



RocketAIC 7140AM

PCIe 3.0 x16 NVMe Expansion Drive Series

Ultra-Speed PCIe Gen3 x16 Storage Expansion Drives



RocketAIC Series PCIe Expansion Storage Drives

If you are in the market for a high-speed storage solution for your Mac Pro workstation, NVMe media's combination of performance, high-reliability and ultra-compact packaging is simply too good to ignore. However, the process of determining which NVMe controller and SSDs best addresses the needs of your application, and ensuring this combination can be readily integrated with your macOS/ Mac Pro environment, is no easy task.

Until now that is – HighPoint has launched a new series, NVMe storage drives for Apple's new M2 and 2019 Mac Pro platforms.

Designed for performance-hungry applications, RocketAIC Drives leverage Broadcom's state of the art PCIe Gen4 switch technology and HighPoint's proven NVMe Hardware architecture and advanced cooling solutions to ensure each SSD delivers maximum throughput at all times.

Designed & Fully Tested for Mac Pro workstation

RocketAIC series PCIe expansion drives were designed for high-productivity Mac Pro workstations and grueling workflows that demand maximum uptime and transfer throughput to ensure projects stay on schedule without compromising quality. The product line has been extensively tested with both 2023 and 2019 Mac Pro platforms to streamline the integration process and ensure full compatibility. We've evaluated the performance capabilities of each PCIe slot to identify which is the ideal match for each RocketAIC drive.

RocketAIC 7140AM

HighPoint's high-density RocketAIC 7140AM series PCIe 3.0 expansion drives are comprised of eight Samsung 980 PRO M.2 SSDs, and are designed to accommodate professional workflows that require a robust, high-density storage solution capable of delivering up to 14GB/s of transfer throughput. The full-length, single-width AIC drive is fully compatible with Apple's M2-Ultra 2023 Mac Pro Platform, and previous generation 2019 Mac Pro workstations, and is available with up to 16TB of robust, blazing fast NVMe storage.

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 7140AM 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 7140AM PCIe expansion drives are designed to accommodate a wide-range of high-density, high-performance workflows, including content creation and post-production platforms, high-speed data ingestion and media capture solutions, AI driven and ML workflows and scientific applications.

Feature Highlights

- Dedicated PCIe Gen3 x16 Host Bandwidth delivers up to 14,000MB/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

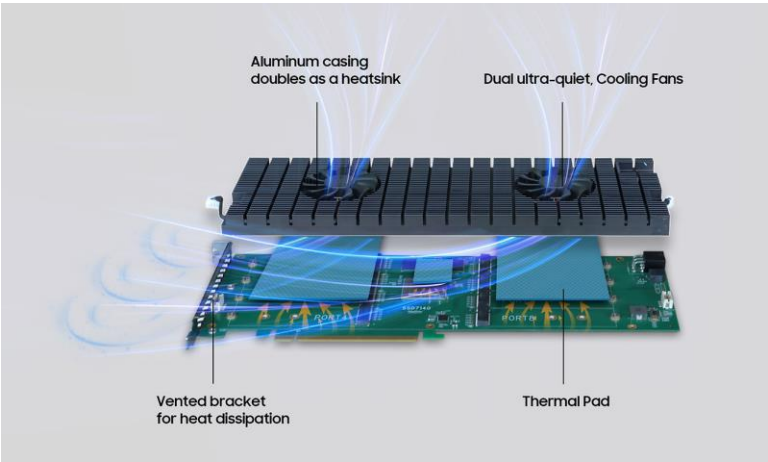
The RocketAIC 7140AM is shipped pre-configured to maximize storage capacity and performance, but can be easily reconfigured using our quick and intuitive management suite.

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.

Advanced NVMe Cooling Solution



The RocketAIC 7140AM 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	RA7140AM-A08T0-03	RA7140AM-A16T0-00
Capacity	8TB	16TB
Performance	Sequential Read (MB/s): 14070	Sequential Read (MB/s): 14110
	Sequential Write (MB/s): 13710	Sequential Write (MB/s): 13620
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	
Supported Systems		
OS (Only supports 64-bit OS)	macOS 10.13 ~ macOS Ventura 13.x	
System Requirements	Mac Platforms: Apple Mac Pro 2023 & 2019	
Secure Boot	No	
Storage Mode - NVMe		
Data RAID	Mac	
NVMe Storage Management		
Management Suites	WebGUI (Browser-Based management tool)	
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 7140AM-A08T0-03	1x RA7140AM-A08T0-03 (includes 8 x Samsung 980 Pro 1TB MZ-V8P1T0B M.2 NVMe)	
	1x QIG	
RocketAIC 7140AM-A16T0-00	1x RA7140AM-A16T0-00 (includes 8 x Samsung 980 Pro 2TB MZ-V8P2T0B M.2 NVMe)	
	1x QIG	

RocketAIC 7140A

