Vault IC 18x

The Vault IC 18x series consists of two ready-to-use tamper resistant semiconductors specially designed for the authentication of accessories, such as batteries, printer cartridges or medical sensors.
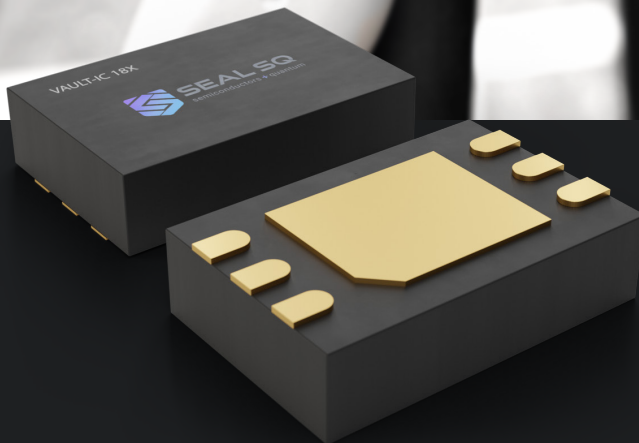
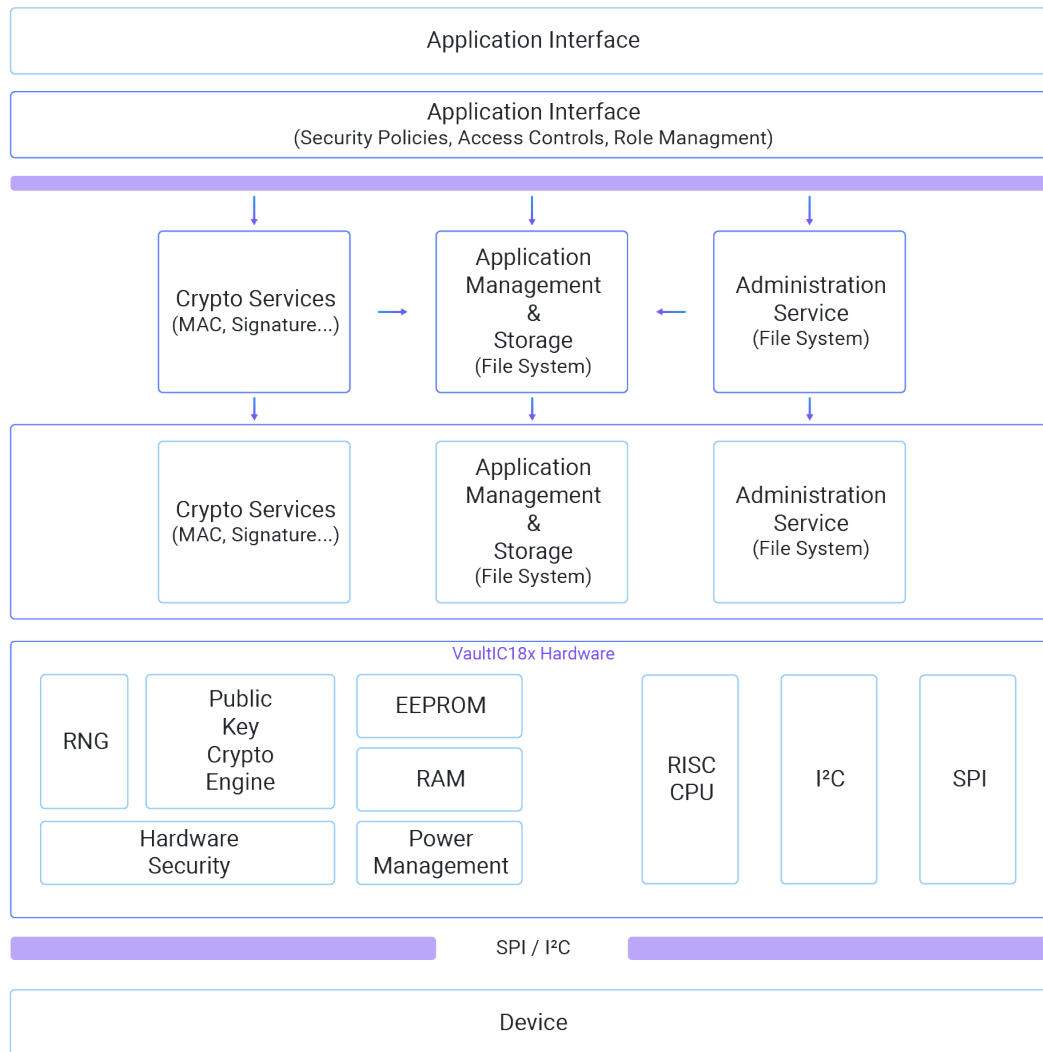**Easy Integration**   **Pre-Provisioned**   **Small Footprint**   **Usage Tracking**

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Block Diagram Vault IC 18x

Technical Features

Connectivity:
- One-Wire Interface (Vault IC 186)
- I2C (Vault IC 183)

Cryptographic Services:
- Digital signature (ECDSA) up to 283 bits
- Strong Mutual Authentication based on ECDSA
- Random Number Generation
- Secure 32-bit counters

Certifications / Standards:
- Hardware: EAL5+ ready
- ECDSA: FIPS 186-4
- ECC Parameters: NIST SP 800-186

Hardware Platform:
- Hardware 16-bit Public Key Crypto Accelerator
- Power consumption: 64µA in standby mode and 3 to 5mA during CPU-intensive operations
- Operating temperature : -40°C to +105°C
- Operating range: 1.62V to 5.5V
- I²C for Vault IC 183, One-Wire-Interface for Vault IC 186
- DFN-6 (RoHS compliant) 2mm x 3mm

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