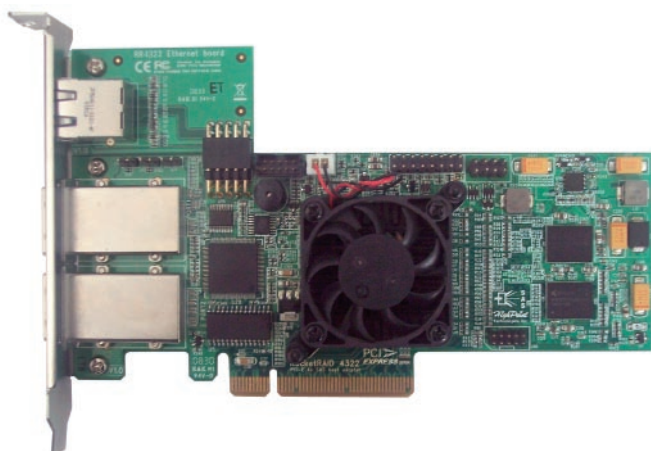# RocketRAID 4322

8 Channel PCI-Express x8 IOP Based SAS RAID Controller

Host Adapter Architecture

- TerabyteStream™ for Blazing Performance
- Intel IOP 81348(1.2GHz)
- PCI-E x8 (Upward compatible with x16)
- 512 MB on-board DDR533 SDRAM with ECC protection
- 2 external mini-SAS
  Direct Connect up to 8 3Gb/s SAS or SATA Hard Drives
- 128 max hard drives via SAS expanders
- NVRAM for write journaling
- Battery Backup Unit (BBU) Optional
- RoHS compliant

Advance RAID Features

- Support RAID 0, 1,3, 5, 6,10,50 and JBOD
- Multiple RAID support
- Multiple Logical Drive Support
- BIOS booting support
- BIOS PnP and BBS (BIOS boot specification)support
- Write through and write back cache
- Online array roaming
- Online capacity expansion (OCE) and Online RAID level migration (ORLM)
- Quick and Background initialization for instant RAID configuration
- Automatic drive insertion / removal detection and rebuild
- 64bit LBA support greater than 2TB per volume
- S.M.A.R.T(Early Warning System)
- Staggered Spinup with user selection in BIOS
- (MAID) spin down drives in array is idle

Array Monitors, Alerts and Indicators

- SMTP for email notification
- Alarm / Buzzer alerts for drive failure
- Hardware Monitor function
- SNMP for remote management
- Ethernet port for (OBM) Out of Bound Management
- NTP (Network Time Protocol)
- Intelli-VRM. (Intelligent Virtual RAID Management)

RAID Management

- TerabyteSaver™ and TerabyteGuard™ for Data Protection and Reliability
- API library for customizing AP
- Command Line Interface (CLI)
- Web browser-base RAID management software
- Disk scrubbing to prevent degraded RAID arrays
- Bad sector repair and re-mapping to reduce dropped drives
- SHI (Storage Health Inspector – Drive analysis from S.M.A.R.T)

Operating System Support

- Windows 2000/XP/Server 2003
- Linux (RedHat, SuSE, Debian, CentOS, etc.)
- FreeBSD
- Mac OS X

RocketRAID 4322

8 Channel PCI-Epress x8 IOP Based SAS RAID Controller

The RocketRAID 4322 Host Adapter

The HighPoint RocketRAID 4322 is the world's fastest external SAS RAID controller utilizing Intel IOP348 1.2GHz processor. The RocketRAID 4322 is the latest product in storage technology, leveraging the storage performance in SAS and SATA II supporting the fastest available throughput while supporting enterprise level features such as Native Command Queuing (NCQ)

HighPoint RAID Management

HighPoint RAID Management software offers a user friendly interface to create, manage and maintain your storage solutions. Email notification and remote are some of the advance features that the RAID Management software has to offer.

Intel 80348 I/O Processor and SDRAM

The RocketRAID 4322 SAS RAID Controller has an integrated Intel I/O processor for hardware RAID parity calculations. With the new I/O processor the system CPU is free to perform other important tasks. There is also up to 512MB DDR533 SDRAM with ECC protection on the RocketRAID 4322 SAS RAID Controller for improved performance.

COMPREHENSIVE OS SUPPORT

HighPoint offers the broadest range of support for all major operating systems to ensure OS and hardware server compatibility. Drivers are available for all major operating systems, including Windows , Linux, Mac OS X and FreeBSD. GPL Licensed Linux drivers into main Linux kernel help customers easily install and configure the RocketRAID 4322.

PHYSICAL SPECIFICATIONS

Size: (163.0mm x 68.0mm) 6.42"L x 2.68"W

EMI : FCC Part 15 Class B and CE

Thermal and Atmospheric Characteristics:

Work Temperature Range :   +5°C ~+ 55°C
Relative Humidity Range :   5% ~ 60% non condensing
Storage Temperature :   ~20 ~ 80°C

MTBF: 920,585 Hours

PCI-E	3.3V	12V
Power	3W max	15W max

RocketRAID 4322 Specification

Host Side Interface	PCI-E x8 (Upward compatible with x16)
Device Interface	SAS/SATA ((II/I)
Number of Channels	8 SAS/SATA ((II/I) channels
Supported RAID Levels	RAID 0, 1,3, 5, 6,10,50 and JBOD
Operating Systems Support	Windows 2000/XP/Server 2003 Linux (RedHat, SuSE, Debian,CentOS, etc.) FreeBSD Mac OS X (no_bootable)
RAID Management Tool	BIOS Web based RAIDManagement Software and CLI
Some Highlighted Features	Hot swap/hot spare 64bit LBA for over 2TB partition support SMART hard drive monitoring SMTP support for email notification OCE/ORLM Automatic RAID Rebuild Online Array Roaming