



Rockey4 Smart

Smart Card Based



Introduction

ROCKEY4 SMART software protection dongle hardware is based on smart card. Its hardware design provides complete protection mechanism and high level of integration. The smartcard chip and its manufacturer have certified by EAL 4+ and IT SEC certification. Its usability and stability are also regulated by ISO/IEC 10373 standard in various aspects like ultraviolet radiation, X ray, electromagnetic field etc.

The smart card chip of ROCKEY4 SMART has the capability of resisting electron detection attack (SPA and DPA) and physical attack (SiShell). The chip is well protected since the initial designing period. By generating noisy and interfering signal technique, adding filter circuit to reduce noise signal and applying special protecting material, the auditing chip runtime instructions are impossible. Controlled by CPU, the hardware random number generator is used to protect the communication datagram.

Derived from ROCKEY4 dongle products, the driverless technique is applied to ROCKEY4 SMART to make the device driverless in Windows 2000/XP/2003/Vista/7, Linux and Mac OS. User can easily use and maintain the device. Bigger memory space and more user defined algorithms are provided. The users of ROCKEY4 can easily switch their application to ROCKEY4 SMART without extra programming. Only recompiling the code can implement the migration.

Key Features

- Hardware based soft clock;
- User definable 8 bytes dongle password;
- Universal unique hardware ID;
- 2 levels-4 groups (basic password & advanced password) password management mechanism, i.e. developer password and end-user password;
- Built-in seed code algorithm;
- Compliant with CE and FCC standards. Support multiple operating systems: Windows 2000 / XP / 2003 / Vista / 7, Linux and macOS;
- License management function;
- Communication datagram encrypted against interception;
- USB driverless device;
- Provide shell encryption tool;
- 1,000 bytes user space;
- Provide 64 module control units;
- Support for 128 user defined algorithms;
- Standard USB 1.1 device, support USB 2.0 interface;
- Provide multiple software programming interfaces: Delphi, Power Builder, Python, Fortran, Java, RealBasic, Oracle, SQL2000, FoxPro, VB, VBA, VC, C# and VB.NET etc.

Specification

CPU	8 bit Smart Card
Certification	CE, FCC, EAL 4+ and IT SEC
Hardware Series Number	Global unique Hardware ID
Memory space	2000 bytes
Built-in algorithm	Seed Code, Random Number, User defined algorithms, DES, 3DES, RSA
Built-in clock	Time license
Read Times	Unlimited
Write Times	At least 100,000
Interface Standard	Standard USB 1.1 device, support USB 2.0 interface
Platform Support	Windows XP / 2000 / 2003 / Vista / 7, Linux, macOS
Interface Type	USB type A
Interface Standard	Standard USB 1.1 device, support USB 2.0 interface
Encryption Method	Shell encryption, programming API
Casing Material	PC (polycarbonate)
Operating Temperature	0°C ~ 70°C
Storage Temperature	-10°C ~ 80°C
Humidity	20%-80%
Cascade Levels	Up to 16
Power Supply	USB port
Working Power	250mw (Max.)
Working Voltage	5V
Working Current	50mA (Max.)
Data Retention Period	At least 10 years

www.rsa.ir

Unit 10, No.58, Ebrahimi St., Teymoori Blvd., Tehran, Iran, 1458995004
Tel: +98 21 66016033 Fax: +98 21 66013776

Email: info@rsa.ir Website: www.rsa.ir