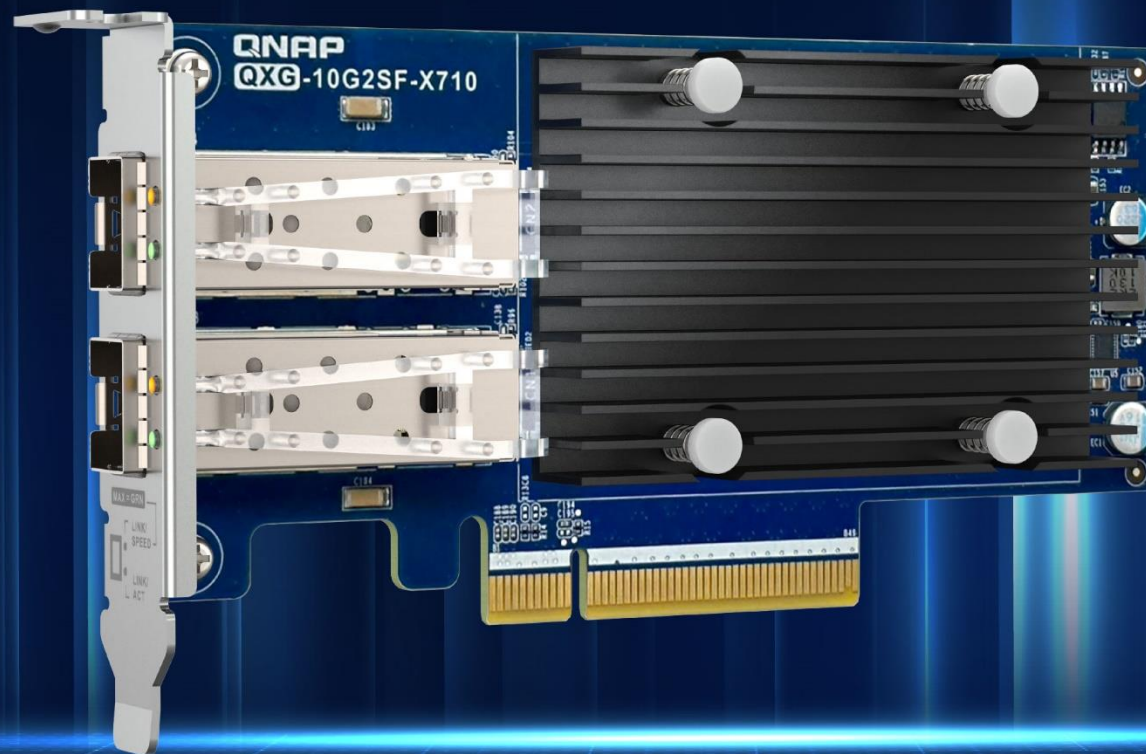


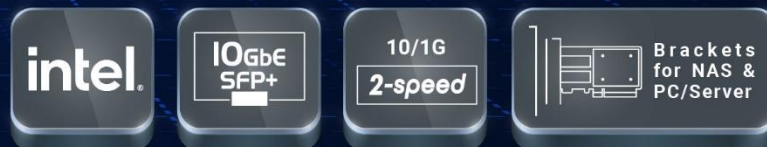
QNAP



QXG-10G2SF-X710

Dual-port, 10GbE SFP+ Intel X710 network expansion card for concurrent data access and video collaboration

Compatible with QNAP NAS, Windows®, and Linux® devices



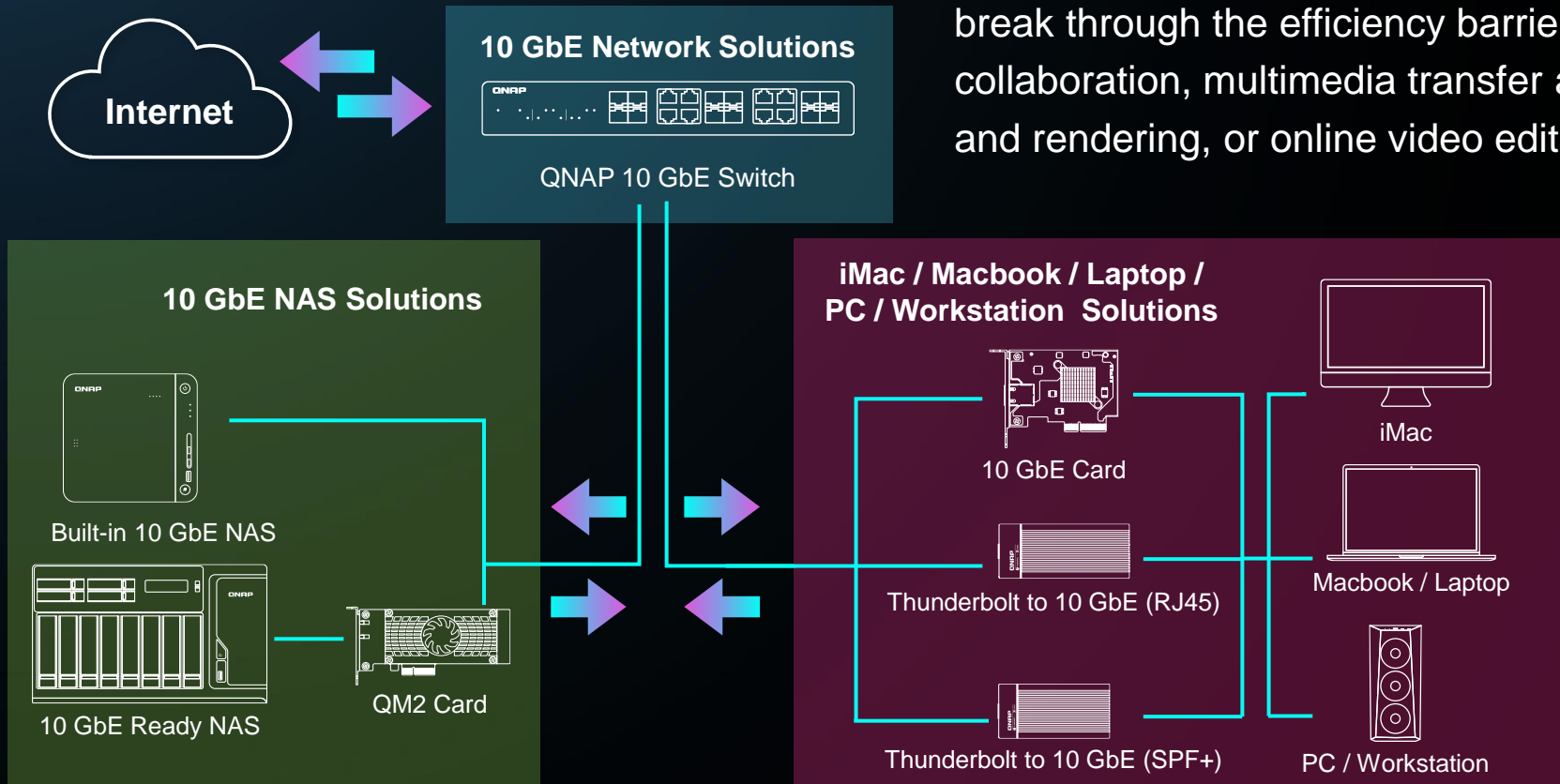
10GbE Network, the Standard for High Productivity

10GbE Connectivity: The Future is Now!



QNAP has a complete 10GbE product architecture to help you easily upgrade to a high-speed environment!!!

The high specification 10GbE network is no longer just for enterprises. It's also a must have for professional audiovisual content creators. With 10GbE bandwidth, SOHO studios can maintain smooth operations and break through the efficiency barrier. Whether it's for multi-user collaboration, multimedia transfer and streaming, 4K/8K video editing and rendering, or online video editing and post-production.

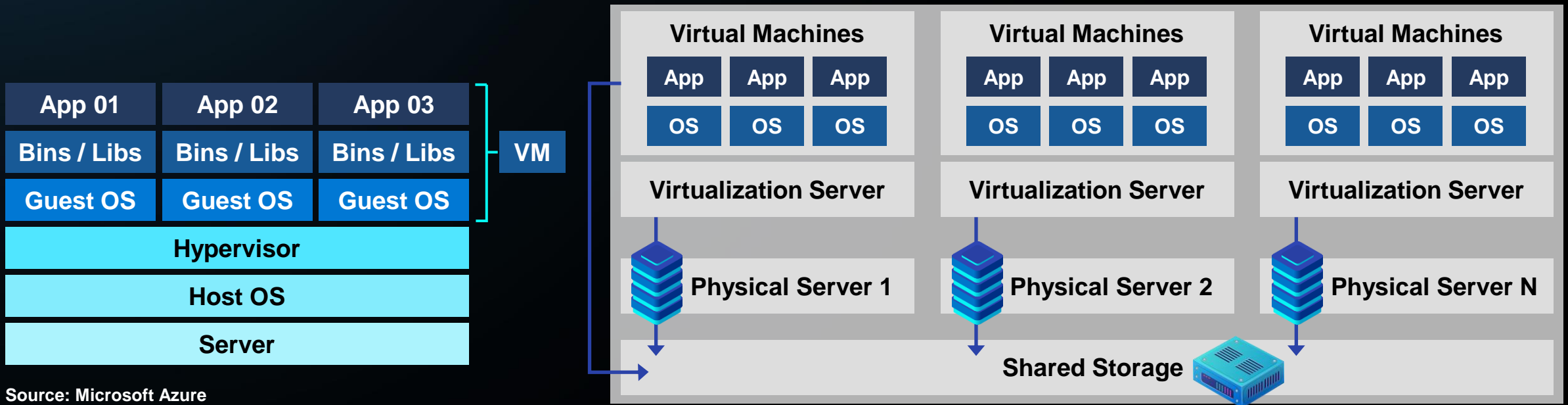


Transferring an hour of 4K video with a file size of approximately 300GB takes about 50 minutes on a previous 1GbE network, but upgrading to a 10GbE network takes about 5 minutes to complete the same task – 10 times faster! This dramatically reduces waiting time and increases efficiency in a work environment where every second counts. A 10GbE network can be said to be the standard for high productivity!!!

