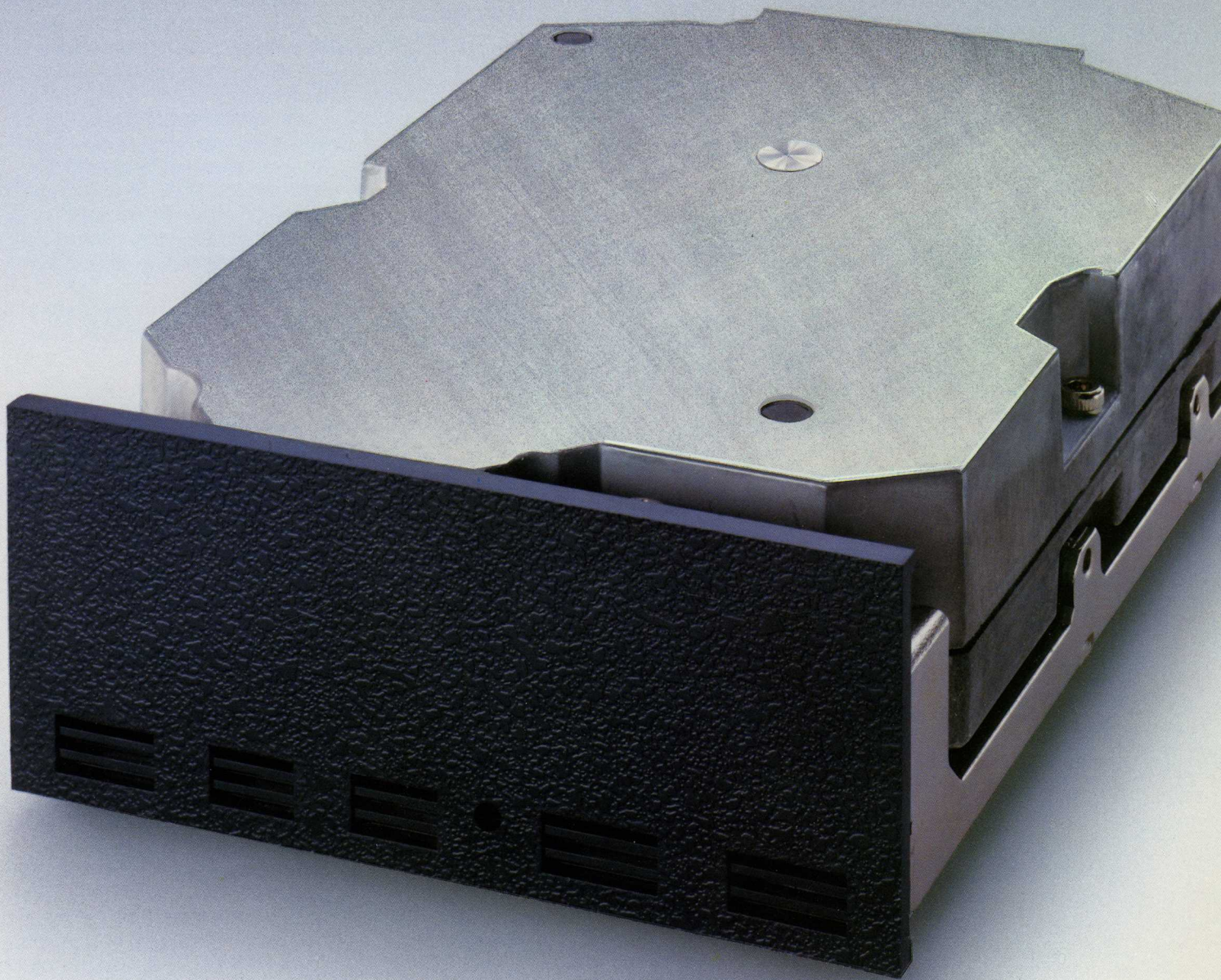


M261XS 3½" SCSI Winchester Drives

1/90
MAR 5 1990

**High Performance,
Compact Drives with
full SCSI Compatibility**

We're developing technology for you.



No One is Developing Technology Like Fujitsu

As a leading supplier of the most complete line of data storage products, Fujitsu America, Inc. can provide you with the products you need for fast, reliable mass data storage.

Fujitsu quality is more than a promise. It is an established fact.

For over twenty years, companies have looked to us for high performance, high quality peripherals. Fujitsu storage products are the most reliable in the industry. We insure constant performance by using highly-automated production lines and computerized testing to control all phases of manufacture and assembly.

As a Fujitsu customer, you'll also enjoy superior service and field support. You'll have immediate access to highly skilled application engineers and product specialists, plus a network of full service distributors.

You can rely on Fujitsu America for quality products and outstanding service. You can also rely on us to continue developing the best data storage technology—technology that delivers the larger capacities, faster access times and higher reliability you need.

We're developing technology for you.

