Raidon MAP6-EZ: High-Speed, Future-Ready Adapter for M.2 NVMe SSDs

Converts M.2 socket into MCIO connector.

The <u>MAP6-EZ</u> from <u>RaidonTek.com</u> is an adapter that converts M.2 socket into an MCIO connector, equipped with a high-density SFF-TA-1016 interface for data transfer speeds of up to 128Gb/s.



This sleek and compact device enables remote NVMe SSD storage, ensuring secure and convenient access from any location within your computer setup. Engineered for seamless integration, the MAP6-EZ delivers speed, versatility, and future-proof connectivity, making it tech enthusiasts and professionals.

Key Features

1. High-Speed Data Transfer with MCIO (SFF-TA-1016) Interface

Its MCIO (SFF-TA-1016) interface delivers seamless, high-speed data transfers with stable, secure connections, for demanding exchanges.

2. Supports PCI Express 5.0, M.2 NVMe SSDs

It supports M.2 NVMe SSDs with PCIe 4.0 and 5.0, delivering up to 128Gb/s for efficient, high-performance data management.

3. Broad OS Compatibility

It offers broad OS compatibility, making it for diverse computing environments and seamless integration.

4. Easy Installation

It offers a simple plug-and-play setup for standard M.2 sockets, allowing quick and easy SSD upgrades without complex installation.

5. Built for the Future

It is future-proof, supporting Hot-Plug with PCIe switch enclosures to keep setup adaptable to evolving technology.

6. Overcome Physical Constraints

It transforms your M.2 socket into an MCIO connector, allowing to extend and relocate the socket outside the computer chassis for convenient access to NVMe SSDs.

Benefits

By integrating these advanced features, the MAP6-EZ becomes a critical component for highperformance, adaptable, and future-proof data management across diverse industries and applications.

1. High-Speed Data Transfer via MCIO (SFF-TA-1016) Interface:

It is designed to excel in applications that demand rapid data transfer. By leveraging the MCIO (SFF-TA-1016) interface, users can achieve the high-speed data throughput necessary for intensive tasks like real-time data processing, large-scale data migrations, and high-frequency trading, all while maintaining secure and stable connections.

2. Enhanced Performance with PCIe 5.0 and M.2 NVMe SSDs:

Supporting the latest PCIe 5.0 technology and M.2 NVMe SSDs, it delivers up to 128Gb/s of data transfer speed. This is particularly beneficial for applications requiring high-performance storage solutions, such as 4K/8K video editing, big data analytics, and HPC, where speed and efficiency are paramount.

3. Broad oS Compatibility for Versatile Integration:

Its broad OS compatibility makes it a solution for diverse computing environments, from enterprise data centers to specialized industrial applications. This flexibility ensures that the device integrates smoothly into existing infrastructures, reducing the time and effort needed for deployment across different systems and applications.

4. Effortless Installation for Quick Upgrades:

The plug-and-play setup of the MAP6-EZ simplifies the installation process, allowing users to quickly upgrade their storage solutions without extensive downtime. This feature is particularly valuable in scenarios where system uptime is critical, such as in server farms, cloud computing environments, and mission-critical systems, where fast and easy SSD upgrades are essential.

5. Future-Ready Design for Long-Term Reliability:

With support for Hot-Plug functionality within PCIe switch enclosures, it is built to adapt to future technological advancements. This ensures that your investment is protected, making the MAP6-EZ a choice for long-term deployments in industries that require scalable and upgradable storage solutions, such as telecom, finance, and healthcare.

6. Enhanced Accessibility by Overcoming Physical Constraints:

The ability of the MAP6-EZ to transform an M.2 socket into an MCIO connector allows for extending and relocating the socket outside the computer chassis. This is particularly beneficial in applications where accessibility is crucial, such as in densely packed data centers, remote installations, or systems with limited space, enabling easy access for maintenance, upgrades, or troubleshooting without the need to dismantle the entire setup.

When combined with the MAP6-EZ HBA Adapter, the Raidon iU1776-U6P3, and forthcoming Raidon M.2 NVMe enclosures, this configuration forms a robust storage solution tailored for both enthusiasts and professionals. This synergistic setup leverages the high-speed capabilities and

efficiency of M.2 NVMe SSDs, delivering superior performance and reliability in a streamlined and technically optimized package.

Multi-OS Support: Mac, Windows, and Linux

It is compatible with Mac, Windows, and Linux, ensuring a seamless experience across different OSs. Its versatility makes it for various computing environments, guaranteeing smooth integration with your current setup.

