

QNAP

TBS-h574TX

Make your creativity bloom
with the lightning-fast
Thunderbolt™ 4 All-Flash NASbook



A Faster and Bigger Storage for the 4K / 8K Video Era

	Date Rate	File Size
HD 1080P (ProRes 422)	220 Mb/s	90 GB/hr
4K (ProRes 422)	630 Mb/s	300 GB/hr
BlackMagic 4K	1.4 Gb/s	630 GB/hr
Canon 4K	2.3 Gb/s	1 TB/hr
Phantom Flex 4K	2.3 Gb/s	1 TB/hr
Red 8K	2.4 Gb/s	1.1 TB/hr
ARRI Alexa 6.5K RAW	7.3 Gb/s	3.3 TB/hr

Thunderbolt NAS for Video editing

How Thunderbolt NAS can help

Collaboration

- Support two Mac® or Windows® notebook/workstation edit photos/videos simultaneously
- Connects to a network via Ethernet, making it easier to collaborate on projects and share resources

Expandability

- Multiple built-in drive slots make it easy to create high-capacity storage space
- Capacity expansion is very convenient through JBOD solution

User friendly

- Provide fast, smoother, easy-to-used operating system
- The companion mobile app allows you to remotely access your NAS files

Data Security

- Centralize backups and ensure consistent backups with snapshot
- You can set permissions or passwords to prevent files from being snooped indiscriminately

TBS-h574TX All-Flash Thunderbolt 4 NAS, Powered by a 13th Gen Intel[®] Core Processor



Intel[®] Core 13th Gen processor

Core™ i3 / i5 optimizes your content creation and productivity with Intel powerful hybrid architecture



5 x E1.S (preinstalled M.2 adapter) slots

Provides 5 of E1.S PCIe SSD slots, supporting up to 15mm E1.S. Five of M.2 adapters are included to support M.2 2280 NVMe SSD



Dual Thunderbolt 4

Provides two Thunderbolt 4 ports to support high transfer speeds so you can focus more on content creation



1 x 10GBASE-T & 1 x 2.5GbE

Provides 10GbE / 2.5GbE LAN ports to help you enjoy a smooth data transmission experience



Compact and metal chassis design

The compact and silver metal chassis design can better fit into your working environment.



USB One-Touch-Copy button

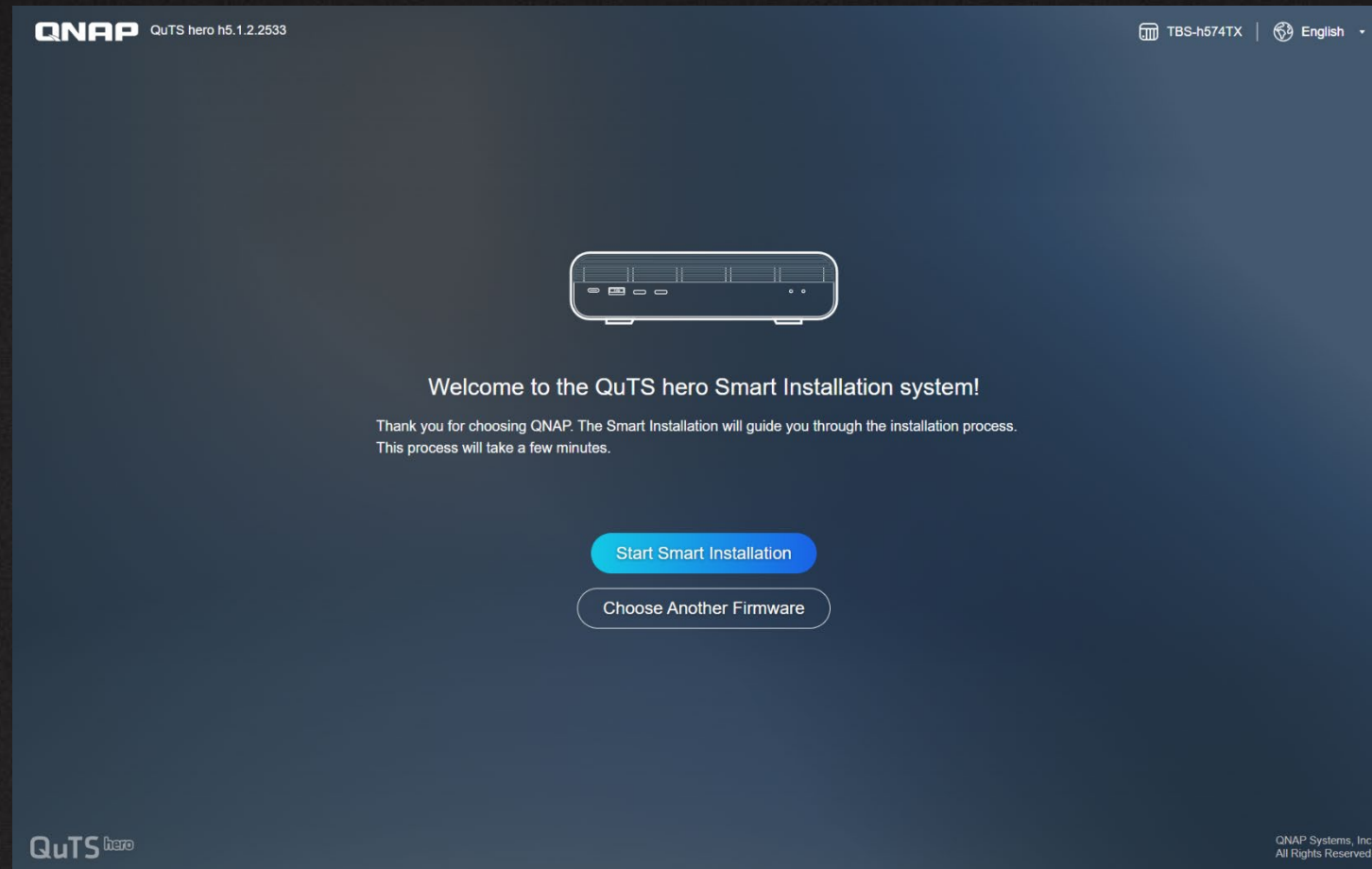
Provides USB One-Touch-Copy button, allowing you to easily copy files in the USB folder to the NAS

Switch NAS Operating Systems between QuTS hero and QTS during Setup

TBS-h574TX is shipped with the QuTS hero operating system. And also supports QTS - QNAP's standard NAS operating system – that provides performance, efficient memory utilization

Note

QTS and QuTS hero use different file systems. You must remove all the drives from the TBS-h574TX before switching from QuTS hero to QTS.



The screenshot shows the QuTS hero Smart Installation system interface. At the top left, the QNAP logo and 'QuTS hero h5.1.2.2533' are visible. At the top right, there are icons for 'TBS-h574TX' and 'English'. In the center, there is a line drawing of the TBS-h574TX NAS device. Below the drawing, the text reads: 'Welcome to the QuTS hero Smart Installation system! Thank you for choosing QNAP. The Smart Installation will guide you through the installation process. This process will take a few minutes.' There are two buttons: a blue 'Start Smart Installation' button and a white 'Choose Another Firmware' button. At the bottom left, the 'QuTS hero' logo is displayed. At the bottom right, the text 'QNAP Systems, Inc. All Rights Reserved.' is visible.

