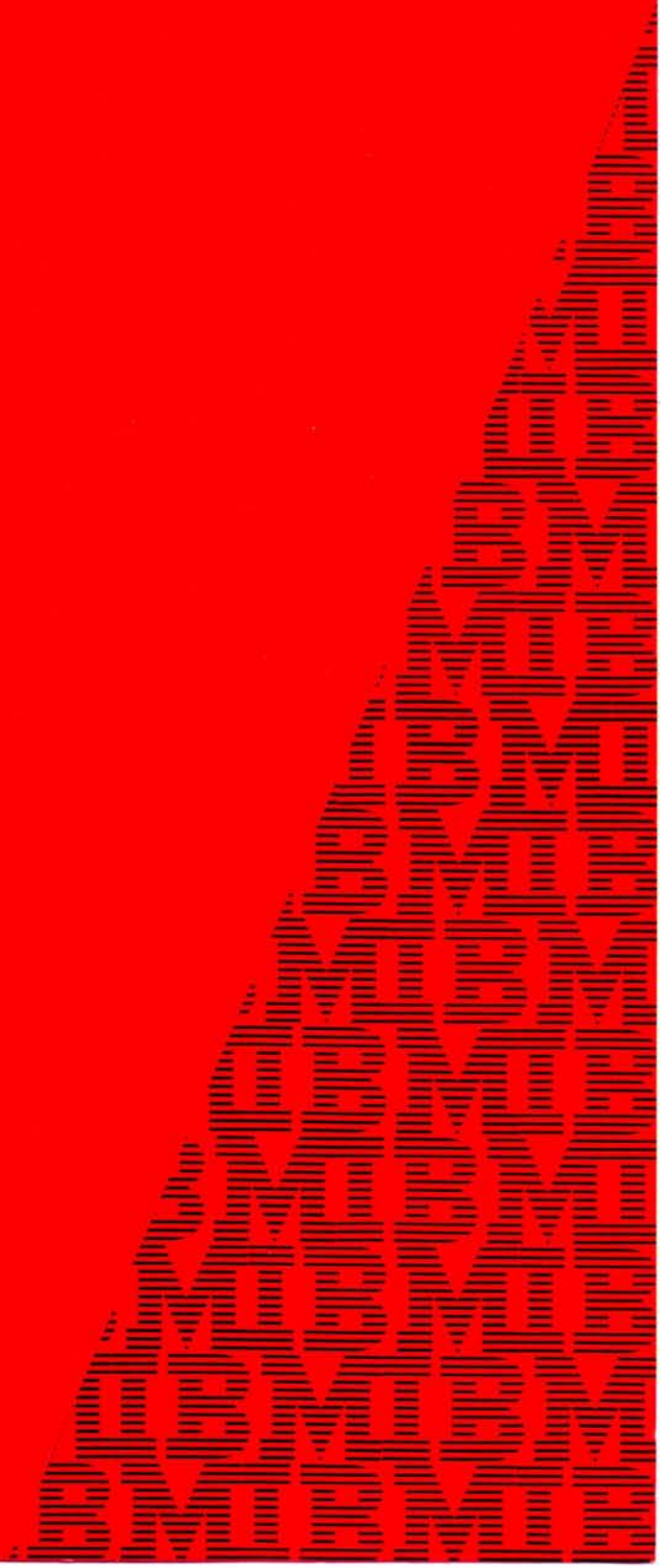
3880 Direct Access Storage



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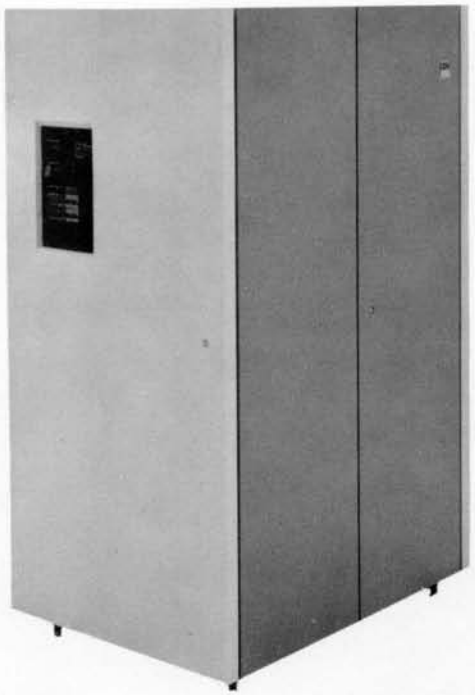

3880 PRODUCT DESCRIPTION

The 3880 is a Direct Access Storage Control Unit providing attachment capabilities for the 3370 and 3340/3344 file drives to system 4341.

The 3880 control unit, incorporating the latest technological concepts, consists of four functional areas packaged on one 4 x 2 gate:

- ☐ Storage Director (2 per 3880)
- ☐ Maintenance/Power Control Module
- ☐ MPL (Microprogram Load) file (33FD)
- ☐ Power

Each 3880 Storage Director contains a micro controller to perform instruction processing, and control storage which has microcode modules required for Channel/Device connections.

The 3880 has the capability for attaching of up to four strings of 3370 or 3340/3344 file drives per director (8 strings per control unit). 3370 strings cannot be intermixed with 3340/3344 strings on the same director.

For IBM internal use only

General Characteristics

The 3880 logic is designed primarily in high density Large Scale Integration Circuitry (LSI), functionally packaged in pluggable units.

The 3880 provides:

- ☐ **CONTROL UNIT RETRY** to recover from any control unit and file errors without intervention at the system level
- ☐ **CONTROL UNIT LOGGING** is also supported where storage subsystem errors and statistical information, recorded in the control unit, is periodically posted to Out Board Record/Statistical Data Record
- ☐ **SINGLE BIT MEMORY CORRECTION** is incorporated so that a single bit error will not prevent normal operation from continuing
- ☐ **POWER SEQUENCER/MONITOR** (PSM) constantly monitors the 3880 voltages, circuit protectors and thermals. Power supply components are monitored for under/over voltage and over current while logic boards are sampled for under voltage. Any fault detected will sequence down the 3880 and record a fault symptom code for problem isolation

