

TS-x73 Series

The most cost-effective **dual PCIe 3.0** slot NAS
Dual M.2 SATA SSD slots & quad-core **2.1 GHz (Turbo Core 3.4 GHz)**



TS-473



TS-673



TS-873



Long-term (5+ years) support processors

TVS-x73e Series



TS-x73 Series



TS-x73U Series



AMD RX-421BD 4-core

Base: 2.1 GHz Turbo Core: 3.4 GHz
Radeon R7 graphics

TVS-x73e: 2 x PCIe slots, USB QuickAccess
, and 4K multimedia



AMD RX-421ND 4-core

Base: 2.1 GHz Turbo Core: 3.4 GHz

TS-x73: 2 x PCIe slots
TS-x73U: 2 x 10GbE SFP+ ports

* TS-473, TS-673, TS-873, TS-873U, TS-1273U, and TS-1673U do not have GPU and HDMI output



AMD R Series flagship embedded SoC

Model Number	OPN	TDP Range	Radeon™ Branding	# x86 Cores	L2 Cache (Mbytes)	CPU Clock GHz (15W Base)	CPU Clock GHz (Max)	# GPU Compute Units	GPU Clock MHz (Max)	Max DDR3 Rate	Max DDR4 Rate	Operating Temp Range Tj °C
RX-421BD	RE421BAAY43KA	12-35W	R7	4	2	2.1	3.4	8	800	2133	2400	0°C to 90°C
RX-418GD	RE418GAAY43KA	12-35W	R6	4	2	1.8	3.2	6	800	2133	2400	0°C to 90°C
RX-216GD	RE216GAAY23KA	12-15W	R5	2	1	1.6	3.0	4	800	1600	1600	0°C to 90°C
RX-421ND	RE421NAAY43KA	12-35W	-	4	2	2.1	3.4	-	-	2133	2400	0°C to 90°C
RX-216TD	RE216TAAY23KA	12-15W	-	2	1	1.6	3.0	-	-	1600	1600	0°C to 90°C
RX-416GD	RE416GATY43KA	15W	R6	4	2	1.6	2.4	6	720	1600	1600	-40°C to 105°C

TVS-x73e

TS-x73 & TS-x73U

TS-x73 front view

LEDs: status, LAN, USB,
M.2 slot 1 & 2, and 3.5"
slots

IR receiver
(RM-IR004 supported
with expansion
graphics card installed)

