

# Production-grade and low-latency media environment

AV over IP, Thunderbolt™ NAS, and high-speed networking



Know more



Sales Inquiry

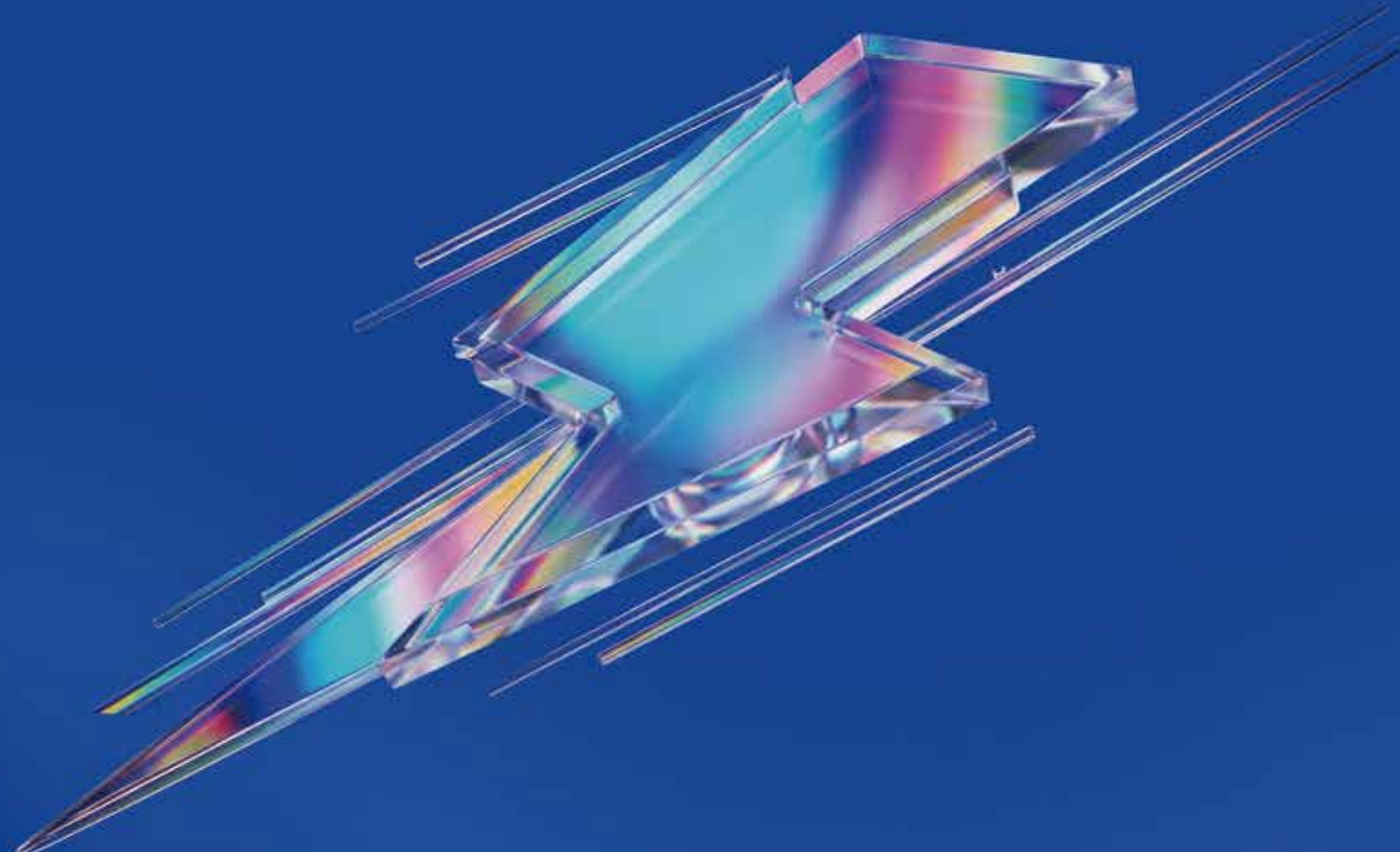
## QNAP SYSTEMS, INC.

[www.qnap.com](http://www.qnap.com)

<b>QNAP Systems, Inc.</b> New Taipei City Email: <a href="mailto:sales@qnap.com">sales@qnap.com</a> Tel: +886 2 2641 2000	<b>QNAP Inc. (USA)</b> Pomona CA Email: <a href="mailto:usasales@qnap.com">usasales@qnap.com</a> Tel: +1-909-595-2782	<b>QNAP Inc. (Canada)</b> Markham, Ontario Email: <a href="mailto:canadasales@qnap.com">canadasales@qnap.com</a> Tel: +1-905-947-1000	<b>QNAP GmbH (Germany)</b> Willich Email: <a href="mailto:desales@qnap.com">desales@qnap.com</a> Tel: +49-2154-88428-0
<b>QNAP SRL (Italy)</b> Roma Email: <a href="mailto:eusales@qnap.com">eusales@qnap.com</a> Tel: +39-(0)687-738456	<b>QNAP UK Limited</b> Swindon Email: <a href="mailto:uksales@qnap.com">uksales@qnap.com</a> Tel: +44-(0)333-344-2522	<b>QNAP Japan</b> Tokyo Email: <a href="mailto:jpsales@qnap.com">jpsales@qnap.com</a> Tel: +81-3-5901-9735	<b>QNAP Korea</b> Seoul Email: <a href="mailto:krsales@qnap.com">krsales@qnap.com</a>



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# AV over IP production network with PTP-precise A/V synchronization

## The Network Behind Flawless AV Production

In professional AV over IP production environments, synchronization isn't a feature — it's the foundation. A single timing mismatch between audio and video streams can derail a live broadcast, disrupt a performance, or compromise a mission-critical production. Precision time synchronization must be built into the network infrastructure itself, not patched on top.

