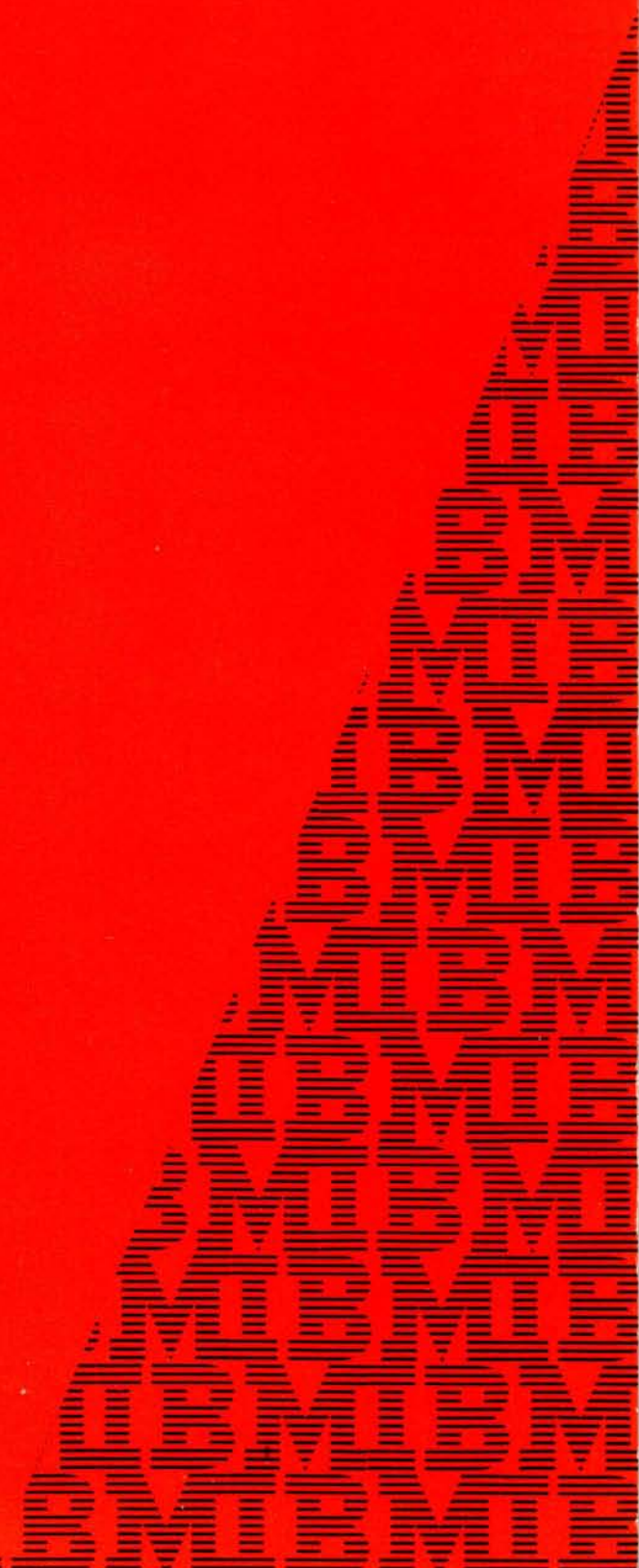# 4341 Processor

PRODUCT DESCRIPTION

The IBM 4341 processor is a high density, medium speed processing system. It employs new standards of technology to enhance the maintainability and availability in both business and scientific environments.

An 8 K byte cache (high speed buffer) reduces storage access time. Optimum DOS/VSE performance is achieved by operating in Extended Control Program Support (ECPS) DOS/VSE mode. The 4341 can operate in ECPS or /370 compatibility mode. The mode can be chosen during IML (Initial Microcode Load) time. Most I/O devices are supported for attachment via the channels. For a complete list of specific I/O devices that are supported, please refer to the DP announcement material.

Bi-Polar LSI (Large Scale Integration)

FET (Field Effected Transistor)

MST (Monolithic System Technology)

VTL (Vendor Transistor Logic)

ELSI (Early Large Scale Integration)

Main System Features

The support processor (SP) UC.5 controls the functions of the

☐ Power sequencing and monitoring

☐ Provides connectors for integrated attachment of four 3278 A and/or 3287 devices

☐ Diskette drive

☐ Maintenance Ships Circuitry

☐ TP Port

☐ Local Channel Adapter (LCA)

Channels — one byte multiplex channel and two selector/block multiplex channels are standard. A group of three additional selector/block multiplex channels are optional.

Main storage is offered in either 2MB or 4MB capacities.

A channel to channel adapter is offered as a feature.

PROGRAMMING SUPPORT/COMPATIBILITY

The 4341 is program compatible to system /360 and /370 programs (except time and model dependent programs). Appropriately generated versions of DOS/VSE will run in ECPS VSE Mode. DOS/VSE will also like OS/VS1 Release 7, VM /370 Release 6, DOS/VS Release 34, and DOS Release 26 run in System /370 Compatibility Mode

Maintainability/Serviceability

Maintenance of the 4341 is enhanced by extensive use of Maintenance Analysis Procedures. The Maintenance Analysis Procedures are designed using the following inputs:

- ☐ NST (New System Test)
- ☐ Resident Diagnostics
- ☐ Fault Locating Diagnostics
- ☐ ELA (Error Log Analysis of machine dependent error information)
- ☐ MSMD (Machine Speed Micro Diagnostics)
- ☐ SRL (Scan Ring Latches are holding and shifting machine status to Service Processor)
- ☐ Power and cooling monitoring
- ☐ ESD (Electro Static Discharge) monitoring
- ☐ Channel Sequence Logging
- ☐ Microword Logic Monitoring
- ☐ Extensive Parity Checking
- ☐ A machine CE-panel
- ☐ ECC (Error Correction Code) for main storage
- ☐ IPS (Integrated Power System) test station
- ☐ RSF (Remote Support Facility)

The "4341" is serviced using a "Reference Code", which is displayed on the console through the service processor (SP). The SP monitors error circuits and provides recovery failure isolation and recording for both recoverable and permanent errors. It also provides manual operations from the 3278 consoles.

ELA (Error Log Analysis) or diagnostics provide a reference code to enter the MAP's. All under cover errors are logged into the SP console file disk and time stamped.

- ☐ Instruction retry reduces the effects of intermittent failures.
- ☐ Single bit error correction in main storage minimizes storage problems.
- ☐ The Remote Support Facility (RSF) will provide the CE with access into the symptom fix file, tip/diag., reference code data bank, incident and message file of Retain. RSF will allow remote-console operation to assist the onsite CE.

EREP, FRIEND, NST, and OLTSEP/OLTEP will support channel I/O's.