Overcome Physical Constraints

It changes your storage setup by converting your M.2 socket into a versatile MCIO connector. This transformation allows you to extend and relocate the socket outside the computer chassis, providing easy and convenient access to M.2NVMe SSDs. Whether you need to swap out drives frequently, optimize airflow within your system, or simply streamline cable management, it offers a flexible solution that enhances both accessibility and efficiency in your storage configuration.

Built for the Future

It is engineered with future-proof capabilities, including support for Hot-Plug potential when connected to PCIe switch enclosures, ensuring your setup remains adaptable and ready for evolving technology needs.



High Speed MCIO (SFF-TA-1016)Interface

The MAP6-EZ is equipped with a high-quality MCIO (SFF-TA-1016) connector, engineered for durability and reliable performance. Its robust construction ensures a long lifespan, capable of withstanding the demands of daily use.

Supports Full Range of M.2 NVMe SSD

It is compatible with M.2 NVMe SSDs, supporting both PCI Expreses 4.0 and 5.0 interfaces. This compatibility sets a new standard in storage performance and future proofing, ensuring top-tier speed and efficiency for any application by accommodating the full range of NVMe drives.

Easy Installation

It provides a hassle-free, plug-and-play setup that fits seamlessly into standard M.2 sockets. With its driver-free installation, users can quickly and easily upgrade their M.2 SSDs without the need for

complex installation procedures, streamlining the process for any application.



Possible applications for MAP6-EZ

With its unique features, it can be applied across a variety of industries and scenarios where highspeed data transfer, robust performance, and flexibility are critical. Here are some possible applications:



1. HPC and Data Centers:

The MAP6-EZ's support for PCIe 5.0 and M.2 NVMe SSDs, combined with its high-speed MCIO interface, makes it for HPC environments where fast data access and transfer rates are essential. It can be used in data centers for tasks such as large-scale simulations, complex scientific computations, and real-time data analytics.

2. Enterprise Storage Solutions:

In enterprise environments, it can be used to create high-speed, scalable storage solutions. Its broad OS compatibility and support for hot-swappable SSDs make it a valuable asset in systems that

require frequent updates, expansion, or maintenance without causing significant downtime, such as cloud storage platforms, financial transaction processing systems, and large database management.

3. Video Editing and Post-Production:

For video professionals working with high-resolution content (4K, 8K, or VR), its ability to handle large data streams with minimal latency is crucial. It enables faster rendering, smoother playback, and more efficient storage management, enhancing productivity in media production environments.

4. Big Data Analytics and AI:

The need for rapid data processing and high-speed access to large datasets is paramount in big data and AI applications. It can be employed in these fields to accelerate data processing tasks, supporting complex algorithms and ML models that require significant computational power and storage bandwidth.

5. Telecom and Networking:

In telecom, it can be utilized in network infrastructure where high-speed data transmission and reliable connectivity are essential. It can support the backbone of network operations, including in data routing, switching, and processing, ensuring that large volumes of data can be handled efficiently.

6. Gaming and VR/AR Development:

Game developers and VR/AR creators require fast storage solutions to handle the extensive data associated with modern gaming and immersive experiences. It provides the necessary speed and flexibility, supporting the rapid loading of assets, quick iteration cycles, and smooth performance in development environments.

7. Industrial Automation and IoT:

The ability to overcome physical constraints by relocating the M.2 socket outside the chassis makes the MAP6-EZ suitable for industrial automation and IoT applications, where space and accessibility might be limited. It can be used in scenarios where remote access to storage and processing units is needed, such as in smart factories, automated production lines, and remote monitoring systems.

8. Military and Aerospace Systems:

Its robust design and future-proof capabilities make it for mission-critical applications in military and aerospace. It can be used in systems that require high reliability, fast data processing, and secure data transmission, such as in avionics, satellite communications, and defense systems.

9. Healthcare and Medical Imaging:

In healthcare, particularly in medical imaging and electronic health records management, it can be applied to handle the vast amounts of data generated. Its high-speed data transfer and secure connections are essential for processing, storing, and retrieving large imaging files (e.g., MRIs, CT scans) quickly and reliably.

These applications leverage the MAP6-EZ's unique features to enhance performance, ensure reliability, and provide flexibility in various demanding environments.

Performance test result for reference. The test result will vary depend on the test environment.



Specs

Model No	MAP6-EZ
Interfaces	M.2 M-key to MCIO 38pin (SFF-TA-1016)
Supports	PCIe PCI Express 4.0 and 5.0
Storage Mode	JBOD - Independent Mode
Dimension	22 mm (W) x 80 mm (L)
Operating System Support	Windows 7 or above, macOS 10.10 or above, Linux Driver-Free Installation
Package Accessories	* MAP6-EZ