



Mercedes-Benz
Research & Development North America

Press Information

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Three Decades of Driving the Future: Mercedes-Benz Celebrates 30 Years of Automotive Innovation in Silicon Valley

- Mercedes-Benz was the first automotive manufacturer to establish a Research & Development Center in Silicon Valley 30 years ago
- Mercedes-Benz Research & Development North America, Inc. (MBRDNA) has an impressive portfolio of cutting-edge technologies that have culminated in nearly 100 U.S. patents awarded to Mercedes-Benz and its affiliated entities
- Today, a powerhouse of more than 600 employees across six U.S. locations is pioneering the most desirable technologies from North America for Mercedes-Benz

Sunnyvale, California. Mercedes-Benz Research & Development North America, Inc. (MBRDNA), a Silicon Valley-headquartered research and development subsidiary of Mercedes-Benz AG, proudly celebrated 30 years of unrivaled technological advancements in automotive innovation. The subsidiary's history is a story of trailblazing industry firsts – first automaker to deliver full [iPod](#) music navigation, first German premium automotive manufacturer to bring Apple's ["CarPlay"](#) infotainment system based on the iPhone into cars, first automaker in the U.S. to launch the [Google "Send-to-Car"](#) functionality in a vehicle, and most recently the first ChatGPT integration into selected Mercedes-Benz models via MBUX. For three decades, MBRDNA has served as an incubator of revolutionary ideas that have transformed the automotive landscape.

"Innovation is at the core of our DNA. For 30 years now, MBRDNA has played an integral part in combining the most innovative technologies with Mercedes-Benz engineering excellence. Among other things, it is thanks to their ceaseless efforts that we're ready for 2025 – and the years to come. And we've got the CLA and MB.OS right around the corner to prove it."

Ola Källenius, Chairman of the Board of Management of Mercedes-Benz Group AG

"Our global RD network plays an important role in creating the world's most desirable cars. Today, digitalization and the electrification of the drivetrain revolutionize what this means. MBRDNA allows us to tap into Silicon Valley's unique ecosystem of tech giants, startup companies, and world-renowned universities.



This helps us to push the envelope in exploring ways in which AI can enhance our customers' experience – from automated driving to hyper-personalization.”

Markus Schäfer, Member of the Board of Management of Mercedes-Benz Group AG,
Chief Technology Officer, Development & Procurement

MBRDNA was first established in 1994, with the clear mission to arrange contacts and cooperative projects with other research institutions in the US and observe technological developments on site. From its early focus on information technology and microelectronics, MBRDNA has evolved into a pioneering force where German engineering excellence converges with Silicon Valley's transformative innovation culture.

Today, MBRDNA plays a key part in solidifying Mercedes-Benz's technological leadership, particularly in the fields of autonomous driving, AI experience, e-drive, and advanced exterior design. MBRDNA's innovative footprint spans six strategic locations across North America - from Ann Arbor and Farmington Hills, Michigan, to Seattle, Washington, and throughout California in Sunnyvale, Long Beach, and Carlsbad - where more than 600 visionaries advance the brand's legacy of engineering excellence. This 30-year milestone is not simply a marker of time, but a tribute to MBRDNA's commitment to envisioning and engineering the most desirable cars for Mercedes-Benz in North America.

30 Years of Innovation

Throughout its 30-year journey, MBRDNA has an impressive portfolio of cutting-edge technologies that have culminated in nearly 100 U.S. patents awarded to Mercedes-Benz, including those now held by Daimler Trucks North America. An overview of the latest examples.

Personalizing Driving Experiences: AI-Powered In-Car Experiences

At the forefront of user experience innovation, MBRDNA reimagines the relationship between driver and vehicle through intuitive design principles. By harnessing the power of artificial intelligence (AI), the team creates adaptive environments that learn, anticipate, and seamlessly cater to individual preferences, transforming complexity into user-centric simplicity.

