

PL40 Series



MODEL	SP0411N
Capacity¹	40GB
Heads	1
Disks	1

FEATURES

- 40GB Formatted Capacity Per Head
- 7,200 rpm Spindle Speed
- High Speed Dual Digital Signal Processor (DSP) Based Architecture
- Ultra DMA-133 Compatible
- 10ms Average Seek Time
- 48 Symbol Reed Solomon OTF Error Corection Code
- S.M.A.R.T. Compliant
- ATA Security Mode Feature Set
- ATA Host Protected Area Feature Set
- ATA Automatic Acoustic Management Feature Set
- SilentSeek™

DRIVE CONFIGURATION

Interface	Ultra ATA-133
Buffer DRAM Size ²	2048 Kbytes
Bytes per Sector	512

PERFORMANCE SPECIFICATIONS

Read Seek Time (typical)	
Track to Track	1.0 ms
Average	10.0 ms
Full Stroke	18.0 ms
Average Latency	4.17 ms
Rotational Speed	7,200 rpm
Data Transfer Rate	
Media to/from Buffer (max.)	728 Mbits/sec
Buffer to/from Host (max.)	133 MB/sec
Drive Ready Time (typical)	6 sec

RELIABILITY SPECIFICATIONS

Non-recoverable Read Error	1 sector in 10 ¹⁴ bits
MTBF	500,000 POH
Start/Stop Cycles (Ambient)	50,000
Component Design Life	5 years

ACOUSTICS (AVERAGE SOUND POWER)

Idle	2.6 Bel
Random Read/Write	2.8 Bel

ENVIRONMENTAL SPECIFICATIONS

Temperature	
Operating	5 ~ 55 °C
Non-operating	-40 ~ 70 °C
Thermal Gradient (max.)	20°C/hr
Humidity (non-condensing)	
Operating	5 ~ 90 %
Non-operating	5 ~ 95 %
Linear Shock (1/2 sine pulse)	
Operating, 2ms	63 G
Non-operating, 2ms	350 G
Vibration (swept sine, 1/4 octave per minute)	
Operating	
5 ~ 21 Hz	0.034" (double amplitude)
21 ~ 300 Hz	1.5 Gp-p
Non-operating	
5 ~ 21 Hz	0.195" (double amplitude)
21 ~ 500 Hz	8 Gp-p
Altitude (relative to sea level)	
Operating	-650 to 10,000 feet
Non-operating	-1,000 to 40,000 feet

POWER REQUIREMENTS

Voltage	+5V±5%, +12V±10%
Spin Up Current (max.)	880 / 1950 mA
Seek (typical)	8.8 W
Read/Write (typical)	7.0 W
Idle (typical)	6.8 W
Standby (typical)	0.5 W
Sleep (typical)	0.5 W

PHYSICAL DIMENSION

Height	0.72 in
Width	4 in
Depth	5.75 in
Weight	1.2 lb

Specifications are subject to change without notice.

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

² Upper 100 KB used for firmware

