EB zoneo

Making automotive networks fast, flexible, and secure
EB zoneo

Efficient and reliable solutions to master the challenges of automotive network communication

Highlights

**EB zoneo SwitchCore**
- Intelligent automotive-grade switch firmware to handle the ever-increasing network functions.
- Perfectly handles complex network configuration, routing, QoS, firewall, device authentication, and time synchronization.

**EB zoneo SwitchCore Shield** inherits all features supported by EB zoneo SwitchCore with extra cybersecurity protection from Argus Ethernet IDPS, a solution which helps to perform deep packet inspection of the Ethernet frames up to the application layer.

**EB zoneo GatewayCore**
- EB zoneo GatewayCore introduces a suite of hardware-dependent modules crafted to configure the hardware accelerators and smoothly combine with AUTOSAR Classic Platform.
- Provides hardware-specific adaptation and acceleration for CAN and Ethernet communication which leads to a significant reduction of latency and CPU load.
- A special configuration assistant helps to configure highly-complex hardware filters and tables to reduce the integration time and efforts.

**EB zoneo VSwitch**
- Virtualization module that mimics switch functionalities to provide fast and reliable communication between virtual machines and Ethernet networks.
- Provides communication between VMs within the ECUs or HPC and between VMs and the Ethernet network.
- Supports VMs using Classic AUTOSAR and VMs using Adaptive AUTOSAR (Linux).

Benefits

**EB zoneo SwitchCore**
- More computational resources – High-level network functions are directly executed on the switches.
- Efficient implementation – Our software implementation is tightly coupled with hardware features.
- Early detection and prevention of unauthorized traffic – Executes cybersecurity protection directly on the switch hardware, thus leading to an early and extensive detection of cyberthreats.

**EB zoneo GatewayCore**
- Optimized for specific hardware – Utilizes distinct hardware accelerators to achieve peak performance tailored to specific use cases.
- Flexible data routing – Supports routing within hardware buses as well as multicasting and multiplexing between modules and protocols.
- Easy configuration – Simplifies complex routing scenarios quickly and effortlessly with configuration assistant in the standard AUTOSAR environment.

**EB zoneo VSwitch**
- Versatile platforms – Simultaneously supports various platforms (Classic AUTOSAR, Linux, QNX) and different hardware interfaces such as Ethernet and PCIe.
- Fast performance – Utilizes DMA and zero-copy technique to provide fastest access to Ethernet frames for all VMs deployed inside of the system.
- Safe communication – Provides for VM communication freedom from interference, protection against read/write access and suppression.

Contact us:
sales@elektrobit.com • www.elektrobit.com