



The Nfina Storage Advantage

When contemplating storage purchases there are several different categories of storage you may need. The most common are: 1) Application Servers with Storage, 2) File Servers and NAS Storage, 3) SAN Storage, 4) JBOD Storage.

The Nfina Storage Core Advantages:

- Nfina's 5-Year Standard Warranty (versus competitors 3 year)
- Reasonably priced non-proprietary enterprise class drives
- Performance design advantages (offering up to 1TB SSD cache)
- US based manufacturing, service & support (headquarters in Mobile, AL)

Application Servers with Storage

Quite often these servers are Microsoft® Windows® Servers (i.e. Windows Server® 2012R2) with the whole storage array dedicated to the C:\ drive. This allows for the operating system as well as the applications to be loaded by typically using default registry and path settings. If the underlying OS is native, then the 200, 300, 400, 500, 700, and 800 Series Nfina products can be easily tailored to meet these storage design needs. If the underlying OS is a virtualized type (Microsoft Hyper-V®, VMware® ESXi™, Citrix® XenServer®, Red Hat® KVM, etc.), or requires more than 32GB of DRAM, then Nfina recommends our dual socket models; 324i2, 428i2 (tower), 528i2, 724i20, and the 824i20. These dual socket storage servers from Nfina all support 12G backplanes and the latest 12G hard drives and SSDs.



Nfina 200 Series

Of course the storage lines can get blurred with these products, for example; making a D:\ partition an NTFS file share, allows the application server to also act as a file server. Typically for SMBs, the server will also act as the Domain (DNS) Controller and the DHCP controller.

The Nfina Advantage for Application Servers with Storage:

- All Nfina Storage Core Advantages apply!



Nfina 400 Series

File Servers and NAS Storage

Quite often, file servers and NAS (NAS=Network Attached Storage) devices are also Windows Servers (i.e. Microsoft Windows Storage Server Workgroup 2012R2) configured as a network share with the standard NTFS file system. The OS is typically put on a C:\ partition (64GB for example), and the rest of file share is put on a D:\ network partition. This server will typically not run applications, but provides access and restriction to network files via group/user permissions. In these systems, typically the underlying OS is native. The Nfina products that can easily be tailored to meet this application are the 200, 300, 400, 500, 700, and 800 series products.



Nfina 300 Series

The Nfina File Server/NAS Advantage:

All of the Nfina Storage Core Advantages (above) plus:

- Nfina's File Server/NAS product is offered with Windows Storage Workgroup 2012, which has unlimited users. Our competitors (i.e. HP® and Dell™, etc.) configure their NAS servers with Windows Server Standard 2012R2 (which requires CAL licenses).
- Nfina's NAS storage can be configured for iSCSI attachment that allows for block storage like a SAN.



Nfina 500 Series

SAN Storage

SAN storage (SAN=Storage Array Network), are fully redundant, fault tolerant (no single point of failure) appliances that are used for primary storage in mission critical applications. SAN's are typically used in 10G iSCSI networks so that general-purpose network switches can be used. This allows for a routable network protocol as well as an auto-failover from primary to secondary storage at no additional cost.



Nfina 700 Series

As an alternative to Ethernet, HBA (host bus adapter) interfaces are available on Nfina SANs. This includes standard HBA (JBOD type) connectors and Fibre Channel interfaces. Typical speeds of Fibre Channel are 4, 8, 16, 32, and 128 gigabit/s. Because of the lack of Ethernet SNAP headers, HBA's and Fiber Channel are more efficient and faster than Ethernet. Also, HBA and Fibre Channel are not routable protocols. Compared to Fibre Channel switches, which are very expensive, HBA switches from LSI® are less expensive than 10G switches from primary vendors (i.e. Cisco®).

The Nfina Storage Advantage

SAN Storage Continued

Nfina also utilizes Hybrid storage technology in our SAN offerings. This allows the use of standard SAS or SATA drives with a high-speed SSD array inserted between the RAID card and the spinners. This gives the user the best of both worlds: SSD type performance at SATA pricing. Nfina's SAN products are the 714i22s SAN and the 814i22s SAN.



Nfina 800 Series

The Nfina SAN Advantage:

All of the Nfina Storage Core Advantages (above) plus:

- Nfina's SAN products offer a fully redundant, fault tolerant storage solution. The drives in the Nfina SAN are built and configured as two independent RAID drive arrays for full redundancy, thus eliminating the potential single point of failure that can occur in a single RAID drive array.

JBOD Storage

JBOD (JBOD=Just a Bunch of Disks), is the least expensive storage option available, allowing physical drives to be added incrementally to an existing server, NAS, or SAN network. It is typically housed in a rack-mount chassis with a number of drives, dual power supplies, and standard HBA connections. Internal to the JBOD unit is typically a SAS expander board that will allow a single HBA connection to reach all the drives available. The Nfina 602 JBOD Storage Expansion Unit is compatible with all Nfina server and storage products.



Nfina 602 JBOD

The Nfina JBOD Advantage:

All of the Nfina Storage Core Advantages (above) plus:

- Nfina's JBOD products offer a 12G backplane. Many of our competitors products are 6G only.

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