Choose between QTS and ZFS based QuTS hero

ZFS-based QuTS hero ensures performance and data integrity

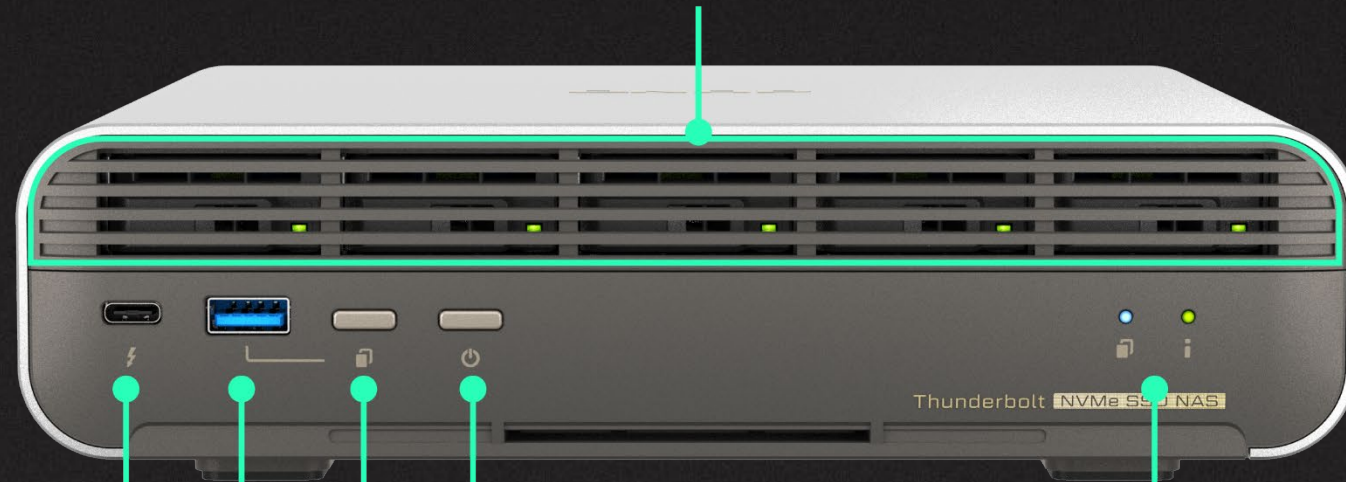
Faced with the explosive growth of data, VDI popularity, increasing SSD adoption, 8K media, and other disruptive IT trends, modern businesses need dependable storage systems to meet future demands. QNAP's new "QuTS hero" operating system combines the app-based QTS with a 128-bit ZFS file system to provide flexible storage management, comprehensive data protection and optimized performance to meet the needs of business-critical applications.

Learn More: [Why QNAP business NAS uses ZFS](#)

	QuTS hero	QTS
Filesystem	ZFS	Ext4
SSD Cache	Read Cache	Read/Write Cache Read Cache Write Cache
Inline Compression	Yes (LZ4 compression, ideal for RAW files and document files)	No
Inline Deduplication	Yes (At least 16 GB RAM required, TBS-h574TX-i3-12G is not supported)	No
Power Failure Protection (Software)	ZIL Copy-On-Write (Service continues after power recovery)	No (Risk of filesystem-level corruption on power-loss and system downtime required for " Check File System ")
Permission Management	Rich ACL (14 types)	POSIX ACLs (3 types) + certain special permissions
Capacity Expansion	Upgrade RAID capacity Change higher capacity disk drives Attach expansion enclosures/JBODs	Add a disk drive to a RAID group Upgrade RAID capacity Change higher capacity disk drives Attach expansion enclosures/JBODs
Data Security	Better (Self-Healing & Copy-on-Write)	Standard
Recommendation SSD Configuration for Video Editing Applications	Use SSD Pools Note: Set the block size 128K when creating Folders/LUNs	Editing (from original/RAW files): Use SSD Pools Post production: Enable Read/Write cache Note: Set the block size to 32K or 64K when creating Volumes, and choose "All I/O" for cache mode.

TBS-h574TX Front View

5 x E1.S NVMe SSD slots, support up to 15mm E1.S SSD, and pre-installed adapters to support M.2 2280 PCIe SSD for each slot



Thunderbolt 4 port

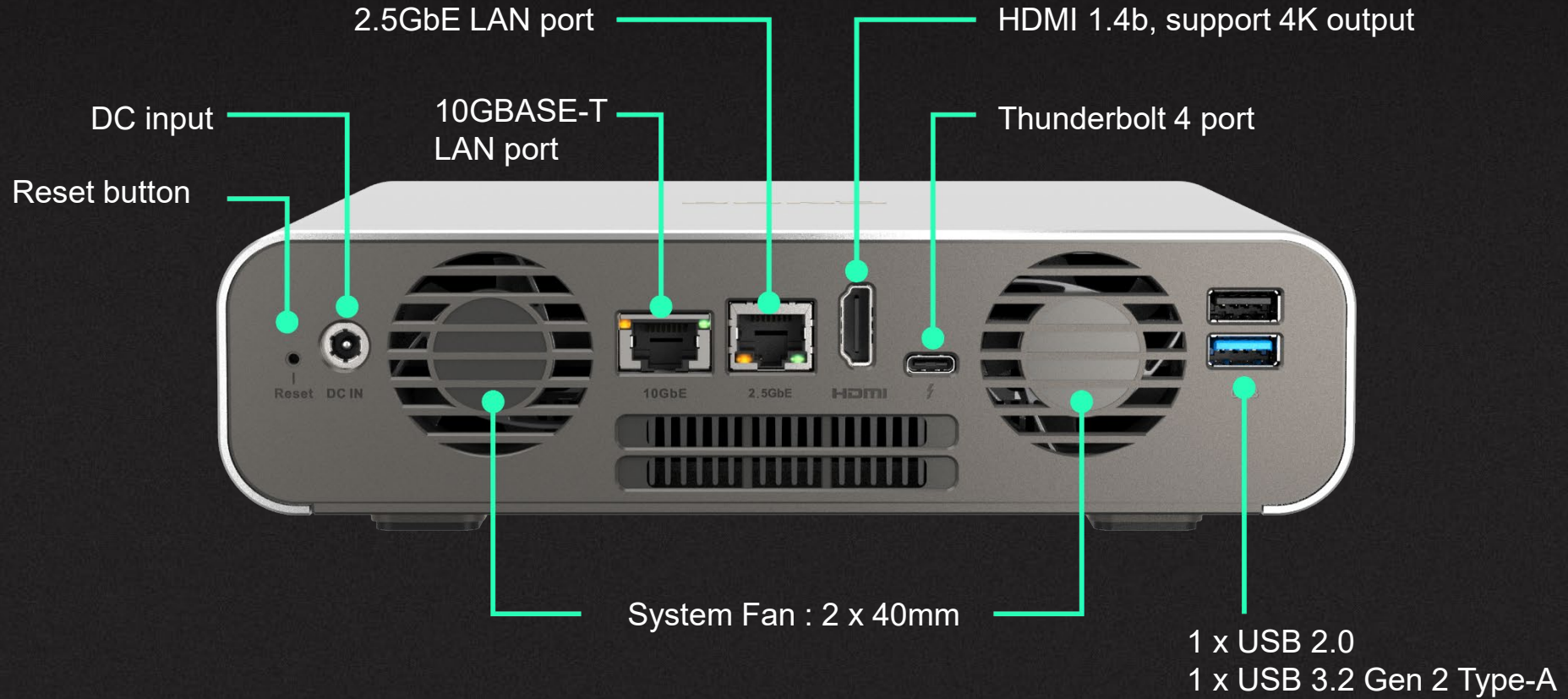
USB 3.2 Gen 2 Type-A

Power button

USB One-Touch copy button

LED Indicator:
USB Copy, Status

TBS-h574TX Rear View



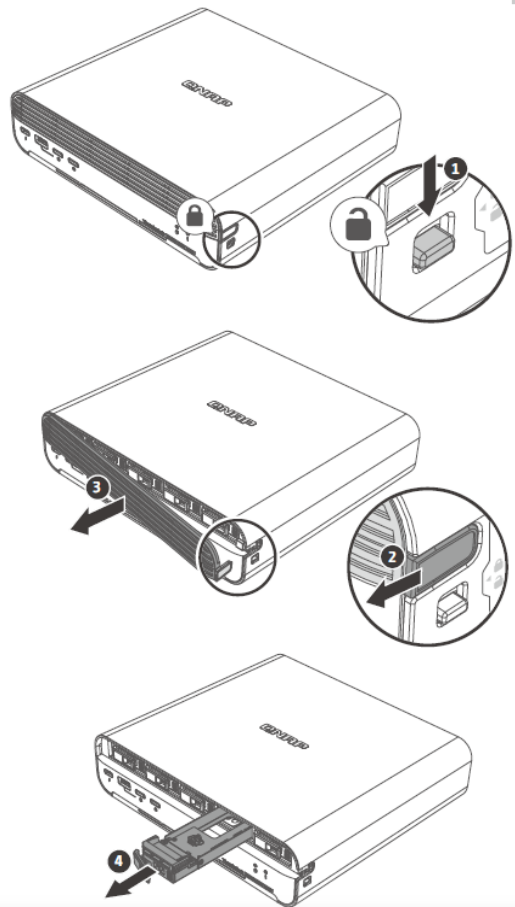
E1.S SSD Provides Small Storage Solutions with Higher Capacity and Hot-swappable Applications

Large-capacity storage space is required for video editing, and frequent reading and writing of SSDs is more likely to cause damage and require replacement of the SSDs.

