



# Zstor RS2224NV HA Metro Cluster

Discover the **Zstor RS2224NV server product line**, a powerful and versatile solution that leverages the latest **AMD EPYC™ 7003 Processors**, featuring the innovative **AMD 3D V-Cache™ technology**. This combination delivers accelerated performance and faster results for specific workloads. Equipped with **the Open-E JovianDSS data storage system**, the Zstor RS2224NV Metro HA system ensures data High Availability and enhanced data protection, making it ideal for critical business infrastructure, especially Data Centers environments.

The **Zstor RS2224NV server** takes advantage of the **PCI Express 4.0 technology**, which offers an impressive **16 GT/s bandwidth** — twice as much as PCIe 3.0. This improvement results in:

- higher performance
- lower power consumption
- greater lane scalability
- and seamless backward compatibility

The **Zstor RS2224NV server** is designed to be PCIe 4.0 ready, supporting up to 24 NVMe SSDs. It also provides **4 Full Height Full-Length PCIe 4.0 x16 slots**, allowing you to integrate **multiple up to 100GbE network cards**. This design ensures unmatched scalability, making it a perfect solution for handling demanding workloads or adapting to growing computational needs.

**Zstor is Open-E's Gold Partner with more than 14 years of experience in building ZFS-based storage systems.** Zstor's products, including servers, storage solutions, and networking equipment, undergo rigorous certification and testing by our dedicated team, and also by the Open-E hardware certification team for the highest safety standards. We develop our solutions under strict quality control measures to ensure the best product quality. Most of our configurations are designed as turn-key appliances, customized to meet your specifications. These solutions are engineered for professional IT environments and cater to various market segments.

Recommended for:



Data Centers



Education



Media  
& Entertainment



Virtualization



Gov & Public



With the Open-E certified  
Zstor RS2224NV you can build:

- compute-intensive applications
- high-performance and high-capacity storage
- high-throughput storage
- and more



# Data Center Optimized Zstor RS2224NV HA Metro Cluster

## High Availability

If you need a reliable and resilient storage solution for your business-critical data, the **Zstor RS2224NV** is an ideal choice. This device supports a High Availability cluster setup with NFS or iSCSI protocols, which ensures continuous data access and protection in case of a node failure. With the Open-E JovianDSS High Availability Cluster Feature Pack, you can easily manage and monitor the cluster configuration and performance using the cluster management software. You can also benefit from the independent Virtual IP (VIP) address feature, which allows you to assign multiple VIPs to different servers and switch them flexibly as needed. When a node failure is detected, the VIPs are automatically moved from the primary to the secondary node without any interruption or timeout for the client servers. The **Zstor RS2224NV** and Open-E JovianDSS provide you with a high-performance and cost-effective High Availability storage solution.

## Thin provisioning

The **Zstor RS2224NV** helps you optimize your storage efficiency by using thin provisioning. This feature allows you to allocate storage space dynamically, only when it is needed. You can avoid wasting storage space and money by over-provisioning your storage capacity. You can also eliminate the hassle of estimating your storage requirements and the risk of running out of space and having to rebuild your system. With thin provisioning, you can create flexible and scalable storage volumes that grow with your data needs.



Don't miss this opportunity to get the best data storage solution for your business. Contact us now and get ready to experience the power and versatility of the Zstor RS2224NV data storage system.

**Buy the solution now!**

## Data integrity check

The **Zstor RS2224NV** storage system ensures data integrity by using advanced checksumming techniques. Each block of data is verified with a checksum that detects any corruption or error. If a faulty block is detected, it is automatically repaired and rewritten. If the same error persists, the block is relocated to a different part of the NVMe drive. The **Zstor RS2224NV** performs data integrity checks on every read/write operation, as well as on idle blocks that are not accessed frequently. All data operations are done atomically, which means they are either completed successfully or not at all. This prevents data inconsistency and loss, even in the event of a power failure.

## Unlimited number of snapshots and clones

The **Zstor RS2224NV** storage system enables you to create and manage an unlimited number of snapshots and clones. Snapshots and clones are essential for effective disaster recovery scenarios, as they allow you to restore your data in case of accidental deletion, corruption, or malware infection. You can schedule snapshots at any frequency and granularity, and monitor your storage capacity and usage. You can also set alerts and notifications when your physical space is running low. With **Zstor RS2224NV** and Open-E JovianDSS, you can enjoy the benefits of unlimited snapshots and clones without compromising your storage performance or efficiency.

