



# RocketRAID 2700 Series PCI-E 2.0 x8/x16 6Gb/s SAS/SATA RAID HBA's



# The Industry's Most Cost-Effective, Comprehensive Selection of SAS/SATA 6Gb/s RAID HBA's

HighPoint RocketRAID 2700 HBA's are the most diverse, versatile and costeffective RAID HBA's available in today's marketplace. Powered by our industryproven RAID technology, industrystandard Mini-SAS connectivity with support for up to 32 devices and PCI-Express 2.0 x8 and x16 bus speeds, RocketRAID 2700 HBA's can be easily integrated into a variety of hardware and software platforms, and are ideal for cost-effective, high-density SMB applications.

# HighPoint RAID Technology

For over a decade, HighPoint has strived to take the cost and complexity out of RAID. HighPoint was the first to introduce affordable RAID 5 solutions to the storage marketplace, for both SMB and consumer applications. Our industry-proven Value-RAID technology keeps costs in check by fully utilizing available system resources in order to optimize data transfer and security, and supports a wide-range of storage configurations including RAID 0, 1, 5, 6, 10, 50 and JBOD.

# Wide Selection of RAID HBA Configurations

Powered by industry-standard Mini-SAS connectivity with support for up to 32 devices, and PCI-Express 2.0 x8 and x16 bus speeds, RocketRAID 2700 HBA's can be easily integrated into a variety of hardware and software platforms, and are ideal for cost-effective, high-density SMB applications.

## Complete, Flexible Upgrade Paths

RocketRAID 2700 HBA's are fully backwards compatible with SAS/SATA 3Gb/s devices, PCI-Express 1.0 and 2.0 motherboards, and are compliant with all major operating systems including Windows, Linux, FreeBSD & Mac OS X.

RAID arrays can be freely moved to any other RocketRAID 2700 HBA. Upgrading, scaling and expanding storage has never been easier.

## Comprehensive RAID & Storage Management Interface

The streamlined web-based user interface simplifies the storage configuration process and allows customers to quickly asses total available capacity, the status of individual hard drives or SSD's, and the health of storage 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 HBA to immediately initialize rebuild process by simply plugging in a new drive.

# Feature Highlights

- HighPoint Turbo RAID Technology: RAID 0, 1, 5, 6, 10, 50 JBOD
- Wide Selection of HBA RAID Configurations: 4-32 Ports
- Complete, Flexible Upgrade
  Paths
- Comprehensive RAID & Storage Management Interface

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 2700 PCIe x8 RAID Controllers Feature Specifications

RocketRAID 2700 PCIe x8 RAID Controllers Feature Spe	cifications
Port Type	RocketRAID 2720SGL - 2x SFF-8087 (Mini-SAS)      RocketRAID 2710 - 1x SFF-8087 (Mini-SAS)      RocketRAID 2722 - 2x SFF-8088 (Mini-SAS)      RocketRAID 2711 - 1x SFF-8088 (Mini-SAS)      RocketRAID 2721 - 1x SFF-8087 (Mini-SAS)      RocketRAID 2721 - 1x SFF-8087 (Mini-SAS)
Number of Channel / Port	RocketRAID 272x -8x 6Gb/s SAS/SATA Channels RocketRAID 271x -4x 6Gb/s SAS/SATA Channels
Number of Devices	RocketRAID 272x: 8x SAS /SATA Hard Drive or SSD / 2x SAS LTO devices RocketRAID 271x: 4x SAS /SATA Hard Drive or SSD / 1x SAS LTO devices
Bus Interface	PCIe 2.0 x8
Form Factor	Low Profile
Dimensions	RocketRAID 2720SGL/2710 -96.3mm*65mm / RocketRAID 2722/2711/2721 - 120mm*68mm
Weight	RocketRAID 2720SGL - 0.12lb RocketRAID 2710 - 0.11lb RocketRAID 2722 - 0.19lb RocketRAID 2711 - 0.18lb RocketRAID 2721 - 0.18lb
RAID Mode	0, 1, 5, 6(1), 10, 50 and JBOD / Non-RAID Mode
	Window Server 2008 and Window 7 and later
	Linux: RedHat Enterprise, Open SuSE, Fedora Core, Debian, Ubuntu
Operating System	FreeBSD
Operating System	Driver embedded into FreeBSD 9.0 and later
	Mac OS X 10.6 and later
	Driver embedded into Mac OS X 10.8 and later
Advanced RAID Features	
Flash ROM for Upgradeable BIOS	Yes
Storage Health Inspector	Yes
Redundant RAID Configurations	Yes
BIOS PnP (plug and play) and BBS (BIOS boot specification) support	Yes: RocketRAID 2720SGL, 2710
Bootable RAID Array	Yes
EFI for Mac Platform	Yes
Multiple RAID Partitions supported	Supports up to 4 RAID partition per disk
Storage Configurations Support Details	Direct Attached
Multiple RAID Adapters supported	Supports up to 4 RAID controllers per system
Online Array Roaming	Yes
Online RAID Level Migration (ORLM)	Yes
Online Capacity Expansion (OCE)	Yes
RAID Initialization Background/Foreground/Quick	Yes
Global Hot Spare Disk support	Yes
Automatic and configurable RAID Rebuilding Priority	Yes
Disk Format compatible: 512, 512e, 4Kn	Yes
Larger than 2 TB Drive and RAID Array support	Yes
Spin down Massive Arrays of Idle Disks support	Yes
Native Command Queuing	Yes
Staggered Drive Spin Up	Yes
Write Back and Write Through	Yes



