

## Getting to Know Your Next-Generation Adaptec® Tri-Mode Adapters

Our Comprehensive Line of Storage Adapters Supports the Industry's Broadest Range of Applications and Delivers Reliable Solutions That Meet Your Long-Term Storage Strategies



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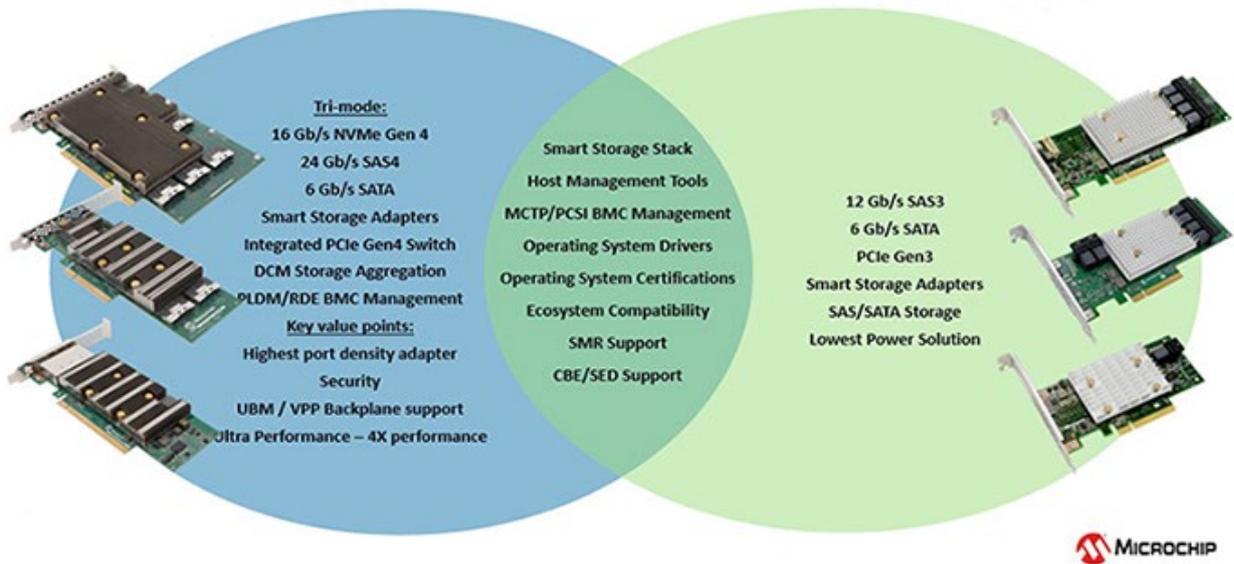
Our new [Adaptec® PCIe Gen 4 NVMe™](#) and [24G SAS Tri-Mode RAID](#) and [HBA Storage Adapters](#) provide essential next-generation NVMe and SAS-4 connectivity and manageability with market leading performance while delivering new levels of security required for the most-demanding data center infrastructures.

Key product highlights include:

- Industry's highest storage fanout – up to 32 Tri-Mode lanes
- Industry's highest bandwidth – includes x16 “Ultra” PCIe Gen4 host interface option
- Delivers four times the storage performance over previous generations
- Integrated PCIe switch for ultra-low latency
- Controller Based Encryption (CBE) available on most RAID adapters
- Universal Backplane Management (UBM) and the Intel® Virtual Pin Port (VPP) Support
- Platform Level Data Model (PLDM)/Redfish® Device Enablement (RDE)

# What's Changed

New 24G PCIe Gen 4 Tri-Mode Adapters    12G PCIe Gen 3 SAS/SATA Adapters



## What's New with Tri-Mode Storage?

Adaptec [Tri-Mode adapters](#) provide new connectivity options with the flexibility to mix and match NVMe, SAS, SATA media within a single drive bay. The SmartRAID 3200 and HBA 1200 adapters deliver between 8 to 32 ports of NVMe 4.0 and/or 24G SAS drive support - the largest port count in the industry - to maximize connectivity. Our Tri-Mode adapters deliver the maximum bandwidth and IOPS performance with both x8 and x16 PCIe Gen 4 CPU interface options, four times performance improvement over previous generations. Advanced capabilities like Dynamic Channel Multiplexing (DCM) SAS Link aggregation technology deliver greater than 99% expander-attached link efficiency to increase performance of high-density storage solutions utilizing lower cost SAS and SATA media. Microchip's direct path technology, built around an embedded PCIe Gen 4 switch, helps keep latency to a minimum.

*Watch this [short video](#) to learn more.*

We have also expanded our management capabilities to include new industry-standard management tools to accelerate time to market by simplifying and streamlining storage management, maximizing software reuse and delivering generational compatibility and ecosystem interoperability.

We continue to put your mind at ease by providing trusted platform support with built-in technologies such as hardware root of trust, and data protection technologies like Controller-Based Encryption (CBE) and Self-Encrypting Drive (SED) management support. These features offer a new level of security from safeguarding the supply chain to deploying secure storage infrastructure and protecting confidential customer data.

### **Common Lineage: Smart Storage Stack**

Adaptec® [Tri-Mode storage adapters](#) bridge the gap between SAS/SATA and NVMe to deliver the maximum performance and flexibility currently available. Our new 24G PCIe Gen 4 Tri-Mode adapters share our reliable and market leading Smart Storage stack, host management tools and vast ecosystem compatibility with our current 12G PCIe Gen 3 SAS/SATA adapters, now delivering an adapter portfolio that supports the industry's widest range of applications.

### **Summary**

Our comprehensive line of storage adapters supports the industry's broadest range of applications and delivers reliable solutions that meet your long-term storage strategies. These solutions span the full range of capacity-optimized, software-defined, hybrid storage, video production, surveillance, virtualization, analytics, high-performance computing and artificial intelligence. These adapters have been evaluated, qualified and deployed by leading data center clients to address their most important storage challenges. We have the right solution, expert support staff and experienced design teams to help you build your next storage application.

Visit [microchip.com/smartstorage](https://microchip.com/smartstorage) for more information.

[Carol Whitmarsh](#), Oct 8, 2021