

The fastest, quietest and  
toughest desktop drive  
in the world



## BARRACUDA ATA IV

BEST COMBINATION OF PERFORMANCE, ACOUSTICS AND RELIABILITY

BEST-FIT  
APPLICATIONS

HIGH-PERFORMANCE PCS

PC GAMING SYSTEMS

ENTRY-LEVEL ATA SERVERS,  
INCLUDING RAID

COST-EFFECTIVE NETWORK  
ATTACHED STORAGE



- Ultra-fast desktop performance with up to 80-Gbyte capacity
- New rugged design for increased reliability
- The industry's most proven FDB motor
- Inaudible acoustics with SBT ("sound barrier technology")
- 3D Defense System™ provides comprehensive protection against data loss

UP TO 80 GBYTES • 7,200 RPM • ULTRA ATA/100

# HIGH-SPEED, HIGH-CAPACITY DRIVES FOR PCs AND ENTRY SERVERS



## Seagate's 3D Defense System™—No One Does More to Protect Your Drives

### Drive Defense

- SeaShell™ packaging protects drive against 1,000 Gs of nonoperating shock.
- Soft SeaShield® protects board against accidental handling damage and displays installation instructions.
- G-Force Protection provides electromechanical enhancements that protect the drive from operating and nonoperating shock.

### Data Defense

- ECC (error-correction code) performs on-the-fly hardware correction for excellent performance.
- Safe Sparing ensures the drive will return to the same sector after a power outage.
- CBDS (continuous background defect scanning) proactively identifies and eliminates defects.

### Diagnostic Defense

- SeaTools Suite diagnostic software is designed to reduce drive returns, decrease drive repair costs and protect data.
- Web-based tools enable users to identify and solve common system-related issues.
- Enhanced S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) predicts and prevents problems transparently before they affect the end-user.
- Enhanced Drive Self-Test (NDST) reduces diagnostic time.

## World-Class Technical Support

- Certified, experienced support staff
- Rated "Above Average to Excellent" by 95 percent of our customers
- Toll-free support with the industry's shortest queues
- Individually archived case histories for quick reference
- Web-based Q&A forum and autoreply e-mail

[www.seagate.com](http://www.seagate.com) ■ 1-800-732-4283 (1-800-SEAGATE)

BARRACUDA ATA IV	80 GB <sup>1</sup>	60 GB <sup>1</sup>	40 GB <sup>1</sup>	20 GB <sup>1</sup>	KEY ADVANTAGES
<b>Model Number</b>	ST380021A	ST360021A	ST340016A	ST320011A	The best choice for high-speed, high-capacity desktop storage.
<b>Interface/External Transfer Rate (Mbytes/sec)</b>	Ultra ATA/100	Ultra ATA/100	Ultra ATA/100	Ultra ATA/100	
<b>PERFORMANCE</b>					
<b>Maximum Internal Transfer Rate (Mbits/sec)</b>	555	555	555	555	Fast internal data rate and 7,200 RPM speed deliver superb performance under Windows 2000 operating systems.
<b>Maximum External Transfer Rate (Mbits/sec)</b>	100	100	100	100	
<b>Sustained Transfer Rate (Mbytes/sec)</b>	24 to 41	24 to 41	24 to 41	24 to 41	
<b>Multisegmented Cache (Mbytes)</b>	2	2	2	2	
<b>Average Seek (msec)</b>	9.5	9.5	8.9	8.9	
<b>Average Latency (msec)</b>	4.16	4.16	4.16	4.16	
<b>Spindle Speed (RPM)</b>	7,200	7,200	7,200	7,200	
<b>CONFIGURATION/ORGANIZATION</b>					
<b>Discs/Heads</b>	2/4	2/3	1/2	1/1	
<b>Bytes per sector</b>	512	512	512	512	
<b>Logical CHS</b>	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	
<b>Recording Method</b>	EPRML (16/17)	EPRML (16/17)	EPRML (16/17)	EPRML (16/17)	
<b>RELIABILITY/DATA INTEGRITY</b>					
<b>Contact Start-Stops</b>	50,000	50,000	50,000	50,000	Hard SeaShield protects against inadvertent handling damage and electrostatic discharge. Also includes installation instructions.
<b>3D Defense System</b>	Yes	Yes	Yes	Yes	
<b>SeaShield and S.M.A.R.T.</b>	Yes	Yes	Yes	Yes	
<b>Nonrecoverable Read Errors per Bits Read</b>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	
<b>Limited Warranty (years)</b>	3	3	3	3	
<b>POWER MANAGEMENT</b>					
<b>+12 VDC ± 10% (amps max)</b>	2.2	2.2	2.2	2.2	
<b>+5 VDC ± 5% (amps max)</b>	NA	NA	NA	NA	
<b>Power Management (watts typ) Seek</b>	12.6	12.6	12.6	12.6	
Read/Write (watts typ)	12.2	12.2	12.2	12.2	
Idle/Standby (watts typ)	8/1.1	8/1.1	8/1.1	8/1.1	
<b>ENVIRONMENTAL</b>					
<b>Temperature: Operating (°C)</b>	0 to 60	0 to 60	0 to 60	0 to 60	G-Force Protection delivers the industry's best protection against nonoperating shock
<b>Nonrecoverable read error per bits read (°C)</b>	-40 to 70	-40 to 70	-40 to 70	-40 to 70	
<b>Shock, Operating: 2 msec (Gs)</b>	63	63	63	63	
<b>Shock, Nonoperating: 2 msec (Gs)</b>	350	350	350	350	
<b>Acoustics</b>					
Idle (bels—sound power)	2.4	2.4	2.0	2.0	Inaudible acoustics ideal for work environments and home operation
Quiet Seek (bels—sound power)	2.8	2.8	2.4	2.4	
Performance Seek (bels—sound power)	3.3	3.3	3.0	3.0	
<b>PHYSICAL</b>					
<b>Height (in/mm)</b>	1/26.1	1/26.1	1/26.1	1/26.1	
<b>Width (in/mm)</b>	4/101.85	4/101.85	4/101.85	4/101.85	
<b>Depth (in/mm)</b>	5.75/146.56	5.75/146.56	5.75/146.56	5.75/146.56	
<b>Weight (lb/g)</b>	1.2/544	1.2/544	1.2/544	1.2/544	

All capacity with FDB motors



**CORPORATE HEADQUARTERS** Seagate Technology LLC, 920 Disc Drive, Scotts Valley, California, 95066, United States 831-438-6550  
**ASIA/PACIFIC** Seagate Technology International Ltd., 151 Lorong Chuan, New Tech Park #06-01, Singapore 556741, 65-488-7200  
**EUROPE, MIDDLE EAST AND AFRICA** Seagate Technology SA, 62 bis, avenue André Morizet, 92643 Boulogne-Billancourt Cedex, France 33 1-41 86 10 00

© 2001 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Seagate logo are registered trademarks of Seagate Technology LLC. Barracuda is a registered trademark of Seagate Technology LLC. Other product names are registered trademarks or trademarks of their owners. Seagate reserves the right to change, without notice, product offerings or specifications. (CS1545) Publication Number: 1538-002, July 2001