Burroughs A9 Series

PRODUCT DESCRIPTION

The A9 Series represents the first of a new series of Burroughs' computer systems. All three models in the series, the A9 Model B, Model D and Model F, provide object code compatibility with the current B 5000, B 6000 and B 7000 computer systems. The entry-level Model B is field upgradeable to the Model D, and the mid-level Model D is field upgradeable to the top-of-the-line Model F.

The A9 systems are designed for general purpose data processing. The new systems support a wide variety of mass storage and peripheral devices and can use most of the software currently available for the B 6900 Series. The A9 Series uses the Master Control Program (MCP), Burroughs' highly successful resource management software.

RELATIONSHIP TO CURRENT PRODUCT LINE

The A9 Series provides an upgrade path for a current Burroughs B 5000 or B 6000 user. Probable upgrade paths include the following: a B 6700, B 6800 or B 5900 system to the A9 Model B; a (2X) B 5900 system to the A9 Model D; and a B 6800, B 6900 or (2X) B 6800 or (2X) B 6900 system to the A9 Model F.

Due to the fact that throughput is very application dependent, the following performance ratings should be used as estimates only. If a similarly configured B 6900 is assigned a performance rating of 1.0, then the relative performance range of the A9 Model B is 0.8 to 1.2; the A9 Model D is 1.3 to 1.7; and the A9 Model F is 1.5 to 2.1. ▷

PRODUCT ANNOUNCED: The A9 Series of computer systems comprises three models which are object code compatible with all Burroughs B 5000, B 6000 and B 7000 series computers. The A9 Series have from 6 to 24 megabytes of main memory and from 2 to 6 I/O Base Modules.
COMPETITION: Honeywell DPS 8, IBM 4300 Series and Sperry 90/80, 1100/60 and 1100/70 Systems.
DATE ANNOUNCED: January 17, 1984.
SCHEDULED DELIVERY: Model A9–F scheduled for second quarter 1984; Models A9–B and A9–D scheduled for first quarter 1985.


BASIC SPECIFICATIONS

MANUFACTURER: Burroughs Corporation, Burroughs Place, Detroit, Michigan 48232. Telephone (313) 972-7000.

MODELS: A9 Model B, A9 Model D and A9 Model F.

CONFIGURATION: The A9 Series processors are available in three models. Each A9 system is made up of the following four subsystems: a central processing unit, a memory subsystem, an I/O data communications subsystem and a maintenance subsystem.

A basic system configuration for the A9 Model B includes one central processor, one memory cabinet, one memory adapter with six megabytes of main memory, one operator display terminal DLP, two operator display terminals and ▶
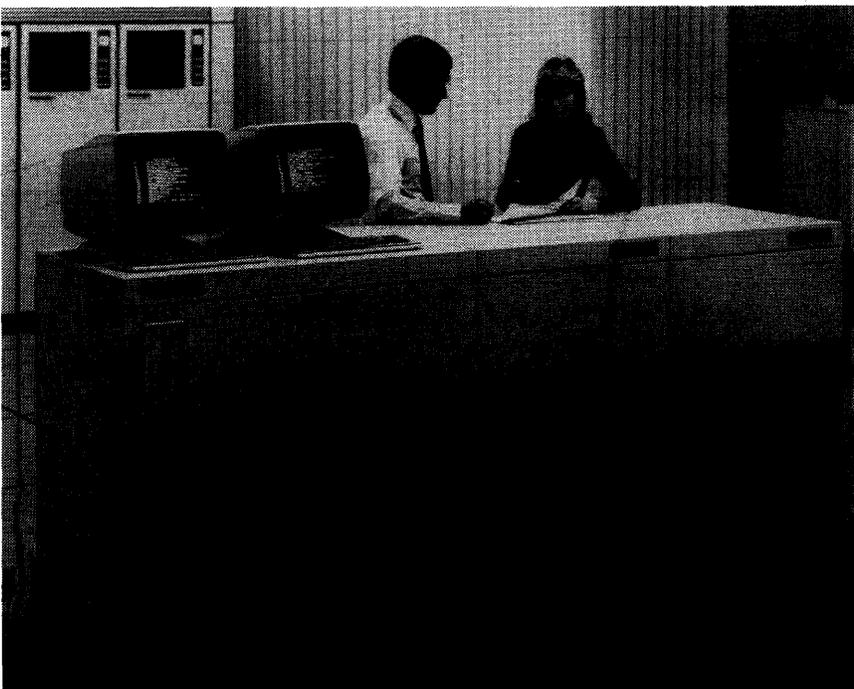
Burroughs' A9 Series consists of three models which are object code-compatible with the B 5000, B 6000 and B 7000 systems. Field upgradeability is provided from entry-level and mid-level models. The new systems feature a full range of compilers, data management facilities and application generation systems.

Burroughs A9 Series

▷ The new series, according to Burroughs, requires approximately 40 to 50 percent less power, air conditioning and floor space requirements than a similarly configured B 6900. With a capacity of 24 megabytes, main memory has been expanded to four times that of the B 6900.

