EDGE COMPUTING
HYPERCONVERGED
DATA STORAGE
SERVERS
BACKUP/DR
The Nfina Advantage

Nfina Technologies is a US based manufacturer of Data Storage, Servers, Edge Computing and Hyperconverged Solutions that combines current high performance technology with a market leading 5-year warranty and US based tech support. Nfina provides the best value and lowest TCO in the industry.

We supply products to IT departments with growing compute and storage requirements who need the latest technology in order to maximize their IT infrastructure spending dollars. Every Nfina customer receives personal attention from our staff, because our success is tied to your business.

Outstanding Performance

"The Nfina 418i2 turned out to be an outstanding workstation that exceeded my performance expectations. Thus, I have decided to purchase three more 418i2 Workstations from Nfina'.

Dr. Georgios Y. Lazarou, Assistant Professor / Director of ISTR
University of South Alabama

Highest Quality IT Products

"I needed a low-cost solution without sacrificing reliability or quality. Nfina’s use of best-in-class components and their willingness to listen to my needs and find a way to meet them made them the clear choice. Quick delivery time and a customer service team that listens and gets the job done makes Nfina a trusted partner for my business".

Jerry Lathan, CEO & Owner
The Lathan Company, Inc., Historical Restoration Specialists

Trusted Business Relationship

"Once we decided to move forward with Nfina, we were very impressed with their service and more importantly, their turn-around time. Never once did we feel like we were stuck in a queue while they moved on to their next potential client. Throughout the process they became a trusted partner as they sought to understand our business and recommend the equipment that best met our needs...not the equipment that best met their goals ".

Douglas Meduna, President & CEO
FairHope Direct, Direct Mail Retailer
At Nfina we pride ourselves in delivering:

**Better Cyber Security**
Our products are free of adware, bloatware, spyware, and tracking software.

**5-Year Product Warranty**
Best in the industry! We stand behind the reliability and quality of our products.

- 100% Enterprise Hardware Components
- 2 Million Hours MTBF Reliability
- Tested & Certified by our Technology Partners

**Superior Tech Support**
24/7 US based tech support.
No third party call centers.

**Faster Lead Times & Delivery**
We provide same business day, custom quotes and quick delivery.

**Lowest Total Cost of Ownership**
TCO can be reduced 2 to 3 times over eight year period compared to vendors like Dell/EMC, HPE, and IBM.

**Industry Proven**
Our products are installed in a variety of industries:

- Banking
- Data Centers
- Education
- Enterprise
- Government
- Healthcare
- Security & Surveillance
If ease of setup and flexible scalability are important to you, then Nfina’s SANs are the answer. These SANs offer unlimited snapshots for effortless backup, unlimited clones for reliable duplication, and a unique tiered storage and caching system that helps accelerate access to frequently used files. An easy to use GUI allows flexible storage provisioning for mission-critical storage and hyperconverged networks.

### 8224R-i20s SAN
- Twin 2U rack-mount, dual-socket servers
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 48 x 2.5” (front) + 4 x 2.5” (rear) drive bays
- 4 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory (per chassis)
- PCIe: 2 x Gen3 x16, 1 x Gen3 x8 (per chassis)
- 2 x 10GbE LAN ports (per chassis)
- IPMI 2.0, KVM over HTML5
- Redundant 1300W hot-swap power supplies

The 8224R-i20s SAN with Intel® Scalable System Framework (Intel SSF) is truly a breakthrough storage solution. Equipped with 48 NVMe/SSD drives, this SAN is an ideal candidate for an all-flash storage array, alleviating the I/O bottleneck between high performance and capacity.

