

Visteon Participates in Research Project for Validating Autonomous Driving Systems

2019-08-23

Visteon is participating along with 22 organizations from the automotive industry in a research project in Germany aimed at developing legally compliant as well as time- and cost-effective validation methods for fully automated and autonomous driving functions (SAE L4 and L5).

With fully automated and autonomous driving functions expected to play a key role in future mobility solutions, automated driving has become a focus of research and development worldwide. Visteon is working with automakers and suppliers to develop a methodology for driving simulation validation to create a reliable test environment for fully automated and autonomous driving. Verification and validation processes must be legally compliant and also time- and cost-effective.

The four-year VVMethoden (methodology for verification and validation of automated vehicles) project is funded by the Federal Ministry for Economic Affairs and Energy and requires a broad range of levels to be simulated, validated and tested. Visteon is significantly supporting this project in a number of areas, including contributing to the test environment through its modular and flexible autonomous driving solution, DriveCore™. The flexible approach of DriveCore™ will help verify different levels of the test project with the goal of cost-effectively minimizing physical testing.

The modular DriveCore™ approach is based on an open hardware and software platform and consists of three elements:

- DriveCore™ Compute: a scalable, modular hardware platform for driver assistance functions and autonomous

driving.

- DriveCore™ Runtime: Visteon's own qualified middleware with a communication layer for real-time exchange of large volumes of data, which has been developed specifically for autonomous driving functions.
- DriveCore™ Studio: an open software development system with record and replay functions for test data which makes it easier to develop algorithms for assistance systems and autonomous driving functions. Furthermore, it facilitates an integrated development process through cloud connectivity.