Virtual Machine (VM) Offers Multiple Advantages for Developers & Users

A must-have upgrade for program developers and technology enthusiasts!

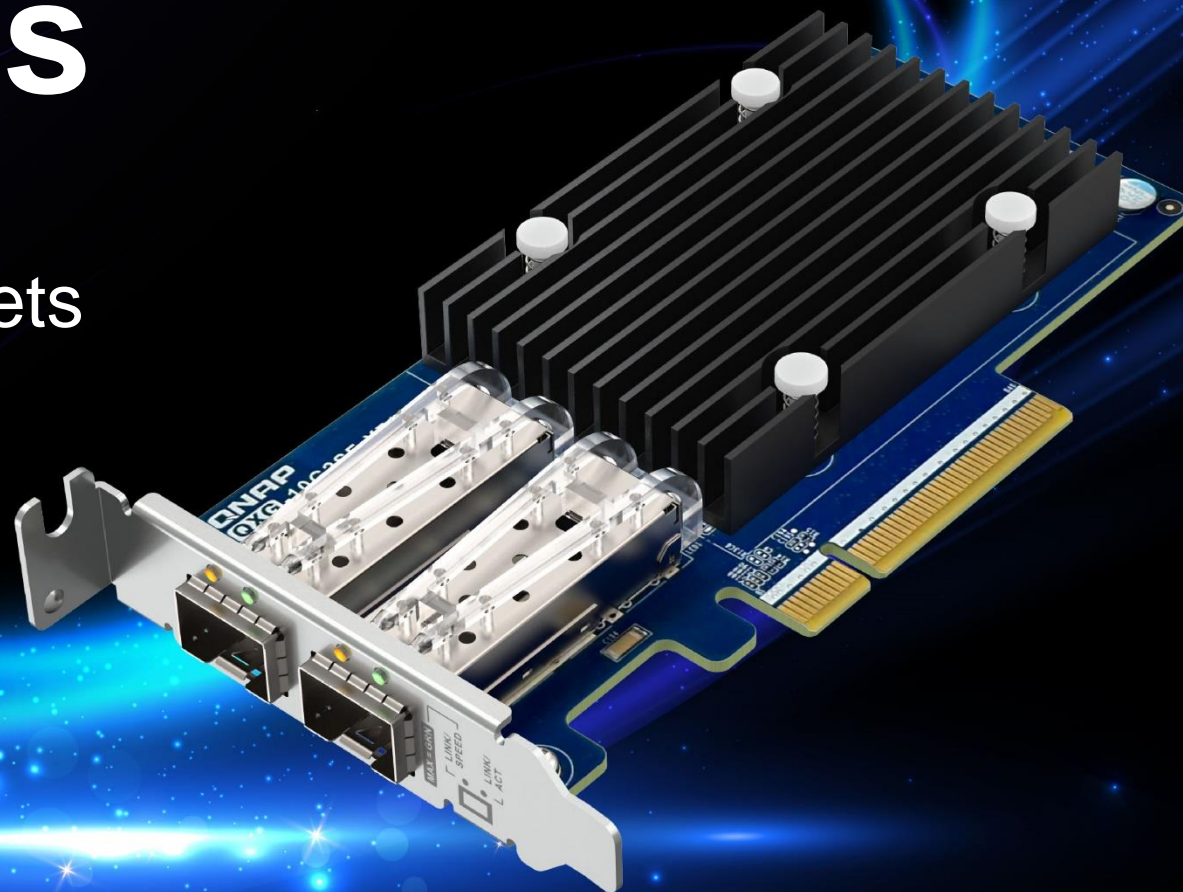
VM provides a wide range of technical support for development. Application developers can use VM to create and manage development and test environments. These environments allow developers to run and test applications on different OS, ensuring cross-platform compatibility. For technology enthusiasts, VM can be used to create virtual desktop environments to run different OS, or to isolate different applications in separate virtual environments for increased security and stability. QXG-10G2SF-X710 provides a variety of VM-related features, including iSCSI, SR-IOV, etc., to increase your efficiency when using VM. If you are using VM, don't miss this opportunity to upgrade; if you are planning to use VM, QXG-10G2SF-X710 is the best way to get started with VM applications.



QNAP

Specifications

2-port Intel 10GbE SFP+ NIC,
Easily build high-speed intranets



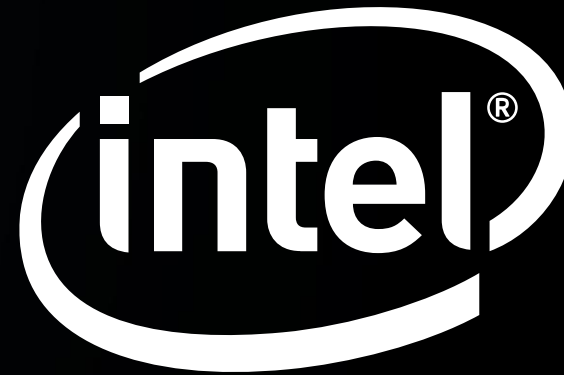
QNAP 2-port 10GbE SFP+ Network Card *QXG-10G2SF-X710*



