

The World's Toughest and Quietest High-Performance Desktop Drive— Now With a Serial ATA Interface



BARRACUDA ATA V

BEST COMBINATION OF RELIABILITY, ACOUSTICS AND PERFORMANCE

BEST-FIT APPLICATIONS

- HIGH-PERFORMANCE PCS
- ENTRY-LEVEL ATA SERVERS,
INCLUDING RAID
- COST-EFFECTIVE NETWORK
ATTACHED STORAGE
- PC GAMING SYSTEMS



- Serial ATA interface for ultra-fast desktop performance, up to 120-Gbyte capacity
- A proven rugged design for increased reliability
- The industry's only fifth-generation FDB motor
- 3D Defense System™ provides comprehensive protection against handling damage and data loss.
- Inaudible acoustics with SBT (sound barrier technology), including the Seagate® exclusive SoftSonic™ motor

120, 80, 60 AND 40 GBYTES • 7,200 RPM • ULTRA ATA/100 • SATA/150

THE FIRST HIGH-SPEED, HIGH-CAPACITY DESKTOP DRIVES WITH A SERIAL ATA INTERFACE



The Seagate 3D Defense System—No One Does More to Protect Your Drives

Drive Defense

- SeaShell™ packaging protects drive against 1,000 Gs of nonoperating shock.
- SeaShield® protects the PCB from accidental direct handling damage such as ESD.
- 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 (DST) 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
- Seagate Design Service Centers (DSC) help companies transform innovative ideas into viable products.

BARRACUDA ATA V	120 GB	80 GB	60 GB	40 GB	KEY ADVANTAGES
Model Number	ST3120023A, ST3120023AS	ST380023A, ST380023AS	ST360015A	ST340017A	Highest-speed, high-capacity desktop storage with Serial ATA interface
Interface/External Transfer Rate (Mbytes/sec)	Ultra ATA/100, SATA/150	Ultra ATA/100, SATA/150	Ultra ATA/100	Ultra ATA/100	
PERFORMANCE					
Maximum Internal Transfer Rate (Mbits/sec)	570	570	570	570	Fast internal data rate and 7,200-RPM speed deliver top performance under Windows 2000 and Windows XP operating systems.
Maximum External Transfer Rate (Mbits/sec)	100/150 (SATA)	100/150 (SATA)	100	100	
Sustained Transfer Rate (Mbytes/sec)	27 to 44	27 to 44	27 to 44	27 to 44	
Multisegmented Cache (Mbytes)	2, 8 (SATA)	2, 8 (SATA)	2	2	
Average Seek (msec)	9.0	9.0	9.0	9.0	
Average Latency (msec)	4.16	4.16	4.16	4.16	
Spindle Speed (RPM)	7,200	7,200	7,200	7,200	
CONFIGURATION/ORGANIZATION					
Discs/Heads	2/4	2/3	1/2	1/2	Exclusive SeaShield protects against handling damage and electrostatic discharge. Also includes installation instructions.
Bytes per sector	512	512	512	512	
Logical CHS	16,383/16/63	16,383/16/63	16,383/16/63	16,383/16/63	
Recording Method	EPRML (16/17)	EPRML (16/17)	EPRML (16/17)	EPRML (16/17)	
RELIABILITY/DATA INTEGRITY					
Contact Start-Stops	50,000	50,000	50,000	50,000	Exclusive SeaShield protects against handling damage and electrostatic discharge. Also includes installation instructions.
3D Defense System	Yes	Yes	Yes	Yes	
SeaShield and S.M.A.R.T.	Yes	Yes	Yes	Yes	
Nonrecoverable Read Errors per Bits Read	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	
Limited Warranty (years)	3	3	3	3	
POWER MANAGEMENT					
+12 VDC ± 10% (amps max)	2.2	2.2	2.2	2.2	
+5 VDC ± 5% (amps max)	NA	NA	NA	NA	
Power Management Seek (watts typ)	12.5	12.5	12.5	12.5	
Read/Write (watts typ)	12	12	12	12	
Idle/Standby (watts typ)	7.5/0.7	7.5/0.7	7.5/0.7	7.5/0.7	
ENVIRONMENTAL					
Temperature: Operating (°C)	0 to 60	0 to 60	0 to 60	0 to 60	The industry's best protection against nonoperating shock
Nonrecoverable Read Errors per Bits Read (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	
Shock, Operating: 2 msec (Gs)	63	63	63	63	
Shock, Nonoperating: 2 msec (Gs)	350	350	350	350	
Acoustics					
Idle (bels—sound power)	2.5	2.5	<2.5	<2.5	Virtually inaudible acoustics ideal for work environments and home operation
Quiet Seek (bels—sound power)	2.8	2.8	2.5	2.5	
Performance Seek (bels—sound power)	3.3	3.3	3.0	3.0	
PHYSICAL					
Height (in/mm)	1/26.1	1/26.1	1/26.1	1/26.1	
Width (in/mm)	4/101.85	4/101.85	4/101.85	4/101.85	
Depth (in/mm)	5.75/146.56	5.75/146.56	5.75/146.56	5.75/146.56	
Weight (lb/g)	1.2/544	1.2/544	1.2/544	1.2/544	

www.seagate.com ■ 1-800-732-4283 (1-800-SEAGATE)



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, 65-6488-7200
EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SA 62 bis, avenue André Morizet, 92643 Boulogne-Billancourt Cedex, France, 33 1-41 86 10 00

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