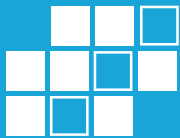


QNAP



QTS 4.3 System



Highlights of hardware capabilities

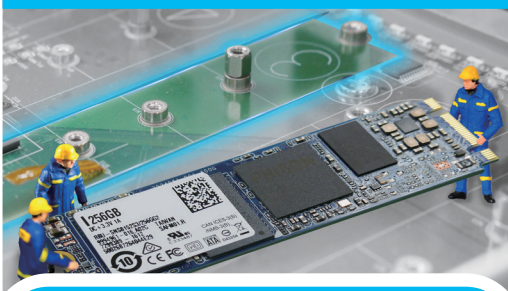
- Intel® Xeon® D processor optimizes performance and efficiency
- Max 128GB DDR4 2133 MHz RAM
- Built-in dual 10GBASE-T network ports

16-bay Xeon® D Super NAS TS-1685

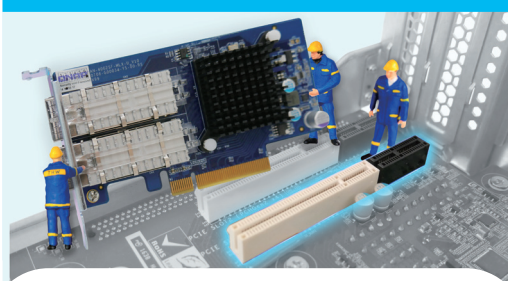
High-capacity NAS with exceptional performance

- ◆ Supports Xeon D-1521 (4-core, 2.4GHz), D1531 (6-core, 2.2GHz), and D-1548 (8-core, 2.0GHz) processors
- ◆ Runs QTS 4.3, providing a comprehensive suite of business applications:
 - Qtier™ with SSD Cache accelerates NAS performance 24/7
 - Snapshot and Snapshot Replica continuously protect your data
 - Virtualization Station 3.0 and Container Station 1.6 allow virtualization of application servers
 - Q'center 1.4 centrally manages all of your NAS devices
 - Qsirch 2.3 simplifies and speeds up file search
 - QmailAgent 1.0.2 offers simple and secure access to multiple email accounts

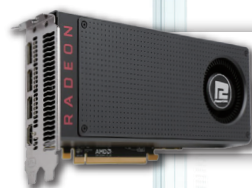
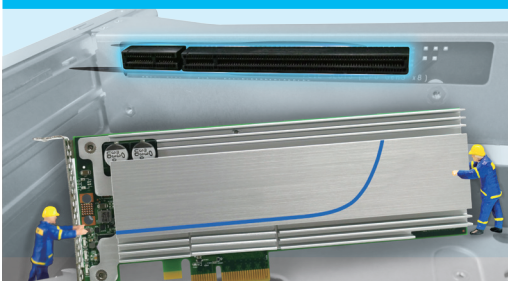
SATA 6Gb/s M.2 port x6



40Gb/s network ready (optional purchase)



Supports PCIe NVMe SSD



TS-1685-D1521-32G-550W
TS-1685-D1531-64GR-550W
TS-1685-D1531-128GR-550W

550W models with AMD Radeon™ RX480 Series GPU GPU Passthrough technology for a premier 3D experience



TS-1685-D1531-128GR-550W

16-bay Xeon® D Super NAS

TS-1685

12 x 3.5" or 2.5" SATA 6Gb/s
HDD/SSD slot

LCD Screen

Monitor the real-time status of the NAS with just a quick glance

Three PCIe expansion slots

► Two PCIe Gen3 x8 slots and one PCIe Gen2 x4 slot
► Support for 10/40 GbE adapters, PCIe NVMe SSD, external graphics cards, and USB 3.1 expansion cards

