

CES 2025: Arm and Nvidia advance automotive AI with Nvidia DRIVE AGX Thor

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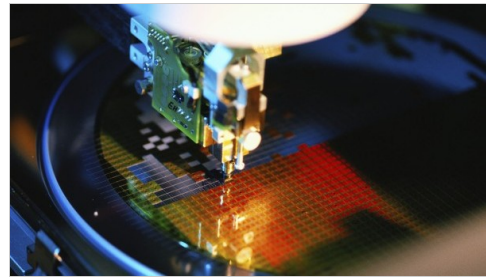
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The Nvidia DRIVE AGX Thor, leveraging Arm Neoverse V3AE, marks a significant evolution in autonomous driving and AI applications

According to a press release on Jan. 7, Arm and Nvidia have collaborated to advance automotive AI with Nvidia DRIVE AGX Thor.



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Showcased at this year's Consumer Electronics Show (CES) is the Nvidia DRIVE AGX Thor, a centralized compute system based on the Nvidia Blackwell architecture. This system is notable for being the first to utilize Arm Neoverse V3AE, marking Arm's inaugural Neoverse CPU tailored for automotive applications. Nvidia DRIVE AGX Thor, which benefits from Nvidia's AI prowess combined with the capabilities of the Arm compute platform, offers advanced AI capabilities sought after by both consumer and commercial fleets. Its adoption by numerous leading original equipment manufacturers signifies a significant step toward the next generation of software-defined vehicles (SDVs).

The Nvidia DRIVE AGX Thor, powered by Arm Neoverse V3AE, facilitates a range of generative AI applications within the automotive sector. This includes automated driving and parking, monitoring of drivers and passengers, and enhanced cockpit functionalities, all while maintaining a centralized, secure platform. The system offers improved efficiency by reducing the need for multiple discrete computational stages, thus achieving higher fidelity or quicker response times for specific workloads, especially in autonomous driving use cases of Level 3 or higher.

The launch of Arm Neoverse V3AE in March 2024 marked several industry firsts, such as the introduction of Armv9-based technologies into the automotive market, offering enhanced AI, security and virtualization capabilities. With these advancements, along with new virtual platforms from ecosystem partners, the automotive development cycle is expected to accelerate by up to two years.

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