ARENA®
The Disk Array Specialist

New iSCSI RAID Subsystem

SS-4503E/R, SS-6603E/R

The iSCSI RAID system setup an important milestone for MaxTronic approaching to critical high-end enterprise demands and cost effective IP-SAN. Active-Active redundant controller architecture support seamless controller failover without downtime. Energy efficient design with high efficiency, load balance power module, System-FAN speed control and disk spin-down function. Powerful hardware engine, high scalable expansion options and user-friendly management interface make it the best choice for fault tolerance, high performance solutions.

Ideal Applications

- Enterprise Storage
- Remote Backup/Disaster Recovery
- Security and Surveillance
- VOD on Education or Entertainment
- Virtualization Cloud Storage

FEATURES AND BENEFITS

Single Controller Upgradable
Single controller model is field upgradable to a redundant solution. You could upgrade single to redundant by directly insert another controller module, So you can just configure a Active/Active solution by use both controller simultaneously for double I/O throughput, or if you prefer to have Active/Standby solution, you can put one controller on "standby", so it becomes a backup for the other one.

Innovate New Array Structure
The system features a new innovate array structure that hierarchically organizes storage objects. With this structure, physical drives are combined into Disk Groups (DG). DGs are subdivided into Logical Disks (LDs) where arrays are created. LDs can be combined together to form a stripped Volumes. Either Volumes or LDs can be pointed to a LUN which are then presented to the host computer.

JBOD Expansion
This feature provides users the option to attach external SAS JBOD unit to expand the capacity of their storage solution. By cascading the RAID-less SAS JBOD unit helps reduce the total cost of ownership.

Full complement of iSCSI features
Link Aggregation (802.3ad) and jumbo frame support for maximizing bandwidth and performance, Challenge Handshake Authentication Protocol (CHAP) authentication, Header Digest and Data Digest help to guarantee iSCSI data, Internet Storage Name Service (iSNS) for helping management of iSCSI devices and support multiple iSCSI targets up to 8 sets.

Centralized management by RAIDGuard Central
RAIDGuard Central (RGC), a free centralized management utility provides centralized monitoring multiple RAID systems by through Ethernet at a local area network. Easier install RGC to a normal PC as an agent and then any PC/server could monitor to RAID system remotely. Allow customer to warning the engineer real-time with mail sending and most popular web messenger: MSN.

iSCSI

FC CE C UL RoHS COMPLIANT SERIAL ATA Serial Attached SCSI

Technical Specifications

Hardware

Model No.	SS-6603E / SS-6603R		Model No.	SS-4503E / SS-4503R
Controller No.	Single (Upgradable) / Dual (Redundant)		Controller No.	Single (Upgradable) / Dual (Redundant)
Controller CPU	Intel IOP34x 1.2GHz		Controller CPU	Intel IOP34x 1.2GHz
Cache Memory	2048-4096 MB DDR II		Cache Memory	2048-4096 MB DDR II
Battery Backup	Optional / Yes		Battery Backup	Optional / Yes
Expansion	miniSAS (SFF-8088) port(*2)		Expansion	miniSAS (SFF-8088) port(*2)
Management port	10/100Mbit port (RJ45)		Management port	10/100Mbit port (RJ45)
UPS monitoring	1 (RS232)		UPS monitoring	1 (RS232)
Host Interface	iSCSI GbE (RJ45)		Host Interface	iSCSI GbE (RJ45)
Host Channel No.	4 / 8		Host Channel No.	4 / 8
Disk Interface	SAS (SATA compatibility)(*1)		Disk Interface	SAS (SATA compatibility)(*1)
Disk Channel No.	16 x 3.5" swappable trays		Disk Channel No.	12 x 3.5" swappable trays
Hot Swap Disk Tray	16		Hot Swap Disk Tray	12
Hot Swap Power Supply	2 x 460W Redundant		Hot Swap Power Supply	2 x 420W Redundant
AC Input Voltage	100 to 240V (+/-10%), 47 to 63 Hz		AC Input Voltage	100 to 240V (+/-10%), 47 to 63 Hz
Hot Swap Fan Module	3 x Turbo Fan		Hot Swap Fan Module	2 x Turbo Fan

*1. Support SATA drive needs AA-MUX tray board equipped.
*2. Support up to 120 disks (include local chassis)

iSCSI Functions

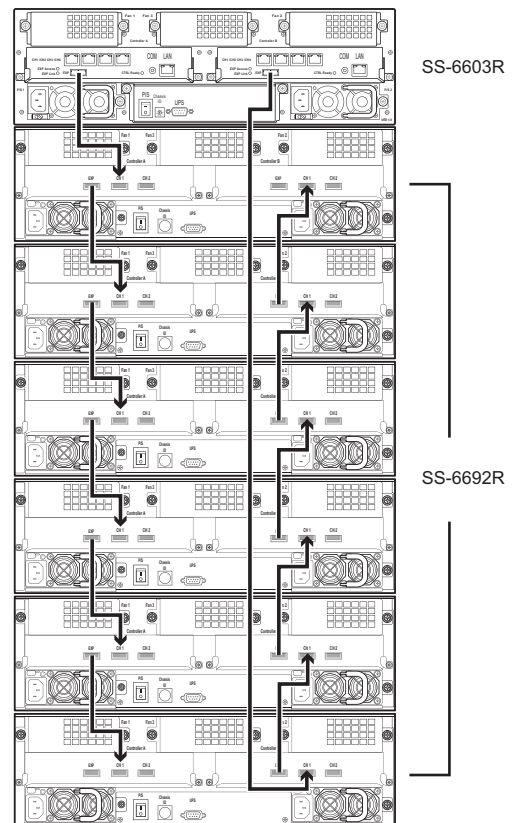| iSCSI Features	- Link-Aggregation, LACP (802.3ad)	- Header Digest and Data Digest
	- Jumbo Frame support (9000bytes)	- Internet Storage Name Service (iSNS)
	- Challenge Handshake Authentication Protocol (CHAP)	- Multiple iSCSI targets (up to 8)

RAID Functions

RAID Levels	JBOD, 0, 1, 3, 5, 6, 10, 30, 50, 60, NRAID
RAID Features	- Support multiple RAID levels and stripe size
	- Support local hot spare and global hot spare
	- Instant and background initialization
	- Online RAID level and stripe size migration
	- Online disk group defragmentation for free space consolidation
	- Online capacity expansion and shrink
	- Online drive traveling and array roaming
	- Online array recovery
	- Support Disk Self Test (DST)
	- Support Disk Scrubbing (DS)
	- Support Disk Cloning (DC)
Snapshot	Yes (firmware embedded)

Environment Specification

Humidity	20% to 80% non-condensing
Operating Temp.	5°C to 40°C (41°F to 104°F)
Non-operating Temp.	-25°C to 60°C (-13°F to 140°F)
Physical Dimension	485(W) x 565(D) x 132(H) mm
Packed Dimension	610(W) x 790(D) x 450(H) mm
Safety Regulatory	UL, CUL, CB
EMC Standard	FCC, CE, C-Tick, BSMI
Physical Weight	24Kgs (without drives)
Packed Weight	33Kgs (without drives)

* Specifications and product offerings may vary without notice.
* Various trademarks belong to their respective owners.

SS-6603R

SS-6692R