

MPI Flexible Disk Series B51

FEATURES:

- Band-Driven
- Highest Accuracy Positioning
- Double Density
- High Performance
- Hard or Soft Sectoring
- Single Electronics Card
- Automatic Diskette Position and Ejection
- Single Supply Voltage
- Industry Compatible (SA 400)
- Attractive Versatile Styling

The MPI Series B51 is a fast access, high reliability, high accuracy micro-sized flexible disk drive. It uses a band-driven design concept similar to IBM and is industry compatible.

The B51 is very small. Its dimensions are only 3.25 x 5.75 x 7.50 inches and it weighs only 3.0 pounds. It is perfect for virtually any microcomputer application. And at the most attractive price available.

Highest Data Capacity for Micros MPI offers the highest data capacity available for industry compatible micros. Up to 249.4K bytes for a 40-track double density drive with single side recording. 109.4K bytes on 35 tracks is standard. With 40 tracks, 124.7K bytes are available. The drives use MFM, FM, M²FM and GCR encoding techniques.

Fastest Access The new Series B51 offers the fastest access in its class. 75 mseconds for 15 tracks. And that's about 5 times faster than its nearest competition. The band-drive design allows the head to be moved at a very fast rate. And the drive is friction-free. Data is transferred at 125K bps in FM encoding and 250K bps for double density.

High Accuracy Positioning With the MPI design approach, the B51 has extremely high positioning accuracy. Because only the diameter of the pulley determines accuracy

Automatic Diskette Position and Ejection With this unique feature, the operator just pushes in the diskette and closes the door — the diskette is positioned automatically. For ejection, the operator just pushes the automatic ejector button and the diskette pops out.

Standard Media MPI micro disk drives uses standard 5.25-inch diskettes that are available from any number of manufacturers and MPI. Media life is projected at 3 x 10⁶ passes per track.

The drives are designed to be modular. Their attractive styling can accommodate a range of colors. The front bezel is removable and can easily be changed to meet OEM requirements.

Applications A growing number of applications are suited to the B51. The small size and low cost makes it a perfect replacement for cassettes . . . in systems such as word processing, small business computers, intelligent terminals.

Physical Specifications

Height 3.25 in.
 Width 5.75 in.
 Length 7.5 in.
 Weight 3.0 lbs.

Operating Attitudes

Vertical, front load;
 Vertical, top load;
 Horizontal, front load

Media Requirements

MPI Diskette 50 or equivalent
 5.25 in. sq. x 0.075 in. thk.
 Soft or Hard Sector

Environmental Specifications

Ambient Temperature
 (operating) 50 to 105°F
 Relative Humidity 20 to 80%

Electrical Specifications

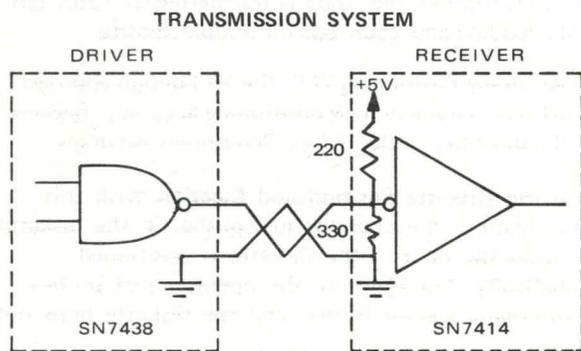
D.C. Power +12 Volts DC, ±5%
 1.5 Amp
 Optional +5 Volts ± 5%, 0.8 Amps
 Typical Power 15 Watts Operating
 Dissipation 6 Watts Standby

Reliability Specifications

MTBF 10,000 Hours
 MTTR 0.5 Hour
 Media Life 3 x 10⁶ Passes Per Track
 Design Life 5 Years
 Data Integrity
 Soft Errors 1 per 10⁸ Bits Read
 Hard Errors 1 per 10¹⁰ Bits Read
 Seek Errors 1 per 10⁶ Seeks
 Preventive Maintenance . . . None

Performance Specifications

Capacity; Single Density, Unformatted:
 Per Disk 1 M Bits
 Per Track 25 K Bits
 Recording Density 2580 BPI
 Flux Density 5160 FCI
 Formatted
 18 Sectors @ 1024 Bits/Sector .74 M Bits/Disk
 10 Sectors @ 2048 Bits/Sector .82 M Bits/Disk
 Double Density, Unformatted:
 Per Disk 2 M Bits
 Per Track 50 K Bits
 Recording Density 5160 BPI
 Flux Density 5160 FCI
 Track density 48 TPI
 Tracks 40
 Physical Sectors 1,10 or 16
 Rotational Speed 300 RPM ±1%
 Average Latency 100ms
 Transfer Rate
 FM Encoding 125K Bits/Sec
 Double Density 250K Bits/Sec
 Access
 Track to Track 5ms
 Average 75ms
 Settle 15ms
 Head Load Time 35ms
 Power Up Delay 1 Sec



SIGNAL INTERFACE

HOST SYSTEM	SPARE	J1 2	SERIES B51
	SPARE	4	
	SPARE	6	
	INDEX / SECTOR	8	
	SELECT 1	10	
	SELECT 2	12	
	SELECT 3	14	
	MOTOR ON	16	
	DIRECTION	18	
	STEP	20	
	WRITE DATA	22	
	WRITE GATE	24	
	TRACK 00	26	
	WRITE PROTECT	28	
	READ DATA	30	
	SPARE	32	
	SPARE	34	
	+12 V	J2 1	
	12 RETURN	2	
	5 RETURN	3	
	+5 V	4	



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