MASTERFUL
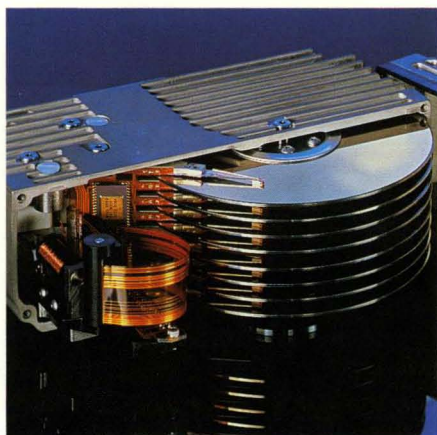
Vertically split, clamshell HDA. 16 ms access time. ESDI, SCSI, or SCSI Macintosh interface. High capacity, high performance.

☐ Balanced rotary voice coil actuator

☐ 15 mini-mono composite heads

☐ In-hub spindle motor

9380E/S/SM Specifications

| Interface	ESDI, SCSI, or SCSI Macintosh
Capacity (MBytes)	
Unformatted	382
9380E	
Formatted	338
9380S/SM	
Formatted	334
Average access time	16 ms
Data Transfer Rate	
9380E	10.0 Mbits per second
9380S/SM	12.0 Mbits per second
Data Encoding	2,7 RLL
Cylinders	1,224
Recording heads	15
Track Density (tpi)	1,100
Power Dissipation	18.0W typical
Dimensions (H x W x D)	3.25'' x 5.75'' x 8.00''
	(82.6 mm x 146 mm x 203 mm)
Weight	6.0 lbs. (2.72 kg)
MTBF	50,000 hours
MTTR	30 minutes
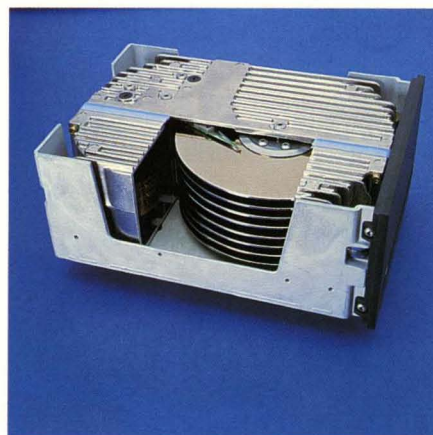
POWER

Over half a Gigabyte of formatted storage capacity. Rapid access and high data transfer. Incredibly durable design. The ultimate 5¼'' full-height.

☐ 50,000 hour MTBF

☐ Clamshell HDA

☐ 17 ms access time

9780E Specifications

Interface	ESDI
Capacity (MBytes)	
Unformatted	795
Formatted	676
Average access time	17 ms
Data Transfer Rate	15.0 Mbits per second
Data Encoding	1,7 RLL
Cylinders	1,661
Recording heads	15
Track Density (tpi)	1,494
Power Dissipation	18.0W typical
Dimensions (H x W x D)	3.25'' x 5.75'' x 8.00''
	(82.6 mm x 146 mm x 203 mm)
Weight	6.0 lbs. (2.72 kg)
MTBF	50,000 hours
MTTR	30 minutes
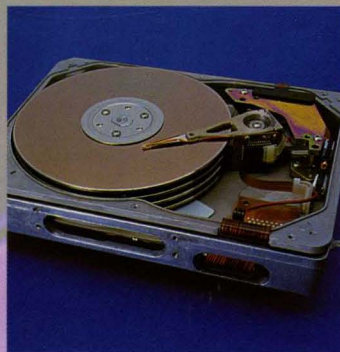
1989

Product

Guide
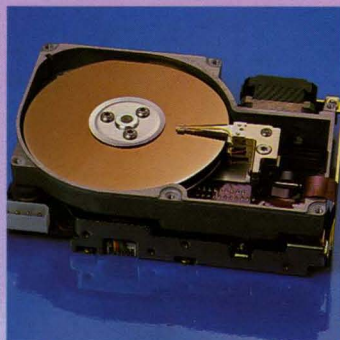
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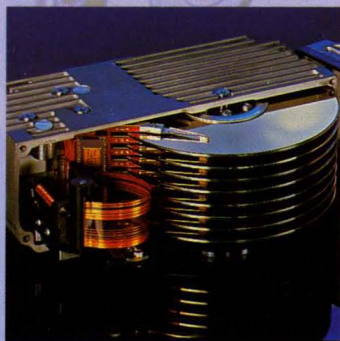
MiniScribe
Solutions for Data Storage

MiniScribe
Solutions for Data Storage

1861 Lefthand Circle

Longmont, Colorado

80501-6798

(303) 651-6000

ESTABLISHED in 1980, MiniScribe Corporation develops, manufactures, and markets Winchester disk drives.

