BURROUGHS B 80 COMPUTER SYSTEM

Compatible with the future







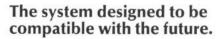
A Very Small But Powerful Fully Featured General Purpose Computer System For:

- The business considering a computer for the first time.
- The business upgrading from a less advanced computer.
- The larger organization with branches, warehouses, plants or other facilities seeking better business management by placing computer power at the locations where transactions occur and where management information is required.

The Burroughs B 80, because it incorporates a unique integrated system of operating and application software called the Computer Management System (CMS), is the one small computer which meets the data processing and management reporting needs of organizations of all sizes. Combined with the ad-

vanced hardware design of the B 80, CMS provides ease of use, powerful performance, and growth capacity not available in any other computer of similar size and cost.

Included in the CMS software is the operating system of the B 80 called the Master Control Program (MCP), first developed by Burroughs for its larger computers. Burroughs now offers this advanced MCP technology in a very small computer system - the B 80. Combined with powerful new microprocessors, new disk technology, and Burroughs worldwide support, CMS - including BMS® application programs makes the B 80 unique in its price range: the system designed for ease of use and ease of growth, both now . . . and later, to future, larger Burroughs systems, without changing your programs or data files.























A Flexible Response To Data Processing Requirements

For the business considering a computer for the first time, or upgrading from a less advanced computer.

The B 80 is within the means of many businesses which could not previously afford a computer of this capability. The B 80 is available in a wide range of configurations, so the user can obtain the system which best meets his needs.

Installation of the B 80 is simple, and it's probable that space currently occupied by accounting machines or less advanced electronic equipment will accommodate the B 80.

For the business already using electronic equipment, Burroughs can provide assistance to make the change to the B 80 with a minimum of expense and delay. Burroughs Data Base Bridging System, part of the Computer Management System, permits users of Burroughs Series L business minicomputers or other manufacturer's systems to transfer existing data bases to B 80 systems utilizing magnetic tape cassettes with minimum effort.

Once installed, the B 80 becomes a compact information center, streamlining daily work and providing immediate access to records for better business management. Because it is easy to use, employees can be quickly trained by Burroughs to operate the B 80.

Most importantly, the B 80 brings electronic efficiency within your business - and under your organizational control. Your records are stored on removable Burroughs super mini-disks or removable disk cartridges. The Burroughs super mini-disk has a storage capacity up to four times that of other generally available mini-disks. The two supermini-disks used on a minimum B 80 (up to six can be used) can store system software, application programs, and approximately 5500 account records. Information can be retrieved from a Burroughs super mini-disk in one-fourth of a second: significantly faster than other mini-disks.

Disk cartridges offer even greater storage capacity and access speed. The B 80 can use up to six disk cartridges simultaneously: the equivalent of approximately 150,000 account records on-line at one time. Information can be retrieved in an average of one-tenth of a second.

All disks are removable, so storage capacity is virtually unlimited.

Business records and information stored on magnetic disks are immediately available, either through the B 80 printer, the system's display panel, or management information display terminals strategically located within your company. Records are protected simply by copying them on another disk which may be stored in a secure area, safe from damage or misuse.

Within the CMS software, Burroughs offers Business Management System program products for the B 80, designed for the requirements of your particular business. These BMS programs are of special value to the organization which does not normally employ a professional data processing staff and are available at a fraction of the cost of custom program development.



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For the larger organization seeking better business management by placing computer power where transactions occur and where management information is required.

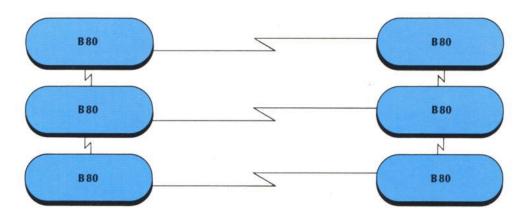
The moderate cost of the B 80 makes multiple installations economically feasible, while its ease of use and power assure the capability to process work on-site at decentralized locations.

For the larger organization, the B 80 puts data processing capability where it is needed. Local business records and information are under local control; and, through the B 80's data communications capabilities, remote records and summary re-

ports are available to management at central locations.

