

NVIDIA Unveils NVIDIA DRIVE Atlan, an AI Data Center on Wheels for Next-Gen Autonomous Vehicles

Fusing AI and BlueField Technology on a Single Chip, New SoC Delivers More Than 1,000 TOPS and Data-Center-Grade Security to Autonomous Machines

GTC -- NVIDIA today revealed its next-generation AI-enabled processor for autonomous vehicles, NVIDIA DRIVE™ Atlan, which will deliver more than 1,000 trillion operations per second (TOPS) and targets automakers' 2025 models.

The NVIDIA DRIVE Atlan system-on-a-chip — the newest addition to NVIDIA's centralized compute roadmap for autonomous vehicles — fuses AI and software with the latest in computing, networking and security for unprecedented levels of performance and security.

DRIVE Atlan will include NVIDIA's next-generation GPU architecture, new Arm CPU cores, as well as deep learning and computer vision accelerators. This data-center-like performance provides automakers ample compute capabilities to build software-defined vehicles that are richly programmable and perpetually upgradeable through secure, over-the-air updates.

"The transportation industry needs a computing platform that it can rely on for decades. The software investment is too immense to repeat for each car. NVIDIA DRIVE is the most advanced AI and AV computing platform, with rich global software and developer ecosystems, and architecturally compatible for generations," said Jensen Huang, founder and CEO of NVIDIA. "Today, we are announcing the next extension of our roadmap — our new DRIVE Atlan is truly a technical marvel, fusing all of NVIDIA's strengths in AI, auto, robotics, safety and BlueField-secure data centers to deliver safe, autonomous-driving fleets."

Data-Center-Grade Security Technology

DRIVE Atlan will integrate an NVIDIA BlueField® data processing unit (DPU), which delivers a broad range of advanced networking, storage and security services to support complex compute and AI workloads found in autonomous vehicles. BlueField offers full data-center-infrastructure-on-a-chip programmability, armed with a safe security enclave to prevent data breaches and cyberattacks. DRIVE Atlan is designed from the ground up to handle the large number of AI applications that run simultaneously in autonomous machines, safely and securely.

Continuous NVIDIA DRIVE Improvement Across Generations

The company's original processor for autonomous driving, NVIDIA DRIVE Xavier™ (30 TOPS) is found in production cars and trucks today, while NVIDIA DRIVE Orin™ (254 TOPS) has already been selected by leading automakers for production timelines starting in 2022. NVIDIA DRIVE Atlan will extend the NVIDIA DRIVE family of SoCs' leadership for vehicles' 2025 production targets and beyond.

Since NVIDIA DRIVE Atlan, Orin and Xavier are all programmable through open CUDA® and TensorRT™ APIs and libraries, developers can leverage their investments across multiple product generations as they establish their future AV production roadmaps.

Watch Huang's [GTC21 keynote address](#), where he announced NVIDIA DRIVE Atlan and more, and register for free for [GTC21](#), running April 12-16.

About NVIDIA

[NVIDIA](#)'s (NASDAQ: NVDA) invention of the GPU in 1999 sparked the growth of the PC gaming market and has redefined modern computer graphics, high performance computing and artificial intelligence. The company's pioneering work in accelerated computing and AI is reshaping trillion-dollar industries, such as transportation, healthcare and manufacturing, and fueling the growth of many others. More information at <https://nvidianews.nvidia.com/>.

Certain statements in this press release including, but not limited to, statements as to: the benefits, performance, abilities and features of NVIDIA DRIVE Atlan and NVIDIA BlueField DPUs; NVIDIA DRIVE Atlan targeting automakers' 2025 models and it extending the NVIDIA DRIVE family of SoCs' leadership for future vehicles; NVIDIA DRIVE Atlan providing automakers capabilities to build software-defined vehicles and what it will include; the transportation industry needing a platform it can rely on; the software investment in cars; NVIDIA DRIVE being the most advanced AI and AV computing platform, its impact and it being architecturally compatible for generations; the extension of our product roadmap; NVIDIA Atlan's benefits and its ability to deliver safe autonomous-driving fleets; and NVIDIA DRIVE Atlan integrating an NVIDIA BlueField DPU and its benefits and impact are forward-looking statements that are subject to risks and uncertainties that could cause results to be materially different than expectations. Important factors that could cause actual results to differ materially include: global economic conditions; our reliance on third parties to manufacture, assemble, package and test our products; the impact of technological development and competition; development of new products and technologies or enhancements to our existing product and technologies; market acceptance of our products or our partners' products; design, manufacturing or software

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