The Automotive Communication Framework Leader for Software-Defined Vehicles

Real-Time Innovations (RTI) is the global leader in **communication framework software** based on the Data Distribution Service (**DDS**™) standard for data-centric **middleware** technology. Privately-held, RTI has the largest engineering team in the world dedicated to DDS, with professional services and global support to help drive project success. This focus provides RTI customers with a communication framework that allows them to **manage risk**, while increasing the **scalability**, **modularity** and **reusability** of their solutions with the **highest levels of safety** and **cybersecurity**.

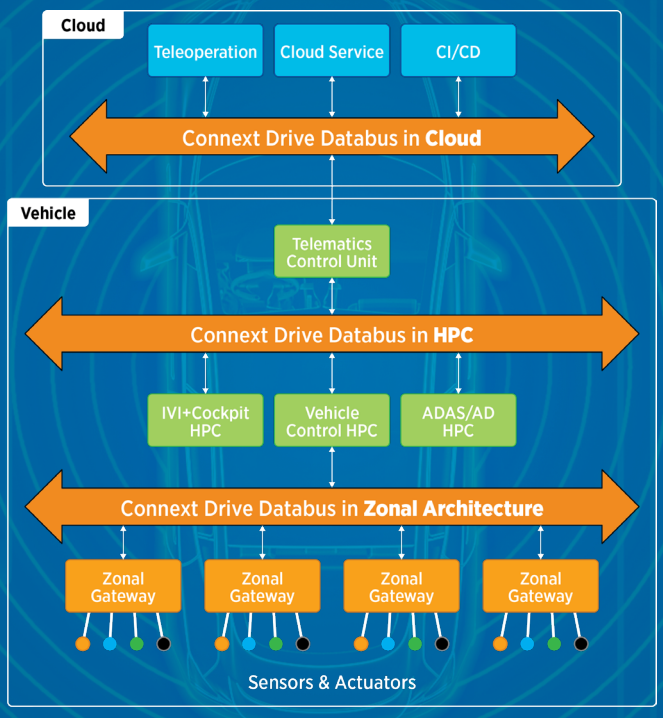
In automotive, RTI works with over **25 automotive vendors** who use our technology to accelerate their software-defined vehicle programs. Today, RTI is in **production with 10 vehicle manufacturers** around the world who rely on RTI software to design zonal, ADAS and telematics architectures as they **evolve in the software-defined** era. RTI technology provides OEMs with an essential component for a variety of **reference platforms** from leading Tier-1 suppliers.

AutoTech AWARDS

RTI wins the Software Supplier of the Year for their extensive customer traction and a compelling solution that solves critical problems across a range of automotive sub-segments and applications.

WARDSAUTO 2024 AUTOTECH AWARDS

Figure 1. Data-centric software-defined vehicle architecture



RTI is enabling the industry transition to software-centric design through its collaboration in standards organizations such as **AUTOSAR**, **AVCC**®, **COVESA**, **OMG**® and **SOAFEE**, as well as with the leading automotive technology providers. This work enables interoperability across technology platforms for lower costs, productivity gains across global development teams and faster time-to-market.

We invite your project teams to take Connext Drive for a test drive.

rti.com/drive

RTI Connext Drive: From Simulation to Production

Connext Drive® is an automotive-grade communication framework **based on the DDS standard** for **middleware** that distributes vehicle dataflow in real time to **ensure vehicle safety and performance**.

Specifically designed for the automotive industry, Connext Drive provides dedicated software components for key software-defined vehicle (SDV) use cases: ECUs, zonal gateways, high performance compute in ADAS, digital cluster and vehicle control, as well as telematics, cloud implementations and OEM-specific applications. RTI's development processes for Connext Drive have been officially certified to **ISO 26262 ASIL D**, **ISO 21434 CAL-4** and **ASPICE CL1** offering manufacturers an accelerated path to building safety-critical systems for electric and autonomous vehicles.

