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NEWS RELEASE

What is the Software-Defined Vehicle?

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We are in the midst of an evolutionary phase for automobiles. Not only are automakers evolving from internal combustion engine vehicles to electric vehicles, but automakers are also changing how users interact and experience the vehicle. The vehicle of the past was defined by hardware, whereas the vehicle of the future will be defined by features enabled by software. In other words, computing power is now more important than horsepower.

Just like today's smartphone users regularly receive automated and wirelessly delivered updates that give the users new features, new functions, and improve the processing speed or battery life of their phone, the software-defined vehicle will also be a fully connected vehicle with similar updates. But unlike many of the vehicles today that offer some connectivity, in the future this will not require items that interface with our cars today, such as keys or cell phones – it will be fully cloud-enabled with over-the-air updates and health and maintenance monitoring.

The implementation of platforms such as Apple CarPlay and Android Auto into our dashboards give a small glimpse of what the future software-defined vehicle will be capable of. While today separate apps are used for maps, traffic avoidance and finding the nearest charging station, that information will be displayed on one screen with the driver utilizing voice recognition with the car – not the phone. Rather than purchasing a new vehicle or installing new equipment on the vehicle to automakers' latest advancements, advanced driver assistance systems (ADAS) and performance and range improvements will be pushed over-the-air as automakers develop them.

Because the software-defined vehicle will thrive on user experience, it will require expanded capabilities of current digital clusters and infotainment systems – merging cockpit controls and ADAS with the dual needs of user experience. Automakers are already pushing to simplify the vehicle architecture to achieve this, while also saving on

cost and weight to benefit electric vehicles in particular.

Now in its fourth generation, **Visteon's SmartCore™ technology** enables some of these features today. SmartCore™ integrates ADAS features into the driver cluster and infotainment systems and brings a more connected, personalized and safe driving experience with information together across multiple displays. SmartCore™ also delivers upgrades wirelessly over-the-air, making a vehicle almost infinitely updatable with no changes to the hardware.

Visteon, with SmartCore™ and its other electrification products, will continue to innovate new possibilities for the software-defined vehicle. These vehicles will not be limited like vehicles in the past, opening up possibilities for continuous improvements for safety and user experience throughout the lifetime of the vehicle.

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