Tool-less installation
of 3.5" HDDs or
screw- secured 2.5"
HDDs/SSDs



Power button

USB 3.1 Gen
1 port & One-
Touch Copy
button



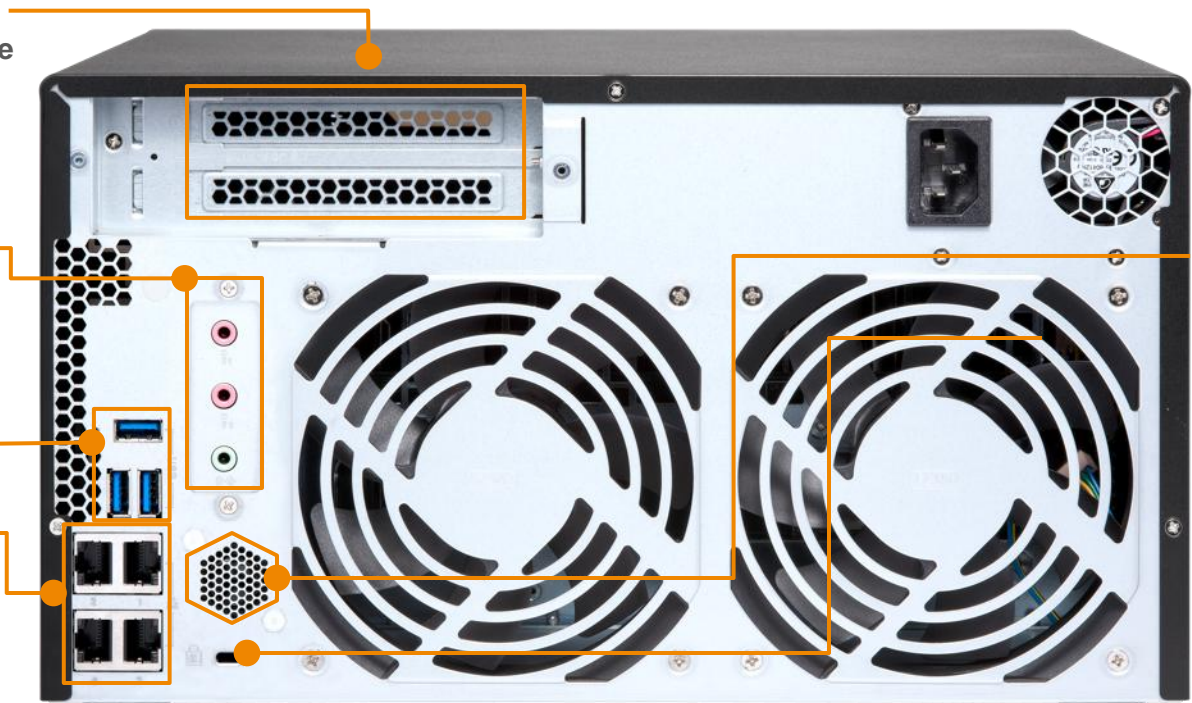
TS-x73 rear view

- 2 x PCIe 3.0 x4 slots
 - TS-473 supports low-profile cards
 - TS-673 & TS-873 support full-height cards

- 2 x 3.5mm dynamic microphone input & 1 x 3.5mm Line Out

- 3 x USB 3.1 Gen1

- 4 x Gigabit LAN



speaker

Kensington security slot

High potential RAM size for big projects



**4 x DDR4 SODIMM
Memory slots, max
4 x 16GB**

4GB RAM (2 x 2GB)

**TS-473-4G
TS-673-4G
TS-873-4G**

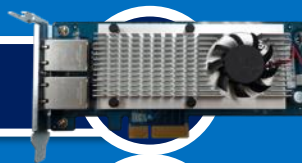
8GB RAM (2 x 4GB)

**TS-473-8G
TS-673-8G
TS-873-8G**

Versatile for most business environments

TS-x73 supports dual **PCIe 3.0 x4** slots for **two expansion cards**

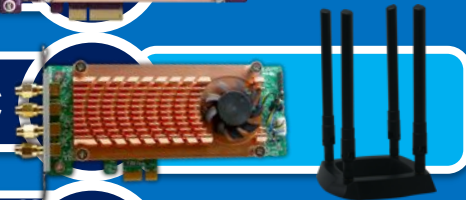
10G/1G NICs



QM2 M.2/10GbE card



QWA-AC2600 wireless NIC



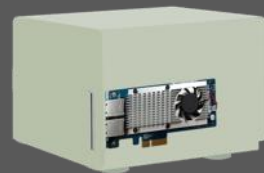
USB 3.1 Gen 2 10G card



SAS 12G card



Other brand with just **one** 2.0 x4 slot

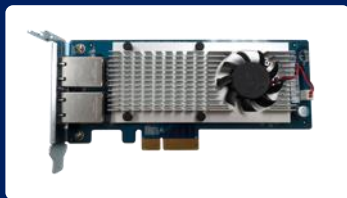


Unleash potentials with fast NICs

10GbE/1GbE network card



LAN-10G2SF-MLX



LAN-10G2T-X550



QXG-10G1T

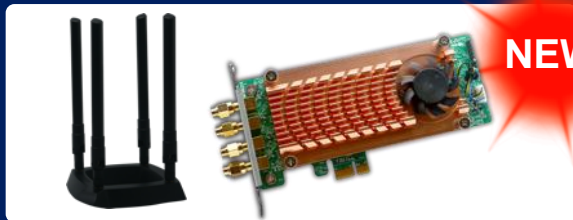


LAN-10G1TA



LAN-1G2T-I210

Wireless network card



QWA-AC2600



TP-Link

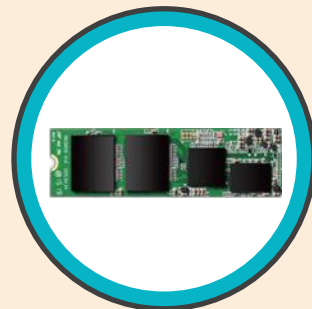
- TL-WDN4800 N900
- TL-WDN3800 N600
- TL-WN881ND N300
- TL-WN781ND N150