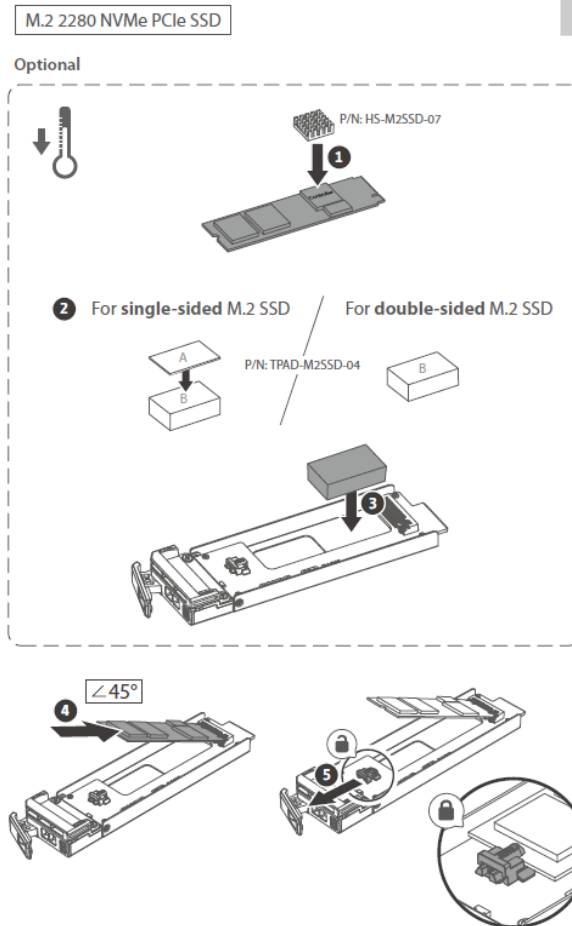
TBS-h574TX is QNAP's new E1.S NAS solution, providing 5 E1.S SSD slots and supporting up to 15mm-height E1.S SSDs. Also comes standard with an M.2 transfer adapter to support M.2 2280 NVMe SSD, allowing you to support hot swapping under the M.2 storage architecture.



Tool-free Quick Installation of M.2 2280 NVMe SSD for Hot-swappable Usage



Slide the lock down to release the front cover



If you want to install heat-dissipation module on M.2 SSDs, with a heat-dissipation module, you can purchase the QNAP heatsink **HS-M2SSD-07** and the thermal pad **TPAD-M2SSD-04**.

Step 1 :

Install the heatsink on the controller.

Step 2 :

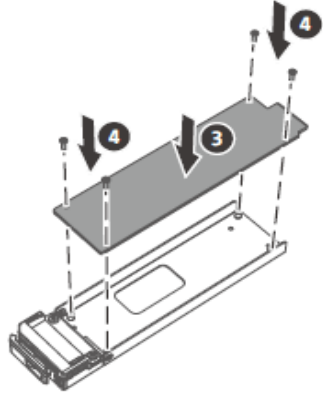
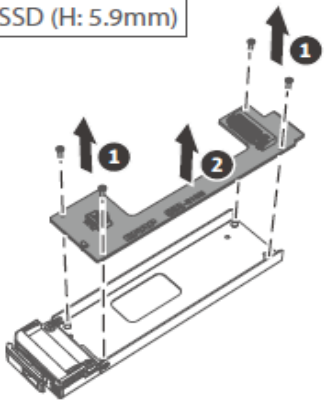
- Single-sided M.2 SSD : Install both thermal pad A and B on the SSD tray.
- Double-sided M.2 SSD : Install thermal pad B on the SSD tray.

Step 3 :

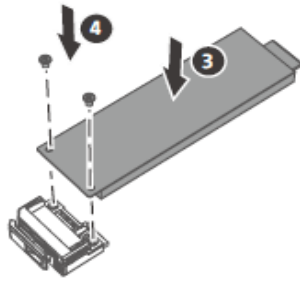
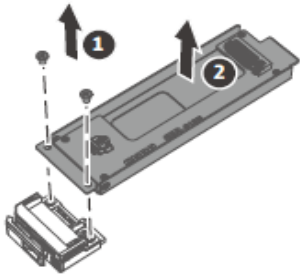
Pull the locker and hold it in place, carefully press down the M.2 SSD with 45 degree.

Note : Heatsinks must not exceed a height of 4.5 mm

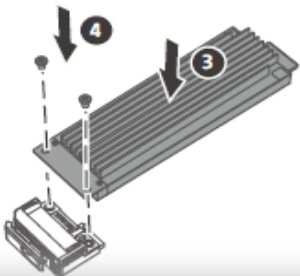
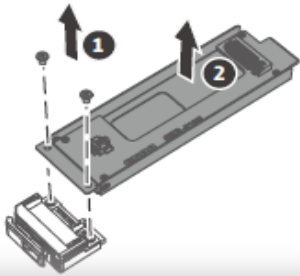
E1.S SSD (H: 5.9mm)



E1.S SSD (H: 9.5mm)



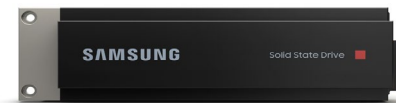
E1.S SSD (H: 15mm)



5 x E1.S NVMe SSD Slots, up to 15mm E1.S SSD

TBS-h574TX contains 5 E1.S NVMe SSD slots, supporting up to 15mm E1.S SSD with cooling fin, giving you a variety of SSD options to build storage space

 **SOLIDIGM™**

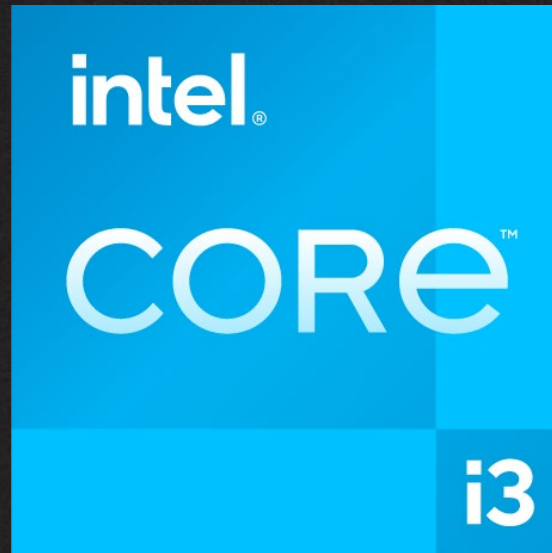


SAMSUNG

Up to 12-core/16-thread Intel Core i5 13th Gen Processor

Powerful 13th generation Intel® Core™ i3 / i5 processors

Equipped with Intel 13th generation processors to provide strong performance and continued to use Intel's performance hybrid architecture to optimize your content creation and productivity. Integrating the latest Intel Graphics can support 4K video transcoding and accelerate various applications.



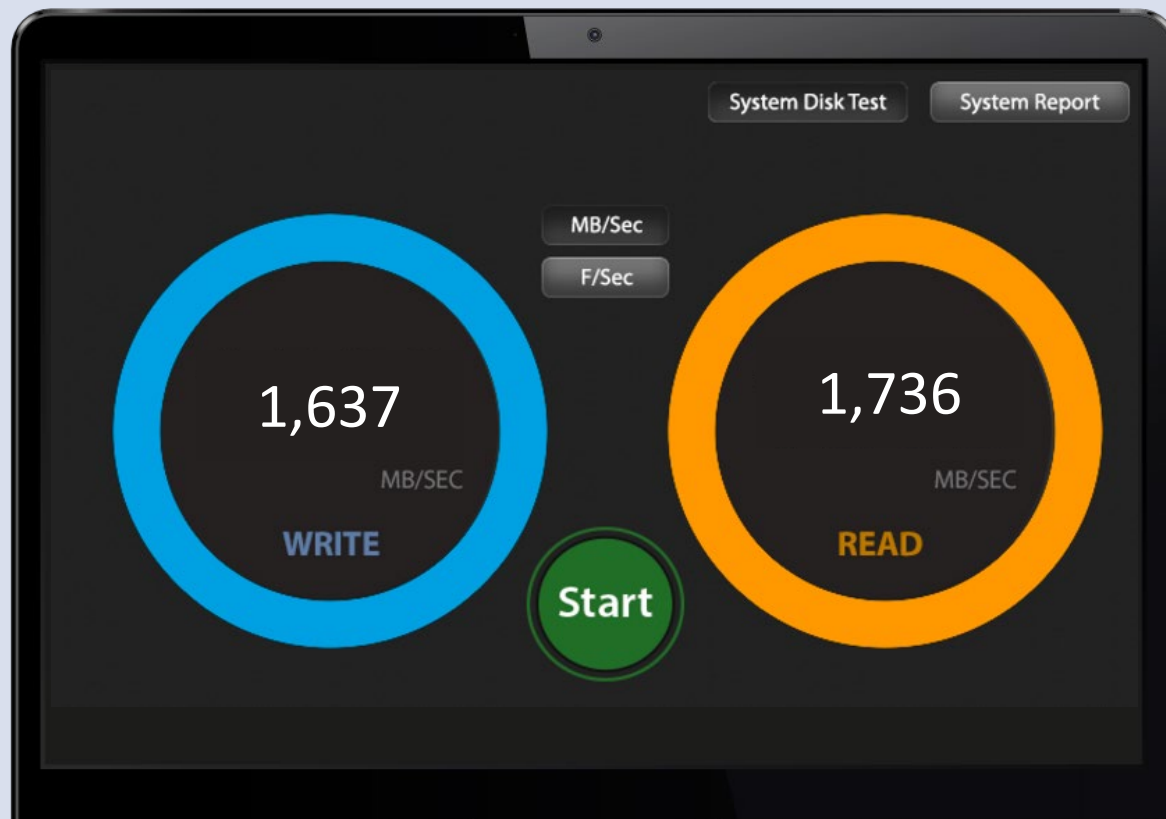
P-core	P-core	E-core	E-core
		E-core	E-core
P-core	P-core	E-core	E-core
		E-core	E-core

