New IBM 3590 High-Performance Tape Subsystem,
Featuring Magstar Tape Drive,
Offered for Wide Range of Computing Platforms.

SAN JOSE, Calif.--(BUSINESS WIRE)--April 10, 1995--IBM today announced the 3590 High-Performance Tape Subsystem, featuring the new Magstar tape drive and its breakthrough recording technology. The 3590 is offered for attachment to a wide range of data processing systems, including IBM's RISC System/6000, POWERparallel System SP2, AS/400 and S/390, as well as platforms using the Sun Solaris operating system.

The Magstar tape drive operates with removable cartridges capable of storing 10 billion characters (gigabytes) of uncompressed data on a 1/2-inch-wide standard cartridge tape. It can read and write data at an instantaneous rate of 9 million characters (megabytes) per second. Magstar's capacity and performance lead the industry in the multi-function segment of the tape drive marketplace, and provide the basis for a highly scalable solution for automated cartridge-handling tasks.

"In previews of our new tape offerings, customer response has been tremendous," said Kent Winton, vice president of marketing for IBM's Storage Systems Division. "They're recognizing Magstar technology as a clear demonstration of our commitment to supplying superior tape solutions. What's more, they're seeing how the 3590 and our family of tape libraries will let them manage their enterprise data in creative new ways."

When used in a stand-alone configuration, the 3590 can operate as a mini-library with a capacity of 300 gigabytes of compressed data in a ten-cartridge, Automatic Cartridge Facility (ACF). The ACF includes a new random-access mode of operation.

The 3590 can also be integrated into the IBM 3495 Tape Library Dataserver and new models of the IBM 3494 Tape Library Dataserver, allowing customers who want to achieve a true "lights out" operation to be able to do so more cost effectively because of the increased cartridge capacity.

When operated with the award-winning 3494 Tape Library, rack-mounted models of the 3590 can access any one of up to 3,040 individual cartridges, for a total on-line capacity of 91.2 trillion characters (terabytes) of compressed data.

And when used with the IBM 3495 Tape Library, the 3590 can gain access to up to 18,900 cartridges, providing an enormous on-line capacity of 567 terabytes of compressed data. This is equivalent to almost 4.5 billion double-spaced typewritten pages -- a stack of paper more than 200 miles high.

In a statement of direction, IBM today also said that it plans to deliver technology known as "volume stacking" on its ESCON-attached tape library products in 1996. The technology would allow the storage of multiple logical volumes of data in the same tape cartridge. This would enable customers to fully exploit the Magstar tape drive's capacity.

3590 SUBSYSTEM IS OFFERED IN A VARIETY OF PACKAGES

Single Magstar tape drives are featured in each of several models of the 3590 subsystem that are packaged to meet a variety of customer needs:

-- Model B11 is a rack-mountable model including a 10-cartridge Automatic Cartridge Facility (ACF). Up to four Model B11s can be mounted in a single rack.

-- Model B1A is a rack-mountable model without the Automatic Cartridge Facility. It is designed to be installed in the 3494 Tape Library Dataserver. Models B1A and B11 both include an integrated SCSI controller with two ports that support a 16-bit, fast and wide SCSI-2 differential interface.

-- Model A00 is a controller designed for attaching 3590 drives to ESCON channels on S/390 systems. It can be installed in a 3494 Tape Library or in the Model A14.

-- Model A14 is a frame box that can be attached to a 3495 Tape Library Dataserver or used for non-library attachment of the 3590 to S/390 systems.

Four Model B11 drives and a Model A00 controller can be installed in the Model A14 for attachment to a 3495; or up to four Model B11 drives and a Model A00 controller can be
installed in the Model A14 for non-library use in an S/390 system.

A 3495 tape library can contain any combination of 3590 Model A14 or 3490 Tape Subsystem Models A01, A02, A10 or A20 units, up to the maximum of eight, depending on the model of 3495 used and the mix of 3490 and 3590 transports selected.

Six new models of the 3494 Tape Library Dataserver were announced today. Models D12, D14, L12 and L14 allow the 3590 subsystem to be used in the 3494 library, while the L10 and D10 use the 3490E Model C1A or C2A subsystems. The modularity of the 3494 library also permits customers to intermix drive units D10, D12 and D14 in the same library configuration. Furthermore, both 3490 and 3590 cartridges can co-exist with each other in the 3494 and 3495 libraries.

-- The 3494 Model D12 Drive Unit contains up to six 3590 Model B1A units. -- The 3494 Model D14 Drive Unit contains up to four 3590 Model B1A units and one 3590 Model A00 ESCON tape controller.

-- The 3494 Model L12 Library Control Unit contains up to two 3590 Model B1A units.

-- The 3494 Model L14 Library Control Unit contains up to two 3590 Model
B1A units and either zero or one 3590 Model A00 ESCON controller.

-- The 3494 Model D10 supports the 3490 Enhanced (3490E) Magnetic Tape Subsystem Models C1A or C2A, each with one tape control function and two SCSI-2, parallel or ESCON data channels.

-- The 3494 Model S10 Storage Unit contains storage slots for 400 cartridges.

IBM is the world's largest supplier of computer storage products. Through its Storage Systems Division, the company provides a full line of storage solutions for IBM computing systems, for original equipment manufacturers (OEMs) and for commercial distribution. Its offerings include disk drives, arrays and subsystems, magnetic tape drives, subsystems and automated libraries, optical drives and libraries, storage controllers and related storage management software.

PRICES AND AVAILABILITY

List Prices Availability

IBM 3590 High-Performance Tape Subsystem
        Model B1A 43,500 Jul 28, 1995
        Model B11 (with ACF) $49,500 Jul 28, 1995
        Model A00 7,500 2nd Half 1995
        Model A14 (frame only) 21,000 2nd Half 1995
                (with 4 B11s and 1 A00) 205,500

        IBM 3494 Tape Library Dataserver
        Model D10 35,000 Apr 14, 1995
        Model S10 30,000 Apr 14, 1995
        Model L12 86,900 Jul 28, 1995
        Model D12 35,000 Jul 28, 1995
        Model L14 86,900 2nd Half 1995
        Model D14 35,000 2nd Half 1995

IBM 3495 Tape Library Dataserver
        Support for 3590 Model A14 1st Half 1996

IBM intends to publish the delivery dates of the ESCON-attached tape library products at the time its SCSI-attached products become generally available.

The 3590 will be offered by IBM and through a large network of IBM Business Partners.