



RocketAIC 7540HW

PCIe 4.0 x16 NVMe Expansion Drive Series

Ultra-Speed PCIe Gen4 x16 Storage Expansion Drives

16TB

RocketAIC Series PCIe Expansion Storage Drives

If you are looking for a high-speed storage upgrade or expansion solution for a modern Server or Workstation platform, NVMe media is a must-have. The 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 determining if the combination is compatible with your computing platform is no easy matter.

Until now that is; HighPoint has taken the guess work out of NVMe storage technology! If you need the fastest, most reliable turnkey 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 media manufactures to deliver the speed, endurance & reliability customers expect from a professional-grade storage solution.

Designed for Factory-Built Server and Workstation Platforms

RocketAIC drives have been validated with a wide range of Dell and HP platforms. We have developed a series of Installation Guides to provide customers with clear, concise instructions for each supported workstation and server. Each guide examines the target system's PCIe configuration in detail to evaluate the performance potential, mechanical compatibility and power requirements of each available expansion slot, and provide a list of recommended RocketAIC PCIe Expansion Drives.

RocketAIC 7540HW

HighPoint's high-density RocketAIC 7540HW series NVMe expansion drives are comprised of eight Samsung 980 PRO 2TB M.2 SSDs, pre-configured to for maximum performance and storage capacity. The Full-Height, Full-length, single-width AIC 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, maximize transfer throughput and provide an abundance of electrical lanes. 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, and is capable of delivering 28GB/s of transfer throughput; the maximum possible from a single-slot PCIe Gen4 expansion drive!

Powered by Samsung's Class-Leading 980PRO M.2 SSDs

RocketAIC 7540HW series NVMe expansion drives are powered by Samsung's proven 980PRO 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.

Feature Highlights

- Dedicated PCIe Gen4 x16 Host Bandwidth delivers up to 28,000MB/s
- Powered by Samsung's Class-Leading 980PRO SSDs
- Powerful, Low-Decibel NVMe Hyper Cooling Solution
- Up to 16TB of Storage Capacity
- Tuned for Maximum Performance & Capacity

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

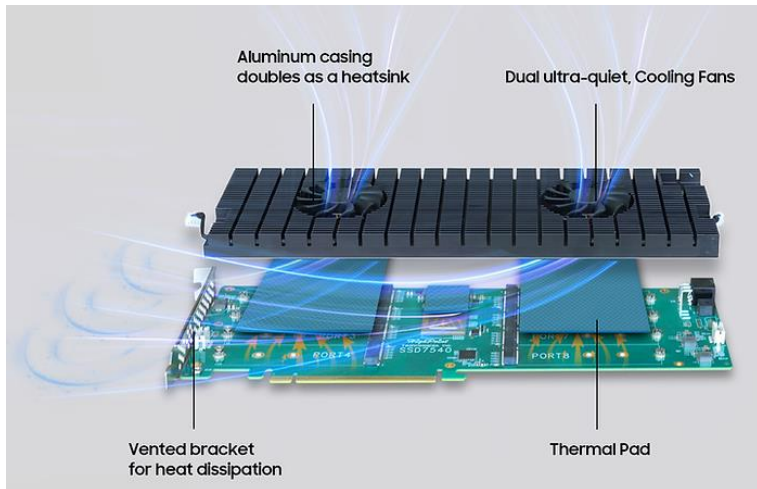
RocketAIC NVMe expansion drives were designed to accommodate a wide-range of high-performance workflows, including AI learning and AV systems, content creation and post-production platforms, and high-speed data ingestion and media capture solutions. RocketAIC drives are shipped pre-configured to maximize storage capacity and performance, but can be easily reconfigured using our quick and intuitive management suite.

Striping - This mode delivers Maximum Performance and capacity by linking multiple NVMe SSDs 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.

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 RocketAIC 7540HW's 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 980PRO SSDs always perform optimally, even under maximum load.

Quick & Intuitive Management Suite

Though RocketAIC series drives are designed to work right out of the box, customers are free to install HighPoint's intuitive WebGUI management software, which includes our SHI solution, and provides simple and quick real-time temperature monitoring and endurance tracking. Quick, and easily mastered, the WebGUI works with all modern web browsers and can be used to manage, configure and monitor every aspect of your RocketAIC NVMe drive with a few simple clicks.

Product feature	
Capacity	16TB
Performance*	Sequential Read (MB/s): 28093
	Sequential Write (MB/s): 27838
RAID Support	RAID 0, 1, 10, Single-Disk
TRIM RAID Support	RAID 0, 1, 10, Single-Disk
Number of Channel / Port	8
Port Type	M.2
Data Transfer Rate	16GT/s
Number of devices	8
SSD Form Factor	2280
Card Dimensions	11.18"(W) x 4.41"(H) x 0.94"(D)
Card Weight	1.85 lbs.
Warranty	3 Years
	TBW(Total SSDs): 9600TB TBW(Single SSD): 1200TB
Cooling System	PCIe Gen4 Hyper-Cooling Solution
SED	Yes
Fan Control	Yes (Windows)
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 and later)
System Requirements	PC Platforms: Refer to the compatibility list (Bifurcation is not required)
Secure Boot	Windows: Yes (need UEFI driver corresponding to Secure Boot) Linux: No
Storage Mode - NVMe	
Data RAID	Windows, Linux (Linux Driver can be installed via internet/network connection)
Boot RAID	Windows 11, 10 Windows Server 2022, 2019, 2016 Microsoft Hyper-V RHEL, Debian, Ubuntu, Fedora, Proxmox, Rocky Linux (Linux kernel 3.10 & later) (Linux Driver can be installed via internet/network connection)
NVMe Storage Management	
Management Suites	WebGUI (Browser-Based management tool)
	CLI (Command Line Interface- scriptable configuration tool)
	API package
	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
Flash ROM for Upgradeable UEFI	Yes
Bootable RAID Array	Yes
Multiple RAID Partitions supported	Yes
Global Hot Spare Disk support	Yes
Operating Environment	
Work Temp	+5°C ~ + 55°C
Storage Temp	-20°C ~ +80°C
Operating Voltage	PCI-e: 12V, 3.3V
Power	74.88W
MTBF	1.5 million hours
Certification / Approval	CE, FCC, RoHS, REACH, WEEE
Kit Contents	
RocketAIC 7540HW-A16T0-00	1x RA7540HW-A16T0-00 (includes 8x Samsung 980 PRO 2TB M.2 NVMe SSDs)
	1x QIG

* Windows OS, ASUS WS WRX80E, CrystalDiskMark 64

