

IAA Mobility 2025: Bosch is shaping the new vehicle world with intelligent hardware and software solutions

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Software-driven mobility will drive growth for Bosch's mobility business

- ▶ Stefan Hartung: "Bosch wants to continue playing a key role in shaping the industry in the age of software-driven mobility."
- ▶ On course to success: with brake-by-wire and steer-by-wire solutions, Bosch expects to achieve cumulative sales revenue of more than 7 billion euros by 2032.
- ▶ Markus Heyn: "Software-driven vehicles are user centered and are constantly learning through software updates."
- ▶ Future viability: Bosch will have invested a further nine-figure euro sum in its Vehicle Motion Management software by 2028.

Farmington Hills, Mich. – In the automotive industry, the Bosch name is synonymous with software. The technology company is demonstrating this to impressive effect at this year's IAA Mobility in Munich. And there's more: from a single source, Bosch also supplies hardware that's tailored to the possibilities of the software – a compelling unique selling point for the company worldwide. "Bosch knows its way around software and hardware. Without sophisticated hardware, even the smartest car won't move a single millimeter," said Dr. Stefan Hartung, chairman of the Bosch board of management, at the trade fair. "Our aim is to continue playing a key role in shaping the industry in the age of software-driven mobility by offering tailored, intelligent solutions."

Initial indications point to success: Bosch has established a foothold in the software-driven world. One example is Bosch's by-wire systems for braking and steering, which are considered a key technology for software-defined vehicles and automated driving. Here, the software takes control; a mechanical connection is no longer necessary. This is an important business for Bosch. With brake-by-wire and steer-by-wire, the company expects to achieve cumulative sales revenue of more than 7 billion euros by 2032. The market dynamics of this

key technology will continue to accelerate in the 2030s. By-wire technology is a taste of what lies ahead for vehicle construction overall. “In the future, hardware will be designed to fit software requirements,” said Dr. Markus Heyn, member of the Bosch board of management and chairman of the Mobility business sector.

Bosch wants to turn cars into personal assistants

In software-driven mobility, Bosch Mobility’s business continues to develop – from hardware with embedded software, to services, to completely independent software that manufacturers and partners then integrate into their ecosystems. “Whether stand-alone or interconnected, standardized, integrated, or decoupled – we can offer everything exactly as the customer wants it,” Hartung said. This is clearly having an impact: despite stagnating global vehicle production, weak demand, and delays in electromobility and automated driving, Bosch Mobility will grow slightly in the current year. The increase in sales revenue is expected to amount to a little less than 2 percent.

Up to today, a vehicle was never as new as the moment it was delivered. “In the future, however, its software will be continuously updated and it will be constantly learning by means of artificial intelligence,” Heyn said. “More than anything else, the new mobility is user centered.” This is what that looks like: Bosch’s Vehicle Motion Management software coordinates all vehicle movements by centrally controlling the brakes, steering, powertrain, and chassis. This improves coordination between the individual systems – and also means they can be adjusted to the driver’s preferences. A particularly smooth ride today? A little more agility tomorrow? And jolt-free stopping the day after? No problem – at the touch of a button, the car feels completely different. Incidentally, Bosch’s Vehicle Motion Management is decoupled from the hardware, which makes it easy to use in different vehicle architectures.

That’s not just theory, it’s happening: the Bosch software is in widespread use, with more than two dozen manufacturers in Europe, China, and Japan already having adopted it. Over the next three years, Bosch will be investing a nine-figure sum in Vehicle Motion Management and expanding its modular software and function portfolio across all domains. Vehicle Motion Management from Bosch works even better in combination with by-wire solutions, because the software can control the respective braking and steering actuators independently of the driver’s actions – for greater safety, improved convenience, or better vehicle dynamics.

Bosch's smart software makes the difference

Bosch's ADAS product family is also software-driven. For intelligent driver assistance systems, vehicle manufacturers can choose from three preconfigured variants that can then be put into production quickly and in a brand-specific way. Here, too, hardware and software can be integrated or purchased separately, depending on customer requirements. Both options benefit from a holistic approach: since Bosch understands the interaction between hardware and software, it can offer individually optimized solutions that can be seamlessly integrated into existing environments.

Modern vehicles, which are designed and developed from a software standpoint, make use of ever fewer, but more powerful vehicle computers. These are a growth driver for Bosch: its high-performance computer business is currently growing by more than 5 percent every year, with automakers such as the BMW Group among the customers. Bosch also offers central vehicle computers that combine various functions, such as in driver assistance and infotainment, on just one control unit and one system on a chip (SoC). This saves space, costs, and energy. These systems have a modular structure and can flexibly integrate software from different manufacturers. In China, Bosch is supplying a high-performance computer to SAIC-GM to create a cockpit featuring artificial intelligence. Thanks to this AI cockpit, drivers can talk to their car in a completely natural way and interact with it as if it were a human being.

Bosch's knowledge and expertise make it a sought-after partner

The software-driven future is fundamentally changing the automotive industry. Bosch wants to seize the opportunities this new world presents – and is in a good position to do so. Hardly any other company combines hardware and software expertise and global presence as seamlessly as Bosch. This makes the company a flexible and reliable partner for the development of intelligent and connected vehicles. After all, strategic partnerships are crucial, particularly where new business models and scalable software systems are concerned. In China, Bosch is already working with WeRide and Horizon Robotics on the development of systems for assisted and automated driving. In Europe, Bosch and the VW subsidiary Cariad are strategic partners in this area. Bosch assumes that such alliances will become increasingly important in the future, and that the proportion of software in vehicles will continue to rise – and with it, the benefits for drivers in the form of even safer and more convenient mobility.

Press photos and infocharts in Bosch Media Service at www.bosch-press.com.

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Bosch press conference: Monday, September 8, 2025, 11:00–11:20 CEST: with Dr. Stefan Hartung, chairman of the board of management of Robert Bosch GmbH, and Dr. Markus Heyn, member of the Bosch board of management and chairman of Bosch Mobility, at the Bosch booth D01 in hall B3 and via [livestream on the Bosch Media Service](#).

Bosch at IAA Mobility | Open Space: The IAA Open Space in downtown Munich will be open from 11:00 to 21:00 CEST from September 9 to 13, 2025. On Sunday, September 14, 2025, the IAA Open Space will be open for guests from 10:00 until 17:00 CEST. During the IAA, visitors can take the Cargo Line and other innovations, as well as many digital features offered by Bosch eBike Systems, for a test ride on the cycling test track in Munich's Englischer Garten park. In addition, Bosch e-bike product experts will be on hand to answer questions in the Open Space at Odeonsplatz.

About Bosch

Having established a presence in North America in 1906, today the Bosch Group employs more than 41,000 associates in more than 100 locations in the North American region (as of Dec. 31, 2024). In 2024, Bosch generated consolidated sales of \$17.3 billion in the U.S., Mexico and Canada. For more information visit www.bosch.us, www.bosch.mx and www.bosch.ca.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 418,000 associates worldwide (as of December 31, 2024). The company generated sales of 90.3 billion euros (\$97.7 billion USD) in 2024. Its operations are divided into four business sectors: Mobility, Industrial Technology, Consumer Goods, and Energy and Building Technology. With its business activities, the company aims to use technology to help shape universal trends such as automation, electrification, digitalization, connectivity, and an orientation to sustainability. In this context, Bosch's broad diversification across regions and industries strengthens its innovativeness and robustness. Bosch uses its proven expertise in sensor technology, software, and services to offer customers cross-domain solutions from a single source. It also applies its expertise in connectivity and artificial intelligence in order to develop and manufacture user-friendly, sustainable products. With technology that is "Invented for life," Bosch wants to help improve quality of life and conserve natural resources. The Bosch Group comprises Robert Bosch GmbH and its roughly 490 subsidiary and regional companies in over 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. Bosch's innovative strength is key to the company's further development. At 136 locations across the globe, Bosch employs some 87,000 associates in research and development. The company was set up in Stuttgart in 1886 by Robert Bosch (1861–1942) as "Workshop for Precision Mechanics and Electrical Engineering." The special ownership structure of Robert Bosch GmbH guarantees the entrepreneurial freedom of the Bosch Group, making it possible for the company to plan over the long term and to undertake significant upfront investments in the safeguarding of its future. Ninety-four percent of the share capital of Robert Bosch GmbH is held by Robert Bosch Stiftung GmbH, a limited liability company with a charitable purpose. The remaining shares are held by Robert Bosch GmbH and by a company owned by the Bosch family. The majority of voting rights are held by Robert Bosch Industrietreuhand KG. It is entrusted with the task of safeguarding the company's long-term existence and in particular its financial independence – in line with the mission handed down in the will of the company's founder, Robert Bosch.

Additional information is available online at www.bosch.com, www.bosch-press.com.

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