The Fujitsu logo consists of the word "FUJITSU" in a bold, sans-serif font. Above the letter "J" is a stylized infinity symbol (∞).

FUJITSU AMERICA • COMPUTER PRODUCTS GROUP

With the Fujitsu M261XS series 3½" Winchester disk drives, you get proven "big-disk" performance and reliability in a compact form factor.

These Winchester drives provide cost effective and highly reliable mass storage for 80286- and 80386-based PC's and personal workstations; storage subsystems; desktop micro-stations; and high-performance laptop and portable computers.

Along with fast access speeds, high capacities, and full SCSI compatibility, these drives uphold the international reputation of Fujitsu for quality, and reliability.

Fast Data Access

Throughout the design of the M261XS series drives, data access was a primary consideration. The end result is an average positioning time of 20 ms and a SYNC data transfer rate of 2.5 megabytes per second.

Critical to this speed are inline heads which allow for faster positioning time. Compared to traditional 90-degree bent-arm designs, the head actuators are lighter. This reduces inertia, thereby increasing acceleration and deceleration for faster seek operations.

A segmented, random access cache uses a 24 KB ring buffer to improve system throughput. This disk cache features programmable reconnect timing, so the cache need not be full to transfer data. Data access time is thus reduced to an absolute minimum.

For defect management, these drives employ the "defective sector slip" technique. During formatting, defective areas of the media are automatically skipped, without changing tracks or heads. When data is read, the drive appears to have contiguous blocks of

data, preventing unnecessary seek operations and rotational latencies.

Flexibility In Application

With the M261XS series, Fujitsu has succeeded in creating a family of drives that can meet widely-varied requirements for system applications and software packages.

These drives provide full ANSI and Common Command Set (CCS) compatibility, using the Fujitsu SCSI protocol chip. The interface is based on standard ANSI SCSI.

Programmable data blocks allow for variable sector sizes and maximum flexibility. System integration time is greatly reduced since block and track sizes are managed within the intelligence of the disk drive itself.

Formatted storage capacities are 90, 135 and 180 MB. The M261XS series is just the first generation of high capacity, high performance 3½" SCSI drives offered by Fujitsu.

Durability And Quality

In the M261XS series, performance is coupled with dependability and Fujitsu's known standards for high quality.

The solenoid actuator lock keeps the heads securely in place off the data areas during transportation. This feature also results in a non-operating shock tolerance of 50 G, and a vibration tolerance of 1.0 G.

Fujitsu's use of a 56 bit error correction code guarantees data integrity by detecting up to 22 bits and correcting 11 bits.

The M261XS series of drives also feature a fully-embedded servo where the positioning of the voice coil motor is controlled by the closed loop servo

M261XS 3½" SCSI Winchester Drives

method. Sector servo information recorded on each data surface provides precise feedback control during operation. The drives operate at an extremely low acoustical noise level of 40 dBA, and consume less than one-third the power of 5¼" SCSI drives.

"Big Disk" Reliability

The Fujitsu M261XS series drives are based on fully-tested

technology. Fujitsu applies the same basic technology that distinguishes the company's larger Winchester disk drives. For example, the thin film media used in the 3½" SCSI drive line is Fujitsu's own; media that was first designed and manufactured years ago for use in larger disk products.

This migration of technology down from proven Winchester drives helps assure product reliability. Thus, Fujitsu's

