

Rocket 700L Series

8 & 16 Channel 12G SAS/ 6G SATA PCIe 3.0 HBAs

Streamlined SAS Connectivity Solutions for High-Density, Single HBA Storage Configurations

Introducing the Rocket 710L & 720L 12G SAS DAS PCIe AIC (add-in-card) HBAs

HighPoint Rocket 700L series 12G SAS connectivity AICs are the industry's most cost-effective SAS/SATA DAS (direct-attached storage) solutions. The compact, half-height PCIe 3.0 x8 AICs can be easily integrated into any industry standard x86 workstation or server platform with a PCIe 3.0/4.0/5.0 x8 or x16 slot, and are available with 8 or 16 dedicated device channels. Each of the industry-standard SFF-8643 ports can directly host up to 4 disks via a selection of certified cabling accessories.

OS RAID & Software Defined Storage Ready

Rocket 700L series HBAs are fully compatible with OS level RAID solutions and Software-Defined Storage Suites such as CEPH and Microsoft S2D. Hard disks hosted by Rocket 700L series HBAs will be recognized as independent, stand-alone drives, which can be formatted, partitioned and configured into software RAID arrays or JBOD/span configurations using the default Windows and Linux storage management interfaces.

Comprehensive Support for Linux & Windows Platforms

Rocket 700L series HBAs are compatible with all current Windows operating system and Linux distributions that utilize kernel v3.10 and later. Device drivers are routinely updated to ensure compatibility with official OS updates.

LACS (Linux Auto Compiling Solution): The administrator need only install the root open-source driver package for Rocket700L series AICs. Once installed, the driver will handle all future updates automatically. The LACS system will automatically check our secure online database for updates whenever the Linux platform is rebooted and recompile driver support as needed, without direct user intervention.

LACS was designed to ensure that the HighPoint product or solution remains operational after a new kernel is installed or when the distribution is updated/patched.

Comprehensive Storage Management & Monitoring Suite

Rocket 700L 12G SAS AICs are compatible with HighPoint's WebGUI and CLI Storage Management & Monitoring tools. These software utilities have been actively developed for and perfected over many years, and are available for Linux distributions and Windows operating systems. The utility suite provides administrators with full manual control over almost all aspects of the storage solution, from monitoring individual drives in real time, troubleshooting a storage configuration in an emergency situation, to configuring an automated maintenance schedule to proactively ward off the threat of downtime imposed by a potential hardware failure.

CLI (Command Line Interface): The HighPoint CLI (Command Line Interface) is ideal for seasoned administrators and platforms that do not utilize graphical operating systems. For many Linux veterans, it is the tool of choice, as it runs from a terminal window, is universal for any distribution, and does not require a graphical OS.

Feature Highlights

- Available with 2 & 4 SFF-8643 Ports and up to 16 dedicated 12G device channels
- PCIe 3.0 x8 host interface
- OS RAID & SDS Ready
- Comprehensive Windows & Linux driver support for both x86 & ARM Platforms
- Advanced, CLI and Web-based Monitoring & Management interfaces
- 1-Click Self-Diagnostic Solution for Troubleshooting & Technical Support
- Staggered Power Up Solution

WebGUI (Web-Based Graphical Management Interface): The WebGUI is an intuitive graphical user interface designed to work with all modern Web Browsers, and is the easiest interface to master. However, the WebGUI also has many advanced features that are essential for maintaining a successful storage configuration, including an event log with Email notification, automated maintenance scheduling, and our advanced S.M.A.R.T. toolset known as SHI (Storage Health Inspector).

SHI (Storage Health Inspector): SHI provides wealth of information about storage media, and enables administrators to instantly assess the temperature, endurance rating, and operational status of each hosted drive.

1-Click Self Diagnostic Logging Service: The WebGUI and CLI includes an automated diagnostic tool designed to streamline the troubleshooting process, even for novice administrators. The Diagnostic tab enables the interface to gather information about the corresponding hardware, software and storage configurations and compile it into a single file which can be submitted to our Support Department. Note, this software does not collect user-data (actual data stored to the storage devices), and poses no threat to security or privacy.

