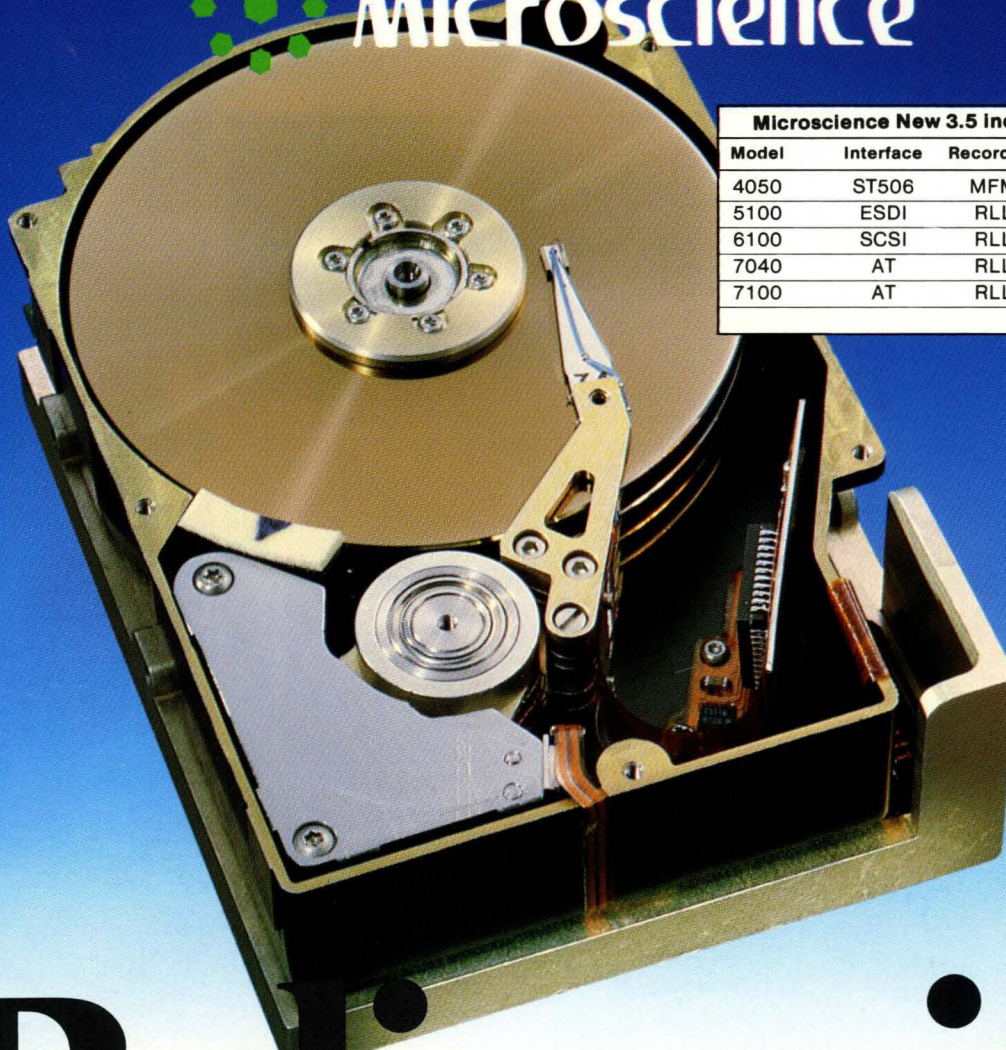




Microscience™



Microscience New 3.5 Inch Disk Drives			
Model	Interface	Recording	Capacity
4050	ST506	MFM	44Mbytes
5100	ESDI	RLL	110Mbytes
6100	SCSI	RLL	110Mbytes
7040	AT	RLL	47Mbytes
7100	AT	RLL	110Mbytes
Formatted			

Believe it!

HIGH PERFORMANCE 3.5 inch Disk Drives 44 to 110 Mbyte CAPACITIES

MAR 16 1989

Far reaching specifications for the five disk drives in our new 3.5 inch family, and there's more: Voice Coil technology, 4ms track to track access (including head settling time), less heat, lower power consumption.

It's what you expect from Microscience, developers and manufacturer of the first Half-Height 5.25 inch Winchester Disk Drive.