Unsurpassed quality, superior design and proven performance characterize each member of the MiniScribe family.

Storage capacities range from 20 to 780 megabytes. Interfaces include AT, XT, SCSI, ESDI, and ST506/412 for easy integration into IBM PC, XT, AT, PS/2, and compatible systems, Apple, and Apple Macintosh computers.

Three form factors are available: 3½'' half-height, 5¼'' half-height, and 5¼'' full-height.

Working in partnership with the leaders in computer system architecture, MiniScribe meets the highest standards of the most discerning customers and demanding applications.

Throughout the world, MiniScribe provides solutions for data storage.

DEDICATION, innovation and pride in workmanship contribute to our industry's highest Quality standards.

Advanced robotics at MiniScribe manufacturing sites in the United States, Hong Kong, and Singapore enable simpler, more reliable and economical drive design and production.

DIRECT sales teams, manufacturers' representatives, and independent distributors form MiniScribe's international marketing network.

Well-stocked warehouses and expert staffing meet product demand, ready to expedite the next shipment - Across the country, or around the world.

5¼" Half-Height

3½" Half-Height

5¼" Full-Height

The 3000 Series

Rugged, 5¼" half-height drives with the features, durability and performance of full-height models.

Model	Capacity*	Access†	Interface
3053	53	25 ms	ST412
3085	85	20 ms	ST412
3180E	182	17 ms	ESDI
3180S	183	17 ms	SCSI
3180SM	183	17 ms	SCSI Macintosh
3650	51	61 ms	ST412

* Unformatted capacity, in MBytes
† Average access time, in milliseconds

EFFICIENCY

Economical, fast and quiet. Operating noise levels measure less than 40 dB.

☐ Rotary voice coil, dedicated servo system

☐ Four-point shock mount

☐ Auto park on power-down

3053 Specifications

Interface	ST412
Capacity (MBytes)	
Unformatted	53
Formatted	45
Average access time	25 ms
Data Transfer Rate	5.0 Mbits per second
Data Encoding	MFM
Cylinders	1,024
Servo heads	1
RW heads	5
Track Density (tpi)	1,033
Power Dissipation	12.4W typical
Dimensions (H x W x D)	1.625'' x 5.75'' x 8.00'' (41.3 mm x 146 mm x 203 mm)
Weight	3.0 lbs. (1.36 kg)
MTBF	30,000 hours
MTTR	30 minutes
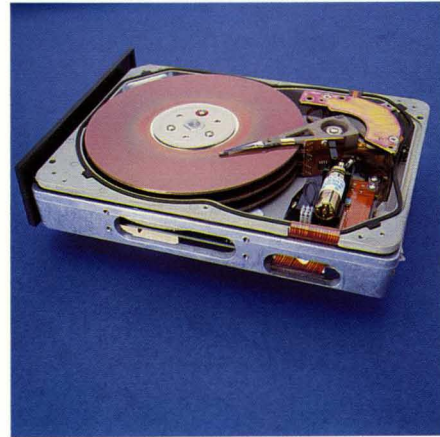
RELIABILITY

The Model 3085, with a 40,000 hour MTBF and average access time of 20 ms.

☐ Closed loop rotary voice coil

☐ Low mass, straight arm actuator

☐ 71 MByte capacity (formatted)

3085 Specifications

Interface	ST412
Capacity (MBytes)	
Unformatted	85
Formatted	71
Average access time	20 ms
Data transfer rate	5.0 Mbits per second
Data Encoding	MFM
Cylinders	1,170
Servo heads	1
RW heads	7
Track density (tpi)	1,100
Power Dissipation	13.5W typical
Dimensions (H x W x D)	1.625'' x 5.75 x 8.00'' (41.3 mm x 146 mm x 203 mm)
Weight	3.2 lbs. (1.45 kg)
MTBF	40,000 hours
MTTR	30 minutes

CAPACITY

Expanded storage in a proven HDA. MiniScribe 3180 drives are available with ESDI, SCSI, or SCSI Macintosh interfaces.

