

■

, web-
USB- - 2.0 .

, , , PKI.

java- web-.

Intel-

- x86
- x86_64

, :

- Windows XP,
- Windows 7,
- Windows 8.1,
- Windows 10,
- macOS,
- Linux x86,
- Linux x86_64

, :

- Google Chrome
- Internet Explorer
- Mozilla Firefox
- Opera
- Edge
- .
- .

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1. rtPKCS11ECP, PKCS#11 .
2. npCryptoPlugin, Active-X IE.
3. npRutokenPlugin , Native Messaging Google Chrome, Mozilla Firefox, Opera chromium-based.
4. Google Chrome, Opera Mozilla Firefox.

MSI- OC Windows, pkg- macOS.

Linux .

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- 34.10-2012, 34.10-2001 RSA
- 34.10-2012, 34.10-2001 RSA
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- PKCS#10 (,)
- X.509, base64-
-
- , X.509 (DN, keyUsages, extendedKeysUsages ..), .
-
- ' CMS. base64 .
- CMS
- ()
- - 34.11-2012 34.11-94

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- 2.0
- 2.0 2100
- 2.0 3000
- 2.0 Flash
- 2.0 Touch
- 2.0 Flash Touch
- Bluetooth (USB)
- PINPad
- PKI ()
- ()

- , 28147-89, 34.10-2012/ 34.11-2012 34.10-2001/ 34.11-94.
- RFC 4357 RFC
- VKO GOST 34.10-2001 (RFC 4357) VKO GOST 34.10-2012 (RFC)
- RFC 3851 3852, RFC 4490.
- RFC 3280.
- RFC 4491.
- PKCS#11 v. 2.20