

# **X-by-Wire Systems Market: Global Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028**

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## **Abstracts**

### Market Overview:

The global X-by-wire systems market size reached US\$ 20.4 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 29.8 Billion by 2028, exhibiting a growth rate (CAGR) of 6.4% during 2023-2028.

X-by-wire systems refer to the replacement of mechanical or hydraulic systems with electronic control systems. Brake-by-wire, steer-by-wire, shift-by-wire, park-by-wire, and throttle-by-wire are some of the commonly used types of X-by-wire systems. These systems are equipped with electronically assisted control mechanisms that aid in eliminating the mechanical linkages involved in the system. X-by-wire systems assist in eliminating the use of various traditional components, such as intermediate shafts, hoses, pumps, vacuum servos, master cylinders, steering columns, and belts. These systems aid in reducing the overall weight of the vehicles and emission levels, increasing fuel efficiency and safety, and improving the response time. The X-by-wire systems replace the conventional mechanical control systems by using human-machine interfaces and electromechanical actuators.

### X-by-Wire Systems Market Trends:

The increasing demand for electric vehicles (EVs) across the globe is one of the key factors driving the growth of the market. EVs are widely adopted due to numerous advantages, such as reduced emissions and fuel consumption. In line with this, various autonomous car manufacturers are introducing electronic control units and sensors, which is positively impacting the market growth. Moreover, various technological advancements, such as the introduction of the lithium-ion capacitor and modular valve

that increases the intelligence by enabling tailor steering performance, are significantly providing an impetus to the market growth. Additionally, the rapid adoption of X-by-Wire systems on account of the rising demand for lightweight vehicles with improved efficiency is favoring the market growth. Other factors, such as the significant expansion in the automotive industry, increasing disposable income levels of the masses, and implementation of various government initiatives on lowering the carbon footprint, are creating a positive outlook for the market.

#### Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each sub-segment of the global X-by-wire systems market report, along with forecasts at the global, regional and country level from 2023-2028. Our report has categorized the market based on type and vehicle type.

#### Breakup by Type:

- Throttle-by-Wire System
- Brake-by-Wire System
- Steer-by-Wire System
- Park-by-Wire System
- Shift-by-Wire System

#### Breakup by Vehicle Type:

- Passenger Cars
- Commercial Vehicles

#### Breakup by Region:

- North America
  - United States
  - Canada
- Asia-Pacific
  - China
  - Japan
  - India
  - South Korea
- Australia
- Indonesia

Others  
Europe  
Germany  
France  
United Kingdom  
Italy  
Spain  
Russia  
Others  
Latin America  
Brazil  
Mexico  
Others  
Middle East and Africa

#### Competitive Landscape:

The competitive landscape of the industry has also been examined along with the profiles of the key players being AB SKF, Continental AG, Curtiss-Wright Corporation, Infineon Technologies AG, JTEKT Corporation, ME Mobil Elektronik GmbH, Nexteer Automotive, Orscheln Products L.L.C, Parker Hannifin Corporation, Robert Bosch GmbH, Tata Motors Limited, Volkswagen AG and ZF Friedrichshafen AG.

#### Key Questions Answered in This Report:

How has the global X-by-wire systems market performed so far and how will it perform in the coming years?

What has been the impact of COVID-19 on the global X-by-wire systems market?

What are the key regional markets?

What is the breakup of the market based on the type?

What is the breakup of the market based on the vehicle type?

What are the various stages in the value chain of the industry?

What are the key driving factors and challenges in the industry?

What is the structure of the global X-by-wire systems market and who are the key players?

What is the degree of competition in the industry?

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