3.5 mm audio jack

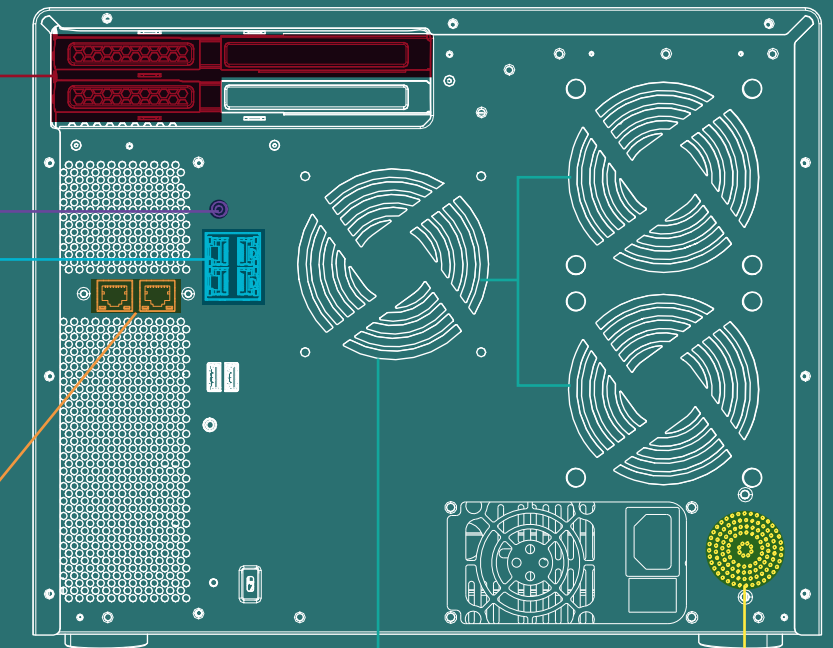
Connects to a speaker or headphones for audio output

Four Gigabit Ethernet ports

Ideal for service binding, port trunking and MPIO configurations

Built-in dual 10GBASE-T network port

Rear View



Smart fans for quiet operation

Separately detect the CPU and HDD temperatures to dynamically control fan speed.

Integrated Speaker

► For direct audio output
► Provides verbal system warnings

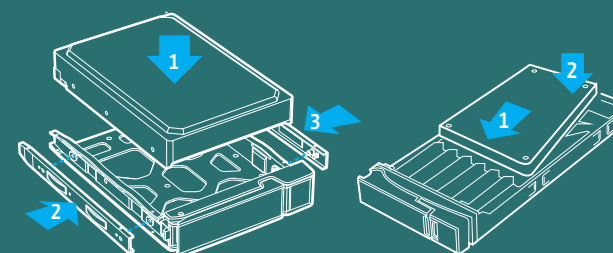
Intel® Xeon® D Processor

Featuring the latest 14nm energy-efficient SoC, supports DDR4 RAM and PCIe Gen.3 per-lane throughput.

DDR4 2133 MHz memory

Supports four DDR4 memory modules with a maximum of 128GB in total

Tool-free HDD and SSD installation

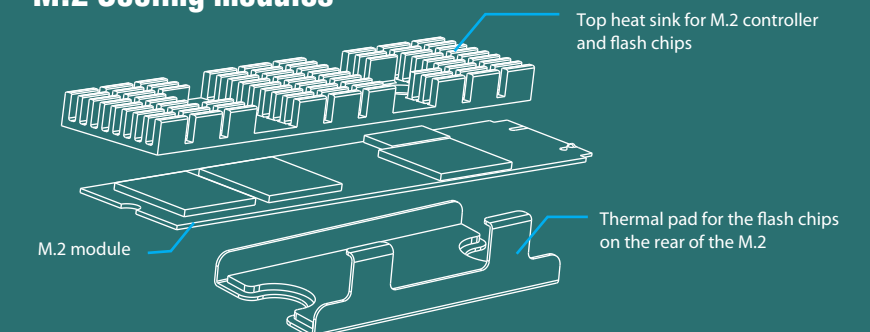


★ Also supports screw-mounted 2.5" SSD/HDD.

Six Built-in M.2 Slots*

- Supports SATA 6Gb/s M.2 SSDs with 2242, 2260, 2280, and 22110 form factors
- Allows for the best flexibility in tiered storage configuration and enables cache acceleration

M.2 Cooling modules**



★ M.2 SSD is optional.

★★ The cooling module for 2260, 2280, 22110 M.2 form factors.

