



## RocketRAID 4500 Series

HighPoint 6Gb/s SAS/SATA Hardware RAID HBA's for PC & Mac Platforms

### *Delivers Superior Reliability and Maximum Performance*

#### HighPoint 6Gb/s SAS Hardware RAID Solutions

HighPoint RocketRAID 4500 HBA's were designed for professional Mac/PC workstation environments and deliver the stability and sustained performance required by 3D or 4K Media Applications. These PCIe x8 2.0, 6Gb/SAS/SATA 8-Channel RAID HBA's support hardware RAID 0, 1, 5, 6, 10 and JBOD configurations. The low-profile form factor allows the HBA to be easily installed into a wide selection of server and workstation chassis.

#### Superior Reliability

RocketRAID 4500 series HBA's provide an unprecedented level of reliability with an extensive selection of security, recovery, and maintenance features. The optional battery backup unit improves recovery times and secures valuable data for up to 72 hours in the event of a power outage or severe non-storage related hardware failure.

HighPoint's innovative RAID Recovery tool protects storage configurations by securely storing multiple copies of RAID meta-data, which administrators can utilize to quickly restore a failed or disabled RAID array.

#### HighPoint DV Mode - Advanced Performance Assurance Technology

Video professionals may find that even hardware RAID-based storage systems will experience inconsistent

performance when capturing or editing high quality digital video, which can greatly impede or even cripple the post-production process. These inconsistencies are caused by standard RAID caching algorithms, which are designed for server environments rather than media applications. HighPoint has introduced DVMode, an innovative caching algorithm designed for the video production applications. DVMode reorganizes I/O in order to minimize the latency time of write-back caching workflow. This innovative new technology maintains consistent, sustained high-performance data transfer – a key component of any storage system dedicated to post production applications.

#### Hybrid Storage Configurations

Today's storage applications need solutions that are versatile enough to support more than one type of storage application. The RocketRAID 4522 does not restrict media selection to hard disk drives; this "Hybrid" approach to storage connectivity accommodates both SAS/SATA hard drives, SAS/SATA SSD's, and LTO Tape device configurations across a variety of platforms.

#### Comprehensive RAID & Storage Management Interface

The streamlined web-based user interface simplifies the storage configuration process and allows customers to quickly assess total available capacity, the status of individual hard drives or SSD's, and the health of RAID and JBOD

#### Feature Highlights

- Hardware RAID 0, 1, 5, 6, 10, 50 & JBOD
- Superior Reliability
- Hybrid Storage Configurations: LTO Tape and RAID Array support
- DVMode Performance Assurance Technology
- True Host-to-Target SAS 6Gb/s Connectivity
- Support Windows, Linux, FreeBSD and Mac OS X Operating System
- Thunderbolt™ Aware
- Bootable RAID Array Support
- Supports OCE / ORLM
- 4Kn Drive Compatible

configurations. Optional auto rebuild and hot spare features add additional layers of data security to redundant RAID 5 and 6 configurations. Administrators can designate unused drives to automatically take the place of failed units or configure the RocketRAID 4500 HBA to immediately initialize rebuild process by simply plugging in a new drive.

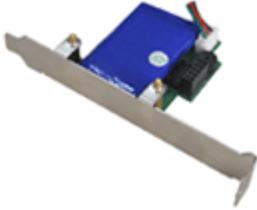
Advanced management features allow customers to manage storage remotely via an internet connection or local network, and configure Email notification to inform one or more users of changing storage conditions while outside of the work environment. In addition, optional CLI packages are available for Linux and FreeBSD platforms.

RocketRAID 4500 Series Technical Specifications	
<b>I/O Processor</b>	6Gb/s RAID-on-Chip
<b>Cache Memory</b>	512MB DDR 3 Cache memory with ECC protection
<b>Battery Backup Unit</b>	Optional Battery Backup Module (HPTBBU-05)
<b>Data Transfer Rate</b>	Up to 6Gb/s per port
<b>Number Of Device Ports</b>	8 6Gb/s SAS & SATA ports
<b>Host Bus Interface</b>	PCI Express 2.0 x8
<b>Device Connector Type</b>	Dual Mini-SAS connectors
<b>Onboard Indicators /Monitor</b>	Alarm Buzzer
<b>Device Supported</b>	Up to 128 SATA / SAS drives via SAS Expander, LTO Tape Drives (RocketRAID 4522)
<b>Backward Compatibility</b>	Backward Compatible with HighPoint RAID HBA
<b>Physical Form Factor</b>	Low Profile
<b>Dimensions</b>	6.57" L x 2.68" H x 0.06" W

RAID Features Suite	
RAID 0, 1, 5, 6, 10, 50, JBOD	
Redundant RAID Configuration for Array availability	
RAID Initialization Types - Background, Foreground and Quick	
Native Command Queuing (NCQ)	
Staggered Drive Spin Up	
Spin Down Idle Disk	
Enhanced data protection with Write Journaling feature	
NVRAM keeps tracks I/O transaction logs	
S.M.A.R.T Support	
Auto Rebuild on spare drive	
Hot-Plug and Hot-Swap support	
Larger than 3 TB drive support	
Bootable RAID Array support	
Write Back or Write Through Cache support	
DVMODE Performance Assurance Technology	
Bootable RAID Array Support	
Supports OCE / ORLM	
4Kn Drive Compatible	

<b>Configuration Management Suites :</b>	User friendly Browser-based Management Interface
	Easy to use BIOS configuration Tool
	Linux Command Line Interface (CLI) - Scriptable configuration tool
<b>Supported Storage Expansion Options :</b>	SAS Expander support, Thunderbolt™ Aware
<b>Monitoring and Management Support :</b>	SMTP, SGPIO, SES2, LED Status, Event Log
<b>Operating System Support :</b>	Windows Server 2013, 2012, 2008, 2007 / Windows 8.1, 8, 7, Vista, Major Linux Distributions (RHEL, CentOS, SLES, Fedora, Ubuntu and Linux Open Source Drivers), FreeBSD, Mac OS X 10.5.x and later (LTO support requires OS X 10.9.x and later)
<b>Operating Temperature :</b>	Work Temp: +5°C ~+ 55°C Storage Temp: -20°C ~ +80°C Relative Humidity: 5% ~ 60% non condensing
<b>Operating Voltage :</b>	12V/3.3V , Power: 11W
<b>MTBF ( Mean Time Before Failure) :</b>	920,585 Hours
<b>Certification Approval :</b>	FCC, CE

SAS 6Gb/s Hardware RAID HBAs	RocketRAID 4520	RocketRAID 4522
Product Image		
Host Bus Interface	PCI-Express 2.0 x8	PCI-Express 2.0 x8
Number of Device Ports	8 Internal Ports	8 External Ports
Form Factor	Low Profile	Low Profile
Cable Included	n/a	n/a
Retail Box Dimensions	13.38" L x 7.68" H x 2.76" W	13.38" L x 7.68" H x 2.76" W
Retail Box Weight	1.14 lbs.	1.35 lbs.
UPC Code	643653452019	643653452217

Accessories	HPTBBU-05
Product Image	
Description	HPTBBU-05 is a Battery Backup Unit designed for use with RocketRAID 4500 Series HBA's. Battery Backup Units grant additional layers of data protection in the case of critical system faults and hardware failures.
Data Protection	Provides up to 72 hours of data protection.
Indicators	Low-charge warning indicator and audible alarm
Charge Time	Fully charges within 24 hours (from complete discharge to full capacity).

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