



NEWS RELEASE

Aptiv Leverages Unique Brain and Nervous System Portfolio to Optimize Vehicle Architecture with New Zone Controllers

2021-01-11

A key offering within Smart Vehicle Architecture™, Aptiv's zone controllers reduce vehicle complexity and total system costs

DUBLIN, Jan. 11, 2021 /PRNewswire/ -- Aptiv PLC (NYSE: APTV), a global technology company enabling the future of mobility, today announced zone controllers that distribute high-speed data and power between sensors and peripherals, while separating input / output (I/O) from compute in the vehicle.

As part of **Smart Vehicle Architecture**, Aptiv's approach to enabling the software-defined vehicle, the zone controllers allow OEMs to break apart the vehicle's physical complexity into more manageable zones and further drive up-integration of distributed ECUs, reducing the weight and lowering total system costs in the vehicle.

"Thanks to our unique position with both the brain and the nervous system of the vehicle, Aptiv is perfectly positioned to help our customers optimize the performance and cost of their vehicles," said Kevin Clark, president and CEO. "Aptiv's powerful zone controllers sit at the intersection of these capabilities, helping them reduce complexity, weight and cost, while putting customers one step closer to the software-defined, electric vehicles of the future."

As a high-speed data and power hub, Aptiv zone controllers simplify complexity by separating I/O from compute, while supporting standardized interfaces and enabling "plug and play" devices. For example, instead of connecting directly to a dedicated ECU, devices connect to an Aptiv zone controller, which then connects to a domain controller over a single common interface. This reduces complexity and improves scalability by allowing domain controllers to focus on higher-level software while maintaining a separate development cycle from the I/O. It also simplifies wiring



harnesses to allow more automated assembly and reduces costs.

Aptiv's deep expertise in advanced vehicle software and hardware architecture, including the insights from over a decade of automated driving experience, informed the development of Aptiv's zone controllers. This has resulted in several key benefits for next-generation vehicles:

- **Reduced Complexity:** Breaking apart the physical complexity of the vehicle simplifies manufacturing while enabling automation to ensure quality and lower cost, while up-integration of distributed ECUs provides compute functionality inside the zones that can be used for feature consolidation.
- **Intelligent Power Management:** The zone controllers manage power distribution throughout a vehicle centrally. In the past, wires needed to allow enough tolerance for peak load without having a melting fuse blow. With the benefits of smart fusing, wires can be specified to the physical limit of the load over a specified period of time. This also allows Aptiv's zone controllers to be flexibly located, which simplifies packaging and reduces cost.
- **Predictive Maintenance:** Aptiv's software can detect when wires attached to the zone controller are close to failing and pass that information back to predictive maintenance systems, helping drivers and fleet operators address potential problems before they affect vehicle operation.

To learn more about Aptiv's zone controllers and download the whitepaper please visit

www.Aptiv.com/zonecontrollers.

About Aptiv

Aptiv is a global technology company that develops safer, greener and more connected solutions enabling the future of mobility. Visit **aptiv.com**.

View original content to download multimedia:**<http://www.prnewswire.com/news-releases/aptiv-leverages-unique-brain-and-nervous-system-portfolio-to-optimize-vehicle-architecture-with-new-zone-controllers-301205005.html>**

SOURCE Aptiv PLC