



RocketRAID 3700A Series

12Gb/s PCIe 3.0 x8 SAS/SATA RAID Host Bus Adapters



The Industry's most Price Competitive SAS 12Gb/s RAID Host Adapters! Customizable Solutions for Project Customers

RocketRAID 3700A series host bus adapters are the world's most price competitive 12G SAS/SATA RAID controllers, and deliver unprecedented end-to-end Generation 3.0 PCI Express transfer performance with Professional class RAID Storage reliability and management capabilities.

RocketRAID 3740A: Professional-Class SAS 12Gb/s RAID Solutions

RocketRAID 3700A series host bus adapters capitalize on HighPoint's two decades of RAID and storage technology to deliver professional grade RAID storage at a fraction of the cost of conventional host RAID solutions. Each adapter is powered by our industry proven RAID technology, superior Gen 3.0 PCIe express transfer bandwidth, and up to sixteen dedicated 12Gb/s SAS channels, which support robust, high-performance RAID 0, 1, 5 6, 10, 50 and JBOD configurations of SAS or SATA hard drives of any disk format, including 512, 512e and 4Kn.

RocketRAID 3700A series host bus adapters are designed to maximize the uptime and accessibility of RAID storage. RocketRAID storage and RAID recovery solutions enhance data retrieval from failed disks and streamline rebuild sessions.

The universal RocketRAID WebGUI interface provides a wide range of preemptive monitoring and maintenance features that enable administrators to easily schedule verification sessions to ensure the health of each RAID storage configuration.

Hybrid Storage Solution (HSS): SAS/SATA RAID Arrays + SAS LTO Tape Drives & Libraries

Today's storage applications need solutions that are versatile enough to support more than one type of storage application. RocketRAID 3700A adapters do not restrict media selection to hard disk drives; this "Hybrid" approach to storage connectivity accommodates both 12G and 6G SAS hard disks and SSD's, 6G SATA drives, and SAS LTO 5/6/7 Tape device and Library configurations across a variety of platforms.

Seamlessly Upgrade RAID Storage

RocketRAID 3700A adapters deliver an unprecedented level of flexibility when it comes to storage configurations. Customers are free to expand or convert RAID storage configurations as needed to keep on top of the evolving demands of the storage application, without sacrificing existing data. Online Capacity Expansion (OCE) allows administrators to add new drives to existing arrays in order to expand available capacity. Online RAID Level Migration (ORLM) allows administrators to convert one RAID level to another in order to tune storage configurations for maximum performance or data security.

Arrays created with RocketRAID 3700A series adapters are future-proof; Online RAID Roaming allows customers to move existing RAID arrays to other 3700A series RAID controllers, in addition to all future HighPoint RAID products.

Key Benefits

- Dedicated 12Gb/s Data Transfer Rate per channel
- Featured high-performance PCle 3.0 x8 host Interface
- Flexible SAS + SATA Array and Storage configurations:
 - SAS 12Gb/s Hard Drives & SSDs, backward compatible with SAS 6Gb/s drives
 - SATA 6Gb/s Hard Drives and SSDs
 - SAS LTO Tape Drive & Library Support
- Enables the Industry's most Cost-Effective RAID 5, 6 & 50 Storage Solutions
- Customizable Solution Services

Suggested Applications

- NAS
- Surveillance
- Web Servers and Storage Servers

Feature Highlights

- Up to 16 ports Internal and external 12Gb/s SAS+SATA Channel
- RAID 0,1,5,6,10,50, JBOD
- RocketRAID Data Recovery Solution increases chances of data retrieval from a failed drive.
- Maximizes RAID Array Accessibility
- Fast Array set up enables immediate Availability
- Robust RAID Monitoring and Management solution ready
- Supports a wide-spectrum of Operating System Platforms





Customized Solution Services for SMB Customers

HighPoint offers a range of Customized Solution services for SMB Customers. We can tailor RocketRAID 3700A host bus adapters to meet the requirements of client defined storage applications across Linux, Windows, Mac and FreeBSD platforms, and are ready to assist Solution Providers with unique product branding. A full API library is available for integration projects and we offer a variety of Enclosure Management services including SGPIO, SES-2 and I2C.

