



RocketAIC 7540HW

PCIe 4.0 x16 NVMe Expansion Drive Series

32TB

Fast, Ultra-Dense PCIe Gen4 x16 Storage Expansion Drives

RocketAIC 7000 Series NVMe Drives

If you are looking for a high-speed storage solution for a professional workstation environment, NVMe media is a must-have. NVMe's combination of performance and reliability in a compact package is simply too good to ignore. However, the process of selecting the right NVMe controller and SSD for the job and then hoping everything meshes well with your platform, can lead to major headache, and time-sink.

HighPoint takes the guess work out of NVMe storage technology. If you need the fastest, most reliable turnkey NVMe storage in today's marketplace, you need a RocketAIC NVMe expansion drive.

RocketAIC Drives employ industry-proven storage technology, precision engineered hardware architecture, and class-leading media from today's premier NVMe vendors to deliver the speed, endurance & reliability customers expect from a professional-grade storage solution. Designed for PC-based workstation platforms and performance-hungry applications, RocketAIC NVMe expansion drives leverage Broadcom's state of the art PCIe Gen4 switch technology and HighPoint's proven NVMe Hardware Cooling solutions to ensure each SSD delivers maximum throughput at all times.

RocketAIC 7540HW

HighPoint's high-density RocketAIC 7540HW series NVMe expansion drives are comprised of eight Samsung 990 PRO Series M.2 SSDs, pre-configured as a RAID 0 array. The full-length, single-width AIC RAID drive was designed for use with full-sized PC-based tower workstation platforms, and was engineered to accommodate professional workflows that demand massive storage capacity, maximum uptime, and uncompromised transfer throughput.

Broadcom Inside!

RocketAIC NVMe expansion drives incorporate Broadcom PCIe switch chipsets, to optimize signal integrity, reduce latency and maximize transfer throughput. an abundance of electrical lanes: 48 for the RocketAIC 7505HW.

The highly flexible, performance-focused hardware architecture is unique to our NVMe solutions and ensures bandwidth is never wasted. The RocketAIC 7540HW allocates a dedicated x16 lanes of upstream bandwidth, and x4 lanes of downstream bandwidth to each device. This combination delivers a massive 16 to 32TB of storage capacity and a blistering 28GB/s of transfer throughput via a single PCIe 4.0 x16 slot!

Powered by Samsung's Class-Leading 990 PRO Series M.2 SSDs

RocketAIC 7540HW series NVMe expansion drives are powered by Samsung's proven 990 PRO series M.2 SSDs, which deliver client class -leading I/O performance and reliability.

RocketAIC 7540HW drives deliver a potent combination of blazing transfer speeds and high-endurance reliability, and are equally suited for professional workflows and personal high-performance computing applications.

Your Choice: Maximum Transfer Speed & Capacity, Maximum Data Security, or the Best of Worlds!

RocketAIC NVMe expansion drives were designed to accommodate a wide-range of high-performance workflows, including AI learning and AV systems, content creation and post-production platforms, and high-speed data ingestion and media capture solutions.

RocketAIC drives are shipped pre-configured to maximize storage and capacity, but can be easily reconfigured using our quick and intuitive management suite.

Striping - This mode delivers Maximum Performance and capacity by linking multiple NVMe SSD's together to act as a single storage unit.

Mirroring - This mode creates a hidden duplicate of the target SSD, and is ideal for applications that require an extra layer of data security, including bootable volumes.

Security & Speed - This mode offers the best of both worlds. Two mirrored arrays are striped together to maximize performance with a layer of data redundancy.

Feature Highlights

- Dedicated PCIe Gen4 x16 Host Bandwidth delivers up to 28,000MB/s
- Powered by Samsung's Class-Leading 990 PRO Series SSDs
- Powerful, Low-Decibel NVMe Hyper Cooling Solution
- Up to 32TB of Storage Capacity
- Tuned for Maximum Performance & Capacity

PCIe-Gen4 Hyper-Cooling Solution

In order to optimize NVMe storage performance, you will need a reliable way to keep temperatures in check. RocketAIC NVMe expansion drives were designed to mitigate the threat of thermal throttling to excel in high-stress computing environments.