### 7212R-i20s SAN
- Twin 2U rack-mount, dual-socket servers
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 24 x 3.5” (front) + 4 x 2.5” (rear) drive bays
- 4 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory (per chassis)
- PCIe: 2 x Gen3 x16, 1 x Gen3 x8 (per chassis)
- 2 x 10GbE LAN ports (per chassis)
- IPMI 2.0, KVM over HTML5
- Redundant 1300W hot-swap power supplies

Capable of taking unlimited snapshots, locally and remotely, the 7212R-i20s SAN boasts zero downtime, ensuring mission critical data is always protected and available. Optimal as a hybrid storage array, this SAN supports multiple drive form factors, independent boot drives, and dedicated remote management.

### 2208Rs SAN
- Twin 2U rack-mount, dual-socket servers
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 16 x 3.5” (front) + 4 x 2.5” (internal) drive bays
- 2 x M.2, NVMe, PCIe Gen3 x4
- Up to 1TB, 2933MHz memory (per chassis)
- PCIe: 4 x Gen3 x16, 2 x Gen3 x8 (per chassis)
- 2 x 10GbE LAN ports (per chassis)
- IPMI 2.0, KVM over HTML5
- Redundant 1000W hot-swap power supplies

The 2208Rs SAN is a simple, affordable storage solution equipped with 2nd Generation Intel® Xeon® Scalable Processors. It’s advanced storage and compute platform delivers enterprise-class performance and allows you to start small and scales to accommodate business growth.
Our SANs take minutes, not hours, to configure and are the perfect high-availability solution for redundant cloud, on-premise storage, backup, disaster recovery, and virtual environments. Data security is provided by engineering total redundancy into our SANs. The result is a solid scale-out storage solution with no single point of failure.

### 2108Rs SAN

- Twin 2U rack-mount, single-socket servers
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 16 x 3.5” or 2.5” hot-swap drive bays
- 2 x M.2 NVMe, PCIe or SATA
- Up to 384GB, 2933MHz memory (per chassis)
- 5 x PCIe Gen3 x8 (per chassis)
- 2 x 10GbE LAN ports (per chassis)
- IPMI 2.0, KVM over HTML5
- Redundant 500W hot-swap power supplies

An ideal business class SAN solution, the 2108Rs is a entry-level SAN that boasts huge benefits in performance, efficiency, and security. This single socket SAN not only saves you money on equipment costs but also provides substantial savings on software licensing.

### 814i22s SAN (EOL)

- Twin 2U rack-mount, dual-socket servers
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 48 x 2.5” (front) + 4 x 2.5” (rear) drive bays
- Up to 1.54TB, 2666MHz memory (per chassis)
- 6 x PCIe Gen3 x8 slots (per chassis)
- 2 x 10GbE LAN ports (per chassis)
- IPMI 1.2/2.0, Java based KVM
- Redundant 1100W hot-swap power supplies
- VMware® ESXi 6.7™ certified

When performance, high IOPS, and low latency are the ultimate goal, the 814i22s SAN equipped with SSD or SAS drives is the tool for the job. Configured with two processors, a full complement of memory, and SSDs, this SAN is a solid high-capacity, fully redundant, storage solution.

### 714i22s SAN (EOL)

- Twin 2U rack-mount, dual-socket servers
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 24 x 3.5” (front) + 4 x 2.5” (rear) drive bays
- Up to 1.54TB, 2666MHz memory (per chassis)
- 6 x PCIe Gen3 x8 slots (per chassis)
- 2 x 10GbE LAN ports (per chassis)
- IPMI 1.2/2.0, Java based KVM
- Redundant 1100W hot-swap power supplies
- VMware® ESXi 6.7™ certified

When high capacity, reliability, and budget considerations are foremost, the 714i22s is a great fit. An easy to use GUI allows flexible storage provisioning as a SAN appliance or hyperconverged cluster. It has 24 – 3.5” drive bays and can be equipped with economical SATA/SAS/NVMe drives.
Needing a Backup, Disaster Recovery, or Business Continuity solution for your business, the Nfina Scalable NAS solutions are the clear winner. With an industry leading five-year warranty, Intel® Architecture, and rock-solid performance, these storage solutions are built to last and are capable of growing with your company needs.

