

## Escalade™ 8500 Series Serial ATA RAID Controller

- Supports up to 4, 8 or 12 Serial or Parallel<sup>1</sup> ATA drives on a single PCI card, enabling up to 2 terabytes of storage on a half-length card
- StorSwitch™ switched architecture delivers the full performance benefit of Serial ATA's point-to-point architecture up to 150MB/sec
- On-board processor provides true hardware-based RAID and intelligent drive management functions
- RAID 0, 1, 10, 5 and JBOD support
- 64-bit/33MHz PCI-compatible
- Bootable BIOS support for greater fault tolerance
- Hot-swap and hot-spare features for data availability
- Windows® and Linux® operating system support

3ware Escalade 8500 Serial ATA RAID controllers deliver full-featured hardware RAID for PC servers and workstations. With 3ware's point-to-point packet switching architecture, each disk drive has its own dedicated port, increasing throughput and enhancing reliability. 3ware delivers unmatched capacity, scalability and performance using inexpensive Serial ATA disk drives. The Escalade 8500 Serial ATA controllers set the standard for Serial ATA RAID.

### Switched Architecture Delivers Highest Performance Serial ATA RAID

Traditional technologies such as parallel ATA and SCSI use a bus-based architecture wherein all the drives share a single bus, with a resulting compromise in performance. The Serial ATA architecture provides point-to-point communication, delivering full bandwidth to each connected drive when a switched architecture is employed. 3ware's non-blocking switched fabric design allows the controller to simultaneously access to all drives, delivering much higher performance than competitive Serial ATA solutions.

### Simpler Configuration and Superior Air Flow

Serial ATA provides significant cabling benefits compared to parallel ATA. It eliminates the need for bulky parallel cables and allows for significantly improved airflow inside the RAID enclosures. Standard ATA drives can still take advantage of Serial ATA cabling. 3ware's Parallel-to-Serial Converter turns a parallel ATA drive into a serial interface. This allows users to immediately take advantage of Serial ATA's longer and thinner cable (1 meter), superior airflow and easier assembly while still using standard ATA hard disk drives.

The 8500 Series controllers are PCI short form-factor half-length cards—ideal for rackmounted system designs. The rear-exit cable connectors make cabling assembly and routing easy and straightforward.

### Advanced RAID Software and Firmware

The Escalade 8500 series includes a complete suite of software and firmware for creating, deleting, verifying and rebuilding arrays, making installation and set-up easy. 3DM™, 3ware's web browser array management utility allows local and remote management and monitoring of arrays and their disks from any standard web browser. 3ware's advanced firmware delivers many of the features one expects with more expensive SCSI drives and controllers, but not typically available in ATA controllers or drives. These include command re-ordering, elevator seeks, dynamic sector repair, asynchronous error messaging and more.

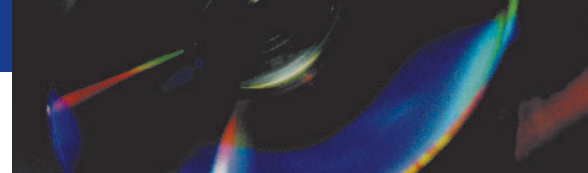
### Mature 4th Generation Switched Technology

The Escalade 8500 Series of ATA RAID controllers are the highest performing, highest capacity Serial ATA controllers available. 3ware's mature 4th generation RAID architecture and software has been deployed in thousands of mission critical servers so users can be confident that their data is protected. Utilizing StorSwitch™ non-blocking switched architecture, Escalade 8500 series are the only Serial ATA controllers that truly unleash the benefits of Serial ATA, delivering performance levels previously only seen with multi-channel SCSI RAID cards.



<sup>1</sup> Requires 3ware's Parallel-to-Serial Drive Converter or equivalent

# Escalade™ 8500 Series



## Escalade 8500 Series Features

- StorSwitch™ point-to-point, non-blocking architecture
- On-board processor provides true hardware based RAID and intelligent drive management functions
- SCSI device driver model to take advantage of the benefits of SCSI using inexpensive ATA drives
- Remote browser 3ware Disk Manager (3DM) utility with password security for network management of storage arrays
- SMTP support for email/pager notification
- Easy-to-configure arrays from BIOS or 3DM utility
- Staggered spin-up to minimize in-rush current at power up
- Bootable BIOS support for greater fault tolerance
- Multiple logical volumes and RAID levels can exist on one card for maximum configuration flexibility
- Multiple card support (up to 4) within a system for large storage requirements
- Hot-swap and hot-spare support for data availability
- Dynamic sector repair for robust data protection
- S.M.A.R.T. disk drive monitoring for reliability
- 2 levels of administrator access to 3DM for added security

## Escalade 8500 Series Specifications:

- Half-length PCI Universal short form factor
- PCI 2.2 compliant 64-bit/33MHz bus master
- Auto-sensing Serial ATA, ATA 133/100 disk drive interface\*
- BIOS PnP (plug and play), and BBS (BIOS boot services) compliant

\* No support for ATA 66/33

## OS Support

- Windows 98/ME/NT4.0/2000/XP
- Red Hat Linux 6.2, 7.0, 7.1, 7.2, 7.3
- SuSE Linux 6.4, 7.2, 7.3, 8.0 SMP
- Linux driver available through open source kernel 2.2.15 and later

For complete OS listing, go to: [www.3ware.com/support](http://www.3ware.com/support)

## Physical and Environmental Specifications

- Operating Temperature 0°C to 50°C
- Operating Humidity 10% to 90%
- Non-operating Temperature -55°C to 85°C
- Non-operating Humidity 10% to 90%
- Power Requirements 2.5W max. on +5V  
6.75 max. on +3.3V  
0.5 max. on -12V, +12V not used
- Dimensions 6.875" length x 3.875" height

## Compatibility

- For latest motherboard and hard drive compatibility listing go to: [www.3ware.com/products/compatibility](http://www.3ware.com/products/compatibility)

## Service and Support

- 3-year warranty on all Escalade products
- Support via the web at [www.3ware.com/support](http://www.3ware.com/support) or by phone at 877-AT-3ware, Monday through Friday, 8:00am to 5:00pm PST

## Accessories

Model	Description
CBL-SATA-39	39" (1m) Serial ATA Cable
CBL-P-SATA	Parallel-to-Serial Drive Converter



## Escalade 8500 Series Selection Guide

Model	8500-4	8500-8	8500-12
Drive Support	Up to 4 Serial ATA, or ATA/133/100	Up to 8 Serial ATA, or ATA/133/100	Up to 12 Serial ATA, or ATA/133/100
RAID Levels	0, 1, 10, 5, JBOD	0, 1, 10, 5, JBOD	0, 1, 10, 5, JBOD
Target Use	Desktops Video Editing Entry Servers	Workgroup Servers Video Servers Backup Servers Web Servers	Enterprise Servers External Storage Near-line Storage
Typical Applications	Video Editing Gaming Fault Tolerance	Web content, e-mail, Backup, Video-on-demand	Large-scale backup, NAS/SAN storage, Database, Video streaming

Note: Supports a combination of Serial and Parallel drives simultaneously using Parallel-to-Serial ATA Converter  
No support for ATA/66/33 Drives

