



NEWS RELEASE

## Cockpit and safety trends drive centralized computing

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Key trends in cockpit electronics and safety associated with Level 2-plus automated driving are contributing to the rapid emergence of domain controllers in vehicles. This growth can be seen in both cockpit domain controllers and safety controllers for advanced driving assistance systems (ADAS) and Level 2-plus automated driving, which enable hands-off driving in certain situations.

Sachin Lawande, Visteon president and CEO, told analysts that the future of cockpit electronics will be driven more by domain controllers, not multiple electronic control units (ECUs) that make up the system, at the J.P. Morgan Auto Conference in New York City on Aug. 12. You can listen to a webcast of Visteon's presentation [here](#).

Visteon is well-positioned to address this trend with solutions in both cockpit and safety domain controllers, Lawande noted.

Cockpit domain controllers – The integrated digital cockpit of the future will consist of multiple **displays** powered by a single **domain controller** for **instrument cluster**, **infotainment**, **head-up displays** (HUD), **driver monitoring** and other functions. This is driving demand for cockpit domain controllers that consolidate ECUs, offering higher CPU and GPU computing power for an improved user experience. The cockpit domain controller market is projected to expand at a cumulative annual growth rate (CAGR) of nearly 80 percent through 2025, according to Strategy Analytics.

Visteon is the first auto supplier offering an automotive-grade, integrated domain controller approach, called **SmartCore™**, which can independently operate the infotainment system, cluster and other domains on one system-



on-chip (SOC). The SmartCore™ architecture is fully scalable and cybersecured through virtualization of the different cores and controlled firewalls. This enables independent functional domains with different levels of ASIL requirements.

Safety domain controllers – Similarly, the growth curve is steep for safety domain controllers for ADAS and autonomous driving (AD) applications. Strategy Analytics projects the ADAS/AD domain controller market will expand at a 54 percent CAGR through 2025. This demand will be fueled by anticipated safety regulations outside the U.S. that will enable certain hands-off driving features such as highway pilot, automated lane change and self-parking.

Visteon's **DriveCore™** centralized computing solution is an autonomous end-to-end driving platform incorporating three components:

- DriveCore™ Runtime – a framework and middleware that transfers PC development to embedded software
- DriveCore™ Compute – a modular and scalable computing hardware platform
- DriveCore™ Studio – a PC-based tool for algorithm development

Increased digitization of the cockpit, growth of electric vehicles, and the subsequent shift toward domain controllers are among several key trends influencing Visteon platforms that will redefine the cockpit and safety experience in the future.