

Relion™ 2712

Optimized for High Density Linux® Storage

Price, Performance, Storage Capacity, Memory and Management



Features

- » 2U rackmount server with 12 drive bays
- » Up to two Intel Xeon 5500 series processors
- » Up to 96GB of RAM using DDR3 modules
- » SAS and SATA storage options
- » Integrated IPMI 2.0 management

Benefits

- » Combines high performance x86 server platform with large direct attach storage capacity
- » Eliminates need for separate disk enclosure, reducing cost
- » Open platform for open source and 3rd party storage stacks
- » Flexible building block for distributed file system solutions

Application Areas

- » Standalone file server
- » Database server
- » Email server
- » HPC node with large direct attached storage

Open Storage Platform

Penguin's new Relion 2712 combines latest x86 server capabilities with storage density typically associated with dedicated disk enclosures. This open and flexible platform can be deployed as multiple server roles or as a building block for larger distributed storage solutions. Since the Relion 2712 is open x86/Linux server platform storage, functionality can be defined and customized through available open source and commercial software stacks.

Storage Building Block

The Relion 2712's physical form factor is optimized for standalone file server and distributed file system membership roles. The Relion 2712 enables up to 24TB of direct attached storage in 2U space, allowing customers to invest in storage media rather than high priced interconnects between servers and disk enclosures. Optional JBOD expansion chassis adds 12 more drive bays, enabling total of 48TB in 4U space with cost efficient SAS infrastructure and consistent look and management.

Performance

Penguin's Relion 2712 is based on the all new Intel Xeon 5500 series 'Nehalem' CPUs and accompanying 'Tylersburg' chipset. This latest Intel dual processor, quad core platform is a complete redefinition of the x86 architecture. The new platform moves system RAM closer to the processors, making data readily available to the CPU cores. The Nehalem architecture also introduces substantially upgraded I/O capabilities, which meet or exceed the performance of current high performance cluster interconnect fabrics and RAID controllers.

Designed for Linux

All Penguin servers have been tested for compatibility with major commercial and free Linux distributions. Relion servers are available with Red Hat Enterprise Linux, SuSE Linux Enterprise Server or CentOS preinstalled. HPC clusters built from Relion servers can be effectively provisioned and managed by Scyld ClusterWare software from Penguin. Scyld ClusterWare is a fourth generation cluster management platform designed to make a cluster as easy to manage as a single system. Scyld ClusterWare has been architected by the 'father' of Linux clustering, Penguin Computing's CTO Donald Becker.



Technical Specifications Relion 2712 Server

	Relion 2712
Form Factor	2U rackmount server with 12 bays for 3.5" drives 2U expansion enclosure with 12 bays for 3.5" drives
Processors	Up to two Intel Xeon 5500 series quad core processors
Bus Speed	Intel Quick Path Interconnect architecture, up to 6.4GT/s (Gigatransfers per second)
Cache	4/8MB level 2 cache
Chipset	Intel 5520 'Tylersburg'
Memory	DDR3 modules, 12 slots, up to 96GB
Expansion Slots	3 x PCI Express gen 2, x8 lanes Proprietary expansion slot for optional RAID controller
Internal Storage	12 hot swap drive bays for 3.5" SAS/SATA hard drives Nearline SATA 5400rpm SATA 2TB drives Enterprise grade 7200rpm SATA drives in multiple capacities up to 1TB High performance 15000rpm SAS drives in multiple capacities up to 450GB Optional hardware RAID 0/1/5/6/10/50/60 support
Network Interfaces	Integrated dual Intel 10/100/1000Mbps Ethernet Dedicated 10/100 management NIC for integrated BMC
Ports	2 x USB 2.0 PS2 keyboard and mouse 2 x LAN management LAN serial port VGA
Management	IPMI 2.0 management processor with support for remote power control, remote console and server health monitoring
Dimensions	3.44" H x 16.93" W x 27.38" D
Power Supply	Dual redundant 800W hot swappable modules
Warranty	Standard 3-year warranty included with every Penguin Computing server

1-888-PENGUIN