

PERFORMANCE

HIGHLIGHTS

- 3.5-inch 7200 RPM Serial ATA hard drive
- Designed for consumer and commercial PC users

FEATURES

Industry leading design, optimized to meet the needs of entry level and value applications:

- Second-generation Serial ATA with 1.5Gb/s interface speed
- Native Command Queuing
- Enables RAID for best mix of performance and reliability
- Supports today's favorite capacity—40GB
- Fluid dynamic bearing motor for quiet operation
- Low height to improve airflow and cooling
- Low weight to reduce shipping costs
- Improved reliability with:
 - Shock Protection System™
 - Data Protection System™
- RoHS compliant version available

DiamondMax® 8S

SERIAL ATA HARD DRIVE

40GB

Serial ATA Performance for Entry Level Desktop Systems

Maxtor hard drive leadership continues with the DiamondMax 8S drive, an optimized second-generation, 7200 RPM, Serial ATA solution for Entry and Value storage applications. Combining performance and value, the drive is a perfect solution for mainstream consumer or commercial Serial ATA systems.

Serial ATA II interface

DiamondMax 8S drives use the Serial ATA II interface, the fastest desktop interface with data transfer rates up to 150MB/sec, to accelerate system performance.

High Performance

The DiamondMax 8S drive incorporates Native Command Queuing (NCQ). NCQ intelligently reorders read and write commands to reduce average access time per command and improve overall system performance.

RoHS Compliant

Maxtor supports the EU directive for Restriction of Hazardous Substances (RoHS)¹. RoHS compliant versions of DiamondMax 8S are available.

Delivering Reliability

DiamondMax 8S drives deliver high reliability and data integrity using the Maxtor-developed Shock Protection System (SPS) and Data Protection System (DPS).

SPS and DPS give the drive enhanced protection against operating and non-operating shock to minimize costly drive returns.

As you transition your Entry Level 40GB application to Serial ATA, select DiamondMax 8S drives from Maxtor.



¹Directive 2002/95/EC of the European Parliament and of the Council of 27 January, 2003.

ORDER INFORMATION

Capacity	40GB
Model SATA/150 2MB Buffer	6E040T0
RoHS Compliant Version 	
Model SATA/150 2MB Buffer	6N040T0

SPECIFICATIONS

Performance Specifications

Rotational Speed	7200 RPM
Buffer Size	2MB
Max External Transfer Rate (Gb/sec)	1.5
Average Seek (ms)	≤ 10.1
Average Latency (ms)	4.17

Reliability Specifications

Head Load/Unload (min)	50,000
Data Errors (non-recoverable)	<1 x 10 ¹⁵ bits read
Annualized Return Rate (ARR)	<1%

Power Requirements

Mode	5V	12V
Seek (mA)	392	502
Idle (mA)	229	425
Standby (mA)	229	36

Environmental Limits

Acoustics FDB motor

Idle (typical sound power: bel)	2.8
Seek (typical sound power: bel)	3.0

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

Height (max mm)	17.5
Width (typical mm)	101.6
Length (max mm)	146.3
Weight (max lb/g)	1.12/510



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All Maxtor products are backed by our leading service and support staff.

Service includes:

- Advance replacement in two business days
- 24-hour on-line troubleshooting tools and email
- Telephone support representatives available Monday-Friday during business hours (except holidays)

To speak with a Maxtor product support representative in the U.S. and Canada, call 1-800-2MAXTOR, Mon.-Fri. from 7 a.m. to 4 p.m. (PST).

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In Australia, call +61 2 9369 3662. In Japan, call 005316-53616, and in Singapore, call 65-6852-0220 or 1-800-481-6788.

For purposes of measuring drive 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. Power numbers are typical values. Acoustics are average values. Specifications subject to change without notice. Seek performance developed utilizing technology licensed from Conville, Inc.

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