High performance P-core focuses on performance, low power consumption E-core focuses on multi-core computing, and the hybrid architecture brings higher efficiency to work tasks.

Thunderbolt 4

Exceptional Performance

- Built-in Thunderbolt 4 ports via Thunderbolt Networking
- Write: 1,637 MB/s, Read: 1,736 MB/s via AJA System Test



NAS : TBS-h574TX-i5-16G
O.S. : QuTS hero h5.1.2
Volume Type : Samsung 980 RPO 1TB x 3 + 970 EVO Plus 1TB x2, RAID 5
Client PC : MacBook Pro M2 Pro, Mac OS 13.5, 16GB RAM
AJA :
Data Pattern : 5120 x 2700 5K RED / Testing Data Size : 16GB / Codec Type : 16bit RGBA

QNAP Thunderbolt Accessories: Thunderbolt 3 & Thunderbolt 4 Cables

QNAP also provides a variety of Thunderbolt cables to choose from. In addition to Thunderbolt 4 cables, there are also more affordable Thunderbolt 3 cables for Thunderbolt 3 computers, allowing you to meet high-speed transmission at a lower cost.

Thunderbolt 4 Cables



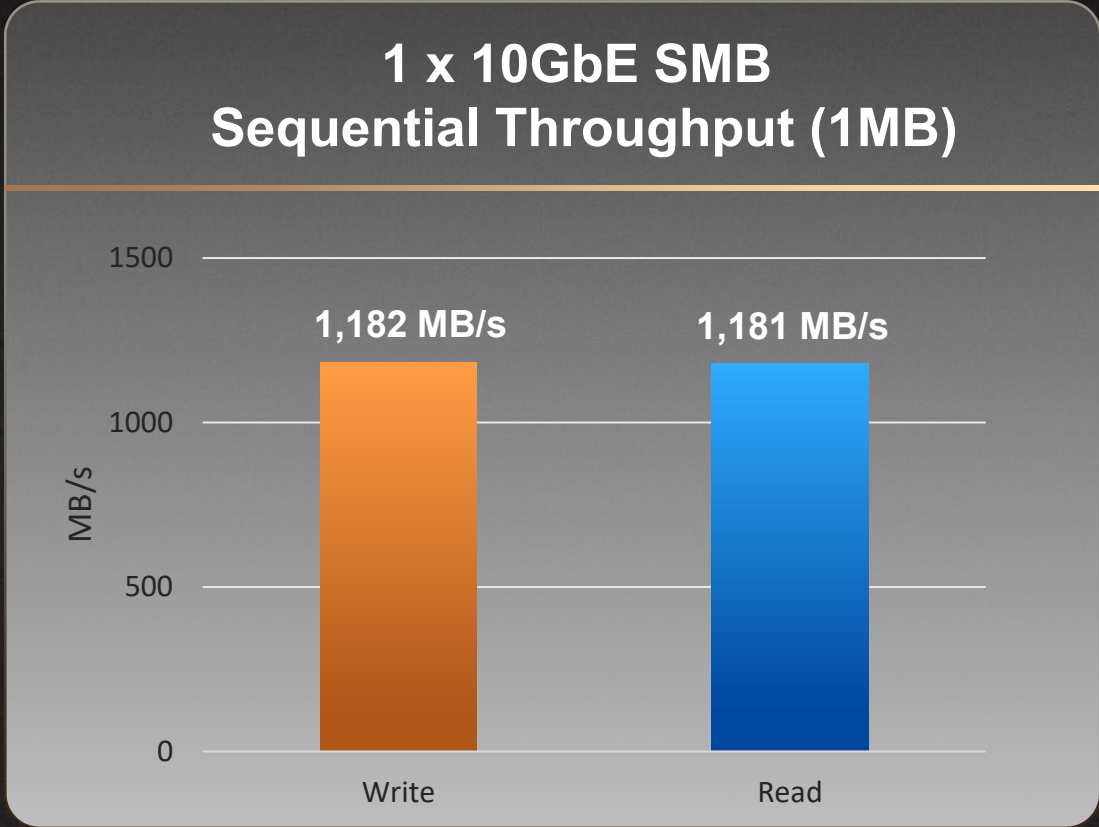
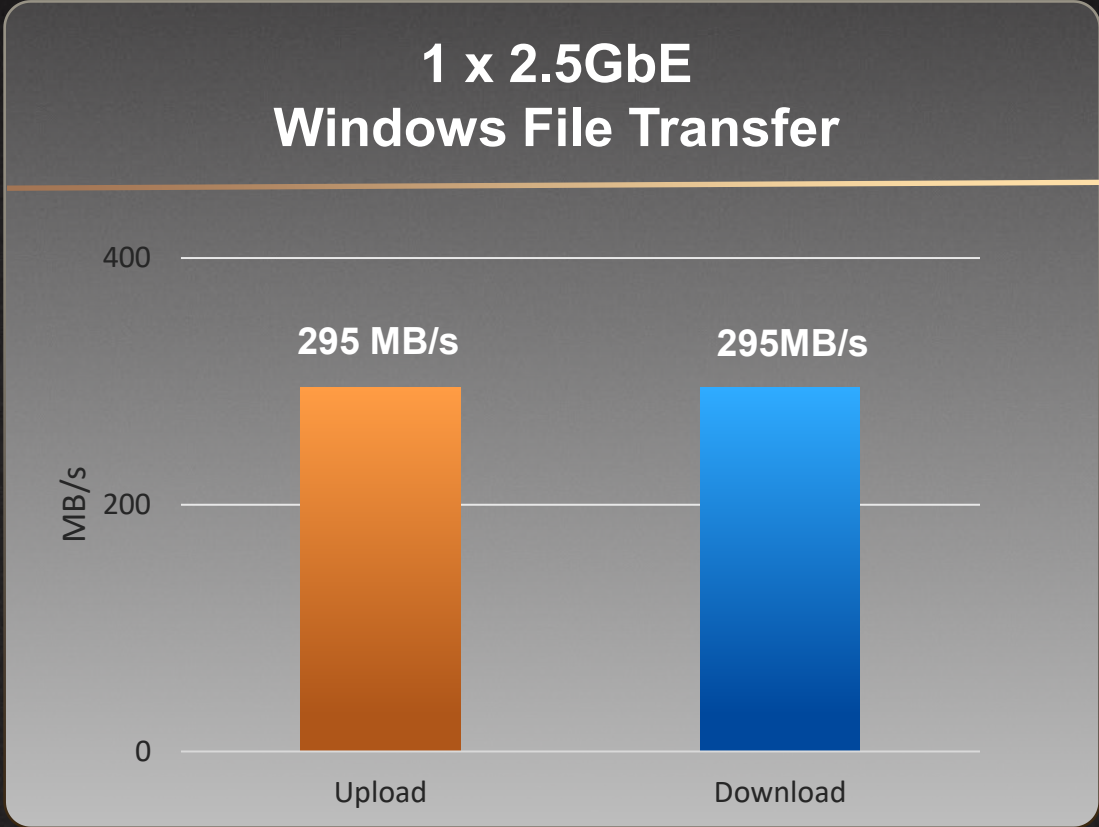
- CAB-TBT4-2M :
2 meter (6.56 ft.)
- CAB-TBT4-0M5 :
0.5 meters (1.64 ft.)

Thunderbolt 3 Cables



- CAB-TBT315M-40G :
1.5 meters (4.92 ft.)
- CAB-TBT320M-40G-LINTES :
2 meters (6.56 ft.)