Dual-Port 10GbE SFP+ Half-Height Network Card

- 2 x SFP+ 10GbE Ports
- 10G/1G Dual-Speed

QXG-10G2SF-X710

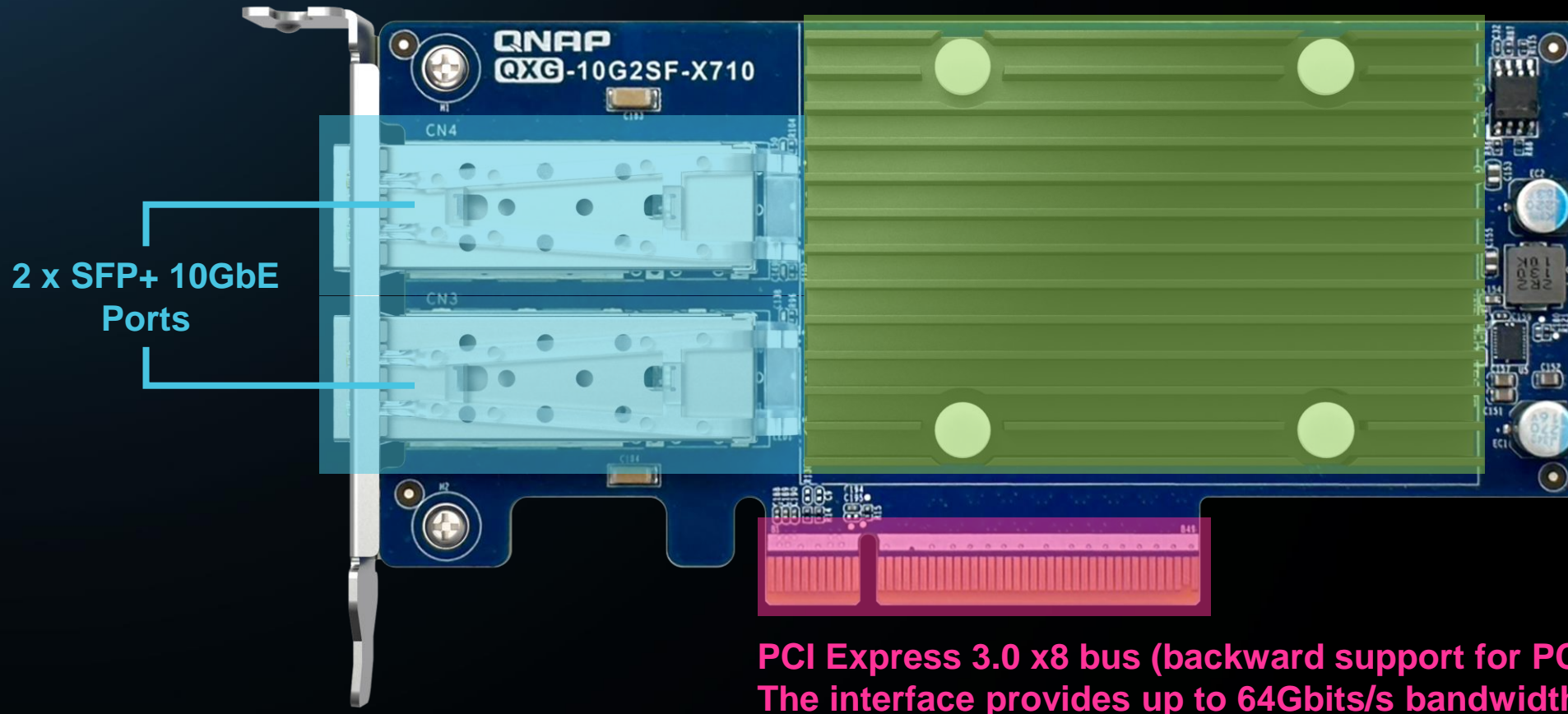


- Support iSCSI
- Support SR-IOV

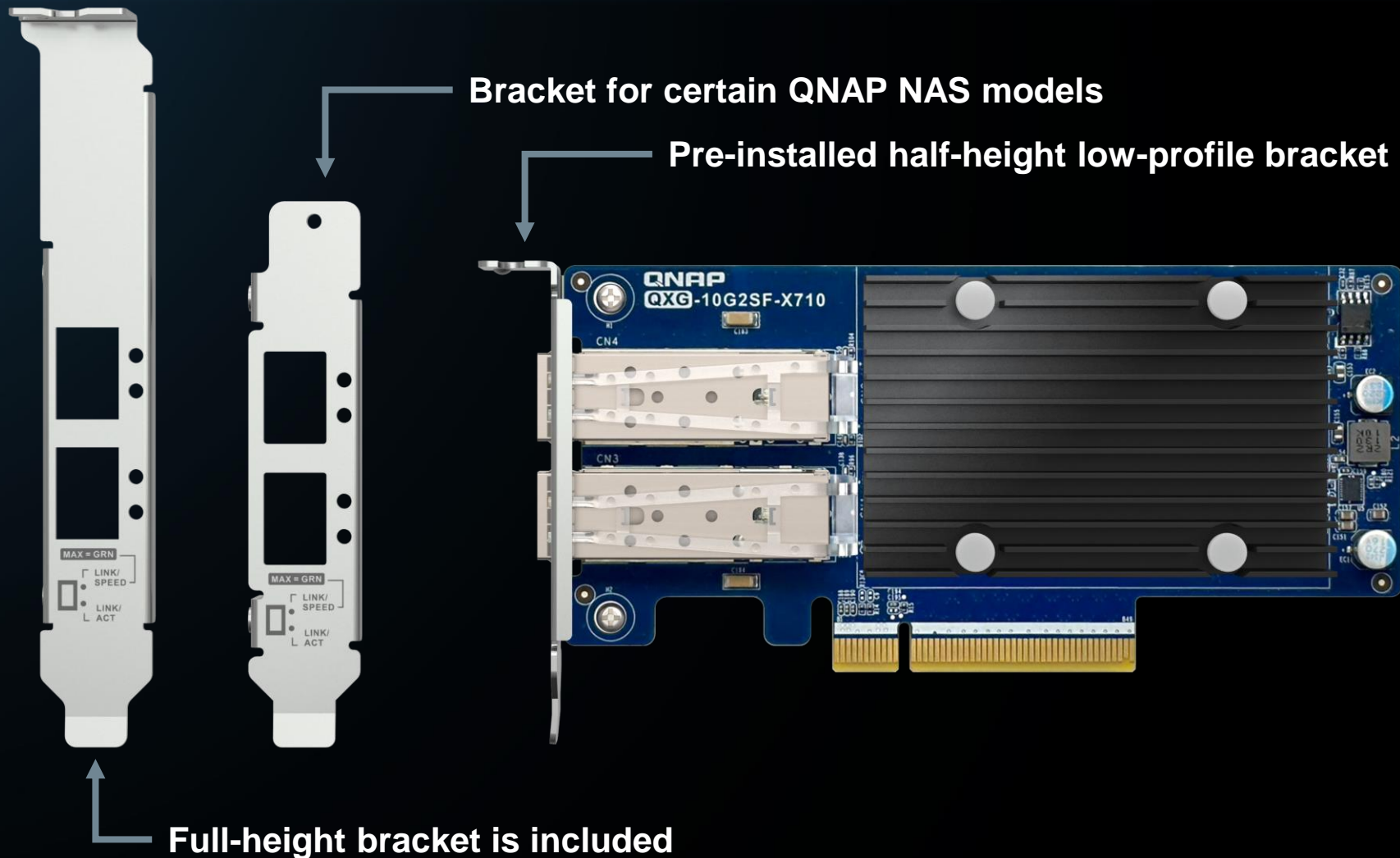
**Intel® Ethernet
Controller X710-BM2**

QXG-10G2SF-X710 External Configuration

Chip Cooling Module: Maximum contact area with high quality heat sink, achieve the best heat dissipation effect

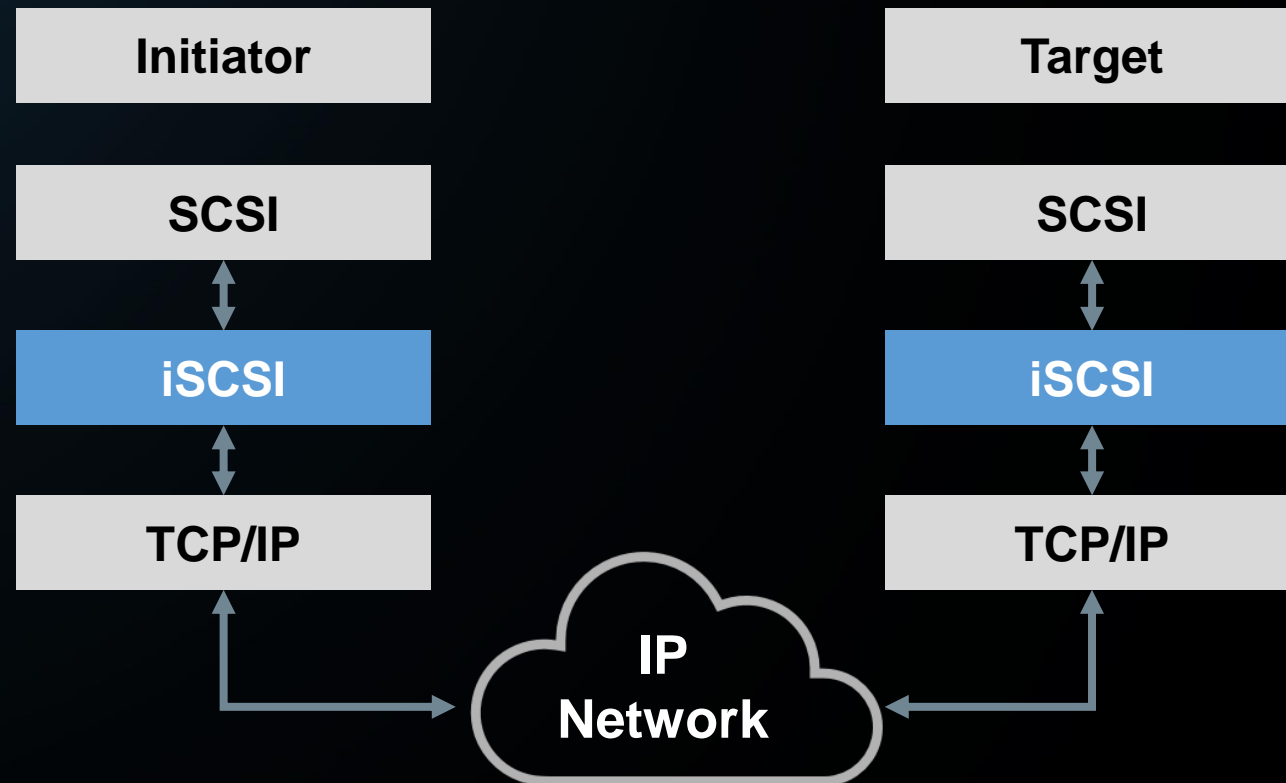


QXG-10G2SF-X710 with Various Brackets for Installation in any Kind of NAS and PC/Server Chassis



Support iSCSI for Flexible Operation

QXG-10G2SF-X710 supports iSCSI function, which allows you to use QNAP NAS as a virtual disk directly when it is connected to client device such as PC, server and VM. Clients can also partition and format virtual hard disks as if they were local hard disks. Virtual hard disks can also be used as storage expansion devices or backup destinations, giving you more virtualization flexibility.



Advantage and Benefits of SR-IOV



Advantage

- Allow you to enjoy physical network service even on a virtual machine.

