



The subsystem provides two SCSI-320 host channels with 12 or 8 drive bays for SATA-II disk drives in a smartly managed enclosure. The subsystem combines massive storage capacity with SATA-II benefits, such as high performance and dedicated bandwidth, in a safe environment where the highest level of data availability is assured. High throughput is available by segregating I/O traffic across the separate PCI-X buses, while IOPS performance is delivered through the internal buffer on the XOR engine and CPU with the help of intelligent firmware algorithms.

Momentum's RAID functionality is unmatched in the industry in terms of its wide variety of array configuration, maintenance, and monitoring capabilities. The SCSI-to-SATA series provides IT professionals with versatile options to meet their needs.

Highlights

- Two (2) SCSI-320 host channels; transfer rate up to 320MBps per channel
- RAID 5 Configuration end to end I/O performance
 - Sequential Read :328 MB/s
 - Sequential Write :229 MB/s
- Single RAID controller providing complete RAID functionality
- Designed to use 3Gbps SATA-II disk drives; backward compatible with SATA-I disk drives
- Modular, passive backplane, high redundancy enclosure design
- High density 2U chassis providing up to 5TB of storage capacity
- Optional, hot-swappable battery backup units (BBU)
- Dual-speed cooling fans to reduce system noise
- DDR cache memory up to 2GB
- SATA NCQ support
- Real-time event notification by a variety of Methods
- Hardware provider interface ready for third-party management software that supports Windows Server 2003 Virtual Disk Service(VDS)

Reliability

The subsystem supports a complete list of RAID configuration levels in the forms of logical drives, logical volumes and logical partitions. Multiple RAID configurations can co-exist within one enclosure, each with distinct write policy, stripe size, and optimization modes. Hot rebuild and numerous fault correction mechanisms ensure the highest standard of RAID protection.

Safe distribution of data is embodied in many ingenious fault-preventive designs. From memory ECC, write-verify, parity regeneration, parity update tracking, Media Scan, to battery backup protection, your data is warded against factors that might cause data inconsistencies. For example, the subsystem is capable of managing storage arrays with fault containment algorithms. If a critical component fails, e.g., a battery module, the subsystem automatically disables its write-back caching and assumes the conservative write-through mode. Algorithms like this guarantees that data is reliably managed and all risk factors are always carefully checked.

Availability

The Z1200 and Z800 subsystems are equipped with field-hardened technologies that ensure data protection and a simple, centralized management. The subsystems are managed by firmware developed with sophisticated RAID technologies and redundant component designs. Incorporating various data protection algorithms and featuring RAID levels 0, 1(0+1), 3, 5, 10, 30, and 50, the subsystem actually offers capabilities only seen in enterprise-class solutions.

To ensure a high level of system availability, critical components such as disk drives, power supplies, and cooling fans, are all redundant and hot-swappable. Modules are integrated with the main signal path PCB via board-to-board or interface-specific connectors to eliminate points of failure. Assisted by GUI management software, the operating status of all components can be constantly monitored through a local or remote console.

Serviceability

All critical modules are housed in their own removable canister, including hard disk drives, power supplies, battery modules, and cooling fans. In the event of component failure, each can be replaced within seconds. Spring screws, securing latches, and key-locks all help provide easier access to the modules.

A variety of configuration and monitoring methods are available, either locally via the LCD keypad panel and the text-mode RS-232C terminal utility, or remotely through the Java-based GUI manager. All fault conditions, including module failure and abnormal voltage and temperature readings, are instantly reported. A system administrator can choose to be notified via LAN broadcast, SNMP traps, email, fax, SMS, ICQ, and MSN messenger when he is away from the installation site. Even the notification utility can be installed redundantly on two different machines to avoid the chance of blind time due to a simple component failure.

