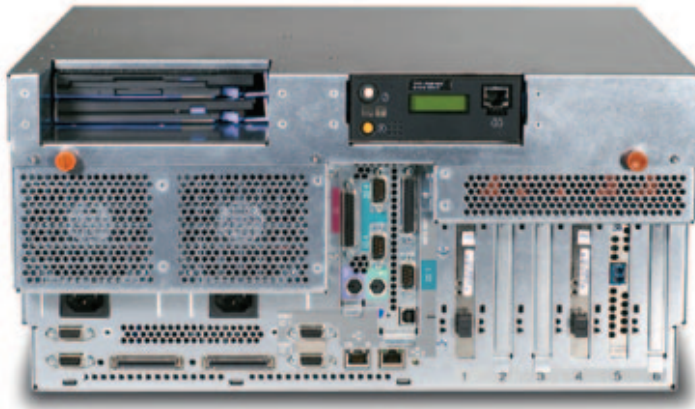


IBM® TotalStorage® Enterprise Tape Controller 3592 Model J70



Highlights

- **Enables IBM @server™ zSeries™ attachment to the IBM TotalStorage Enterprise Tape Drive 3592 Model J1A or Enterprise Tape Drive 3590**
- **Supports the IBM TotalStorage Enterprise Tape Library 3494, StorageTek Automated Cartridge Systems (ACS) and stand-alone rack and frame environments**
- **Designed to use the high performance, capacity, and reliability of the IBM TotalStorage Enterprise Tape Drive 3592 Model J1A**
- **Designed to support the 300GB high capacity and 60GB fast-access formats of the IBM TotalStorage Enterprise Tape Cartridge 3592**
- **Designed to provide tape drive and tape cartridge sharing between ESCON® and FICON™ enabled zSeries and S/390 servers**

Tape storage connectivity for

IBM @server zSeries, S/390 servers

The J70 Controller is designed to offer ESCON and FICON attachment of either 3592 or 3590 Tape Drives in a 3494 Tape Library, StorageTek ACS and stand-alone environments. The Model J70 is designed to exploit the performance and function of the 3592 Tape Drive including the high-capacity 300GB and 60GB fast-access tape formats. In a zOS or OS/390 environment, an individual 3592 tape cartridge can be scaled to a 60 GB fast-access format. The effect of capacity scaling to 60 GB is to reduce the average locate time to a random record (from load point) to less than 30% of the normal locate time. Tape drives can be shared among FICON and ESCON hosts, allowing effective drive utilization and to help reduce hardware switching and fabric infrastructure requirements.

The J70 Controller is built from IBM components, including the IBM @server pSeries, AIX® operating system and PCI-X bus architecture. Redundant, hot-swappable power supplies and cooling components with automatic failover help provide high availability for the Controller. In addition, the J70 Controller provides support for the IBM TotalStorage Master Console (TSMC) which allows administrators to remotely monitor the J70 Controller for early problem detection and to enable service notification, including automatic event-driven service notification to IBM.

High-performance storage to help improve IT productivity

The J70 Controller has been designed to provide greater throughput and connectivity than previous IBM Controllers, offering up to eight ESCON attachments, or up to four FICON attachments, or an intermix of ESCON and FICON attachments. The J70 Controller is designed to provide up to 1.5 times the throughput of the A60.

The J70 Controller is designed to provide numerous functions to allow better performance for applications that require high data transfer rates, write many files to a tape cartridge, regularly synchronize records to the cartridge, or randomly retrieve records or files from a high capacity tape cartridge. This functionality is delivered by a combination of the J70 Controller microcode and OS/390 or zOS operating systems support.

Flexible configuration options help simplify storage infrastructure

Although designed to complement the high capacity and high performance of the 3592 Tape Drive, the J70 Controller is backward compatible with the 3590 Tape Drive. This compatibility enhances the flexibility of the J70 Controller to fit into various storage environments, including those with existing 3590 tape systems—helping to protect prior investments in tape storage hardware.