COMPETITIVE POSITION

The top-of-the-line A9 Model F has been designed to compete with IBM's high-end 4381 Model Group 2. The mid-level A9 Model D is targeted against the IBM 4381 Model Group 1 and the entry-level A9 Model B against the IBM 4361 Model Group 5. The A9 Series will also be competitively marketed against the Sperry 1100/60 and 1100/70 Systems. □

▶ system control processors, one I/O cabinet and two I/O base modules. The A9 Model D systems include a central processor, one memory cabinet, one memory adapter with six megabytes of main memroy, one operator display terminal DLP, two operator display terminals and system control processors, two I/O cabinets and three I/O Base Modules. The A9 Model F systems include one central processor, one memory cabinet, one memory adapter with six megabytes of main memory, one six-megabyte main memory increment, one operator display terminal DLP, two operator display terminals and system control processors, two I/O cabinets and three I/O Base Modules.

Main memory is expandable in 6-megabyte increments to a maximum of 12 megabytes on Model D systems, and to a maximum of 24 megabytes on Model F systems.

CENTRAL PROCESSOR: The A9 central processor's main component is a Multiple Logical Processor (MLP) which considers each hardware operator to be a microprogram. These microprograms are generated, managed, selected, synchronized and terminated by the components contained in the MLP.

MEMORY SUBSYSTEM: All memory is housed in a single cabinet of the A9 system. A minimum of six megabytes and a maximum of 12 megabytes of 64K RAM is contained in a memory base. A second base must be added if more than 12 megabytes of memory is configured.

INPUT/OUTPUT SUBSYSTEM: The A9 Model B system includes two Input/Output Data Communication (IODC) base modules. The A9 Model D includes four and Model F includes from four to six IODC base modules. Each IODC base module supports up to eight DLPs for peripheral attachment or one Network Support Processor (NSP) for data communications control. On the A9 Model B, one IODC is used for I/O operations and the other can be used for data communications supporting up to 20 communications links. Models D and F allow for IODC base modules to be configured for any combination of I/O or data communications control without all of the modules being used for the same purpose. A maximum of three IODCs may be used on Model D for I/O only or data communications only. Model F allows for a maximum of five IODCs used for I/O only or data communications only. Models D and F support up to 108 and 144 communications lines, respectively.

PERIPHERALS: The A9 Series systems support the same perpheral devices as the B 6900 Series systems. Each system must be configured with a DLP for each type of peripheral subsystem. After receiving a request for I/O transfer from the central processor, the DLP initiates the peripheral-dependent functions required to perform the transfer.

COMMUNICATIONS: The Data Communications Subsystem is modularly designed and will accommodate medium- to large-scale communications networks. A series of functional processors including the Network Support Processor, Line Support Processor and Quad Line Adapters handle the communications functions.

SOFTWARE: The A9 Series uses Burroughs' Master Control Program (MCP) which provides resource management. Some of its features include: virtual memory, compiler-oriented hardware, reentrant code, dynamic resource allocation and efficient multiprogramming. Environmental software available for the A9 Series includes: NDL II, GEMCOS, DMS II, WFL, REPORTER, EDITOR, BNA and LINC. Programming languages supported include: APL, Algol, Basic, Cobol 68 and 74, Fortran 66 and 77, PL/1, RPG–II and Pascal.

PRICING: The A9 Series systems are available for purchase or for lease under a one-year, three-year or five-year agreement. The standard lease agreement entitles the customer to unlimited use of the equipment and includes full-time equipment maintenance coverage (24 hours/day, 7 days/week).

EQUIPMENT PRICES

		Purchase Price	Monthly Maint.	1-Year Lease	5-Year Lease
PROCESSORS AND MEMORY					
A9-B	Basic System; includes central processor, memory cabinet, memory adapter with six megabytes of main memory, I/O Cabinet, two I/O Base Modules, operator display terminal DLP, and two ODT and Systems Control Processors	$351,100	$1,125.00	$19,220	$14,831
A9-D	Basic System; includes same components as Model A9-B with one additional I/O Cabinet and two additional I/O Base Modules	433,900	1,150.00	23,397	17,973
A9-F	Basic System; includes same components as Model A9-D with an additional six-megabyte main memory increment	613,900	1,325.00	32,656	24,982
A9-MB	Memory Base with 6MB	70,000	150.00	3,707	2,832
A9-MI	Memory Module; 6MB	60,000	150.00	3,178	2,428

Burroughs A9 Series

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		Purchase Price	Monthly Maint.	1-Year Lease	5-Year Lease
SYSTEM OPTIONS					
A9-IOC	I/O Cabinet and I/O Base Module	45,000	110.00	2,413	1,850
A9-IOB	I/O Subsystem Base Module	6,563	27.50	211	179
A930-2	I/O Base Module Exchange; two processors; includes one path selection module and one distribution module	4,500	15.00	202	157
A930-3	I/O Base Module Exchange; three processors; includes one path selection module and two distribution modules	6,500	22.00	292	217
A930-4	I/O Base Module Exchange; four processors; includes one path selection module and three distribution modules	8,500	29.00	382	277
A995-92	Distribution Module	2,500	8.00	112	87
A995-93	Logic Expansion Module	3,676	18.20	137	111 ■