Optional Features

- ☐ Two Channel Switch

  This feature allows two channel paths to each storage director (4 channel paths per 3880)

- ☐ Remote Enable/Disable

  This feature relocates the enable/disable switches from the operator panel to a remote console

Programming Support

Programming support is provided in DOS/VSE and VM /370 for 3370 attachment and DOS/VS, VS1, VM for 3340/3344 attachment.

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Maintainability/Serviceability

- ☐ Maintenance Device (MD)

  The MD is a portable onsite tool used as the CE's interface to the 3880. It combines the functions of a CE Panel and MAP package. The MD includes a microprocessor, diskette loading device, and hand held keyboard display. The customized diskette is EC controlled and will be shipped with each 3880.
  The MD provides:

  - Automatic execution of microdiagnostics for recreation and isolation of failure
  - High speed analysis of symptom codes from console messages and error logs for FRU isolation
  - Routines and procedures for machine checkout.

- ☐ Maintenance Information Manuals (MIM)

  Contain support level documentation that supplement the MD's MAP package

- ☐ Environment Recording, Edit and Print (EREP1)
- ☐ Tracer/Dumper Micro

  A tool to aid in problem isolation when no hardware error is evident. Runs concurrent with customer operation when invoked by the CE

- ☐ On Line Tests (OLTs)

  A channel interface OLT and a Tracer/Dumper Retrieval OLT

- ☐ Hardcore Micro Tests

  A series of tests initiated on each storage director with initial power up to thoroughly checkout the 3880 hardware

- ☐ New System Test (NST)

CE Career Path

This is a DP CE career path product.

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