8224R-i20 NAS

- 2U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 24 x 2.5" (front) + 2 x 2.5" (rear) drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- PCIe slots: 2 x Gen3 x16, 1 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1300W hot-swap power supplies

Looking for redundancy for backup, disaster recovery, or business continuity solutions then the 8224R-i20 NAS is the perfect choice. Built with Intel® Scalable System Framework this 24 bay NAS is ideally suited for an all-flash or hybrid storage array, recommended for use as a stand alone device or as scale-up storage in a hyperconverged infrastructure.

7212R-i20 NAS

- 2U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 12 x 3.5" (front) + 2 x 2.5" (rear) drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- PCIe slots: 2 x Gen3 x16, 1 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1300W hot-swap power supplies

The future-ready, Nfina 7212R-i20 NAS featuring Intel® Scalable System Framework, delivers performance, scalability, and reliability with no I/O compromise. Supporting a wide range of form factors, like SATA, SAS, SSD, NVMe and M.2, this NAS is the best hybrid storage solution for backup and disaster recovery applications. It can be used as a stand-alone NAS or for creating storage pools in a HA cluster.

2208R NAS

- 2U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 8 x 3.5" (front) + 2 x 2.5" (internal) drive bays
- 1 x M.2, NVMe, PCIe Gen3 x4
- Up to 1TB, 2933MHz memory
- PCIe slots: 4 x Gen3 x16, 2 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1000W hot-swap power supplies

The 2208R is the perfect NAS for small to medium sized businesses that desire the increased performance of dual 2nd Generation Intel® Xeon® Scalable processors but have budget limitations. This advanced storage and compute platform allows businesses to increase efficiency and workflow by creating centralized data storage pools.
The Nfina 2108R is an entry-level, single-socket NAS, ideal for businesses looking to consolidate their server and storage infrastructure and increase availability with efficient data replication and recovery options. Using a single-socket NAS not only saves you money on equipment costs but also provides substantial savings on software licensing.

This NAS is ideal for secondary storage applications, creating or adding to data pools, multi-tiered NFS file servers, and other backup strategies. Featuring energy efficient design and Intel® Xeon® v4 processors, the 714i20 dual-socket storage server offers great value and high density by utilizing 3.5” drives.

The 228R NAS is well suited for primary storage applications where budget is an essential consideration. It’s an outstanding general-purpose platform for storage, backup, and disaster recovery applications in data centers that demand high density and high reliability.
Delivering low latency, high performance, and scalability, the Nfina Scalable Servers with 2nd Generation Intel® Xeon® Scalable Processors, offer a new level of platform convergence. These servers can be configured with SSD/NVMe drives for an all-flash array or mixed with SATA/SAS, SSD/NVMe, and M.2s for a hybrid storage solution. Whatever the application, these future-ready servers are capable of tackling the workload with ease.

### 8224R-i20 Server
- 2U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 24 x 2.5” (front) + 2 x 2.5” (rear) drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- PCIe slots: 2 x Gen3 x16, 1 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1300W hot-swap power supplies

If higher IOPS and lower latency are of utmost importance then the dual socket, 8224R-i20 server is the solution. With up to 24 2.5" SSD or NVMe direct attach drives, this server is ideally suited for an all-flash or hybrid storage array, used as a stand-alone device or in a high-performance computing (HPC) cluster.

### 7212R-i20 Server
- 2U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 12 x 3.5” (front) + 2 x 2.5” (rear) drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- PCIe slots: 2 x Gen3 x16, 1 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1300W hot-swap power supplies

Delivering network agility and flexibility, the Nfina 7212R-i20, 2U dual-socket server, is the perfect choice for hyperconverged networks or scale-out storage. This server can be configured with a combination of SAS, SATA, SSD, NVMe and M.2 drives for a powerful hybrid storage solution.

