



CERTIFICATE

HUNGUARD Informatics and IT R&D and General Service Provider Ltd. (6 Kékgolyó str. Budapest 1123 Hungary) as a certification authority accredited by the accreditation document No. NAH-6-0048/2018 of National Accreditation Authority by applying the certification system HUNG_TMK-2-eIDAS_20220202 certifies, that the qualified certificate issuing trust service system provided by

Microsec Micro Software Engineering & Consulting Private Company Limited by Shares.

as an electronic information system applied for trust services according to 910/2014/EU regulation in relation to electronic signatures and infrastructures complies

with the ETSI EN 319 411-2 V2.4.1 (2021-11) Policy and security requirements for Trust Service Providers issuing certificates;
Part 2: Requirements for trust service providers issuing EU qualified certificates European Standard.

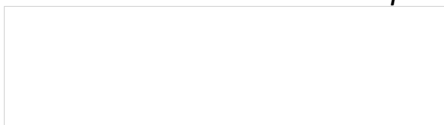
This certificate has been issued on the basis of the Certification report
HUNG-TJ-ESIGN-R-016-2022

Produced on commission for Microsec Micro Software Engineering & Consulting Private Company Limited by Shares
(Hungary, H-1033 Budapest, Ángel Sanz Briz str. 13.)

Certificate registration number: **HUNG-T-ESIGN-R-016-2022**
Validity start date of the certificate: 30 October, 2022
Validity end date of the certificate: 30 October, 2024

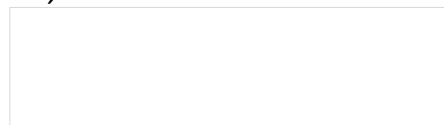
This Certificate has eighth pages including the Annexes containing validity terms and other attributes.

Budapest, 30 October, 2022



Endródi Zsolt Attila
Certification director

PH.



Szűcs Ákos Balázs
Managing director

Annex 1

Validity terms of the certificate

1 The trust service where the certified electronic information system applied in based on:

Category of Service ¹ :	<p>Qualified certificate issuing trust service</p> <p>http://uri.etsi.org/TrstSvc/Svctype/CA/QC</p> <p>Certificate validity status information service issuing Online Certificate Status Protocol (OCSP)</p> <p>http://uri.etsi.org/TrstSvc/Svctype/Certstatus/OCSP/QC</p> <p>Certificate validity status information services issuing and signing Certificate Revocation Lists (CRLs)</p> <p>http://uri.etsi.org/TrstSvc/Svctype/Certstatus/CRL/QC</p>
Name of Service:	Qualified certificate issuing trust service for electronic signature
Identifiers of Trusted Service Policy:	<p>OID: 1.3.6.1.4.1.21528.2.1.1.142 (version 3.1)</p> <p>1.3.6.1.4.1.21528.2.1.1.143 (version 3.1)</p> <p>1.3.6.1.4.1.21528.2.1.1.144 (version 3.1)</p>
Type of certificate policies: ²	QCP-n-qscd, QCP-n, NCP+
Identifier of Practice Statement of Trusted Service (SZSZ-MIN-ALA):	OID: 1.3.6.1.4.1.21528.2.1.1.192 (version 3.1)
Name of Service:	Qualified certificate issuing trust service for electronic seal
Identifiers of Trusted Service Policy:	<p>OID: 1.3.6.1.4.1.21528.2.1.1.181 (version 3.1)</p> <p>1.3.6.1.4.1.21528.2.1.1.182 (version 3.1)</p> <p>1.3.6.1.4.1.21528.2.1.1.183 (version 3.1)</p>
Type of certificate policies	QCP-l-qscd, QCP-l, NCP+
Identifier of Practice Statement of Trusted Service (SZSZ-MIN-BEL):	OID: 1.3.6.1.4.1.21528.2.1.1.172 (version 3.1)