## High Availability solution functionality test results

Functionality test name	Functionality test results [passed/failed]
Manual Failover	Passed
Automatic Failover triggering after network failure	Passed
Automatic Failover triggering after shutdown test	Passed
Automatic Failover triggering after reboot test	Passed
Automatic Failover triggering after power-off	Passed

## Active-active failover resource switching time test results

Total number of targets	Switching time [seconds]	Performance test results [passed/failed]
2	22	Passed
10	26	Passed
20	28	Passed

# Achieving High Performance and High Availability in the Most Challenging Data Storage Environments



## Guaranteed data protection

Your data is your most valuable asset. That's why the **Zstor RS2224NV** storage system, powered by Open-E JovianDSS, offers you multiple layers of data protection. You can rely on the automatic and scheduled data integrity checks that verify and correct any data errors or inconsistencies. You can also take advantage of the unlimited snapshots and clones that allow you to backup and restore your data at any point-in-time. For an event of a drive failure, you can use the software-based RAID arrays. Moreover, the **Zstor RS2224NV** storage system features a self-healing mechanism that detects and repairs any malfunctions and restores full data redundancy. This way you can easily implement a disaster recovery strategy and recover from any data loss or damage.

## Enhanced storage performance

In today's competitive market, enterprise storage needs to deliver high capacity, reliability, speed, and affordability. That's what the **Zstor RS2224NV** storage system offers you. Powered by Open-E JovianDSS, the **Zstor RS2224NV** is an innovative data storage solution that boosts your efficiency and performance. You can also use the powerful tuning tools to optimize your system for different workloads, such as I/O-intensive databases or high-throughput video recording. You can also save time and hassle by using the predefined profiles that suit your needs.

## Optimal resource utilization

The **Zstor RS2224NV** storage system helps you make the most of your storage resources with the advanced features of Open-E JovianDSS. These features are especially useful for virtual environments, where storage efficiency and flexibility are crucial. With deduplication and compression, you can reduce your storage footprint and increase your effective storage capacity. With thin provisioning, you can allocate storage space on demand and expand your physical storage capacity without downtime. With these features, you can also extend your disk retention periods and save costs.

## Optimized for Data Centers

The **Zstor RS2224NV** storage system is designed for the modern data center and ready to handle compute-intensive applications that involve big data, heavy virtualization, and high-density server configurations. The system allows you to manage your storage infrastructure easily and intuitively, and maintain continuous operations during updates or refreshes. By choosing the **Zstor RS2224NV** storage system, you benefit from flexible CPU power, networks running with up to 100Gb/s Ethernet, and the knowledge and experience of Zstor in building and developing servers specialized for data centers.

# Hardware details\*

	Default configuration	Options
Motherboard	Zstor-KMPP	-
CPU	AMD EPYC 7313 16-core	EPYC 7513 32-core, EPYC 7713 64-core
RAM	16 x 32GB Samsung DDR4 3200MHz	up to 32 x 64GB Samsung DDR4 3200MHz
Storage raw capacity	480TB	up to 720TB
SSDs	16 x 30.72TB KIOXIA CM7-R NVMe	24x 30.72TB KIOXIA CM7-R NVMe
Network interface	2 x Intel X710 10GBase-T 2x NVIDIA ConnectX-6 100GbE dual-port	4x NVIDIA ConnectX-6 100GbE dual-port
Form factor	2U	-

\*Per 1 node

## About Zstor Data Center Solutions Provider

At Zstor, we are dedicated to revolutionizing the data center landscape. Our mission is to deliver cutting-edge, high-performance, and cost-effective data center solutions tailored to your needs. With a strong focus on innovation, quality, and customer satisfaction, we have become a trusted partner for a wide range of industries, including hosting/cloud internet providers, universities, and research institutes.

**Experience Excellence:** Our team boasts a wealth of experience in the server, storage, and networking industry. This expertise enables us to provide Enterprise Class Storage and Networking features to our clients, all while keeping costs significantly lower than traditional server, storage, and networking vendors.

**Performance Meets Reliability:** At Zstor, we take pride in offering products that combine exceptional performance with unwavering reliability. Our solutions are built on a field-proven customizable hardware platform, allowing us to deliver highly scalable and dependable storage and networking solutions. From a cluster-in-a-box to several PetaBytes of storage, we offer an efficient, high-density, and cost-effective platform for your evolving needs.

## About Open-E

Open-E, founded in 1998, is a well-established developer of IP-based storage management software. Its flagship product Open-E JovianDSS is a robust, award-winning storage application which offers excellent compatibility with industry standards, and is the easiest to use and manage. Additionally, it is of the most stable solutions on the market and undisputed price performance leader.

Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. Open-E accounts for over 37,000 installations world-wide and has received numerous industry awards and recognition, also with its product Open-E DSS V7. For further information about Open-E, its products and partners, visit [www.open-e.com](http://www.open-e.com).

## About the Open-E JovianDSS Server Certification

Open-E JovianDSS delivers software-defined storage which results in a wide variety of different hardware requirements such as performance, range, capacity, capability, and connectivity. To ensure compatibility and robust storage environments, all selected partners offer storage systems which are tested, benchmarked, and certified by Open-E. This way, customers are able to use solutions that require exceptional security and redundancy, without compromising performance.

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