- 18ms average positioning time
- Closed loop dedicated servo system
- Single PCB with SMD-VLSI circuitry
- ST506, SCSI, ESDI, AT choices
- Microprocessor control
- Dedicated head landing zone
- Dynamic spindle brake
- Actuator lock

MICROSCIENCE INTERNATIONAL CORPORATION

CORPORATE HEADQUARTERS

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Taipei, TAIWAN
(8862) 715-5650



3.5 inch High Performance Winchester Disk Drive

SPECIFICATIONS

Model No.	4050	4060	4070	4090	5100	6100	7040	7100	Model No.
Capacity Unformatted	53.3 MB	80.0 MB	74.2 MB	111.3 MB	124.6 MB	124.6 MB	53.4 MB	124.6 MB	Capacity Unformatted
Capacity Formatted	44.5 MB	66.8 MB	62.3 MB	93.4 MB	110.3 MB	110.3 MB	47.2 MB	110.3 MB	Capacity Formatted
Per sector	512 bytes	512 bytes	512 bytes	512 bytes	512 bytes	512 bytes	512 bytes	512 bytes	Per sector
Sectors per track	17	17	17	17	36	36	36	36	Sectors per track
Data Transfer Rate	5 Mb/s	7.5 Mb/s	5 Mb/s	7.5 Mb/s	10 Mb/s	10 Mb/s	10 Mb/s	10 Mb/s	Data Transfer Rate
Average Latency	8.33 ms	8.33 ms	8.33 ms	8.33 ms	8.33 ms	8.33 ms	8.33 ms	8.33 ms	Average Latency
Seek Time (incl. settling)									SeekTime (incl. settling)
Track to track	4 ms	4 ms	4 ms	4 ms	4 ms	4 ms	4 ms	4 ms	Track to track
Average	18 ms	18 ms	18 ms	18 ms	18 ms	18 ms	18 ms	18 ms	Average
Maximum	40 ms	40 ms	40 ms	40 ms	40 ms	40 ms	40 ms	40 ms	Maximum
Functional Specifications									Functional Specifications
Recording density	14,445 bpi	21,668 bpi	14,445 bpi	21,668 bpi	25,406 bpi	25,406 bpi	25,406 bpi	25,406 bpi	Recording density
Track density	1,250 tpi	1,250 tpi	1,250 tpi	1,250 tpi	1,250 tpi	1,250 tpi	1,250 tpi	1,250 tpi	Track density
Cylinders per surface	1,024	1,024	1,024	1,024	855	855	855	855	Cylinders per surface
Platters	3	3	4	4	4	4	2	4	Platters
Read write heads	5	5	7	7	7	7	3	7	Read write heads
Servo heads	1	1	1	1	1	1	1	1	Servo heads
Recording code	MFM	RLL (2,7)	MFM	RLL (2,7)	RLL (2,7)	RLL (2,7)	RLL (2,7)	RLL (2,7)	Recording code
Power dissipation	10 w, typ.	10 w, typ.	10 w, typ.	10 w, typ.	10 w, typ.	11 w, typ.	9 w, typ.	11 w, typ.	Power dissipation
Interface	ST506/412	ST506/412	ST506/412	ST506/412	ESDI	SCSI	AT	AT	Interface

GENERAL SPECIFICATIONS:

Reliability Specifications

MTBF (typical usage)	36,000 poh
Preventive maintenance	none
Component life	5 years
Error rates	
Soft read errors	1 in 10 ¹⁰ bit read
Hard read errors	1 in 10 ¹² bit read
Seek errors	1 in 10 ⁶ seeks

Power Requirements

DC voltage	+12 volts ±5% @ 0.6A typ. 1.5A starting +5 volts ±5% @ 0.5A typ.
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Environmental limits (operating)

Ambient temperature	40° to 122F° (5° to 50°C)
Relative humidity	8% to 80% non-condensing
Wet bulb, maximum	78°F non-condensing (25.5°C)
Altitude	-1,000 to 40,000 ft.
Vibration	5 to 500 Hz, 1.0 G
Shock	10 G, 11 ms

Environmental Limits (non-operating)

Ambient temperature	-40° to 140F° (-40° to 60°C)
Relative humidity	8% to 80% non-condensing
Wet bulb, maximum	78°F non-condensing (25.5°C)
Altitude	-1,000 to 40,000 ft.
Vibration	5 to 500 Hz, 2.0 G
Shock	75G (7040), 60G(others); 11 ms

Mechanical Dimensions

Height	1.625 in.
Width	4.000 in.
Length	5.750 in.
Weight	2.0 lb.

Safety Approvals

UL, CSA, TUV

DISTRIBUTOR: