

Diamond
Max™

6800



Introducing the DiamondMax™ 6800 from Maxtor – our latest 5,400 RPM drive for storage-hungry desktop systems. Offering up to 27.2 GB of storage, this capacity leader sports an UltraDMA 66 interface and a fast 2 MB 100 MHz SDRAM cache buffer. Featuring our powerful new Maxtor-designed dual microprocessor controller, this drive is the perfect complement for today's high-performance systems and demanding applications. As always, each product in the DiamondMax family is backed by unsurpassed service and support. When your application calls for powerful storage, turn to the DiamondMax 6800 from Maxtor.

Maxtor®

5,400 RPM**3.5-INCH
HIGH-
PERFORMANCE
HARD DRIVES**

27.2 – 6.5 GB

*Designed for
Desktop Systems***FEATURES:***Fast ATA-4/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*



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



CRN Test Center Recommended
DiamondMax 4320 (17.2 GB)
Computer Reseller News, Fall 1998



1998 World Class Award
Best Hard Drive:
DiamondMax 2160 (8.4 GB)
PC World, July 1998



Editor's Choice Award
DiamondMax Plus 2500 (10.0 GB)
DiamondMax 2880 (11.5 GB)
Storage Review, Summer 1998

Maxtor's DiamondMax 6800 series delivers outstanding performance including:

- 5,400 RPM spin speed
- 6.8 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



MODEL	92720U8	92040U6	91360U4	91020U3	90845U3	90650U2
CAPACITY	27,226 MB	20,419 MB	13,613 MB	10,209 MB	8,455 MB	6,500 MB
HEADS	8	6	4	3	3	2
DISKS	4	3	2	2	2	1

PERFORMANCE SPECIFICATIONS

Seek Times (typical)	
Track to Track	1 ms
Average	< 9.0 ms
Maximum	< 20 ms
Average Latency	5.77 ms
Rotation Speed ($\pm 0.1\%$)	5,400 RPM
Controller Overhead	< 0.3 ms
Start Time (0 - drive ready)	7.3 sec typical

DATA TRANSFER RATE

To/From Interface	up to 66.7 MB/sec
To/From Media	up to 27.8 MB/sec

DRIVE CONFIGURATION

Integrated Controller	ATA-4/Ultra DMA
Buffer Size	2 MB
Buffer Type	SDRAM
Sectors per Track	266-462
Tracks per Surface (cylinders)	17,549
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^{14} bits read

POWER REQUIREMENTS (TYPICAL)

MODE	12V $\pm 10\%$	5V $\pm 5\%$	POWER
Spin-up	2200 mA	390 mA	
Seek	780 mA	360 mA	11.2 W
Read/Write	310 mA	420 mA	5.8 W
Idle	305 mA	320 mA	5.3 W
Standby	20 mA	165 mA	1.1 W

ENVIRONMENTAL LIMITS

ACOUSTICS

Idle mode	3.3 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	27° C

ALTITUDE (RELATIVE TO SEA LEVEL)

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

VIBRATION**

Operating, random, no errors	10 - 45 Hz at 0.004 G2/Hz
	48 - 62 Hz at 0.008 G2/Hz
	65 - 300 Hz at 0.004 G2/Hz
	301 - 500 Hz at 0.0006 G2/Hz
Non-operating, random	10 - 2,000 Hz at 2.15 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

SHOCK**

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

**Without non-recoverable errors.

PHYSICAL DIMENSIONS

Height	1.02 in	2.59 cm
Length	5.78 in	14.67 cm
Width	4.00 in	10.20 cm
Weight	1.30 lbs	0.59 kg



ShockBlock

MaxSafe



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 service representative, call: (U.S. and Canada) 800-2MAXTOR, press 2. Available 6 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>.

Specifications subject to change without notice. Maxtor defines 1 megabyte as 10^6 or 1 million bytes and 1 gigabyte as 10^9 or 1 billion bytes. Printed in the U.S.A. 5/99. DiamondMax™, MaxFax™, MaxSafe™ and ShockBlock™ are trademarks of Maxtor. No Quibble is a registered trademark of Maxtor. Copyright © 1999 Maxtor Corporation. 5/99 Stock #DM6800 Rev. 4012

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