Burroughs Business Management System program products are available to the larger organizations with decentralized, diversified, or multinational computer operations. These BMS program products, written in the higher level languages of COBOL and RPG, are designed for the requirements of local business offices. A full range of procedural capabilities and the network languages of NDL (Network Definition Language) and MPL (Message Processing Language) simplify the use of B80 systems in data communications networks. Implementation of the Computer Management System (CMS) on future, larger Burroughs systems will allow users of these systems and B 80 users to use the same programs and data files without reprogramming or recompiling.

Of special importance is Burroughs worldwide support capability for the B 80. No matter where your network extends, professional training, support, and maintenance can be provided.



Maximum flexibility in establishing decentralized data processing is possible because the B 80 can effectively operate in a stand-alone environment; as a host to its own terminal network; as a terminal computer system connected to a larger host system; or, as illustrated here, in a network of several B 80's connected to each other. These various networks may be connected utilizing local direct connect facilities or remotely utilizing Burroughs data communications procedures.

Simplified Operation Through Advanced Technology

The B 80 operates under a complete Master Control Program with the capabilities of the Master Control Programs used on Burroughs larger computer systems. The Master Control Program (MCP) makes possible much of the superiority of the B 80, functioning independently on the user's behalf with no special effort required by the operator. The MCP assumes responsibilities, exercises control, and monitors jobs which would otherwise require operator attention. Because the MCP does so much automatically, the B 80 is easy to operate - especially important to the first time user.

System-To-Operator Communication

Through the MCP, the B 80 communicates with the operator in simple language statements. No matter how the B 80 is configured or what applications are being used, these statements are universal: consequently, personnel may use other B 80 systems with no loss of efficiency.

As part of system-to-operator communication, the MCP will advise the operator:

- Whether the system and peripherals are operational.
- Whether proper files are available.
- Whether necessary peripherals are ready for use.

Because the MCP does this checking automatically, operator efficiency is greatly increased.

Dynamic Resource Allocation

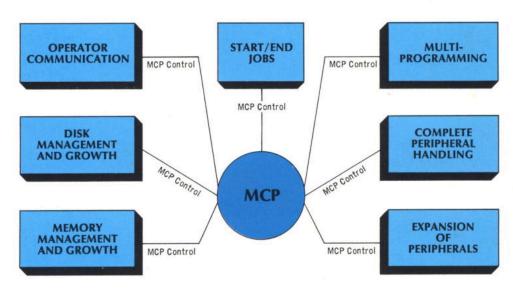
The MCP manages the B 80, simplifying operation. Utilizing Dynamic Resource Allocation, the MCP will:

- Automatically select the peripherals necessary to execute a job in the most efficient way.
- Automatically utilize available memory in the most efficient way.
- Automatically assign system components as they are required by application programs.
- Automatically allow several programs to run simultaneously (the

number depends on the size of the B 80 used and the applications processed), and allow application program combinations to vary from one time to another.

- Automatically execute jobs by priority levels previously established. The jobs most important to the user become those most important to the B 80: MCP sees to it they get done fast.
- Automatically control the assignment of files and data components (i.e., memory locations and specific disks) without operator intervention.

The B 80 Master Control Program: automatic communication, management, selection, multi-programming, and job priority execution. All in one small computer which combines unprecedented power with ease of use: the B 80.



Convenient And Economical Growth Through Advanced Technology

Burroughs B 80: The Right System Now... And For The Future

Burroughs will recommend and provide the B 80 system that best satisfies your current requirements. As these requirements expand, the MCP technology allows B 80 growth without reprogramming for system power improvement. Expand memory, peripheral units, BMS application programs, and data communications capability: whatever the expansion, through MCP the B 80 will automatically accept the increased system power. No need to rewrite current programs. No need to retrain personnel. No need to alter operating procedures.

That's convenient growth. Economical growth.

The B 80 system may be configured using:

- Burroughs super mini-disks for the ultimate in compact, convenient information storage.
- Disk cartridges for even larger file capacity. The file capacity of the B 80 may be increased over 13 times through the addition of more minidisk or disk cartridge units to the basic B 80. And because all disks

are removable and interchangeable, multiple B 80 installations are a practical way to grow.

