




DiamondMax® **45** **PLUS**

 Breathe new life into your digital A/V and 3-D gaming applications with the DiamondMax® Plus 45 series from Maxtor. Offering up to 45 GB of storage, sub-8.7 ms average seek time and a 7200 RPM spin speed, DiamondMax Plus 45 drives are ideally suited to disk-intensive environments where burst and sustained transfer rates are crucial. They feature the latest Ultra ATA/100 interface and a high-speed 2 MB SDRAM cache buffer with advanced buffer management to accommodate data streams up to 100 MB per second. They also employ Maxtor's Adaptive ATA Control™ for unsurpassed data integrity and the new Maxtor Silent Store™ technology for whisper-quiet acoustic performance. Maximize your computer data storage with the DiamondMax Plus 45.

7200 RPM

**3.5-INCH
HIGH-
PERFORMANCE
HARD DRIVES**

Capacities up to 45 GB

*Designed for High-end
Desktops and Workstations*

HIGHLIGHTS:

*Fast ATA/Enhanced
IDE compatible*

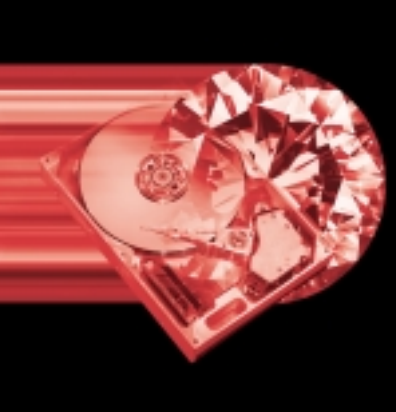
*Digital Signal Processor
(DSP)-Based Architecture*

*Ultra ATA/100
Data Transfer Rate*

*2 MB SDRAM
Cache Buffer*

<8.7 ms Seek Time

*No Quibble Service®
and Support*



Best Buy
DiamondMax Plus 40 (40 GB)
Computer Shopper, April 2000



Kick Ass Product
DiamondMax Plus 40 (40 GB)
Maximum PC, April 2000



Best Hard Drive
DiamondMax 60 (60 GB)
PC World, June 2000



Win100 Award 2000
DiamondMax Plus 40 (40 GB)
Winmag.com, June 2000

MODEL	54610H6	53073H4	52049H3	51536H2
CAPACITY	46103 MB	30735 MB	20491 MB	15367 MB
HEADS	6	4	3	2
PLATTERS	3	2	2	1

DiamondMax[®] 45 PLUS

Maxtor's DiamondMax Plus 45 series delivers outstanding performance including:

- 15.4 GB of data storage per platter
- Fast data transfer rates (up to 100 MB/sec)
- 7200 RPM spin speed
- < 8.7 ms average seek
- 2 MB cache buffer
- 3-year warranty



PERFORMANCE SPECIFICATIONS

Seek Times (typical)	
Track to Track	1 ms
Average	< 8.7 ms
Full Stroke	< 20 ms
Average Latency	4.17 ms
Rotation Speed (± 0.1%)	7200 RPM
Controller Overhead	< 0.3 ms
Start Time (0 - drive ready)	8.5 sec typical

DATA TRANSFER RATES

To/From Interface	up to 100 MB/sec
To/From Media	up to 49.5 MB/sec

DRIVE CONFIGURATION

Integrated Controller	Ultra ATA/100
Buffer Size	2 MB
Buffer Type	SDRAM
Data Zones per Surface	16
Bytes per Sector/Block	512

RELIABILITY SPECIFICATIONS

Start/Stop Cycles	50,000 (minimum)
Component Design Life	5 years (minimum)
Data Errors (non-recoverable)	< 10 per 10E15 bits read
Annual Return Rate (ARR)	< 1%

POWER REQUIREMENTS (TYPICAL)

MODE	12V±10%	5V±5%	POWER
Spin-up (peak)	2500 mA	620 mA	
Seek	800 mA	510 mA	12.9 W
Read/Write	525 mA	515 mA	9.0 W
Idle	350 mA	490 mA	6.6 W
Standby	30 mA	270 mA	1.75 W

ENVIRONMENTAL LIMITS

ACOUSTICS

Idle mode	3.3 bel (average sound power) ¹
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TEMPERATURE

Operating	5° C to 55° C
Non-operating, Storage	-40° C to 71° C

RELATIVE HUMIDITY (NON-CONDENSING)

Operating, Non-operating, Storage	5% to 95%
Maximum Wet Bulb, Operating	30° C

VIBRATION

Operating, random, no errors ²	10 to 45 Hz at 0.004 G ₂ /Hz
	48 to 62 Hz at 0.008 G ₂ /Hz
	65 to 300 Hz at 0.004 G ₂ /Hz
Non-operating, random	301 to 500 Hz at 0.0006 G ₂ /Hz
	10 to 2,000 Hz at 2.15 Grms, no damage
Operating, swept sine (1 octave per minute)	10 to 300 Hz
	1.0 G peak amplitude

SHOCK

Operating Mechanical Shock	30 Gs, 2 ms, no errors ²
Non-operating Mechanical Shock	300 Gs, 2 ms, no damage ²

PHYSICAL DIMENSIONS (MAXIMUM)

Height	1.02 in	2.61 cm
Length	5.78 in	14.70 cm
Width	4.02 in	10.21 cm
Weight	1.30 lbs	0.59 kg



All Maxtor products are backed by the *No Quibble Service*[®] policy, the benchmark for service and support in the industry. *No Quibble* includes:

- **Advance replacement in 2 business days**
- **MaxFax[®] 24-hour automated technical support**
- **Maxtor's commitment to total customer satisfaction**
- **Phone technicians available Monday–Friday**

For more information or to talk to a customer support representative, call: (U.S. and Canada) 800-2MAXTOR. Available 5 A.M.–5 P.M. (PT) Mon–Fri; (Europe) +353 1 204 1111. Available 9:30 A.M.–6 P.M. (CET) Mon–Thurs and 9:30 A.M.–5 P.M. (CET) Fri; (Asia/Pacific) 800-481-6788. Available 8 A.M.–5:30 P.M. (GMT+8) Mon–Fri; or visit our home page on the Internet at <http://www.maxtor.com>.

Specifications subject to change without notice. Maxtor defines 1 megabyte as 10⁶ or 1 million bytes and 1 gigabyte as 10⁹ or 1 billion bytes. ¹Acoustics measured at sea level. ²Without non-recoverable errors. Adaptive ATA Control™, DualWave™, MaxSafe™, Silent Store™ and ShockBlock™ are trademarks of Maxtor. DiamondMax®, Maxtor®, MaxFax® and No Quibble Service® are registered trademarks of Maxtor Corporation. Copyright © 2000 Maxtor Corporation. Printed in the U.S.A. 9/00 Stock #DMP45/4827 Rev. B

