

The NVIDIA DRIVE® autonomous vehicle (AV) platform is a full-stack solution for highly automated, supervised driving through fully autonomous operation. It includes active safety, automated driving, and parking—plus AI cockpit capabilities—scaling from Level 2+ to Level 5.

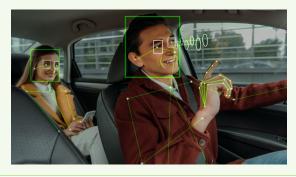
SYSTEM HARDWARE AND ARCHITECTURE:

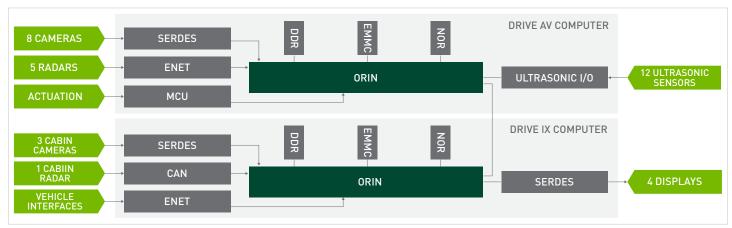
NVIDIA DRIVE Orin™ SoC:

- > Integrated next-generation GPU architecture and Arm Cortex-A78AE CPU cores
- > 254 TOPS—more than 8X the performance of the previous-generation SoC
- > Adherence to systematic safety standards such as ISO 26262 ASIL-D
- > Architecture that scales from Level 2+ ADAS to Level 5 AV

The NVIDIA DRIVE Level 2+ solution is powered by two NVIDIA DRIVE Orin systems-on-a-chip—one for active safety, automated driving, and parking applications, and one for AI cockpit capabilities. It also includes the NVIDIA DRIVE Hyperion™ sensor suite for developers to evaluate their AV platform. DRIVE Hyperion L2+ configuration includes:

- Eight exterior cameras, five radars, and twelve ultrasonic sensors that interpret scenes with 360-degree awareness to produce a comprehensive environmental model.
- > Three interior sensing cameras and one in-cabin radar for driver and occupant monitoring.



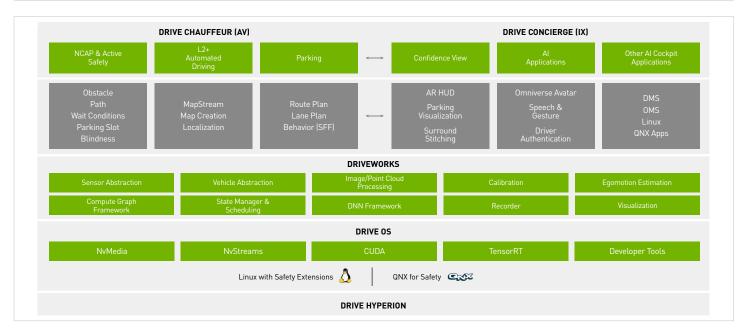


NVIDIA DRIVE SOFTWARE

NVIDIA DRIVE SDK provides a complete development environment for building and deploying state-of-the-art autonomous software applications, including perception, localization, mapping, planning and control, driver monitoring, and natural language processing. It includes NVIDIA DRIVE OS for Safety SDK for safety assessment-ready accelerated computing and NVIDIA DriveWorks for comprehensive middleware functions. NVIDIA DRIVE AV and DRIVE IX software applications provide the DNNs and advanced algorithmic modules for perception, mapping, and planning—including NVIDIA Safety Force Field™—as well as intelligent cockpit capabilities.

SUPPORTED FEATURES:

Active Safety	Highway Driving	Urban Driving and Parking	Cockpit
 Automatic Emergency Braking Automatic Emergency Steering Lane Departure Warning Lane Keeping Assist Blind Spot Monitoring Traffic Sign Assist Stop Sign and Traffic Light Assist 	 Adaptive Cruise Control Lane Centering Driver-Initiated Lane Change Automatic Lane Change Lane Fork to Follow Route (Highway Interchange) Lane Merge Speed Adaptations for Curves and Speed Limit Changes 	 > Traffic Light Stop at Intersection > Protected Intersection Turn > Unprotected Intersection Turn > Roundabout > Yield to Pedestrian Crossing > Parking Assist > Remote Parking 	 Confidence View Augmented Reality AR HUD Parking Visualization Fused Awareness Conversational AI Driver/Occupant Monitoring Activity Monitoring



END-TO-END SOLUTION

The NVIDIA DRIVE Level 2+ solution is trained and validated on NVIDIA DRIVE Infrastructure—a true end-to-end development process based on a unified computing architecture. It starts with NVIDIA DGX™ systems, which enable streamlined, large-scale DNN training and optimization. Using the power of GPUs and AI, developers can comprehensively train DNNs for autonomous vehicle perception, planning, control, and more. The NVIDIA DRIVE Constellation™ and NVIDIA DRIVE Sim™ platforms provide a virtual proving ground with a near-infinite variety of driving conditions to test and validate DNNs on the same hardware as in the vehicle. Combined with the DRIVE AV solution, DRIVE Infrastructure creates a continuous development cycle for constant improvement.

This software-defined vehicle platform delivers continual enhancements for the end consumer as well. With over-the-air updates, automakers can deliver new features and capabilities throughout the life of the car, extending joy to the customer and creating new, transformative business models.