- A system display to confirm B 80 input and output, including immediate management information provided by Burroughs BMS programs.
- Magnetic tape cassette stations and industry-compatible mini-disks.
- Line printers to complement the advanced matrix system printer. The print capability of the B 80 can be increased 23 times through the addition of such line printers.
- Burroughs Audit Entry Systems for local or remote preparation of audited input. Audit Entry Systems may also be connected to the B 80 for batch transmission of data.
- Burroughs visual display terminals for immediate management access to information, providing data entry as well as inquiry capability. Terminals may be located locally or remotely.







BURROUGHS BUSINESS MANAGEMENT SYSTEMS

Complete Application Programs For The B 80

Burroughs application program products for the B 80 can eliminate custom program preparation and are much more economical. Called Business Management Systems, these BMS program products have been designed, written, tested, and perfected by Burroughs programmers and applications experts on a worldwide basis. BMS programs satisfy the requirements of a wide range of organizations, including manufacturers, hospitals, government, and finance. In the commercial/industrial area, there are Business Management Systems of particular interest to a wide range of wholesalers and distributors.

BMS programs provide dynamic management reporting to furnish, in addition to routine accounting documents, the information needed to manage successfully. This key management information is available in printed or display form, locally or remotely, periodically or on demand. Such immediate access to information provides the B 80 user with management control not available from less advanced systems.

Because BMS programs are available either as complete packages or modularly, the B 80 user may obtain a total Business Management System immediately, or just those applications presently required. As applicational needs increase, the MCP technology of the B 80 allows subsequent modules to be added conveniently — without reprogramming — and integrates these automatically with existing programs.

Information input and retrieval to and from the BMS programs is made easy by Burroughs Data Control System (DCS), another element in the comprehensive Computer Management System (CMS).

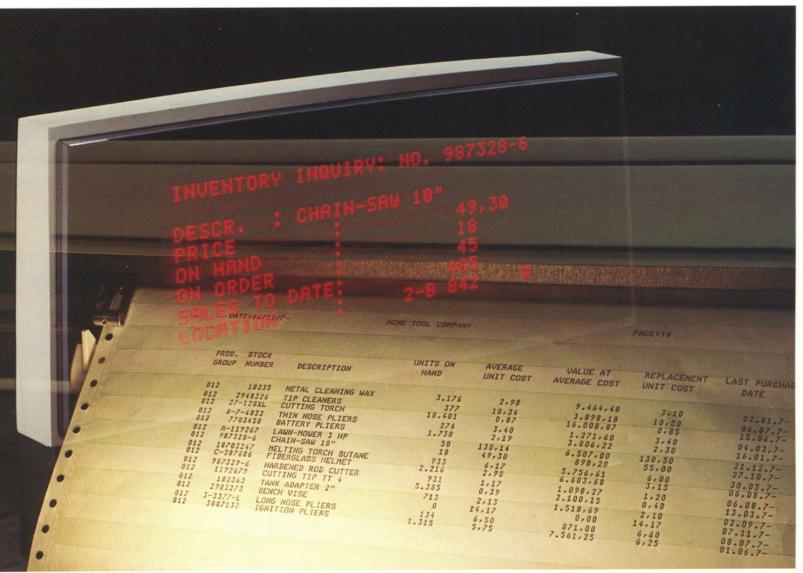
The Data Control System makes the handling of B 80 data simple by allowing acceptance of Audit Entry media, whether cassette, industry-compatible mini-disk, or Burroughs super mini-disk; by reducing the programming effort required for file creation and maintenance; and by providing basic reporting and inquiry capability without the creation of separate report programs. DCS permits data retrieval and display without detailed operator or programmer knowledge of the data or report formatting techniques.





