHAPTER 8 MARKET ESTIMATES & FORECAST, BY REGION, 2021 - 2032 (\$BN, UNITS)

- 8.1 Key trends
- 8.2 North America
 - 8.2.1 U.S.
 - 8.2.2 Canada
- 8.3 Europe
 - 8.3.1 UK
 - 8.3.2 Germany
 - 8.3.3 France
 - 8.3.4 Spain
 - 8.3.5 Italy
 - 8.3.6 Russia
 - 8.3.7 Nordics
- 8.4 Asia Pacific
 - 8.4.1 China
 - 8.4.2 India
 - 8.4.3 Japan
 - 8.4.4 South Korea
 - 8.4.5 ANZ
 - 8.4.6 Southeast Asia
- 8.5 Latin America
 - 8.5.1 Brazil
 - 8.5.2 Mexico
 - 8.5.3 Argentina
- 8.6 MEA
 - 8.6.1 UAE
 - 8.6.2 South Africa
 - 8.6.3 Saudi Arabia

CHAPTER 9 COMPANY PROFILES

- 9.1 Aisin Seiki
- 9.2 Aptiv PLC
- 9.3 BorgWarner
- 9.4 Continental AG
- 9.5 Denso Corporation
- 9.6 Ford Motor Company
- 9.7 Hyundai Motor Company
- 9.8 Infineon Technologies
- 9.9 Johnson Controls
- 9.10 Lear Corporation
- 9.11 Magna International
- 9.12 Mahle Group
- 9.13 Mitsubishi Electric
- 9.14 Nidec Corporation
- 9.15 Panasonic
- 9.16 Robert Bosch
- 9.17 Schaffler Group
- 9.18 Sumitomo Electric Industries
- 9.19 Valeo
- 9.20 ZF Friedrichshafen

I would like to order

Product name: Automotive 48V System Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2024 to 2032

Product link: <https://marketpublishers.com/r/AB7BF335FFF9EN.html>

Price: US\$ 4,850.00 (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/AB7BF335FFF9EN.html>