10GBASE-T and 2.5GbE LAN Ports for High-speed Network Environment Right out of the Box



Test environment :
NAS: TBS-h574TX
OS : QuTS hero h5.1.2
Volume type: Samsung 980 RPO 1TB x 3 + 970 EVO Plus 1TB x2, RAID 5
Client PC: Windows Server 2022, AMD EPYC 7302P 3.0GHz, 96GB RAM,
IOmeter : 16MB, 30-sec ramp up time, 3-min seq. run time, 8 worker, 16-outstanding

Built-in HDMI Port for 4K Video Output

Up to 1.35 GHz
Intel® Iris® Graphic

Up to 80 EUs

The foundational building block of GPU

HDMI 4K output
1 x HDMI 1.4b

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE



1. The supported video and audio formats may vary depending on the software's compatibility
2. This slide shows the specification of Intel Core i5 1340PE integrated GPU



Video Editing Storage Solution



Video File Management Solution for Pre-production – Raw Footage On-site Editing and Powerful Video Transcoding

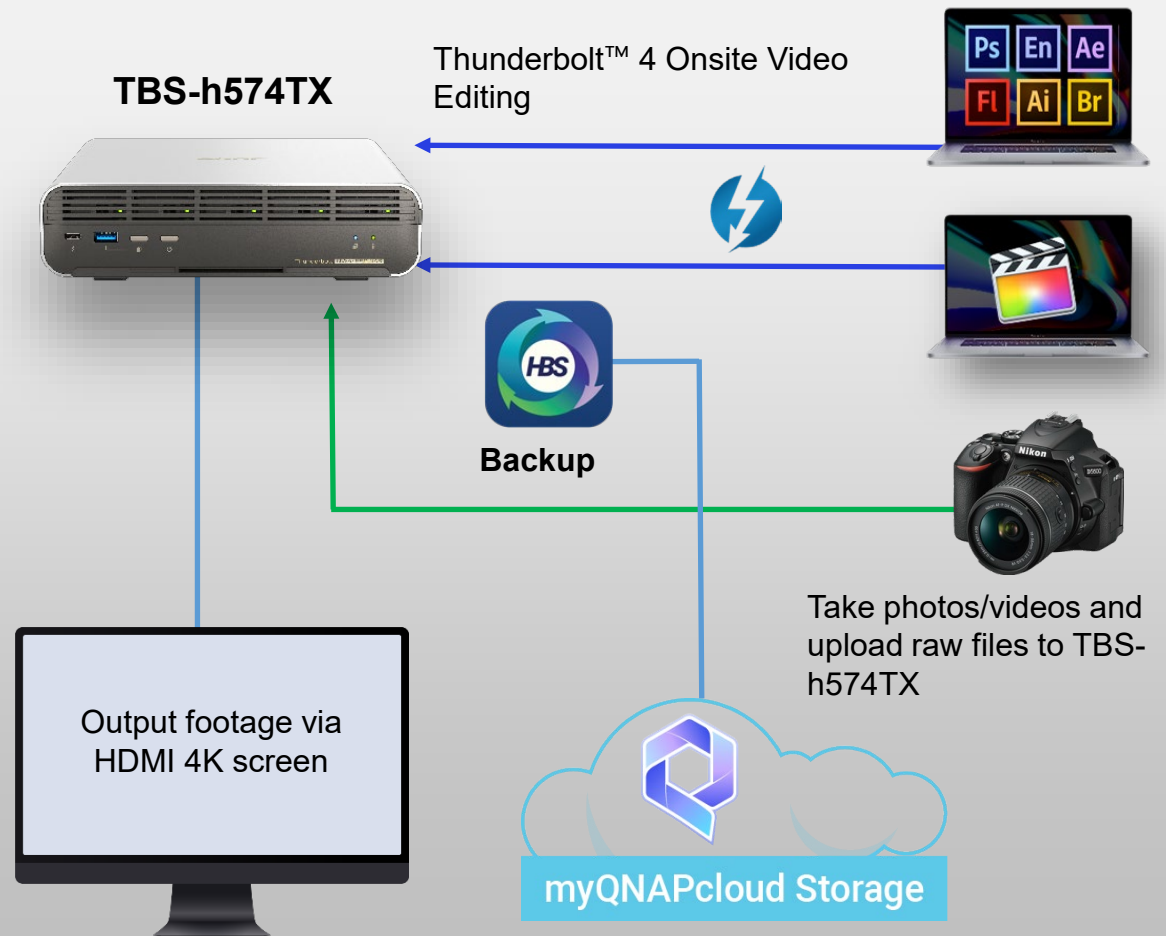
DIT (Digital Imaging Technician) is the keyman to take responsibility of video file management on shooting site in a frontline video production team.

DIT can quickly import large raw footage from camera SD cards to the TBS-h574TX through USB 3.2 Gen 2 (10Gbps) ports and proceed with video transcoding on the NASbook.

The TBS-h574TX comes with a built-in HDMI™ output, allowing on-site personnel to immediately play raw footage from the NASbook on a large screen

Benefits for a pre-production team :

- Fast file import from SD cards to NASbook
- Store small files to myQNAPcloud Storage
- Remote access and sharing video files
- High-resolution video display using HDMI™ output
- Rough cut on-site using Thunderbolt™ 4

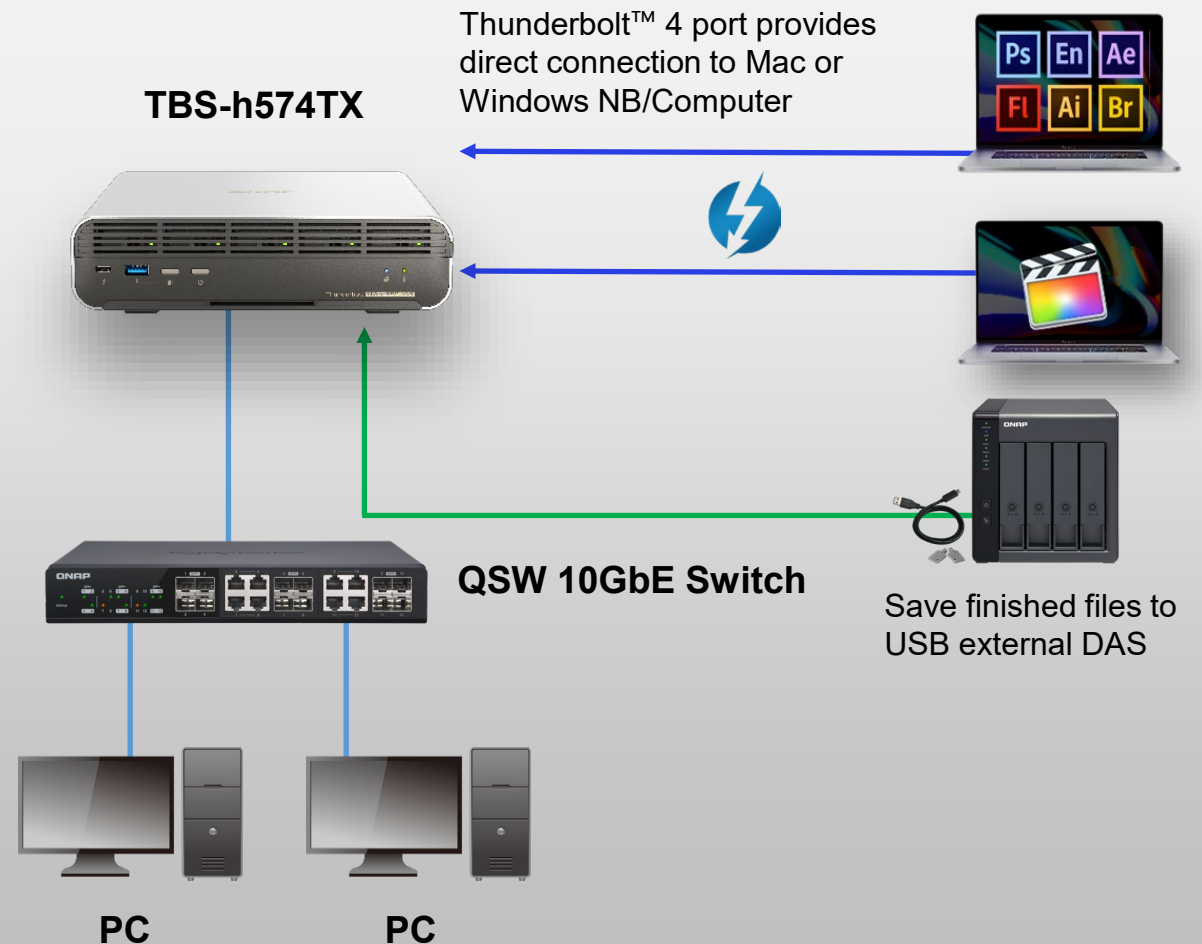


TBS-h574TX Helps You Achieve Efficient Collaboration in Post-production

NAS is way more collaborative than DAS. The TBS-h574TX provides Thunderbolt™ 4 and 10GbE connectivity that allow the post-production team to edit video files directly from the NASbook, without waiting for files to move from drive to drive, computer to computer.