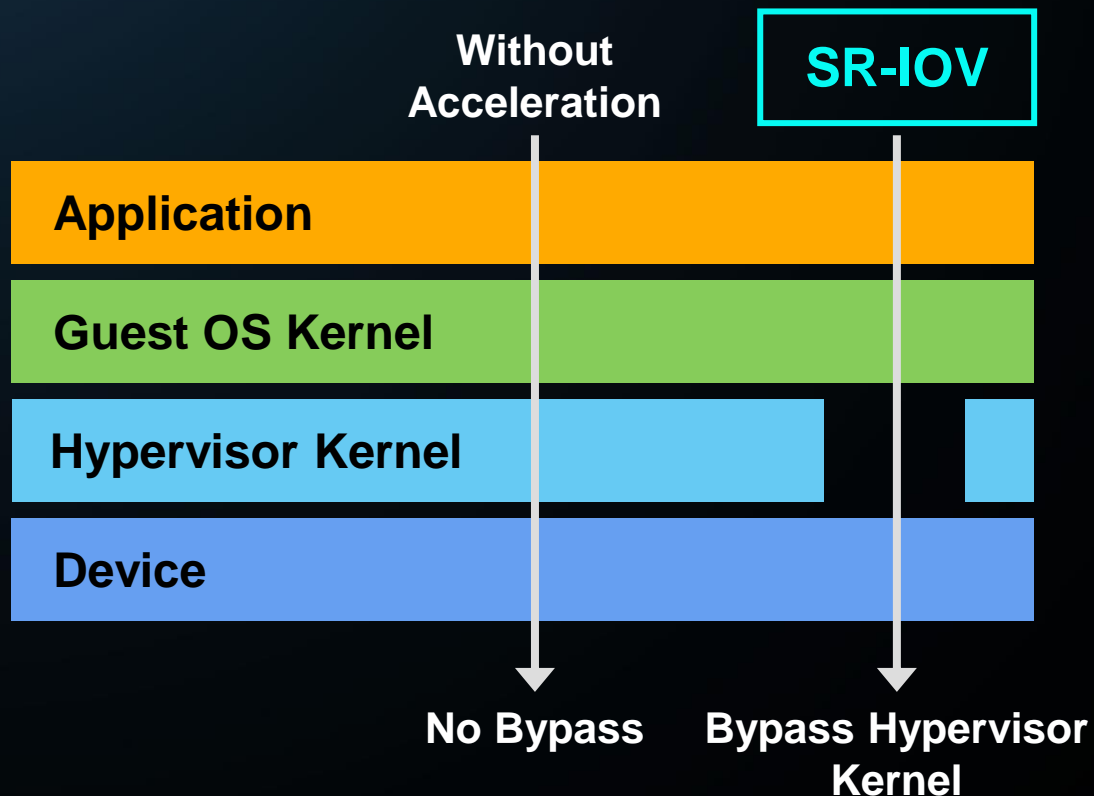


Benefit

- If you need real-time service, such as ticket booking, internet cash flow, audio and video services, etc. You can directly enjoy the speed of the physical NIC to reduce network latency.
- Reduce host CPU consumption
- Reduce network bandwidth consumption and improve network efficiency by at least 20%.

SR-IOV Support for Improved VM Networking Performance

QXG-10G2SF-X710 supports the SR-IOV function that can be installed on the NAS to allocate the bandwidth resource from the physical NIC directly to the VM, reducing network bandwidth consumption and improving network efficiency, as well as being more stable and reducing hypervisor CPU Utilization.



Hardware Acceleration

Advanced Virtual Machine Performance

Specific QNAP NAS models and appliances support pass-through assignment of hardware resources to VM that can dramatically increase VM performance and enhance VM application potential.

Notes for the Use of SR-IOV

- SR-IOV requires a supported host model, BIOS version, and supported network card.
- SR-IOV requires minimum software versions: QTS 4.5.2, QuTS hero h4.5.2 or QVS 3.5.3.
- Currently, only Linux and FreeBSD driver are available for download from the Intel® website.
 - www.intel.com/content/www/us/en/developer/topic-technology/open/overview.html
- VM Live Migration is not available when using SR-IOV (Device Passthrough).
 - Because the physical device used for the original virtual machine has been dynamically migrated, the original physical device ID will not be recognized when you migrate the virtual machine to the new NAS.

QNAP Product List with SR-IOV support

Minimum BIOS Version

- Q05SAR01: TS-h686, TS-h886
- Q047AR03: TS-1886XU-RP, TS-h1886XU-RP
- QX31AR19: TDS-16489U, TDS-16489U R2
- Q09ARR07: TS-h1290FX
- Q03XAR15: TS-h2490FU
- Q053AR20: TDS-h2489FU

NAS Supported

- QuCPE-7010-D2123IT-8G
- QuCPE-7010-D2146NT-32G
- QuCPE-7010-D2166NT-64G

QuCPE Supported

Minimum BIOS Version

- Q03OAR05: QGD-1602P
- Q03OAR16: QGD-1602

QGD Supported

QNAP



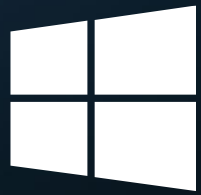
QXG-10G2SF-X710

Comes with a free **3-year**
product warranty

More Information: [QNAP Warranty Service](#)

QNAP-Warranty Service Official Website
<https://www.qnap.com/service/product-warranty/go/>

Flexible Development of 10GbE in Your Device



Windows

Windows 11
Windows Server 2022



ubuntu

Ubuntu
20.04/22.04 LTS



QTS 5.0.1 or a later
updated version

QTS

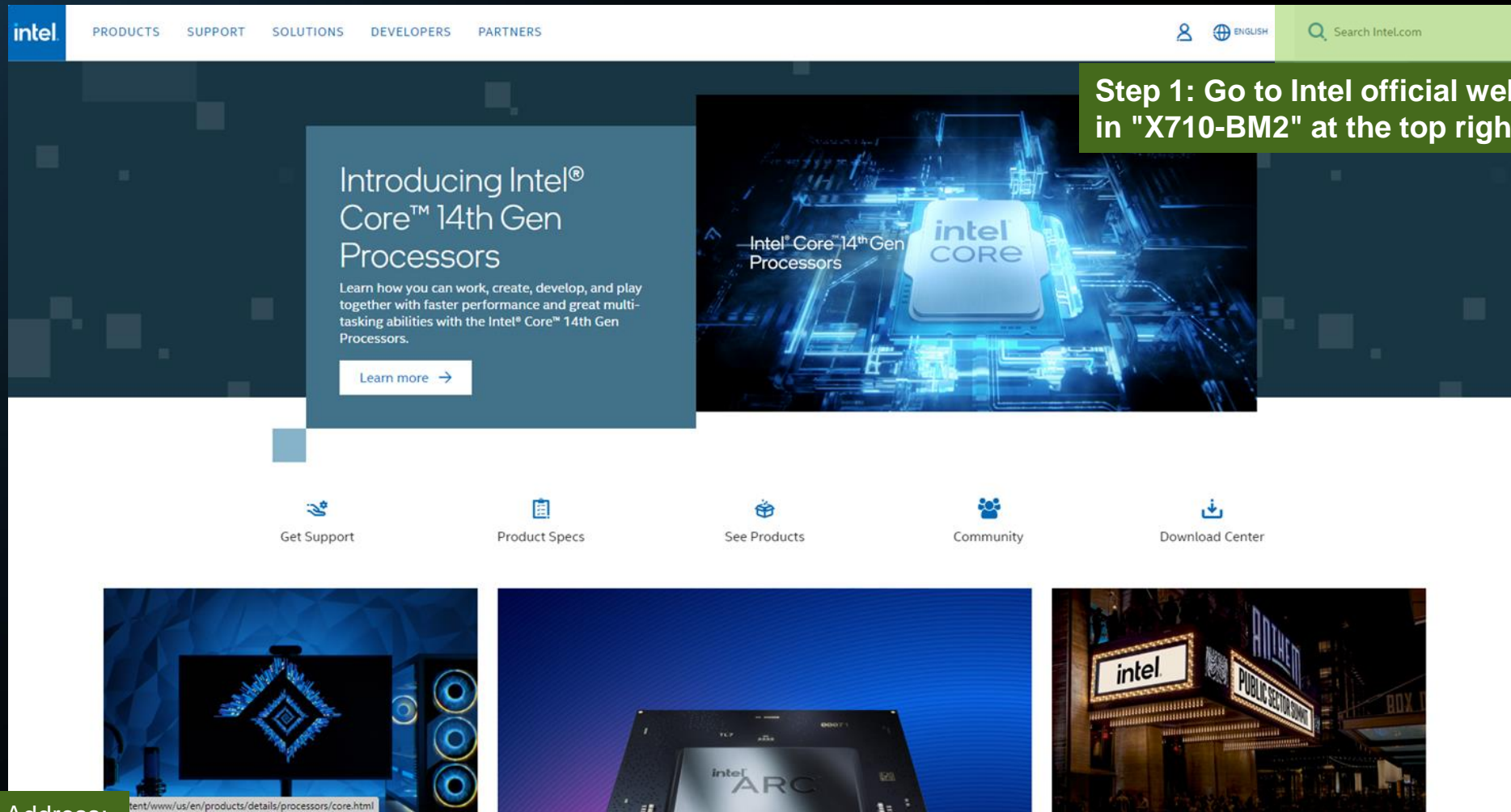


QuTS hero 5.0.1 or a
later updated version

QuTS hero

Intel Official Website NIC Driver Download

QXG-10G2SF-X710 Driver Download



Step 1: Go to Intel official website and type in "X710-BM2" at the top right.

