



# M-Systems

Flash Disk Pioneers

## Product Update

<b>Subject:</b>	<b>TrueFFS 4.1 – New DiskOnChip Software Upgrade TrueFFS/DOS V1.23 – New DiskOnChip Software for DOS</b>		
<b>Products:</b>	DiskOnChip family	<b>Part Number:</b>	MD22xx to MD28xx
<b>Update #:</b>	PU0400	<b>Date:</b>	February 16,2000

### Description:

M-Systems has announced a software upgrade for the DiskOnChip family. The new version number is: TrueFFS 4.1 for all the operating systems except DOS, and version TrueFFS 1.23 for DOS and utilities.

Beginning April 15, 2000, all DiskOnChip DIP products (DiskOnChip 2000 and DiskOnChip Millennium DIP) will be delivered formatted and containing the DOS 1.23 driver, this is in place of the DOS 1.21 driver. The Millennium TSOP is shipped unformatted.

### New Features in TrueFFS 4.1

TrueFFS 4.1 includes the following new features:

- Supports the entire DiskOnChip product family, including the new DiskOnChip 2000 products based on the new 0.21 micron technology (MD2202-Dxx, MD2203-Dxx) and DiskOnChip Millennium.
- Supports new flash technologies (256Mbit)
- Supports DiskOnChip 2000 in high profile, up to 288MB
- Supports DiskOnChip 2000 in low profile, up to 96MB
- Support a new API DiskOnChip, extended services. The new API is provided through an IOCTL interface. New features that are available through the new API are:
  - Media write protect with password protection
  - Defrag operation to enable improved write performance by pre-erasing flash areas
  - An Info inquiry command that provides information about media type, state, driver version and other useful information
  - Flash media physical access API
  - BDK (Boot partition) access API
  - Re-mount
- Improved wear leveling

### New Features in TrueFFS/DOS 1.23

TrueFFS/DOS 1.23 includes most of the features in TrueFFS 4.1 except the IOCTL feature.

**Availability**

DiskOnChip TrueFFS 4.1 and DOS driver & utilities version 1.23 will be available on April 15, 2000 from the M-Systems' website. All DiskOnChip devices shipped from M Systems beginning April 15, 2000, will include the new TrueFFS/DOS 1.23, in place of 1.21.

**OS support**

The following operating systems are supported by the new software release: DOS, Windows 2000, Windows CE, VxWorks, QNX, pSOS, Embedded NT. In addition, OSAK 4.1 supports non-OS or proprietary environments. OSAK and BDK will also be available on April 15, 2000. For other Operating Systems support please contact M-Systems or the OS vendor.

**Utilities Compatibility**

The DiskOnChip software utilities, version 1.23, is fully backward compatible with all DiskOnChip products.

**DiskOnChip GANG Programmer Support**

DiskOnChip GANG, software version 1.23, will be available on April 15, 2000. The software has been improved and upgraded to support the new DiskOnChip devices. Customers using the DiskOnChip software, version 1.21 or lower, and want to upgrade to the new TrueFFS software, version 4.1 (or DOS driver 1.23), will need to create a new binary image (with the new driver), using the GANG software version 1.23.

**Key Milestones:**

All DiskOnChip DIP products (DiskOnChip 2000, DiskOnChip Millennium DIP) are shipped formatted and loaded with the TrueFFS 1.23 DOS driver	April 15, 2000
GANG Software 1.23 upgrade release	April 15,2000

Please contact your M-Systems' representative, or refer to M-Systems' web site ([www.m-sys.com](http://www.m-sys.com)), for any further information or guidance.

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