

DiskOnChip 2000

Rugged, Reliable, Competitive




DiskOnChip[®] 2000, a field-proven industry standard for modular, flash storage, delivers high reliability in a standard, rugged DIP form factor that is easy to integrate. DiskOnChip 2000 is a highly cost-effective data and code-storage solution. It achieves unrivaled data reliability with M-Systems' TrueFFS[®] Flash File System, without degrading performance. Available in a range of capacities using the same socket, DiskOnChip 2000 enables embedded designers to seamlessly and reliably upgrade to higher capacities. DiskOnChip 2000 transparently supports the most popular operating systems and CPUs to help meet tight time-to-market schedules.

DiskOnChip 2000 has been successfully designed into hundreds of systems, such as Single Board Computers (SBCs), Industrial PCs (IPCs), thin clients, servers, and telecom infrastructure equipment.



DiskOnChip 2000 implements M-Systems' most highly refined, cost-effective NAND technology while meeting standard, embedded system requirements for reliable, on-target data and code storage.

UNMATCHED DATA RELIABILITY

On-the-fly Error Detection and Correction Code (EDC/ECC) and M-Systems'  TrueFFS® Flash File System, an industry standard for flash management, guarantee data reliability without any performance penalties.

RUGGED

DiskOnChip 2000 provides rugged storage packed in a standard, 32-pin DIP.

SEAMLESSLY SCALABLE

All capacities use the same size 8KB memory window for seamless upgrades.

ANY CPU, ANY OS

DiskOnChip 2000 is compatible with every major CPU and supports all major OS environments. A royalty-free SDK enables proprietary CPU and OS support.

RELIABILITY

- EDC: 4 random bits/512 Bytes
- ECC: 2 random bits/512 Bytes

PERFORMANCE

- Burst Read/Write: ISA 1.1MB/sec, local bus 11.9MB/sec
- Sustained Read: ISA 1.1MB/sec, local bus 6MB/sec
- Sustained Write: ISA 0.65MB/sec, local bus 2.1MB/sec

OS & CPU SUPPORT

- OSs: Linux, pSOS, QNX, VxWorks, XP, WinCE
- CPUs: x86, PowerPC, MIPS, StrongARM, XScale, SuperH

FORM FACTOR

- 32-pin DIP
- Profile: low and high

WIDE CAPACITY RANGE

- Low Profile (MB): 16, 32, 48, 64, 96, 128, 192, 256, 384
- High Profile (MB): 576, 768, 1024

ELECTRICAL

- Active (typ): Read 30 mA, Program/Erase: 30 mA
- DC Supply Voltage: 5V or 3V ($\pm 0.25V$)

ENVIRONMENTAL

- Commercial Temperature: 0°C to +70°C
- Extended Temperature: -40°C to +85°C

ORDERING INFORMATION

T = Extended Temperature

- Low Profile: MC2202-DCCC-V-T
(CCC = 16-384MB)
- High Profile: MC2203-DCCCC-V-T
(CCCC = 576-1024MB)

USA Tel: +1-510-494-2090 Fax: +1-510-494-5545
Japan Tel: +81-3-5423-8101 Fax: +81-3-5423-8102
Taiwan Tel: +886-2-8770-6226 Fax: +886-2-8770-6295

China Tel: +86-755-2519-4732 Fax: +86-755-2519-4729
Europe Tel: +972-9-764-5011 Fax: +972-3-548-8666

 **M-Systems**
Flash Disk Pioneers
www.m-systems.com/embedded