QNAP

QNAP TVS-672XT NAS Tower Intel® Core™ i3 i3-8100T 8 GB DDR4 60 TB HDD QNAP Turbo System Black

Brand : QNAP

Product code: TVS-672XT-I3-8G-60TB-IWP

Product name : TVS-672XT

Intel Core i3-8100T 3.1 GHz, DDR4 SODIMM, 4 GB Flash, Intel UHD Graphics 630, 6 x 3.5" SATA, 2 x M.2, 1 x 10GBASE-T RJ45, 1 x USB 3.0, 2 x Type-C USB 3.1 Gen2, 2 x Type-A USB 3.1 Gen2, 1 x HDMI 2.0, 250W
QNAP TVS-672XT. Type: NAS. Chassis type: Tower. Device class: Home & Home Office. Processor family: Intel® Core™ i3, Processor model: i3-8100T, Processor frequency: 3.1 GHz. Internal memory: 8 GB, Internal memory type: DDR4. Total installed storage capacity: 60 TB, Installed storage drive type: HDD. Operating system installed: QNAP Turbo System

Storage	
Supported storage drive interfaces	M.2, Serial ATA III
Storage drive sizes supported	2.5,3.5,M.2
Number of M.2 (M & B) slots	2
RAID support *	✔
RAID levels	0, 1, 5, 6, 10, 50, JBOD
Online RAID migration	✔
Online RAID expansion	✔
Hot-swap drive bays	✔
Supported file systems	FAT32, HFS+, NTFS, exFAT, ext3, ext4
Storage drives installed *	✔
Total installed storage capacity *	60 TB
Number of storage drives supported *	6
Installed storage drive type *	HDD
Supported storage drive types *	HDD & SSD
Auto-rebuild	✔
Bad block scan	✔
Disk roaming	✔

Processor	
Processor manufacturer *	Intel
Processor generation	8th gen Intel® Core™ i3
Processor family *	Intel® Core™ i3
Processor model *	i3-8100T
Processor frequency *	3.1 GHz
Processor cores	4
Processor threads	4
Processor cache	6 MB
Bus type	DMI3
Configurable TDP-down frequency	2.4 GHz
CPU configuration (max)	1
ECC supported by processor	✔
PCI Express configurations	1x16, 1x8+2x4, 2x8
PCI Express slots version	3.0
Processor cache type	Smart Cache
Processor code	SR3Y8
Processor codename	Coffee Lake

Design	
LED indicators	HDD, LAN, Status, USB
Built-in display	✔
Cable lock slot	✔
Cable lock slot type	Kensington
Built-in speaker(s)	✔
Number of built-in speakers	1

Performance	
Type *	NAS
Device class *	Home & Home Office
Backup function *	✔
Backup features	iSCSI LUN
Buzzer	✔
Multilingual support	✔
Noise level	23.8 dB
Snapshot	✔
Management protocols	SNMP 2/3
Web-based management	✔
Share folder access right management	✔
Security algorithms	256-bit AES, FIPS 140-2, HTTPS, SSH
Access Control List (ACL)	✔
Reset button	✔
On/off switch	✔
Built-in iTunes server	✔
Built-in FTP server	✔
Browser supported	Apple Safari 7, Google Chrome, Microsoft Internet Explorer 10, Mozilla Firefox
System log	✔
Hot spare	✔
S.M.A.R.T. support	✔
Share folder	CIFS/SMB
Universal Plug and Play (UPnP)	✔

Software	
Operating system installed *	QNAP Turbo System
Operating system version	4.4.0

Processor

Processor lithography	14 nm
Processor operating modes	64-bit
Processor package size	37.5 x 37.5 mm
Processor socket	LGA 1151 (Socket H4)
Scalability	1S
Stepping	B0
System bus rate	8 GT/s
Tjunction	82 °C
Thermal Design Power (TDP)	35 W
On-board graphics card model	Intel® UHD Graphics 630
Maximum internal memory supported by processor	64 GB
Memory bandwidth supported by processor (max)	37.5 GB/s

Memory

Internal memory *	8 GB
Internal memory type	DDR4
Maximum RAM supported	32 GB
Memory slots	2
Memory form factor	SO-DIMM
Flash memory	4000 MB

Network

Ethernet LAN *	✓
Ethernet LAN data rates	10,100,1000,1200,2500,5000,10000 Mbit/s
Ethernet LAN data rate supported (max)	10000 Mbit/s
Wi-Fi	✗
DHCP client	✓
DHCP server	✓
Jumbo frames support	✓
iSCSI support	✓
Wake-on-LAN ready	✓
Supported network protocols	TCP/IP, IPv4, IPv6
Link aggregation	✓
Load balancing system	✓
Dynamic DNS (DDNS)	✓
WLAN adapter supported	✓