## **RAID Monitoring and Management Suite**

RAID Monitoring and Management Suite	RAID Management Suites: BIOS/Firmware configuration tool Browser-Based management tool CLI (Command Line Interface- scriptable configuration tool) API package	
Enclosure Management Interface: SGPIO, SES-2 and I2C	Yes, except RocketRAID 2711,	
(Drive LEDs supported: SGPIO, SES-2 and LED Header)	RocketRAID 2722 only support via SES	
SMTP Email Alert Notification	Yes	
Alarm Buzzer	Yes	
Operating Environment		
Work Temp:	+5°C ~+ 55°C	
Storage Temp:	-20°C ~ +80°C	
Relative Humidity:	5% ~ 60% non condensing	
Operating Voltage:	PCI-e: 12V/3.3V Power: 11W	
MTBF (Mean Time Before Failure)	920,585 Hours	
Certification Approval	FCC, CE	

RocketRAID 2700 PCIe x8 RAID Controllers	RocketRAID 2720SGL	RocketRAID 2722	RocketRAID 2721
Product Image			
Host bus Interface	PCI-Express 2.0 x8	PCI-Express 2.0 x8	PCI-Express 2.0 x8
Number of Device Ports	8 Internal Ports	8 External Ports	4 Internal / 4 External Ports
Form Factor	Low Profile	Low Profile	Low Profile
Retail Box Dimensions	7.76" L x 6.81" W x 1.18" H	7.76" L x 6.81" W x 1.18" H	7.76" L x 6.81" W x 2.36" H
Retail Box Weight	0.41 lbs	0.49 lbs.	0.89 lbs.
UPC Code	643653272020	643653272211	643653272112
Kit Contents	1x controller card 1x Low Profile Bracket 1x Quick Installation Guide	1x controller card 1x Low Profile Bracket 1x Quick Installation Guide	1x controller card 1x SFF8087 to SFF8087 cable 1x Low Profile Bracket 1x Quick Installation Guide

RocketRAID 2700 PCIe x8 RAID Controllers	RocketRAID 2710	RocketRAID 2711
Product Image		
Host bus Interface	PCI-Express 2.0 x8	PCI-Express 2.0 x8
Number of Device Ports	4 Internal Ports	4 External Ports
Cable Included	One Mini-SAS Cable: SFF-8087 to SFF-8087	n/a
Retail Box Dimensions	7.76" L x 6.81" W x 2.36" H	7.76" L x 6.81" W x 1.18" H
Retail Box Weight	1.18 lbs.	0.48 lbs.
UPC Code	643653271016	643653271115
Kit Contents	1x controller card 1x SFF8087 to SFF8087 cable 1x Low Profile Bracket 1x Quick Installation Guide	1x controller card 1x Low Profile Bracket 1x Quick Installation Guide



