UTIMACO
u.trust Anchor CSAR

utimaco ®

UTIMACO's Multi-tenant and Converged Cloud HSM Platform for General Purpose and Payment use Cases.

UTIMACO u.trust Anchor CSAR

Secure your digital transformation with a robust and converged HSM platform for payment and general purpose use cases **that enables you to deploy HSM-as-a-Service (HSMaaS) in the cloud or within your enterprise.**

u.trust Anchor is simple to manage and provides high assurance, tamper-resistant, security compliant, full control and audibility of your cryptographic keys with best-in-class performance**.**

Use Cases

- Document Signing
- Code Signing
- PKI
- Key Injection
- Key Management
- Transaction Signing
- Card Personalization
- BYOK
- DKE
- TLS

Application Programming Interfaces (APIs)

- **PKCS#11**
- **Microsoft Crypto API** (CSP)
- **Microsoft Cryptography Next Generation** (CNG)
- **Microsoft SQL Extensible Key Management** (SQLEKM)
- **Java Cryptography Extension** (JCE)
- **UCAPI** – UTIMACO Crypto API

Cryptographic Algorithms

- **RSA, DSA, ECC** with NIST and Brainpool curves
- **DH, ECDH** with NIST and Brainpool curves
- **5G, Block-Chain and PQC ready**
- **SHA-1, SHA-2 and SHA-3 Family**
- **AES, Triple DES, DES**
- **EC-VRF**
- **Hash-based deterministic RNG** (NIST SP800-90B, AIS31 DRG.4)
- **True random number generator** (AIS31 PTG.2)

Security Classification / Certifications

- **FIPS 140-2 Level 3**[*]
- **FIPS 140-3**[**]
- **Common Criteria EAL4+** (eIDAS)[**]
- **PCI – HSM**[*]

Features

- **Up to 32 partitions** with QOS
- **Deploy different firmware stacks per partition** in FIPS or Non-FIPS mode
- **"m of n" authentication**
- **Configurable role-based access control** and separation of duties
- **Multi-slot support**
- **Remote Management**
- **Software Simulator** for evaluation and integration testing
- **Secure key storage and processing**
- **Windows and Linux support**
- **Broad ecosystem of integrations** (PKI software, database encryption, …)

Models (PCIe and Network Form Factors)

- CSAR Premium
- CSAR Plus
- CSAR Standard

Product Family and Simulator Availability

- Based on u.trust Anchor
- SecurityServer
- Simulator included

19 inch Network Appliance

PCIe Card

Reliability

MTBF
- 134,250 hours, in acc. with Telcordia Issue 3, temperature 30°C, environment Ground Benign

Connectivity

Connection
- 2 RJ45 1 Gb/s network interfaces
- 2 SFP+ 10 Gb/s network interfaces as optional extension

Certification/Compliance

Safety
- UL, IEC/EN 60950-1
- CE, IEC/EN 62368-1
- CB Certificate

Emissions
- FCC Class B

Environmental
- RoHS II

Physical Specifications

Form Factor
- 19" Rack-mountable (1U)

Weight
- 10 kg

Dimensions
- Width: 446 mm (excluding brackets)
- Height: 44 mm
- Depth: 533,4 mm (excluding handles)

Operating Environment

Temperature
- +10°C to +50°C (+50°F to +122°F)

Relative Humidity
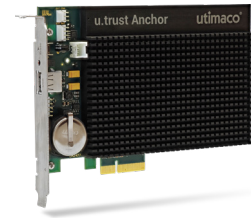- 10% to 95% Non-condensing

Electrical and Heat Specifications

Power Supply
- Redundant field-replaceable
- 2 x 100 ~ 240 V AC, 50 ~ 60 Hertz, 300 W

Heat Dissipation
- Max. 222 BTU/h

Reliability

MTBF
- 389,797 hours, in acc. with Telcordia Issue 3, temperature 30°C, environment Ground Fixed, temperature 50°C for parts in potting material

Connectivity

Connection
- PCIe x4
- Compatible with PCIe 1.1, PCIe 2.0 and PCIe 3 slots

Certification/Compliance

Emissions
- FCC Class B

Environmental
- RoHS II (pending)
- REACH

Physical Specifications

Form Factor
- PCIe Add-In Card (Standard Height; Half Length)

Weight
- < 500 g

Dimensions
- Width: 111,15 mm
- Height: 18,6 mm
- Depth: 167,65 mm (excluding brackets)

Operating Environment

Temperature
- Operation: +10°C to +40°C (+50°F to +104°F)
- Storage: -10°C to +55°C (+14°F to +131°F)

Relative Humidity
- 10% to 95% Non-condensing

Electrical and Heat Specifications

Operating Voltage
- 12 V supplied by PCIe Connector
- 3,3 V supplied by PCIe Connector

Heat Dissipation
- Max. 85.3 BTU/h

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