



Visteon Introduces DriveCore™ Autonomous Driving Platform to Accelerate Adoption of Self-Driving Technology

Jan. 9, 2018

- Scalable central computing system for Level 3 and above autonomous driving solutions
- Based on open standards, with ecosystem of technology partners including DeepScale, STEER, StradVision and Automotive Artificial Intelligence
- Consists of three components: DriveCore™ Compute, Runtime and Studio

LAS VEGAS, Jan. 9, 2018 /PRNewswire/ -- Visteon Corporation (Nasdaq: VC) – a leading automotive cockpit technology company – is unveiling its DriveCore™ autonomous driving platform at CES® 2018. Designed to accelerate the development and commercialization of autonomous driving technology, DriveCore™ is the first solution to allow automakers to build autonomous driving solutions quickly and in an open collaboration model.



DriveCore™ was designed as a complete technology platform, consisting of the hardware, in-vehicle middleware and PC-based software toolset needed to develop machine learning algorithms for autonomous driving applications of Level 3 and above. Building on Visteon's success with a centralized computing approach, DriveCore™ will provide automakers a fail-safe domain controller, with a high degree of computing power scalability, which supports the integration of data from multiple camera, Lidar and radar sensors.

"To meet the computing demands of Level 3-plus solutions, autonomous systems will need highly scalable levels of processing power and the ability to perform sensor fusion across multiple radar, camera and Lidar sensors," explained Sachin Lawande, president and CEO of Visteon. "DriveCore is the first open platform in the industry that offers highly scalable computing power and software to perform late sensor fusion to enable rapid development of these autonomous systems."

DriveCore™ consists of three primary components, all of which can be experienced at Visteon's exhibit (CP-20) at CES:

- **Compute** is a modular, scalable computing hardware platform that can easily be adapted to all levels of automated driving. It is designed to deliver from 500 gigaflops to 20 teraflops of processing power (with existing Systems on Chip) in a scalable manner, independent of the type of central processing unit (CPU) used. It will support NVIDIA, Freescale, Qualcomm and, later, other processor types seamlessly – protecting an automaker's investment in this technology.
- **Runtime** is in-vehicle middleware that provides a secure framework to enable applications and algorithms to communicate in a real-time, high-performance environment. It enables sensor fusion in a sensor-independent manner, so sensors can be upgraded as new capabilities become available, such as radar going from 2-D to 3-D.
- **Studio** is a PC-based development environment that enables automakers to create and support an ecosystem of algorithm developers, unlocking innovation potential through an open framework for sensor-based artificial intelligence algorithm development. Studio allows easy integration of third-party algorithms and access to real-life sensor data – complemented by a simulation, validation and benchmarking environment for algorithms ranging from object detection to camera-based lane detection.

Consistent with the goal of creating an open collaboration model for automakers, Visteon is also announcing four new technology partners as part of the DriveCore™ introduction:

- DeepScale uses deep learning to create an integrated model of the environment in real-time, from any combination of

sensors. Then, DeepScale's deep neural networks (DNNs) add the perception capabilities needed for automated driving.

- STEER provides a fully automated parking solution, in which the car drops off passengers at a designated point, drives itself to the nearest automated parking zone, waits for a "summon signal," then drives to the designated pick-up point.
- StradVision deploys machine learning algorithms to build advanced object detection and recognition software.
- Automotive Artificial Intelligence provides a graphical simulation environment, offering intelligent traffic and traffic scenarios, which runs in conjunction with DriveCore™ Studio.

"Successful implementation of autonomous driving technologies will require collaboration from multiple companies offering specific expertise in different aspects of the solution," said Visteon Chief Technology Officer Markus Schupfner. "At CES, we are showing how our investment in new technologies such as machine learning and collaboration with leading tech partners will help drive the future of autonomous driving."

Visteon will be hosting demonstrations of DriveCore™ at its booth, where it will also be showcasing solutions that will speed the transition to an all-digital vehicle cockpit and, ultimately, autonomous driving. From fully reconfigurable instrument clusters and the latest-generation, high-definition (HD) digital display technologies to driver monitoring, ADAS integration and a virtualized instrument cluster domain, Visteon will be displaying products that will underpin the epic shift toward connected cars and autonomous vehicles.

About Visteon

Visteon is a global technology company that designs, engineers and manufactures innovative cockpit electronics products and connected car solutions for most of the world's major vehicle manufacturers. Visteon is a leading provider of instrument clusters, head-up displays, information displays, infotainment, audio systems, SmartCore™ cockpit domain controllers, and vehicle connectivity. Visteon also supplies embedded multimedia and smartphone connectivity software solutions to the global automotive industry. Headquartered in Van Buren Township, Michigan, Visteon has approximately 10,000 employees at more than 40 facilities in 18 countries. Visteon had sales of \$3.16 billion in 2016. Learn more at www.visteon.com.

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