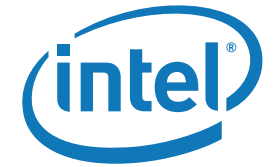
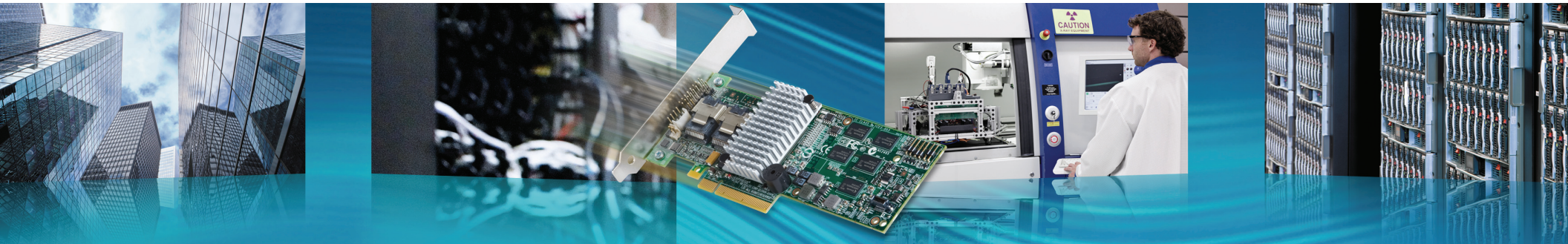


# Intel® RAID Solutions for Your High Performance Computing Storage Applications



Amplify. Optimize. Thrive. Do SAS-2/6G Storage Right.



Today's sophisticated high performance computing applications demand data processing speeds, higher availability, and some of the most advanced clustering technologies out there.

## A Complicated Array of Storage Challenges

Whether a data warehouse, transactional processing, or even an all-in-one scientific clustering solution is required, solving storage needs for high performance computing applications can be challenging. The degree of performance, availability, data protection, dispersion, capacity allocation and access rights vary by solution. In addition, the amount of storage required is frequently larger than most other applications.

Given the complexity of options, it is more important than ever to choose a brand that provides flexible configuration options and proven success. And with a wide variety of customers that fall within the high performance computing space, consolidating your line card with a brand that has multiple options to consider is a smart choice for your business.

## Intel® RAID Delivers Flexibility to Help

Intel is a stalwart in the realm of high performance computing applications – especially when it comes to solving complex customer questions. With a myriad of successes, system builders can leverage powerful and proven storage technologies for new opportunities. Intel RAID solutions for SAS-2/6G storage provides outstanding performance, advanced data protection, and a variety of array and storage management configuration options. Designed to optimize Intel® Server Boards and Intel® Server Systems based on the Intel® Xeon® processor, Intel RAID can easily integrate within existing infrastructure, especially other Intel technologies. Additionally, advanced performance options such as SSD Cache and FastPath\* I/O allow you to tailor a solution to best meet the needs of your customer.

### Amplify.

Supercharge storage with world-class performance, and simplified data protection across all RAID levels.

### Optimize.

Reduces total cost of ownership by shopping Intel for servers and controllers.

### Thrive.

Obtain the best tools, marketing support, and upgrades, such as Premium Features.

Custom training, as well as Intel® service and support, make Intel the one source for customers seeking data protection, increased productivity, and simplified IT. All Intel RAID solutions are validated across multiple platforms with Intel® boards, chassis, and systems.

## Diverse Intel RAID Options for Diverse High Performance Computing Needs

System builders can solve the most complicated high performance computing storage requirements by offering Intel SAS-2/6G RAID solutions, powered by LSI MegaRAID. With a range of options to select from, customers can benefit from significant performance improvements for both 3Gb/s and 6Gb/s SATA or SAS-based systems. By upgrading from a SAS-1 to SAS-2 generation product, customers can achieve up to 250% more performance with standard hard drives and even higher with the use of Solid State Drives (SSDs). When architecting storage solutions, system builders can choose from the following:

- **Intel® Embedded Server RAID Technology II:** Host-based RAID that uses the chipset, processors, and memory of the server board to provide basic data protection.
- **Intel® Integrated Server RAID:** Unique system boards that offer intelligent RAID protection for SAS and SATA hard disk drives.
- **Intel® RAID Controllers:** Standard add-in cards designed to provide a wide variety of RAID solutions for Intel® Server boards and systems.
- **Intel® Premium Feature Keys:** Unlock advanced software features to further enhance performance and data protection of mainstream and scalable performance products.

## Consider a Powerful Trio of Performance

Intel® Solid State Drives when combined with Intel RAID controllers and Premium Features offer significant performance advantages including I/O acceleration. Simply add at least one SSD to your array to improve performance, and reduce power consumption per IOP.



1. Intel Solid State Drives provide rugged and reliable storage performance. SSDs can reach up to 45,000 read IOPs compared to the fastest enterprise hard disk drives that can only reach up to 400 IOPs.
2. Intel® RAID Controllers lower total cost of ownership and provide simple, high-performance data protection for Intel® Server Boards and Systems based on the Intel® Xeon® processor.
3. SSD Cache and FastPath I/O, when combined with an SSD and RAID controller, can accelerate I/O and transactional performance of your array. FastPath I/O nearly doubles I/O performance with up to 150,000 I/O reads per second for SSDs.

## TAKE THE NEXT STEP

For more information on architecting a storage solution using Intel® RAID Products, explore [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

To make Intel® RAID Controllers part of your server environment, please contact an Intel® Channel Partner Program Participant.



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