

# Intel® Embedded Server RAID Technology II

Basic RAID Functionality for Entry-Level Servers



Intel® RAID solutions are designed, optimized, and tested for Intel servers for excellent performance, and data protection capabilities. A one-of-a-kind testing and quality assurance process ensures simplified use in Intel servers.

Intel® Embedded Server RAID Technology is host-based RAID that utilizes the chipset, processors, and memory of the server board to provide basic data protection. This is the entry-level standard for Intel® Xeon® processor 5000 sequence-based server boards.

Intel Embedded RAID technology includes advanced technologies and world-class features that supports up to six SATA drives or eight SAS/SATA drives, depending on the server board or system. If you require more drive support, you can seamlessly upgrade to Intel® Integrated

RAID and/or an Intel® RAID controller add-in card. Host-based RAID 0/1/10 is included with Intel server boards and systems, and RAID 5 upgrade is available with Activation Key AXXRAKSW5.

## Why Intel® Embedded RAID?

- Excellent capabilities for entry-level systems using up to 6 SATA drives or 8 SAS/SATA drives. (Optional SAS motherboard or SAS I/O module required for 8 SAS/SATA drive capability.)
- Comes standard with any Intel® Xeon® processor 5000 sequence-based server boards.
- Includes a RAID 5 upgrade with activation key AXXRAKSW5.

## Why Intel® RAID Solutions

- Industry leading performance, and simplified data protection across all RAID levels.
- Reduces total cost of ownership by shopping Intel for servers *and* controllers.
- Validated using more than 10 times the testing of most other RAID cards tested by Intel.
- Single Web-based RAID software stack to support all products.
- Easy to deploy, and seamless upgrades available.

Intel Embedded RAID Technology II	
Drive Fault Tolerance	Yes
Hard Reset/Power Loss Tolerance	No. Hardware RAID required.
Event Log Detail	Limited vs. Hardware RAID
I/O Response	Baseline I/O response. Hardware RAID offers up to 100x better response.
RAID Levels	0, 1, 5, and 10. Raid 5 with AXXRAKSW5 activation key.
Drive Support	Supports up to eight physical drives, and eight virtual drives.
Auto Re-build Support	Yes
Strip Size	64KB only
Hot Spare Support	Yes with limited capabilities vs. Hardware RAID.

### Want More? Intel Hardware RAID Solutions Offer:

- Superior I/O response
- Embedded cache and battery backup
- Reversible hot-spare
- Solid State Drive Support
- SSD Guard\*
- Dimmer Switch\*
- VMware\* ESXi Virtualization Support
- Broader OS Support

For more information on Intel® RAID Controllers, visit [www.intel.com/go/RAID](http://www.intel.com/go/RAID)

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