### 2208R Server
- 2U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 8 x 3.5” (front) + 2 x 2.5” (internal) drive bays
- 1 x M.2, NVMe, PCIe Gen3 x4
- Up to 1TB, 2933MHz memory
- PCIe: 4 x Gen3 x16, 2 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1000W hot-swap power supplies

The 2208R is ideal for budget applications that require the power of dual 2nd Generation Intel® Xeon® Scalable processors. This advanced storage and compute platform delivers high level performance and lower cost of ownership, greatly reducing strain on your network and your finances.
Nfina’s Servers with Intel® Scalable Processors, feature Intel Advanced Vector Extension 512 (AVX-512) for improved throughput and workload-optimized performance, and Intel® QuickAssist Technology (QAT) for faster data compression, making these servers ideal for hybrid clouds, high-demand applications, enterprise networks, and data centers.

**2108R Server**
- 2U rack-mount, single-socket server
- 2nd Gen. Intel® Xeon® Scalable Processor
- 28 cores, Up to 4GHz processor speed
- 8 x 3.5” or 2.5” hot-swap drive bays
- 1 x M.2, NVMe, PCIe or SATA
- Up to 384GB, 2933MHz memory
- 5 x PCIe Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 500W hot-swap power supplies

This single-socket server is an excellent choice for mid-size businesses requiring a high performance server on a budget. Higher core density, increased I/O throughput with less latency, and built-in system security provides greater savings and better return on your investment.

**5208R-i20 Server**
- 1U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 8 x 2.5’’ hot-swap drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- 2 x PCIe Gen3 x16
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1100W hot-swap power supplies

The 5208R-i20, dual-socket server, is an eight bay system for robust virtualized environments and high-performance computing applications. Configure this server with eight SSD or NVMe drives for reduced latency, higher IOPS, and faster CPU to data storage performance.

**3204R-i20 Server**
- 1U rack-mount, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 4 x 3.5” or 2.5” hot-swap drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- 2 x PCIe Gen3 x16
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1100W hot-swap power supplies

The 3204R-i20 dual-socket server delivers superior performance per-core and enhanced memory and networking capabilities. This versatile server is the perfect fit for enterprise applications, data centers, and virtualized computing environments.
Nfina Rack Servers with dual Intel® Xeon® Processors offer a myriad of configuration options for any size workload, from general-purpose compute and virtualized environments, to mission-critical applications. For maximum performance, configure these servers with SSD drives for reduced latency, higher IOPS, and faster throughput.

### 724i20 Server (EOL)
- 2U rack-mount, dual-socket server
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 12 x 3.5" (front) + 2 x 2.5" (rear) drive bays
- Up to 1.54TB, 2666MHz memory
- 6 x PCIe Gen3 x8 slots
- 2 x 10GbE LAN ports
- IPMI 1.2/2.0, Java based KVM
- Redundant 740W hot-swap power supplies
- VMware® ESXi 6.7™ certified

Featuring energy efficient spread-core design, robust memory capability, and 12Gb/s SAS/SATA connectivity, the 724i20 is a cost-effective, highest density server offering. This dual-socket server is capable of virtualization density up to 1.6X compared to the previous generation. The 724i20 is an outstanding general-purpose platform for hyperconverged clusters, file server, and virtualized computing applications in data centers and enterprise applications.

### 228R Server (EOL)
- 2U rack-mount, dual-socket server
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 8 x 3.5" (front) or 2.5" (internal) drive bays
  - Supports NVMe, SSD, SAS, SATA
- Up to 1TB, 2666MHz memory
- 6 x PCIe Gen3 x8 slots
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 740W hot-swap power supplies

The 228R, a 2U rack-mount server, is well suited for applications where budget is an essential consideration. Dual Intel® Xeon® E5-2600 v4 Family processors, robust memory capability, and six PCIe expansion slots provides superior performance and room to grow as your companies data needs increase.

