3650 RETAIL STORE SYSTEM DESCRIPTION

The IBM 3650 System is a family of products designed to accomplish a complete retail information management system.

The 3650 System consists of the following machines:

- 3651 Store Controller
- 3653 Point of Sale Terminal
- 3657 Ticket Unit
- 3659 Remote Communications Unit
- 3275-3 Display Station

The system devices are located throughout a store or group of stores, 3653 Point-of-sale terminals may be located on the selling floor. 3275-3 Display Terminals and 3284-3 Printers may be placed in areas such as the store manager’s office or the security area for data entry, enquiry and report printing. The 3657 Ticket Unit would also be placed in these areas for the purpose of printing and encoding merchandise labels/tickets.

The 3284-3 attaches to the 3275-3. The 3653, 3657 and 3275-3 terminals attach to the 3651 Control Unit via a SLOOP (Store Loop).

The SLOOP (Store Loop) is a method of connecting terminals designed with serviceability in mind. If an individual terminal detects an error, it proceeds through a self-diagnosis routine, displays an error code to the operator and energizes Bypass circuitry to permit the rest of the SLOOP to function.

If the SLOOP itself fails, the terminal that is downstream of the failure transmits a code to the 3651, indicating the point of failure.

Intermittent errors are recorded on a disk at the In-Store Controller.

The 3651 may have up to three (3) SLOOP’s attached. The first is standard an is a local SLOOP. There may be up to sixty-three (63) terminals attached. The second and third SLOOP’s are optional and may be either local or remote. In the case of a remote SLOOP, communication is via a 3872 and 3659 modems. Up to three (3) 3659’s may be linked to a 3872 and a maximum of sixty-four (64) terminals may be on one remote SLOOP.
3651 DESCRIPTION

The IBM 3651 Store Controller controls the flow of data throughout the store or stores. Communication with the host processor is via 3872 or 3976-3 or PTT Mandatory Modem. Communication with the store's terminals is via SLOOP (store loop) adapters. One local SLOOP that is capable of handling up to sixty-three (63) terminals is standard. Two additional SLOOP's are optional and may be either local or remote.

3651 Serviceability/Maintenance Features:

- Maintenance Analysis Procedures (MAP's)
- Problem Determination Procedures (PDP's)
- Bring Up Tests
- In Line Diagnostics
- Error Logging
- CE/Operator Panel
- Automatic Diagnosis of SLOOP Failures

3653 DESCRIPTION

The IBM 3653 Point-of-Sale Terminal acts as the customer transaction processing and recording unit.

3653 Features:

- Wire Matrix Printer
- Function and Numeric Keyboard

- 8 Numeric Digit Display with Description Lights Indicating whether Display shows amount due, subtotal, change, total or refund.
- Cash Drawer
- Check Verification Station

3653 Optional Features:

- Wand Magnetic Label Reader
- Journal Tape Locks
- Till Cover Lock
3653 Serviceability/Maintenance Features:
- Maintenance Analysis Procedures (MAP's)
- Problem Determination Procedures (PDP's)
- Operator Oriented
- On Line Diagnostics
- Automatic and Manual Error Recording Procedures
- Automatic Error Logging
- Bring Up Tests

3657 DESCRIPTION

The IBM 3657 Ticket Unit is a merchandise label and ticket maker/reader that operates as a terminal on the store loop.

The 3657 encodes and prints labels or tickets with information required for sales and inventory control. 1" x 1" adhesive backed labels may have up to 11 characters each. 1" x 2" tickets may have up to 42 characters of encoded information and two lines of print of up to 21 characters each. 1" x 3" tickets may have up to 79 characters of encoded information and 2 lines of print of up to 32 characters each.

Tickets and labels are supplied in rolls as follows:

- 1" x 1" = 9,000/roll
- 1" x 2" = 2,800/roll
- 1" x 3" = 1,900/roll

3657 Serviceability/Maintenance Features:
- Graphic Integrated Manual
- Maintenance Analysis Procedures (MAP's)
- CE Panel
- Hardware Bring Up Test
- In Line Diagnostics
- Error Log
- No Scheduled PM
- Automatic Remake of Error Tickets
3659 MODEM

The IBM 3659 is a stand-alone device that allows attachment of SLOOP installations remote from the system controller. This facility is provided to satisfy remote store requirements such as external warehouse locations, remote auto centers and small stores.

3659 Features
- Transmission Networks utilize non-switched lines
- Transmission rate is 2400 BPS
- Attachment to the 3651 Controller is via the 3872 Modem

3659 Serviceability/Maintenance Features:
- Signal Quality Meter
- Indicator Panel
- Local and Remote Wrap Tests
3275-3 DESCRIPTION

The IBM 3275-3 is a stand-alone remote key driven display terminal which operates under control of the 3651 store controller via the SLOOP communications line.

3275-3 Features:

- Printer Adapter for the 3284-3 Matrix Printer
- Audible Alarm for System to Operator Communications and to indicate screen overflow
- Security Keylocks to prevent modification of data on the 3275-3

Serviceability/Maintenance Features:

- Trouble-shooting manuals contain procedures to isolate failures.
- On Line Tests
- New improved general logic probe
- Indicator switch unit for manually exercising the terminal
- No scheduled preventive maintenance

PROGRAM SUPPORT

The 3650 Retail Store System will be supported via a host 370 processor using DOS/VS BTAM or OS/VS BTAM.

Industry oriented programs which operate in the host 370 and complement the 3650 Retail Store System are:

A  Sub-system support services
B  User Application Program Support
The Sub-System Support Service programs provide facilities for:

A. Creating the operational 3650 Retail Store System functions
B. Transmission of the 3650 Retail Store System functions to the 3651
C. Maintenance of the 3650 Retail Store System functions

The User Application Program Support will be used by the customer to write retail function oriented application programs. These application programs will then be transmitted to the 3651 Retail Store Controller where they will subsequently be made operational.

**SYSTEM SERVICEABILITY**

- Graphic Integrated Manuals
- Maintenance Analysis Procedures (MAP’s)
- Charts will isolate failures
- In line diagnostics
- Modem wrap tests
- Error Log
- Operator error procedures
- General logic probe
- CE Indicator card

**SYSTEM RELIABILITY**

- Minimum moving parts
- Non-mechanical keyboard
- Soft error recovery

**SYSTEM TECHNOLOGIES**

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

**CE CAREER PATH**

The 3650 Retail Store System components are "Data Recording" CE Career path products.