

1.8-Inch Type II PC Card (removable storage)

TOSHIBA 1.8-Inch Hard Disk Drive

Transforming Mobile Storage

Toshiba Storage Device Division takes storage where it's never been before, fueling a range of new markets and applications to make life easier on the go. Toshiba's 1.8-inch hard disk drives offer powerful storage solutions to keep pace with your work and home lifestyles.

Packing high capacity storage into a PC Card format, the 1.8-inch removable drive provides mobile computer users with additional portable storage and increased mobility.

The 2GB and 5GB cards offer users all the storage they need in the palm of their hand, holding as much information as 3,500 floppy disks or just more than 7 CDs in a disk the size of a credit card.

Weighing less than two ounces, the drive's powerful, lightweight design makes it an ideal "bridge" device for sharing data between systems – such as two notebooks, a notebook and digital camera or other digital gear.

The card also functions as an external hard disk drive with robust back-up storage capabilities for large multimedia presentations, digital photos, movies, MP3 files and even additional operating software.

For busy executives, college students – virtually anyone needing portable storage – Toshiba's 1.8-inch removable hard disk drives eliminate the need to carry multiple CDs, diskettes or cumbersome external drive cables while on the road, in the office or around the house.

When you need a hard disk drive that can deliver power and unparalleled performance – look to Toshiba.

Storage just got easier.

FEATURES:

- **High Capacity:** 2GB and 5GB (5GB removable storage equivalent to 3,500 floppy disks or 7.7 CDs)
- **Ease Of Use:** PC Card format for Type II slots
- **Lightweight Design:** 1.94 oz (weighs less than a pager)
- **Small Footprint:** 5 x 54 x 85.6 mm (size of a credit card)



Toshiba 1.8-inch Hard Disk Drive – PC Card

BENEFITS/USES:

Removable back-up storage – Just slide the drive into the PC Card slot on your laptop, PDA or MP3 player. Safeguard your important files by simply dragging and dropping to the PC drive, or store additional software and operating systems on the drive to expand the functionality of your mobile PC.

"Bridge" device for sharing data between PC and non-PC appliances – Share information from laptop to laptop, laptop to digital camera, digital camera to car navigation system.

Store work and home files – From multimedia presentations to digital photos to MP3 files, the 1.8-inch removable drive can serve as a personal hard disk drive. Once files have been saved, just pop out the disk and all your data moves with you.



L2000 MK2001MPL 1.8-Inch Hard Disk Drive Series

BASIC SPECIFICATIONS

Formatted Capacity (GB) ¹	2.0
Number of Disks	1
Number of Data Surfaces (Heads)	2
Max. Recording Density (KBPI)	372
Track Density (TPI)	24,200
<u>Logical Configurations</u>	
Cylinders	3,900
Sectors	63
Heads	16
Interface Type	PC Card ATA/ 68-pin ATA

FUNCTIONAL SPECIFICATIONS

Seek Time (ms)	
Track-to-Track	3
Average	15
Maximum	26
Average Latency (ms)	7.14
Rotational Speed (RPM)	4,200
Data Transfer Rate	
Max. Internal (Mb/s)	130
Buffer-to-Host (MB/s) – 68-pin ATA	
ATA: PIO Mode	16.6
Ultra DMA Mode	66.7
Buffer-to-Host (MB/s) – PC Card ATA	
I/O Mode	5.2
Memory Mode	20
Buffer (KB)	256

RELIABILITY CHARACTERISTICS

MTTF (hours)	300,000
--------------	---------

POWER SPECIFICATIONS

Power Requirements	+3.3V (+5/-5%)	+5V (+5/-5%)
Power Consumption		
Spin Up (W)	1.2	1.9
Reading/Writing (W)	1.3	2.0
Seeking (W)	1.3	2.0
<u>Idle (W)</u>		
Idle (W)	0.5	0.8
Stand-By (W)	0.23	0.38
Sleep	0.05	0.1
Power Efficiency (W/GB)	0.25	0.4

ENVIRONMENTAL LIMITS

Temperature	
Operating	5°C to 55°C
Non-operating	-20°C to 60°C
Vibration	
Operating	1.0 G (5-500 Hz)
Non-operating	5.0 G (10-500 Hz)
Shock	
Operating	150 G / 2.0 ms
Non-operating	1000 G / 1.0 ms

PHYSICAL SPECIFICATIONS

Dimensions	
Width	2.13" (54mm)
Height	0.197" (5mm)
Depth	3.37" (85.6mm)
Weight	1.94oz. (55g)



L5000P MK5002MPL 1.8-Inch Hard Disk Drive Series

BASIC SPECIFICATIONS

Formatted Capacity (GB) ¹	5.0
Number of Disks	1
Number of Data Surfaces (Heads)	2
Max. Recording Density (KBPI)	507
Track Density (TPI)	41,600
<u>Logical Configurations</u>	
Cylinders	3,900
Sectors	63
Heads	16
Interface Type	PC Card ATA/ 68-pin ATA

FUNCTIONAL SPECIFICATIONS

Seek Time (ms)	
Track-to-Track	3
Average	15
Maximum	26
Average Latency (ms)	7.52
Rotational Speed (RPM)	3,990
Data Transfer Rate	
Max. Internal (Mb/s)	125
Buffer-to-Host (MB/s) – 68-pin ATA	
ATA: PIO Mode	16.6
Ultra DMA Mode	66.7
Buffer-to-Host (MB/s) – PC Card ATA	
I/O Mode	5.2
Memory Mode	20
Buffer (KB)	256

RELIABILITY CHARACTERISTICS

MTTF (hours)	300,000
--------------	---------

¹ Toshiba defines 1 GB as 1,000,000,000 bytes.

POWER SPECIFICATIONS

Power Requirements	+3.3V (+5/-5%)	+5V (+5/-5%)
Power Consumption		
Spin Up (W)	1.2	1.9
Reading/Writing (W)	1.3	2.0
Seeking (W)	1.3	2.0
<u>Idle (W)</u>		
Idle (W)	0.5	0.8
Stand-By (W)	0.23	0.38
Sleep	0.05	0.1
Power Efficiency (W/GB)	0.1	0.125

ENVIRONMENTAL LIMITS

Temperature	
Operating	5°C to 55°C
Non-operating	-20°C to 60°C
Vibration	
Operating	1.0 G (5-500 Hz)
Non-operating	5.0 G (10-500 Hz)
Shock	
Operating	200 G / 2.0 ms
Non-operating	1000 G / 1.0 ms

PHYSICAL SPECIFICATIONS

Dimensions	
Width	2.13" (54mm)
Height	0.197" (5mm)
Depth	3.37" (85.6mm)
Weight	1.94oz. (55g)

TOSHIBA STORAGE DEVICE DIVISION

35 Hammond, Irvine, CA 92618-1697 TEL (949) 457-0777, FAX (949) 588-7845,

Specifications are subject to change without notice. Toshiba is a registered trademark of Toshiba Corporation. Printed in USA. SDD 8/01©2001