

Volvo leverages Nvidia partnership for next-gen software-defined cars

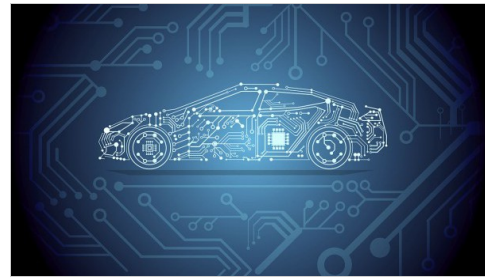
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Utilizing Nvidia's advanced computing, Volvo highlights human-centric technology in cars such as the EX90, aiming for improved safety and AI capabilities



Source: Getty/kaptnali

Volvo Cars is leveraging its long-term strategic partnership with Nvidia to launch software-defined vehicles. The core compute system of the Volvo EX 90 electric sport utility vehicle (SUV) is powered by the Nvidia Drive Orin system-on-a-chip (SoC), capable of performing over 250 trillion operations per second (TOPS). This advanced computing system supports everything in the car, from AI-based safety and driving-assistance systems to future autonomous driving capabilities and delivering top-notch customer experiences.

Volvo plans to enhance its partnership with Nvidia further by integrating Nvidia Drive Thor into future cars, significantly boosting computational capabilities to up to 1,000 TOPS, four times as many operations per second as one Drive Orin SoC while offering seven times greater energy efficiency.

This upgrade, featuring the Nvidia Blackwell graphics processing unit (GPU) architecture, will enable more sophisticated driving-assistance features, autonomous driving development, and generative AI-based capabilities and in-car experiences.

“With NVIDIA DRIVE Thor in our future cars, our in-house-developed software becomes more scalable across our product line-up, which will help us to continue to improve the safety in our cars, deliver best-in-class customer experiences, reduce our costs and increase our margins,” said Jim Rowan, CEO of Volvo.

Additionally, Volvo Cars is exploring AI's potential through Zenseact, its fully owned software company, utilizing Nvidia DGX systems for AI model training. This AI supercomputing platform will enhance the training efficiency of both current and future AI models, bolstering Volvo's commitment to safety and the development of autonomous driving.

“The NVIDIA DGX AI supercomputer will supercharge our AI training capabilities, making this in-house AI training data center one of the largest in the Nordics,” said Anders Bell, chief engineering and technology officer at Volvo. “By leveraging NVIDIA technology and setting up the data center, we can pave a quick path to high-performing AI, ultimately helping make our products safer and better.”

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