

CAPACITY

*3.5-Inch 5400 RPM
Capacity-Class
Hard Drives*

*Capacities up
to 160GB*

*Designed for
Desktop Systems,
Enterprise Servers
and Consumer
Electronics
Applications*

HIGHLIGHTS:

- Fast ATA/Enhanced IDE Compatible
- Ultra ATA Data Transfer Speeds up to 133 MB/sec
- 2MB Cache Buffer
- Quiet Drive Technology
- Shock Protection System
- Data Protection System
- 3-Year Warranty

**DiamondMax®
D540X****Demonstrating Outstanding
Capacity, Value and Reliability
for your Desktop Storage Needs*****Now with capacities up to 160GB***

The Maxtor DiamondMax® D540X hard disk drive is designed to efficiently meet the need for capacity. With 40GB per platter at industry-standard capacity points, the D540X confirms Maxtor's leadership position in drive technology. The D540X drive uses advanced, integrated electronics combined with numerous design innovations to achieve a wide range of capacity points, solid reliability, and quiet operation all at very competitive prices. As a result, the D540X is the premier choice for desktop, enterprise and consumer electronic storage needs.

Maxtor-Developed Ultra ATA Interfaces

Maxtor-developed Ultra ATA interfaces have data transfer rates up to 133 megabytes-per-second. With these leading-edge interfaces, end users will experience the fastest ATA data transfer rates available.

Maxtor Quiet Drive Technology

Maxtor's Quiet Drive Technology provides users with superior disk drive acoustics by reducing noise levels and improving sound quality.

Delivering Reliability

Like previous generations, the DiamondMax D540X takes reliability and data integrity to an even higher level with Maxtor's Shock Protection and Data Protection Systems, which give the user enhanced protection against both operating and non-operating shock and verifies essential functions in seconds to eliminate costly and unnecessary drive returns. These systems deliver high reliability as shown by the D540X product line's annualized return rate (ARR) of less than 1.0%.



20GB

40GB

60GB

80GB

120GB

160GB

DiamondMax D540X

Model	4D020H1 4K020H1	4D040H2 4K040H2	4D060H3 4K060H3	4D080H4 4K080H4	4G120J6	4G160J8
Capacity	20GB	40GB	60GB	80GB	120GB	160GB
Heads	1	2	3	4	6	8
Platters	1	1	2	2	3	4
Integrated Ultra ATA controller	U100	U100	U100	U100	U133	U133

Performance Specifications

Seek Times (typical read, ms)	
Track to Track	2.0
Average (normal seek)	9.6/12.0
Full Stroke (normal seek)	24.0
Average Latency	5.5
Controller Overhead	< 0.3
Drive Ready Time (typical, sec)	7.5

Data Transfer Speed (MByte/sec, max)

To/From Interface	100/133
To/From Media	43.4
Sustained at OD	35.9
Sustained at ID	17.8

Drive Configuration

Buffer Size	2 MB
Buffer Type	SDRAM
Data Zones per Surface	16
Bytes per Sector/Block	512
Rotation Speed (RPM ± 0.1%)	5400

Reliability Specifications

Start/Stop Cycles (min)	> 50,000
Component Design Life (min)	5 years
Data Errors (non-recoverable)	< 1 per 10E14 bits read
Annualized Return Rate (ARR)	< 1.0%



Power Requirements (rms average)

Mode	12V (ma)	5V (ma)	Power (W)
Spin-up (peak)	1800	425	23.7
Seek	270	385	5.2
Read/Write	225	375	4.8
Idle	170	335	3.75
Standby	30	130	1.0
Sleep	30	95	0.85

Environmental Limits

Acoustics¹ (sound power: bel)

Idle mode (track following at speed)	3.0 avg
Quiet seek mode	3.1 avg
Performance seek mode	3.6 max

Temperature

Operating	5° C to 55° C
Non-operating, Storage	-40° C to 65° 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 300 Hz at 0.004 G2/Hz 301 to 500 Hz at 0.00005 G2/Hz
---	---

Shock

Operating Mechanical Shock	Read 30 Gs, 2 ms, no errors ² Write 60 Gs, 2 ms, no errors ²
Non-operating Mechanical Shock	300 Gs, 2 ms, no damage ²

Physical Dimensions

Height (max mm)	26.1 mm
Width (typical mm)	101.6 mm
Length (max mm)	147.0 mm
Weight (max kg)	0.580 kg

Specifications subject to change without notice. GB means 1 billion bytes. Total accessible capacity varies depending on operating environment. ¹Acoustics measured at sea level. ²Without non-recoverable errors. ©2001 Maxtor Corporation. Maxtor, DiamondMax, MaxFax and No Quibble Service are registered trademarks of Maxtor Corporation. Printed in the USA. Maxtor Corporation, 500 McCarthy Boulevard, Milpitas, CA, 95035. 9/01 6158v2 Neptune JC/Muller/50K-PDFupdate4/02

For more information visit:

- www.maxtor.com
- www.maxtor.com/BigDrive
- www.maxtor.com/FastDrive

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

No Quibble Service includes:

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

To speak with a Maxtor product support representative in the U.S. and Canada, call 1-800-2MAXTOR, Mon.-Fri. from 5 a.m. to 5 p.m (PST).

In Europe, call +353 1 204 1111 Mon.-Thur. from 9:30 a.m. to 6 p.m (CET) and Fri. 9:30 a.m. to 5 p.m. (CET).

In Asia/Pacific, call +61 2 9369 3662 Mon.-Fri. from 8 a.m. to 5:30 p.m. (GMT+8).

Maxtor[®]