

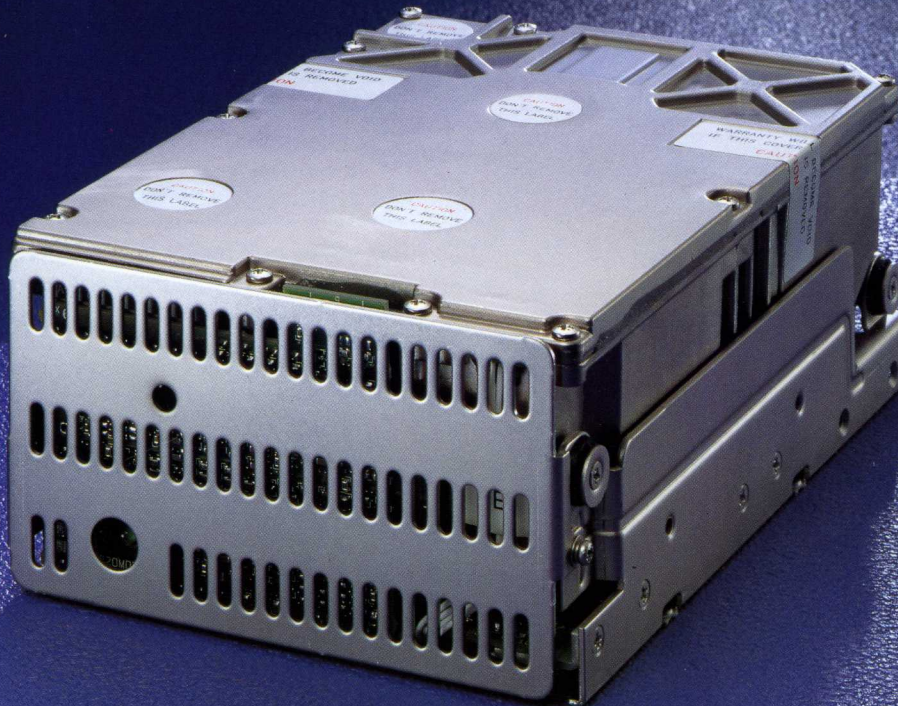
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FUJITSU

Fujitsu Quality Storage Products

5¹/₄-inch magnetic disk drives

M2266S/SA/SB/H/HA/HB



The M2266 is high-performance 5¹/₄-inch magnetic disk drive with large storage capacity. The M2266 is available in six types – S, SA, SB, H, HA, and HB. The S, SA, and SB types each have an embedded single-ended Small Computer System Interface (SCSI) controller, and are formatted with 256 bytes/block, 512 bytes/block, and 1,024 bytes/block, respectively. Users can reformat the drive to suitable block size in the range of 180 to 4,128 bytes/block with even-byte boundary. The H, HA, and HB types have a differential SCSI controller and are preformatted the same as S, SA, and SB types, respectively. Each disk enclosure is completely sealed, integrating eight disks, sixteen Whitney heads, a rotary voice coil motor (VCM), and a DC spindle motor. They are ideal for intelligent office systems which can handle images, voices, and video data.

Large storage capacity

The M2266 has storage capacity of 1,266 MB (unformatted).

High performance

The M2266 achieves fast positioning time – 4 milliseconds track-to-track, 14.5 milliseconds average, 30 milliseconds maximum, including settling time. The S, SA, SB, H, HA, HB types, which have a large data buffer of 128 KB, the transfer rate to the host computer is 4.8 MB/s (synchronous mode), 2.00 MB/s (asynchronous mode).

Embedded Single-ended SCSI controller (S, SA, SB types)

The S, SA, and SB types each have an embedded single-ended SCSI controller. The controller's commands meet the SCSI CCS (Common Command Set for direct-access device) standard.

Embedded Differential SCSI controller (H, HA, HB types)

The H, HA, and HB types each have an embedded differential SCSI controller.

Microprocessor controlled

The voice coil motor is controlled by a microprocessor. As a result, the seek control circuit is greatly simplified and reliability is further increased.

