Press Briefing

DENSO
Crafting the Core

JAPAN MOBILITY SHOW 2025

Press Briefing Remarks by Mr. Hayashi – October 30th, 2025
Shinnosuke Hayashi, President and CEO

DENSO CORPORATION

Good morning, I'm Shinnosuke Hayashi from DENSO.
Thank you very much for joining us today.

Since its founding, DENSO's journey has evolved alongside the automobile. By focusing on the environment and safety, we have addressed social challenges and expanded our product domains from starter and alternator systems to powertrain, body, thermal, and safety products—covering a wide range of core vehicle functions.
To ensure vehicle performance and reliability, we have also pursued deep technological expertise in each domain, evolving our offerings from components to systems.
This breadth and depth of technology are unique strengths of DENSO, supporting both the evolution of automobiles and the future of mobility.
Today, the world is steadily moving toward carbon neutrality. In the automotive industry, reducing environmental impact and responding to increasingly diverse powertrains have become key challenges.
Leveraging our fuel efficiency and emission reduction technologies, along with our electrification expertise, DENSO continues to tackle these challenges by offering products for engine vehicles, HEVs, PHEVs, battery EVs, and FCEVs.

Now, we are pleased to announce the development of a new inverter—the core component of electric vehicles.

The key to inverter performance lies in semiconductor and cooling technologies.
Through extensive R&D—from circuit design to manufacturing processes—we've realized a proprietary 3D structure on SiC(silicon carbide) semiconductor wafers, maximizing power efficiency. Additionally, by applying cooling technologies cultivated through car air conditioning systems, we've achieved a flat, double-sided cooling structure for the power card. By optimally integrating these technologies as a system, we have reduced power loss by 70% and downsized the core module by about 30% compared to conventional products.
This results in the world's highest power density, contributing to improved energy efficiency across the vehicle.

Meanwhile, in the era of Software-Defined Vehicles (SDVs), vehicle intelligence is accelerating through advanced driver assistance and autonomous driving.
System-on-Chip (SoC) semiconductors are gaining attention as high-performance digital components capable of running sophisticated software.
Unlike general-purpose SoCs, automotive SoCs must withstand harsh conditions unique to

vehicles.
For over half a century, DENSO has tackled technical challenges such as heat, noise, and vibration in semiconductor development.
Building on this experience, we are developing original SoCs that deliver high performance and reliability tailored to automotive needs.
We are also advancing the development of an “Integrated Mobility Computer” that controls multiple domains across the vehicle, leveraging our expertise in ECU development across all areas.
This computer will help accelerate the spread of vehicle intelligence, contributing to safer and more comfortable mobility for more users.
We aim to launch the Integrated Mobility Computer equipped with our original SoC in 2029.
Production is planned at our next-generation factory in Aichi Prefecture (Zenmyo Plant), which will use advanced technologies to operate 24 hours a day.
DENSO will extend its efforts toward the environment and safety beyond the evolution of automobiles to encompass the entire mobility society.

At this year’s Japan Mobility Show, we are showcasing initiatives that expand these efforts to society —such as energy management across entire cities and safe, comfortable mobility realized through vehicles connected to society.
We invite you to visit our exhibits and experience the future of mobility with DENSO.

“With refined technology, we open the future.”

We have taken on numerous challenges through the power of technology.
The driving force behind this is the passion of the people involved in manufacturing.

DENSO will continue to unite the passion of our employees, and together with automakers and many partners who share our vision for the future, we will keep taking on new challenges.

Thank you very much for your attention.