



# Wipro Cloud Car

## The transformation journey to the software-defined future

Wipro leverages its Cloud Car framework and accelerators (including OTA and TSN solutions from Excelfore) to transform legacy E/E architecture, apps and stacks into the building blocks of tomorrow's software-defined vehicles.



The transition from domain-based legacy architecture to zone-based software-defined vehicles is a complete overhaul of the vehicle's E/E architecture. This reconstruction includes a network architectural change that embraces automotive Ethernet and introduces new-age over-the-air (OTA) updates. These updates can add new functionality, features, and apps without compromising the functional safety and security requirements of a new-age vehicle that remains "evergreen."

### Key Takeaways



A suite of accelerators, such as infrastructure bring-up templates, act as reusable Lego blocks to support accelerated migration to the SDV E/E vehicle architecture. This includes the modernization factory, virtual vehicle, fast development loop, fleet-wide observability-enabled hybrid cluster, and more.



Wipro provides SDV consulting and development expertise for end-to-end design and development, including SDV full-stack migration/transformation and related end-to-end integration – from vehicle to cloud. These services are supported by Wipro Cloud Car SDV infrastructure as a service (IaaS) and SDV lab as a service (LaaS).



Wipro Cloud Car extends many solutions for cloud-connected data-driven innovative solutions for SDV E/E, including cyclic AI, shadow mode, data harvesting, and data mesh.



Wipro also offers customized verification and validation (V&V) and testing as a service (TaaS) for migration/transformation to SDV E/E, including a cloud-accelerated virtual vehicle solution framework.

### Key elements of the Wipro's Cloud Car SDV transformation framework

Building blocks in the technology stack

Transition management for current systems

Gen AI to optimize R&D efficiency

## A Look at Wipro's Automotive Expertise

Wipro Automotive is a leading technology services and consulting company focused on building innovative solutions that address clients' most complex digital transformation needs. By leveraging our holistic portfolio of consulting, design, engineering, and operations capabilities, we help clients realize their boldest ambitions and build future-ready, sustainable businesses. With over 240,000 employees and business partners across 65 countries, Wipro delivers on the promise of helping our customers, colleagues, and communities thrive in an ever-changing world. We work with global automotive OEMs, Tier 1s, and multiple ecosystem partners, driving cross-industry collaboration and sharing thought leadership to accelerate innovation at scale for the world.



- Generative AI for Automotive
- Electrification
- Software Defined Vehicle



- Zonal/Domain Controller ECUs
- Architecture Evaluation
- Connected Vehicle



- Automotive Events
- White Paper presentations
- Demos

## Explore our WEE capabilities

At Wipro Engineering Edge, we have a full slate of integrated services from chip to cloud and beyond and operate across 11+ sectors. Explore our wide range of offerings to supercharge your business:

<b>Silicon &amp; Hardware</b>	<b>Embedded Software</b>	<b>Connectivity (5G)</b>	<b>Cloud Products &amp; Platforms</b>	<b>AI and data Engineering</b>	<b>Industry 4.0</b>	<b>Automotive Engineering</b>
Creating the basic building blocks of modern world technology, from the physical chip to the intelligence in it.	Bridging the gap between the physical and digital world by integrating your sensors, hardware, devices, and software.	Ensuring your products and platforms talk to each other clearly, quickly and ubiquitously.	Helping you in your software transformation to make cloud your operating system.	Building fast, scalable platforms to enable you to take control of, and monetize, your data.	Building and maintaining the factory of the future: automated, cost-effective, intelligent and sustainable.	Evangelizing and deploying disruptive auto tech centered around autonomous, electrification, connectivity and diverse mobility.
<ul style="list-style-type: none"> <li>• Silicon design</li> <li>• Mechanical and hardware systems</li> <li>• Custom silicon - AI/ML, 5G, edge, IoT, auto, cloud, AR/VR enabled chips</li> </ul>	<ul style="list-style-type: none"> <li>• Embedded and platform software</li> <li>• Edge and heterogeneous computing</li> <li>• AI @ Edge</li> <li>• Digital signal processing</li> </ul>	<ul style="list-style-type: none"> <li>• 5G networks</li> <li>• Edge computing</li> <li>• Wireless and Wi-Fi</li> <li>• 5G for enterprises</li> <li>• 5G devices &amp; network testing lab</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud native &amp; modern engineering</li> <li>• Software for cloud</li> <li>• Cloud migrations</li> <li>• Security engineering</li> <li>• Products &amp; platforms IP (incl. IBM IP)</li> </ul>	<ul style="list-style-type: none"> <li>• Smart enterprises</li> <li>• Intelligent platforms</li> <li>• High-performance computing</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial IoT</li> <li>• Product lifecycle management</li> <li>• Connected supply chain</li> <li>• Smart manufacturing</li> <li>• Integrated work &amp; asset mgmt. (IWAM)</li> </ul>	<ul style="list-style-type: none"> <li>• Software defined vehicle (SDV)</li> <li>• Electric Vehicles (EV)</li> <li>• Connected Auto</li> <li>• WiPOD (Autonomous)</li> </ul>
<b>Tarang Labs</b>	<b>5G Def-I</b>	<b>Wipro Holmes</b>	<b>Cloud Car</b>			

Wipro's Cloud Car offering, including integrated solutions from multiple technology partners, has been used by global OEMs and Tier1s to fast-track their SDV journey.