



# YOUR JOURNEY, TRANSFORMED

## ACCELERATED AI PERFORMANCE:

The dedicated Neural Processing Unit (NPU), designed for multimodal AI, is designed to offer a 12x performance boost\* over previous cockpit platforms, enabling real-time occupant data processing. This advancement facilitates live decision-making, adaptive responses, and proactive assistance, enabling personalized in-cabin experiences. Equipped with transformer accelerators and vector engines, along with mixed precision support, the NPU in Snapdragon Ride™ Elite is designed to deliver low-latency, highly accurate, and efficient end-to-end transformers, maintaining optimal power and performance.

## FLEXIBLE, CENTRALIZED PROCESSING WITH SOFTWARE VIRTUALIZATION AND MULTI-OS SUPPORT:

The heterogeneous platform seamlessly runs multiple applications without performance loss, offering concurrency and multitasking in virtual environments for numerous cameras, sensors, rich user experiences and advanced AI-enabled audio. Automakers can create configurable software-defined vehicles (SDVs) for all tiers, providing flexibility and scalability while simplifying vehicle architecture. This architecture results in shorter time-to-commercialization, enabling customers to enjoy the latest innovations, quickly. Snapdragon® Cockpit Elite software stack, with a Type-1 hypervisor, offers support for rich multimedia features, on-device AI with a fully integrated edge orchestrator, optimized gaming and advanced 3D graphics for rich user experiences. It comes with long-term support (API compatibility) built into the design to run the instrument cluster, the infotainment system, and multiple passenger instances in app-centric, multi-user virtual machines with the ability to share content and data where needed.

## INDUSTRY-LEADING POWER EFFICIENCY:

Engineered to deliver exceptional performance while minimizing energy consumption and allowing vehicles operate smarter and longer. The solution is a combination of intelligent power management hardware and software that balances core utilization and application runtime.

## INTUITIVE EXPERIENCES:

Engineered to support context-aware applications, this platform enables hands-free, unsupervised automated driving that anticipates needs, along with real-time driver monitoring and enhanced object detection for a smoother, more confident ride. Its improved Qualcomm® Adreno™ GPU is engineered to deliver a 3x performance boost\* with advanced rendering, meeting demands for gaming, multimedia, and dynamic driver information.

## SOFTWARE-DEFINED:

Purpose-built for the industry's shift to SDVs, the elite-tier platform is designed to take an end-to-end approach for enhanced safety, security, and upgradeability through the unified software framework that emphasizes software reuse; designed to help automakers accelerate feature development via a cloud-based workbench, streamlining software development for continual improvement and reducing time-to-commercialization for new features and services.

## CUTTING-EDGE CAMERA SUBSYSTEM FOR SAFETY AND COMFORT:

Our elite-tier automotive platforms feature a powerful, efficient camera system with an advanced Image Signal Processor (ISP) for clear, responsive visuals in extreme driving conditions. They are designed to support over 40 multimodal sensors\*, including up to 20 high-resolution cameras for 360-degree coverage and in-cabin monitoring. Compatible with the latest and upcoming automotive sensors and formats, our platforms use AI-enhanced imaging tools to deliver unparalleled image quality for both enhanced in-cabin experiences and advanced safety features.

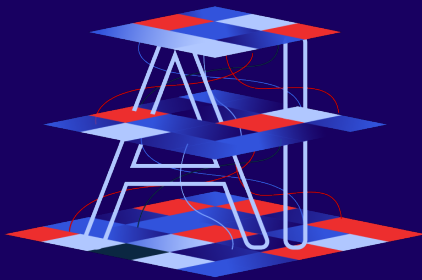
## AUTOMATED DRIVING AND AI SOFTWARE STACK:

The Snapdragon Ride Elite platform exemplifies the approach of software virtualization, offering an end-to-end automated driving system with advanced features like vision perception, sensor fusion, path planning, localization, and complete vehicle control, all running concurrently, independently, and free from interference.

## SAFETY FIRST:

Designed to meet automotive safety standards for ASIL-D systems with a dedicated safety island controller and robust hardware architecture for isolation and interference-free operation, helping to enable reliable quality-of-service for specific ADAS functions, as well as comfort and confidence from drivers and passengers.

\* All performance targets are compared to previous generation, based on preliminary internal testing, and subject to change upon final validation. Snapdragon branded products are products of Qualcomm Technologies, Inc. and/or its subsidiaries.



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## AI TOOLS AND OFFERINGS WITH SNAPDRAGON COCKPIT ELITE AND SNAPDRAGON RIDE ELITE PLATFORM:

### DRIVING SMARTER WITH ON-DEVICE AI TOOLS FOR AUTOMOTIVE:

The Qualcomm® AI Hub and Qualcomm® AI Orchestrator streamline the developer journey from concept to deployment. Developers can identify a problem, find or bring an AI model, and onboard it via the Qualcomm AI Hub for early feedback, with cloud measurements ensuring the model meets expectations. The Qualcomm AI Orchestrator revolutionizes on-device AI by harmonizing personal preferences, local context, and app capabilities, delivering a personalized and responsive experience. This workflow optimizes AI models for real-world automotive applications, leveraging our Snapdragon® Digital Chassis™ solutions.

### AI FOR ADVANCED DRIVER ASSISTANCE SYSTEMS AND AD:

Snapdragon Ride Elite brings hardware software co-design, enabling the automotive ecosystem to develop advanced automated driving systems using the Snapdragon Ride AD stack and tools. This stack supports highway and urban navigation, including ADAS functions and cutting-edge multi-sensor perception using transformers. Designed for E2E AI architectures, from sensor to AI planner, it delivers a robust, human-like driving experience. Data and Simulation Factory tools streamline data collection, annotation, and reprocessing to accelerate development cycles.



Snapdragon

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