QM2 card adds SSD cache, Qtier, & 10GbE

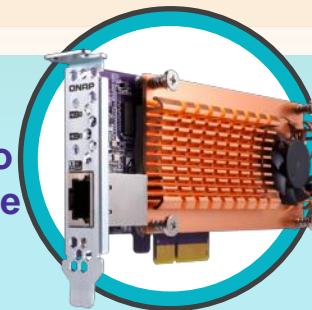


2 x **M.2** 2280 /2260
SATA 6Gb/s SSD slots

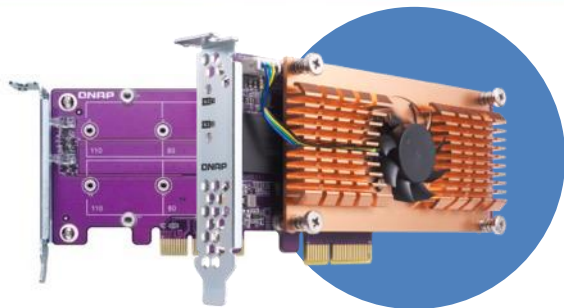
- SSD cache or storage space
- Qtier auto tiering
- Independent thermal sensors



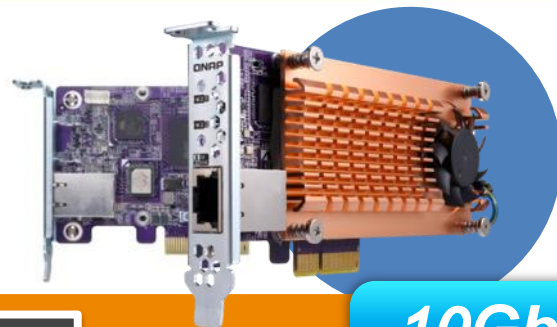
QM2 card provides 2 x M.2
SSD, combined with the two
M.2 SATA SSD slots on x73e
to form a **RAID 5**
pool/volume for better
protection and performance.



QM2 cards with M.2 SSD slots & 10GbE



Support all NAS models
with a PCIe slot



QM2-2S

2 x M.2 22110 / 2280 **SATA** SSD slot

QM2-2P

2 x M.2 22110 / 2280 **PCIe** NVMe SSD slot

QM2-2S10G1T

2 x M.2 2280 **SATA** SSD slot

1 x **10GBASE-T** 10GbE port (10G/5G/2.5G/1G)

QM2-2P10G1T

2 x M.2 2280 **PCIe** NVMe SSD slot

1 x **10GBASE-T** 10GbE port (10G/5G/2.5G/1G)

**10GbE
Combo**

Turn TS-x73 into a wireless access point

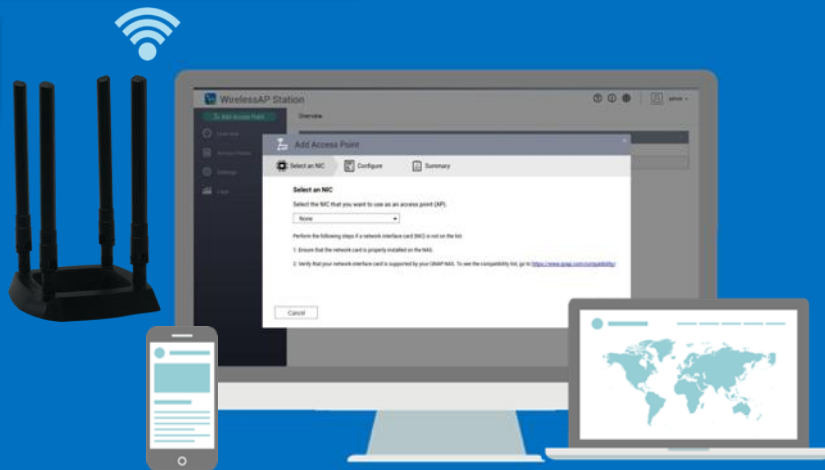
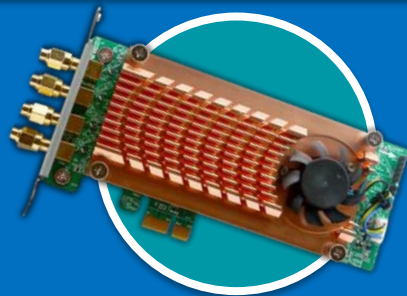
Install **WirelessAP Station** and devices can connect to NAS wirelessly

Setup isolated wireless connections for max bandwidth (IoT/VM/Container)

Powerful x86 performance; add more wireless cards to increase bandwidth



QWA-AC2600 wireless card
4 x 4 MU-MIMO AC2600
Dual Band Dual Concurrent



HDMI output with a graphics card

HybridDesk Station, Linux Station, accelerated transcoding



Supports RM-IR004 remote control with Qbutton feature



QTS 4.3.5 supports **NVIDIA** graphics card!

