NVIDIA DRIVE

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.

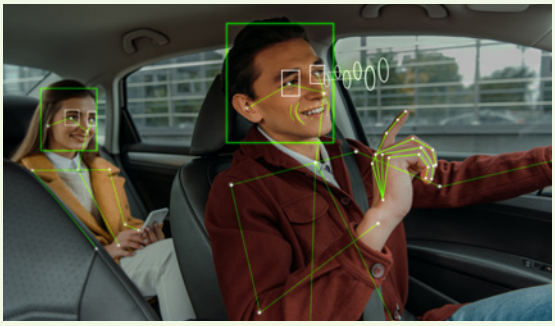
SYSTEM HARDWARE AND ARCHITECTURE:

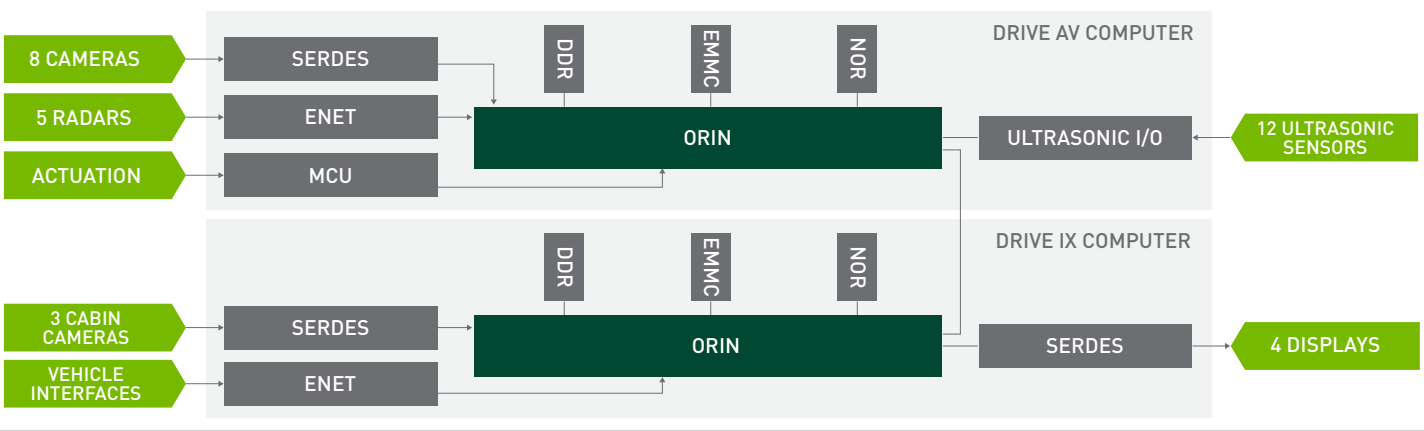
NVIDIA® Orin™ SoC:

- Integrated next-generation GPU architecture and Arm CA78-AE 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 scales from ADAS to Level 5

The NVIDIA DRIVE Level 2+ solution is powered by two NVIDIA 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 includes:

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



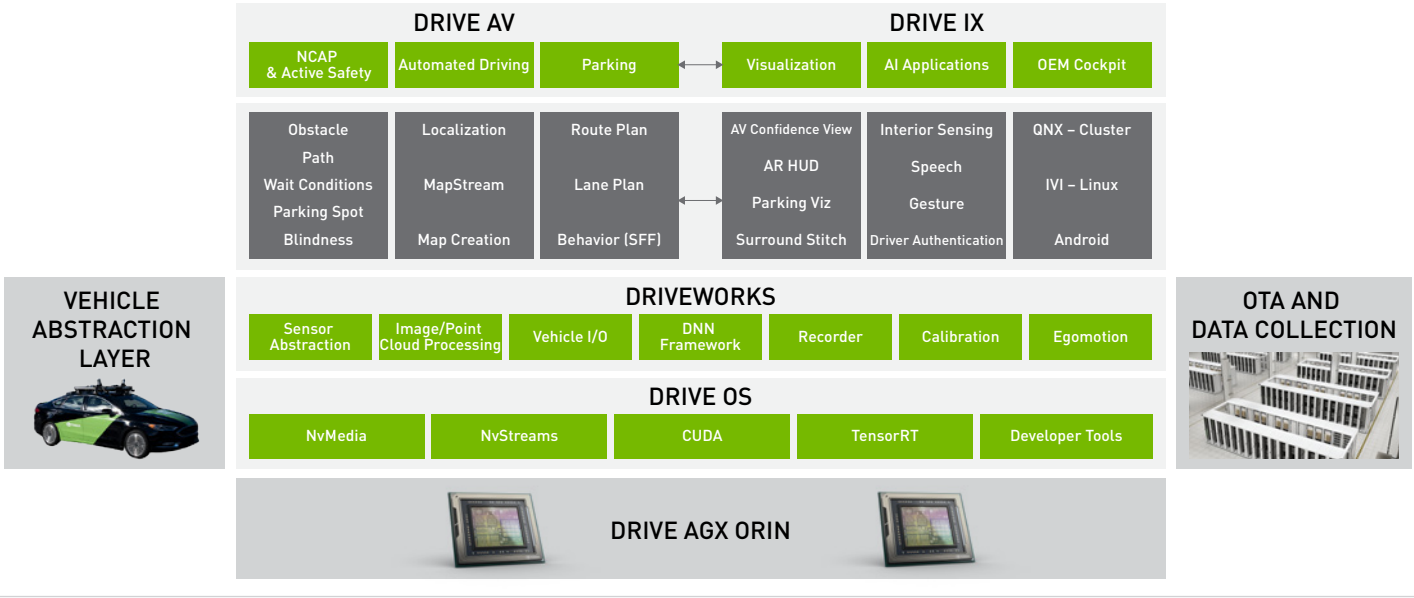


NVIDIA DRIVE SOFTWARE

The **NVIDIA DRIVE Software** stack is a complete solution to build and deploy state-of-the-art AV applications, including: perception, localization, mapping, planning and control, driver monitoring, and natural language processing. It includes the **NVIDIA DRIVE OS** safe operating system for accelerated computing and the **NVIDIA DriveWorks SDK** for comprehensive middleware functions. **NVIDIA DRIVE AV** and **DRIVE IX** stacks 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 > Road Lane Departure Mitigation > Speed Limit Information > Speed Limitation > Traffic Light Assist > Reversing Assist	> Adaptive Cruise Control > Lane Keep Assist > Driver-Initiated Lane Change > Automatic Lane Change > Lane Fork to Follow Route (Highway Interchange) > Lane Merge > Speed Adaptations for Curves and Speed Limit Changes > Approaching Stopped Traffic	> Traffic Light Stop at Intersection > Protected Intersection Turn > Unprotected Intersection Turn > Roundabout > Yield to Pedestrian Crossing > Parking Assist > Parking UX > 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™** platform provides 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.

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