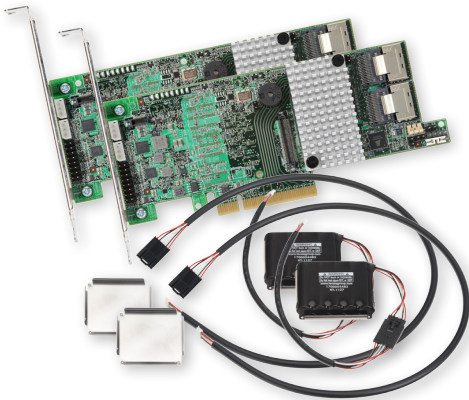
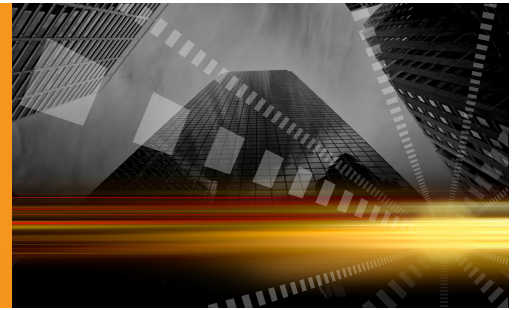


LSI Syncro™ CS 9271-8i Solution

Built on MegaRAID® Technology

Cost-effective application uptime for two-node Cluster-in-a box systems



LSI Syncro CS 9271-8i Solution

LSI Syncro CS solutions are designed to provide continuous application uptime at a fraction of the cost and complexity of traditional high availability solutions. Built on LSI MegaRAID technology, the Syncro CS 9271-8i enables OEMs and system builders to use Syncro CS controllers to build cost-effective two-node Cluster-in-a-Box (CiB) systems and deliver high availability in a single self-contained unit.

Syncro CS Solutions and Cluster-in-a-Box (CiB); Taking Simple and Smart to the Next Level

Datacenters, remote offices and small and medium sized businesses (SMBs) are often limited by the amount of space available for compute resources. Meeting footprint constraints in the datacenter is an essential piece of driving down the total cost of ownership. Keeping clustered servers in a single-server form-factor while providing failover support and shared storage is a huge benefit for IT administrators trying to meet these limitations.

The Syncro CS 9271-8i solution in CiB systems delivers a redundant, 2-server node cluster with shared storage for environments where form factor is critical. Since the CiB is a single self-contained unit, installation of the Syncro CS 9271-8i solution can be conducted during system assembly. This simplifies deployment in the field allowing a complete configuration to be up and running in minutes.

High Availability for Converged Server-Storage Platforms

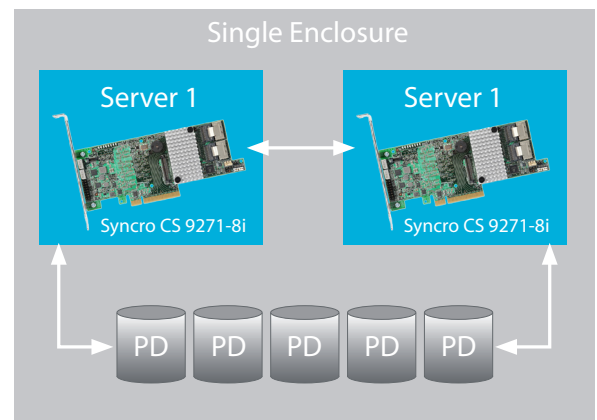
LSI has collaborated with OS and server industry leaders to develop cost-effective, high availability CiB server clustering solutions for SMB and Remote Office Branch Office (ROBO) environments. These solutions bring shared storage and storage controller failover into DAS environments, leveraging the low cost DAS infrastructure, simplicity, and performance benefits. For SMBs running local applications, Syncro CS solutions offer a cost-effective and easy to deploy and manage solution to reduce application downtime and the associated lost productivity and revenue. The solutions also help to increase storage utilization and reduce power, cooling and space requirements for a lower total cost of ownership.

