

	AegisSAN LX				AegisSAN Q500						AegisSAN		TrioNAS LX		TrioNAS				JBOD
	P600Q	P400Q	F630Q	F630Q	P20	P21	P10	F30	F21	F20	S300Q	P110V04	U600Q	U400Q	U221	U220	U210	U110	J300Q
Hardware Components																			
Processor	Intel Xeon				Intel Briarwood S1200 Series						Intel IOP		Intel Xeon		Intel Xeon	Intel i3		Intel Atom	LSI
Form Factor	4U60, 4U24, 3U16, 2U12				4U24, 3U16, 2U12						4U24, 3U16, 2U12	1U4	4U24, 3U16, 2U12		2U12		1U4		4U24, 3U16, 2U12
Controller	Dual-active or Single-upgradable controller				Dual-active or Single-upgradable controller						Dual-active or Single-upgradable controller	Single controller	Single-upgradable controller		Single controller				Dual-active or Single controller
Host Channels (Per controller)	10GbE ports x2 (SFP+, RJ45)	-	16Gb Fibre Channel ports x2	8Gb Fibre Channel ports x4	10GbE ports x2 (SFP+)	10GbE ports x2 (10GBase-T)	-	16Gb Fibre Channel ports x2	8Gb Fibre Channel ports x4	8Gb Fibre Channel ports x2	6Gb SAS ports x2	-	10GbE ports x2 (SFP+, RJ45)		10GbE ports x2		-	-	6Gb SAS port x1 (In) 6Gb SAS port x1 (Out)
	1GbE ports x2	1GbE ports x6	1GbE ports x2	1GbE ports x2	1GbE ports x2	1GbE ports x2	1GbE ports x6	1GbE ports x2	1GbE ports x2	1GbE ports x2	-	1GbE ports x2	1GbE ports x3	1GbE ports x7	1GbE ports x2		1GbE ports x6	1GbE ports x2	-
Expansion Enclosure	J300Q 6Gb/s SAS series				J300Q 6Gb/s SAS series						J300Q series	-	J300Q 6Gb/s SAS series		-				J300Q 6Gb/s SAS series
Memory (Per controller)	F600Q/P400Q/F600Q 2U12/3U16/4U24: 4GB DDR3 ECC, up to 16GB F600Q/P400Q/F600Q 4U60 & F630Q: 8GB DDR3 ECC, up to 16GB				4GB DDR3 ECC, up to 8GB						2GB, up to 4GB	1GB, up to 2GB	8GB, up to 16GB		32GB	16GB, up to 32GB		4GB	-
Hard Drive Interface	6Gb/s SAS/SATA				6Gb/s SAS/SATA						3Gb/s SAS/SATA	3Gb/s SATA	6Gb/s SAS/SATA		6Gb/s SATA			3Gb/s SATA	6Gb/s SAS/SATA
Max. No. of Hard Drive	2U12/3U16/4U24: 256 4U60: 240				256						72	4	256		12			4	-
SAN Features																			
RAID & Volume	RAID level 0,1,0+1,3,5,6,10,30,50,60, JBOD, N-way mirror, Online volume expansion				RAID level 0,1,0+1,3,5,6,10,30,50,60, JBOD, N-way mirror, Online volume expansion						RAID level 0,1,0+1,3,5,6,10,30*,50*,60*, JBOD, N-way mirror, Online volume expansion*		RAID level 0,1,5,6,10,50,60, JBOD, Online pool expansion		RAID level 0,1,5,6,10,50,60, Online pool expansion		RAID level 0,1,5,10		-
Advanced Data Protection	QReplca, QSnap, Volume cloning, Microsoft Windows VSS, Online disk roaming, Instant volume restoration, Battery Backup Module				QReplca, QSnap, Volume cloning, Microsoft Windows VSS, Online disk roaming, Instant volume restoration, Battery Backup Module						QReplca*, QSnap, Volume cloning, Microsoft Windows VSS, Online disk roaming, Instant volume restoration, Battery Backup Module*		Remote replication, Snapshot, Volume cloning, Offline disk roaming, AntiVirus (ICAP), Amazon S3 cloud replication, ZFS file-system		Remote replication, Snapshot, Volume cloning, Offline disk roaming, AntiVirus (McAfee), Amazon S3 cloud replication, ZFS file-system				-
Data Efficiency	QThin				QThin						-		DeDup, Compression, SSD caching, Thin provisioning		DeDup, Compression, SSD caching, Thin provisioning	Compression, SSD caching, Thin provisioning		Compression, Thin provisioning	-
