The IBM 1285 Optical Reader is designed to read printed tapes created by adding machines and cash registers. The output from the optical reader can feed directly into an IBM System/360 Model 30, 1401, 1440 or 1460 Data Processing System.

The adding machine or cash register tape is read electronically by a Flying Spot Scanner, which consists of a cathode-ray tube, optics, photomultipliers and both digital and analog-control circuits.
TECHNOLOGY

The new IBM Solid Logic Technology (SLT) uses smaller, more reliable, solid-state components that allow circuit speeds in the nanosecond range. The new technology is used for both digital and analog-control circuits.

In digital-switching circuits, the coincidence of one or more input signals is necessary to develop one of two predetermined output levels.

In analog-switching circuits, input voltage levels are actually added or subtracted to develop an infinite range of meaningful output voltage levels.

SPECIFICATIONS

- Reads 16 characters, digits 0-9 and six special characters.
- Reads tapes from 36 inches to 200 feet in length.
- Reads up to 25 characters per line.
- Reads a ten-character line, vertically spaced four lines per inch, at 2,190 lines per minute.

TAPE TRANSPORT

- Tapes are loaded onto a supply spindle and fed through a scanning station, where it is wound into an easily handled roll.
- A flat, high-friction belt driven by a prolay is utilized to transport paper over a scan station.
CHECKING CIRCUITS

- On-Line Errors: Are displayed on a scope to allow the operator to make corrections via a keyboard.
- Off-Line Errors: Will be marked and machine will continue processing.
- Parity Checking of Data.
- Jam-Detection Circuits.

DIAGNOSTIC FEATURES

- Display Tube and Controls
- Logic Diagnostic Switch: Selects the system for logic diagnostics.
- Analog Diagnostic Switch: Selects the system for analog diagnostics.
- Cycle Switch: Allows the system to scan a group of lines repetitively without tape advance.
- Indicators: To display recognition code logic.