

Series
2000

AP-DOC-011
Application
Note

Write Protecting the
DiskOnChip[®] 2000

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1. Preface

The purpose of this application note is to explain how to use the DPROTECT utility to enable the write-protect mechanism in the DiskOnChip2000 Flash Disk. Write protection allows the end user to read data from the Flash Disk, while preventing any modifications to it, thus protecting the media from viruses and unauthorized user modification. The DiskOnChip2000 will retain its write protection even when it is transferred to a different system.

This application note is based on the information provided in Application Note AP-222, *Write Protection for M-Systems' Flash Disks*. AP-222 provides information on the code implementation details and how to call the write protection API from within a program. This application note, AP-DOC-011, provides information on using the write protection utility: DPROTECT.

2. Usage

The DPROTECT syntax is:

DPROTECT drive: /{ON | OFF} [/PASSWORD=*password*]

drive:	Drive letter ¹ assigned to the DiskOnChip2000
ON OFF	/ON - enable write protection /OFF - disable write protection
/PASSWORD= <i>password</i>	<i>password</i> is an optional eight ² character ³ password. If a password is not supplied, the default password will be used.

Note:

1. You can run the DINFO utility to determine the drive letter assigned to the DiskOnChip2000.
2. If a longer password is specified it will be truncated to eight characters.
3. Only printable characters can be used.
4. All parameters, except the password, are not case sensitive.

3. Examples

Example 1:

```
DPROTECT D: /ON
```

or

```
dprotect d: /on
```

Assuming that the DiskOnChip2000 is accessed as drive D:, this command will write protect the device with the default password. In order to remove the protection, DPROTECT must be used without a password, as described in example 2.

Example 2:

```
DPROTECT C: /OFF
```

or

```
dprotect c: /off
```

Assuming that the DiskOnChip2000 is accessed as drive C:, this command will remove the write protection only if the device was protected with the default password. If a password was specified when the device was protected, then this command will fail.

Example 3:

```
DPROTECT C: /ON /PASSWORD=mydisk
```

or

```
dprotect c: /on /password=mydisk
```

Assuming that the DiskOnChip2000 is accessed as drive C:, this command will protect the device with the password “mydisk”. In order to remove the protection, DPROTECT must be used with the same password, “mydisk”, as described in example 4.

Example 4:

```
DPROTECT D: /OFF /PASSWORD=mydisk
```

or

```
dprotect d: /off /password=mydisk
```

Assuming that the DiskOnChip2000 is accessed as drive D:, this command will remove the write protection from the device with the password “mydisk”. If the password does not match the one used to enable write protection then the operation will fail. If the password is lost, the only way to unprotect the device is to run DFORMAT. This operation will erase the entire contents of the DiskOnChip2000. For further information regarding the DFORMAT utility, please refer to the *DiskOnChip2000 Utilities User Manual*.

4. Additional Documentation and Tools

Document/ Tool	Description
DiskOnChip 2000 Data Sheet	DiskOnChip Data Sheet
DiskOnChip 2000 Utilities	DiskOnChip 2000 Utilities User Manual
DiskOnChip2000-EVB	DiskOnChip Evaluation Board
DiskOnChip2000-PIK	DiskOnChip Programmer and Integrators Kit
DiskOnChip-GANG	8 Socket Gang Programmer*
AP-222	Password-controlled write-protection feature for TFFSBIOS Flash Disks.

* Contact M-Systems for availability

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