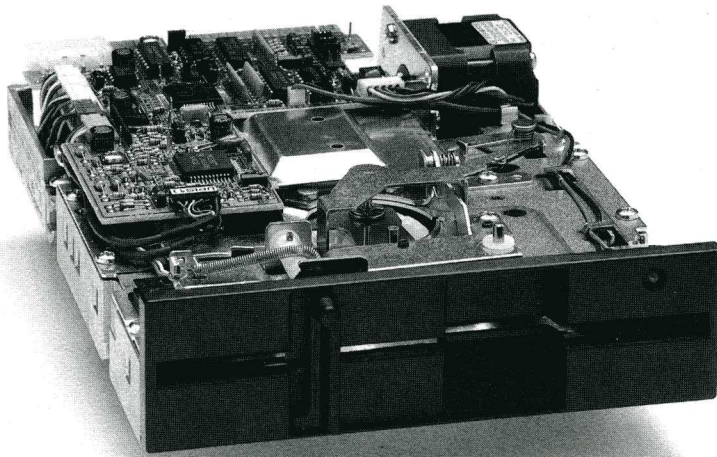


FLOPPY DISK DRIVE

ND 103161 5 1/4" FLOPPY DISK DRIVE,
1.2 Mbyte Dual speed



FLOPPY DISK DRIVE

INTRODUCTION

ND 103161 Floppy Disk Drive reads and writes in single or double density, and on one or both sides of 5 1/4" diskettes.

It is provided with:

Two ceramic read/write heads providing media life of over 3 million passes/tracks, and head life of over 15,000 hours.

A Head Positioning Actuator which positions the read/write heads to the desired track on the diskette. The Head Load Solenoid loads the read/write heads against the diskette, allowing data to be recorded on or read from the diskette.

FEATURES

- Through formatting, the diskettes can be made single sided/ single density or double sided/double density.
- Easy maintenance and service.
- Fast 3ms track-to-track access time.
- Write protect for improved data security.
- Software compatible with 8-inch double-sided/ double-density floppy disk drives (1.6MB).
- Dual mode (1.6MB/1MB read write 0.5MB read only).
- High speed (360 rpm) or dual speed mode (300/360 rpm) selectable.

FLOPPY DISK DRIVE

PRODUCT DESCRIPTION

The ND 103161 Floppy Disk Drive consists of:

1. Read/Write and Control Electronics
2. Drive Mechanism
3. Head Positioning Mechanism
4. Two Read/Write Heads

These components perform the following functions:

- Interpret and generate control signals
- Move read/write heads to the selected track
- Read and write data

Performance Specifications:

	Low speed 300rpm:	High speed 360rpm:
Unformatted Capacity: Per Disk	1.0 KBytes	1.6 MBytes
Formatted Capacity: Per Disk	0.8 MBytes	1.2 MBytes
Transfer Rate	max. 250 Kbits/sec.	max. 500 Kbits/sec.
Latency (average)	100 msec.	83 msec.
Access Time: Track-to-Track	3 msec.	3 msec.
Average (includ- ing settling)	94 msec.	91 msec.
Settling Time	15 msec.	15 msec.
Head Load Time	35 msec.	35 msec.
Motor start-up time	500 msec.	600 msec.

Functional Specifications

Innermost track bit density	5922 bpi	9646 bpi
Track Density	96 tpi/ 48 tpi read	96 tpi
Cylinders	80	77
Tracks	160	154
Heads	2	2

ENVIRONMENTAL REQUIREMENTS

Operating temperature +10°C to +30°C

Power Requirements:

- + 2 VDC +/- 5% 0.4A typ., 1.0A max
- + 5 VDC +/- 5% 0.5A typ., 0.6A max

Physical Requirements:

Height: 42.8 mm
Width: 149 mm
Depth: 210 mm
Weight: 1.5 kg

RELIABILITY SPECIFICATIONS

MTBF: 10,000 hours under typical usage
MTTR: 30 minutes

Device Life: 15,000 POH

Error Rates:

Soft Read Errors: 1 per 10⁹ bits read
Hard Read Errors: 1 per 10¹² bits read
Seek Errors: 1 per 10⁶ seeks



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