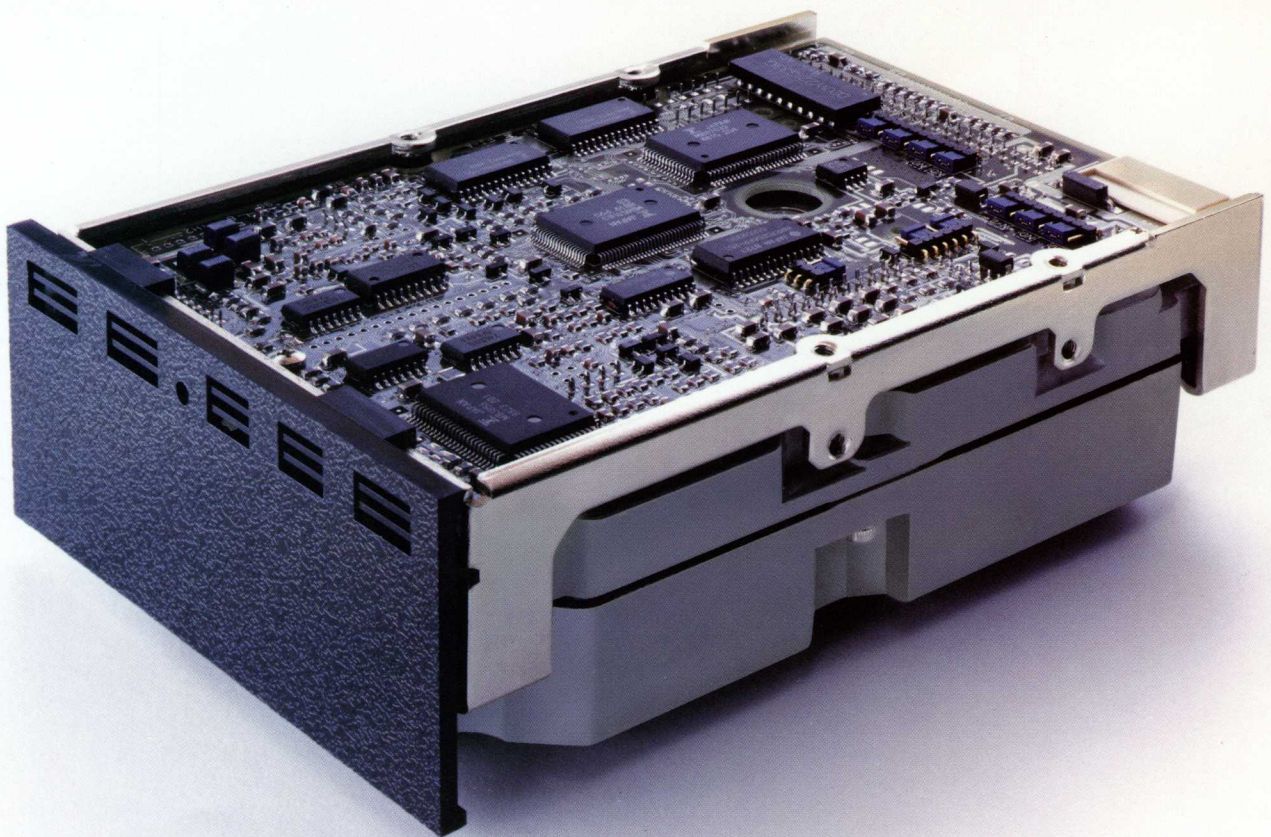
M261XS series drives have an MTBF of at least 50,000 power-on-hours.

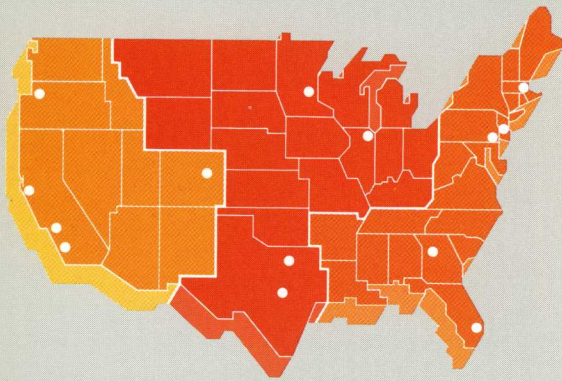
For added reliability, Fujitsu controls the manufacture of all critical components through vertical integration.

More than two decades of Winchester disk drive manufacturing experience have gone into the development of Fujitsu's M261XS series.

Experience makes all the difference.

With the Fujitsu M261XS series 3½" Winchester disk drives, you get proven "big-disk" performance and reliability in a compact form factor.





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SPECIFICATIONS

		M2612S	M2613S	M2614S
CAPACITY (MB)	unformatted	90.84	136.60	182.36
DISKS		2	3	4
HEADS	(read/write)	4	6	8
TRACK CAPACITY	formatted	17,408 Bytes		
CYLINDERS		1,334		
POSITIONING TIME	track to track	8 ms		
	average	20 ms		
	maximum	40 ms		
AVERAGE LATENCY		8.6 ms		
ROTATION SPEED		3,490 RPM		
DATA TRANSFER RATE	(to and from buffer)	ASYNC: 1.25 MB/s SYNC: 2.5 MB/s		
RECORDING CODE		RLL (1,7)		
START TIME		15 seconds		
STOP TIME		25 seconds		
INTERFACE		SCSI		
POWER		12 VDC, 0.45 A (max. 2.0A); 5 VDC, 1.0 A 10.4 W		
DIMENSIONS	(HxWxD)	1.62"x4.0"x5.75"		
WEIGHT		2.2 lbs		
MTBF		50,000 power-on-hours		
MTTR		less than 30 minutes		
COMPONENT LIFE		5 years		
ERROR RATES	recoverable	10 per 10 ¹¹ bits read		
	unrecoverable	10 per 10 ¹⁵ bits read		
	seek	10 per 10 ⁷ seeks		
TEMPERATURE	operating	5°C to 45°C		
	not operating	-40°C to 60°C		
	gradient	less than 15°C/hour		
HUMIDITY	operating	20% to 80%		
(non-condensing)	not operating	5% to 95%		
VIBRATION	operating	max. 0.5G		
(3Hz to 100Hz)	not operating	max. 1.0G		
SHOCK	operating	max. 5.0 G		
	not operating	max. 50.0 G		
ALTITUDE	operating	10,000 ft.		
	not operating	40,000 ft.		

Call 1-800-626-4686

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