Ports & interfaces

USB port *	✓
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity	1
USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity	2
USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity	2
HDMI ports quantity	1
HDMI version	2.0
Ethernet LAN (RJ-45) ports *	3
Thunderbolt 3 ports quantity	2
3.5 mm (1/8-inch) out	✓
Microphone in	✓
PCI Express x4 (Gen 3.x) slots	1

Graphics

On-board graphics card base frequency	350 MHz
On-board graphics card dynamic frequency (max)	1100 MHz
On-board graphics card DirectX version	12.0

Software

Windows operating systems supported	Windows 10, Windows 10 Education, Windows 10 Education x64, Windows 10 Enterprise, Windows 10 Enterprise x64, Windows 10 Home, Windows 10 Home x64, Windows 10 IOT Core, Windows 10 Pro, Windows 10 Pro x64, Windows 7, Windows 7 Enterprise, Windows 7 Enterprise x64, Windows 7 Home Basic, Windows 7 Home Basic x64, Windows 7 Home Premium, Windows 7 Home Premium x64, Windows 7 Professional, Windows 7 Professional x64, Windows 7 Starter, Windows 7 Starter x64, Windows 7 Ultimate, Windows 7 Ultimate x64, Windows 7 x64, Windows 8, Windows 8 Enterprise, Windows 8 Enterprise x64, Windows 8 Pro, Windows 8 Pro x64, Windows 8 x64
Linux operating systems supported	✓
Mac operating systems supported	Mac OS X 10.10 Yosemite, Mac OS X 10.11 El Capitan, Mac OS X 10.12 Sierra, Mac OS X 10.13 High Sierra, Mac OS X 10.14 Mojave, Mac OS X 10.7 Lion, Mac OS X 10.8 Mountain Lion, Mac OS X 10.9 Mavericks
Server operating systems supported	Windows Server 2003, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, Windows Server 2016

Power

Power supply unit (PSU) capacity	250 W
AC input voltage	100 - 240 V
Fan voltage	12 V

Weight & dimensions

Width *	264.3 mm
Depth *	279.6 mm
Height *	188.2 mm

Packaging content

Cables included	AC, LAN (RJ-45)
Quick installation guide	✓

Processor special features

Embedded options available	✓
Enhanced Intel SpeedStep Technology	✓
Execute Disable Bit	✓
Idle States	✓
Intel 64	✓
Intel Clear Video Technology	✓
Intel Enhanced Halt State	✓
Intel Identity Protection Technology version	1.00
Intel Secure Key Technology version	1.00
Intel Stable Image Platform Program (SIPP)	✗
Intel Stable Image Platform Program (SIPP) version	0.00
Intel Trusted Execution Technology	✗
Intel TSX-NI	✗
Intel TSX-NI version	0.00
Intel Virtualization Technology (VT-x)	✓
Intel Virtualization Technology for Directed I/O (VT-d)	✓

Graphics

On-board graphics card OpenGL version	4.5
On-board graphics card ID	0x3E91
Maximum on-board graphics card memory	64 GB
Number of displays supported (on-board graphics)	3

Design

Chassis type *	Tower
Cooling type *	Active
Product colour	Black
Number of fans	4 fan(s)
Fan diameter	9.2 cm
Fan diameter 2	6 cm

Processor special features

Intel VT-x with Extended Page Tables (EPT)	✓
Intel® AES New Instructions (Intel® AES-NI)	✓
Intel® Clear Video HD Technology (Intel® CVT HD)	✓
Intel® Clear Video Technology for Mobile Internet Devices (Intel CVT for MID)	✓
Intel® Hyper Threading Technology (Intel® HT Technology)	✗
Intel® Identity Protection Technology (Intel® IPT)	✓
Intel® InTru™ 3D Technology	✓
Intel® OS Guard	✓
Intel® Quick Sync Video Technology	✓
Intel® Secure Key	✓
Intel® Smart Cache	✓
Intel® Turbo Boost Technology	✗
Maximum number of PCI Express lanes	16
Thermal Monitoring Technologies	✓
Thermal solution specification	PCG 2015A
Memory channels supported by processor	Dual
Memory types supported by processor	DDR4-SDRAM

Operational conditions

Operating temperature (T-T)	0 - 40 °C

Other features

Digital Living Network Alliance (DLNA) certified	✓
Processor ARK ID	129944