### 528i2 Server (EOL)
- 1U rack-mount, dual-socket server
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 8 x 2.5" hot-swap drive bays
- Up to 1.54TB, 2666MHz memory
- 2 x PCIe Gen3 x16 slots
- 2 x 1GbE LAN ports (other options avail.)
- IPMI 1.2/2.0, Java based KVM
- Redundant 750W hot-swap power supplies
- VMware® ESXi 6.7™ certified

Designed for high performance use in a wide range of server applications, the Nfina 528i2 with Intel® Xeon® v4 processors offers remarkable value in a 1U package. Dual-sockets, 12Gb/s SAS/SATA connectivity, and RAID options make this expandable server good for hyperconverged clusters, data centers, or any application that requires a premium computing platform.
Nfina Technologies Rack Servers are an important component in maximizing small business IT networks. Our intelligent hardware designs combine efficiency and performance with real affordability. Our products and components are manufactured to the highest standards for use in a variety of applications. Our goal is to deliver quality servers that last, lowering your overall cost of ownership.

### 324i2 Server
- 1U rack-mount, dual-socket server
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 4 x 3.5” or 2.5” hot-swap drive bays
- Up to 1.54TB, 2666MHz memory
- 2 x PCIe Gen3 x8 slots
- 2 x 1Gbe LAN ports
- IPMI 1.2/2.0, Java based KVM
- Redundant 750W hot-swap power supplies
- VMware® ESXi 6.7™ certified

Nfina Technologies 324i2 rack server is designed to deliver the best combination of performance, reliability, and value in the industry. This energy efficient custom server is an good choice for any business looking for high performance at a low cost. Dual-sockets with Intel® Xeon® v4 processors and 12Gb/s SAS/SATA connectivity make it ideal as a public or private cloud server or for virtualized computing applications.

### 214i2 Server
- 1U rack-mount, single-socket server
- Intel® Xeon® Processor E3-1200 v6
- 4 cores, Up to 4.5GHz processor speed
- 4 x 3.5” or 2.5” hot-swap drive bays
- 1 x M.2 SATA SSD
- Up to 64GB, 2666MHz memory
- 1 x PCIe Gen3 x8 slot
- 2 x 1Gbe LAN ports
- IPMI 2.0, Java based KVM
- Redundant 450W hot-swap power supplies

The 214i2 is an economical rack-mount server solution. An array of choices including storage, RAID, memory, and Intel® Xeon® v6 processors prove that power, flexibility and economy can coexist in a entry-level server. The impressive performance per watt makes this energy efficient model perfect for use as a microserver supporting low-end dedicated hosting, simple front-end web, and basic content delivery.

### 114R Server
- 1U rack-mount, single-socket server
- Intel® Xeon® Processor E3-1200 v6
- 4 cores, Up to 4.5GHz processor speed
- 4 x 3.5” (front) + 2 x 2.5” (internal) drive bays
- 1 x M.2 PCIe NVMe
- Up to 64GB, 2400MHz memory
- 1 x PCIe Gen3 x8 slot
- 2 x 1Gbe LAN ports
- IPMI 2.0, KVM over HTML5
- 350W power supply with PFC

The 114R is an economical, entry-level server for small to medium business that offers a myriad of drive options and a storage capacity that can grow with your company. The 114R is a good choice for web hosting, mainstream communications, as a cloud server, or a light load virtual machine.
Delivering superior performance per-core, enhanced memory capabilities, and drive type flexibility, the Nfina Tower Servers with Intel® Xeon® Processors are an excellent selection for small to medium businesses, virtualized environments, and security applications. The compact tower footprint also provides flexibility from a logistics standpoint. Since it doesn’t require a rack, it can be placed anywhere in an office environment.

### 4208T-i20 Server
- Tower, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 8 x 3.5" or 16 x 2.5" hot-swap drive bays
- 2 x M.2 SSDs, PCIe or SATA
- Up to 1.5TB, 2933MHz memory
- PCIe slots: 3 x Gen3 x16, 3 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 750W hot-swap power supplies

The Nfina dual-socket 4208T-i20 tower server, featuring 2nd Generation Intel® Xeon® Scalable processors, delivers superior performance per-core, enhanced memory capability, and SATA/SAS/NVMe flexibility. It is the ideal server for small to medium businesses, virtualized environments, and security applications.