¹ Based on ETSI TS 119 612 V2.2.1 (2016-04) 5.5.1.1 chapter

² Based on ETSI EN 319 411-2 v2.4.1 (2021-11) 5.2 chapter

Name of Service:	Qualified certificate issuing trust service for website authentication
Identifiers of Trusted Service Policy:	OID: 1.3.6.1.4.1.21528.2.1.1.170 (version 3.1)
Type of certificate policies	QEVCP-w
Identifier of Practice Statement of Trusted Service (SZSZ-MIN-SSL):	OID: 1.3.6.1.4.1.21528.2.1.1.171 (version 3.1)
Root certification unit Microsec e-Szigno Root CA 2009 ³	<p>Subject: C=HU, L=Budapest, O=Microsec Ltd., CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>Issuer C=HU, L=Budapest, O=Microsec Ltd., CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>SHA-256 hashes:</p> <p style="text-align: center;">3C5F81FEA5FAB82C64BFA2EAEC AFCDE8 E077FC8620A7CAE537163DF36EDBF378</p> <p style="text-align: center;">72F9AF2158181BAF16D60C9B4E6F4BD7 CA8D2341AD48AFDB67CB4C8332D546F6</p> <p style="text-align: center;">8E8C6EBF77DC73DB3E38E93F4803E62B 6B5933BEB51EE4152F68D7AA14426B31</p>
Productive certification units:	<p>Subject: C=HU, L=Budapest, O=Microsec Ltd., CN=Qualified e-Szigno CA 2009/emailAddress=info@e-szigno.hu</p> <p>Issuer: C=HU, L=Budapest, O=Microsec Ltd., CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>Subject: C=HU, L=Budapest, O=Microsec Ltd., CN=Qualified e-Szigno QCP CA 2012/emailAddress=info@e-szigno.hu</p> <p>Issuer: C=HU, L=Budapest, O=Microsec Ltd., CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>Subject: C=HU, L=Budapest, O=Microsec Ltd., CN=Qualified Pseudonymous e-Szigno CA 2009/emailAddress=info@e-szigno.hu⁴</p> <p>Issuer: C=HU, L=Budapest, O=Microsec Ltd., CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>Subject: C=HU, L=Budapest, O=Microsec Ltd./2.5.4.97=VATHU-23584497, CN=Qualified KET e-Szigno CA 2018</p> <p>Issuer: C=HU, L=Budapest, O=Microsec Ltd., CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>Subject: C=HU,L=Budapest,O=Microsec Ltd.,2.5.4.97=VATHU-23584497-2-41,CN=Qualified e-Szigno Organization CA 2016</p>

³This Root (trust anchor) was created earlier with two other certificate. The three selfsigned certificate have same attribute fields: Subject, Subject Private Key Identifier and the public key itself. The validity of the certificates and signatures issued by the mentioned Root are provided, based on the validity check by the previous Root certificates.

⁴ Not in use, because the TSP do not issue certificates with pseudonym.

	<p>Issuer: C=HU,L=Budapest,O=Microsec Ltd.,CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p> <p>Subject: C=HU,L=Budapest,O=Microsec Ltd.,2.5.4.97=VATHU-23584497,CN=Qualified e-Szigno TLS CA 2018</p> <p>Issuer: C=HU,L=Budapest,O=Microsec Ltd.,CN=Microsec e-Szigno Root CA 2009/emailAddress=info@e-szigno.hu</p>
Productive certification units KET ⁵ :	<p>Subject: C=HU, L=Budapest, O=Microsec Ltd./2.5.4.97=VATHU-23584497, CN=Qualified KET e-Szigno CA 2018</p> <p>Issuer: C=hu, CN=KGYHSZ (Public Administration Root CA - Hungary)</p> <p>Subject: C=HU, L=Budapest, O=Microsec Ltd., CN=Qualified KET e-Szigno CA 2009/emailAddress=info@e-szigno.hu</p> <p>Issuer: C=hu, CN=KGYHSZ (Public Administration Root CA - Hungary)</p>
Root certification units e-Szigno Root CA 2017	<p>Subject: C=HU, L=Budapest, O=Microsec Ltd./2.5.4.97=VATHU-23584497, CN=e-Szigno Root CA 2017</p> <p>Issuer: C=HU, L=Budapest, O=Microsec Ltd./2.5.4.97=VATHU-23584497, CN=e-Szigno Root CA 2017</p> <p>SHA256 hash:</p> <p style="text-align: right;">BE00B30839B9BC32C32E44479059506 41F26421B15ED089198B518AE2EA1B99</p>
Productive certification units:	<p>Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Qualified Pseudonymous CA 2017⁶</p> <p>Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Root CA 2017</p> <p>Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Qualified CA 2017</p> <p>Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Root CA 2017</p> <p>Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Qualified Organization CA 2017</p> <p>Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Root CA 2017</p> <p>Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Qualified QCP CA 2017</p> <p>Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Root CA 2017</p> <p>Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Qualified TLS CA 2018</p> <p>Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Root CA 2017</p> <p>Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno TSA CA 2017</p> <p>Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497</p>

⁵Only in the case of Qualified Public Administration Certificate Provider service (KET).

