Server Reliability

When looking at the reliability of servers, there are many factors to consider:

Robust Architecture

All Nfina Technologies™ Servers utilize 100% original Intel® manufactured motherboards. This is the best quality motherboard currently available. It is manufactured to IPC-A-610 standards, which are the highest in the industry. The Intel architecture is the reference design from which all other servers are made.

Nfina's use of Intel motherboards and Intel processors insure the highest level of SW compatibility in the industry. They work with all non-proprietary, open architecture, plug-and-play drivers for industry standard PCI networking cards and Operating Systems (e.g. Windows®, Linux®, VMware®, etc…).

Hard Disk Drives

The lowest MTBF component in any server is the hard disk, but not all hard drives are manufactured to the same standards. The more expensive Enterprise SAN class drives utilize vibrational safeguard technology that has been added to prevent premature failures in vibrating cabinets where many disk drives are installed (e.g. data centers).

All Nfina Technologies hard drives utilize Seagate® Enterprise class hard disk drives with the additional vibrational circuit. These drives carry a five year warranty, and have the highest MTBF in the industry.

Power Supplies

The next lowest MTBF component in any server is the power supply. The more reliable servers utilize a redundant power scheme that makes use of dual hot-swap power supplies to double the MTBF of that critical component.

All Nfina Technology servers utilize redundant power supplies made by the well-known manufacturer, Delta™. Delta power supplies have a proven track record of quality and innovation that exceeds customer expectations. Features such as fan speed control, thermal management, and low acoustic performance are part of Delta's extensive design. This combination guarantees a premium quality product.

Server Reliability

Solid State Hard Drives

Solid State Drives (SSDs) are the highest MTBF hard drives in the industry. This is because there are no moving parts to create a premature mechanical failure. However, NAND flash chips have a limited write life, and not all SSDs are created equal. The more expensive Enterprise class SSDs provide excess NAND flash chips that allow the SSD controller to move blocks that are being accessed frequently and repeatedly to extend the life of the drive, resulting in a longer warranty.

Nfina Technologies only uses Intel or SanDisk® Enterprise class SSDs. These drives deliver very fast, consistent, read/write performance with strong data protection, providing superior quality of service for many big data applications. Lower latencies deliver 80,000 IOPS, resulting in ultimate performance and reliability.

RAID Technology

LSI® (an Avago Technologies Company) has been the RAID technology "Best-In-Class" Industry leader for many years. Using their *MegaRAID*® software, *CacheVault*™ and *FastPath*™ technology insures customers will have the best RAID experience possible. The LSI support team is world class, readily accessible, and has demonstrated high technical competence on their products and technology.

Nfina offers LSI hardware RAID cards for the ultimate configurability and reliability of the storage array.

DDR3 DIMM Memory

Kingston® is the leading manufacturer of DDR3 ValueRAM® for use in many computer applications. All Kingston ValueRAM DIMM products are 100% tested using a dynamic burn-in test and carry a lifetime warranty. They are manufactured to the highest JEDEC standards available in the industry, and Kingston has been a long time sitting member of the JEDEC board of directors.

Nfina is proud to offer Kingston DDR3 DIMM memory in all of our servers.

Server Reliability

Connectivity

Connectivity should be tailored to the application; data integrity, economy and ease of integration, speed and maximum performance are all important factors. Interoperability, quality and reliability are paramount when it comes to connectivity. Nfina offers a variety of connectivity options from Intel, LSI, and QLogic® to suit any application, from standard 1Gb and 10Gb Ethernet connections, to Host Bus Adapters, Infiniband™, and Fibre Channel.

All Nfina Servers come with Dual or Quad 1Gb Ethernet ports. For Expansion, Nfina products can be equipped with Intel interface boards with up to four additional 1GB Ethernet ports or Dual 10GB Ethernet ports or Infiniband (56 Gb/s). SFP Fiber Optic options are also available.

When high-speed data transfer is the priority, Nfina meets the challenge with QLogic Fibre channel connectivity. Optimized for virtualization, QLogic products include the added benefit of Dynamic Power Management Technology, which delivers the lowest possible power consumption.

For applications requiring the additional storage capability of JBODs, LSI host bus adaptors can be utilized to scale out storage, and LSI RAID cards are available with external SAS connectors.

Summary

By utilizing the world-class vendors and best-in-class components, Nfina Technologies can offer the highest performance and the highest reliability servers in the industry, without the hefty price tag from some of those other “name brands”.

Nfina Technologies, Inc. 820 S. University Blvd., 4E, Mobile, AL 36609 Phone: 251.243.0043 Fax: 251.316.3884 **www.nfinausa.com**