FastTrak® TX2300 SATA RAID Adapter

FastTrak® TX2300
2-Port SATA RAID Adapter

Cost-effective RAID 0/1 controller with SATA 3Gb/s drive support for motherboards with a PCI interface

Cost-effective SATA RAID 0/1 PCI Adapter

The Promise FastTrak TX2300 2-port SATA RAID PCI adapter offers a low-cost solution for implementing a RAID 0 or RAID 1 storage system with up to two high-performance Serial ATA disk drives. Promise Technology is the leading provider of Serial ATA interface solutions, and with the FastTrak TX2300, users can benefit from Promise's experience in maximizing Serial ATA storage system performance.

Promise's Proven FastTrak RAID Engine

The FastTrak TX2300 leverages Promise's proven RAID 0/1 software engine for fast, efficient, and reliable RAID. Use RAID 0 for massive capacity and maximum performance or RAID 1 for data protection. Promise's RAID engine also offers performance enhancing technology like elevator seek and load balancing for efficient performance. And for maximum uptime, the FastTrak supports features like transparent data recovery and drive rebuilds performed in the background.

SATA 3Gb/s Support

The controller supports SATA 3Gb/s drives and conforms to *Serial ATA II, Extensions to SATA 1.0a* specification with Native Command Queuing and Disk Activity LED headers support. In addition to Native Command Queuing, the controller also supports Tagged Command Queuing with drives that can take advantage of this capability. Command Queuing increases I/O performance by intelligently reordering data requests so that the data can be more quickly accessed than if the commands weren't ordered.

Advanced HBA Features

The low-profile form factor FastTrak TX2300 PCI adapter incorporates many of Promise Technology's advanced host bus adapter features. The 66MHz PCI bus supports up to 266MB/sec burst data transfer rate. The FastTrak TX2300 also includes large LBA support for drives above 137GB, and its onboard BIOS automatically identifies and configures drive type.
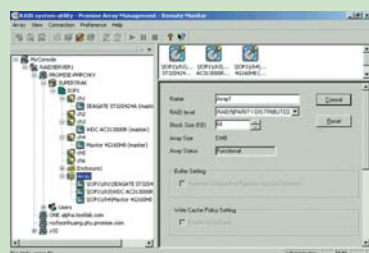
FastTrak® TX2300 highlights

- :: 2 Serial ATA 3Gb/s Ports for support of up to 2 drives
- :: RAID 0/1 and JBOD
- :: PCI 32-Bit / 66 MHz
- :: Native Command Queuing (NCQ)
- :: SATA Tagged Command Queuing (TCQ)
- :: Large LBA support for drives above 137GB
- :: Disk Activity LED Headers
- :: Combine with the SuperSwap 1100 for an advanced internal storage system

SERIAL ATA 3Gb/s

Performance Boost with
NCQ/TCQ Support

RoHS 2002/95/EC

Designed for Microsoft® Windows® XP

Designed for Microsoft® Windows® Server 2003

RAID Serial ATA

Sophisticated Array Monitoring Tools

Promise Array Management (PAM) software offers professional management tools in a simple-to-use, straightforward format. Array configurations, management and monitoring features are available via the windows based management and can be access locally or via the TCP/IP network remotely.

Easy Upgrade/Migration Path

The FastTrak TX2300 is designed to maximize flexibility throughout the life of the storage system. For non-RAID SATA users, the FastTrak TX2300 simplifies the transition to a RAID array. For a FastTrak TX2300 RAID user, the software supports online capacity expansion and RAID level migration. And as capacity and performance requirements grow, the FastTrak TX2300 supports MetaData on Disk, enabling easy migration to Promise external storage solutions.

The Leader in SATA RAID

Promise Technology, Inc., recognized as the originator and worldwide leader of ATA RAID since 1997, 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 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

Disk Array Features

Device Support	2 Serial ATA ports for up to 2 Serial ATA 3G devices
Supported RAID Levels	RAID 0 / 1 / JBOD RAID 0 – Data striped across 2 drives for increased performance RAID 1 – Mirrored pairs of drives for data protection
Data Transfer Rate	Up to 266 MB per second (Performance may vary depending upon drive make, motherboard and PCI bus speed)
RAID Features	Data handling optimizations include elevator seek and load balancing Supports hot-swap of failed drives Offers transparent data recovery and rebuilds drive in background Variable stripe size Online Capacity Expansion - add capacity on the fly RAID Level Migration - change array levels on the fly MetaData on Disk (MDD) for drive roaming
Easy to Use	Quick initialization Arrays are bootable with built-in BIOS Upgrades your current disk drive to a RAID array by migrating existing data to the array

System Management

Management Tools	PAM (Promise Array Management) local and remote monitoring for Windows — monitors status of arrays, hard drives, and controller via TCP/IP; warns of drive failure; allows rebuilds of mirrored arrays; synchronizes data in fault-tolerant arrays; email notification for array events; S.M.A.R.T.-compatible status reporting
Notification	Email, audible, and visible alarms
Operating System Support	Microsoft Windows XP, Windows 2003 Server, Windows 2000 RedHat Linux; SuSE Linux Linux partial open source code

Hardware

Serial ATA 3G Support	Supports Serial ATA II: 3Gbps Specification
	Supports Serial ATA II: Extensions to Serial ATA 1.0a, including
	  –Native Command Queuing
	  –Staggered Drive Spin-Up
	  –HDD Activity Indication
	Supports serial ATA Spec 1.0a
	Supports Serial ATA tagged command queuing (TCQ)

PCI Support	32-bit / 66MHz PCI interface compliant to PCI Rev 2.3 (Backward-compatible with PCI 33)
HBA Features	Low-profile form factor (HW) 2.25 x 4.69 inches (57 x 119 mm) Flash upgradable for future updates Supports ACPI (S1, S3, S4)
Physical and Environmental	Operating temperature: 32 to 122°F (0 to 50°C) Relative humidity: 5%-95% non-condensing Up to 2 controllers in the same system are supported
Cables in kit	2 x 25" (650mm) Serial ATA Cables
Agency Certifications	UL, cUL, CE, FCC Class B, BSMI, MIC, C-Tick, VCCI
Limited Warranty	3 Years

* Check www.promise.com for latest operating system drivers