⁶ Not in use, because the TSP do not issue certificates with pseudonym.

	, CN=e-Szigno Root CA 2017 Subject: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN= e-Szigno TSA CA 2020 Issuer: C=HU ,L=Budapest ,O=Microsec Ltd. ,2.5.4.97=VATHU-23584497 ,CN=e-Szigno Root CA 2017
Root certification units Microsec e-Szigno Root CA	Issuer: C=HU, L=Budapest, O=Microsec Ltd., OU=e-Szigno CA, CN= Microsec e-Szigno Root CA Subject: C=HU, L=Budapest, O=Microsec Ltd., OU=e-Szigno CA, CN=Microsec e-Szigno Root CA <i>The Provider does not issue Certificates according to this hierarchy. The Provider keeps the SHA-1 based hierarchy for the verifiability of the previously created signatures and Time Stamps Intermediate Certification Units in the SHA-1 based hierarchy issued "closing CRLs". The Provider terminated the OCSP services serving the SHA-1-based hierarchy in April 2017. The validity of the old electronic signatures can be verified by using the closing CRL-s.</i>

2 Review of the system evaluation must be enforced in the following cases in order to confirm the results of the initial system evaluation certified in this document, to maintain the validity of certificate:

- once a year in the validity period of the Certificate (planned system evaluation review),
- responding to the main modifications in the system architecture or functionality (special).

3 Significant changes in the architecture or functionality of the system under operation must be reported by the Customer to the Certifier within 30 days after the modification went into operation. Furthermore, the Customer must send the documentation of the change in detail, which are commensurate with the former evaluation level. The Certifier evaluates the effects of the modification and decides on the necessity of a special system evaluation review in order to maintain the certificate validity.

4 When compliance is achieved, the Certifier fills out a Certificate Maintenance Record for the actual system state. The Customer must provide the terms of the planned or special system evaluation review.

Annex 2

Document containing the requirements

ETSI EN 319 411-2 V2.4.1 (2021-11) Policy and security requirements for Trust Service Providers issuing certificates; Part 2: Requirements for trust service providers issuing EU qualified certificates

ETSI EN 319 411-1 V1.3.1 (2021-05) Policy and security requirements for Trust Service Providers issuing certificates; Part 1: General requirements

ETSI EN 319 401 V2.3.1 (2021-05) Electronic Signatures and Infrastructures (ESI); General Policy Requirements for Trust Service Providers

Annex 3

Further features of the certification

This certificate based on contract signed on 06 July 2020 and the assessment started on 22 July 2022. This certificate has been issued according to the following:

- Evaluation report for Microsec Micro Software Engineering & Consulting Private Limited Company by Shares as a qualified trusted service provider based on ETSI EN 319 401 V2.3.1 (2021-05) standard v1.0 (C435-07/P/E-2022-ÉJ2)
- Evaluation report for Microsec Micro Software Engineering & Consulting Private Limited Company by Shares as a qualified trusted service provider qualified certificate issuance service based on ETSI EN 319 411-2 V2.4.1 (2021-11) standard v1.0 (C435-07/P/E-2022-ÉJ6)

Locations of assessment:

Central Site with offices, location of RA activities	Ángel Sanz Briz út 13, 1033 Budapest, Hungary. South Area of Graphisoft Park
Graphisoft serverroom	Záhony utca 7. D building, 1031 Budapest, Hungary 700 m away from central site
Dataplex serverroom	Asztalos Sándor út 13. 1087 Budapest, Hungary 10 km away from central site

Considered laws

REGULATION (EU) No 910/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC

2015 CCXXII. law the general rules of electronic administration and trust services

24/2016. (VI. 30.) BM decree on detailed requirements of trust services and trust service providers

Considered document about methodology

ISO/IEC 27002:2018 Information technology - Security techniques - Code of practice for information security management

NIST Special Publication 800-53 Revision 4 Security and Privacy Controls for Federal Information Systems and Organizations

NIST Special Publication 800-53A Revision 4 Assessing Security and Privacy Controls in Federal Information Systems and Organizations: Building Effective Assessment Plans (December 2014)

Contact:

HUNGUARD Kft., 6 Kékgolyó street, 1123 Budapest, Hungary

Tel: +36 1 792 0880; Fax: +36 1 445 0414

e-mail: iroda@hunguard.hu