GUARDKNOX

GUARDKNOX VEHICLE SERVER

HIGHLIGHTS

- Centralized Multi-domain application hosting ECU
- Supports large number of interfaces interconnected using Ethernet
- Mixed Criticality – single SoC multiple types of safety and security applications
- Certifiable to ISO 26262 up to ASIL D and the upcoming ISO 21434
- General purpose, cluster computer, modular unit

A HIGH-PERFORMANCE VEHICLE SERVER PLATFORM

The Vehicle Server is multi-domain ECU comprising heterogeneous resources in a highly integrated and cost-effective design. Coupled with GuardKnox secure SOA stack it provides both hardware and software platform for safe and secure mixed criticality application hosting. It offers a consolidation capable of hosting rich operating systems with its vast ecosystems alongside dedicated critical, time sensitive and safety related functionality in a safe and secure manner, offering a vehicle operation functionality as well as enhanced and extendable user experience.

Supporting all automotive interfaces – the vehicle server is designed around a SoC family, allowing scaling up from dedicated low to high end solutions with ease, utilizing the same hardware and software architecture and toolchain.

The same design can be used across backbone ECUs, optimized in each for different applications, while still maintaining the same development environment, uniform software deployment infrastructure, and leveraging economy of scale. When FPGA based designs are employed, a unique Hardware OTA capability becomes available, which allows to deploy hardware acceleration and processing resources in real-time even after the vehicle is in customer hands.

FOR MORE INFO ON THE GUARDKNOX ZONAL ARCHITECTURE AND ETHERNET BACKBONE, CLICK HERE FOR A PRODUCT DEMO

Abstracting and decoupling functionality as software from physical hardware, a vehicle server is a fundamental building block in the next evolution of the E/E architecture

The GuardKnox Vehicle server enable automotive manufacturers to meet the new and improved user experience customers have come to expect in this era of connectivity.