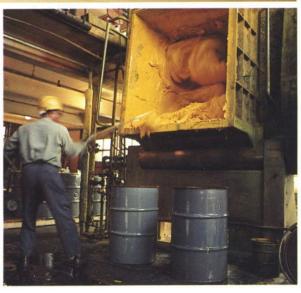












BURROUGHS

Provides And Supports Everything The B 80 User Requires

- All hardware, including peripherals.
- All Computer Management System software, including the Master Control Program, the Data Control System, High Level Languages, Utility Programs, Interpreters, Burroughs Data Base Bridging System, and Business Management Systems. Together, B 80 hardware and CMS are the B 80 system: easy to use; easy to expand across the broad range of B 80 models; and easy to upgrade to larger Burroughs systems without reprogramming and to future, larger Burroughs systems without reprogramming or recompiling.

The compatible operating environment design provided by the Computer Management System means that application programs, data files, and operating methods and procedures are portable to other Burroughs systems without change. This B 80 compatibility with both future user requirements and future computer technology is unique in very small computer systems.

- All necessary pre-installation guidance.
- · All customer training.
- · All forms and supplies.
- All necessary product maintenance, from field engineers located throughout the world.

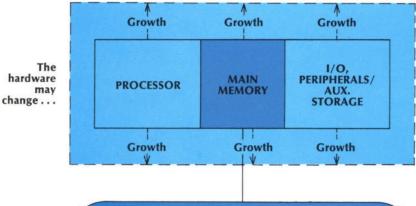


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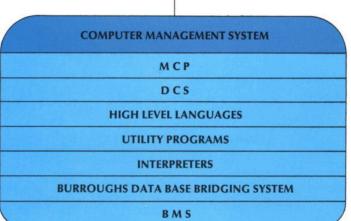




All necessary product maintenance.



... but the software "virtual machine" will not it will be identical to future, larger Burroughs computer systems.



Portable & Compatible

Advanced Technology For System Power And Operational Simplicity

The B 80's are microprogrammed systems. At program execution time, an organized group of microinstructions, called the interpreter, is brought into memory by the MCP to monitor and direct system functions and to execute application programs.

The B 80 processor is implemented using nine advanced large scale integrated circuits contained on a single printed circuit board. The circuits include a nano memory, a micro stack, input/output logic and

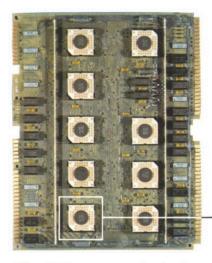
system registers, and utilize microprocessor technology.

The B 80 processor operates at one MHz. The system's main memory has an access time of 500 nanoseconds, and utilizes metal oxide silicon (MOS) LSIC. Read/write main memory is expandable from the basic 32,768 bytes capacity to 61,440 bytes in 4KB increments.

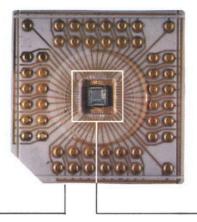
Processor throughput is significantly increased by an "overlap" feature which allows the processor, during the execution of a micro-instruction,

to "look ahead" at the next microinstruction to be executed.

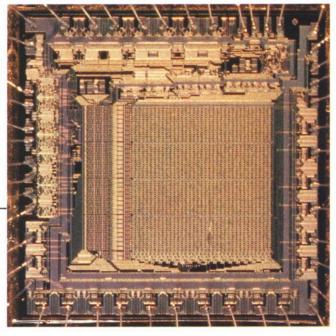
The B 80 system has up to 11 individual buffered controls for handling input/output devices. System efficiency is increased by an automatic hardware "interrupt" system. With this system, each input/output channel notifies the processor when data is ready for processing or transmission. This feature eliminates the need for the processor to scan channels continuously and is accomplished without programmer intervention.



The B 80 processor is implemented using nine advanced large scale integrated circuits contained on a single printed circuit board.



The circuits include a nano memory (shown), a micro stack, input/output logic and system registers, and utilize microprocessor technology.



Detail of nano random access memory large scale integrated circuit.

NO MATTER WHAT YOUR LINE OF BUSINESS . . . NO MATTER WHAT ITS SIZE . . . NO MATTER WHAT SPECIAL NEEDS YOU MAY HAVE . . . NO MATTER WHAT EQUIPMENT YOU PRESENTLY USE . . .

Contact your Burroughs representative for a B 80 demonstration. See for yourself why the B 80 is compatible with the future . . . with your future.

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Burroughs B