Intel Official Website Address:
"https://www.intel.com.tw"

Intel Official Website NIC Driver Download

QXG-10G2SF-X710 Driver Download

The screenshot shows the Intel website search results for the query 'x710-bm2'. The search bar at the top left contains the text 'x710-bm2'. Below the search bar, there is a 'Filter By' section on the left with a dropdown arrow. The filter options are: 'Category', 'Product Information (3)', 'Support (121)', and 'Drivers & Software (95)'. The 'Drivers & Software (95)' option is highlighted in green. To the right of the filter section, it says '258 results' and 'Sort by Relevancy' with a dropdown arrow. A blue banner across the top of the results area reads: 'Access to additional search results may be restricted. Please [sign in](#) or [register](#) to view.' Below this banner, there are several search results for 'Intel® Ethernet Controller X710-BM2'. The first result is a link to the product page. The second result is a link to a quick reference document. The third result is a link to a product brief, with a 'Download' button next to it. The fourth result is another link to a product brief, also with a 'Download' button. A green callout box with white text is overlaid on the left side of the page, pointing to the 'Drivers & Software (95)' filter option. The callout text reads: 'Step 2: Please click "Drivers & Software" on the left side.'

Q x710-bm2

Filter By

258 results

Sort by Relevancy

Category

Product Information (3)

Support (121)

Drivers & Software (95)

Access to additional search results may be restricted. Please [sign in](#) or [register](#) to view.

Intel® Ethernet Controller X710-BM2

Intel® Products / Intel® Ethernet Products / Intel® Ethernet 700 Series Controllers / Intel® Ethernet Controller X710 / Intel® Ethernet Controller X710-BM2

Intel® Ethernet Controller X710-BM2 - Ordering and trade compliance information inclusive of change notifications, material declarations, and trade compliance information.

Intel® Ethernet Controller X710-BM2

Intel® Products / Intel® Ethernet Products / Intel® Ethernet 700 Series Controllers / Intel® Ethernet Controller X710 / Intel® Ethernet Controller X710-BM2

Intel® Ethernet Controller X710-BM2 quick reference with specifications, features, and technologies.

Intel® Ethernet Controller X710-BM2

Intel® Products / Intel® Ethernet Products / Intel® Ethernet 700 Series Controllers / Intel® Ethernet Controller X710 / Intel® Ethernet Controll...

Intel® Ethernet Controller X710-BM2 quick reference with specifications, features, and technologies.

Intel® Ethernet Controller X710-BM2 Product Brief

Last Updated: 02/12/2021 File: PDF (286.78 KB) Content Type: Product Briefs

Content ID: 613458 Version: 2

The Intel® Ethernet Controller X710 offers dual-port 10GbE, and is backwards compatible to 1GbE.

Intel® Ethernet Controller X710-BM2 Product Brief

Last Updated: 01/27/2021 File: PDF (287.39 KB) Content Type: Briefs

Step 2: Please click "Drivers & Software" on the left side.

Intel Official Website NIC Driver Download

QXG-10G2SF-X710 Driver Download

The screenshot shows the Intel website's search results for the query 'x710-bm2'. The page features a navigation bar with 'intel' logo and links for PRODUCTS, SUPPORT, SOLUTIONS, DEVELOPERS, and PARTNERS. A search bar at the top contains the query 'x710-bm2'. Below the search bar, there are filter options for 'Filter By' including Category, Product, Download Type, and Operating System. The search results are sorted by 'Newest to Oldest' and show 95 results. A blue banner indicates that access to additional search results may be restricted, suggesting users sign in or register. The first result is 'Intel® Network Adapter Driver for Microsoft Windows 11*' with a 'View Details' link. The second result is 'Intel® Ethernet Adapter Complete Driver Pack' with a 'View Details' link. A green banner highlights this second result with the text 'Step 3: Please click "Intel® Ethernet Adapter Complete Driver Pack".'. The third result is 'Intel® Network Adapter Driver for Windows Server 2012*' with a 'View Details' link.

intel PRODUCTS SUPPORT SOLUTIONS DEVELOPERS PARTNERS

Q x710-bm2

Filter By

Category

< All Categories

Drivers & Software (95)

Product

Q Filter by Product

Ethernet Products (95)

Server Products (15)

Software (1)

Download Type

SORT

Firmware (54)

Drivers (26)

Software Downloads (15)

Operating System

SORT

Q Filter by Operating System

95 results

CLEAR ALL FILTERS

Drivers & Software

Sort by Newest to Oldest

Access to additional search results may be restricted. Please [sign in](#) or [register](#) to view.

Intel® Network Adapter Driver for Microsoft Windows 11* [View Details](#)

<https://www.intel.com/content/www/us/en/download/727998/intel-network-adapter-driver-for-microsoft-windows-11.html>

Date: 08/28/2023 Version: 28.2.1

This download record installs drivers for Intel® Network Adapters using Microsoft Windows 11*

Intel® Ethernet Adapter Complete Driver Pack [View Details](#)

<https://www.intel.com/content/www/us/en/download/15084/intel-ethernet-adapter-complete-driver-pack.html>

Date: 08/25/2023 Version: 28.2.1

This download installs version 28.2.1 of the Intel® Ethernet Adapter Complete Driver Pack for supported OS versions.

Step 3: Please click "Intel® Ethernet Adapter Complete Driver Pack".

<https://www.intel.com/content/www/us/en/download/134309/ethernet-port-configuration-tool-windows.html>

Date: 08/08/2023 Version: 1.39.56.9

Download for Ethernet Port Configuration Tool - Windows*.

Intel® Network Adapter Driver for Windows Server 2012* [View Details](#)

Intel Official Website NIC Driver Download

QXG-10G2SF-X710 Driver Download

The screenshot shows the Intel website's 'Drivers & Software' section for the 'Intel® Ethernet Adapter Complete Driver Pack'. The page features a navigation bar with links for PRODUCTS, SUPPORT, SOLUTIONS, DEVELOPERS, and PARTNERS. A search bar is located in the top right corner. The main content area displays a table of driver versions with columns for ID, Date, and Version. The latest version, 28.2.1, is highlighted. Below the table, there is an 'Introduction' section, a 'Documentation' section with links for 'Release Notes' and 'README Text Files', and an 'Available Downloads' section. A green callout box is overlaid on the 'Download' button for the latest version, providing instructions for the next step.

| ID | Date | Version |
|-------|-----------|-------------------|
| 15084 | 8/25/2023 | 28.2.1 (Latest) ▼ |

Download
Release_28.2.1.zip

OS Independent, FreeBSD*, Microsoft Windows*, Linux*, VMware*
Size: 776.7 MB
SHA1: 9BB439CDD64F9D729C36E0D5A3D21849FF2BE2FE

Step 4: Click to download and install the driver to use QXG-10G2SF-X710 on your Windows/Windows Server/Ubuntu device.

Introduction
This download installs version 28.2.1 of the Intel® Ethernet Adapter Complete Driver Pack for supported OS versions.

Documentation
[Release Notes \(Release_Notes_28.2.1.pdf\)](#)
[README Text Files \(readme_28.2.1.txt\)](#)

Available Downloads

About Intel® drivers
If you purchased an OEM branded server or appliance, contact your OEM for a SW driver version that is compatible with your exact FW version. Using SW and FW versions that have not been validated to work together will affect performance, feature availability, and system stability.
[See list of manufacturers' Support websites.](#)

