**Product Description**

The Model 15 is the newest member of the IBM System/3 product line. It is a growth system for System/3 Model 6 and Model 10 customers as well as System/360 Model 20 users.

Addressing for storage up to 128K bytes is accomplished through the use of a program loadable hardware Address Translation Table.

The processor cycle time is 1.52 microseconds and is hardware controlled with the exception of the MLTA, 3277, and 2560 attachments which are microprogram controlled.

**Technology**

MST-1 (Monolithic Systems Technology 1) is utilized for the processor and I/O attachments. In addition, limited amounts of SLD, SLT, and special technologies are utilized to interface with I/O devices.

Main storage array logic is MOSFET (metal oxide semiconductor field effect transistor).

DC power is provided by multilevel bulk supplies in conjunction with series regulators.

**Main Storage**

The MOSFET main storage features non-destructive readout. ECC (error correction and checking) circuitry is used to correct single bit errors and detect double bit errors.

When moving data to or from the 5444 or the 5445, main storage transfers two bytes of data per processor cycle. All other operations transfer one byte of data per cycle.

**CPU Features**

- Standard
  - 48K MOSFET memory with ECC
  - Program level and eight interrupt levels including:
    - I/O Operations End Interrupt
    - Program Check Interrupt
  - Disk dual byte data path
  - Storage protection
  - Privileged/non-privileged instructions

- Optional
  - BSCA
  - MLTA(RPQ)
  - 64K, 96K, 128K storage
  - LCA
Attachable I/O Devices

- Line Printer - 1403
- Tape Drives - 3411/3410
- Disk Files - 5444 and 5445
- 96-Column Card I/O - 5424
- 80-Column Card I/O - 2560, 2501 and 1442
- Display Station/Keyboard - 3277
- Devices attachable to BSCA, MLTA and LCA are the same as on the Model 10

Maintainability

The maintenance philosophy of the System/3 Model 15 is consistent with the Model 6 and the Model 10. Serviceability is enhanced through the use of IMP (Integrated Maintenance Plan).

IMP consists of:
- MAP Charts
- Diagnostic Programs
- CE Controls
- Maintenance Documentation
- Training tailored to the use of IMP

New CE aids include:
- Address match on I cycles, E cycles, or both
- 3277 Display Station utilized as alternate CE output device
- CE diagnostic disk pack shipped with each system
- Additional display capabilities
- 2560, 2501 TAPs (Timing Analysis Programs)
- Error logging for new devices
Programming

Model 15 SCP
- 5444 disk resident
- Multi-programming (two levels)
- Optional spooling to 5445
- Interrupt driven supervisor
- New operator interface via 3277 Display Station
- SCP interfaces for new functional capabilities
- CCP, MLTA support
- Model 10 mode to facilitate conversion

Model 15 Program Products
- Enhanced versions of Model 10 Program Products
- RPGII, COBOL source compatibility
- Assembler, sorts, utilities
- Support for new or additional I/O

Minimum System

- 5415 Processor with 48K memory
- 3277 Display Station
- 5421 Printer Control Unit
- 1403 Printer
- 5444 Disk Storage
- Card I/O:
  - .5424
  - or
  - .2560 and 5422
  - or
  - .1442 and 5422

CE Career Path

This is a "Data Systems" CE career path product.