QNAP managed switches are engineered for exactly this demand

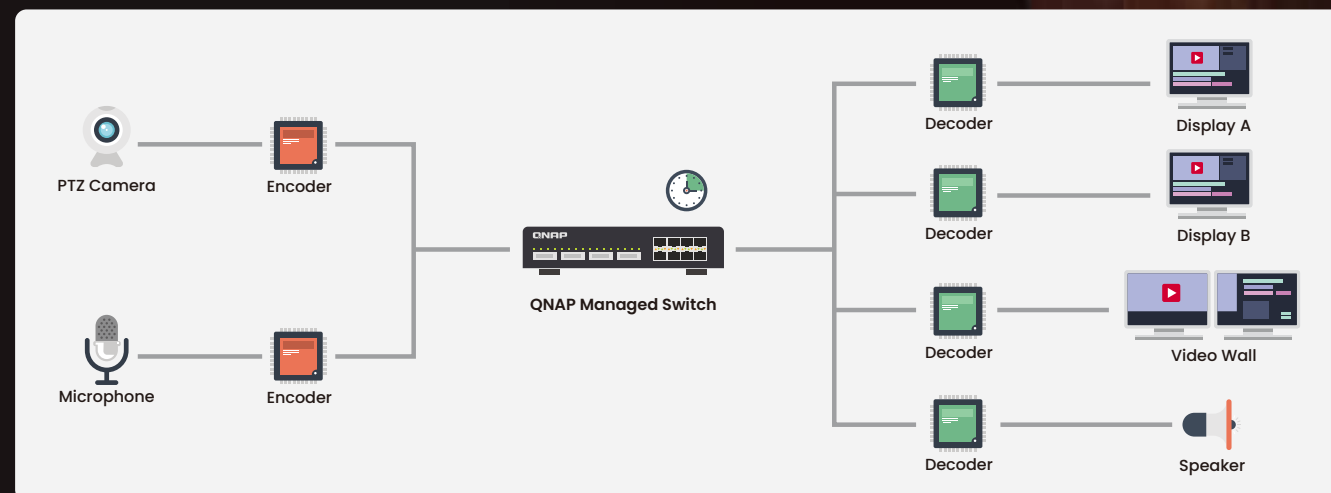
With native IEEE 1588v2 Precision Time Protocol (PTP) support and built-in AVoIP protocol profiles for Dante and AES67 — automatically configuring IGMP snooping, QoS, and multicast settings with a single click — QNAP gives AV engineers the timing accuracy and deployment simplicity that modern AVoIP productions require, without compromise.

### Boundary Clock (BC)

Synchronizes to an upstream grandmaster and redistributes nanosecond-accurate timing across all network segments.

### Transparent Clock (TC)

Eliminates switch-induced timing errors, delivering nanosecond-accurate synchronization to every end device.



## Next-Gen Media Workflows: Supercharging Performance with USB 4 Expansion & Hybrid E1.S/M.2 SSD 10GbE/25GbE NAS

## The World's First Thunderbolt™ 5 AI NAS & Comprehensive Thunderbolt™ 4 NAS Ecosystem

Built for video editors and creative teams who demand the fastest possible storage performance, QNAP's Thunderbolt NAS lineup delivers a direct, high-bandwidth connection to your Mac or PC workstation — no switches, no bottlenecks.

Thunderbolt's high-speed direct connectivity is natively compatible with Mac's built-in Thunderbolt interface, enabling 1TB of 4K footage to be transferred in approximately 10 minutes and dramatically accelerating multi-user project collaboration. Whether your workflow calls for Thunderbolt™ 4 or the next-generation Thunderbolt™ 5, QNAP has you covered with four purpose-built options: **TVS-AIh1688ATX**, **TS-h966TX**, **TVS-h874T**, and **TVS-h674T**.



One ecosystem. Maximum throughput. Intelligent storage. — Built for creators who can't afford to wait. QNAP's integrated solution bridges your Mac or PC directly to high-speed network storage.

The QNA & QXG series connects seamlessly via USB 4 ports or a PCIe slot, instantly unlocking 10GbE or 25GbE network access. Whether transferring 4K/8K footage or syncing large project files, your workstation gains enterprise-grade bandwidth with minimal setup.

For teams requiring even greater capacity, the QXP-40G2UC PCIe-to-USB4 expansion card enables your NAS to connect USB4 JBOD enclosures, scaling storage on demand without disrupting your workflow.

### SMB Multichannel

