

Ultra mobile PATA/ZIF Spinpoint N2A/N2B



Capacity		30GB	40GB	60GB	80GB	100GB	120GB	160GB
3600 RPM class	2MB Buffer	HS031GA	HS041HA	HS061HA	HS080HA			
4200 RPM class	2MB Buffer	HS030GB	HS040HB	HS060HB	HS080HB		HS120JB	HS160JB
	8MB Buffer		HS04THB	HS06THB	HS082HB	HS10TJB	HS122JB	

FEATURES

- MAX.80GB Formatted Capacity Per Disk
- High Speed Digital Signal Processor Based Architecture
- Low Power HDC
- Advanced Power Management Control
- Fluid Dynamic Bearing Spindle Motor Technology
- ATA S.M.A.R.T Compliant
- ATA 28-bit Address Feature Set
- Multi-Burst On-The-Fly Error Correction
- SilentSeek™
- Free Fall Sensor (optional)

DRIVE CONFIGURATION

Capacity	30 / 40 / 60 / 80 / 100 / 120 / 160GB
Interface	PATA/ZIF
Rotational Speed	3600 / 4200 RPM class
Buffer DRAM Size	2 / 8 MB
Byte per Sector	512

PERFORMANCE SPECIFICATION

Average Seek time (typical)	15.0 ms
Average Latency	8.3 ms
Media Transfer Rate (Max.)	
3600RPM class	410 Mb/s
4200RPM class	458 Mb/s
Interface Transfer Rate (Max.)	100 MB/s
Drive Ready Time (typical)	2.0 sec

RELIABILITY SPECIFICATION

Non-recoverable Read Error	1 sector in 10 ¹³ bits
Controlled Ramp Load/Unload	600,000

ACOUSTICS

Idle	
30/40/60/80GB	1.6 Bel
100/120/160GB	1.8 Bel
Performance Seek	
30/40/60/80GB	2.2 Bel
100/120/160GB	2.4 Bel

POWER REQUIREMENTS

Voltage	+3.3V ±5%
Spin-up Current (Max.)	400 mA
Seek (typical)	0.8 W
Read/Write (typical)	
30/40/60/80GB	0.9 W
100/120/160GB	1.0 W
Idle (typical)	0.30 W
Standby (typical)	0.07 W
Sleep (typical)	0.07 W

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	5 ~ 60 °C
Non-operating	-40 ~ 85 °C
Humidity (non-condensing)	
Operating	8 ~ 90 %
Non-operating	8 ~ 90 %
Linear Shock (1/2 sine pulse)	
Operating, 2ms	600 G
Non-operating, 1ms	1500 G
Vibration	
Operating	0.67 Grms
Altitude (relative to sea level)	
Operating	-300 to 3,000 m
Non-operating	-400 to 15,000 m

PHYSICAL DIMENSION

Height	
30/40/60/80GB	5.0 mm
100/120/160GB	8.0 mm
Width	71.0 mm
Length	54.0 mm
Weight (Max.)	
30/40/60/80GB	48 g
100/120/160GB	59 g

* Note : Design and specifications are subject to change without prior notice.

1MB = 1,000,000 Bytes, 1GB = 1,000,000,000 Bytes

* Accessible capacity may vary as some OS uses binary numbering system for reported capacity.

* A small portion of the (2/8MB) buffer memory is reserved for firmware use.

* 160GB 48-bit Address Feature Set

