EB zentur
The foundation for building your automotive security

Elektrobit offers a full and flexible HSM firmware stack toward building a more stable foundation for automotive security – providing robustness, resistance to attacks, and reliability.

EB zentur works seamlessly with Elektrobit’s EB tresos and other Classic AUTOSAR-compliant stacks to provide a full-stack AUTOSAR solution enhanced with hardware-level security. It covers the HSM needs of various OEMs and supports the leading microcontroller platforms.

Benefits:

- **Faster cryptographic performance and improved bandwidth** leads to shorter wait times and less load on the main processor
- **Optimized** main core RAM usage
- **Full-stack AUTOSAR solution** with cost-optimized seamless integration into EB tresos from single source
- **State-of-the-art AUTOSAR** hardware-level security system
- **Dual AUTOSAR stack support for** reduced time to market
- **Flexibility** with tailor-made OEM extensions and customization

Industry leading expertise and reliability

600 million vehicles on roads
35 years in the automotive business
Key features:

- Hardware trust anchor
- Hardware security for key storage
- Hardware-accelerated cryptographic operations for secure communication, authentication, and access control

Full hardware security enabled by EB zentur HSM Firmware and crypto drivers:

**EB zentur HSM Firmware**
Elektrobit's HSM firmware is a dedicated software for a hardware security module (HSM) to enable its functionality.

- SHE/SHE+ and EVITA light/medium/full
- OEM-specific features
- Customized feature sets
- Certificate management
- HSM firmware update
- Extended secure boot
- Symmetric and asymmetric keys
- Symmetric and asymmetric cryptography
- Signature verification
- Life cycle management

**EB zentur CDH**
The communication between host and HSM is encapsulated via EB zentur Crypto Driver Hardware (CDH) to allow a seamless and reliable integration into Classic AUTOSAR stack.

- Communication with HSM firmware
- Configurable with EB tresos Studio
- Available for third-party HSM implementations

**EB zentur HSM Firmware-supported platforms**

**Infineon 32-bit TriCore™ AURIX™**
TC23x | TC27x | TC29x | TC32x
TC33x | TC35x | TC36x | TC37x
TC38x | TC39x | TC3e

**Infineon 32-bit TRAVEO™ T2G Arm® Cortex®**
CYT2B7 | CYT2B9 | CYT2BL
CYT4BB | CYT4BF | CYT4DN | CYT4EN

**ST Microelectronics**
SPC58 Chorus C Line
SPC58 Chorus G Line
SPC58 Chorus H Line

**Your service partner**
Elektrobit's services provide a long-term partnership and guaranteed outcome for your automotive software projects. Our product and service portfolio is strengthened by a service offering tailored to your needs:

- **Consulting and training**
  Develop the next-generation software with state-of-the-art experts and ensure the domain excellence.

- **Customized products**
  Meet the OEM- and Tier 1-specific security requirements with tailor-made products.

- **Customer support**
  Worldwide availability to technical expert support for reduced downtime and improved productivity.

**Contact us:**
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