



Relion 4724

Got Storage?

Features

- » 4U rackmount server with 24 drive bays
- » Dual Intel Xeon 5500 series processors
- » Up to 96GB of RAM using DDR3 modules
- » Enterprise SATA drives in 1 and 2TB capacity
- » Integrated IPMI 2.0 management capabilities

Benefits

- » Combines x86 server platform with large storage capacity
- » Eliminates the need for external disk enclosures, reducing cost
- » Open platform for open source and 3rd party software stacks
- » Flexible building block for distributed file system solutions

Application Areas

- » Standalone file server
- » Email server
- » Database Server
- » Scratch space to support diskless HPC clusters

Versatile Storage Platform

Penguin Relion 4724 couples modern high performance x86 application server capability with class leading direct attached storage capacity. Individual Relion 4724s can be used as file- or disk-to-disk backup servers or to support data intensive applications such as email. Clusters of Relion 4724s running a distributed file system provide aggregate storage capacity and network bandwidth at a fraction of the cost of high end specialty equipment.

All Drives

Relion 4724 is literally optimized for storage – it's all drives. Using current state-of-the-art 2TB SATA drives maximum raw capacity is 48TB. Multiple hardware- and software based RAID technologies are available, including Adaptec Zero Maintenance controllers and Penguin-proprietary high performance RAID6 stack capable of 2+ GB/s. With Relion 4724 customers can leverage the lowest \$/GB cost enabled by current high capacity enterprise SATA drive technology.

Connectivity

Penguin Relion line of servers is based on Intel's current Xeon 5500 series quad core processors and associated Intel 'Tylersburg' I/O chipset. Based on PCI Express generation 2 I/O architecture, Relion 4724 is optimized for moving large volumes of data between the array of disks and storage clients connected to a high performance messaging fabric. Penguin is well versed in InfiniBand fabric technology having designed some of the current TOP30 supercomputing installations.

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 4724 Server

	Relion 4724
Form Factor	<ul style="list-style-type: none"> 4U rackmount server with 12 bays for 3.5" drives
Processors	<ul style="list-style-type: none"> Two Intel Xeon 5500 quad core processors
Chipset	<ul style="list-style-type: none"> Intel 5520 'Tylersburg'
Bus Speed	<ul style="list-style-type: none"> Intel Quick Path Interconnect, up to 6.4GT/s
Cache	<ul style="list-style-type: none"> 8MB level 2 cache
Memory	<ul style="list-style-type: none"> DDR3 DIMMs, 12 slots, up to 96GB
Internal Hard Drives	<ul style="list-style-type: none"> 24 hot swap drive bays for 3.5" SAS/SATA hard drives Enterprise grade 7200rpm SATA drives in multiple capacities up to 2TB High performance 15000rpm SAS drives in multiple capacities up to 600GB Optional hardware RAID 0/1/5/6/10/50/60 support
Expansion Slots	<ul style="list-style-type: none"> 4 x PCI Express gen2 x8 1 x PCI Express gen2 x4 1 x PCI Express x4
Network Interfaces	<ul style="list-style-type: none"> Integrated dual Intel 10/100/1000Mbps Ethernet Dedicated 10/100 management NIC for integrated BMC
Ports	<ul style="list-style-type: none"> 2 x USB 2.0 PS2 keyboard and mouse 2 x LAN management LAN serial port VGA
Management	<ul style="list-style-type: none"> IPMI 2.0 management processor with support for remote power control, remote console and server health monitoring
Dimensions	<ul style="list-style-type: none"> 7" H x 17.2" W x 26" D
Power Supply	<ul style="list-style-type: none"> Redundant 2 x 900W power supplies
Operating System Support	<ul style="list-style-type: none"> Red Hat Enterprise Linux, SUSE Linux Enterprise Server
Warranty	<ul style="list-style-type: none"> Standard 3-year warranty included with every Penguin Computing server