Management	QCentral, LCM, Serial console, HTTP Web UI, Secured Web (HTTPS), iSNS, S.E.S., Online firmw are upgrade, SSH telnet, LED indicators, S.M.A.R.T., Wizard				QCentral, USB LCM, Serial console, HTTP Web UI, Secured Web (HTTPS), iSNS, S.E.S., Online firmw are upgrade, SSH telnet, LED indicators, S.M.A.R.T., Wake-on-LAN, Wizard						QCentral*, LCM, Serial console, HTTP Web UI, Secured Web (HTTPS), iSNS*, S.E.S., Online firmw are upgrade, SSH telnet, S.M.A.R.T., Wizard		QCentral, LCM, Console, iSNS, S.E.S., SSH, Web GUI, S.M.A.R.T., Wizard, Performance states		QCentral, Web GUI, S.M.A.R.T., Wizard, Performance states, Wake-on-LAN				QCentral, LCM, S.E.S.
Networking	DHCP, Static IP, NTP, Trunking, LACP, VLAN, Jumbo frame				DHCP, Static IP, NTP, Trunking, LACP, VLAN, Jumbo frame						DHCP, Static IP, NTP, Trunking*, LACP*, VLAN*, Jumbo frame		IPv6, DHCP, Static IP, NTP, Trunking, LACP, VLAN, Jumbo frame, WINS		IPv6, DHCP, Static IP, NTP, Trunking, LACP, VLAN, Jumbo frame, WINS				-
Notification	Email, SNMP trap, Browser pop-up, Syslog, Windows messenger				Email, SNMP trap, Browser pop-up, Syslog, Windows messenger						Email, SNMP trap, Browser pop-up, Syslog, Windows messenger		Email, SNMP trap, Browser pop-up, Syslog, Windows messenger		Email, SNMP trap, Browser pop-up, Syslog, Windows messenger				-
OS Support	Windows, Linux, Solaris, Mac				Windows, Linux, Solaris, Mac						Windows, Linux, Solaris, Mac		Windows, Linux, Solaris, Mac		Windows, Linux, Solaris, Mac				-
Virtualization	Vmw are VAAI, Hyper-V, Citrix				Vmw are VAAI, Hyper-V, Citrix						VMware, Hyper-V, Citrix		VMware, Hyper-V, Citrix		VMware, Hyper-V, Citrix				-
NAS Features																			
Data Service	-				-						-		SMB v2, NFS v3/v4, AFP v3.3, FTP, SFTP, iSCSI target, WebDAV		SMB v2, NFS v3/v4, AFP v3.3, FTP, SFTP, iSCSI target, WebDAV				-
Directory Service	-				-						-		UnifiedAUTH, Microsoft Active Directory, LDAP		UnifiedAUTH, Microsoft Active Directory, LDAP				-
Compliance & Warranty																			
Green	Auto disk spin down, 80 Plus Gold PSU				Auto disk spin down, Wake-on-LAN, MAID, 80 Plus Gold PSU						Auto disk spin down, 80 Plus Gold PSU		Auto disk spin down, 80 Plus Gold PSU		Auto disk spin down, 80 Plus Platinum PSU		Auto disk spin down, 80 Plus PSU		Auto disk spin down, 80 Plus Gold PSU
Warranty	System: 3 years, Battery backup module: 1 year				System: 3 years, Battery backup module: 1 year						System: 3 years, Battery backup module: 1 year		System: 3 years		System: 3 years				System: 3 years
Safety & EMI	RoHS, CE, FCC, BSMI*, UL*, cUL*				RoHS, CE, FCC, BSMI, UL, cUL						RoHS, CE, FCC, BSMI, UL, cUL		RoHS, CE, FCC, BSMI, UL, cUL		RoHS, CE, FCC, BSMI, UL, cUL				RoHS, CE, FCC, BSMI, UL, cUL
Requirements																			
AC Input	4U24/3U16/2U12: 90-264V ~ 10A-5A 550W with PFC (Auto Switching) 4U60: 90-264V ~ 12A-6A 700W with PFC (Auto Switching)				90-264V ~ 10A-5A 550W with PFC (Auto Switching)						90-264V ~ 10A-5A 550W with PFC (Auto Switching)	100-240V ~ 3A-1.3A 200W with PFC (Auto Switching)	90-264V ~ 10A-5A 550W with PFC (Auto Switching)		100~240V, 50~60Hz, 3.3~6.5A		100~240V, 50~60Hz, 2.0~1.0A		90-264V ~ 10A-5A 550W with PFC (Auto Switching)
DC Output	4U24/3U16/2U12: 3.3V-25A, 5V-32A, 12V-40A 4U60: 5V-25A, 12V-45A				3.3V-25A, 5V-32A, 12V-45A						3.3V-25A, 5V-32A, 12V-40A	5V-2A, 12V-14A	3.3V-25A, 5V-32A, 12V-40A		12V-45A, 5V-40A, 3.3V-30A, 5Vsb-4.0A		19V-6.85A		3.3V-25A, 5V-32A, 12V-40A
Operating Temperature	4U24/3U16/2U12: 0 to 40°C 4U60: 10 to 40°C				0 to 40°C						0 to 40°C		0 to 40°C		0 to 40°C				0 to 40°C
Relative Humidity	4U24/3U16/2U12: 5% to 95% non-condensing 4U60: 10% to 85% non-condensing				5% to 95% non-condensing						5% to 95% non-condensing		5% to 95% non-condensing		5% to 95% non-condensing				5% to 95% non-condensing

