



KPIT + Qorix Performance. Crafted from S-CORE.

Real-Time ADAS on Red Hat – Portable Across Platforms

Who this is for

OEMs and Tier-1 suppliers evaluating real-time ADAS execution on Red Hat, cross-hardware portability and safe, deterministic runtime behavior for SDV programs.

What the demo shows

This demonstrator is built on the Qorix Performance Stack – a safety-aligned runtime platform that provides deterministic execution, communication, and functional separation across heterogeneous automotive hardware.

- ▶ Real-time Adaptive Cruise Control (ACC) executing on two different HPCs
 - Qualcomm SA8775
 - Technica's Taipur platform
- ▶ Identical ADAS function running on both hardware setups, enabled by Qorix Performance
- ▶ Fast switching between platforms using Technica's Flync configuration tool
- ▶ High determinism and consistent timing behavior across heterogeneous hardware
- ▶ Separation of application logic from underlying hardware and OS constraints
- ▶ Program-oriented runtime control on a Red Hat-based SDV foundation

Why it matters

OEMs increasingly seek hardware abstraction and runtime portability to reduce integration cost, enable supplier flexibility and avoid vendor lock-in.

- ▶ Qorix Performance provides a unified, safety-aligned runtime platform, ensuring consistent real-time ADAS execution across different hardware platforms
- ▶ Red Hat delivers a trusted real-time foundation, widely used for safety-informed automotive workloads
- ▶ Technica's Flync tooling enables smooth platform switching with minimal integration effort
- ▶ Application logic becomes decoupled from hardware evolution, reducing engineering overhead for SDV programs

In essence: With KPIT delivering the ACC function, and Qorix providing deterministic orchestration, the demo illustrates a clear path to portable, predictable and program-ready ADAS execution.

▶▶ One ADAS function, multiple hardware platforms – identical behavior.

A clear path toward portable, predictable and program-ready ADAS execution.