

Certificate of HASP Memory Volatility

This document outlines all relevant information required by a vendor to certify the level of volatility of the memory utilized in HASP USB keys produced by Aladdin Knowledge Systems.

Manufacturer:

Aladdin Knowledge Systems

Product Name(s):

HASP USB keys
HASP4 Parallel keys

Model(s):

HASP HL: Basic, Pro, Max, Net
HASP4: Std, M1, M4, Net

Type of Memory:

Non-volatile memory used. There is no volatile memory in the specified HASP HL and HASP4 models.

Type of Non-Volatile Memory:

EEPROM

Accessibility of Non-Volatile Memory:

1) Can the memory be accessed by accidental/intentional keystroke, or software malfunction?

Yes, the non-volatile memory can be accessed by software malfunction.

2) Locations of non-volatile memory along with accessibility and purpose of memory?

- User area – this area of the memory is accessible by Aladdin customers product for Read / Write
- System area – this area of memory is not accessible and used by Aladdin for Read Only purposes.

Required Memory:

Is the device needed for normal operation, i.e. required for this processing period?

Yes, the HASP software protection key is required for normal operation of software.

Device Removal Consequences:

If the device memory chip is erased, what impact will it have on the operation and normal function of the device?

If the System area of memory is erased, the device will not be accessible at all. If the user area of the memory is erased then the device is 'alive' but delivers incorrect data to the application. In this case, the behavior depends on Aladdin customer's implementation of the HASP product.

Method of Memory Access:

How is the memory accessed? Is non-volatile memory location theoretically accessible with any system code, not just via the operating system or low-level booting firmware?

[The memory is accessed only via Aladdin Software \(Firmware, API and drivers\)](#)

Warranty:

Does chip removal or EEPROM erasure void the warranty?

[Yes](#)

Memory Size:

How much memory is contained in the key?

[Up to 16KB – depending on the model](#)

Memory Spacing:

Is the memory fully utilized or does it have available memory space for additional information to be placed?

[There is unused space but it can only be used by Aladdin for future purposes](#)

Data Remanence:

Can the non-volatile memory be addressed to ensure that only authorized information is resident? If yes, then how?

[The HASP system ensures that the System memory area only contains authorized information. The information in the User memory area can be verified by Aladdin's customer.](#)

Additional Notice from Aladdin Knowledge Systems:

[Aladdin Knowledge Systems reserves the right to modify the product without prior notification.](#)

Evaluation and summary of HASP memory volatility information was completed by:

Haim Ramon

Product Manager, SW DRM

Aladdin Knowledge Systems

Haim.Ramon@aladdin.com