3340 Disk Storage

Product Description

The 3340 Disk Storage Facility is a direct access storage device providing fast access, medium capacity, and low cost data storage. Incorporating the latest technological concepts, the 3340 is designed for use with System 3115, 3125, 3135, 3145 and 3158 via direct attachement or via the 3830 Model 2 Control Unit.

The 3340 subsystem is composed of up to four 3340 Disk Storage Modules for a maximum of eight disk drives per string.

The following models of 3340 are available:
- Model A02 - Dual Drive - With controller logic
- Model B02 - Dual Drive
- Model B01 - Single Drive

The controller in the 3340 Model A02 provides the interface between the system adapter or control unit and the 3340 disk drives. Therefore, the 3340 Model A02 must be the first unit of the subsystem.

3340 Programming Support

Programming support for the 3340 is provided in DOS/VS beginning with Release 29.

Optional Features

Rotational Position Sensing (RPS) - RPS enables the drive to disconnect the interface during most of the record search time.

Service Features

- CE Panel - The 3340 Model A02 incorporates a CE Panel for executing in-line micro-diagnostics, and displaying device status bytes.
- On-Line Tests (OLT’s) - On-line maintenance programs that run under control of the processor, concurrent with customer operations.
- Maintenance Library Manuals (MLM’s) - Contain Error Code Dictionaries, Installation Instructions, and MAP’s.
  MAP’s, as the prime CE tool, have been enhanced by including circuit descriptions, second level diagrams, and scope waveform pictures. By including all documentation necessary for trouble analysis, less time is required for problem resolution.
- Micro-Diagnostics (MICRO’s) - Reside in read-only storage with the control program for the native attachment, or control unit. They are initiated from the CE panel, and operate any 3340 of the subsystem varied off-line.
- Preventive Maintenance - There is no PM on the 3340 disk drive.
- System logging of detailed sense information associated with subsystem errors.

CE Career Path

This is an CE Career Path "Data Systems" or "General Systems" product, depending on system attachment.
General Characteristics

Access Time (average) - 25 ms
Disk Rotation - 3000 RPM
Data Rate - 885 Kilobytes/sec.

Design Features

- **3348 Data Module (DM)** - The modular design places heads, disks, carriage and spindle within a sealed cartridge. Automatic loading of the data module establishes the electromechanical connections to the 3340 Disk Drive. The carriage is operated by a Voice Coil Motor (VCM). The VCM circuits are controlled by prerecorded servo tracks. CE tracks are on each data surface of the 3348 Data Module.

3348 Data Modules are available in two models and can be interchanged on the three 3340 Models.

Data Module Specifications are:

<table>
<thead>
<tr>
<th>Model</th>
<th>Data Capacity</th>
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<tbody>
<tr>
<td>35</td>
<td>34.94 megabytes</td>
</tr>
<tr>
<td>70</td>
<td>69.89 megabytes</td>
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- Error Correction Coding - ECC hardware in the controller detects and supplies correction information for read errors of up to 3 contiguous bits within a single record.

- Logic is MST-E.

- Closed Loop Air System - The head/disk environment is maintained in a closed loop air flow system which provides better contamination control.

- Read Only Feature - The Read Only Feature offers data protection. A mechanical plug must be inserted in the Data Module before a write operation can be performed.