

ENTRY

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

*Capacities up
to 20GB*

*Designed for
Entry-level Desktop
Systems and
Consumer
Electronics
Applications*

HIGHLIGHTS:

- Fast ATA/Enhanced IDE compatible
- Digital Signal Processor (DSP)-Based Architecture
- Ultra ATA/100 Data Transfer Speed
- 2MB SDRAM Cache Buffer
- No Quibble Service® and Support

**Fireball™
541DX****Combining Value and Performance
for Entry-Level Desktop Systems**

Maxtor Fireball™ 541DX is the industry's first 20GB single-head/single-platter hard drive with an Ultra ATA/100 interface. Because they combine value and performance, these drives are excellent choices for entry-level desktop systems and consumer electronics applications.

Delivering Reliability

The Maxtor Fireball 541DX is the latest in the new family of Maxtor single-platter 5400 RPM hard drives designed for higher reliability. Its inner diameter load/unload ramp locks the recording head into a protective carrier to cradle the head during shipment and any other time the drive is not in operation.

Fireball 541DX takes reliability and data integrity to a higher level with Maxtor 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 drives continue the Maxtor tradition of delivering high reliability with performance.

Quiet Operation

The 541DX drives include Maxtor Silent Store™ technology for whisper-quiet acoustic performance and Maxtor Adaptive ATA Control™ for unsurpassed data integrity. When your application calls for a cost-effective, high-performance storage solution, select the 541DX series by Maxtor.

10GB

15GB

20GB



Fireball. 541DX

Model	2B020H1	2B015H1	2B010H1
Capacity	20GB	15GB	10GB
Heads	1	1	1
Platters	1	1	1

Performance Specifications

Seek Times (typical read, ms)	
Track to Track	1.0
Average (normal seek)	11.5
Full Stroke (normal seek)	18.7
Average Latency	5.51
Controller Overhead	< 0.3
Drive Ready Time (typical, sec)	5

Data Transfer Speed (MByte/sec, max)

To/From Interface	100
To/From Media	46.4
Sustained at OD	39.3
Sustained at ID	25.0

Drive Configuration

Integrated Controller	Ultra ATA/100
Buffer Size	2 MB
Buffer Type	SDRAM
Data Zones per Surface	16
Bytes per Sector/Block	512
Rotation Speed (RPM \pm 0.1%)	5400

Reliability Specifications

Start/Stop Cycles (min)	> 50,000
Component Design Life (min)	5 years
Data Errors (non-recoverable)	< 1 per 10E15 bits read
Annualized Return Rate (ARR)	< 1.0%

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, MaxFax, and No Quibble Service are registered trademarks of Maxtor Corporation. Fireball, Maxtor Silent Store and Maxtor Adaptive ATA Control are trademarks of Maxtor Corporation. Printed in the USA. Maxtor Corporation, 500 McCarthy Boulevard, Milpitas, CA, 95035. 11/01 6273 JC/Muller/50K-PDFupdate 4/02



Power Requirements (rms average)

Mode	12V (ma)	5V (ma)	Power (w)
Spin-up (peak)	2000	480	26.4
Seek	350	450	6.5
Read/Write	360	480	6.4
Idle	258	435	5.3
Standby	50	185	1.6
Sleep	50	190	1.4

Environmental Limits

Acoustics¹ (sound power: bel)

Idle mode (track following at speed)	3.1 avg	3.4 max
Normal seek mode	3.3 avg	3.8 max

Temperature

Operating	5° C to 55° C
Non-operating, Storage	-40° C to 71° 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 G ² /Hz 301 to 500 Hz at 0.000001 G ² /Hz
Non-operating, random	10 to 2,000 Hz at 4.08 Grms, no damage
Operating, swept sine (1 octave/minute, peak amplitude)	
10 to 300 Hz	1.0 G
301 to 400 Hz	0.25 G
401 to 500 Hz	0.0625 G

Shock

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

Physical Dimensions

Height (max mm)	17.5 mm
Width (typical mm)	101.6 mm
Length (max mm)	146.6 mm
Weight (max kg)	0.454 kg

For more information on Maxtor storage products, visit our website at www.maxtor.com

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).

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