RocketRAID 2700 PCIe x16 RAID Controllers	
	RocketRAID 2740 - 4x SFF-8087 (Mini-SAS)
Port Type	RocketRAID 2744 - 4x SFF-8088 (Mini-SAS)
	RocketRAID 2760A - 6x SFF-8087 (Mini-SAS)
	RocketRAID 2782 - 6x SFF-8087 & 2x SFF-8088 (Mini-SAS)
Number of Channel / Port	RocketRAID 274x -16x 6Gb/s SAS/SATA Channels RocketRAID 2760A -24x 6Gb/s SAS/SATA Channels
Number of Channel / Fort	RocketRAID 2782 -32x 6Gb/s SAS/SATA Channels
	RocketRAID 274x -16x SAS /SATA Hard Drive / SSD
Number of Devices	RocketRAID 2760A -24x SAS /SATA Hard Drive / SSD
	RocketRAID 2782 -32x SAS /SATA Hard Drive / SSD
Bus Interface	PCle 2.0 x16
Form Factor	RocketRAID 2740 -Low Profile / RocketRAID 2744/2760A/2872 -Full Height
	RR2740 -0.27lb
Dimensions	RR2744 -140mm*107mm RR2760A -198.0mm*111.0mm
	RR2782 -198.0mm*111.0mm
	RocketRAID 2740 -0.12lb
\//-:	RocketRAID 2744 -0.35lb
Weight	RocketRAID 2760A -0.47lb
	RocketRAID 2782 -0.58lb
RAID Mode	0, 1, 5, 10, 50 and JBOD / Non-RAID Mode
	Window Server 2008 and Window 7 and later
Operating System	Linux: RedHat Enterprise, Open SuSE, Fedora Core, Debian, Ubuntu FreeBSD
Operating System	Driver embedded into FreeBSD 9.0 and later
	Mac OS X 10.6 and later
Advanced RAID Features	
Flash ROM for Upgradeable BIOS	Yes
Storage Health Inspector	Yes
Redundant RAID Configurations	Yes
Multiple RAID Partitions supported	Supports up to 4 RAID partition per disk
Storage Configurations Support Details	Direct Attached
Multiple RAID Adapters supported	Supports up to 4 RAID controllers per system
Online Array Roaming	Yes
Online RAID Level Migration (ORLM)	Yes
Online Capacity Expansion (OCE)	Yes
RAID Initialization Background/Foreground/Quick	Yes
Global Hot Spare Disk support	Yes
Automatic and configurable RAID Rebuilding Priority	Yes
Disk Format compatible: 512, 512e, 4Kn	Yes
Larger than 2 TB Drive and RAID Array support	Yes
Spin down Massive Arrays of Idle Disks support	Yes
Native Command Queuing	Yes
Staggered Drive Spin Up	Yes



RAID Monitoring and Management Suite		
RAID Management Suites: BIOS/Firmware configuration tool Browser-Based management tool CLI (Command Line Interface- scriptable configuration tool) API package	Yes	
Enclosure Management Interface: SGPIO, SES-2 and I2C ( Drive LEDs supported: SGPIO, SES-2 and LED Header)	Yes, except RR2744 only supports via SES	
SMTP Email Alert Notification	Yes	
Alarm Buzzer	Yes	
Operating Environment		
Work Temp:	+5°C ~+ 55°C	
Storage Temp:	-20°C ~ +80°C	
Relative Humidity:	5% ~ 60% non condensing	
Operating Voltage:	RR2740/2744 -PCI-e: 12V/3.3V Power: 11W RR2760A -PCI-e: 12V/3.3V Power: 40W RR2782 -PCI-e: 12V/3.3V Power:45W	
MTBF (Mean Time Before Failure)	920,585 Hours	
Certification Approval	FCC, CE	

RocketRAID 2700 PCIe x16 RAID Controllers	RocketRAID 2740	RocketRAID 2744	RocketRAID 2760A
Product Image			
Host Bus Interface	PCI-Express 2.0 x16	PCI-Express 2.0 x16	PCI-Express 2.0 x16
Number of Device Ports	16 External Ports	16 External Ports	24 Internal Ports
Retail Box Dimensions	13.38″L x 7.67″ W x 2.75″ H	13.38"L x 7.67" W x 2.75" H	13.38"L x 7.67" W x 2.75" H
Retail Box Weight	1.20 lbs	1.22 lbs	1.43 lbs
UPC Code	643653274000	643653274413	643653276028
Kit Contents	1x controller card 1x Low Profile Bracket 1x Quick Installation Guide	1x controller card 1x Quick Installation Guide	1x controller card 1x Quick Installation Guide

RocketRAID 2700 PCIe x16 RAID Controllers	RocketRAID 2782
Product Image	
Host Bus Interface	PCI-Express 2.0 x16
Number of Device Ports	24 Internal / 8 External Ports
Retail Box Dimensions	7.75″L x 6.81″ W x 2.75″ H
Retail Box Weight	1.48 lbs
UPC Code	643653278213
Kit Contents	1x controller card 1x Low Profile Bracket 1x Quick Installation Guide



Optional Accessories	
	<b>INT-MS-1MEJ</b> - Internal Mini-SAS (SFF-8087) to SATA Cable. Each cable supports up to 4 drives via industry standard SATA connectors.
	<b>EXT-MS-1MMS</b> - The Ext-MS-1MMS is a high-speed cable that supports a data bandwidth up to 4x 6Gb/s between the RocketRAID controller installed in the host system, and the drive enclosure via SFF-8088 ports. Each cable can connect up to 4x Hard Drives or SSDs.
	<b>RocketStor 6414S</b> - The RocketStor 6414S is a 4-Bay JBOD enclosure designed for use with the RocketRAID 2700 series external port RAID HBA's to house up to 4x 2.5" or 3.5" Hard Drives or SSDs.
	<b>RocketStor 6418S</b> - The RocketStor 6418S is an 8-Bay JBOD enclosure designed for use with the RocketRAID 2722, 2744 and 2782 to house up to 8x 2.5" or 3.5" Hard Drives or SSDs.

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