

769- and 410-megabyte  
5 1/4-inch Fixed Disk Drives with  
15 Mbit/sec ESDI Interface



This high-capacity 5 1/4-inch disk drive incorporates the ESDI high-performance standard interface. Fast seek times of 16.5 and 14.5 msec provide the performance necessary for today's system applications. A 15 Mbit/sec transfer rate, and status and configuration reporting across the interface are included in the benefits of this high-capacity, high-performance disk drive family. The XT-8000E family offers size and cost reduction opportunities relative to larger-sized, high-capacity disk drives.

**Maxtor**

# THE MAXTOR XT-8000E™ FAMILY

## KEY FEATURES

- Capacities of 769 and 410 Mbytes (unformatted).
- High performance with 16.5 and 14.5 msec seek times.
- High-performance data transfer rate of 15 Mbits/second.
- Supports hard or soft sectoring, user selectable one byte granularity.
- Spindle motor synchronization option available.
- Drive control and data signals use the same cabling as the ST506/412 disk drives.
- High-performance MAXTORQ™ rotary voice-coil actuator with microprocessor-controlled closed-loop track-following servo system.
- Microprocessor-controlled acceleration profile allows highest performance on all seeks.
- Microprocessor-controlled spindle motor for precise speed control (+0, -0.2%) under all conditions.
- Maxtor (patented) brushless DC spindle motor inside disk hub.
- Advanced Whitney suspension heads.
- Thin film media.
- Dynamic braking during power-down cycle.
- Dedicated landing/shipping zone.
- Fully automatic, positive actuator latch.
- Surface-mounted components allow a single MAXPAK™ printed circuit board for improved reliability.
- Standard power requirements.
- Physical dimensions and mounting holes identical to industry standards.

## SPECIFICATIONS

### PERFORMANCE SPECIFICATIONS

	XT-8760E	XT-8380E
Capacity, unformatted		
Per drive (Mbytes)	768.92	410.09
Per surface (Mbytes)	51.26	51.26
Per track (bytes, minimum)	31,410	31,410
Capacity, typical format		
Per drive (Mbytes)	676.82	360.97
Per surface (Mbytes)	45.12	45.12
Per track (bytes)	27,648	27,648
Per sectors (bytes)	512	512
Sectors/track	54	54
Disk transfer rate (Mbits/sec)	15	15
Sectoring	Hard or soft, with one byte granularity supported	
Seek* time (msec), typical		
Average	16.5	14.5
Track-to-track	2.5	2.5
Maximum	33	32
Rotational speed (rpm)	3,600	3,600
Average latency (msec)	8.33	8.33

### FUNCTIONAL SPECIFICATIONS

	XT-8760E	XT-8380E
Bit density (bpi)	31,596	31,596
Flux density (fci)	21,064	21,064
Track density (tpi)	1,376	1,376
Disks	8	5
Data heads	15	8
Servo heads	1	1
Tracks	24,480	13,056
Sectors (512 bytes)	1,321,92	705,024
Cylinders	1,632	1,632

\*Includes settling

### PHYSICAL SPECIFICATIONS

Dimensions	
Height	3.25 in. (82.55 mm)
Width	5.75 in. (146.05 mm)
Depth	8.20 in. (208.28 mm)
Weight	7.1 lbs. (3.2 Kg)
Temperature limits	
Operating	10° to 50°C (50° to 122°F)
Relative humidity limits (Non-condensing)	
Operating	8% to 80%
Maximum gradient/hr	10%
Power dissipation	
Typical	27 watts
Maximum	35 watts
DC power requirements	
+12 VDC ± 5%, 1.57A (typical)	
4.5A maximum	
+5 VDC ± 5%, 1.7A (typical)	
1.9A maximum	

### RELIABILITY SPECIFICATIONS

MTBF:	30,000 hours
PM:	Not required
MTTR:	30 minutes
Recoverable error rate:	≤10 in 10 <sup>11</sup>
Unrecoverable errors rate:	≤10 in 10 <sup>13</sup>
Seek error rate:	≤10 in 10 <sup>7</sup>

# Maxtor

Maxtor Corporation  
211 River Oaks Parkway  
San Jose, CA 95134  
(408) 432-1700  
TELEX 171074  
FAX (408) 433-0457

™XT-8000E, MAXTORQ and MAXPAK are trademarks of Maxtor Corporation. Specifications subject to change without notice. Printed in U.S.A. 9/88  
Copyright © 1988 Maxtor Corporation 20K P/N 1014410