* Available in Dec. 2013.



For Enterprise & SMB
Best Price-Performance Value
High Availability & High Scalability Storage Systems

SAN Series

AegisSAN LX

Provide Great Performance & Availability for Enterprises

High Availability

Dual active RAID controllers
Fully redundant & hot swappable designs
Cache mirroring through high bandwidth channels
Multi-path & load-balancing (MPIO, MC/S, Trunking, LACP)

Flexible Volume

Virtualization: VMware VAAI, Citrix, Hyper-V
High density form factors
JBOD, N-way mirror & online volume expansion

Applications

Video editing & streaming
Broadcasting
Highly-virtualized environments

Value Add-on

QiSOE (Qsan hardware iSCSI offload engine)
QThin (thin provisioning)
QReplca (async remote replication)
QSnap (writable snapshot)
BBM (battery backup module)



AegisSAN Q500

Deliver Solutions with High Availability & Cost-effectiveness

Eco-friendly Platform

Intel Briarwood platform
80 Plus Gold PSU
MAID & Wake-on-LAN

High Availability

Dual active RAID controllers & fully redundant & modular designs
Multipath & load balancing (MPIO, MC/S, Trunking, LACP)

Enhanced Data Protection

Innovated USB LCM
QReplca (async remote replication)
QSnap (writable snapshot)
BBM (battery backup module)

Value Add-ons

QiSOE (Qsan hardware iSCSI offload engine)
fcQiSOE (Qsan hardware FC offload engine)
QThin (thin provisioning)
VMware VAAI, Citrix, Hyper-V



Unified Storage Series

TrionAS LX

Feature Cutting Edge Storage Functions for Enterprises

High Availability & Scalability

SSD caching for quick read/write speed & random I/O
Fully redundant & hot swappable designs
Expanded up to 256 drives

Storage Efficiency

NAS + iSCSI SAN + Cloud Storage
UnifiedAUTH to simplify account management
Thin provisioning, dedup & compression to save storage capacity

Integrated Backup Solution

Amazon S3 cloud backup & disaster recovery
Remote replication for data protection

Advanced Protection

Self-healing ZFS file system
Snapshot & volume clone
AntiVirus

Multiple Protocols Support

SMB, NFS, AFP, FTP, WebDAV & iSCSI



TrionAS

Bring Enterprise-class Features to SMB

TrionAS is Simplified

NAS + iSCSI SAN + Cloud Storage
UnifiedAUTH for unified authentication
Versatile easy-to-use management tools
SMB, NFS, AFP, FTP, WebDAV & iSCSI supported

