GlobalLogic
A Hitachi Group Company

R-Car Proactive Partner Solution

RENESAS R-Car *Consortium*

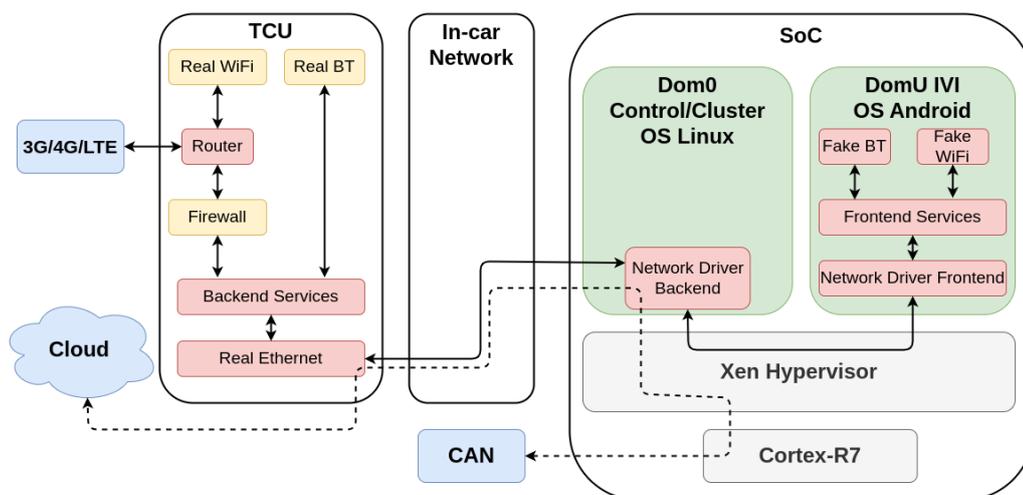# GlobalLogic Phoenix Accelerator Solution

Solution Summary

Phoenix is Globallogic's hypervisor-based Digital Cockpit solution accelerator. It is based on the proven OSS technologies and supports a wide variety of the automotive use-cases used in a modern integrated Digital Cockpit solutions. Those include, but are not limited to feature rich AAOS based IVI, fully digital instrument cluster along with safety island functionality to ensure functional safety requirements, display sharing between hypervisor domains, integration with TCU and HUD components, etc.. The solution has been used in several production programs and helped to reduce both, the development effort and time to market.

Features/Benefits

- Single SoC solution for Integrated Digital Cockpit solution
- OSS : Xen, Linux, Android O/P/Q (latest versions continuously integrated and supported)
- HW: Renesas Gen3/Gen3e SoC
- ASIL-B rated RTOS for Automotive mission-critical tasks running on Safety Island
- Android VM for Infotainment
- Ultra fast boot – less than 15 seconds from cold start until full operational mode
- Reliable and secure Android AOSP and Tizen IVI VMs
- Early RVC availability – <2 sec after cold boot
- Secure communication between VM and safety island
- ARM TrustZone support

Diagrams/Graphics

High-level architecure of GlobalLogic Phoenix Solution Acceletator

Target Markets and Applications

- Integrated Automotive Cockpit
- Virtualized Instrumental Cluster & IVI

Video Demo on Youtube

2023.10

GlobalLogic, a Hitachi Group Company, is a leader in digital product engineering. We help our clients design and build innovative products, platforms, and digital experiences for the modern world.

By combining design, engineering, and industry knowledge with Hitachi's technology, we empower clients to envision possibilities and fast-track their digital transformation.

Headquartered in Silicon Valley, GlobalLogic operates design studios and engineering centers around the world.

We extend our deep expertise to customers in the automotive, communications, financial services, healthcare & life sciences, media and entertainment, manufacturing, semiconductor, and technology industries.

For over 20 years, GlobalLogic has partnered with businesses across every major industry to make amazing products. We connect the dots between people, products, and business opportunities.

In 2021, GlobalLogic was acquired by Hitachi. GlobalLogic's capabilities, combined with Hitachi's Lumada, enables us to deploy Hitachi's extensive library of digital solutions to the global market. Together with Hitachi, we help customers re-imagine their business, consumer interactions, and develop innovative products and services, with an accelerated time-to-market.

GlobalLogic in numbers:
- Founded in 2000
- 29,600+ employees in 21 countries
- 500+ active clients
- 70+ private label customer labs
- 47 engineering centers
- 8 design studios
- 12 sales offices
- 350+ UX/UI designers & developers through Method, our experience design arm
- One of the biggest engineering hubs of GlobalLogic is in Ukraine. Here in Ukraine we have a footprint and tech expertise in many industries.

GlobalLogic's contributions span various aspects of automotive technology, including:

Digital Cockpit: We create immersive digital experiences within the vehicle, enhancing comfort, safety, and entertainment.

Telematics and Connectivity: Our engineers have been at the forefront of developing telematics systems that connect vehicles to the world and ensure safety and convenience.

Electronic Control Units: We specialize in creating the electronic brains that control vehicle functions, making them smarter and more efficient.

Advanced Driver Assistance Systems: Our engineers contribute to the development of ADAS, improving driver safety and assisting in various driving tasks.

Virtual Service Training: We're reshaping how vehicle maintenance is taught and delivered, making it more efficient and accessible.

Design and Styling: Our design expertise is behind the aesthetic appeal of modern vehicles, ensuring they not only perform well but look great too.

We look forward continuing to make an Impact, redefine the future of technology and create solutions that will shape the world for years to come.