Benefits for a post-production team :

- Directly connect the NASbook to Mac® via Thunderbolt™ 4
- Directly connect the NASbook to Windows® workstations through 10GbE and 2.5GbE connectivity
- File storage and backup by connecting a DAS through the high-speed UBS 3.2 Gen 2 ports



Hot-swappable M.2 SSDs Facilitate File Sharing for Collaboration and Delivery

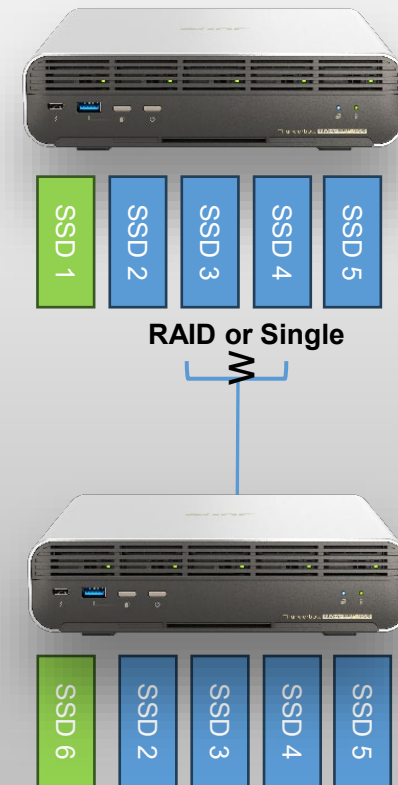
You can configure a TBS-h574TX for each work team in the two locations, and configure the system disk and RAID configuration. Through convenient hot-swappable technology, the SSD can be used like an external hard drive: remove the SSD from NAS A and install it into NAS B to complete the transfer of large amounts of files.

Benefits for remote teamwork :

- Hot-swappable feature enables physically transferring large media files

*Note :

- Before migrating the storage pool, you need to click "Safely Detach Pool" in Storage & Snapshots
- To rebuild the storage pool, you need to click "Rebuild Storage Pool" in Storage & Snapshots



***Set SSD 1 of one TBS-h574TX as the system disk. The rest of the SSDs 2~5 can be RAID or Single Disk setup. With hot-swappable support, the storage pool can be transferred to another TBS-h574TX without shutting down.**

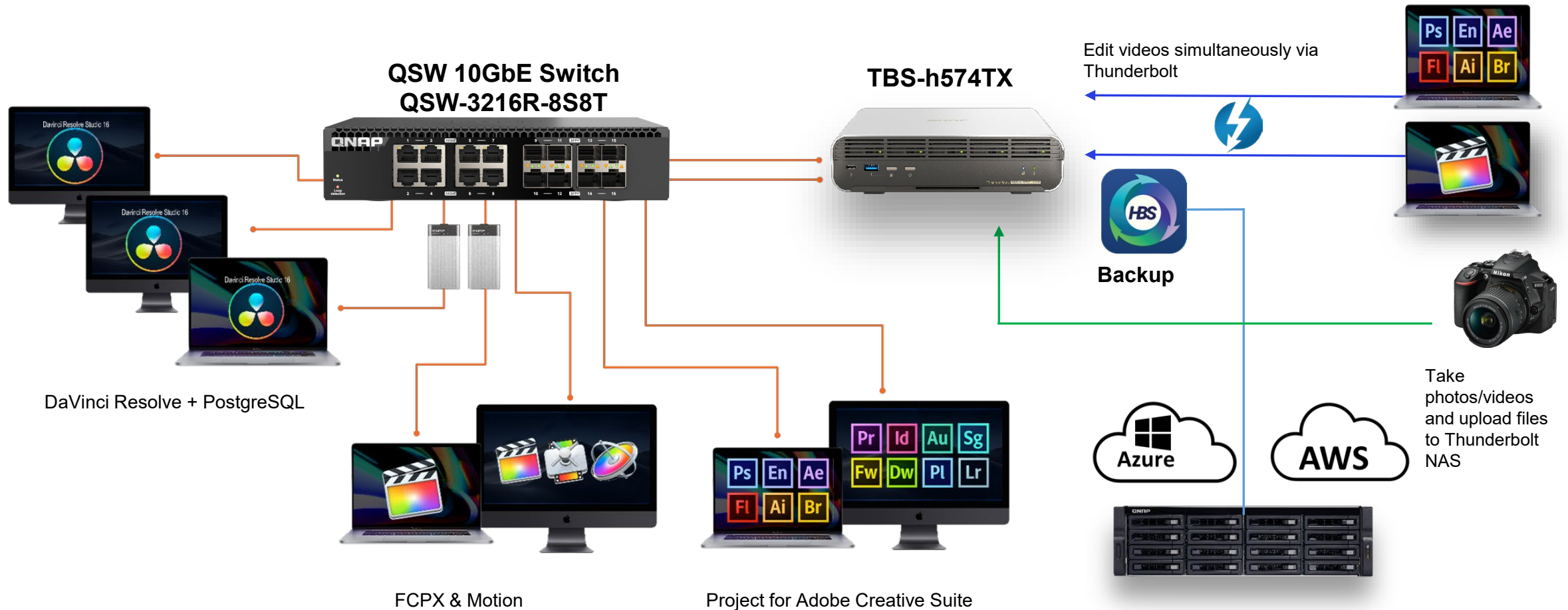
An Official Adobe Partner for Video, Audio, and Image Solutions



QNAP NAS is the best centralized storage for Adobe users, allowing streamlined collaborative workflows on projects of all types (including photos, graphics, videos, and music). Higher file transfer performance can be achieved using a QNAP NAS with 2.5GbE, 10GbE, or Thunderbolt™ connectivity, and storage capacity can be scaled up for larger storage spaces to support your amazing creative work!



Complete Solutions to Create a High-speed, Efficient and Secure Collaboration Environment for Mac[®] and Windows[®]



Compact and Durable Metal Case Design

2.24 kg / 4.94 lbs

Light weight. Take it everywhere!

**Small size &
space saving**

60 x 215 x 199 mm

2.36 x 8.46 x 7.83 inch

(H x W x D)

TBS-h574TX Specifications

Ordering SKU	TBS-h574TX-i3-12G	TBS-h574TX-i5-16G	TBS-h574TX-i5U-16G
CPU	Intel Core i3-1320PE 8C(4P+4E)/12T up to 4.50GHz	Intel Core i5-1340PE 12C(4P+8E)/16T up to 4.50GHz	Intel Core i5-1235U 10C(2P+8E)/12T up to 4.4GHz
Memory	12GB onboard RAM (Non-expandable)	16GB onboard RAM (Non-expandable)	16GB onboard RAM (Non-expandable)
Drive tray	5 x E1.S up to 15mm (or 5 x M.2 2280 PCIe w/ the supplied M.2 adapters) Support Hot-swapping		
LAN	1 x 10GBASE-T Multi-Gig (RJ-45) + 1 x 2.5GbE (RJ-45)		
Thunderbolt	2 x Thunderbolt 4		
USB	1 x USB 3.2 Gen2x1 (10Gb/s, Type-A, front) 1 x USB 3.2 Gen2x1 (10Gb/s, Type-A, rear) 1 x USB 2.0 (Type-A, rear)		
Dimensions (H x W x D)	60 x 215 x 199 mm (2.36 x 8.46 x 7.83 inch)		
Weight	2.24 kg (4.94 lbs)		
HDMI	1 x HDMI (1.4b), support 4K output		
Power supply	120W adapter		

Supports up to 12 More SATA HDDs with One JBOD, adding 264TB (12 x 22TB) of storage space

USB



TR-002



TR-004



TL-D800C



TR-004U



TL-R1200C-RP

Maximum # of JBOD / RAID expansion units	
TR-002	2
TR-004	2
TR-004U	2
TL-D800C	1
TL-R1200C-RP	1

Note: These expansion units can only be used as an individual storage pool or volume on the NAS. Their storage pool or volume cannot be combined into the connected NAS. NAS applications cannot be installed on the them.

