

Elite EL Drive

Product Brochure



The Dongle with Application Media

The flash-embedded Elite EL Drive dongle is a high-speed USB 2.0 device with write speeds exceeding 10Mb/s and read speeds over 20Mb/s. With a flash drive capacity of 8Gb (16Gb and 32Gb may also be available), the memory chips are of high quality MLC or SLC. The Elite EL Drive is ideal for distributing top-end applications embedded on the dongle device.

- **High-speed storage**

The embedded flash is high-speed USB 2.0 with the maximum write speeds over 10Mb/s and maximum read speeds over 20Mb/s.

- **High capacity**

The capacity of the flash drive chip is 8Gb (16Gb and 32Gb may also be available), and to ensure data storage security, only flash drive memory chips of high quality, MLC or SLC, are used.

- **Multiple partitioning options**

Partitioning is customizable to enable a variety of partition schemes (Security Partition, Public Partition, Hidden Partition, and CD-ROM). Partition sizes can be configured, and developers can choose the most feasible scheme to match requirements of the software products.

- **Password protection**

Only a user with a valid password can access the protected device zone. Even if the device is lost, data is still under protection. (Windows systems only)

- **No interference**

The dongle and the Flash drive work independently from each other, without interference. Users may need to develop encryption functions respectively according to their requirements.



Ultimate Protection

The ultimate in dongle protection, based on an excellent chip (EAL 5+), Elite EL DRIVE is ideally suited to demands of the highest level of dongle security for protecting high end products from piracy. The Elite EL DRIVE is designed and manufactured to explicit manufacturing norms (ISO/IEC 10373, ISO/IEC 15408), formulated in accordance with international criteria EAL (Evaluation Assurance Level), and ranked in the international 1-7 grading system for scientific evaluation of chip security.



Best Chip Security

EAL 5+ is at the upper limit of current technical advancement in smart chip security. Elite EL DRIVE is equipped with the most advanced 16-bit smart card chip making it a state of the art EAL 5+ implementation for the global hi-tech sector. EAL 5+ means that the Elite EL provides outstanding effectiveness in resistance of major attacks such as Electronic Attack (SPA and DPA), Probe Attack (SiShell), Chip Dissection and Debug Port..



Code-Port Solution

Code Port is an evolutionary technique for transferring key codes from protected software to a dongle under secure communication. When a corresponding dongle is plugged, the protected application calls specific API functions to run key codes and data stored in the dongle and return legal results, so as to complete the full operation of the protected application. As the codes and data stored in the dongle do not have copies at the PC end, malicious crackers are unable to retrieve algorithms or data by physical interception.



Handy Remote Update

Dongles can be updated remotely without the need for callback. The updating process is reliable and secure, therefore hugely improving work efficiency and saving greatly on management and logistics costs.



Smart Technology

As distinguished from conventional chip technology, the Elite EL smart card chip contains a high performance cryptographic algorithm accelerator or coprocessor. A smart card chip of this nature can be viewed as a highly integrated mini PC. Now, let us see how smart it truly is:

- **Automatic self-locking mechanism**

Access to the chip is protected by PIN with the maximum number of re-tries pre-set by software developers. So under a dictionary attack, once the number of re-tries exceeds the pre-set value, the chip triggers a self-locking mechanism and blocks all external running operations.

- **Globally unique serial number**

A global unique SN that cannot be altered or rewritten is assigned to the smart card chip. This puts an end to piracy and enables effective management of the released chips.

- **Hardware random number generator (White Noise Technology)**

The smart card chip produces a high security random number, enabling the implementation of more secure solutions.

- **Built-in timer**

The timer is a very useful component for software protection that applies to time-limited usage and anti-tracking. The Elite EL has a built-in timer lasting more than 10 hours, considerably longer than similar competitor products.

- **Driverless**

In full compliance with USB-HID device interface specifications, Elite SL dongle can be used in most operating systems without additional device drivers. This greatly reduces the difficulty of deployment and maintenance.



Technical Specification

CPU	16-bit, 16MHz	Smart Card
RAM(bytes)	VM Mode	254+2047
Memory(bytes)	64K	
IO Buffer(bytes)	250	
Working Voltage	DC 5V +/- 5%	
Max Consumption	1000mW	
Working Temperature	0°C~70°C	
Data Retention	10 Years	Typical
Rewritable	100,000 times	Lowest
Connection Type	USB 1.0, USB 2.0	
Encryption Algorithm	RSA, DES, TDES, SHA1	
Connection	Driver or HID	

Technical Specification of the Flash

Flash Type	MLC,SLC(Super High-speed)
Flash Capacity	8Gb (16Gb and 32Gb may also be available)
Erasing	MLC>10000 times; SLC>100000 times
Data Retention	10 Years
USB Spec.	USB 2.0,High-speed
Speed	Up to 480Mbps
USB Spec.	USB 2.0,High-speed
Device Type	Mass storage Device (Driverless)
Working Temperature	0°C~70°C
Working Voltage	3.0-5.5V

Storage Temperature -55-150°C

Max. Current 400 mA

Operating Systems Supported

Window 98SE/ME, Windows 2000, Windows XP, Windows Vista, Windows 7/8/10/11, Windows Server 2003, Windows Server 2008, WinCE, Linux, MacOS.

Programming Languages Supported

VC++, C++ Builder, BC, VC6, VS2005, VS2008, Delphi6, Delphi7, Delphi2010, VB6, VB2008, PB, AutoCAD, C#, Java and more. Contact us for extra support.

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