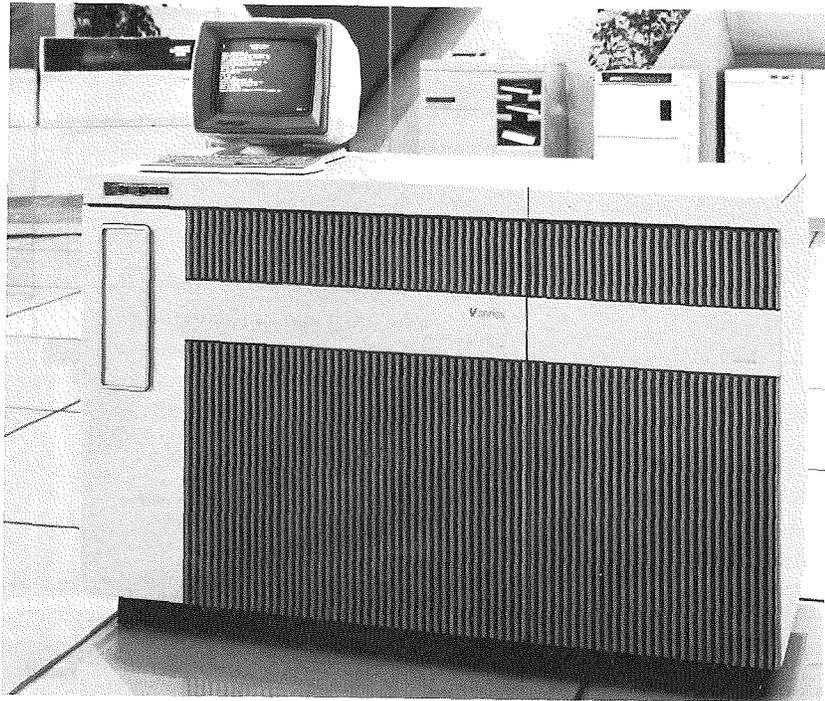# Burroughs
V 310-1 Central System

Burroughs V 310-1 is a comprehensive system for business, industrial, governmental and financial data processing, and for engineering and scientific computation.

The V 310-1 is object code compatible with previously released Burroughs B 2000/B 3000/B 4000 series systems thereby protecting one of the biggest investments organizations have in data processing — application programs and data files. Customers currently using B 2000/B 3000/B 4000 systems can move to the V 310-1 with virtually no conversion.

V Series Master Control Program

The V Series Master Control Program MCP/VS is a comprehensive, supervisory operating system that controls V 310-1 operation. This powerful tool is specifically designed for use with Burroughs V Series systems to efficiently manage system resources so that human resources can be devoted to constructive problem-solving.

The V Series MCP is designed to automatically:
- Assign memory
- Manage input/output functions
- Communicate with the operator
- Log system usage
- Load programs
- Maintain a library of all files
- Supervise many other functions

The V Series MCP significantly contributes to simpler programming, ease-of-operation and maximum throughput.

Input/Output Processors

The V 310-1 Input/Output (I/O) Subsystem is designed with a high level of multi-programming capabilities. The I/O Processor moves data between main memory and peripheral devices at a rate up to 8 million bytes per second. The I/O Processor can support up to 32 Data Link Processors (DLPs). These Data Link Processors enable the I/O Subsystem to operate concurrently with the central system.

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Software

Many complete and powerful program products are available for use with the V 310-1 System. They include:
- V Series Master Control Program (MCP/VS)
- ANSI 74 COBOL Compiler
- FORTRAN 77 Compiler
- Binder
- RPG II Compiler
- BASIC Compiler
- Pascal Compiler
- LINC II (Logic and Information Network Compiler)
- SORTS/UTILITIES
- Conversion Aids
- B 1000 Migration Aids
- Programmer Productivity Systems
- Network Definition Language (NDL) Compiler
- Interactive RPG Editor/Debug
- Message Control System Generator
- Generalized Message Control System (GEMCOS)
- SWITCH
- Screen Display Facility
- On-Line Data Entry System
- Automated Documentation System
- Remote Job Entry (RJE)
- Data Management System II (DMS II)
- REPORTER III
- On-Line REPORTER
- Workflow Management Language
- Site Management Language
- FLAME
- DM/INQUIRY
- Burroughs Network Architecture (BNA)
- EDIT I
- Command And Edit (CANDE)
- Time Analysis and Billing System II (TABS II)
- Data Entry System
- Host-Link™
- Data Transfer System

Host-Link is a trademark of Burroughs Corporation.

General Characteristics

The V 310-1 System offers many advanced features to users:
- Integrated hardware and software design
- Dynamic multiprogramming simplified through abbreviated human/machine communications
- Expansion without reprogramming
- Automatic self-regulation under V Series MCP control
- Dynamic memory management
- Fixed- and variable-length arithmetic
- A powerful I/O subsystem with buffering, thus allowing the Data Link Processors to obtain maximum utilization of I/O to memory bandpass
- Automatic volume recognition
- Flexible priority scheduling
- Security access control
- Comprehensive system logging and reporting

Operating Characteristics

The V 310-1 Central System includes:
- A central processor unit which is a stored logic processor. The processor is a modularized series of microprogrammed processors operating asynchronously to maximize throughput.
- Integrated circuit, error-correcting main memory. Beginning with 5 million bytes, expandable to 20 million bytes.
- One Data Link Processor (DLP) base for:
  - Line printers
  - Operator display terminal/diagnostic console
  - Disk drives
  - Magnetic tape units

Optional Features

- Shared Systems Processor which enables multiple processors to share a common disk file database
- Multiprocessor environment with a single high performance "front-end" processor
- Multiprocessor environment via I/O channel connection (Inter-System Control)
- Flexible peripheral switching capability
- Additional Data Link Processor (DLP) bases, allowing up to 32 total Data Link Processors
- B 874 System and Communications Processor for small network environments
- B 974 Systems and Communications Processor for medium to large network environments
- CP 3680 Data Communications Systems for large network environments
- Uniline Data Communications DLP for single-line data communications
- SMD DLP for MD 4 disk storage
- Printer/tape DLP for B 9498 Tape Streamer capability

Physical Specifications
V 310-1 Central System

- Height: 44 in./111.76cm
- Width: 29 in./73.66cm
- Length: 67.5 in./171.45cm

Electrical Requirements

- 200 to 240 volts, single-phase, 70 amps

Heat Dissipation

- 20,000 BTU per hour

Physical Specifications
Optional Extension Cabinet

- Height: 44 in./111.76cm
- Width: 29 in./73.66cm
- Length: 45 in./114.30cm

Electrical Requirements

- 200 to 240 volts, single-phase, 70 amps

Heat Dissipation

- 10,000 BTU per hour

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