Reliable, maintenance free

The completely sealed disk enclosure contains a breathing filter and a recirculation filter to provide a contamination-free environment. Whitney heads eliminate moving parts for head loading and unloading. These drives use LSI drive logic, and the Head IC prevents read errors caused by external electric noise. With these features, the drives' mean time between failures (MTBF) is expected 200,000 power-on hours, and their mean time to repair (MTTR) is less than 30 minutes.

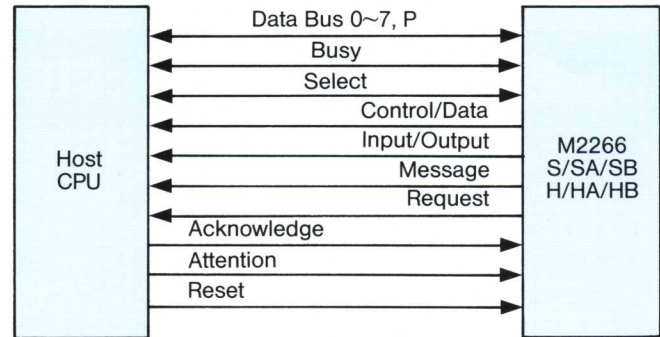
Compact, economical

These drives' large capacities and high performances have not been achieved at the expense of compactness. Their physical sizes are the same as those of 5¼-inch flexible disk drives, and can be installed in flexible disk drive cabinets to increase storage capacity. They can be mounted horizontally or vertically. These features make the drives ideal for office applications.

Internationally compatible

The M2266 uses low-voltage DC of +12 V and +5 V, permitting international applications and freedom from the effects of power line fluctuations.

SCSI interface



FUNCTIONAL SPECIFICATIONS

		M2266S/SA/SB/H/HA/HB
Storage capacity	Unformatted	1,266 MB
	Formatted	959 MB (S/H) 1,079 MB (SA/HA) 1,165 MB (SB/HB)
Disks (5¼-inch)		8
Heads	Read/Write	15
	Servo	1
Track capacity (unformatted)		50,910 bytes
Track per cylinder		15
Cylinders		1,658
Sectors		45/1,024B (SB, HB) 85/512B (SA, HA) 150/256B (S, H)
Positioning time	Track-to-track	4 ms
	Average	14.5 ms
	Maximum	30 ms
Average latency time		8.3 ms
Rotational speed		3,600 rpm
Data transfer rate		2.00 MB/s (Asynchronous mode) 4.80 MB/s (Synchronous mode)
Recording code		1/7 (RLL)
Interface		SCSI (Embedded)
Start time		Less than 20 s
Stop time		Less than 15 s

PHYSICAL SPECIFICATIONS

		M2266S/SA/SB	M2266H/HA/HB
Power requirements	Operating	12VDC ±5%, 5VDC ±5%	
	Start up	12VDC, max. 5.0A	
Dimensions	Height	83 mm (3.3 in.)	
	Width	146 mm (5.7 in.)	
	Depth	203 mm (8.0 in.)	218 mm (8.6 in.)
Weight		3.5 kg (7.7 lb.)	
Ambient temperature	Operating	5°C to 45°C (41°F to 113°F)	
	Not operating	-40°C to 60°C (-40°F to 140°F)	
	Gradient	Less than 15°C (27°F)/H	
Relative humidity	Operating	20% to 80% (non condensing)	
	Not operating	5% to 95% (non condensing)	
Vibration	Operating	Max. 0.2G (3Hz to 100Hz) (except resonance point)	
	Not operating	Max. 0.4G (3Hz to 100Hz)	
Shock resistance	Operating	Max. 2G (10 ms)	
	Not operating	Max. 20G (10 ms)	
Attitude	Operating	3,000 m (10,000 ft)	
	Not operating	12,000 m (40,000 ft)	

RELIABILITY SPECIFICATIONS

		M2266S/SA/SB/H/HA/HB
MTBF		Expected 200,000 power-on hours
MTTR		30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹⁵ bits read
	Seek errors	10 per 10 ⁷ seeks

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu representative.
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