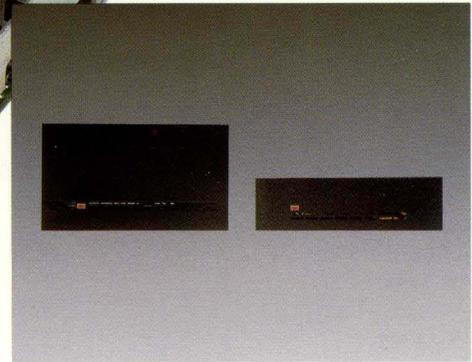




MAY

1983

MiniScribe III



Half-Height 5¼" Winchester Disk Drive 6.4 or 12.8 MBytes unformatted storage capacity

The MiniScribe III is a half-height drive series providing the popular 6.4 and 12.8 megabyte capacities in half the space of full-size 5¼-inch Winchester disk drives. Where size, weight and power are at a premium in today's systems, it offers the OEM a drive that is simple, reliable and economical.

MiniScribe III delivers 85 or 155 milliseconds average access time. And it offers many innovative features that will appeal to the OEM system designer.

- Field proven rack-and-pinion motion translator allows an increased number of recording tracks, yet retains the full-step holding torque and positioning repeatability of the stepper-motor actuator.
- IC preamplifier, within the sealed enclosure and in close proximity to the read/write heads, assures data reliability in electrically noisy environments.
- Efficient temperature compensation system (patent pending) enhances the positioning repeatability over the operating temperature range.
- Unique breather filter arrangement (patent pending), plus a recirculating air system, guarantees a clean pressurized operating environment to the heads and disks.
- Microprocessor-controlled buffered seek takes full advantage of the stepper motor high-speed slew characteristics. This results in a fast 85 or 155 millisecond average access time.
- Crystal control assures constant spin-motor speed, regardless of temperature variations and effects of motor life, and eliminates all adjustments.
- Microprocessor-controlled internal self diagnostics provide fast performance verification.
- A head shipping zone in a non-data area of the disk, coupled with a carriage locking feature, prevents disk damage during transport.
- ST412 interface compatibility, coupled with voltage requirements identical to the 5¼" floppy drive, simplify system integration.
- Slim-line package is ½ height of standard 5¼" floppy drive, providing volume efficiency.
- Rugged media and shock mounting has been incorporated to withstand severe handling encountered by today's smaller desk top and portable systems.

MiniScribe III

MODEL SPECIFICATIONS

	Model 3006	Model 3012
Storage Capacity-Unformatted		
Per Drive	6.4 MBytes	12.8 MBytes
Per Track	10,416 Bytes	10,416 Bytes
Storage Capacity-Formatted		
Per Drive	5.0 MBytes	10.0 MBytes
Per Track	8,192 Bytes	8,192 Bytes
Per Sector	256 Bytes	256 Bytes
Sectors per Track	32	32
Data Tracks	612 (1 disk)	1224 (1 disk)
Recording Density		
Areal	4.87×10^6 bits per square inch	5.9×10^6 bits per square inch
Linear (MFM)	8290 bpi	10000 bpi
Radial	588 tpi	588 tpi
Cylinders	306	612
Data Transfer Rate	5.0 Mbits per second	5.0 Mbits per second
Access Time		
Average Latency	8.33 msec	8.33 msec
Seek Time		
Track-to-Track	3.0 msec	3.0 msec
Average	85 msec (including settling)	155 msec (including settling)
Maximum	205 msec (including settling)	420 msec (including settling)

GENERAL SPECIFICATIONS

MTBF	10,000 hours (continuous operation)
MTRR	30 minutes
Preventive Maintenance	None
Data Reliability	1 soft error in 10^{10} bits read 1 permanent error in 10^{12} bits read 1 seek error in 10^6 seeks
Typical Power Consumption	17 watts
Input Power Required	+ 12VDC $\pm 5\%$, 1.1 amps max 2.5 amps start (20 seconds) + 5VDC $\pm 5\%$, 1.5 amp max
Operating Temperature	40°F (4°C) to 115°F (46°C)
Relative Humidity	8% to 80%, non condensing 78°F (26°C) maximum wet bulb
Physical Size	1.625 in. H \times 5.75 in. W \times 8.00 in. D
Weight	3.5 pounds

Features and specifications subject to change without notice.

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