

# DiamondMax® 10

## ATA HARD DRIVE

80GB 120GB 160GB 200GB 250GB 300GB

### HIGHLIGHTS

- 3.5-inch 7200 RPM 3.0Gb Serial ATA hard drive
- Capacities up to 300GB
- Performance and reliability for desktop applications

### FEATURES

- Choice of parallel or serial interfaces
- Latest Serial ATA interface with 3.0Gb/s data transfer speed
- Native command queuing
- Ultra ATA data transfer speeds up to 133MB/sec
- 8MB cache buffer for 80GB, 120GB, 160GB and 200GB drive
- 16MB cache buffer for 250GB and 300GB drive
- Fluid dynamic bearing motor for quiet operation
- Improved reliability with:
  - Shock Protection System™
  - Data Protection System™
- RoHS compliant version available

### 3.0Gb SATA II, reliability and great performance

Maxtor creates a new standard with the introduction of the DiamondMax 10 drive. Its high capacity, enhanced reliability and great performance combine to make this the perfect drive for home or office desktop users.

#### Interface choices

Offers the choice of parallel or serial interface including the latest 3.0Gb/s SATA II features and performance.

#### Serial ATA

The DiamondMax 10 drive incorporates the latest features of the Serial ATA interface, with data transfer rates and functions to accelerate system performance.

#### Parallel ATA\*

DiamondMax 10 drive is also available with the industry's fastest version of the parallel ATA interface. The Maxtor-developed Ultra ATA/133 interface maximizes performance potential by supporting data transfer rate up to 133MB/sec.

#### RoHS Compliant

Maxtor supports the EU directive for Restriction of Hazardous Substances (RoHS)<sup>†</sup>. RoHS compliant versions of DiamondMax 10 are available.

#### High Performance

DiamondMax 10 SATA drive supports native command queuing, which intelligently reorders read and write commands to improve performance.

Using larger buffers (8MB on 80GB to 200GB, 16MB on 250GB and 300GB), the DiamondMax 10 drive delivers industry-leading benchmarks and blazing performance.

#### Delivering reliability

The DiamondMax 10 drives deliver high reliability and data integrity using the Maxtor-developed Shock Protection System™ and Data Protection System™ to give the drive enhanced protection against operating and non-operating shock.



\*Note Serial ATA features like native command queuing are not available on drives with a parallel interface

†Directive 2002/95/EC of the European Parliament and of the Council of 27 January, 2003.



## Maxtor DiamondMax 10 ATA Hard Drives

### Certificate of RoHS Compliance

Maxtor Corporation recognizes the significance of protecting the environment and strives to positively impact environmental protection.

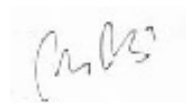
Maxtor is committed to providing RoHS compliant versions of disk drive products to meet our customers' needs and certifies that to its knowledge Maxtor DiamondMax 10 ATA drives, listed below, are RoHS compliant, conforming to the requirements of "Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment."

Product Name	Capacity	Interface	Model Number
DiamondMax 10	80GB	ATA/133	6L080L0
DiamondMax 10	80GB	ATA/133	6L080P0
DiamondMax 10	100GB	ATA/133	6L100P0
DiamondMax 10	120GB	ATA/133	6L120P0
DiamondMax 10	160GB	ATA/133	6L160P0
DiamondMax 10	200GB	ATA/133	6L200P0
DiamondMax 10	250GB	ATA/133	6L250R0
DiamondMax 10	300GB	ATA/133	6L300R0
DiamondMax 10	80GB	1.5Gb/s SATA II	6L080M0
DiamondMax 10	120GB	1.5Gb/s SATA II	6L120M0
DiamondMax 10	160GB	1.5Gb/s SATA II	6L160M0
DiamondMax 10	200GB	1.5Gb/s SATA II	6L200M0
DiamondMax 10	250GB	1.5Gb/s SATA II	6L250S0
DiamondMax 10	300GB	1.5Gb/s SATA II	6L300S0
DiamondMax 10	80GB	3.0Gb/s SATA II	6V080E0
DiamondMax 10	160GB	3.0Gb/s SATA II	6V160E0
DiamondMax 10	200GB	3.0Gb/s SATA II	6V200E0
DiamondMax 10	250GB	3.0Gb/s SATA II	6V250F0
DiamondMax 10	300GB	3.0Gb/s SATA II	6V300F0

Maxtor affirms its new products designated as such are RoHS compliant with respect to the maximum concentration values for the six substances shown in the table below:

<b>Banned Substances</b>	<b>Maximum Concentration Value Allowed in Homogeneous Materials (PPM)</b>
Cadmium (Cd)	100
Lead (Pb)	1000
Mercury (Hg)	1000
Hexavalent Chromium (Cr <sup>6+</sup> )	1000
Polybrominated Byphenyls (PBB)	1000
Polybrominated Diphenyl Ethers (PBDE)	1000

This declaration is based on Maxtor's current understanding of the RoHS Directive and information provided through supplier material declarations pertinent to the ingredients and materials comprising subject Maxtor products.



