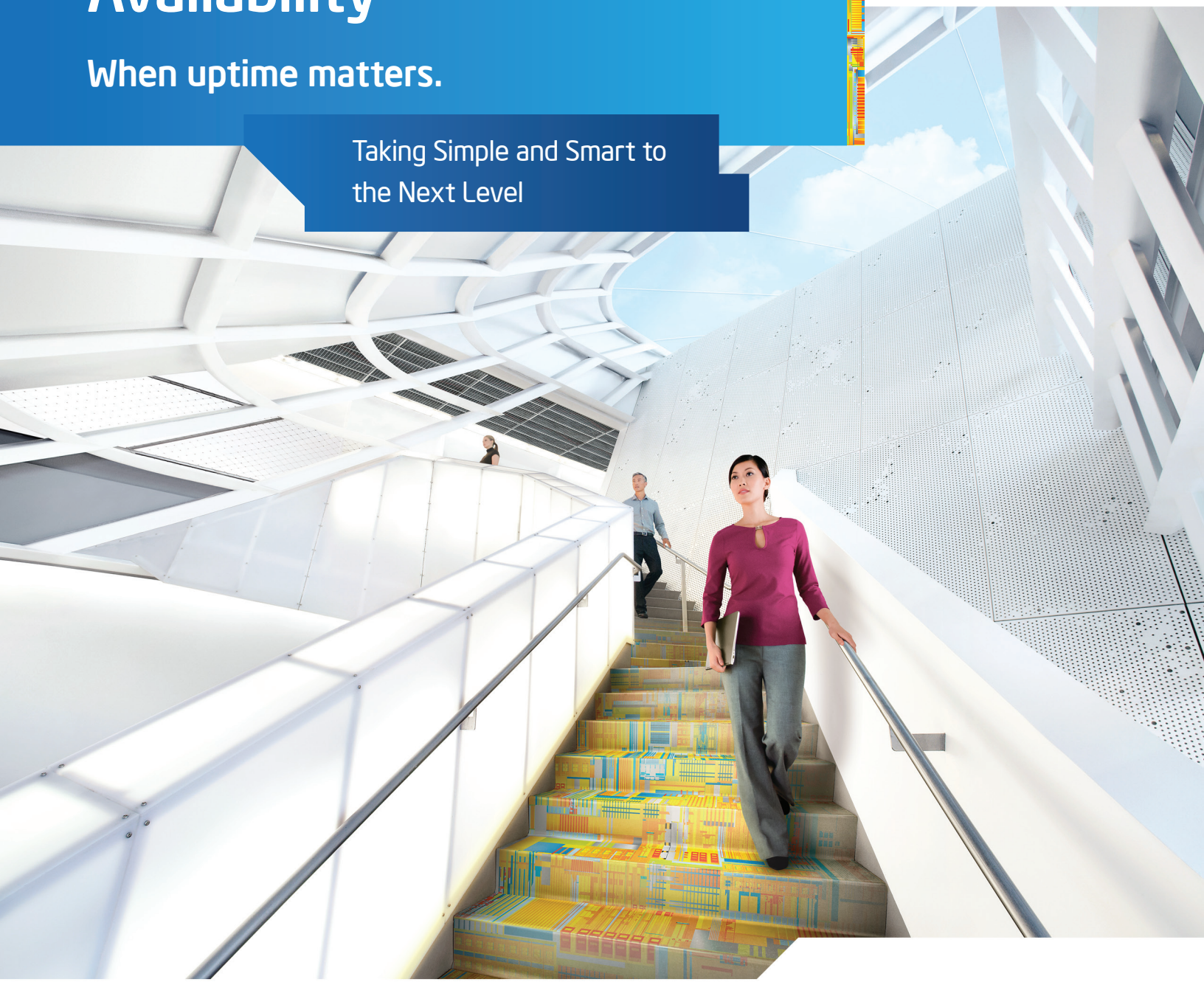
SOLUTION BRIEF

Intel® RAID High Availability

When uptime matters.

Taking Simple and Smart to the Next Level



Solutions that deliver enterprise benefits of exceptional availability at the right price.

Intel® RAID High Availability

When uptime matters.

Datacenters, remote offices and small and medium-sized businesses (SMBs) are often limited by the amount of space available for compute resources. Budget constraints make it challenging for these businesses to keep up with the latest storage solutions that can benefit their business.

For businesses where cost and application uptime matters, the Intel® RAID High Availability Premium Feature Kit, powered by LSI Syncro Technology, allows for Intel's intelligent RAID products to be upgraded to deliver the enterprise benefits of redundant, shareable and scalable DAS at the right price. These simple and intelligent failover solutions reduce latency by half, at half the cost compared to other high availability solutions. By combining two storage RAID controllers with two servers, they provide a redundant, simplified server failover cluster. You can use an easy to install HA Premium Feature upgrade kit with Intel RAID controllers and two servers to further enhance storage applications and deliver higher ROI for your server boards and systems to a JBOD configuration or in a single cluster-in-a-box (CiB) form factor.

