

HPC Storage Solution Scalable to 720TB with 960GB of Cache Storage Building Block Solution in a 4U Form Factor

RAID Incorporated's new HPC Storage Solution is designed for all major parallel file system-based applications that demand the highest level of performance at an affordable cost point per GB.

Each 4U storage node can be connected into a QDR InfiniBand, 10Gb Ethernet, or an 8Gb FC switch. Up to (10) 4U, 36-bay storage nodes can be incorporated into a 42U rack.

The 4U Storage Building Block Node

The 4U Storage Building Block Node utilizes dual Tylersburg chipsets to enable twice the bandwidth for superior I/O performance. The 4U chassis has 36 hot-swappable drive bays that are easily accessible using a 6Gb/s backplane. This enables a variety of drive options such as SSD, SAS, or SATA in 3.5" or 2.5" sizes. With full cooling redundancy and a high-efficiency redundant power supply, this solution is optimized for the next generation Intel® Xeon® series.

The motherboard based on Intel's Nehalem 5520 (Tylersburg) chipset support Intel's Xeon® 5600-series processors in the LGA 1366 socket today. With features that include support for (72) PCI-Express 2.0 lanes, up to 96GB of DDR3 memory, and IMPI 2.0 support, these solutions deliver the highest performance.

Ideal Uses

- Optimized for use with all major parallel file systems
- High-Performance Compute Clusters (HPCC)
- Visualization & Imagery
- Biotechnology & Life Sciences

Key Specifications

- Processor support: Dual Intel
- 5500 series Nehalem Xeon Quad / Dual-Core, with QPI up to 6.4 GT/s
- Dual Intel® 5520 (Tylersburg) Chipsets
- Up to 96GB DDR3 1333/ 1066/ 800MHz ECC Registered DIMM / 24GB Unbuffered DIMM
- Intel® 82576 Dual-Port Gigabit Ethernet Controller
- 8-Port 6Gb SASII Controller; RAID 0, 1, 5, 10
- 7 (x8) PCI-Express 2.0 (in x16 slot)
- Integrated Matrox G200eW Graphics

Options

- QDR Infiniband Switch
- 10Gb Ethernet Switch
- 8Gb FC Switch

4U Storage Nodes

- Dual Nehalem CPUs
- (36) Hard Drives in SSD, SAS, or SATA
- (4) 6Gb/s SAS RAID controllers
- 6Gb/s SAS Backplane

