SSD6200 Series Bootable NVMe RAID Host Controllers

2 & 4 M.2 Ports, PCIe Gen3 x8

Seamless, Driverless Experience

Driverless, Bootable NVMe RAID Solutions for Professional Applications, Industrial Solution Providers & VAR's

HighPoint SSD6200 series bootable NVMe host RAID controllers are built to tackle the demanding workflow and storage performance requirements of industrial workstation and server applications.

Wide Spectrum of Supported Operating Systems

Unprecedented NVMe Boot Capability: SSD6200 series controllers are natively supported by a wide range of VM and OS platforms, including Linux, Windows & VMware. RAID configurations will automatically be recognized as single volumes; no driver required!
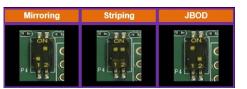
Simplicity Redefined

Configure arrays with the flip of a switch! No IT background? No problem! SSD6200 controllers are ideal for users of any skill level. Customers don't need to master a complicated RAID application to configure NVMe storage.

Optimizes Production Workflows:
One-Click RAID Creation enables Solution Providers and VAR's to optimize production workflows. The onboard RAID switch completely flattens the learning curve by eliminating the need for an interface or application. You don't even need an OS or input devices! Simply install the SSD's, plug in the card, power on the system and toggle the switch!

RAID Switch Settings:
Each controller features two hardware switches which can be used to configure one of 3 arrays modes (Mirroring, Striping and JBOD).

RAID Mode Selection

RAID Mirroring: Data Security Zero-Downtime Boot Solution!
RAID Mirroring creates a secure backup of you bootable drive. The hidden "mirror" will automatically take over if the original fails.

RAID Striping: Full-Speed Ahead!
Maximize Performance & Capacity; RAID Striping combines multiple NVMe SSD's to boost performance and capacity.

Blisteringly Fast

A single SSD6200 controller can deliver over 7000MB/s of transfer performance using off-the-shelf M.2 NVMe SSD of any capacity. The massive transfer bandwidth and versatility enable solution providers to deliver custom-tailored NVMe storage for a wide range of customer applications.

FIO (Ubuntu Linux)	RAID 0	RAID 1
2M-Seq-Read (MB/s)	7204	3616
2M-Seq-Write (MB/s)	6284	1727
4K-Rand-Read (IOPS)	149K	148K
4K-Rand-Write (IOPS)	125K	136K

Distraction-Free, Zero-Noise Cooling Solution

The SSD6204/6204A can operate in complete silence. The full-length black anodized aluminum heat sink and ventilated full-height bracket dissipate waste heat away from critical NVMe controller componentry and the M.2 NVMe SSD's without the aid of a cooling fan.

Intuitive & Streamlined Management Suite

To streamline the RAID creation and administration process, we have developed unique versions of our WebGUI and CLI management tools.

Key Benefits

- Wide Spectrum of Bootable OS Support
- Driverless NVMe RAID Solution
- UEFI, CLI & WebGUI RAID Configuration & Management
- SHI – Storage Health Inspector; Active SMART, temperature & TBW monitoring
- Half-Height & Full-Height form factors

The **WebGUI** is ideal for customers who are not accustomed to command line based management tools. Wizard-like quick configuration menus allow even the most novice user to get everything up and running with a few simple clicks.

The **CLI** (Command Line Interface) is ideal for experienced administrators and was designed for platforms that do not utilize graphical operating systems.

SHI (Storage Health Inspector)

Both interfaces include our SHI feature, which enables customers to monitor the health of NVMe SSD's via SMART attributes, in real-time, such as temperature, TBW (Total Bytes Written), and operational status.

Logical	Setting	Event	SHI

Storage Health Inspector(SHI)

Device Serial Number	RAID	°F	Total Bytes Written	S.M.A.R.T
7FE0070087104034542	None	89	138.89 TB	Detai
03F10707074404014589	None	89	138.63 TB	Detai
7F600070089D04033529	None	89	147.17 TB	Detai
6D110707069503992916	None	91	140.32 TB	Detai

The **UEFI Package** is a command line RAID creation tool used to prepare NVMe configurations for OS installation without the need for a separate OS or application.
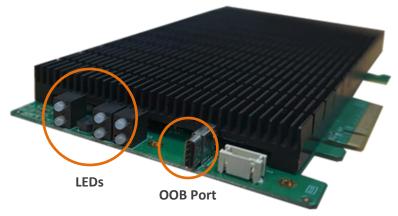
HighPoint
Technologies, Inc.