### 4228T Server
- 4U Tower, dual-socket server
- 2nd Gen. Intel® Xeon® Scalable Processors
- 28 cores, Up to 4GHz per processor
- 8 x 2.5" (front) + 2 x 2.5" (internal) drives
- 2 x M.2 SSDs, PCIe NVMe drives
- Up to 1TB, 2933MHz memory
- PCIe slots: 4 x Gen3 x16, 2 x Gen3 x8
- 2 x 10GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 1280W hot-swap power supplies

The 4228T tower server delivers workload-optimized performance, efficiency, enhanced security, and scalability. Featuring 2nd Generation Intel® Xeon® Scalable processors, multiple options for drive formats, and six PCIe expansion slots, this economical tower server is one that will continue to grow with your company’s business data.

### 428i2 Server (EOL)
- Tower, dual-socket server
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 8 x 3.5" or 16 x 2.5" hot-swap drive bays
- 1 x M.2 SATA SSD
- Up to 1TB, 2666MHz memory
- PCIe Gen3 slots: 2 x16, 2 x8 & 1 x4(2.x)
- 2 x 1GbE LAN ports
- IPMI 1.2, Java based KVM
- Redundant 750W hot-swap power supplies

The Nfina 428i2 is built to provide the power of a high performance, rack-mount server in a compact desktop/tower package. The 428i2 with Intel® Xeon® v4 processors and 12Gb/s SAS/SATA connectivity is the perfect selection for use in hyperconverged environments, and high performance virtualized computing applications, or as a public or private cloud server.
Easy setup as well as outstanding performance and expandability make these products capable of fulfilling the small business needs of today and tomorrow. For engineering, graphic and computational-intensive applications, all of our tower servers can be configured as workstations equipped with your choice of NVIDIA® graphics cards and multiple displays.

### 328T Server (EOL)
- 4U Tower, dual-socket server
- Intel® Xeon® Processors E5-2600 v4
- 22 cores, Up to 3.6GHz per processor
- 8 x 3.5” or 2.5” hot-swap drive bays
  - Supports SSD, SAS, SATA
- Up to 1TB, 2666MHz memory
- PCIe slots: 3x Gen3 x16, 3x Gen3 x8
- 2 x 1GbE LAN ports
- IPMI 2.0, KVM over HTML5
- Redundant 920W hot-swap power supplies

The 328T is a rack-mountable tower server well suited for applications where budget is a primary consideration. The 328T is ideal for a small business migrating from desktops to a server environment. It is also a good choice for high-availability storage, cloud, and virtualized environments.

### 418i2 Server
- Tower, single-socket server
- Intel® Xeon® Processor E3-1200 v6
- 4 cores, Up to 4.5GHz processor speed
- 8 x 3.5” or 2.5” hot-swap drive bays
- 1 x M.2 SATA SSD
- Up to 64GB, 2666MHz memory
- PCIe Gen3 slots: 1 x16, 1 x8 & 1 x4
- 2 x 1GbE LAN ports
- IPMI 2.0, Java based KVM
- Redundant 460W hot-swap power supplies

The 418i2 desktop tower server is an excellent choice for any small business searching for a high performance server at a low cost. With an Intel® Xeon® E3-1200 v6 processor and multiple options for RAID, storage, memory, and operating systems, the Nfina 418i2 desktop/tower server has great expandability for it’s compact size.

