



## RocketAIC 7140AW

PCIe 3.0 x16 NVMe Expansion Drive Series

**Ultra-Speed PCIe Gen3 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. 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 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 7140AW

HighPoint's high-density RocketAIC 7140AW series PCIe 3.0 NVMe expansion drives are comprised of eight Samsung 980 PRO M.2 SSDs, and are available with up to 16TB of storage capacity. The full-length, single-width AIC drive has been tested for compliance with a wide range of Dell and HP Server and Workstation platforms, and was designed to accommodate professional workflows that require a robust, high-density storage solution capable of delivering 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 7104AW allocates a dedicated x16 lanes of upstream bandwidth, and x4 lanes of downstream bandwidth to each device, and is capable of delivering 14GB/s of transfer throughput; the maximum possible from a single-slot PCIe Gen3 expansion drive!

### 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.

### Feature Highlights

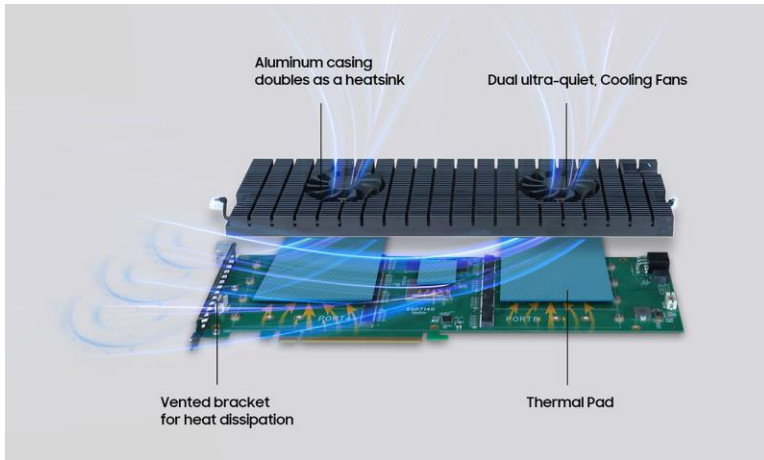
- Dedicated PCIe Gen3 x16 Host Bandwidth delivers up to 14,000MB/s
- Powered by Samsung's Class-Leading 980PRO SSDs
- Advanced NVMe Cooling Solution
- Up to 16TB of Storage Capacity
- Tuned for Maximum Performance & Capacity

**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.

### Advanced NVMe Cooling Solution



The RocketAIC 7104AW is equipped with HighPoint’s advanced High-Density NVMe cooling solution, which mitigates the risk of thermal throttling by ensuring each hosted SSDs consistently operates within their recommended temperature thresholds, even under sustained heavy I/O. The full-length anodized aluminum heat sink is equipped with a pair of ultra-durable, low-decibel cooling fans and high-conductivity thermal padding. This innovative, ultra-efficient cooling system rapidly transfers waste heat away from critical componentry, without introducing unwanted distraction into your work environment.

### 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	RA7140AW-A08T0-03	RA7140AW-A16T0-00
Capacity	8TB	16TB
Performance*	Sequential Read (MB/s): 14194	Sequential Read (MB/s): 14204
	Sequential Write (MB/s): 13566	Sequential Write (MB/s): 13391
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	8GT/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	3 Years
	TBW(Total SSDs): 4800TB TBW(Single SSD): 600TB	TBW(Total SSDs): 9600TB TBW(Single SSD): 1200TB
SED	No	
Fan Control	Yes (Windows)	
<b>Supported Systems</b>		
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: PC Systems or Motherboard with an industry standard PCIe x16 physical Slot (Bifurcation is not required), Refer to the compatibility list.	
Secure Boot	No	
<b>Storage Mode - NVMe</b>		
Data RAID	Windows, Linux (Linux Driver can be installed via internet/network connection)	
<b>NVMe Storage Management</b>		
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	
Global Hot Spare Disk support	Yes	
Flash ROM for Upgradeable UEFI	No	
Bootable RAID Array	No	
Operating Environment		
Work Temp	+5°C ~ + 55°C	
Storage Temp	-20°C ~ +80°C	
Operating Voltage	PCI-e: 12V, 3.3V	
Power	78.36W	64.76W
MTBF	1.5 million hours	
Certification / Approval	CE, FCC, RoHS, REACH, WEEE	
Kit Contents		
RocketAIC 7140AW-A08T0-03	1x RA7140AW-A08T0-03 (includes 8 x Samsung 980 Pro 1TB MZ-V8P1T0B M.2 NVMe)	
	1x QIG	
RocketAIC 7140AW-A16T0-00	1x RA7140AW-A16T0-00 (includes 8 x Samsung 980 Pro 2TB MZ-V8P2T0B M.2 NVMe)	
	1x QIG	

\* Windows OS, ASUS Maximus Z690 Hero, CrystalDiskMark 64