Natalie McKinsey

Maxtor Corporate Environmental Compliance Program Manager, October 31, 2005

**Important information:**

Maxtor bases its knowledge and belief of RoHS compliance on information provided by third parties, and makes no representation or warranty as to the accuracy of such information beyond that implied or expressed in (1) various legal and technical opinions on the likely interpretation of EU legislation, and (2) supplier material declarations. Maxtor continues to take steps to provide accurate information but may not have conducted destructive testing on homogeneous materials.

## ORDER INFORMATION

Capacity	80GB	120GB	160GB	200GB	250GB	300GB
<b>Non RoHS Compliant Version</b>						
Model Serial ATA (1.5Gb/s) 8 MB buffer	<b>6B080M0</b>	<b>6B120M0</b>	<b>6B160M0</b>	<b>6B200M0</b>	—	—
Model Serial ATA (1.5Gb/s) 16MB buffer	—	—	—	—	<b>6B250S0</b>	<b>6B300S0</b>
Model ATA/133 8MB buffer	—	—	<b>6B160P0</b>	<b>6B200P0</b>	—	—
Model ATA/133 16MB buffer	—	—	—	—	<b>6B250R0</b>	<b>6B300R0</b>

## RoHS Compliant Version

Model Serial ATA (1.5Gb/s) 8 MB buffer	<b>6L080M0</b>	<b>6L120M0</b>	<b>6L160M0</b>	<b>6L200M0</b>	—	—
Model Serial ATA (1.5Gb/s) 16MB buffer	—	—	—	—	<b>6L250S0</b>	<b>6L300S0</b>
Model Serial ATA (3.0Gb/s) 8 MB buffer	<b>6V080E0</b>	—	<b>6V160E0</b>	<b>6V200E0</b>	—	—
Model Serial ATA (3.0Gb/s) 16MB buffer	—	—	—	—	<b>6V250F0</b>	<b>6V300F0</b>
Model ATA/133 2MB buffer	<b>6L080L0</b>	—	—	—	—	—
Model ATA/133 8MB buffer	<b>6L080P0</b>	<b>6L120P0</b>	<b>6L160P0</b>	<b>6L200P0</b>	—	—
Model ATA/133 16MB buffer	—	—	—	—	<b>6L250R0</b>	<b>6L300R0</b>

## SPECIFICATIONS

### Performance

Rotational Speed	7200 RPM
Buffer Size	
80GB, 120GB, 160GB, 200GB	8MB
250GB, 300GB	16MB
External Data Transfer Rate	
Serial ATA (Gb/s)	1.5 or 3.0
Parallel ATA (MB/s)	133
Average Seek (ms)	<9.0
Average Latency (ms)	4.17

### Reliability

Start/Stop Cycles (min)	50,000
Component Design Life (min)	5 years
Annualized Return Rate (ARR)	<1%

### Acoustics

Idle (typical, 1 disk, 3 disk)	2.5 / 2.9 bels
Quiet Seek (typical, 1 disk, 3 disk)	2.6 / 3.0 bels
Normal Seek (typical, 1 disk, 3 disk)	3.2 / 3.8 bels

### Environmental Limits

#### Temperature

Operating (°C)	0 to 60
Non-operating (°C)	-40 to 71

#### Shock

Operating Mechanical Shock 2ms (G)	60
Non-operating Mechanical Shock 2ms (G)	300

### Physical Dimensions

Width (max mm)	101.6
Length (typical mm)	147
Height (max mm)	26.1
Weight max (LB)	1.39



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- Maxtor's commitment to total customer satisfaction
- Product support representatives available Monday-Friday

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and Fri. 8:30 a.m. to 4 p.m. (GMT)

In Australia, call 800-124-328

In Asia, call +65 6 481 6788

Mon.–Fri. from 7:00 a.m. to 3:00 p.m. (Singapore GMT +7)

For purposes of measuring drive storage capacity, a gigabyte (GB) means 1,000,000,000 bytes.  
Total accessible capacity varies depending on operating environment. Seek times are at nominal conditions and include settling.  
Specifications subject to change without notice.

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