← ControlPanel


- System
 - General Settings
 - Storage & Snapshots
 - Security
 - Hardware
 - Power
- Privilege
- Network & File Services
 - Notification Center
 - Firmware Update
- Applications
 - Backup / Restore
 - External Device
 - System Status
 - System Logs
 - Resource Monitor
 - License Center

General Audio Alert Smart Fan Graphics Card

You can install graphics cards on the expansion slots to increase the capacity for performing computations in certain applications. [Compatibility list](#)



TS-673	Graphics Card	Resource Use	Hardware ...	Output
	 NVIDIA Corporation GP108 [GeForce GT 1030] Memory:-- Fan speed:--	GPU usage:-- Temperature:--	QTS Container Station	

Without it: 146s



⌂ ...

With it: 26 s !!

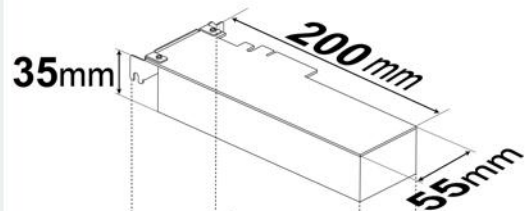



Install a graphics card to accelerate transcoding

Supported graphics card dimension

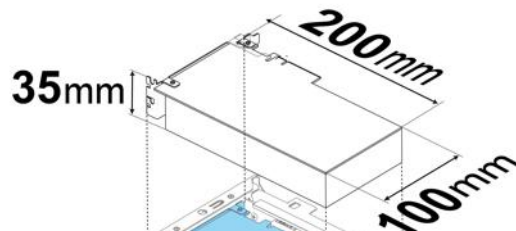
250W power supply

TS-473



Low-profile PCIe card

TS-673 / TS-873



Full-height PCIe card

Supports bus-powered NVIDIA graphics cards such as GeForce[®] GT1030 & 1050

QTS & virtualization increases productivity

All-new **QTS 4.3.4** Storage & Snapshot Manager, and multimedia management

Supports Windows/Linux VMs & containers

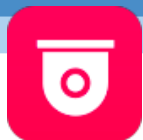


**Virtualization
Station**



**Container
Station**

24x7 surveillance center



Surveillance Station 5.1

Free: **4 channels**

Max: 72 channels (optional license purchase)



QVR Pro

Free: **8 channels**

Max: 128channels (optional license purchase)

