

P80CE Series



| CAPACITY ^{†1} | 80GB | 120GB | 160GB |
|------------------------|------------|------------|------------|
| MODEL ATA, 2MB | SP0842N/CE | SP1243N/CE | SP1644N/CE |
| ATA, 8MB | | SP1253N/CE | SP1654N/CE |

FEATURES

- 80GB Formatted Capacity Per Disk
- Ultra ATA-133
- Fluid Dynamic Bearing Spindle Motor Technology
- High Speed Dual Digital Signal Processor (DSP) Based Architecture
- [AV Streaming Feature Set](#)
- [ATA Automatic Acoustic Management Feature Set](#)
- ATA S.M.A.R.T. Compliant
- ATA Security Mode Feature Set
- ATA Host Protected Area Feature Set
- ATA Automatic Acoustic Management Feature Set
- ATA 48-bit Address Feature Set
- ATA Device Configuration Overlay Feature Set
- Multi-Burst On-The-Fly Error Correction
- SilentSeek™

DRIVE CONFIGURATION

| | |
|--------------------------------|----------|
| Interface | ATA-6 |
| Buffer DRAM Size ^{†2} | 2 / 8 MB |
| Bytes per Sector | 512 |

PERFORMANCE SPECIFICATIONS

| | |
|---------------------------------------|---------------|
| Read Seek Time (typ.) | |
| Track to Track | 0.8 ms |
| Average | 8.9 ms |
| Full Stroke | 18 ms |
| Average Latency | 4.17 ms |
| Rotational Speed | 7,200 rpm |
| Maximum Data Transfer Rate | |
| Media to/from Buffer (max.) | 880 Mbits/sec |
| Buffer to/from Host | 133 MB/sec |
| Drive Ready Time (typ.) ^{†4} | 5/7 sec |

RELIABILITY SPECIFICATIONS

| | |
|-----------------------------|-----------------------------------|
| Non-recoverable Read Error | 1 sector in 10 ¹⁴ bits |
| MTBF | 600,000 POH |
| Start/Stop Cycles (Ambient) | 50,000 |
| Component Design Life | 5 years |

ACOUSTICS (AVERAGE SOUND POWER)

| | | |
|-------------------|--------|---------|
| Idle | 1-Disk | 2.5 Bel |
| | 2-Disk | 2.7 Bel |
| Random Read/Write | 1-Disk | 3.0 Bel |
| | 2-Disk | 3.0 Bel |

ENVIRONMENTAL SPECIFICATIONS

| | |
|---|---------------------------|
| Temperature | |
| Operating | 0 ~ 60 °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 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 | -1,000 to 10,000 feet |
| Non-operating | -1,000 to 40,000 feet |

POWER REQUIREMENTS

| | |
|--|------------------|
| Voltage | +5V±5%, +12V±10% |
| Spin Up Current (max.) | 650 / 1900 mA |
| Seek (typ.) ^{†4} | 8.5 / 9.0 W |
| Read/Write On-Track (typ.) ^{†4} | 7.0 / 7.5 W |
| Idle (typ.) ^{†4} | 6.5 / 7.0 W |
| Standby (typ.) | 0.5 W |
| Sleep (typ.) | 0.5 W |

PHYSICAL DIMENSION

| | |
|--------|---------|
| Height | 1 in |
| Width | 4 in |
| Depth | 5.75 in |
| Weight | 1.39 lb |

Specifications are subject to change without notice.

^{†1} 1MB=1,000,000 Bytes 1GB=1,000,000,000 Bytes

^{†2} 128 KB is used for firmware

^{†3} 30% duty cycle, random seek

^{†4} 1-Disk/2-Disk