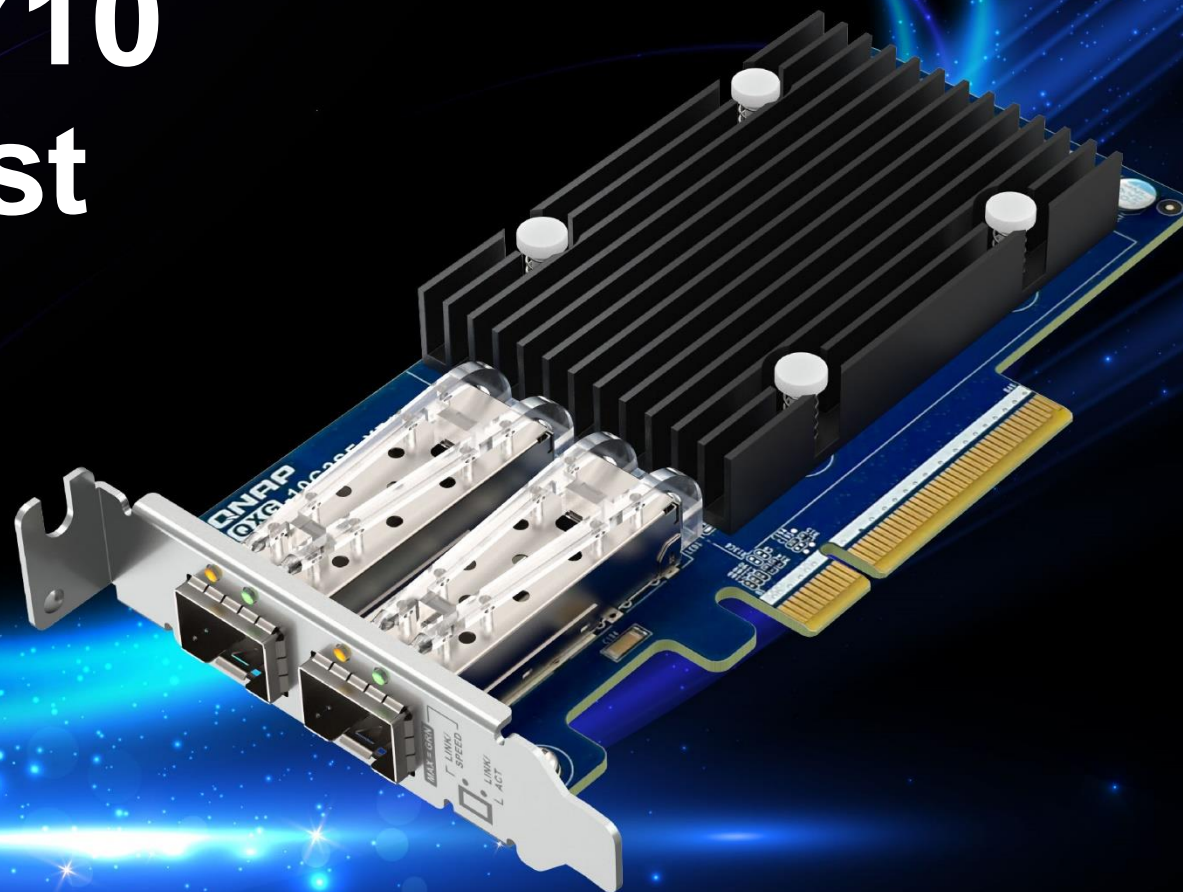
For a detailed list of features, fixes, known issues and general release information, download the release notes and review the readme.txt that is

QXG-10G2SF-X710 10GbE NIC Specifications

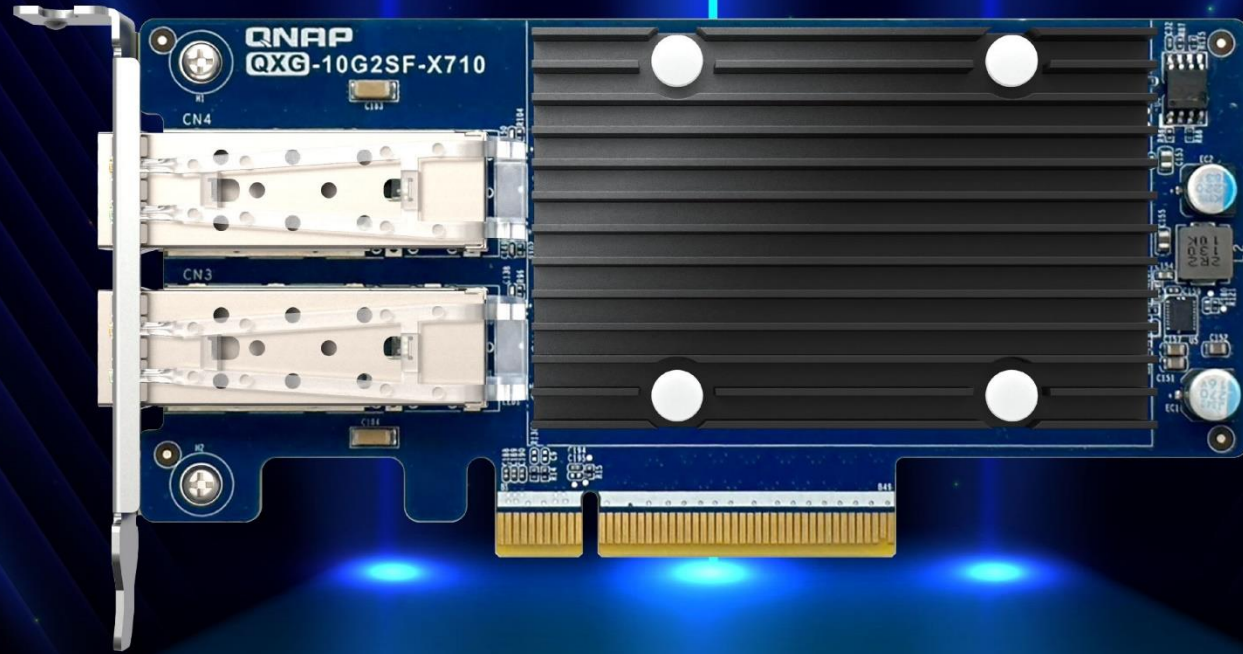
| QXG-10G2SF-X710 | |
|-----------------------------|--|
| Network Controller | Intel® Ethernet Controller X710-BM2 |
| Transmission Speed | 10 GbE / 1 GbE Dual-Speed |
| Type of Port | SFP+ |
| Number of Ports | 2 |
| Support for QNAP OS | QTS 5.0.1 or Later Versions QuTS 5.0.1 or Later Versions |
| Support for other OS | Windows® (Driver Installation Required) Ubuntu® (Driver Installation Required) |
| PCIe Interface | PCI Express 3.0 x 8 |
| Package Content | 1 x QXG-10G2T 1 x QIG (Quick Installation Guide) 3 x Bracket (Pre-Installed Half-Height Low Profile Bracket) |
| Year of Warranty | 3 Years |

QNAP

QXG-10G2SF-X710 Performance Test



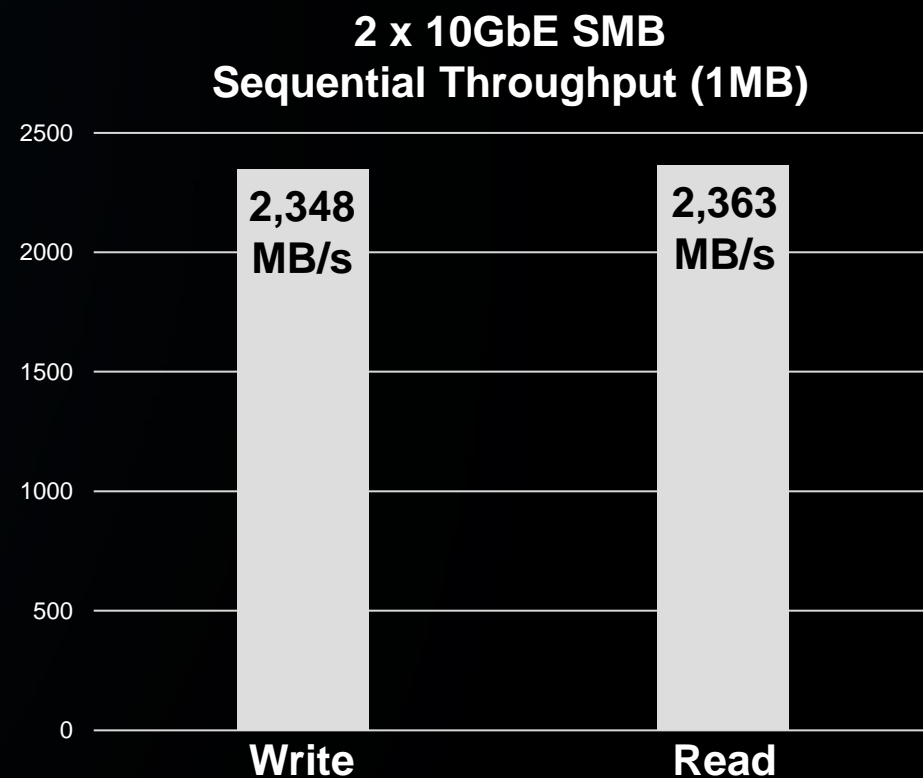
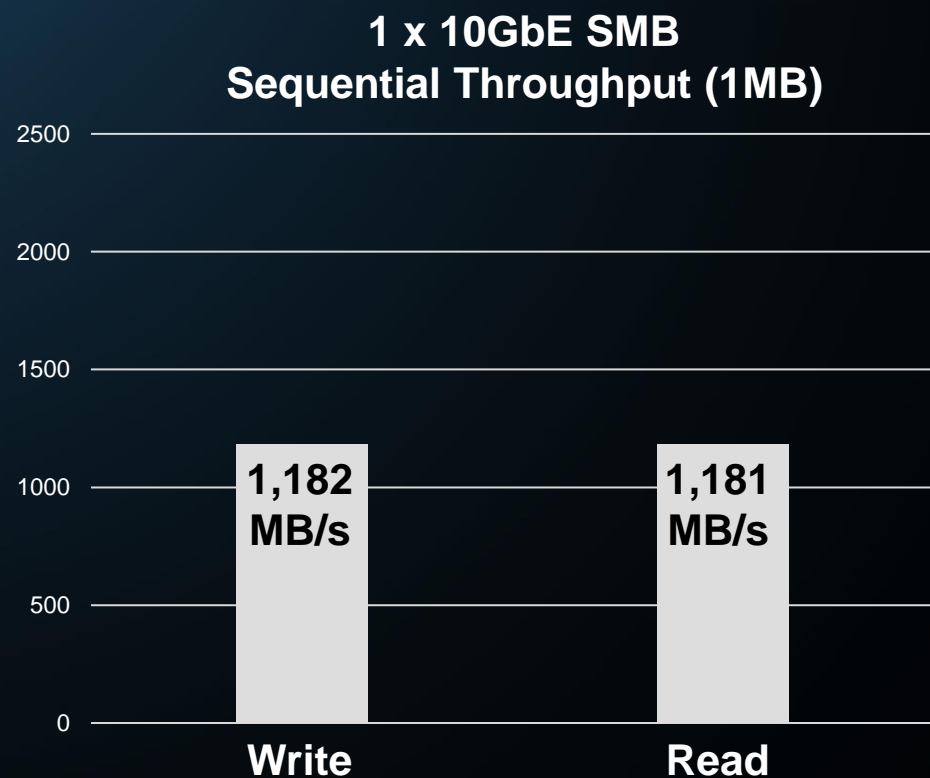
QNAP



