Voyager 6
SV0643A

FEATURES

- Formatted Capacity 6.4 Gbytes
- 9.5 msec average seek time
- 5,400 rpm Spindle Speed
- EPR4 Read Channel with 16/17 rate code
- 200 Mbits/sec Maximum Data Rate
- Ultra ATA/EIDE Interface
- PIO Mode 4/Multi-Word DMA Mode 2/Ultra DMA
- Error Correction on the Fly (Multi-Burst)
- 512 KB Segmented Read/Write Cache Buffer
- S.M.A.R.T. 3 compliant

DRIVE ARCHITECTURE

Formatted Capacities	
Gbytes per Drive	6.4
Megabytes per Surface	2150
Bytes per Sector	512
Physical Organization	
Disks	2
Data Surfaces	3
Read/Write Heads	3
Cylinder	12,257
Sectors per Track	252 - 396

FUNCTIONAL SPECIFICATIONS

Actuator Type	Rotary Voice Coil
Interface	Enhanced IDE
Servo	Embedded Sector Servo
Recording Method	16/17 EPR4
Recording Density (kbpi,max.)	260
Flux Density (kfcpi,max.)	276
Track Density at Zero Skew (tpi)	12,500

PERFORMANCE SPECIFICATIONS

Seek Time (RD/WT typical)	
Track to Track	2.0/2.0 ms
Average	9.5/10.5 ms
Full Stroke	20/22 ms
Average Latency	5.56 ms
Spindle Speed	5,400 ± 0.1% rpm
Data Transfer Rate	
Media to/from Buffer	124 - 200 Mbits/sec
Buffer to/from Host	16.6/33 MBytes/s
Start Time	
Typical	15 sec
Stop Time	
Typical	7 sec
Buffer Size	512 Kbytes

RELIABILITY SPECIFICATIONS

Recoverable Read Error	1 in 10^{10} bits
Non-recoverable Read Error	1 in 10^{14} bits
MTBF (POH)	500,000 hours
MTTR (typical)	5 minutes
Start/Stop Cycles	50,000
Component Design Life	5 years

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	5 ~ 55 °C
Non-operating	-40 ~ 70 °C
Thermal/Humidity Grad.(max.)	20°C/15%/hr
Humidity (non-condensing)	
Operating	8 ~ 80 %
Non-operating	8 ~ 95 %
Maximum Wet Bulb(OP/NOP)	29/40 °C
Altitude (relative to sea level)	
Operating	-200 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

SHOCK AND VIBRATION

Linear Shock (1/2 sine pulse)		
Operating	11 ms	10 G
	(2 ms	63 G REF)
Non-operating	11 ms	75 G
	(2 ms	200 G REF)
Non-operating Rotational	2 ms	12,000 RAD/SEC^2
Vibration (swept sine)		
Operating (1/2 octave per minute)		
5 ~ 21 Hz		0.034" (double amplitude)
22 ~ 300 Hz		1.5 Gp-p
300 ~ 500 Hz		.5 Gp-p
Non-operating (1 octave per minute)		
5 ~ 21 Hz		0.195" (double amplitude)
22 ~ 500 Hz		8 Gp-p

POWER CONSUMPTION

Power supply tolerance	+5V/±5%,+12V/±10%
Power Up Current (max.)	800/1550 MA
Read/Write (typical)	6.7 watts
Seek (30%) typical	7.4 watts
Idle (typical)	6.7 watts
Standby (typical)	1.3 watts
Sleep (typical)	1.3 watts

ACOUSTIC NOISE

Sound Power	
Idle (typical)	3.9 BEL
Random Read/Write (typical)	4.3 BEL

PHYSICAL DIMENSION

Height	1 inch
Width	4 inches
Depth	5.75 inches
Weight	1.2 pounds

Specifications are subject to change without notice