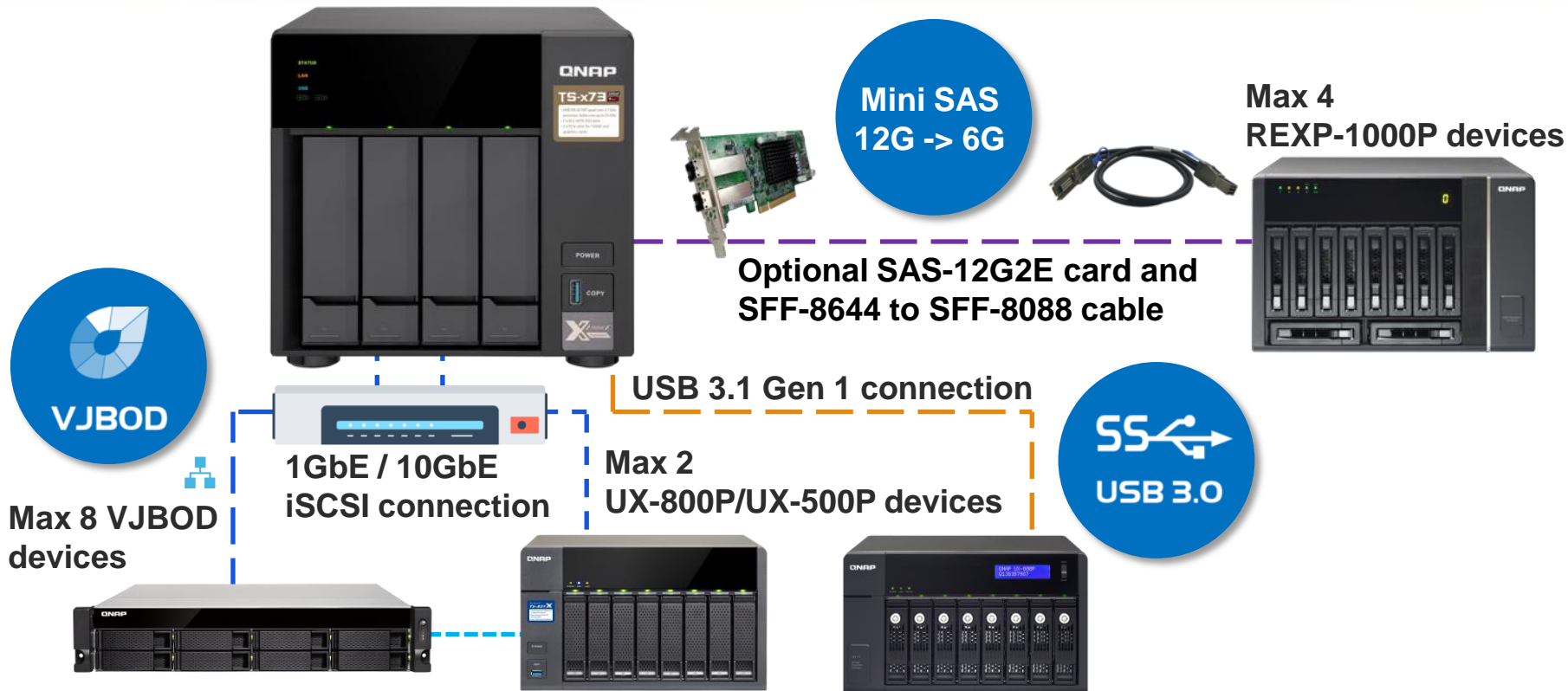


QUSBCam2

Up to 1080p USB Webcam recording



Expand capacity with VJBOD & more



Let's get started with TS-x73 live demo

Upgrade memory & install M.2 SATA 6Gb/s SSD

1 Remove top cover

2 Install RAM and SSD

Install a PCIe graphics card

1 Remove top cover

2 Remove the PSU

3 Install the PCIe card

Test #1: 10GbE performance setup

QNAP TS-873

HDD : 8 x 2.5"SSD, RAID 5, QTS 4.3.4

PCIe #1 : 2-port 10GbE SFP+ card
(LAN-10G2SF-MLX)



