Amdahl 5890/5990 Series

Product Enhancement

Amdahl Corporation augmented the price/performance options of its top-end 5990 Series with the addition of three models. The company also enhanced its Multiple Domain Feature and announced that its 5990 main-frames would support the new MVS/ESA operating system by the fourth quarter of this year. Amdahl markets the 5990 Series as a plug-compatible replacement for the IBM ES/3090 S Series.

The new 5990 models consist of the 5990-350 single processor, the 5990-500 dual processor, and the 5990-100 three-way multiprocessor. They join the 5990-700 dual processor and the 5990-1400 four-way multiprocessor introduced in May 1988. All three models were announced in April. The Model 350 became available in April, while the other two became available in May.

Amdahl added the new models to lower the entry point into the 5990 Series and to provide smaller price/performance increments and additional upgrade possibilities. The Model 350 is rated at 35 million instructions per second (MIPS), according to published reports. The Model 500 is rated at 44 MIPS and the Model 1100 is rated at 91 MIPS. The entire Amdahl 5990 line now has a performance range of 35 to 113 MIPS. At this performance range, the model line competes with the medium and upper end of the ES/3090 S Series.

Amdahl calls the Model 350 the most powerful uniprocessor in the IBM-compatible marketplace. The model comes with 64 megabytes of main memory, expandable to 256 megabytes, and 32 channels, expandable to 64 channels. Users can also configure it with up to one gigabyte of optional Expanded Storage. The company said the Model 350 is particularly suited to transaction-intensive applications and other so-called "single-threaded" processes that run more effectively on a single processor than on multiprocessors.

The 5990-500 is positioned as an entry-level dual processor. It is configurable with the same amount of memory and number of channels as the Model 350. The Model 500 offers 70 percent of the Model 700's performance. The Model 700, announced last year, is also a dual processor.

The 5990-1100 three-way processor provides up to 45 percent more performance than the 5990-700 and is a logical upgrade increment between the dual processors and a 5990-1400 four-processor model, the top end of the 5990 Series. The Model 1100 comes with 128 megabytes of main memory, expandable to 512 megabytes, and 64 channels, expandable to 128 channels. Users can also add up to two gigabytes of Expanded Storage.

The 5990-350 sells for \$3,806,250, the 5990-500 for \$4,620,000, and the 5990-1100 for \$9,870,000.

In addition to the new models, Amdahl announced the 5990 Series would support IBM's MVS/ESA operating system and the ESA/370 architecture by the fourth quarter. The company expects to demonstrate MVS/ESA capabilities on its mainframes by the third quarter.

Amdahl also announced enhancements to its Multiple Domain Feature (MDF), which allows a single mainframe to be partitioned into several independent systems that can run different operating systems simultaneously. The maximum number of domains that can be supported has been increased from 4 to 7 on uniprocessors and dual processors and from 8 to 14 on multiprocessors in partitioned mode.

MDF enhancements once again put Amdahl on an even par with IBM's Processor Resource/Systems Manager (PR/SM) enhancements. PR/SM, a hardware feature for IBM 3090 mainframes, is similar to MDF. In February, IBM increased the number of possible logical partitions when operating in Logically Partitioned (LPAR) mode. LPAR mode now supports up to 7 logical partitions on single processors and up to 14 logical partitions on multiprocessors operating in physically partitioned mode. Previously, PR/SM let users set up 6 logical partitions on single processors and up to 12 on multiprocessors.