



RocketRAID 600L Series

2 and 4-Channel SATA 6Gb/s PCI-Express 2.0 RAID HBAs

Best Cost/Performance SATA 6Gb/s RAID 0, 1, 5, & 10 Solutions

Introducing the RocketRAID 600L Series: HighPoint's Second Generation 6Gb/s RAID HBA's

HighPoint's RocketRAID 600L Series HBA's are the industry's most affordable, high-performance SATA 6Gb/s RAID HBAs, and are ideal for PC based workstation and server applications that require a secure, cost-effective, mass storage solution.

Universal PCI-Express 2.0 Host Interface

RocketRAID 600L series controllers to be easily installed into any PCIe 2.0, 3.0 and 4.0 host platform with a free PCIe x4 slot. The universal PCIe 2.0 host interface is capable of delivering up to 1000MB/s of transfer performance; ideal for configurations of 2 to 4 NAS/RAID class SATA 6Gb/s hard disk drives.

Industry proven RAID Technology & Management Suite

RocketRAID 600L series controllers are powered by our industry-proven SATA RAID stack, and one or more RAID arrays, non-RAID JBOD configurations and single drives. In addition, partition-based RAID capability enables RocketRAID 600L series controllers to host multiple arrays using the same set of drives.

Administrators can specify how much capacity should be assigned to an array during the creation process; any remaining space can be used to configure a separate array.

RocketRAID 600L series controllers utilize the latest iteration of our universal web-based and command line management suite. Advanced Management Features allow customers to fine tune arrays for specific projects, with options to specify block size, schedule routine automated maintenance sessions, and configure real-time warning with email notification.

SHI (Storage Health Inspector) allows administrators to instantly check the operating status of storage devices in real-time. SHI utilizes SMART technology to log and report the physical characteristics of each hard drive or SSD, such as temperature, voltage and disk related warnings or errors.

Online Array Roaming: RocketRAID 600L series controllers support Online Array Roaming. Customers can move an array created with the previous generation RocketRAID 620L (RR620) directly to the current RocketRAID 620L (RR620L) controller. The array will remain intact and accessible, even if the drives are moved to different ports.




Feature Highlights

- **PCI-Express 2.0 Host Interface (upwards compatible with PCIe 3.0 & 4.0 platforms)**
- **Up to 4 SATA Ports**
- **RAID 0, 1, 5, 10 & JBOD**
- **Supports Windows, Linux & Mac platforms**
- **Supports Bootable and Data-only storage configurations**

Intelligent 1-Click Self-Diagnostic Solution: HighPoint's Web-based graphical management suite (WebGUI) now includes a host of automated diagnostic tools designed to streamline the troubleshooting process, even for novice administrators. Customers no longer have to manually assemble a collection of screenshots, logs and status reports when submitting support inquiries. 1-click enables the interface to gather all necessary hardware, software and storage configuration data and compile it into a single file, which can be transmitted directly to our FAE Team via our Online Support Portal.

Hardware Features	RR620L	RR640L	RR642L
Port Type	2x SATA	4x SATA	2x SATA / 2x eSATA
Number of Channels / Ports	2x 6Gb/s SATA Channels	4x 6Gb/s SATA Channels	4x 6Gb/s SATA Channels
Number of Devices	2x SATA Hard Drives* / SSDs	4x SATA Hard Drives* / SSDs	4x SATA Hard Drives* / SSDs
Host Interface	PCIe 2.0 x1	PCIe 2.0 x4 (x2 electrical)	PCIe 2.0 x4 (x2 electrical)
Form Factor	Low-profile	Low-profile	Low-profile
Controller Dimensions	2.83" L x 2.66" H x 0.30" D	3.12" L x 2.56" H x 0.28" D	3.12" L x 2.64" W x 0.30" D
Weight (Retail Box)	0.40 lbs.	0.49 lbs.	0.56 lbs.
RAID Mode	0, 1, JBOD/ Non-RAID Mode	0, 1, 5, 10, 50, JBOD / Non-RAID Mode	
Operating System Support			
Windows	Windows 11, 10, 8.1, 7 Windows Server 2022, 2019, 2016, 2012, 2008	Windows 7 and later / Windows Server 2008 and later	
Linux	Kernel 3.10 and later (RedHat/ Ubuntu /Debian/ Fedora)	Linux Kernel 2.6.35 and later	
macOS	n/a	Driver embedded into macOS 10.10 and later (only intel platforms)	
Advanced RAID Features			
Flash ROM for Upgradeable BIOS	Yes	Yes	Yes
Storage Health Inspector	Yes	Yes	Yes
Redundant RAID Configurations	Yes	Yes	Yes
BIOS PnP (plug and play) and BBS (BIOS boot specification) support	Yes	Yes	Yes
Bootable RAID Array	Yes	Yes	Yes
Multiple RAID Partitions supported	Yes	Yes	Yes
SATA connectivity support	Yes	Yes	Yes
Multiple RAID Adapters supported	Yes	Yes	Yes
Online Array Roaming	Yes	Yes	Yes
Online RAID Level Migration (ORLM)	Yes; Windows and Linux		
Online Capacity Expansion (OCE)	Yes; Windows and Linux		
RAID Initialization Background/Foreground/Quick	Yes	Yes	Yes
Global Hot Spare Disk support	No	No	No
Automatic and configurable RAID Rebuilding Priority	Yes	Yes	Yes
Disk Format compatible: 512, 512e	Yes	Yes	Yes
Larger than 2 TB Drive and RAID Array support	Yes	Yes	Yes
Spin down Massive Arrays of Idle Disks support	Yes	Yes	Yes
Native Command Queuing	Yes	Yes	Yes
Staggered Drive Spin Up	Yes	Yes	Yes
Write Back and Write Through	Yes	Yes	Yes
SSD Trim	No	No	No

*NAS/Enterprise class hard disks are required for RAID configurations

RAID Monitoring and Management Suite			
Management Suite	BIOS configuration tool, Browser-Based management tool, CLI (Command Line Interface- scriptable configuration tool), API package		
Enclosure Management Interface: I2C and LED Header	No	Yes	Yes
SMTP Email Alert Notification	Yes	Yes	Yes
Alarm Buzzer	Yes	Yes	Yes
Operating Environment	RR620L	RR640L	RR642L
Work Temp:	+5°C ~+ 55°C	+5°C ~+ 55°C	+5°C ~+ 55°C
Storage Temp:	-20°C ~ +80°C	-20°C ~ +80°C	-20°C ~ +80°C
Operating Voltage:	12V: 2.5W; 3.3V: 0.7W	12V: 2.5W; 3.3V: 0.7W	12V: 2.5W; 3.3V: 0.7W
MTBF	920,585 Hours	920,585 Hours	920,585 Hours
Kit Contents	RR620L	RR640L	RR642L
			
	1x RR620L Controller card	1x RR640L Controller card	1x RR642L Controller card
	2x SATA Cables	4x SATA Cables	2x SATA Cables
	1x Low Profile Bracket	1x Low Profile Bracket	1x Low Profile Bracket
	1x Quick Installation Guide	1x Quick Installation Guide	1x Quick Installation Guide

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