



ANDROID AUTOMOTIVE PLATFORM

Integrating Connectivity, Productivity and Entertainment into New Vehicles

Android Automotive is an Android-based operating system designed for vehicles. Android Automotive is much more tightly integrated with the features of a car. Depending on the set-up, it can even control various sensors and switches in the vehicle. Android has successfully been deployed in production infotainment (IVI) systems as the primary operating system and also has been used in conjunction with other operating systems. The options for IVI systems includes porting Android to run directly on an SoC as the sole operating system, running Android in conjunction with another operating system such as Linux with use of a hypervisor, or utilizing Android via a Linux Container. As the only services company in the Open Automotive Alliance (OAA), HARMAN is the one-stop-shop for all Android Automotive needs.

HARMAN Connected Services (HCS) helps OEMs select the right technical solution for its needs by understanding the differing development efforts and trade-offs in functionality each technical approach brings. HARMAN helps automakers to more easily bring cutting-edge technology to their drivers, and create new opportunities for developers to deliver powerful experiences for drivers and passengers in a safe and scalable way. HARMAN ensures a seamless experience for integrating Android Automotive into in-vehicle infotainment systems across different hardware platforms, OS environments and HMI frameworks. Supporting our customers throughout the journey from conceptual design, implementation, optimization and certification to maintenance is key.

Top-line Benefits

- Complete service portfolio covering concept development, platform development, application development, security patch releases, long term maintenance, integration, customization and certification
- Fastest time-to-market
- Robust production quality implementation
- Support for all major hardware platforms, Operating Systems and HMI frameworks
- In-depth automotive expertise and Android Automotive implementation experience

Why HARMAN?

Shortening Time-to-Market

Shorten your time from concept to delivery using our best practices, turn-key delivery models and rich talent pool.

Cross-platform

Take advantage of our experience in multiple industry verticals and leading platforms to rapidly exploit new market opportunities.

Global delivery footprint

Our skilled, talented engineers deliver solutions to companies like yours from centers throughout the world.

Solution accelerators

Get access to leading edge innovation and best practice by using our solution accelerators and global pool of partnerships.

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Capabilities and Benefits

Concept development	<ul style="list-style-type: none">• Android Automotive feasibility assessment• Android Automotive gap assessment• Total cost of ownership assessment• Regionalization assessment• Google automotive services impact analysis• SoC selection and hardware configuration development
Platform development	<ul style="list-style-type: none">• Platform architecture development• BSP, HAL development and board bring-up• Android framework extension and modifications• UI/UX development through dedicated HARMAN design studio• Custom HMI development• 3rd party solution integration – VR, Navigation, Connected services
OEM Application development	<ul style="list-style-type: none">• OEM specific development• Application UI/UX development• Full Application Lifecycle support – from concept to publishing in play store• Managed services team to monitor application performance and staged upgrades• Component and system testing• Product regionalization
Security patch releases	<ul style="list-style-type: none">• Provides continuous security updates post cessation of patch releases from Google• Performs regular penetration testing to ensure product is secure• Monitor Google's security bulletins to implement security updates for eventual integration and release
Long term Maintenance and Support	<ul style="list-style-type: none">• Migration of core platform to newer version of Android• Application migration• Bug fixes• New feature introduction and release for new vehicle lines
Managed services	<ul style="list-style-type: none">• Application deployment and monitoring• Over the Air software update deployment• Connected services integration and hosting

Partner with an industry expert

HARMAN (harman.com) designs and engineers connected products and solutions for automakers, consumers, and enterprises worldwide, including connected car systems, audio and visual products, enterprise automation solutions; and services supporting the Internet of Things. With leading brands including AKG®, Harman Kardon®, Infinity®, JBL®, Lexicon®, Mark Levinson® and Revel®, HARMAN is admired by audiophiles, musicians and the entertainment venues where they perform around the world. More than 50 million automobiles on the road today are equipped with HARMAN audio and connected car systems. Our software services power billions of mobile devices and systems that are connected, integrated and secure across all platforms, from work and home to car and mobile. HARMAN has a workforce of approximately 30,000 people across the Americas, Europe, and Asia. In March 2017, HARMAN became a wholly-owned subsidiary of Samsung Electronics Co., Ltd.

Visit our website at harmanconnected.services/android-automotive-platform

