

ON-SITE EDITING WITH ALL-FLASH NAS



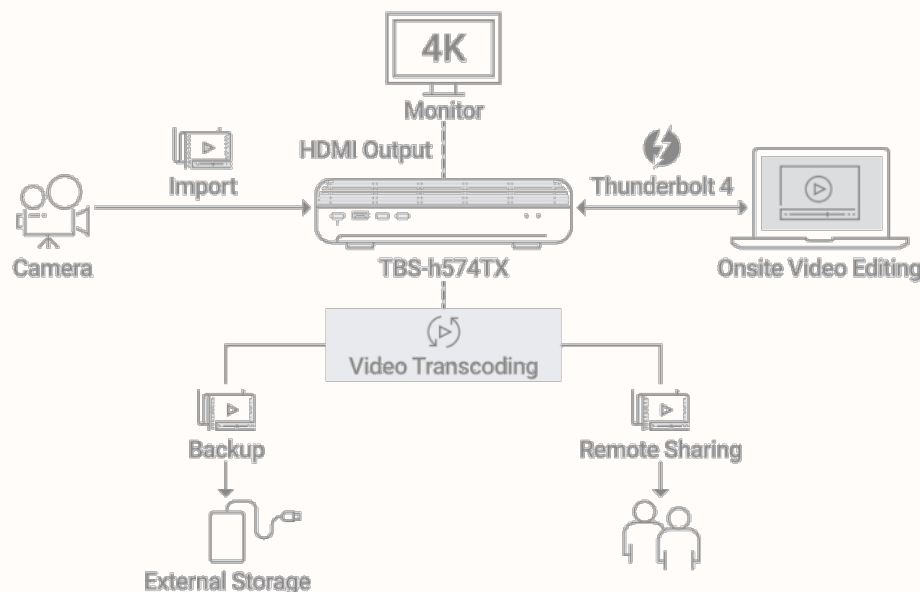
Overview

The rise in demand for high-quality, low-latency access to digital assets including raw and compressed videos for on-site editing in DIT (Digital Imaging Technician) carts, SOHO collaborative environments, and content creators has revolutionized the architecture and form factor of modern Network Attached Storage (NAS) systems. Traditional hard disk drive (HDD)-based NAS systems, while cost-effective, might not meet the performance and mobility requirements of these modern editing workflows. The emergence of all-flash NAS systems, leveraging high performance NVMe™ solid-state drives (SSDs) and high bandwidth network or direct-attached interfaces, offers a transformative storage solution for these workflows by delivering low latency, high throughput, multi-user concurrency, low power, and seamless scalability.

All-Flash Network Attached Storage (NAS) Systems

Network Attached Storage (NAS) serves as a centralized repository for digital assets, accessible over a network such as 10GbE to workstations or PCs or directly with high speed direct interfaces such as Thunderbolt 4 and USB 3.2. NAS systems support applications to enable professionals and prosumers to organize and access digital assets quickly and seamlessly. All-flash NAS replaces HDDs with NVMe™ SSDs providing scalable performance while lowering the physical and acoustic profile for mobility or office use.

On-site editing requires rapid digital asset retrieval, storing, and backing up while also demanding small form-factors such as for DIT carts. The QNAP® NASbook TBS-H574TX is an all-NVMe™ flash NAS features a compact, portable design with five NVMe™ M.2 SSD slots and delivers extreme performance for on-site editing or collaborative environments. Designed for film sets, small studios, small-scale video production teams and SOHO users, the compact TBS-h574TX Thunderbolt™ 4 all-NVMe™ flash NASbook elevates video production for optimum productivity. It packs high-speed I/O and Intel® Core™ performance required by video production, allowing creators to enjoy a smooth experience in real-time video editing, large file transfer, video transcoding, and backup. Creators can direct attach for peer-to-peer connections using the TBS-h574TX with 2 Thunderbolt™ 4 connections, making the TBS-H574TX an ideal bridge between pre-production and post-production for next level video projects and team collaboration. The TBS-H574TX has a storage capacity for media of up to five NVMe™ M.2 SSD slots.¹



Source: TBS-h574TX, QNAP, <https://www.qnap.com/en-us/product/tbs-h574tx>

The NASbook TBS-h574TX is equipped with 2.5GbE and 10GbE networks for dedicated or collaborative access to shared media libraries making it ideal for SOHO environments or for prosumers sharing content.¹

NVMe™ SSDs

NVMe™ SSDs enable all-flash NAS systems to provide high-performance access to massive libraries of high resolution raw or compressed media while offering high quality of service (QoS) to support collaborative environments. NVMe™ SSDs are designed with PCIe® interface allowing it to scale to over 7x the speed of HDDs providing real-time access to digital assets for professional and prosumer workflows. The power efficiency and slimmer design of NVMe™ SSDs also allow all-flash NAS systems to have a reduced physical footprint and quieter operations.

SANDISK® NAS 800 NVMe™ SSDs are purpose-built for NAS and make the ideal choice for all-flash NAS systems such as the QNAP® NASbook TBS-H574TX by delivering consistent high throughput and high-endurance in a small form-factor. The SANDISK® NAS 800 NVMe™ SSDs have capacities ranging from 960GB2 to 7.68TB2 offering massive storage capacity for growing digital media libraries. Each SANDISK® NAS 800 NVMe™ SSD can handle heavy video editing and multiuser environments with an endurance rating up to 14PBW (7.68TB1 model). The QNAP® NASbook TBS-H574TX combined with up to five SANDISK® NAS 800 NVMe™ SSDs helps to enable low latency access, helping to ensure smooth playback of high-bitrate digital media content. The TBS-H574HX can also easily configure RAID 6 for a balance of speed and redundancy.



Conclusion

All-flash NAS systems represent a paradigm shift in on-site video editing by offering unmatched performance, scalability, and reliability. With performance scalability of the SANDISK® NAS 800 NVMe™ SSDs, low profile all-flash NAS systems are suitable for on-site editing in DIT carts, collaborative SOHO environments, or at home for content creators. The combination of high-performance and high-endurance SANDISK® NAS 800 NVMe™ SSDs and the 2.5GbE, 10GbE network or direct attached Thunderbolt™ 4 interfaces of the QNAP® TBS-574TX all-flash NAS, can deliver the ideal storage solution for the modern creative professional or prosumer. For those seeking scalability or to be future-ready, the QNAP® TBS-574TX all-flash NAS and the SANDISK® NAS 800 NVMe™ SSD offers capacity at scale for growing digital media libraries.

1. All QNAP® product information and visuals can be found at <https://www.qnap.com/en-us/product/tbs-h574tx>
2. 1GB = 1 billion bytes and 1TB = 1 trillion bytes. Actual user capacity may be less depending on operating environment.