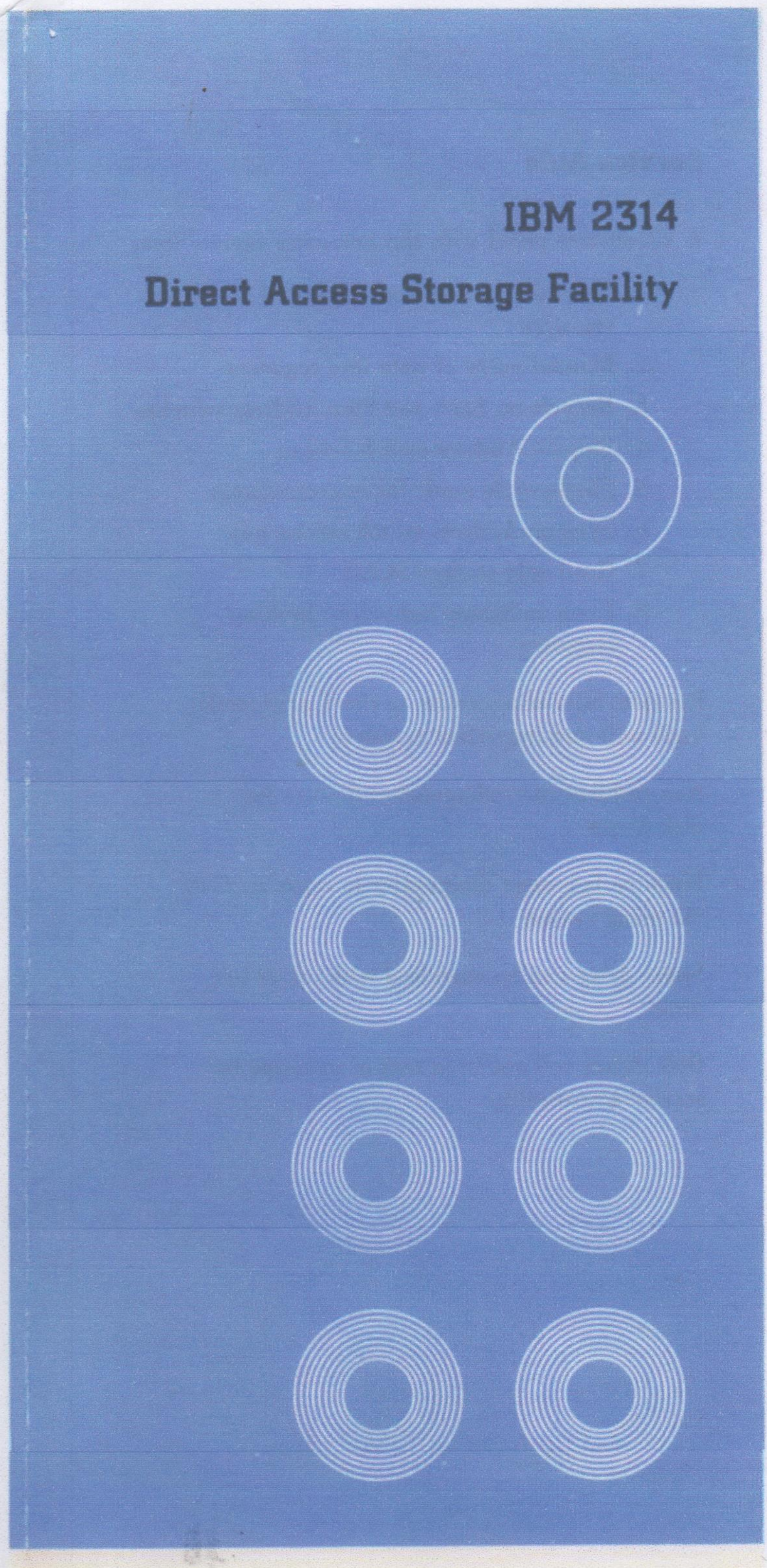
IBM 2314

Direct Access Storage Facility



IBM field engineering announcement

The IBM 2314 Direct Access Storage Facility, with the 2316 Disk Pack, extends the IBM 1311-2311 Disk Storage Drive family. The 2314 has a greater capacity and a faster data rate than was previously available in this family. Nine Disk Storage Drives plus a Storage Control Unit, similar to the 2841, are packaged together to form the 2314. Of the nine disk drives, eight are operational (on-line) at one time, while the ninth is held in reserve, as a spare. The reserve drive is placed in operation if one of the on-line drives becomes inoperable or requires maintenance. The designated reserve drive cannot be used by the system because the control unit can only address eight drives.