TrionAS is Reliable

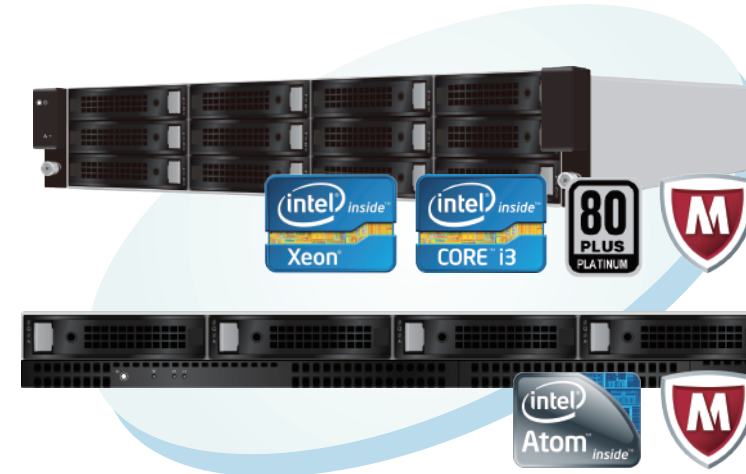
Self-healing ZFS file system
Snapshot, volume cloning & remote replication
Amazon S3 cloud backup & disaster recovery
3-year free anti-virus license

TrionAS is Efficient

DeDup to eliminate duplicate repeating data
Compression to reduce data size
Thin provisioning to allocate capacity dynamically
SSD caching for quick read/write speed and random I/O

TrionAS is Green

Auto disk spin down
80 Plus Platinum PSU



Technologies



What is QiSOE?

Qsan iSCSI storage systems feature QiSOE (Qsan hardware iSCSI offload engine), which adopts a dedicated CPU core to process iSCSI packet. With QiSOE the performance will be booming up to 30% and the solution is for companies that need to process tremendously huge amount of random access data.



What is SSD Cache?

With SSD Cache, users are allowed to assign SSD as the system's read/write cache to make data search 5x faster. With the characteristics of high performance, low latency and better reliability, SSD Cache best suits the business-critical applications that require quick read/write speed and random I/O.



What is QReplca?

Data protection and backup solutions play an important role in storage system and QReplca is the remote replication tool that deploy full data copies across storage systems at different sites through LAN or WAN. In addition, QReplca supports to replica multiple logical volumes in one system at one time.



What is QThin?

QThin the thin provisioning provides more physical resources than actually available capacity so that organizations can avoid allocated but unused storage and be able to purchase only the disk capacity they actually need. Therefore, QThin can significantly raise storage utilization and help enterprises to save cost.



What is DeDup?

With DeDup users can eliminate duplicate copies of redundant data to save storage capacity significantly, and companies can optimize storage space utilization and save costs greatly. DeDup can grant Qsan's unified storage the space savings of up to 90% in backup systems and virtual machines!



What is UnifiedAUTH?

With UnifiedAUTH, IT administrators can just manage employees' accounts by Windows AD and no extra settings of sync or authentication required. On the other hand, end-users can just use their Windows AD ID and password to login via clients of any popular OS. No worries to remember lots of different passwords.



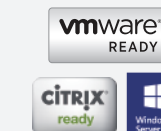
What is Hardware Redundancy?

Qsan storage systems are equipped with fully redundant components for all major functions, including dual active RAID controllers, power supplies, fan modules, battery backup modules, and SAS JBOD expansion ports. Being hot pluggable, all of them enable non-stop services for enterprises.



What is Auto Disk Spin Down?

In most cases, the hard drives consume the most electric power. With Qsan's auto disk spin down feature and proper configuration, the power consumption of hard drives can be reduced to a minimum, and users will not even notice this feature since there's no performance impact at all.



What is Virtualization?

Virtualization refers to the creation of a virtual machine that acts like a real computer with an operating system. It adds a new layer of software and hardware between storage systems and servers so that applications no longer need to know on which specific drives, partitions or storage systems their data resides. This greatly enhances the flexibility, agility, scalability and manageability. Qsan storage systems support virtualization technologies of VMware, Citrix and Hyper-V.