Intel® RAID High Availability Solutions are based on Microsoft Windows Server 2012. Customers realize the unique benefits and capabilities of Intel and Microsoft to develop lower-cost, Windows-based HA server clustering solutions. These solutions combine Microsoft's experience in managing clustered server environments through the Windows operating system, with LSI's expertise delivering highly scalable and sharable storage and RAID interconnect technology. Not only has Intel collaborated with Microsoft and LSI, but Intel RAID products have undergone thousands of hours of testing to ensure they work better together with Intel Xeon® processor based Servers and Intel® Solid-State Drives. These powerful technologies combined provide greater efficiencies and help maximize data center footprint for businesses of all sizes. Business applications run faster and are more available when Intel RAID High Availability is added onto an existing compatible RAID controller.

Did you know that an Intel RAID controller upgrade provides redundancy with a redundant simplified server failover cluster?

Why Intel RAID High Availability Solutions?

- Enable Windows Server high availability capabilities and cluster topologies[1]
- Reduce the cost of building high availability server clusters by 60% and increase performance by 25%
- Simple upgrade (hardware key and software) to existing Intel RAID controllers
- Quick deployment without the complexities of a SAN

1 - Linux-based server compatibility is anticipated prior to 2014

Intel RAID High Availability

Simpler, Smarter, and More Cost-Effective DAS

Traditional high-availability (HA) solutions combine servers into clusters and share storage across a storage area network (SAN) to ensure continuous application availability and eliminate single points of failure. Intel RAID High Availability lowers cost and reduces complexity of HA solutions with fully redundant and simplified storage without the need for storage networking hardware.

SAN Storage Based Solution

Two Servers + SAN + External Storage

Two External RAID Controllers

Complex set-up configuration and interoperability, expensive cables, etc.

Decent performance and latency

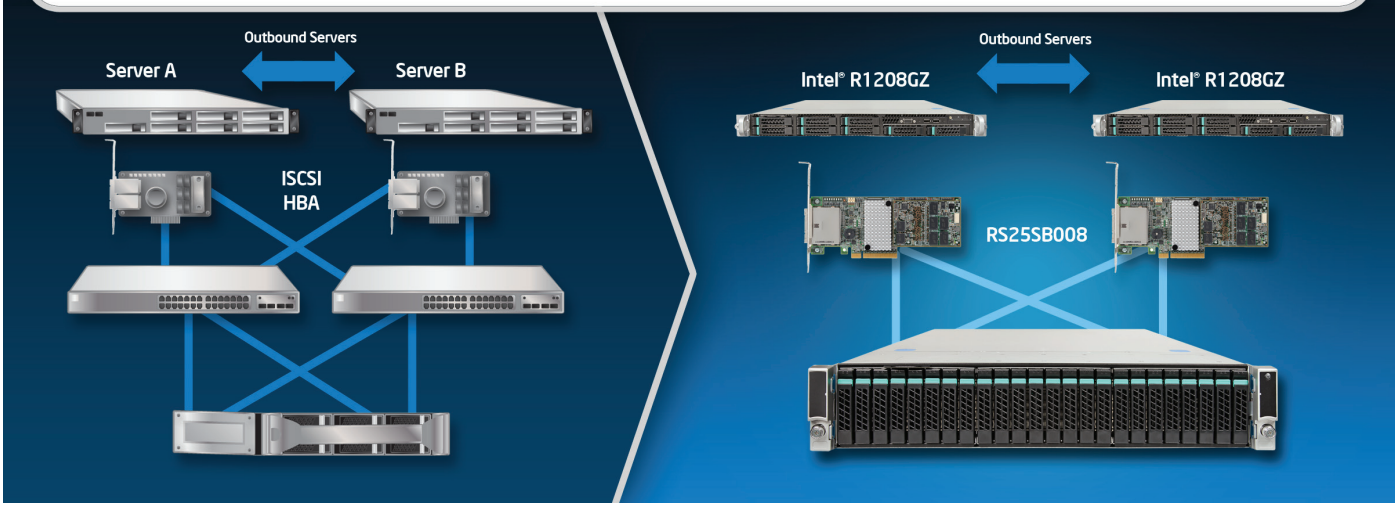
Intel RAID High Availability Solution

Two Intel Servers* + JBOD

Two Intel RAID High Availability Controllers

DAS simplicity

Lower latency and higher performance



Use Case for an ROBO: Auto Parts Store Example

Inventory and pricelist lookup database, running in SQL Server

Application Uptime: 100% during business hours

End Users: Primarily local at the store branch. They needed access to the central office data for inventory control. They wanted the data to be concurrently accessed by Web clients and inventory managers.

