



## SSD7204 – 4x dedicated M.2 Ports to PCIe 3.0 x8 NVMe RAID Controller



### Industry's Best Cost/Performance NVMe RAID Controller for Mac, Linux & Windows

HighPoint's third-gen SSD7204 is the industry's best cost/performance 4-slot NVMe RAID storage. The dedicated PCIe 3.0 bandwidth can assign up to 4 lanes per NVMe SSD, and delivers over 7000 MB/s of transfer performance. Each SSD7204 controller benefits from our industry-leading NVMe RAID architecture, and can support RAID 0, 1, 1/0 and single disk configurations of to 4 M.2 NVMe SSD's. Comprehensive device driver support and installation guides are available for all major operating system platforms including Windows 10 and Server 2019, macOS 10.15 Catalina, and leading Linux distributions.

#### Third-Gen NVMe RAID Architecture

Our third-generation NVMe architecture utilizes a PCIe 3.0 x8 host interface to ensure broad compatibility with a wide range of hardware platforms; the SSD7204 can be easily installed into any industry standard PCIe 3.0 and 4.0 x8 or x16 slot. The full-length black-anodized heat sink provides superior heat dissipation for the hosted SSD's and critical controller components. This unique, fan-less design allows for completely silent operation – ideal for applications that require distraction free work environments.

#### Ideal for Distraction Free Working Environments

Low-noise environments are of critical importance for many media professionals. Minimizing distraction during prolonged editing sessions can dramatically improve productivity. The SSD7204's unique fan-less cooling system combined with NVMe storage media allows for completely silent operation. When installed into a well ventilated chassis, such as a 2019 Mac Pro, the SSD7204's full-length heat sink proved more than capable of dissipating waste heat from both the NVMe SSD's and controller chipset components.

#### Superior Compatibility

The third generation SSD7204 was designed for easy integration into commercially available desktops, workstations, and servers using off-the-shelf M.2 SSD's. It can be easily installed into any industry standard PCIe 3.0 x8 or x16 slot, and deliver maximum performance with only eight dedicated lanes. As with all members of the SSD7000 family, the SSD7204 has been extensively tested with a wide range of commercially available NVMe drives from all major manufacturers of any M.2 form factor (2242, 2260, 2280, 22110), including MLC, TLC & QLC models, in a variety of hardware environments.

#### Robust Linux Support

A dedicated team of engineers proactively monitors and updates support for all major Linux distributions to ensure the SSD7204 is compatible with the latest releases of CentOS, Ubuntu and Debian. Our innovative Auto-Compile feature was designed to streamline Linux installation and upgrade procedures, and eliminates the need for user intervention. Auto Compile is now embedded directly into our open-source driver packages. In addition, each driver release is accompanied by a comprehensive Installation Guide, which includes step-by-step setup walk-throughs, handy troubleshooting tips, and Technical Support resources.

#### Comprehensive Storage Management Suites - *Your Choice: We offer Graphical or Text-only interfaces*

When it comes to maintaining critical storage configurations, each customer has specific needs and preferences. Both management interfaces share universal layouts across all major operating systems, and can be administered locally or remotely via an internet connection.

#### Key Benefits

- Industry's Best Cost/Performance NVMe RAID solution for Mac, Linux & Windows
- RAID 0, 1, 1/0 and single disk
- **New** Zero-Noise Cooling Solution
- Flexible solution: compatible with PCIe x8 and 16 slots
- Dedicated PCIe 3.0 x8 bus bandwidth
- Up to PCIe 3.0 x4 bandwidth for each NVMe M.2 SSD

#### Suggested Applications

- Mac, Windows & Linux Workstations
- Noise-sensitive Media Applications

The Web RAID Management Interface (**WebGUI**) is a simple and intuitive web-based management tool and is ideal for customers who are new to RAID technology. The Wizard-like Quick Configuration menu allows even the most novice user to get everything up and running with a few simple clicks. Experienced users can fine tune configurations for specific applications using the Advanced Options menu.

The **CLI** (command line interface) is a powerful, text-only management interface designed for advanced users and professional administrators. The universal command lines work with any platform, and are shared across our entire product line. Comprehensive user guides are available for the CLI, and are included with the most recent product updates available from the SSD7204 Software Updates webpage.

Feature Specifications	
Bus Interface	PCI-Express 3.0 x8 (upwards compatible with PCIe 4.0)
Number of Channel / Port	4x M.2 NVMe port (Dedicated PCIe 3.0 x4 per port)
Data Transfer Rate	8GT per lane / 8Gbps per lane
Number of devices	4x M.2 NVMe SSD
SSD Form Factor	2242/2260/2280/22110
Controller Form Factor	Full-Height
Dimensions	7.68" (W) x 4.38" (H) x 0.73" (D)
Weight	1.34 lbs. (610g)
Operating System Support	Windows 10, Windows Server 2012 R2 or later, Linux Kernel 3.10 or later macOS 10.13 or later
Cooling	Full-length black anodized heat sink
NVMe Configuration	
RAID Support	Single, RAID 0, 1, 1/0
TRIM RAID Support	Single, RAID 0, 1, 1/0
Storage Mode - NVMe	Data RAID
NVMe RAID Management	
Management Suites	Browser-Based management tool
	CLI (Command Line Interface- scriptable configuration tool)
	API package
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	Yes
Single-RAID or Multi-RAID Arrays per Controller	Yes
Operating Environment	
Work Temp	+5°C ~ + 55°C
Storage Temp	-20°C ~ +80°C
Operating Voltage	PCI-e: 12V, 3.3V
Power	Typical: 8W
MTBF (Mean Time Before Failure)	920,585 Hours
Compliance Certification	CE, FCC, RoHS, REACH, WEEE
Kit Contents	1x SSD7204 RAID Controller
	1x Quick Installation Guide

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