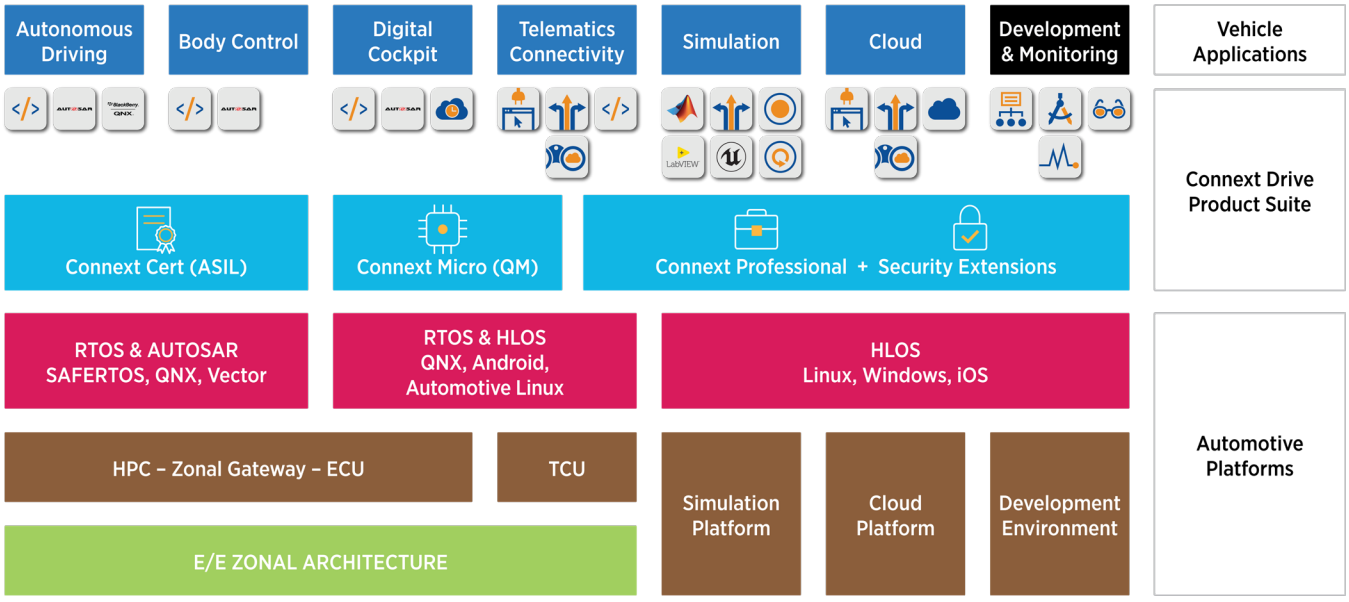
Connext Drive supports the co-location of different technologies by operating natively on DDS, or by providing direct **integrations within AUTOSAR Classic and AUTOSAR Adaptive and interoperability with ROS 2**. Based on the rising importance of Continuous Integration and Continuous Delivery (CI/CD) in automotive, Connext Drive supports communication of **Microservices** in **Container** and **Virtual Machine**-based environments.

In addition, Connext Drive includes a suite of **Tools** that help distributed and autonomous system developers to expedite and ease the **entire development lifecycle** from prototype to production.

The Connext Drive licensing model supports suppliers at each phase, reducing development cost, risk and time to market. This is due to a **flexible licensing model** and **extensive platform support** that includes, but is not limited to, the following:

- **Cores:** Arm and Tricore™
- **Operating Systems:** Android, Automotive Grade Linux, iOS, QNX, SAFERTOS®, Ubuntu, VxWorks®, Windows
- **Compilers:** Green Hills, HighTec, Tasking
- **AUTOSAR Vendors Integrations:** Elektrobit, ETAS, Siemens Embedded, Vector

Figure 2. RTI Connext Drive Software Stack



Your systems. Working as one.

CORPORATE HEADQUARTERS
232 E. Java Drive, Sunnyvale, CA 94089
Telephone: +1 (408) 990-7400
info@rti.com

rti.com
rti_software
rtisoftware
company/rti
rti.com/blog
rti.com/podcast