Live Demo



QNAP

Enterprise-level OS

ZFS-based QuTS hero



QuTS hero O.S. with Powerful Data Reduction

Technologies to Extend SSD Endurance

Only available when during inline data process before writing

ZFS file system with inline deduplications and compression feature

It's the best choice to pair with the all-flash and SSD storage because it reduces the data size and pattern that need to be written to the SSD directly

Deduplication
Minimum : 16GB RAM



File Station Web UI & Qfile Mobile App: Easy to Use, Easy to Find & Share

All the files and folders stored on your NAS and connected storage spaces are accessible through a familiar interface, and rich search/sort functions are available to help find files.



Smart and Automatic File Management



Qsirch 5

A powerful, Google™-like search tool

- Search image, music, video, document, and email by keyword and filters.
- 5 advanced image search: search by face, text in image, things, color and map.
- Supports Qfiling to perform archival tasks based on your search criteria.



Qfiling 3

Automatically filing and archiving



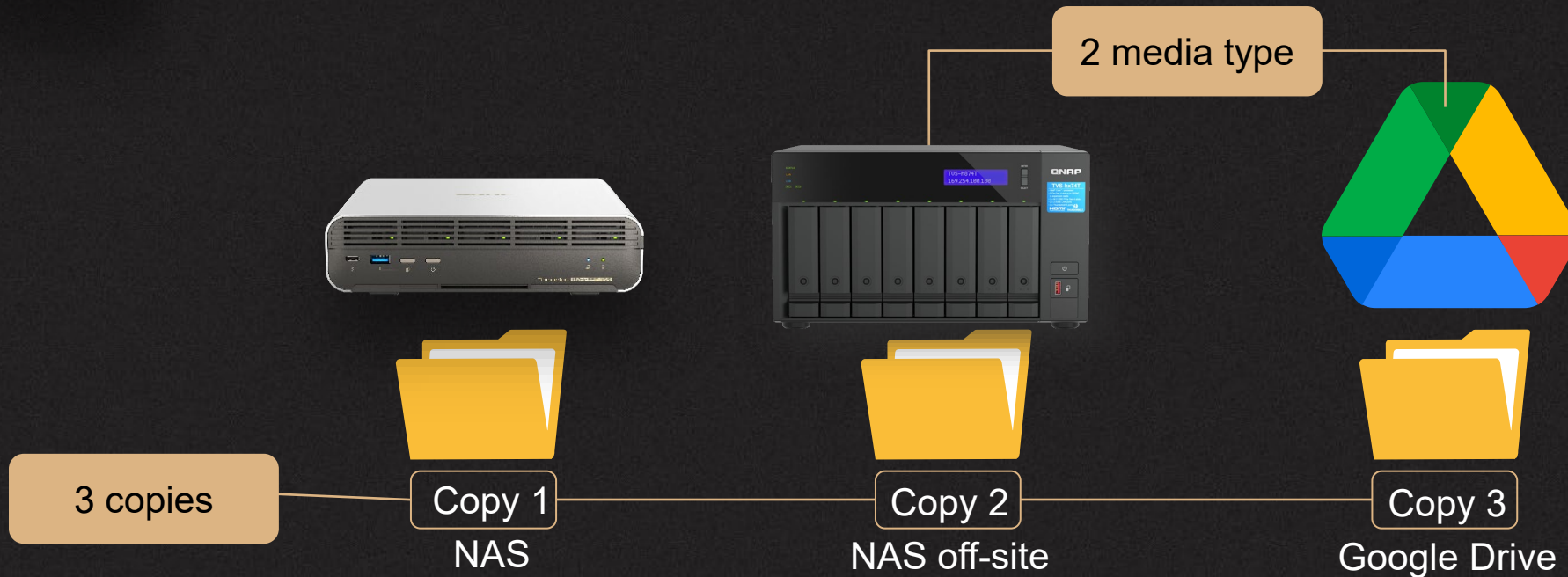
- 2 type of task: filing task, recycling task
- 3 type of scheduling rule: one-time, scheduling, real-time
- 9 editing module: AI face blur, encryption and decryption, video transcoding and so on

HBS 3.0 NAS App Fulfilling Data Backup 3-2-1 Practice with Deduplication



HBS 3 (Hybrid Backup Sync 3)

Complete 3-2-1 backup strategy and recovery plan: 3 copies \ 2 media type \ 1 remote backup

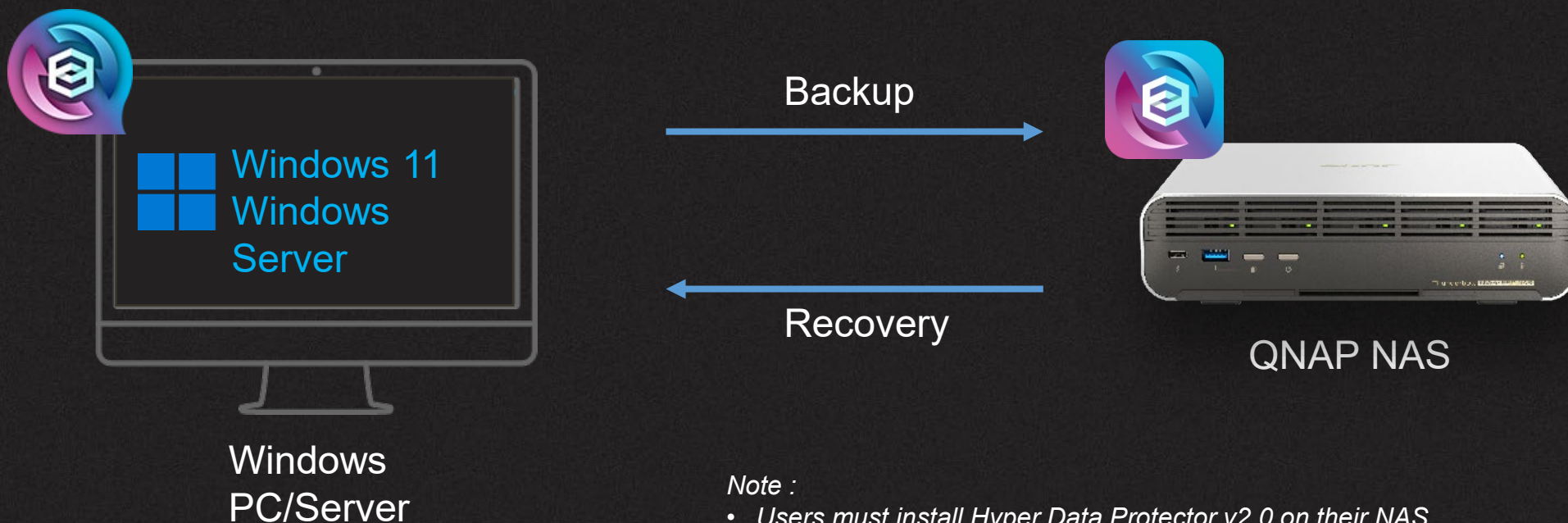


NetBak PC Agent (Beta):

License-free Windows® PC & Server Backup and Recovery

Back up Windows® PC/server

NetBak PC Agent is a license-free Windows® utility for backing up full system, disks, folders, files from PC/Server and recovering your important data to a QNAP NAS.



Note :

- Users must install Hyper Data Protector v2.0 on their NAS.
- Beta Program : Till December 22, 2023 (The official release will be announced separately)

High-performance Multimedia Management & Streaming Platform



QuMagie AI smart photo albums and auto classification



Plex Server media streaming



CAYIN MediaSign Player
HEVC (H.265) video transcoding



Roon Server identifies your entire music library stored on the NAS



Use Cinema28 for multi-room streaming



Snapshots Protect and Restore your Data. Easy and Fast!

TBS-h574TX supports Snapshot, like taking a photo - within seconds the complete status of your NAS system and data is recorded.