Service Aids

A CE service panel with the following capabilities:

1. Manual selection and display of important registers
2. Manual entry of data into registers
3. Recycle on Start and Stop Address switches
4. Stop on Address switch setting
5. Single cycle mode for microprogram
6. Sync on Address switch setting hub
7. Read only storage SCAN
8. Error indicator lights for checking circuitry

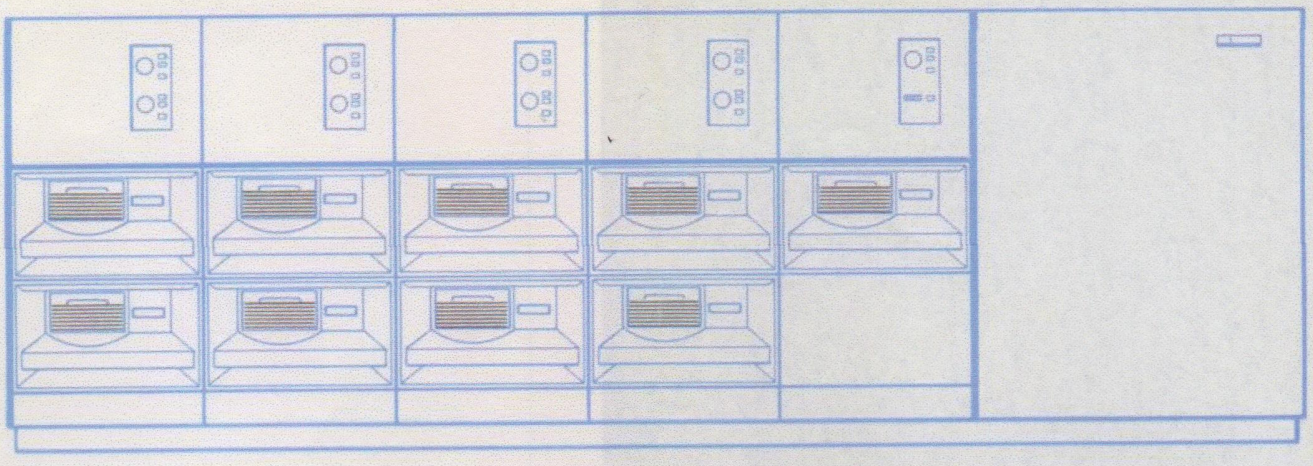
Resident microdiagnostics to check arithmetic logic unit and important registers

Non-resident microdiagnostics to exercise disk drives

Machine language diagnostics to exercise 2314 via using system

Spare drive can be exercised with an off-line tester

Disk drives roll out from rear of machine for service accessibility



Highlights

207 million characters of storage (8 Disk Packs)

Removable disk pack (IBM 2316)

400 nanosecond bit cell time (3.2 μsec/character)

Off-line service to spare drive

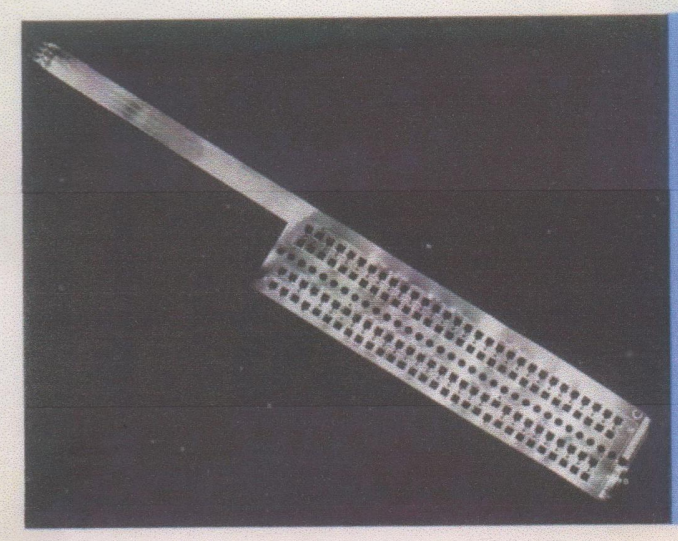
TROS microprogram controlled

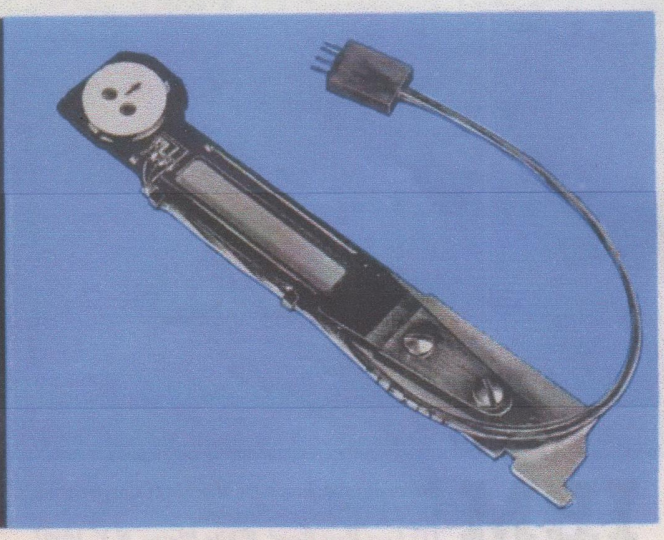
Solid logic technology

Average access time 75 milliseconds

18 read/write heads per access (disk drive)

Ferrite core read/write element bonded to a virtually indestructible ceramic gliding shoe





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