The Enabler for High-Value, Entry-Level Systems

U SERIES X

AN ENTRY-LEVEL SOLUTION WITH FEATURES YOU WOULD EXPECT FROM A MORE EXPENSIVE DRIVE

BEST-FIT APPLICATIONS

- ENTRY-LEVEL PCS
- DIGITAL AUDIO
- PRINTERS AND COPIERS
- POS SYSTEMS

- Cost-optimized configuration enables greater margins and profitability for your entry-level systems
- Designed using Six Sigma to deliver the industry's most valuable combination of performance, acoustics and reliability
- Features Seagate® SoftSonic™ motor for whisper-quiet operation
- 25-percent thinner to improve system airflow—ideal for fanless systems

20 AND 10 GBYTES • 5,400 RPM • ULTRA ATA/100

Seagate®

U series x

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.
- Enhanced G-Force Protection provides new mechanical features that further protect the drive from 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
- Seagate Design Service Centers (DSC) help companies transform innovative ideas into viable products.

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

U SERIES X	20 GB[1]	10 GB[1]	KEY ADVANTAGES
Model Number	ST320014A	ST310014ACE	Industry standard interface is backward-compatible with ATA/66.
Interface	Ultra ATA/100	Ultra ATA/100	
PERFORMANCE			
Transfer Rate			
Maximum Internal (Mbits/sec)	445	366	Fast internal transfer rate and 2-Mbyte cache enable high productivity for common office applications.
Maximum External (Mbytes/sec)	100	100	
Cache, Multisegmented (Mbytes)	2	2	
Average Seek (msec)	12.7	12.7	
Average Latency (msec)	5.55	5.55	
Spindle Speed (RPM)	5,400	5,400	
CONFIGURATION/ORGANIZATION			
Discs/Heads	1/1	1/1	Single head configuration is ideal for entry-level PC and peripheral applications.
Bytes per Sector	512	512	
Logical CHS	16,383/16/63	16,383/16/63	
Recording Method	GPRML (96/102)	GPRML (96/102)	
RELIABILITY/DATA INTEGRITY			
Contact Start-Stops	50,000	50,000	Designed using Six Sigma to deliver maximum reliability and quality.
3D Defense System	Yes	Yes	
Nonrecoverable Read Errors per Bits Read	1 per 10^{13}	1 per 10^{13}	
POWER REQUIREMENTS			
+12 VDC ±10% (amps max)	1.9	1.9	Low power requirements are ideal for entry-level PCs and fanless systems.
+5 VDC ±5% (amps max)	0.9	0.9	
Power Management (watts) Seek	6.0	6.0	
Read/Write	5.5	5.5	
Idle	4.5	4.5	
Standby	1.2	1.2	
Sleep	1.0	1.0	
ENVIRONMENTAL			
Operating/Nonoperating Temperature (°C)	0 to 60/−40 to 70	0 to 60/−40 to 70	Robust design enables operation under extreme ambient conditions.
Operating Shock @ 2 msec (Gs)	63	63	
Nonoperating Shock @ 1 and 2 msec (Gs)	350	350	
Acoustics, Idle (bels—sound power)	2.6	2.6	Features Seagate SoftSonic Motor for whisper-quiet operation.
Seek	2.7	2.7	
PHYSICAL			
Height (in/mm)	.79/19.99	.79/19.99	25-percent thinner form-factor to improve system airflow.
Width (in/mm)	4/101.9	4/101.9	
Depth (in/mm)	5.75/147.0	5.75/147.0	
Weight (lb/g)	1.0/455	1.0/455	

1. Capacity calculated as 1 Gbyte = 10^9 bytes

3D DEFENSE SYSTEM

Designed for Microsoft® Windows NT® Windows® 98

Designed for Microsoft® Windows® 2000 Professional

ULTRA ATA

Seagate