Synology DS1817+

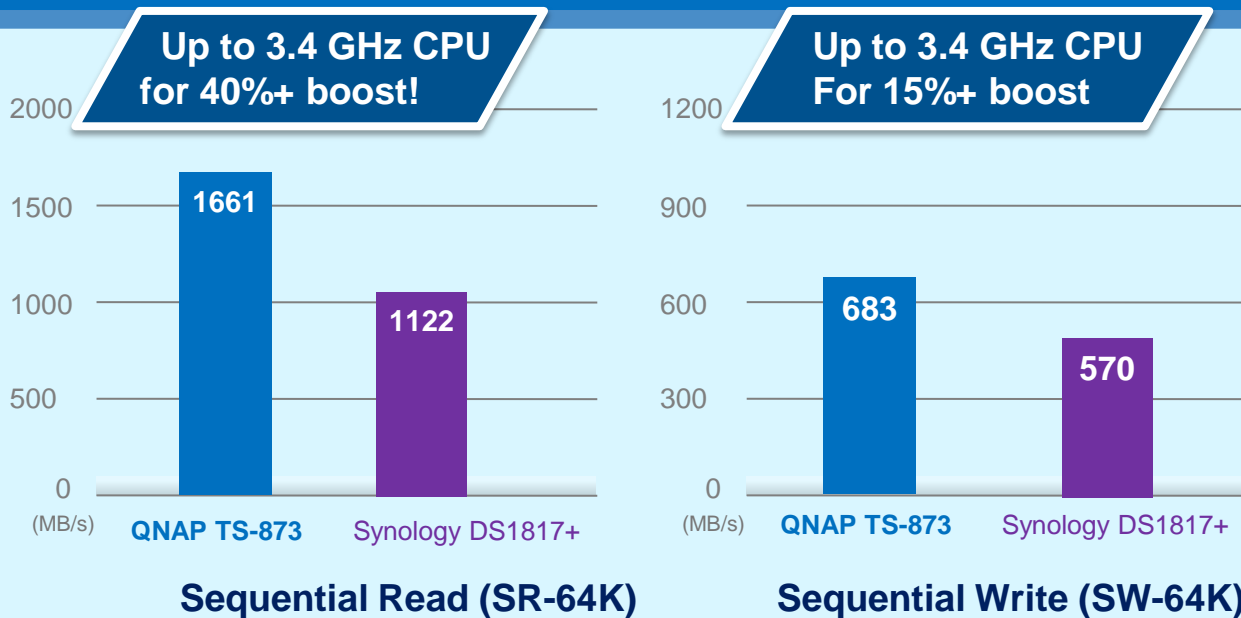
HDD : 8 x 2.5"SSD, RAID 5, DSM 6.2

PCIe : 2-port 10GbE SFP+ card
(LAN-10G2SF-MLX)



Test #1: 10GbE performance run

IOmeter Sequential Throughput, 2 x 10GbE, 64KB



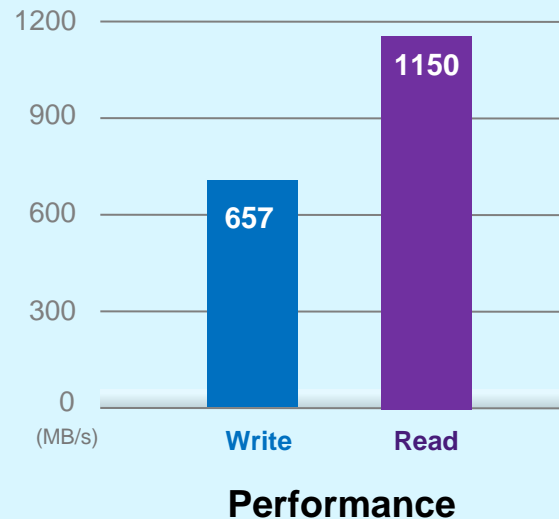
Test # 2: Qtier accelerated 10GbE speed

QNAP TS-473

- ✓ HDD: 3 x 1TB SATA HDD, RAID 5
- ✓ Internal M.2 SATA SSD slots: 2 x 256GB M.2 SATA SSD
- ✓ PCIe #1: 2-port M.2 SATA SSD card (QM2-2S)
with 2 x 256GB M.2 SATA SSD
- ✓ PCIe #2: 1 port 10GbE 10GBASE-T card (QXG-10G1T)
- ✓ 4 x M.2 SSD for Qtier RAID 5 tier



With SATA HDDs, M.2 SSDs and Qtier for the best performance



x73 family outruns the competition



NAS Model	TVS-x73e	TS-x73	Synology DSxx17+
Processor	AMD R series quad-core 2.1 GHz, Turbo Core 3.4 GHz		Intel Atom quad-core 2.4 GHz
Memory	Up to 64GB DDR4 (4 x SODIMM)		Up to 16GB DDR3 (2 x SODIMM)
USB QuickAccess	✓ <input type="checkbox"/>	---	---
PCIe Slot	2 x 3.0 x4 slot		1 x 2.0 x4 slot
Accelerated Transcoding	✓ <input type="checkbox"/>	Requires a PCIe graphics card	---
HDMI	2 x 4K HDMI v1.4b 30Hz	Requires a PCIe graphics card	---
Internal M.2 SSD slot	2 x M.2 2280/2260 SATA 6Gb/s slot		---
LCD	✓ <input type="checkbox"/>	---	---
Audio	2 x 3.5mm MIC in + 3.5mm line out + speaker		---

The most cost-effective NAS with
dual **PCIe 3.0** expansion slots, dual **M.2 SATA SSD**
slots and **quad-core CPU** up to 3.4 GHz



TS-473



TS-673



TS-873