QTS supports up to 1,024 snapshots, QuTS hero supports up to 65,536 snapshots

Mitigate the growing threat of ransomware

Step 1

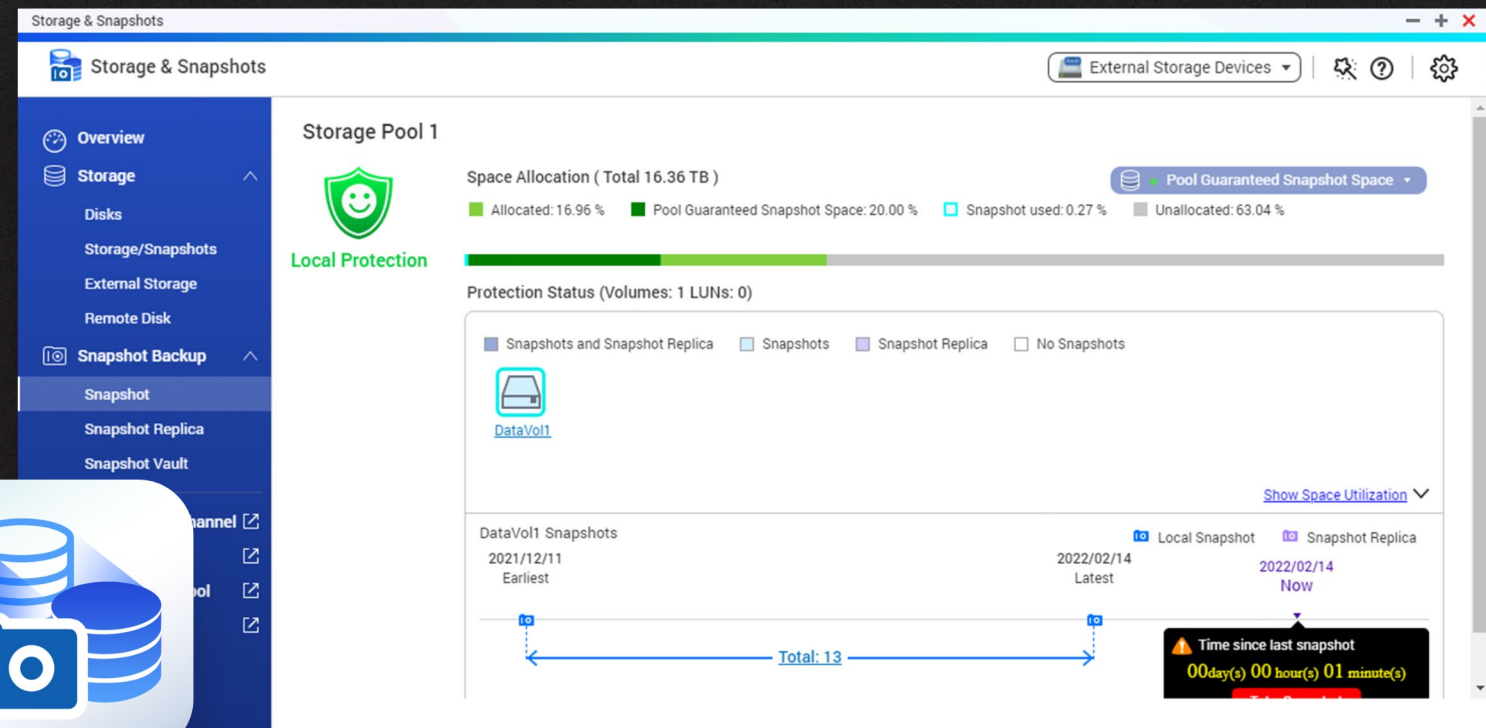
Regularly update, and use Malware Remover

Step 2

Routinely back up to your NAS, and create multi-version snapshots

Step 3

Back up snapshots to another QNAP NAS



Secured Access & Enhanced Data Security



QuFirewall

You can allow/deny IP addresses and regions to prevent unauthorized access and brute force attacks for safeguarding data and service security.



Malware Remover

Regularly scan your NAS using the latest malware definitions. When under attack, infected files will be immediately removed to ensure NAS data security.

The screenshot shows the QuFirewall application window. On the left, there is a sidebar with a 'QuFirewall' header, a 'Firewall ON' toggle, and a notification: 'QuFirewall has denied access to 1 events in the last 24 hours.' Below this are menu items: 'Firewall Profiles', 'Event Counts', 'Capture Events', and 'Notification Settings'. The main area displays 'Firewall Profiles : 3' with an 'Add Profile' button. A table lists the profiles:

Profile Name	Rules	Action
> <input checked="" type="checkbox"/> Basic protection Enabled	6	✎ ⋮
> <input type="checkbox"/> Include subnets only	4	✎ ⋮
> <input type="checkbox"/> Restricted security	40	✎ ⋮

The screenshot shows the Malware Remover application window. On the left, there is a sidebar with menu items: 'Scan', 'Settings', and 'Event Logs'. The main area features a large blue circular button with a stethoscope icon labeled 'Start Scan'. Below this, there are two columns of status information:

Scheduled Scan Daily, 03:00	Last Scan 20 second(s) ago.
Instant scan after malware definition updates Enabled	Last Scan Status Scan Complete

3-year Standard Warranty Covering Hardware Repair and Support Services

TBS-h574TX is backed by a 3-year hardware warranty at no additional cost.

You can also purchase a warranty extension that extends your warranty coverage up to **5 years** total.

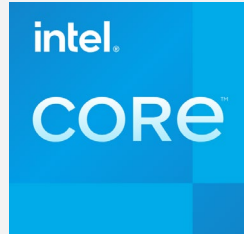
For TBS-h574TX : **LW-NAS-GREY-2Y** (2-year extended warranty), USD\$ 199





NASbook, compact and metal chassis design

Add 12 more HDDs via **USB JBOD**



Up to **12**-core Intel Gen 13 processor

Dual **Thunderbolt 4**



E1.S
M.2
NVMe SSD

5 x E1.S NVMe SSD slots, supporting up to 15mm E1.S, and pre-installed adapters to support M.2 2280 NVMe SSD



Support both



1 x HDMI 4K output



USB-A 3.2 Gen2 (10Gbps) & One-Touch-Copy Button



TBS-h574TX

All Flash Thunderbolt 4 Nasbook



1 x 10GBASE-T + 1 x 2.5GbE



i3: 12GB RAM
i5: 16GB RAM
Maximum Memory

Dual Thunderbolt 4 ensures two clients accessing & editing



Up to 5 x M.2 2280 NVMe SSD, Support **hot-swapping**



Up to 5-year warranty



Collaboration between Final Cut Pro and Adobe Premiere Users

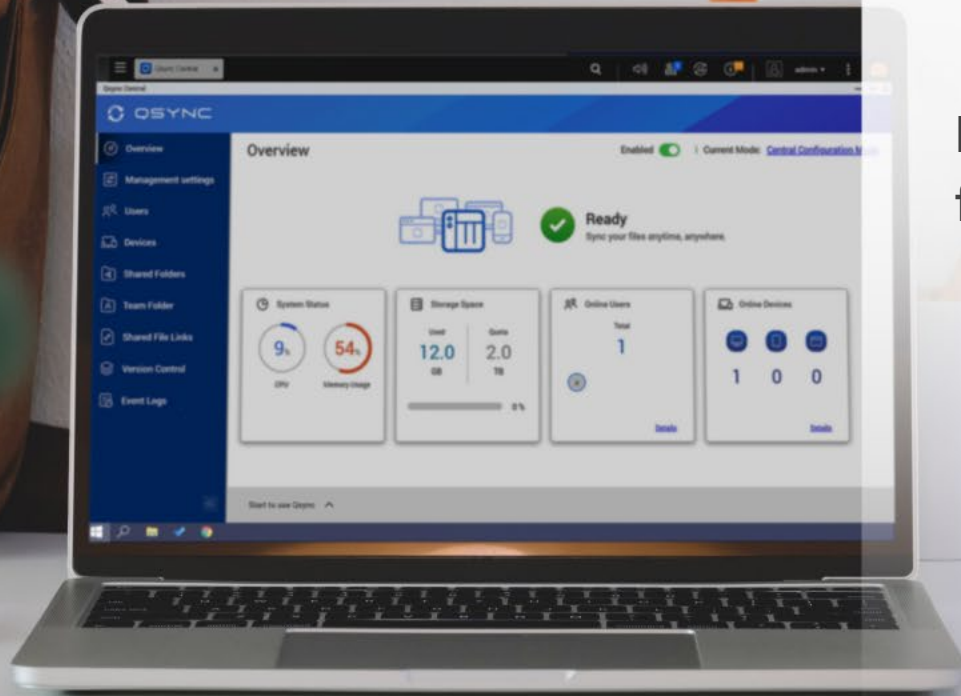
Up to **16TB** Storage capacity

(TBS-h574TX with 4 TB SSD, RAID 5)

QNAP

TBS-h574TX

Make your creativity bloom with the lightning-fast Thunderbolt™ 4 All-Flash NASbook



Copyright© 2023 QNAP Systems, Inc. All rights reserved. QNAP® and other names of QNAP Products are proprietary marks or registered trademarks of QNAP Systems, Inc. Other products and company names mentioned herein are trademarks of their respective holders.