




DiamondMax® **40** **PLUS**

 Unleash your computer's maximum performance with the new DiamondMax® Plus 40 series from Maxtor. Available in capacities up to 40 GB, these 7,200 RPM drives include Maxtor's unique DualWave™ twin processor technology for a 10x boost in host command processing speed. Coupled with 2 MB of high speed 100 MHz SDRAM for the cache buffer and an UltraDMA 66 interface, give our DualWave-equipped hard drives superior benchmark performance and maximum throughput. As a result, they're an ideal choice for consumers working with large files, including audio and video applications. As with the existing DiamondMax line, the new series include enhancements to Maxtor's innovative ShockBlock™ and MaxSafe™ feature set for added reliability and superior protection from shock and damage. No matter how demanding your application, the new DiamondMax Plus 40 series delivers the ultimate in performance and capacity.

7,200 RPM

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

Capacities up to 40 GB

*Designed for High-end
Desktops and Workstations*

FEATURES:

*Fast ATA/Enhanced
IDE compatible*

*Digital Signal Processor
(DSP)-Based Architecture*

*UltraDMA 66
Data Transfer Rate*

*2 MB SDRAM
Cache Buffer*

< 9.0 ms Seek Time

*No Quibble®
Service and Support*



DiamondMax[®] 40 PLUS

Maxtor's DiamondMax Plus 40 series delivers outstanding performance including:

- 7,200 RPM spin speed
- 10.2 GB of storage per disk
- < 9.0 ms average seek
- 2 MB cache buffer
- Fast data transfer rates (up to 66 MB/sec)
- 3-year warranty



**DUAL
WAVE
PROCESSOR**

ShockBlock

MaxSafe

**S · M · A · R · T
S Y S T E M
C O M P L I A N T**

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 homepage on the Internet at <http://www.maxtor.com>.

¹Based on 1- and 2-disk models; ²Without non-recoverable errors. 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. DualWave[™], MaxFax[™], MaxSafe[™] and ShockBlock[™] are trademarks of Maxtor. DiamondMax[®], Maxtor[®] and No Quibble[®] are registered trademarks of Maxtor Corporation. Printed in the U.S.A. Copyright © 1999 Maxtor Corporation. 11/99 Stock #DMP40 Rev. 4533



Win 100 Hardware
DiamondMax 4320 (17.2 GB)
Windows Magazine, June 1999



Best Buy
DiamondMax 6800 (27.2 GB)
Computer Shopper Magazine, September 1999



Hard Drive Best Buy
DiamondMax Plus 5120 (20.4 GB)
PC World Magazine, October 1999



Recommended List
DiamondMax Plus 6800 (27.3 GB)
Winmag.com, October 1999

MODEL	54098U8	53073U6	52049U4	51536U3	51024U2
CAPACITY	40,981 MB	30,735 MB	20,490 MB	15,367 MB	10,245 MB
HEADS	8	6	4	3	2
DISKS	4	3	2	2	1

PERFORMANCE SPECIFICATIONS

Seek Times (typical)	
Track to Track	1 ms
Average	< 9.0 ms
Maximum	< 20 ms
Average Latency	4.17 ms
Rotation Speed (± 0.1%)	7,200 RPM
Controller Overhead	< 0.3 ms
Start Time (0 - drive ready)	< 10 sec typical

DATA TRANSFER RATES

To/From Interface	up to 66.7 MB/sec
To/From Media	up to 43.2 MB/sec

DRIVE CONFIGURATION

Integrated Controller	ATA-5/UDMA 66
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)	< 1 per 10 ¹⁵ 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	350 mA	530 mA	6.8 W
Idle	350 mA	490 mA	6.6 W
Standby	15 mA	235 mA	1.4 W

ENVIRONMENTAL LIMITS

ACOUSTICS

Idle mode ¹	3.6 bel (average sound power)
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TEMPERATURE

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

RELATIVE HUMIDITY (NON-CONDENSING)

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

ALTITUDE (RELATIVE TO SEA LEVEL)

Operating	-200 - 10,000 feet
Non-operating	-200 - 40,000 feet

VIBRATION²

Operating, random, no errors	10 - 45 Hz at 0.004 G ² /Hz
	48 - 62 Hz at 0.008 G ² /Hz
	65 - 300 Hz at 0.004 G ² /Hz
	301 - 500 Hz at 0.0006 G ² /Hz
Non-operating, random	10 - 2,000 Hz at 4.1 Grms, no damage
Operating, swept sine (1 octave per minute)	
5 - 20 Hz	0.049" double amplitude
21 - 300 Hz	1.0 G peak amplitude

SHOCK²

Operating Mechanical Shock	30 Gs, 2 ms, no errors
Non-operating Mechanical Shock	250 Gs, 2 ms, no damage

PHYSICAL DIMENSIONS

Height	1.02 in	2.59 cm
Length	5.77 in	14.66 cm
Width	4.02 in	10.21 cm
Weight	1.30 lbs	0.59 kg

Maxtor[®]