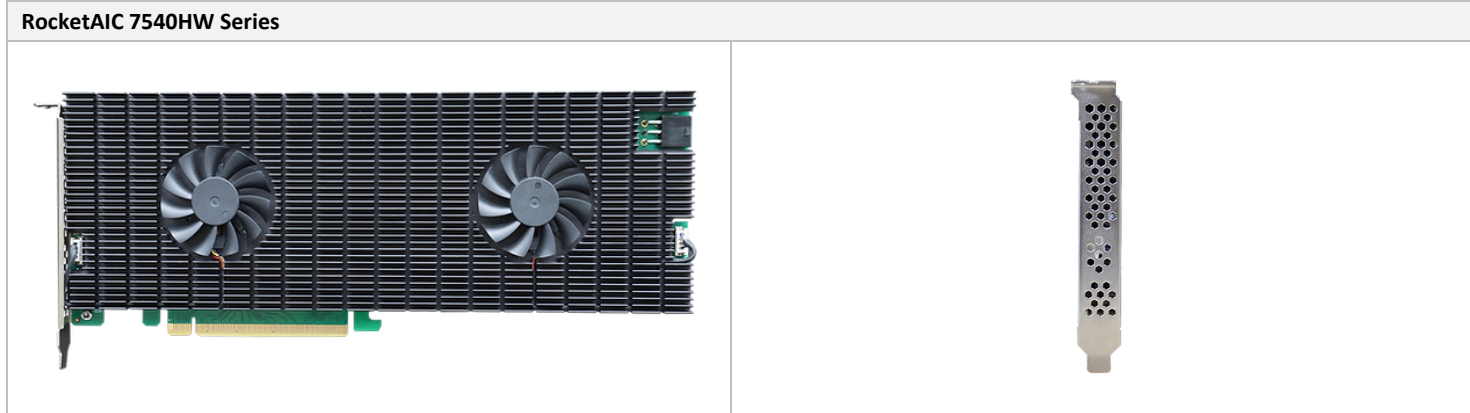
The proven PCIe Gen4 NVMe Hyper-Cooling solution was engineered to perform optimally in demanding workflows while generating minimal noise. The system leverages a full-length anodized aluminum heatsink with a powerful low-decibel cooling fan and high-efficiency thermal padding to rapidly transfers waste heat away from sensitive hardware and ensure the Samsung SSDs always perform optimally, even under maximum load.

Quick & Intuitive Management Suite

Though designed to work right out of the box, customers are free to install HighPoint's intuitive management software suite, which includes our SHI solution (Storage Health Inspector). SHI provides real-time temperature monitoring & endurance tracking. Quick, and easily mastered, the WebGUI can be used to manage, configure and monitor every aspect of your NVMe drive with a few simple clicks. Customers with advanced administrative skills may prefer the CLI, as it runs from a terminal window, is universal for any distribution, and does not require a graphical OS.

Product feature		
Bus Interface	PCI-Express 4.0 x16	
Number of Channel & Port Type	8x M.2 NVMe ports (Dedicated PCIe 4.0 x4 per port)	
Capacity	16 or 32TB	
Data Transfer Rate	16GT/s (up to 28,000 MB/s)	
Number of devices	8x M.2 NVMe SSD	
SSD Form Factor	2280	
External Power Support	Yes (Uses 6pin PCIe Power Connector)	
Form Factor	Full-Height, Full-Length, Single-Width	
Card Dimensions	11.18"(W) x 4.41"(H) x 0.94"(D)	
Card Weight	1.85 lbs.	
Warranty	3 Years	
	<table border="0"> <tr> <td>16TB Models: TBW(Total SSDs): 9600TB TBW(Single SSD): 1200TB</td> <td>32TB Models: TBW(Total SSDs): 19200TB TBW(Single SSD): 2400TB</td> </tr> </table>	16TB Models: TBW(Total SSDs): 9600TB TBW(Single SSD): 1200TB
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Cooling System	PCIe Gen4 Hyper-Cooling Solution	
SED	SafeStorage SED Solution	
Supported Systems		
OS (Only supports 64-bit OS)	Windows 11, 10 / Windows Server 2022, 2019, 2016 / Microsoft Hyper-V RHEL, Debian, Ubuntu, Fedora, Proxmox, Rocky Linux (Linux kernel 3.10 & later)	
System Requirements	PC Platforms: Any PC or Motherboard with an industry standard PCIe x16 physical Slot (Bifurcation is not required)	
Secure Boot	Yes (Windows)	
NVMe Configuration		
RAID Support	Single, RAID 0, 1, 10	
TRIM RAID Support	Single/RAID 0, 1, 10	
Storage Mode - NVMe		
Data RAID	Windows, Linux	
Boot RAID	Windows 10, Server 2016 & later / Linux RHEL, Rocky, CentOS, Ubuntu, Debian, Fedora	
NVMe RAID Management		
Management Suites	WebGUI (Browser-Based management tool)	
	CLI (Command Line Interface- scriptable configuration tool)	
	UEFI Tool & UEFI HII	
SMTP Email Alert Notification	Yes	
Alarm Buzzer	Yes	
Storage Health Inspector	Yes	
NVMe SMART status	Yes	
Automatic and configurable RAID Rebuilding Priority	Yes	
Auto resume incomplete rebuilding after power on or reboot system	Yes	
Single-RAID or Multi-RAID Arrays per Controller	Yes	
Cross-Sync RAID Solution Across Controllers	Yes	
Advanced RAID features		
Online Array Roaming	Yes	
RAID Quick Initialization for fast array setup	Yes	
Global Hot Spare Disk support	Yes	

Performance*		
SEQUENTIAL READ	28,093MB/s	
SEQUENTIAL WRITE	27,838MB/s	
Operating Environment		
Work Temp	+5°C ~ + 55°C	
Storage Temp	-20°C ~ +80°C	
Operating Voltage	PCI-e: 12V, 3.3V	
Power	RocketAIC 7540AW-A16T0-0E	RocketAIC 7540AW-A32T0-0F
	85.28W	86.08W
MTBF	1.5 million hours	
Kit Contents		
RocketAIC 7540AW-A16T0-0E	1x RA7540AW-A16T0-0E (includes 8 x Samsung 990 PRO 2TB M.2 NVMe SSDs)	
	1x QIG	
RocketAIC 7540AW-A32T0-0F	1x RA7540AW-A32T0-0F (includes 8 x Samsung 990 Pro 4TB M.2 NVMe SSDs)	
	1x QIG	



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