☐ Low power dissipation

☐ Precise robotic assembly

☐ Fast access

3180E Specifications

Interface	ESDI
Capacity (MBytes)	
Unformatted	182
Formatted	157
Average access time	17 ms
Data Transfer Rate	10.0 Mbits per second
Data Encoding	2,7 RLL
Cylinders	1,250
Track Density (tpi)	1,135
Servo Heads	1
RW Heads	7
Pov.er Dissipation	15.0W typical
Dimensions (H x W x D)	1.625'' x 5.75'' x 8.00'' (41.3 mm x 146 mm x 203 mm)
Weight	3.2 lbs. (1.45 kg)
MTBF	35,000 hours
MTTR	30 minutes

3180S/SM Specifications

Interface	SCSI or SCSI Macintosh
Capacity (MBytes)	
Unformatted	183
Formatted	160
Average access time	17 ms
Data Transfer Rate	12.0 Mbits per second
Data Encoding	2,7 RLL
Cylinders	1,255
Track Density (tpi)	1,193
Servo Heads	1
RW Heads	7
Power Dissipation	17.0W typical
Dimensions (H x W x D)	1.625'' x 5.75'' x 8.00'' (41.3 mm x 146 mm x 203 mm)
Weight	3.2 lbs. (1.45 kg)
MTBF	35,000 hours
MTTR	30 minutes
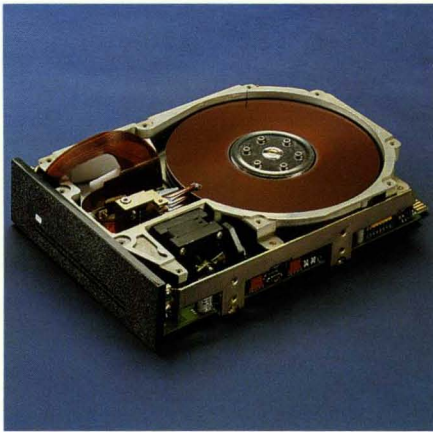
ECONOMY

An affordable, ST412 interface drive with more than 40 MBytes of formatted storage capacity.

☐ Rack and pinion actuator

☐ Color-coded LED

☐ Rugged reliability

3650 Specifications

|	
Interface	ST412
Capacity (MBytes)	
Unformatted	51
Formatted	42
Average access time	61 ms
Data Transfer Rate	5.0 Mbits per second
Data Encoding	MFM
Cylinders	809
Servo heads	1
RW heads	5
Track Density (tpi)	763
Power Dissipation	18.1W typical
Dimensions (H x W x D)	1.625'' x 5.75'' x 8.00'' (41.3 mm x 146 mm x 203 mm)
Weight	3.5 lbs. (1.59 kg)
MTBF	25,000 hours
MTTR	30 minutes

THE 8000 SERIES

Sleek, versatile half-height 3½" drives of uncompromising quality, compatibility and power.

Model	Capacity*	Access†	Interface
8051A	51	28 ms	AT
8051S	55	28 ms	SCSI
8225	24	68 ms	ST412
8225AT	25	40 ms	AT
8225S	25	68 ms	SCSI
8225XT	25	68 ms	XT
8425	26	68 ms	ST412
8425F	26	40 ms	ST412
8425S	26	68 ms	SCSI
8438	38	68 ms	ST412
8450	48	45 ms	ST412
8450AT	50	40 ms	AT
8450S	50	68 ms	SCSI
8450XT	50	68 ms	XT

* Unformatted capacity, in MBytes
† Average access time, in milliseconds
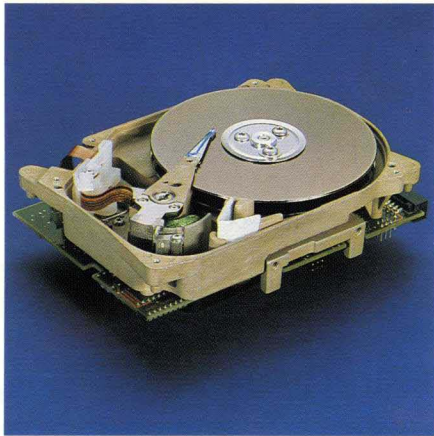
UNCHALLENGED

No other company in the world has sold as many 3½'' hard drives as MiniScribe.
Unparalleled performance and design.

