About.

SuperTrak® EX8350 Serial ATA 3Gb/s PCI-Express RAID Controller



High-Performance, Maximum Reliability SATA 3Gb/s RAID Solution

High Performance SATA 3Gb/s RAID Controller for **Servers and Storage Systems**

The SuperTrak EX8350 RAID controller is a cost-effective high-performance, high-capacity solution for internal storage systems. With support for SATA 3Gb/s drives and Promise's proven RAID engine, the SuperTrak EX8350 RAID controller is designed to meet the needs of disk-to-disk backup, NAS storage, security and surveillance, video editing, and near-line storage.



The SuperTrak EX8350 RAID controllers include advanced RAID features for greater data protection and management. Greater than 2 TB support allows for very large arrays in 64-bit platforms. An enhanced RAID platform with advanced features such as multiple logical drive support, media patrol™, read check table and bad sector remapping protects your storage investment. Equipped with the new web-based Promise Array Manager (WebPAM™) software, SuperTrak EX8350 is extremely easy to manage for both Windows and Linux environments through a browser-based graphical user interface.

SATA 3Gb/s Support

The SuperTrak EX8350 controller supports SATA 3Gb/s drives and conforms to Serial ATA II, Extensions to SATA 1.0 specification with Native Command Queuing and Disk Activity LED headers support. Command Queuing increases I/O performance by intelligently reordering data requests so that data can be accessed more quickly.

Supports PCI-Express for High Throughput

The SuperTrak EX8350 takes advantage of the high throughput performance of the PCI-Express host bus interconnect. Using the x 4 PCI-Express bus, the controller is capable of achieving throughput of up to IGB per second.

Intelligent RAID Architecture

The SuperTrak EX8350 delivers exceptional multi-drive performance by taking advantage of Intel's XScale 80333 I/O processor technology. It offers advanced RAID 6 technology for high level fault tolerance, allowing multiple simultaneous drive failures without downtime or data loss.

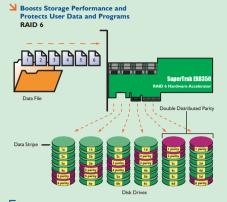


SuperTrak® EX8350 :: 8 Serial ATA 3Gb/s ports

- :: 8-Port Serial ATA (SATA) RAID controller with 3.0 Gb/s per port
- :: PCI-Express x 4 Host Bus Interface
- Support RAID levels 0, 1, 5, 6*, 10, and JBOD
- Linux open source driver support
- Online capacity expansion and RAID level migration to add capacity as needed
- Hardware- accelerated RAID 6 Capable for maximum reliability
- Intel IOP333 XScale I/O processor
- Multiple logical drive support
- Automatic/manual rebuild of hot spare drive
- PerfectRAID™ technology for robust error handling and recovery
- :: Battery backup module optional
 - * RAID 6 upgrade available in late 2005







Shares work among up to 6 drives (RAID 6) for huge storage capacity Dramatically increases read and write data transfer speeds. Calculates and distributes parity to protect data against drive failure.

Sophisticated Array Management Tools



Web-based Promise Array Management (WebPAM) software offers professional management tools in a simple-to-use, straightforward format. Array configurations, management and monitoring features are available via the web based interface. Moreover, the SuperTrak EX family supports industry standard SNMP so third party management application integration is simplified.

The Leader in SATA RAID

Promise Technology, Inc., recognized as the originator and worldwide leader of ATA RAID, has offered high-performance solutions for PC storage since 1988. Today the world's biggest OEMs and resellers look to Promise for ongoing innovations in ATA and SATA RAID design as the company continues to lead with the most powerful and economical alternatives to traditional RAID controllers and subsystems.

www.promise.com

Specifications

Controller Specifications

- Eight SATA ports at 3.0Gb/s (300MB/sec)
- Storage capacity up to 16.0 terabytes (with eight 500GB drives x 4 controllers/ system)
- PCI-Express x 4 host bus interface
- Intel IOP333 XScale I/O processor (500 MHz)
- 128MB DDR ECC on-board controller cache
- · Battery back-up module option
- · Four controller support within a system
- Low profile form factor ideal for IU/2U server
- Combine with the SuperSwap 4100 for an advanced internal storage system

RAID Levels Supported

- RAID 0 Data striped across 2-8 drives for increased performance but no data protection
- RAID I Mirrored pairs of drives for data protection with increased read performance
- RAID 5 Striped parity on 3-8 drives, ultimate data protection, capacity and performance balance
- RAID 6 Double parity for maximum data protection; allow multiple simultaneous drive failures without downtime or data loss (RAID 6 upgrade available in late 2005)
- RAID 10 Data mirrored then striped across up to eight drives, for double drive failure protection
- JBOD Just a Bunch Of Drives: independent connected drives with no RAID interconnection

RAID Fault Tolerance and Robustness Features

- Multiple logical drive support enables combining different RAID levels on one set of disks
- · Read Check table to avoid data read errors
- Online capacity expansion and RAID level migration to add capacity "on the fly" as needed
- PerfectRAID[™] technology for error handling and recovery of fatal, media and disk errors
- Support hot swap of failed drives and hot spares
- · Automatic/manual rebuild of hot spare drive
- · Background initialization for instant drive availability
- Supports bad sector remapping
- Variable stripe block size support to meet various application requirements
- Synchronization can be scheduled periodically for RAID array data consistency

Advanced Performance Features

- Multiple caching policy support:
- $\boldsymbol{\cdot}$ Packet commands and interrupt coalescing minimize interrupts for better performance
- Elevator seek streamlines commands based upon data location on the disk

Web-based Promise Array Manager

- Creates, deletes, expands, and converts disk arrays remotely
- Array synchronization and rebuild scheduling
- Monitors drive, array, and enclosure status and provides online event logging
- $\bullet \ \text{E-mail notification of drive, array, controller or enclosure events (e.g. error or degrade conditions)}\\$

Operating Systems*

- Microsoft Windows 2000/XP/2003
- Red Hat Linux, SuSE Linux, Linux open source driver

Platform Support

- Intel IA32, EM64T, and AMD64
- Single and dual CPU servers

SuperBuild™ BIOS

- Array configuration utility at the BIOS level
- BIOS Boot Specification support: boot system from any array
- · Flash-upgradeable BIOS for future upgrades

Cable in Kit

• 8 x 39" (1000mm) serial ATA cables

Physical Dimension

• 6.6" x 2.71" (167.65 x 68.9 mm)

Limited Warranty 3 Years

* Check www.promise.com for latest operating system drivers
© 2005 Promise Technology, Inc. Specifications subject to change without notice.

P/N: G6130S835000000-I

:: Promise USA

Milpitas, CA Tel: 408-228-1400

:: Promise EMEA

Eindhoven, The Netherlands Tel: 31-40-235-2600 E-mail: sales@promise-emea.cor

:: Promise Germany

Dortmund, Germany Tel: 49(0)-23-1/56-76-48-0 E-mail: sales-de@promise-emea.com

:: Promise Italy

Roma, Italy Tel: 0039-06-3671-2626 E-mail: sales-it@promise-emea.com

:: Promise Taiwan

Hsin-Chu, Taiwan Tel: 886-3-578-2395 E-mail: sales@promise.com.tw

:: Promise China

Beijing, China
Tel: 86-10-8857-8085 or 8095
E-mail: sales-china@promise.co

:: Promise Japan

Tokyo, Japan Tel: 81-03-5823-1021 E-mail: sales@promise.com.tw