The J70 Controller can be used in the following configurations with 3592 Tape Drives:

- *IBM Automation: Up to eight 3592 Tape Drives can be installed in a Tape Drive Expansion Frame 3494 Model D24 with a J70 Controller. Up to four additional 3592 Tape Drives can be connected to the J70 Controller in an adjacent L22 or D22 frame.*
- *StorageTek Automation: One or two J70 Controllers can be installed in a 3590 Model C10 Silo Compatible Frame. Each Controller can attach up to 12 3592 Tape Drives that are installed in an IBM TotalStorage Silo Compatible Tape Drive Frame 3592 Model C20.*
- *Standalone rack: Up to twelve 3592 Tape Drives can be installed with a J70 Controller in a 2m rack, or up to eight 3592 Tape Drives can be installed with a J70 Controller in a 1.6 or 1.8 m rack.*

The J70 Controller can be used in the following configurations with 3590 Tape Drives:

- *IBM Automation: Up to four 3590 Model B1A, E1A or H1A Tape Drives can be installed in a Tape Drive Expansion Frame 3494 Model D14 with a J70 Controller. Up to six additional 3590 drives can be connected to the J70 in an adjacent L12 or D12 frame. Either fibre-attached or SCSI-attached 3590 drives are supported.*
- *StorageTek Automation: One or two J70 Controllers can be installed in a 3590 Model C10 Silo Compatible Frame to attach to 3590 Model B1A, E1A, or H1A Tape Drives installed in a 3590 Model C12 Silo Compatible Frame. Either fibre-attached or SCSI-attached 3590 drives are supported in configurations consistent with 3590 Model A60 support, including multiple C12 configurations.*
- *Standalone with 3590 A14: Up to four 3590 Model B11, E11, or H11 Tape Drives can be installed with one J70 Controller in a 3590 Model A14 Frame. Either fibre-attached or SCSI-attached 3590 drives are supported in configurations consistent with 3590 Model A60 support, including multiple A14 configurations.*
- *Standalone rack: Up to four SCSI attached 3590 B11, E11, or H11 Tape Drives can be installed with a J70 Controller in a 1.6, 1.8, or 2.0 m rack. Up to four Fibre Channel attached 3590 E11 or H11 Tape Drives can be installed with a J70 Controller in a 1.8 or 2.0m rack. Up to two Fibre Channel attached 3590 E11 or H11 Tape Drives can be installed with a J70 Controller in a 1.6m rack. Either FC attached or SCSI-attached 3590 drives are supported in configurations consistent with 3590 Model A60 support, including multiple rack configurations.*

These flexible attachment options allow the J70 Controller to adapt as data center needs change. By supporting multiple servers and drives as well as tape libraries, the J70 Controller can work in a variety of storage configurations.

IBM @server zSeries and S/390 software support

The J70 Controller is supported on zSeries and S/390 servers running zOS, zVM, VSE/ESA and OS390. For more information on software support for the J70 Controller with 3592 drives, visit <http://www.storage.ibm.com/tape/drives/3592/3592opn.pdf>

IBM TotalStorage Enterprise Tape Controller 3592 Model J70 at a glance

Characteristics

Number of ESCON interfaces	up to 8
Number of FICON interfaces	up to 4
ESCON maximum channel link speed	17MB/sec
FICON maximum channel link speed	2Gb/sec
ESCON maximum distance (unrepeated, single link to controller)	3km
FICON long wavelength maximum distance (unrepeated, single link to controller)	10km
FICON short wavelength maximum distance (unrepeated, single link to controller)	300m
Warranty	1 year

Physical characteristics

Dimensions	222 mm H x 445 mm W x 603 mm D 8.7 in H x 17.5 in W x 23.8 in D
Weight	39 kg (86 lb)

Operating environment

Temperature (with media)	16° to 32° C (60° to 90° F)
Relative humidity	20% to 80% non-condensing (limited by media)
Wet bulb maximum	23° C (73.4° F)
Heat output	2.05 BTU/hr
Power requirements	600 Watts

Maximum drive attachment capability	3592 Model J1A	3590 Model E, H FC Attached	3590 Model B, E, H SCSI Attached
Stand alone rack	12	12	8
3494 Library	12	10	10
Silo compatible frame	12	12	8
A14	NA	12	8

For more information

For more information, contact your IBM representative or IBM Business Partner. In the United States or Canada, you also can call IBM Direct: 1-800-IBM-CALL (1-800-426-2255). Or visit ibm.com/storage/tape



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GB equals one billion bytes; when referring to hard drive capacity, accessible capacity may be less.

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