Wide Spectrum of Supported Operating Systems

SSD6200 series RAID controllers enable customers to seamlessly configure bootable RAID storage using up to 4 M.2 NVMe SSD's for leading Virtual Server platforms, such as VMware, Microsoft Hyper-V and Proxmox, and all current versions and distributions of Windows, Linux and FreeBSD operating systems.

OOB (out of band) RAID Management: The SSD6202A & SSD6204A controllers feature an OOB port and a built-in CLI (command line utility) which allows users to manage and monitor RAID storage using a separate system (such as a laptop). OOB is well suited to secure Data Center and Hosting applications, as it only grants access to the NVMe RAID console and configuration; it cannot interact with user data in any way.

Status LEDs – The SSD6202A & SSD6204A provide LED indicators which enable administrators to quickly determine the status of the NVMe SSDs, RAID array, and PCIe host connection.

LEDs

OOB Port

SSD620 Series Product Family

SSD6202A

SSD6202

SSD6204A

SSD6204

Product feature	SSD6202	SSD6202A	SSD6204	SSD6204A
Bus Interface	PCI-Express 3.0 x8			
M.2 Ports	2		4	
Data Transfer Rate	8GT / 8Gbps per lane			
Number of devices	2		4	
SSD Form Factor	2242/2260/2280		2242/2260/2280/22110	
Form Factor	Half-Height		Full-Height	
Card Dimensions	6.61" L x 2.71" H x 0.67" D		7.68'' L x 4.38'' H x 0.73'' D	
Card Weight	0.77 lbs.	0.85 lbs.	1.23 lbs.	1.32 lbs.
5-Pack Dimensions	14" x 10" x 6"		15" x 12" x 12"	
5-Pack Weight	5 lbs.		8 lbs.	
System Requirements	Any PC System or Motherboard with an industry standard PCIe x8 or x16 physical Slot (Bifurcation is not required)			
OS Support	Windows 11 /10, Windows Server 2022/2019/2016, Microsoft Hyper V, Linux (Kernel v3.10 and later), VMware, Proxmox			
Cooling	Anodized aluminum heat sink with integrated low-noise fan		Full-length anodized aluminum heat sink	
RAID Switch	Yes	Yes	n/a	Yes
USB Port	n/a	OOB Port (out of band management). 1x Type-C connector supports HighPoint certified USB-A31-1MC USB cable	n/a	OOB Port (out of band management). 1x Type-C connector supports HighPoint certified USB-A31-1MC USB cable
LED Indicator	n/a	RAID, SSD, PCIe status monitoring	n/a	RAID, SSD, PCIe status monitoring
NVMe Configuration				
RAID Support	Single, RAID 0, 1			
TRIM Support	Single, RAID 0, 1			
Management Suites	CLI (Command Line Interface)			
	WebGUI (Graphical, web-based management interface)			
	UEFI Package			
	MP-Tool RAID Management (only available for project requests)			
Operating Environment				
Work Temp	+5°C ~ + 55°C	+5°C ~ + 55°C	+5°C ~ + 55°C	+5°C ~ + 55°C
Storage Temp	-20°C ~ +80°C	-20°C ~ +80°C	-20°C ~ +80°C	-20°C ~ +80°C
Operating Voltage	PCI-e: 12V, 3.3V	PCI-e: 12V, 3.3V	PCI-e: 12V, 3.3V	PCI-e: 12V, 3.3V
Power	Typical: 3.96W	Typical: 3.96W	Typical: 3.84W	Typical: 3.84W
MTBF	920,585 Hours	920,585 Hours	920,585 Hours	920,585 Hours
Certification	CE, FCC, RoHS, REACH, WEEE			
Kit Contents	SSD6202	SSD6202A	SSD6204	SSD6204A
	QIG, low-Profile bracket	QIG, low-Profile bracket	QIG	QIG