LIVE DEMO

2 x 10GbE SMB Sequential Throughput

1000+MB/s Read/Write Performance, Transferring Large Files/Backups in a Snap



TS-855X

Test Environment:

- NAS: TS-855X
- CPU: Intel Atom® C5125 processor, Max 2800 MHz (8C, 8T)
- Volume type: Raid 5, Samsung 870 EVO 1TB x8
- Client PC: Windows Server 2022, AMD EPYC 7302P 16-Core Processor 2.9GHz, 96GB RAM

QNAP

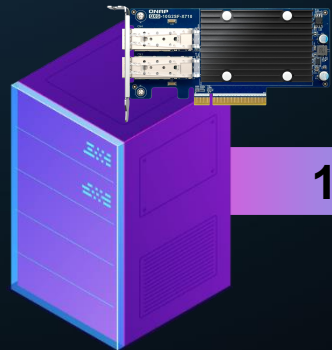
**Paired with QNAP Products
Realized Multiple Application Scenarios**



Easily Create a High-Speed 10GbE Network Studio Environments

QNAP's diverse product lineup allows you to use the QXG-10G2SF-X710 with a variety of QNAP's 10GbE switches and NASes to create a high-speed network environment on a lean budget, completely enhancing the productivity and experience of your editing team and other studio partners.

PC + QXG-10G2SF-X710

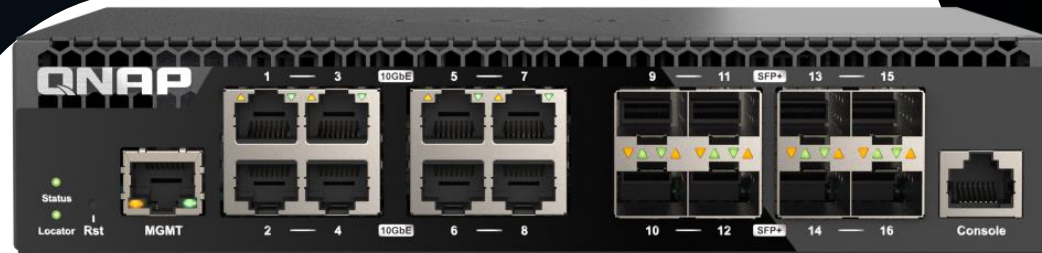


10GbE

PC + QXG-10G2SF-X710



10GbE



QSW-M3216R-8S8T

10GbE

10GbE

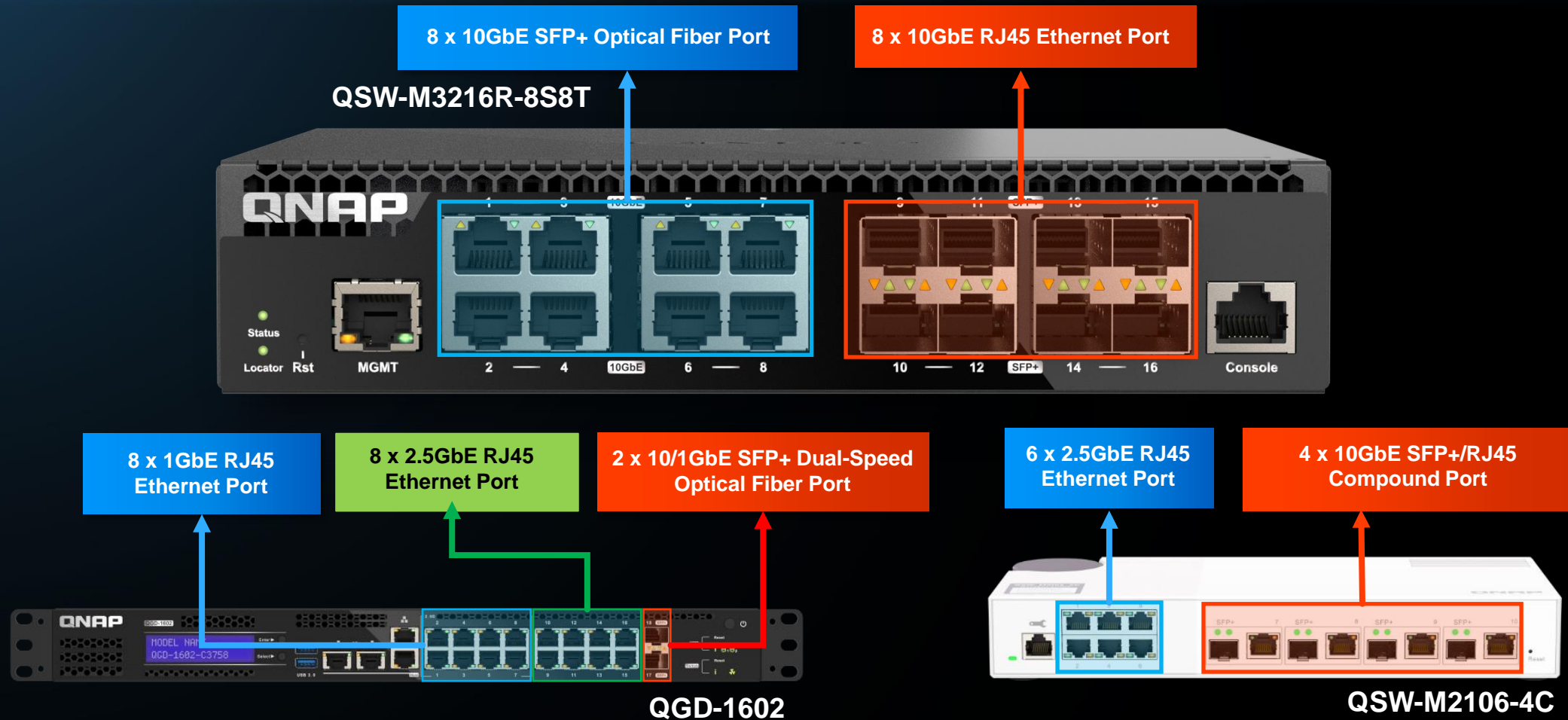
TS-h1683XU-RP



TS-h1886XU-RP R2

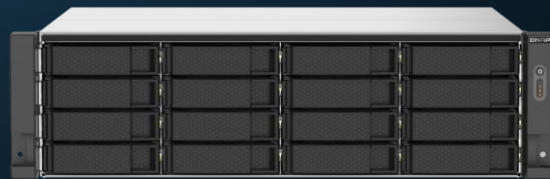


You'll also Need a Companion Switch to Unlock the Full Potential of 10GbE Network



[More QNAP Switch with 10GbE Network Speed Support](#)

Many QNAP NAS models are Scalable for 10GbE High-Speed Network Transmission



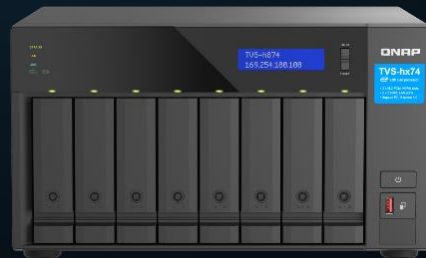
TS-1673AU-RP



TS-1273AU-RP



TS-h886



TVS-h874



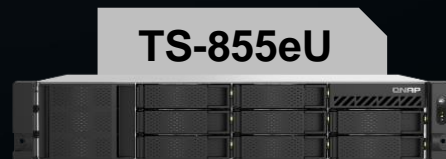
TVS-h674



TVS-h474



TS-h686



TS-855eU



TS-855eU-RP



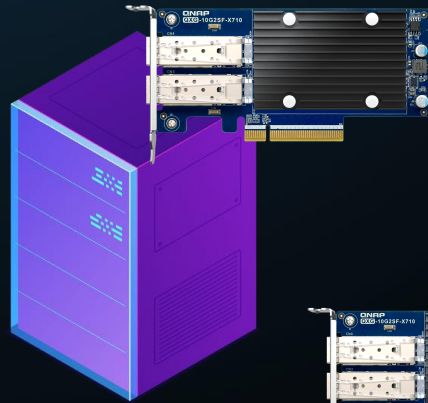
TS-873AeU

[More QNAP NAS with QXG-10G2SF-X710 Support](#)

