WESTERN DIGITAL MOS/LSI

FD1771 A/B - 01 - 11

DATA SHEET

FLOPPY DISK FORMATTER/CONTROLLER

MARCH 1978

GENERAL DESCRIPTION

The FD1771 is a MOS/LSI device that performs the functions of a Floppy Disk Controller/Formatter. The device is designed to be included in the disk drive electronics, and contains a flexible interface organization that accomodates the interface signals from most drive manufactures. The FD1771 is compatible with the IBM 3740 data entry system format.

The processor interface consists of a 8-bit bi-directional bus for data, status, and control word transfers. The FD1771 is set up to operate on a multiplexed bus with other bus-oriented devices.

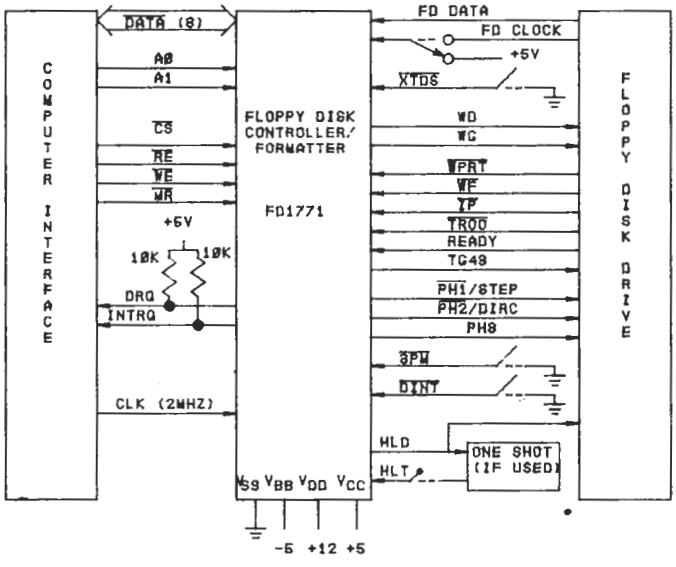
The FD1771 is fabricated in N-channel Silicon Gate MOS technology and is TTL compatible on all inputs and outputs.

APPLICATIONS

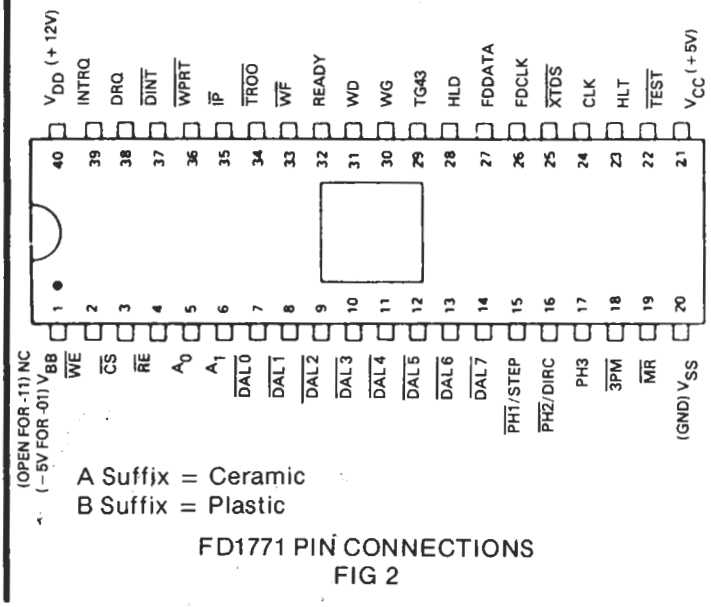
- o FLOPPY DISK DRIVE INTERFACE
- o SINGLE OR MULTIPLE DRIVE CONTROLLER/FORMATTER
- o NEW MINI-FLOPPY CONTROLLER

FEATURES

- o SOFT SECTOR FORMAT COMPATIBILITY
- o AUTOMATIC TRACK SEEK WITH VERIFICATION
- o READ MODE
  - Single/Multiple Record Read with Automatic Sector Search or Entire Track Read
  - Selectable 128 Byte or Variable Length Record
- o WRITE MODE
  - Single/Multiple Record Write with Automatic Sector Search
  - Entire Track Write for Diskette Initialization
- o PROGRAMMABLE CONTROLS
  - Selectable Track to Track Stepping Time
  - Selectable Head Settling and Head Engage Times
  - Selectable Three Phase or Step and Direction and Head Positioning Motor Controls
- o SYSTEM COMPATIBILITY
  - Double Buffering of Data 8 Bit Bi-Directional Bus for Data, Control and status
  - DMA or Programmed Data Transfers
  - All Inputs and Outputs are TTL Compatible
- o No — 5VDC Power Supply Required on – 11 version



FD1771 SYSTEM BLOCK DIAGRAM
FIG 1



A Suffix = Ceramic
B Suffix = Plastic

FD1771 PIN CONNECTIONS
FIG 2

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