4 x 2.5" SATA 6Gb/s SSD slot

Offers flexible configuration in tiered storage and enables cache acceleration

USB One Touch Backup

Backup data to and from the NAS with a single button

16-bay Xeon® D Super NAS

TS-1685

Ordering Information

NAS SKUs	Descriptions
TS-1685-D1521-16G	Intel® Xeon® Processor D-1521, 16GB non-ECC RAM (8GB UDIMM*2), 250W PSU
TS-1685-D1521-32G	Intel® Xeon® Processor D-1521, 32GB non-ECC RAM (16GB UDIMM*2), 250W PSU
TS-1685-D1521-32G-550W	Intel® Xeon® Processor D-1521, 32GB non-ECC RAM (16GB UDIMM*2), 550W PSU
TS-1685-D1531-32G	Intel® Xeon® Processor D-1531, 32GB non-ECC RAM (16GB UDIMM*2), 250W PSU
TS-1685-D1531-64G	Intel® Xeon® Processor D-1531, 64GB non-ECC RAM (16GB UDIMM*4), 250W PSU
TS-1685-D1531-64GR	Intel® Xeon® Processor D-1531, 64GB ECC RAM (16GB RDIMM*4), 250W PSU
TS-1685-D1531-128GR	Intel® Xeon® Processor D-1531, 128GB ECC RAM (32GB RDIMM*4), 250W PSU
TS-1685-D1531-64GR-550W	Intel® Xeon® Processor D-1531, 64GB ECC RAM (16GB RDIMM*4), 550W PSU
TS-1685-D1531-128GR-550W	Intel® Xeon® Processor D-1531, 128GB ECC RAM (32GB RDIMM*4), 550W PSU

* Minimum ordering quantity (MOQ) required for Intel® Xeon® Processor D-1548. Please contact QNAP sales representatives for the details.

Hardware Specifications

CPU	TS-1685-D1521-16G/TS-1685-D1521-32G/TS-1685-D1521-32G-550W: Intel® Xeon® Processor D-1521, 4-core 2.4 GHz TS-1685-D1531-32G/TS-1685-D1531-64G/TS-1685-D1531-64GR/TS-1685-D1531-128GR/ TS-1685-D1531-64GR-550W/TS-1685-D1531-128GR-550W: Intel® Xeon® Processor D-1531, 6-core 2.2 GHz
System Memory	Total DIMM slots: 4 Maximum memory: DDR4 128GB (with DDR4 32GB RDIMM x 4) Memory modules pre-installed: TS-1685-D1521-16G: 16GB non-ECC RAM (8GB UDIMM x 2) TS-1685-D1521-32G: 32GB non-ECC RAM (16GB UDIMM x 2) TS-1685-D1521-32G-550W: 32GB non-ECC RAM (16GB UDIMM x 2) TS-1685-D1531-32G: 32GB non-ECC RAM (16GB UDIMM x 2) TS-1685-D1531-64G: 64GB non-ECC RAM (16GB UDIMM x 4) TS-1685-D1531-64GR: 64GB ECC RAM (16GB RDIMM x 4) TS-1685-D1531-128GR: 128GB ECC RAM (32GB RDIMM x 4) TS-1685-D1531-64GR-550W: 64GB ECC RAM (16GB RDIMM x 4) TS-1685-D1531-128GR-550W: 128GB ECC RAM (32GB RDIMM x 4)
Flash Memory	512MB DOM
Hard Drive Tray	2.5"/3.5" HDD and SSD slot x 12 / 2.5" SSD slot x 4
Supported Hard Drive	SATA 6Gb/s HDD and SSD
M.2 Slot	6 x M.2 2242/2260/2280/22110 SATA 6Gb/s SSD slots Note: 1. The M.2 SSD is not included as standard. 2. M.2 SSD operations can easily generate excessive heat. It is recommended to install a cooling module (shipping with TS-1685) on the M.2 SSD.
USB	Front: 1 x USB 3.0 port / Rear: 2 x USB 3.0 port
LAN Ports	10GBASE-T port x2 / Gigabit port x4
Audio Output	1 x built-in speaker, 1 x 3.5mm Line-out jack Note: Only one of the above audio output ports can work at a time. If a speaker is connected, the sound will output through the speaker.
LED Indicators	Status/Power, LAN, Drive 1-16, M.2 1-6
Buttons	Power button, Reset button, USB one-touch-backup button
Form Factor	Desktop
Dimensions (H x W x D)	303.84 x 369.89 x 319.8 mm / 11.96 x 14.56 x 12.59 inch
Temperature	0-40°C
Relative Humidity	5~95% non-condensing, wet bulb: 27°C.
Power Supply	1685-D1521-16G/TS-1685-D1521-32G/TS-1685-D1531-32G/TS-1685-D1531-64G/TS-1685-D1531-64GR/ TS-1685-D1531-128GR 100-240V~, 3-1.5A, 60-50Hz, 250W PSU TS-1685-D1521-32G-550W/TS-1685-D1531-64GR-550W/TS-1685-D1531-128GR-550W:550W PSU
PCIe Slots	Number: 3 Slot 1: PCIe Gen.3 x8 / Slot 2: PCIe Gen.2 x4 / Slot 3: PCIe Gen.3 x8
Fan	3 x 9.2cm system fan (12V DC) / CPU: 2 x 9cm fan

* Model specifications are subject to change without notice. Please refer to www.qnap.com for the latest information.

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