

Mercedes A-Class puts Visteon's SmartCore™ on the road

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Debuting in Daimler's all-new Mercedes A-Class, Visteon's industry-first cockpit domain controller, SmartCore™, hit the roads in August 2018. Being the focal point of the A-Class's redesigned luxury interior, SmartCore™ powers the vehicle's instrument cluster and infotainment displays through a seamless and intuitive HMI, allowing drivers to personalize their experience with a simple swipe of the touchscreen, the touch pad or remote controls located on the steering wheel.

As the first market-ready model to incorporate Visteon's SmartCore™ application, the new Mercedes A-Class is the world's first vehicle featuring an integrated cockpit domain controller using a single silicon chip with multiple CPUs. Combining Daimler's first integration of touch displays in its vehicles, the A-Class supplies a truly digital cockpit user experience which is safely controlled by SmartCore™.

The vehicle's highly-integrated cockpit user experience is based on two digital displays and facilitates seamless instrument cluster, vehicle controls, multimedia, Apple CarPlay, and Android Auto features. The system also incorporates multiple display modes that are user selectable, offering high levels of customization of the overall look and feel of the system.

Depending on the model variant, Visteon's SmartCore™ solution powers the free-standing driver and information display consisting of two seven-inch screens or one seven- and one 10.25-inch screen. It combines the high-resolution widescreen cockpit with touchscreen operation of the media display through the touchscreen, center console touchpad and the steering wheel's control buttons.

SmartCore™'s architecture – based on Visteon's hypervisor – allows the system to drive the A-Class's entry-level infotainment domain running on Linux beside a cluster domain with ASIL-B requirements - without any risk of interference between the two. This signifies the integration of two traditionally separate in-car domains which come together in a single silverbox, providing the remote intelligence that drives the two display units.

The in-car infotainment embeds tuner, multimedia, connectivity options such as Bluetooth, USB and Wi-Fi, and hands-free phone applications. Supporting a remote user interface, SmartCore™ enables the operation of CarPlay, Android Auto and MirrorLink, as well as Baidu Carlife for the Chinese market.

Following the initial SmartCore™ launch on the A-Class, the platform is now available in the Mercedes Actros truck and will be followed with additional vehicle lines during 2018-2020 as Daimler brings the new digital cockpit user experience to more models across global markets.