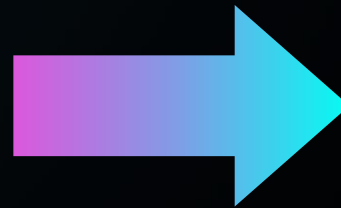
Create a Cost-Effective Virtualized Application Environment with QNAP NAS

Virtualization Station on QNAP NAS is a powerful Hypervisor software that supports multiple operating systems, including Windows®, Linux®, and QuTScloud, enabling you to create a virtualized environment on your NAS. You can set up and run multiple virtual machines based on available system resources. Virtualization Station also supports a variety of resource management and acceleration features, making it a high-performance and affordable platform for virtualization applications.

PC + QXG-10G2SF-X710

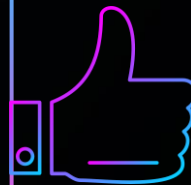
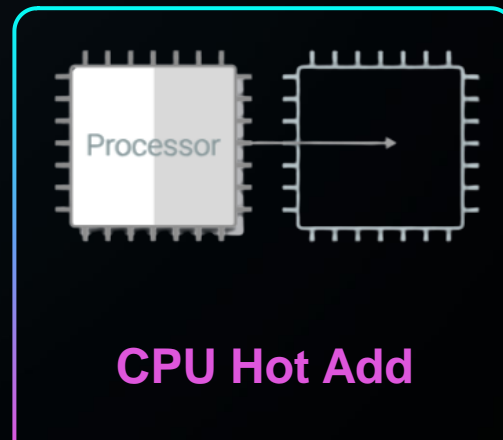
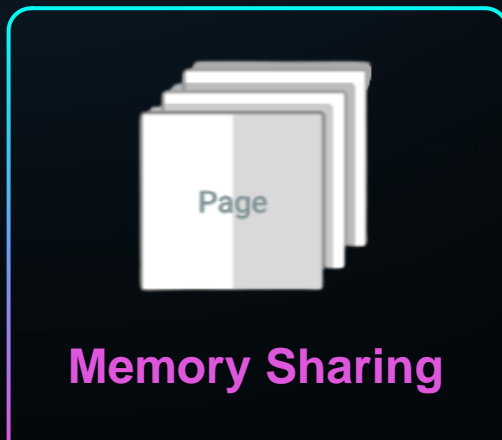
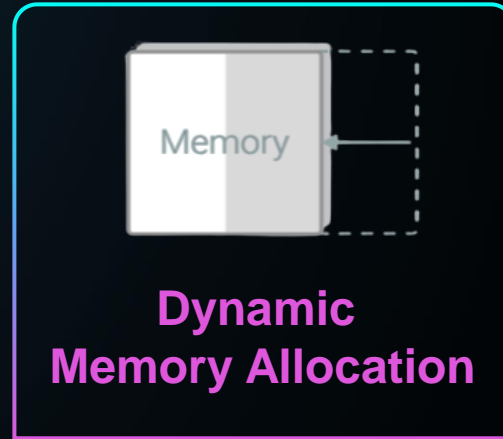
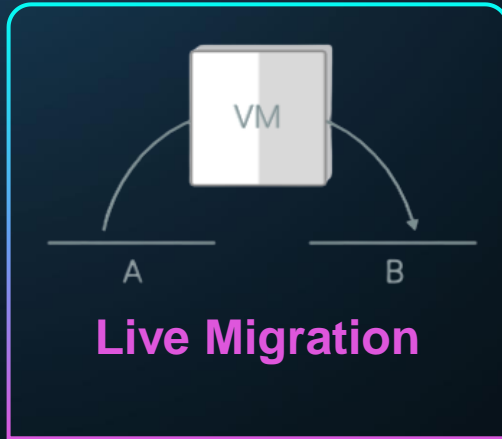


TS-1673AU-RP + QXG-10G2SF-X710





Virtualization Station Support a Wide Range of Powerful Features



Virtualization Station on QNAP NAS supports a wide range of operating systems. Users can download and use a variety of virtual devices directly from the application's VM Marketplace. Virtualization Station also provides a variety of resource configurations that you can choose according to your needs to maintain the best efficiency and stability of your VM. Virtualization Station offers several disaster recovery tools to protect against data loss. Options include local/remote backups, one-time/scheduled tasks, and more.

[More Information of Virtualization Station](#)

QNAP QNA Series Thunderbolt to 10GbE Adapters



Host with **Thunderbolt 3**

- 10G/1G dual speed
- SFP+ port

QNA-T310G1S



Host with **Thunderbolt 3**

- 10G/5G/2.5G/1G/100M
five speed
- RJ-45 NBASE-T port

QNA-T310G1T



QNA series adapters are also compatible with **Thunderbolt 4**

Complete Line of 10GbE Accessories



- CAB-DAC15M-SFP+ (1.5M)
- CAB-DAC30M-SFP+ (3M)
- CAB-DAC50M-SFP+ (5M)

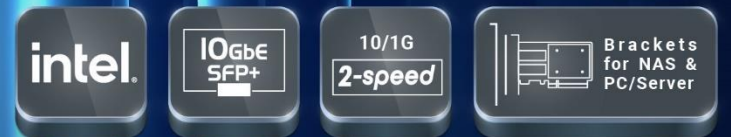
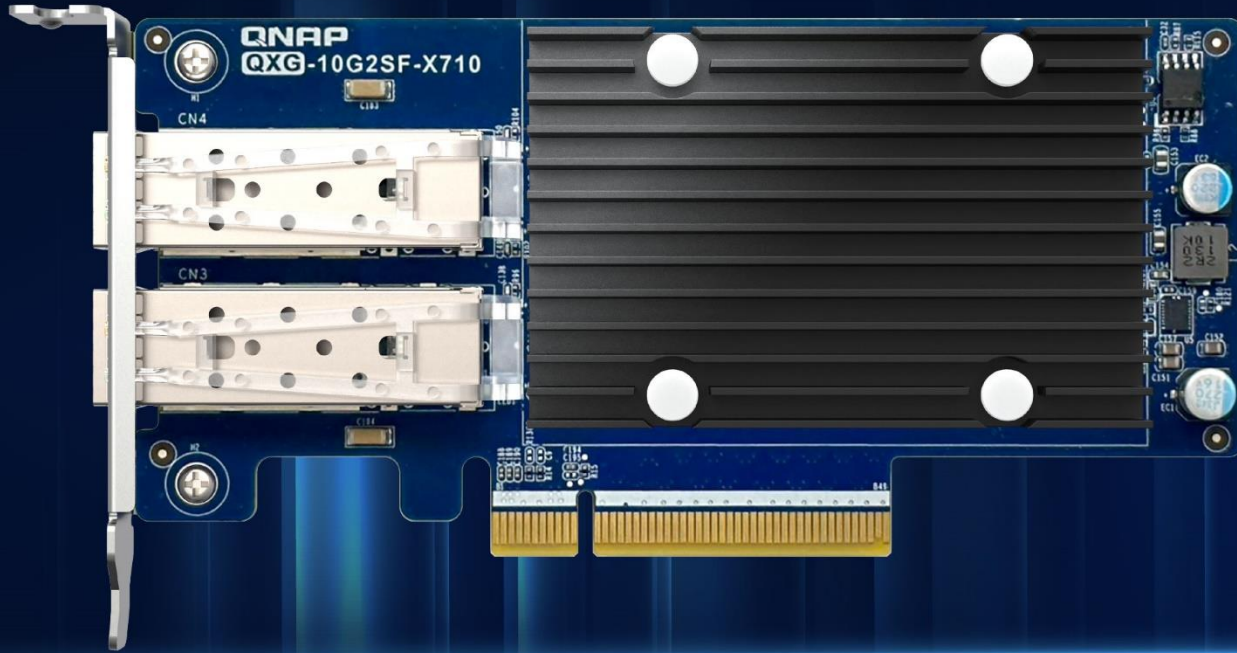
**10GbE SFP+
DAC**



TRX-10GITSFP+SR

**10GbE SR
Transceivers**

QNAP



Compatible with QNAP NAS, Windows®, and Linux® devices

QXG-10G2SF-X710

Dual Port 10GbE Dual Speed PCIe Gen3 Multi-Gig Network Expansion Card
The Best Way to Upgrade Your Network and VM Performance!