IBM Series/1
New Product Announcement

A recent announcement from IBM's GSD has added 10 enhancements to the Series/1 mini-computer product line: 1) a new low-end, high-density processor, the 4952; 2) the 1210 attachment feature for the IBM 5250 CRT Workstations; 3) the 4969 magnetic tape drive subsystem; 4) 23-and 29-megabyte disk drives for the 4963 disk subsystem family; 5) a multiline attachment feature that allows users to program the communications features of up to eight transmission lines independently; 6) the reclassification of the Event-Driven Executive (EDX) from an FDP to a licensed program; 7) a FORTRAN IV compiler and object support library; 8) a mathematical and functional subroutine library; 9) a command language for the Real-Time Programming System (RPS) Version 4; and 10) a new version of the Program Preparation Subsystem (PPS).

The new 4952 processor offers packaging densities up to six times as high as the older Series/1 processors through the use of IBM's SAMOS (silicon-aluminum MOS) technology. On a single board, the 4952 offers the CPU, a clock comparator, a storage address relocation translation feature, and up to 128K bytes of memory. The improved density has been achieved through a new logic design in which each logic module incorporates 2 chips with up to 100 circuits, and by employing 36K-bit memory chips in place of the 2K-bit chips in the older Series/1 processors. The chips incorporate redundant bits so that they can continue to function if a portion is found to be inoperable. The 4952 provides 80 percent of the power of the 4953, having an average instruction time of 9.4 microseconds as opposed to 7.4 microseconds on the 4953. The 4942 comes in either a 5-slot or 14-slot chassis, and includes memory management as a standard feature.

The basic 4952 includes a CPU with 32K bytes of memory, storage address translation feature, clock comparator, power supply, and half-width rack and costs $4,600. The 32K-byte memory; clock comparator, power supply, and half-width rack and costs $4,600. The 32K-byte memory increments, which attach to the processor board, cost $450 each. The 4952 in a full-width chassis costs an additional $1,550. The new processor will be available in May 1979.

The new 1210 attachment feature provides four ports for interfacing the 5250 CRT Workstations to Series 1 processors. The feature is priced at $2,950 and will become available in December 1979. Software support will be priced at $18 for a monthly license.

The 4969 magnetic tape drives are available in three 45-ips tension-arm models and three 75-ips vacuum-column models. The 45-ips drives are the 4N, an 800-bpi NRZI drive priced at $8,950; the 4P, a 1600-bpi phase-encoded drive priced at $9,350; and the 4D, an 800 1600-bpi drive priced at $12,950. The 75-ips drives are the 7N, an 800-bpi NRZI drive priced at $11,950, the 7P, a 1600-bpi phase-encoded drive priced at $12,350; and the 7D, an 800/1600-bpi drive priced at $12,590. The dual-density 1550 controller for up to four drives is priced at $4,550. The 1540 NRZI controller for up to four drives is priced at $3,950, while the 1545 phase-encoded controller for up to four drives is priced at $4,350. Software support for the tape subsystem is priced at $17 for a monthly license or $1,020 on a one-time charge basis.

The new 23-megabyte disk drive, which includes 131K bytes of fixed-head storage, is priced at $9,980 for a primary unit and $8,280 for an expansion unit. The 29-megabyte disk drive is priced at $9,260 for a primary unit and $7,560 for a secondary unit. A maximum of four of the 4963 disk drives may be attached to a Series/1. The drives utilize 8-inch disks and record on 450 tracks inch at a density of 8530 bits per inch. There are 11 tracks per cylinder, each containing 16,384 bytes. Average seek time is 27 milliseconds for the moving heads, and the average rotational delay is 9.6 milliseconds. The data transfer rate is 1.03 megabytes per second. The new drives are available now.

The multiline communications controller will be available in September 1979 and is priced at $1,380. Lines in groups of four can be attached to the controller by means of adapters. Each adapter costs $1,520.

The reclassified Event-Driven Executive (EDX), which will be available in May 1979, does not support the new magnetic tape subsystem but provides support for all the other new and previously announced Series/1 features and products. In addition, the EDX supports: the ability to initiate an applications program and to pass parameters to the new program, multitasking within each application program, multiple dynamic terminal support, and a relocating loader. EDX programs

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and their monthly license fees include the basic supervisor and emulator, $16; utilities, $12; program preparation facility, $15; macro library, $29; and macro/library/host, $80. The library/host is on a continuous-payment basis, whereas the other modules can be paid for in specified periods.

The FORTRAN IV compiler, object support library (both for $14 per month), and functional subroutine library ($8 per month) run under EDX on the 4955 processor and will become available in May 1979. The command language facility, which operates under RPS, will also become available in May. With this enhancement, RPS will be priced at $49 per month.

IBM also announced the following price reductions on Series/1 main memory increments:

		New Purchase Price	Old Purchase Price
6315	Storage addition, 4953 processor; 16,384 bytes	$1,170	$1,510
6316	Storage addition, 4953 Model C and D processors only; 32,768 bytes	1,560	2,425
6325	Storage addition, 4955 processor; 16,384 bytes	1,580	1,750
6326	Storage addition, 4955 Model C and D processors only; 32,768 bytes	2,350	2,850□