☐ 32K on-board cache (8051A)

☐ 1:1 interleave

☐ Pre-formatted

8051A/S Specifications

Interface	AT or SCSI
Capacity (MBytes)	
8051A	
Unformatted	51
Formatted	43
8051S	
Unformatted	55
Formatted	45
Average access time	28 ms
Data Transfer Rate	
8051A	8.0 Mbits per second
8051S	600 KBytes per second
Data Encoding	2,7 RLL
Cylinders	
8051A	745
8051S	799
Heads	4
Track Density (tpi)	1,109
Power Dissipation	8.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75'' (41.3 mm x 101.6 mm x 146 mm)
Weight	1.5 lbs. (.68 kg)
MTBF	30,000 hours
MTTR	30 minutes
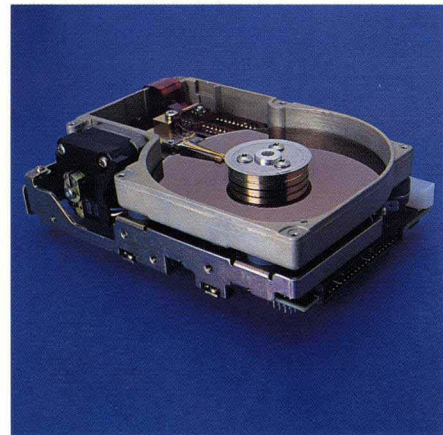
PROVEN

ST412, XT, AT, SCSI, or SCSI Macintosh interface.
Dependable, economical storage solutions.

☐ Adaptable, compatible

☐ Cost-efficient

☐ Proven design and performance

8225/XT Specifications

Interface	ST412 or XT
Capacity (MBytes)	
8225	
Unformatted	24
Formatted	21
8225XT	
Unformatted	25
Formatted	21
Average access time	68 ms
Data Transfer Rate	7.5 Mbits per second
Data Encoding	2,7 RLL
Cylinders	
8225	771
8225XT	805
Heads	2
Track Density (tpi)	898
Power Dissipation	7.0W low power option
8225	10.7W typical
8225XT	12.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75'' (41.3 mm x 101.6 mm x 146 mm)
Weight	1.63 lbs. (.74 kg)
MTBF	30,000 hours
MTTR	30 minutes

8225AT/S Specifications

Interface	AT or SCSI
Capacity (MBytes)	
8225AT	
Unformatted	25
Formatted	21
8225S	
Unformatted	25
Formatted	21
Average access time	
8225AT	40 ms
8225S	68 ms
Data Transfer Rate	
8225AT	8.0 Mbits per second
8225S	350 KBytes per second
Data Encoding	2,7 RLL
Cylinders	
8225AT	747
8225S	809
Heads	2
Track Density (tpi)	898
Power Dissipation	7.0W low power option
8225AT	12.0W typical
8225S	13.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75''
	(41.3 mm x 101.6 mm x 146 mm)
Weight	1.63 lbs (.74 kg)
MTBF	30,000 hours
MTTR	30 minutes
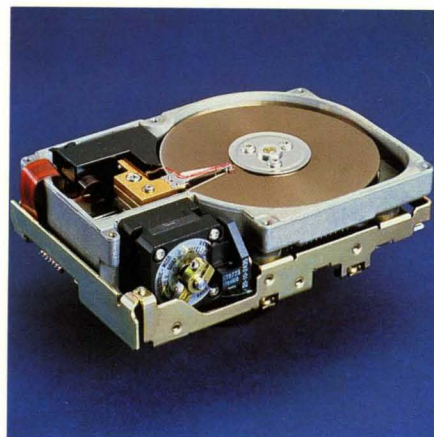
PRECISE

20 MByte solutions. Cost-effective, with ST412 or SCSI interface.

☐ Single PCBA

☐ Whitney technology flexures and sliders

☐ Rack and pinion actuator

8425/F Specifications

Interface	ST412
Capacity (MBytes)	
Unformatted	26
Formatted	21
Average access time	
8425	68 ms
8425F	40 ms
Data Transfer Rate	5.0 Mbits per second
Data Encoding	MFM
Cylinders	615
Heads	4
Track Density (tpi)	804
Power Dissipation	
8425	10.0W typical
8425F	12.5W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75''
	(41.3 mm x 101.6 mm x 146 mm)
Weight	1.80 lbs (.82 kg)
MTBF	30,000 hours
MTTR	30 minutes

