

GUARDKNOX

SECURE GATEWAY

GuardKnox's gateway line is a secure, seamless, fully configurable, and reliable solution for vehicle data network management and application hosting that provides the necessary evidence for OEMs to show compliance to GSR and UNECE R155 requirements without impacting performance. In today's vehicle E/E Architectures, managing the increasing software complexity while supporting high-speed, low-latency communication is crucial. The gateway line offers complete hardware and software products that securely interconnect and processes data in real-time across heterogeneous networks while providing multi-gigabit traffic with deterministic latency.

The gateway line includes GuardKnox's patented CommEngine™ hardware IP for network and security activities implemented on FPGA and the SOA Framework Suite for complete and flexible software lifecycle management. The gateway can be integrated into new vehicles during production or retrofitted in the aftermarket for existing vehicle types.

MAIN FEATURES



GENERAL

- Supports different vehicle types and environment range (busses, trucks, cars, etc.)
- Provides the highest level of industry standards for safety and security
- Delivered with a complete toolchain for full life cycle maintenance and updates
- Flexible design for short time-to-market (including for custom requirements)



SOFTWARE

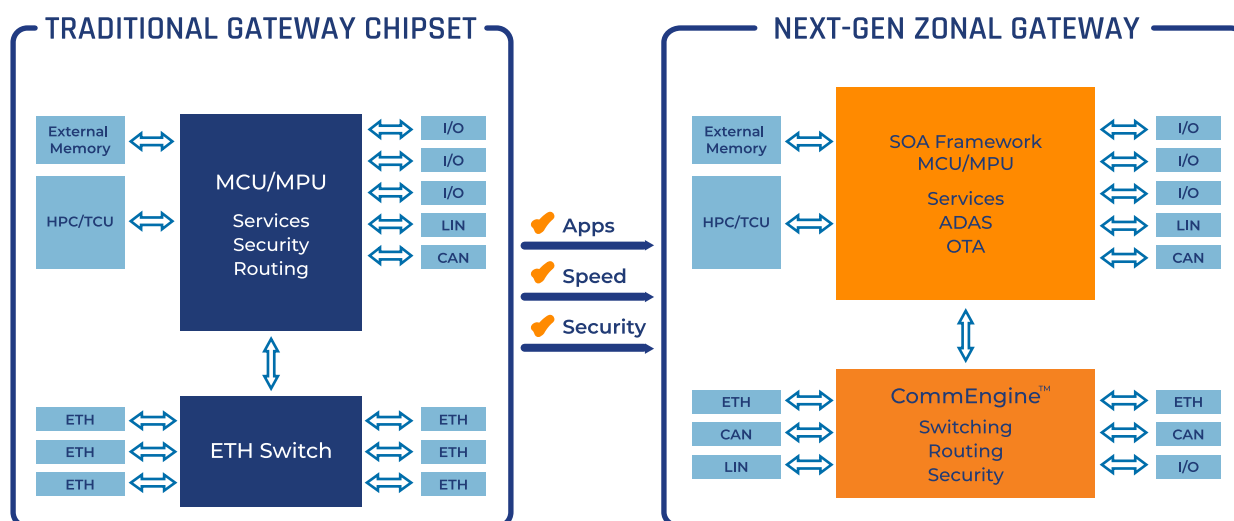
- Supports a wide range of OS and applications
- Supports mixed transport middlewares
- Automatic SW deployment and lifecycle management via patented SOA Framework Suite
- Employs highly portable SW services that are decoupled from underlying hardware
- Implements a bespoke component-based approach for HEDS in the automotive domain
- Delivered with a fully-distributed model-driven SW development and analysis tool suite

HARDWARE

- Supports routing and switching for Legacy Signals, Frames and L5 PDUs
- Supports latency of 10µs for AUTOSAR PDU routing and 5µs for L3/L2 switching
- Provides TSN and security inspection for total communication bandwidth of 10GB
- Configurable routing tables - either via the included offline tool or embedded SW
- Large number of ports: 20xCAN, 4xETH, 4xLIN, Wakeup by KL30/KL15/CAN

SECURITY

- ISO 21434 and ISO 26262 (up to ASIL B) compliant
- Includes Whitelist and blacklist firewall and flooding protection
- Employs conditional switching and Periodicity check per message
- Uses DPI for signals range validation according to predefined rules
- Provides Intrusion Detection System (IDS) for security sensing



MULTIPLE IMPLEMENTATIONS TO FIT ANY VEHICLE