Multi-HBA Solution

HighPoint's multi-HBA (host bus adapter) Non-RAID solution software packages are available for all major operating system platforms including Windows, Linux, FreeBSD, and Mac OS X. The RocketRAID 3700 device driver enables up to four independent cards to work in unison, and effectively function as a single 64-channel 12G SAS host controller. This innovative approach to direct-attached mass storage connectivity allows customers to simplify the build process, streamline maintenance procedures, and provides dedicated SAS 12Gb/s point-to-point bandwidth for each connected device. The robust, versatile, device driver allows administrators to keep tabs on the operational status of each card and individual storage device via the RocketRAID 3700's intuitive web-based management interface.

Feature Specifications		
Bus Interface	8-lane, 8 GT/s PCI Express 3.0 Compliant	
Number of Channel / Port	16x 12Gb/s SAS / 6Gb/s SATA Channels	
Data Transfer Rates:	Up to 12Gb/s per port	
Port Type	Four SFF-8643 mini-SAS HD	
Storage Device Support	16x SAS /SATA Hard Drive / SSD / SAS LTO devices	
Form Factor	Low Profile	
RAID Level Support	0,1,5, 6 10,50 and JBOD / Non-RAID Mode	
	Note: RAID 6 not supported on Mac OS X	
Operating System Support	Window Server 2008 and Window 7 and later	
	Linux	
	FreeBSD	
	Mac	



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	
Bootable RAID Array		Yes	
EFI for Mac Platform		Yes	
Multiple RAID Partitions supported		Yes	
Pass-through support for SAS Tape and Tape Devices		Yes	
Storage Configurations		Direct Attached	
Multiple RAID Adapters supported		Support up to 4 RAID controllers per system	
Online Array Roaming		Yes	
Online RAID Level Migration (ORLM)		Yes	
Online Capacity Expansion (OCE)		Yes	
RAID Quick Initialization for fast array setup		Yes	
Drive hot-plug support		Yes	
Global Hot Spare Disk support		Yes	
Automatic and configurable RAID Rebuilding Priority		Yes	
Auto resume incomplete rebuilding after		Yes	
power on or reboot system		i co	
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	
SAS TCQ		Yes	
Disk media scan and repair		Yes	
Device Error Recovery support		Yes	
Automatic remap and fix drive bad block		Redundant RAID Levels (RAID1, 5, 6, 10, 50)	
for RAID array			
Staggered Drive Spin Up		Yes	
Write Back and Write Through		Yes	
RAID Monitoring and Management Suite			
RAID Management Suites:			
BIOS/Firmware configuration tool			
Browser-Based management tool		Yes	
CLI (Command Line Interface- scriptable configuration tool)			
API package			
Enclosure Management Interface: SGPIO, SES-2 and I2C		Yes	
(Drive LEDs supported: SGPIO, SES-2 and LED Head	uerj	Voc	
SMTP Email Alert Notification Alarm Buzzer		Yes	
Operating Environment		Yes	
Work Temp:	+5°C ~+ 55°C		
Storage Temp:	-20°C ~ +80°C		
Relative Humidity:	5% ~ 60% non condens	sing	
	PCI-e: 12V, 3.3V Powe	r: 14W	
Operating Voltage:	(12V 1A, 3.3V 0.5A)		
Operating Voltage: MTBF (Mean Time Before Failure)			



12Gb/s SAS/SATA RAID HBA	RocketRAID 3740A	
Product Image	Section 1764/1466 S	
Product Dimensions	5.97" x 2.68" x 0.06"	
Retail Box Dimensions	13.38" L x 7.68" H x	
Retail Box Weight	1.09 lbs	
UPC Code	643653374014	
Kit Contents	1x controller card 1x Low Profile Bracket 1x Quick Installation Guide	
Optional Accessories		
	8643-4SAS-1M - 1 Meter Cable length, SFF-8643 to Controller and 4x SFF-8482 to 4x SAS Drives	
	8643-4SATA-1M - 1 Meter Cable length, SFF-8643 to Controller and 4x SATA to 4x SATA Drives	

OEM Series

The following OEM Series RocketRAID 3700 Host Bus Adapters are available direct from HighPoint. For more information, please contact our Sales Department at sales@highpoint-tech.com.

OEM Series				
No. of Channels	Ports	Model		
8x SAS 12 Gb/s	2x Int. Mini-SAS HD	RocketRAID 3720A		
	2x Ext. Mini-SAS HD	RocketRAID 3722A		
16x SAS 12Gb/s	4x Ext. Mini-SAS HD	RocketRAID 3744A		

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