For example, the “Zero-Layer” and intelligent “Routines” feature learn user preferences to automate comfort settings. Now further enhanced by ChatGPT and GPT-4o integration, the MBUX Voice Assistant delivers an even more intuitive and natural conversational experience, creating a truly personalized in-vehicle environment. Starting with the new CLA, MBUX Virtual Assistant will also integrate Gemini on Google Cloud and Google Places data, further enhancing the user experience of conversational POI search.

Redefining Tech Luxury: From F015 to DRIVE PILOT

MBRDNA contributed significantly to the Mercedes-Benz research vehicle [F015](#) presented in 2015. F015 was one of Mercedes-Benz's visions of autonomous driving of the future. MBRDNA designed the user experience and the software implementation for this luxury sedan focused on autonomous driving, showcasing how the



car could evolve beyond its traditional role as a mere transportation into a private retreat for relaxation and productivity.

A decade later, Mercedes-Benz has made great strides toward giving passengers the freedom to use their valuable time on the road in manifold ways. MBRDNA's dedicated teams have been instrumental in developing and certifying Mercedes-Benz DRIVE PILOT^[1], the world's first SAE-Level 3^[2] system for conditionally automated driving with internationally valid type approval within the U.S. DRIVE PILOT first received certification in Germany in 2021 followed by Nevada and California in 2023. In the U.S., each state requires separate certification.

In another industry first, in December 2023, Mercedes-Benz received testing permits valid for special, turquoise-colored exterior marker lights for automated driving on freeways in Nevada and California. This innovative feature communicates the automated driving system's status to the outside world, representing another leap forward in the integration of autonomous vehicles into everyday traffic.

Electrifying Progress: Chartering the Course Towards a Sustainable Future

MBRDNA is driving innovations across powertrain technology, lightweight engineering, and aerodynamic design. MBRDNA's powertrain and advanced exterior design teams were part of the global, cross-functional team that created the all-electric technology program Mercedes-Benz VISION EQXX. The VISION EQXX has demonstrated an unprecedented range of more than 1,200 kilometers or 745 miles on a single battery charge, thanks in part to its remarkably aerodynamic exterior design with a benchmark drag coefficient of cd 0.17. In other words, the car is more aerodynamic than an American football.

The Road Ahead: Shaping the Future of the automobile

As Mercedes-Benz's bridgehead to the unparalleled innovation ecosystem in Silicon Valley, MBRDNA stands at the cusp of even greater advancements. Together with NVIDIA, the global leader in accelerated computing, Mercedes-Benz is creating an AI computing infrastructure to enable upgradable automated driving functions for its cars.

Mercedes-Benz further strengthens its innovation pipeline through strategic academic alliances, funding educational initiatives at the Stanford University School of Engineering and the University of California San Diego's Contextual Robotics Institute. This allows Mercedes-Benz to stay at the forefront of AI and automated driving research and create valuable pathways for emerging talent to deliver real-world automotive solutions.

Building on this three-decade legacy of innovation, MBRDNA is poised to embark on a new chapter in automotive excellence, redefining the automotive landscape for decades to come.

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[1] Availability and use of future DRIVE PILOT features on motorways depends on options, countries, and relevant laws.



[2] The norm SAE J3016 defines six levels of driving automation (Level 0 to Level 5). SAE Level 3 (conditional automated driving): The automated driving function takes over certain driving tasks. However, a driver is still required.

About MBRDNA

As a U.S.-based research and development subsidiary of Mercedes-Benz, Mercedes-Benz Research & Development North America (MBRDNA) is responsible for the development of advanced technologies spanning autonomous driving, electric vehicles, connected car solutions, and software development, among other areas of focus. MBRDNA currently employs more than 600 developers, technicians, engineers, and designers who collaborate closely with Mercedes-Benz R&D facilities around the globe.

Learn more about current topics and events related to MBRDNA on our @Mercedes-Benz Research & Development North America, Inc. LinkedIn channel at <https://www.linkedin.com/company/mbrdna/>. Learn more about our open positions at <https://jobs.lever.co/MBRDNA>

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