

Voyager 2 VG35102A

FEATURES

- Formatted Capacity 5.1 Gbytes
- Fully Compatible for Major Operating Systems
- 5,400 rpm Spindle Speed
- PR4 Read Channel with 8/9 rate code
- 122 Mbits/sec Maximum Data Rate
- Fast ATA-4/EIDE Interface
- PIO Mode 4/Multi-Word DMA Mode 2/Ultra DMA
- Error Correction on the Fly (Multi-Burst)
- 128KB Segmented Read/Write Cache Buffer
- S.M.A.R.T. Function is Supported

DRIVE ARCHITECTURE

Formatted Capacities	
Gbytes per Drive	5.1
Megabytes per Surface	850
Bytes per Sector	512
Physical Organization	
Disks	3
Data Surfaces	6
Read/Write Heads	6
Cylinder	7728
Sectors per Track	144 ~ 259

FUNCTIONAL SPECIFICATIONS

Actuator Type	Rotary Voice Coil
Interface	Enhanced IDE
Servo	Embedded Sector Servo
Recording Method	8/9 PR4
Recording Density (kbp, max.)	145
Flux Density (kfcpi, max.)	163
Track Density at Zero Skew (tpi)	8000

PERFORMANCE SPECIFICATIONS

Seek Time (RD/WT typical)	
Track to Track	2.0/2.0 ms
Average	10/11 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	66 ~ 122 Mbits/sec
Buffer to/from Host	16.6/33 MBytes/s
Start Time	
Typical	15 sec
Stop Time	
Typical	7 sec
Buffer Size	128 Kbytes

RELIABILITY SPECIFICATIONS

Recoverable Read Error	1 in 10 ¹⁰ bits
Correctable Read Error	1 in 10 ¹² 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 ~ 65 °C
Thermal/Humidity Grad.(max.)	20°C/15%/hr
Humidity (non-condensing)	
Operating	8 ~ 80 %
Non-operating	8 ~ 95 %
Maximum Wet Bulb	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

Shock (1/2 sine pulse, 11 ms duration)	
Operating	10 G
Non-operating	75 G
Vibration (swept sine, 1 octave per minute)	
Operating	
5 ~ 21 Hz	0.034" (double amplitude)
22 ~ 400 Hz	1.5 Gp-p
Non-operating	
5 ~ 21 Hz	0.195" (double amplitude)
22 ~ 500 Hz	8 Gp-p

POWER CONSUMPTION

Power supply tolerance	+5V/±5%, +12V/±10%
Power Up (max.)	400/1550 mA
Read/Write (typical)	5.1 watts
Seek (typical)	6.0 watts
Idle (typical)	4.2 watts
Standby (typical)	1.0 watts
Sleep (typical)	1.0 watts

ACOUSTIC NOISE

Maximum value at 1 meter	
Idle	35 dBA
Random Read/Write	40 dBA

PHYSICAL DIMENSION

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

Specifications are subject to change without notice



NORTH AMERICA