Key Benefits

- Two (2) server cluster in a small single-system form factor
- High availability at fraction of the cost and complexity of existing HA solutions
- Failover and shared storage capabilities of SAN at DAS price point
- Increases application uptime while reducing latency and cost in clustered compute environments
- Makes high availability an affordable and viable option for SMB, SME and ROBOs

SAN Features of Syncro CS at Lower Total Cost

- Shared Storage
- High Availability
- Lower Cost / Power
- Ease of Deployment
- Higher Density



Syncro CS in a Cluster-in-a-Box Deployment Model

LSI Syncro CS 9271-8i	
Solution Provided	Fully redundant shared storage and application failover for two-node single-system Cluster-in-a box systems
In the Box	<ul style="list-style-type: none"> • Two (2) Syncro CS 9271-8i HA controllers with CacheVault (each includes CV power module, CV clip and remote cable) • Quick Install Guide • Two (2) LP Brackets • Resource CD
Controller Physical Dimensions	MD2 Low Profile (6.6" x 2.536")
Controller External Connectors	Two Mini-SAS SFF8087 internal connectors
Device Support	Up to 96 6G SAS and/or NL-SAS dual-ported HDDs and SSDs (w/SCSI-3 PR) Up to 31 6G SAS enclosure/expander devices Maximum of 120 dual-ported SAS devices in the HA storage domain. Please see on-line compatibility matrix on lsi.com.
Host Bus Type	x8 lane PCI Express® 3.0 compliant
Data Transfer Rates	Up to 6Gb/s per port
I/O Processor/SAS Controller	LSISAS2208 Dual-Core RAID on Chip (ROC)
Cache Memory	1 GB 1333MHz DDRIII SDRAM
Cache Protection	MegaRAID CacheVault flash cache protection (included)
Key High Availability Features	<ul style="list-style-type: none"> • Dual Active HA w/shared storage across 2 server nodes • Server Storage Cluster HA topology support • Write Back HA cache mirroring • Up to 64 virtual drives with Shared host access • Up to 64 virtual drives with Exclusive host access • Planned/Unplanned failover modes
Key RAID Data Protection Features	<ul style="list-style-type: none"> • RAID levels 0, 1, 5, and 6 • RAID spans 10, 50 and 60 • Auto resume after loss of system power during array rebuild • Single controller Multipathing (failover) • Single controller Load Balancing • Configurable stripe size up to 1MB • Fast initialization for quick array setup • Check Consistency for background data integrity • Patrol read for media scanning and repairing • 64 virtual drive support per controller (64 total in HA domain) • Up to 64TB LUN support • DDF compliant Configuration on Disk (COD) • S.M.A.R.T support • Global and Dedicated Hot Spare Support <ul style="list-style-type: none"> – Automatic rebuild – Enclosure affinity • Enclosure management <ul style="list-style-type: none"> – SES (inband)
Controller Operating Temperature	Maximum ambient: Controller Card with included CacheVault module: 55°C
Controller Operating Voltage	+3.3V, +12V
Controller MTBF (Calculated)	1,251,284 hours
Hardware Warranty	3 years, free technical support, advanced replacement option
Regulatory Certifications	EN55022, EN55024, EN60950, EN 61000-3-2, EN 61000-3-3; FCC Class A, Class B; UL1950; UL; CSA C22.2; VCCI; RRL for MIC; BSMI;C-tick; RoHS; WEEE
RAID & HA Management	MegaRAID Management Suite™: MegaRAID Storage Manager™, StorCLI (command-line interface), WebBIOS, SMI-S
SSD Optimization	<ul style="list-style-type: none"> • MegaRAID CacheCade® Software uses SSDs in front of HDD volumes to create high-capacity, high-performance controller read cache pools • MegaRAID Fast Path Software designed to provide high-performance I/O acceleration for SSD arrays connected to 6Gb/s MegaRAID SAS controllers • Up to 32 SSDs (6G SAS) in a CacheCade Read SSD pool • Up to 64 CacheCade virtual drives (The total # of HDD VD + CacheCade VDs in the HA domain must not exceed 64) • Up to 512GB CacheCade Read volume capacity in the HA domain
OS Support	Microsoft® Windows® Server 2012 and Server 2008 R2 Red Hat Enterprise Linux 6.3 and 6.4 SuSE Linux Enterprise Server 11 SP2 and SP3
Ordering Information	LSI00392



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