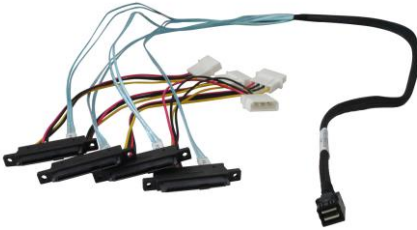

Staggered Power Up Solution

Hard disk drives require considerably more power during their initial spin-up phase. Powering on large numbers of disks simultaneously can place a great deal of strain on the platform’s PSU. To mitigate this problem, Rocket 700L series enable administrators to power-up groups of PUIS enabled hard disks at timed intervals; a feature known as Staggered Drive Spin-Up. This feature can be enabled or disabled by the administrator as needed, using the HighPoint Web-based (WebGUI) or CLI storage management interfaces.

HighPoint Certified Cable Accessories

We manufacture a selection of certified data cables for Rocket 700L series 12G SAS Connectivity AICs. HighPoint Certified Cable accessories are fully compliant with all current technology standards and have been rigorously tested with our Rocket/RocketRAID series controller cards to ensure maximum transfer performance, secure connectivity, and ease of integration.

As we cannot guarantee secure connectivity, stability or compatibility with unqualified third-party cable accessories or adapters, we recommend that only HighPoint Certified cables be used with our controller products.

Certified Cabling 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

Feature Specifications	Rocket 720L	Rocket 710L
Bus Interface	8-lane, 8 GT/s PCI Express 3.0 Compliant (PCIe 3.0 x8)	
Number of Channel / Port	16x 12Gb/s SAS / 6Gb/s SATA Channels 4x SFF-8643 Ports	8x 12Gb/s SAS / 6Gb/s SATA Channels 2x SFF-8643 Ports
No. of Devices	Up to 16 SAS/SATA HDD	Up to 8 SAS/SATA HDD
Bus Type	PCIe 3.0 x8	
Form Factor	Low-Profile	
Dimensions	5.51"W * 2.48"H * 0.67"D	
Weight	0.66 lbs.	
RAID Mode	Single disk	
Operating System Support <i>(Only supports 64-bit operating systems)</i>	<ul style="list-style-type: none"> Windows 11, 10 Windows Server 2022, 2019, 2016 Microsoft Hyper-V Linux (Supports Linux Driver Auto-Compile) Redhat/Ubuntu/Debian/Fedora/Proxmox/Rocky Linux (Kernel v3.10 and later) Arch Linux (Kernel v5.17.5 and later) 	
System Requirements	PC Platforms: PC Systems or Motherboard with an industry standard PCIe x8 or x16 physical Slot.	
Advanced Features		
Storage Health Inspector	Yes	
Storage Configurations Support Details	Direct Attached	
Drive hotplug support	Yes	
Disk Format compatible: 512, 512e, 4Kn	Yes	
Larger than 2 TB Drive support	Yes	
Spin down Massive Arrays of Idle Disks support	Yes	
Native Command Queuing	Yes	
SAS TCQ	Yes	
Disk media scan and repair	Yes	
Staggered Drive Spin Up	Yes	
Write Back and Write Through	Yes	
SSD TRIM Mode	Supported by Linux (not supported for Windows)	
Monitoring and Management Suite		
Management & Monitoring Interface	<ul style="list-style-type: none"> Browser-Based management CLI (Command Line Interface- scriptable configuration tool) API package 	
Enclosure Management Interface	SGPIO (Drive LEDs supported: SGPIO)	
SMTP Email Alert Notification	Yes	
Alarm Buzzer	Yes	
Compliance Certification	CE FCC RoHS REACH WEEE	

Feature Specifications	Rocket 720L	Rocket 710L
Operating Environment		
Work Temp:	+5°C ~+ 55°C	
Storage Temp:	-20°C ~ +80°C	
Operating Voltage	PCI-e: 12V/3.3V Power: 11W	
MTBF (Mean Time Before Failure)	920,585 Hours	
Kit Contents		
	1x Rocket 720L Controller card	1x Rocket 710L Controller card
	1x Quick Installation Guide	1x Quick Installation Guide
	1x Low-Profile bracket	1x Low-Profile bracket



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