Administration: On-site once a week for general maintenance

Budget: $15,000 per store annually for infrastructure hardware

Current Configuration: Database configured and operated at the central office

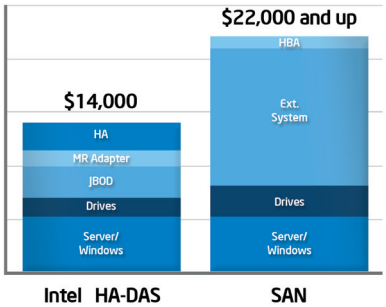
Configuration Type: Multi-server SAN

Connection: Ethernet (to local store)

Characteristics: Slow. There were large latencies due to a distant WAN and complex SAN infrastructure. It was difficult to make manual changes at the local store branches.

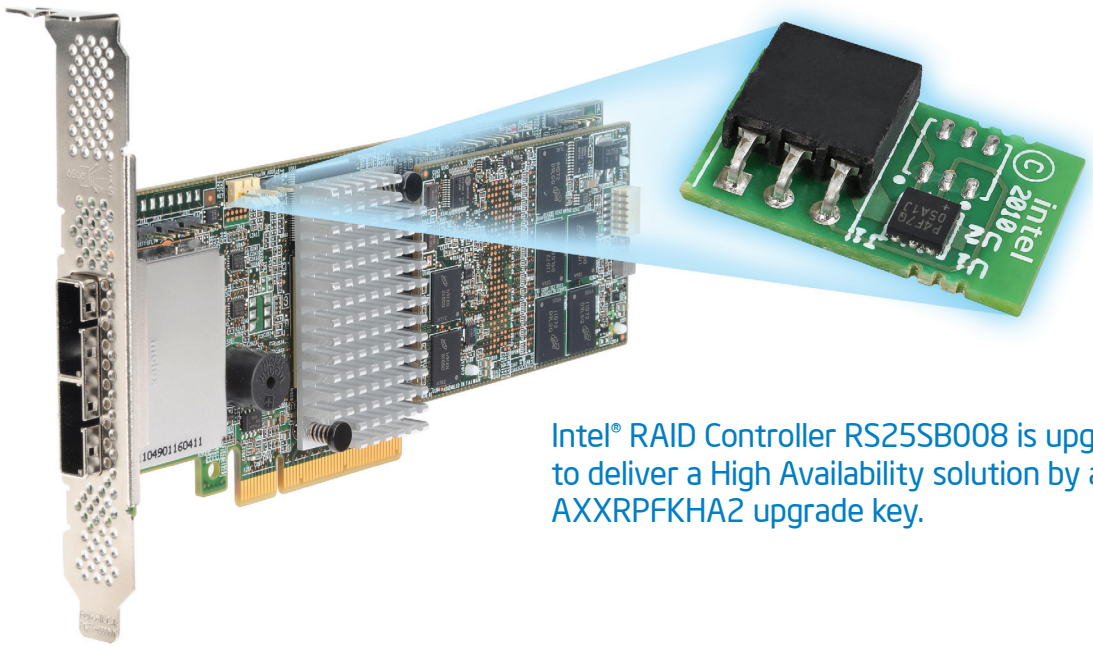
Since the auto parts store couldn't afford its point of sale to be interrupted, they scoured the market to find a high availability server-storage cluster solution. The store rejected the SAN-based HA solution that would cost $22,000 or higher, and decided to go with the Intel HA-DAS for $14,000. This cost included the servers, OS licenses, HA-DAS controllers, hard drives and the JBOD enclosure. The configuration could be deployed entirely using the Microsoft Windows Server 2012 Failover Cluster Manager without any additional management software.

Turn this use case into real costs savings for your ROBO and SMB customers.



Intel® RAID High Availability Solutions
Powered by LSI Syncro Technology

Solution Provided In the Box	▪ Two Intel® RAID High Availability Solution enablement keys for use with selected Intel® RAID controllers. ▪ Quick install guide
Key High Availability Features	▪ 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
RAID & HA Management	Intel® RAID Management Suite™: Raid Web Console 2 StorCLI (command-line interface), Bios Console, SMI-S
Compatible Intel® RAID Cards	Intel® RAID Controller RS25SB008 and RS25AB080 [1]
OS Support	Microsoft® Windows® Server 2012 and Server 2008 R2 [2]
Ordering Information	AXXRPFKHA2



Intel® RAID Controller RS25SB008 is upgradeable to deliver a High Availability solution by adding the AXXRPFKHA2 upgrade key.

1 - Additional Intel® RAID add-in cards and modules are anticipated. Please see the Intel's support site for AXXRPFKHA2 for an up to date list of compatible products.

2 - Linux-based server compatibility is anticipated prior to 2014

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel, the Intel logo, Intel Inside, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and/or other countries.

*Other names and brands may be claimed as the property of others.

Copyright © 2013 Intel Corporation. All rights reserved.
0613/SJ/EM/PDF Please Recycle 329112-001US