IBM

3741

MODEL 3 and 4

3741 Programmable Work Station Model 3/4

General Description

IBM 3741 Models 3 and 4 are additions to the previously announced 3740 Data Entry System.

The 3741 Models 3 and 4 enhance the functions of the basic 3741 Models 1 and 2 by providing 4000 bytes of program and data storage and a versatile new Application Control Language (ACL).

The ACL is used by the customer's programmer to write source language programs. These programs are put onto an IBM diskette in 128 character records.

The source language programs are compressed into 4 byte instruction step object programs by the ACL translator feature (ROS) and loaded back onto the IBM diskette.

Description

The 3741 Model 3 retains all modes of operation available on the basic 3741 Model 1 and optional features such as verify, field totals, selfcheck, copy, and printer. The Model 3 adds ACL program mode to the above basic modes. ACL mode loads from a diskette and executes up to 3000 bytes of the customer application program.

CE Career Path

The 3741 Models 3 and 4 are designated DR/DS career path products.

Optional Features

3741 Models 3 and 4

- Verify and Production Statistics
- Field Totals, Self-check Modules 10 and 11, and Initialization
- Printer Attachment (3713 Matrix)
- Second Disk Drive
- ACL Translator — Reads ACL source coded IBM diskettes, translates to object code, and writes back onto IBM diskette.

3741 Model 4 Only

- Keylock
- Badge Reader
- Synchronous Clock
- Terminal Identification

The program controls the following functions:

- Display — up to 240 characters on the CRT
- Open and close data files (There can be four logical data files open at any one time)
- Read/Write I/0 level control of disk drives
- Buffer — register data transfer
- Promted and overlapped keyboard entry, by field
- Add, subtract, multiply, and divide
- Test and branch
- Edit output data
- Table look up
- Printer line and vertical printer control

ACL mode minimizes the operator's action in entering source data.

The 3741 Model 4 provides all modes of operation available on the 3741 Model 3, plus Binary Synchronous Communications Adapter at 1200-2400 Bauds. The BSCA is operable with the 3741 in basic mode only, and is not controllable by the application program.
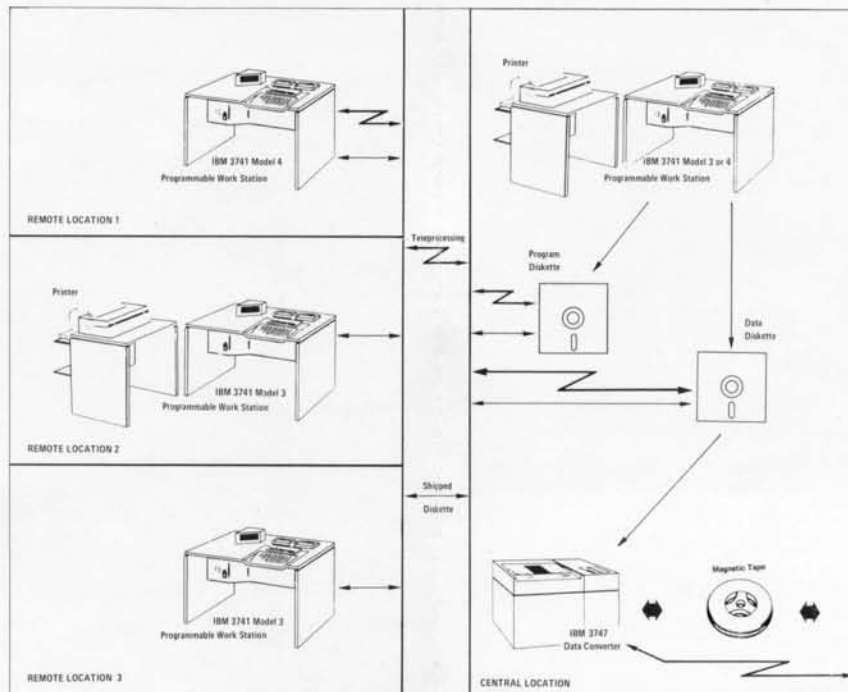
System Serviceability

- Graphic Integrated Manuals provide a complete improved layout Maintenance Library
- Maintenance Analysis Precedure (MAP) charts will isolate failures to a Field Replaceable Unit (FRU)
- Large Scale Integration (LSI) packaging for minimum FRU's
- No scheduled PM
- In-Line Micro-programmed Diagnostics
- I/0 Exerciser Programs
- Program Step/Register Trace
- Dump to Printer/CRT
- Single Instruction Execute
- Address Stop
- Operator Media and Error Procedures
- CRT display of errors

System Reliability

- Minimum number of moving parts
- Soft error recovery on disk operations

System Technologies

Field Effect Transistor (FET) and Transistor Transistor Logic (TTL)

3741 MOD 3/4 TYPICAL ENVIROMENT