

A-Plus Project PLS-30560S

FEATURES

- Best capacity for next generation PC
- 4,500 rpm spindle speed
- 11 msec average seek time
- Power Management for "Green PC"
- 1 inch height form factor
- 42.67 Mbts/sec maximum data rate
- 256KB segmented read/write cache buffer
- Fast SCSI-2 Interface
- 88 bits Reed-Solomon error correction
- Automatic parking and locking
- Automatic reassignment of defective sector

DRIVE ARCHITECTURE

Formatted Capacities	
Megabytes per Drive	560.480
Megabytes per Surface	140.120
Bytes per Sector	512
Physical Organization	
Disks	2
Data Surfaces	4
Read/Write Heads	4
Cylinder	2912
Sectors per Track	72 ~ 108

FUNCTIONAL SPECIFICATIONS

Actuator Type	Rotary Voice Coil
Interface	SCSI-2
Servo	Embedded Sector Servo
Recording Method	1,7 RLL
Recording Density (bpi,max.)	66,405
Flux Density (fcpi,max.)	49,803
Track Density (tpi)	3,305

PERFORMANCE SPECIFICATIONS

Seek Time (typical)	
Track to Track	3 ms
Average	11 ms
Full Stroke	20 ms
Average Latency	6.7 ms
Spindle Speed	4,500 ± 0.1% rpm
Data Transfer Rate	
To/From Media	42.67 Mbts/s
To/From Buffer	10 MBytes/s
Command Overhead (max.)	0.5 msec
Start Time	
Typical	8 sec
Maximum	15 sec
Stop Time	
Typical	7 sec
Maximum	15 sec
Interleave	1:1
Buffer Size	256 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)	300,000 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 Gradient (max.)	20 °C/hr
Humidity (non-condensing)	
Operating	8 ~ 80 %
Non-operating	8 ~ 95 %
Maximum Wet Bulb	26 °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 Up (max.)	15.0 watts
Read/Write (typical)	4.8 watts
Seek (typical)	5.0 watts
Idle (typical)	3.2 watts
Standby (typical)	1.6 watts
Sleep (typical)	1.4 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



ELECTRONICS