Amdahl 580 System Product Enhancement

On September 30, 1982, Amdahl Corporation introduced the Model 5850, an entry-level system in its 580 Series of large-scale processors. Concurrent with the announcement of the Model 5850, the firm reduced purchase prices by approximately 11 percent and increased lease prices by about 10 percent on all other models in the 580 Series. At the same time Amdahl announced the following software products: CMS/Accelerator (CMS/XL), MVS/SP Assist (MVS/SPA), and Release 2.0 of the Universal Timesharing System (UTS).

MODEL 5850: Designed as an entry-level system in Amdahl's top-of-the-line 580 Series, the Model 5850 is geared toward users who do not require the higher performance of the Amdahl 5860. According to the vendor, the 5850 fills the performance gap between the Amdahl 470V/8 and the Amdahl 5860. The new system's performance in most commercial environments is about 1.4 to 1.6 times greater than that of the Amdahl 470V/8. The Model 5850 provides approximately 75 percent of the throughput capacity of the 5860, the largest uniprocessor in the 580 Series.

In order to protect users' investments in applications and systems software, Amdahl has designed the Model 5850 to operate with MVS/SP Versions 1 and 2, VM/SP Release 1 and 2, VM/XA Migration Aid, and ACP, as does the Model 5860.

In addition to utilizing the technology of the 580 family, the Model 5850 also provides: the capability to be field upgraded to the 5860 uniprocessor in approximately 8 hours; main memory capacity of 16 to 32 megabytes with 16 to 32 channels; a standard data streaming feature on all block multiplexer channels; full compatibility with the Amdahl 470 and 580 Series; CPU implementation on 7 multiple chip carriers housed in a 5.6 cubic foot stack; advanced error checking; packaging with fewer connections and more rapid fault isolation; compact size and light weight; distributed microcode, as well as a class of firmware (macrocode); a 400-gate, 0.4 nanosecond, LSI, emitter-coupled logic chip; and Amdahl-developed air cooling.

First customer shipments are scheduled to begin in the second quarter of 1983.

SOFTWARE: CMS/Accelerator (CMS/XL) is designed to improve performance in a VM/SP environment. As part of the VM/SP operating system, the Conversational Monitor System (CMS) offers users a flexible time-sharing system. According to Amdahl, CMS/XL improves interactive system performance from 10 to 20 percent by reducing the overhead required to support a large number of CMS users. CMS/XL assists in improving CMS performance by reducing both system overhead and system disk contention. When CMS/XL is installed, fewer modules have to be loaded from the shared system disks and fewer input/output operations are required to process CMS console output. In addition, fewer operations are necessary to return unused pages to the system. CMS/XL requires no source modifications to the VM/SP control programs (CP) or to CMS. CMS/XL is currently available for general distribution.

The MVS/SP Assist (MVS/SPA) program product is designed to improve performance in an MVS/SP Version 1, Release 3 environment. MVS/SPA permits the IBM MVS/SP Version 1, Release 3 program products to run on Amdahl processors and on IBM System/370 models without extended facilities. This program consists of software routines functionally equivalent to the additional instructions introduced in the System/370 Extended Facility (EF), 3033 Extended Feature (XF), and 3033 Extended Addressing (EA) feature. By providing software routines functionally equivalent to those of the software/microcode combination used by the MVS/SP Version 1, Release 3 program product SCP, MVS/SPA can simulate many of the System/370 extended hardware instructions. The program provides support for 32 megabytes of real storage on Amdahl systems. MVS/SPA Release 1.0 functionally replaces MVS/SEA Release 3.0. However, support for MVS/SEA Release 3.0 will be provided through March 31, 1983. MVS/SPA is available for shipment.

Universal Timesharing System (UTS) is designed as a UNIX Timehsaring Operating System Version 7.0 Enhancement to run under VM/370 or VM/SP on any Amdahl or Amdahl-compatible mainframe. In addition to the features of UTS Release 1.0, Release 2.0 offers C compiler and UNIX system kernel performance improvements, a paging capability to allow more users to share a common copy of UTS, Fortran 77 and Pascal 8000 compilers, support for remote

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3270 and compatible devices, and support fo the 3278 Series of large-screen terminals. No VM modifications are required to run UTS. UTS Release 2.0 is currently available in either binary or source code format. □

EQUIPMENT PRICES

	Purchase Price	Two-Year Lease	Four-Year Lease	Main- tenance
Basic Model 5850 System with 16 megabytes of memory and	\$2,750,000	\$101,244	\$80,995	\$8,500
16 channels				

SOFTWARE PRICES

	Annual Fee	Monthly Fee	Annual Fee (DSLO)	Monthly Fee (DSLO)
CMS/Accelerator (CMS/XL)	\$7,500	\$725	\$5,700	\$550
MVP/SP Assist (MVS/SPA)	3,150	300	2,350	250
Universal Timesharing System (UTS)* Release 2.0	15,750	1,500	11,800	1,125

^{*}UTS Release 2.0 is priced at \$10,500 (annual fee) for academic users, and \$1,000 (monthly fee) for academic users. Also for academic users, Annual DSLO is \$7,850, and monthly DSLO is \$750.