8425S Specifications

|	
Interface	SCSI
Capacity (MBytes)	
Unformatted	26
Formatted	21
Average access time	68 ms
Data Transfer Rate	100 KBytes per second
Data Encoding	MFM
Cylinders	617
Heads	4
Track Density (tpi)	804
Power Dissipation	13.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75'' (41.3 mm x 101.6 mm x 146 mm)
Weight	1.80 lbs. (.82 kg)
MTBF	20,000 hours
MTTR	30 minutes
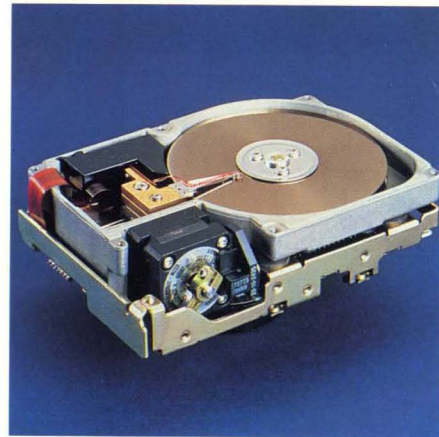
UNCOMPROMISING

33 MByte capacity in an affordable, reliable MiniScribe 3½'' drive. ST412 interface.

☐ Low cost per megabyte

☐ Minimal power dissipation

☐ High throughput

8438 Specifications

Interface	ST412
Capacity (MBytes)	
Unformatted	38
Formatted	33
Average access time	68 ms
Data Transfer Rate	7.5 Mbits per second
Data Encoding	2,7 RLL
Cylinders	615
Heads	4
Track Density (tpi)	804
Power Dissipation	10.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75'' (41.3 mm x 101.6 mm x 146 mm)
Weight	1.8 lbs. (.82 kg)
MTBF	30,000 hours
MTTR	30 minutes
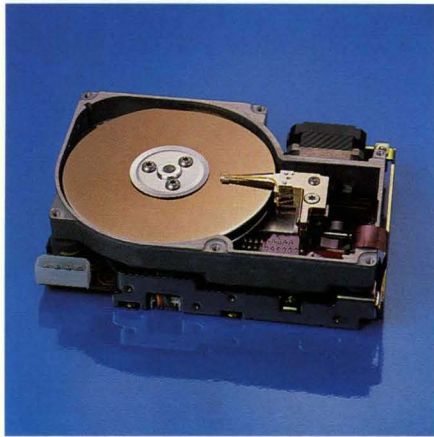
INTELLIGENT

ST412, SCSI, AT, or XT interface. Reliability, economy, versatility, and proven design.

☐ High accuracy, shock resistance

☐ 7.5 Mbit data transfer rate

☐ Single PCBA

8450 Specifications

Interface	ST412
Capacity (MBytes)	
Unformatted	48
Formatted	41
Average access time	45 ms
Data Transfer Rate	7.5 Mbits per second
Data Encoding	2,7 RLL
Cylinders	771
Heads	4
Track Density (tpi)	898
Power Dissipation	10.7W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75'' (41.3 mm x 101.6 mm x 146 mm)
Weight	1.80 lbs. (.82 kg)
MTBF	30,000
MTTR	30 minutes

8450S Specifications

Interface	SCSI
Capacity (MBytes)	
Unformatted	50
Formatted	42
Average access time	68 ms
Data Transfer Rate	350 KBytes per second
Data Encoding	2,7 RLL
Cylinders	809
Heads	4
Track Density (tpi)	898
Power Dissipation	13.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75'' (41.3mm x 101.6 mm x 146 mm)
Weight	1.63 lbs. (.74 kg)
MTBF	30,000 hours
MTTR	30 minutes

8450AT/XT Specifications

Interface	AT or XT
Capacity (MBytes)	
8450AT	
Unformatted	50
Formatted	43
8450XT	
Unformatted	50
Formatted	43
Average access time	
8450AT	40 ms
8450XT	68 ms
Data Transfer Rate	
8450AT	8.0 Mbits per second
8450XT	7.5 Mbits per second
Data Encoding	2,7 RLL
Cylinders	
8450AT	745
8450XT	805
Heads	4
Track Density (tpi)	898
Power Dissipation	7.0W low power option
	12.0W typical
Dimensions (H x W x D)	1.625'' x 4.00'' x 5.75''
	(41.3 mm x 101.6 mm x 146 mm)
Weight	1.63 lbs. (.74 kg)
MTBF	30,000 hours
MTTR	30 minutes

The 9000 Series

*Finely engineered and field-proven 5¼"
full-height drives equal to the most
rigorous data storage and retrieval tasks.*

Model	Capacity*	Access†	Interface
9380E	382	16 ms	ESDI
9380S	382	16 ms	SCSI
9380SM	382	16 ms	SCSI Macintosh
9780E	795	17 ms	ESDI

* Unformatted capacity, in MBytes
† Average access time, in milliseconds