### 116T Server
- Mid-Tower, single-socket server
- Intel® Xeon® Processor E3-1200 v6
- 4 cores, Up to 4.5GHz processor speed
- 4 x 3.5” or 2.5” hot-swap drive bays
  - Supports SSD, SAS, SATA
- Up to 64GB, 2400MHz memory
- PCIe Gen3 slots: 2 x8, 1 x4
- 2 x 1GbE LAN ports
- IPMI 2.0, KVM over HTML5
- 400W Gold Level power supply

The 116T is a mid-tower server, single socket, server well suited for small to medium business applications. Boasting an impressive 4.5GHz Intel® Xeon® processor this server packs a punch and is a good choice for web hosting, mainstream communications, as a cloud server, or a light load virtual machine.
Nfina’s JBODs are high-density storage expansion units that provide an easy way to boost capacity in existing storage systems, resulting in increased fault tolerance and improved data access performance. These products can be daisy-chained for High-Availability clusters or high-redundancy requirements and are suitable for high performance computing, cloud backup, data replication, and archive storage applications.

### 604JBOD-A
- 4U rack-mount enclosure
- 24 x 3.5” or 2.5” hot-swap drive bays
- 12Gb/s SAS connectivity capable
- Storage capacity dependent upon drive type
- 1 x SAS expander
- 4 x Mini-SAS HD dual ports
- Redundant 1000W hot-swap power supplies
- Supports NTP sync and RTC battery backup
- 1 x IPMI port (Monitoring, power & fan mgmt.)
- 5 year warranty

A high-density storage expansion unit, the Nfina 4U, 604JBOD-A is an easy solution for expanding capacity in existing storage systems. This product is suitable for hyperconverged networks, high performance computing, cloud backup, data replication, and high-density archival storage applications.

### 6224JBOD
- 2U rack-mount enclosure
- 24 x 2.5” hot-swap drive bays
- 12Gb/s SAS connectivity capable
- Storage capacity dependent upon drive type
- 1 x SAS expander
- 4 x Mini-SAS HD dual ports
- Redundant 740W hot-swap power supplies
- Supports NTP sync and RTC battery backup
- 1 x IPMI port (Monitoring, power & fan mgmt.)
- 5 year warranty

The Nfina 6224JBOD, storage expansion unit, is an important component in maximizing IT network performance, redundancy, and efficiency. It is also a cost-effective solution for expanding storage capacity to existing Server, NAS, and SAN products.

### 602JBOD-A
- 2U rack-mount enclosure
- 12 x 3.5” or 2.5” hot-swap drive bays
- 12Gb/s SAS connectivity capable
- Storage capacity dependent upon drive type
- 1 x SAS expander
- 4 x Mini-SAS HD ports
- Redundant 740W hot-swap power supplies
- Supports NTP sync and RTC battery backup
- 1 x IPMI port (Monitoring, power & fan mgmt.)
- 5 year warranty

The 602JBOD-A is a 2U storage expansion unit that allows incremental storage to be added to existing storage networks. Multiple JBODs can be easily daisy-chained using SFF Mini-SAS cables. This product can be used for disaster recovery, cloud backup, data replication, and high-availability environments.
Nfina’s 100 Series products are powerful PCs and thin clients housed in an extremely compact form factor. This scalable computing platform can be configured with a choice of Intel® Core™ or Celeron® processors, 2.5” SATA, SAS or SSD drive, and a M.2 SSD drive for faster data transfer. The Nfina 100 Series products prove that superior power and performance can exist in a small form factor (SFF) device.

100i7 Mini PC
- 8th Gen. Intel® Core™ Processor i7-8559U
- Quad core, 4.5GHz CPU speed, 8MB Cache
- 1 x 2.5" HDD/SSD, 1 x M.2 SATA or PCIe SSD
- Up to 32GB, 2400MHz memory
- Intel® Iris™ Plus Graphics 655
- 4 x USB 3.1, 1 x HDMI®, 1 x Thunderbolt™ 3

Defining intelligent computing in a small package, the 100i7 Mini PC features M.2 SSD drive support for faster data transfer, integrated Intel® Iris™ Plus graphics, and the latest 8th generation Intel® Core™ i7 processor for optimal workflow efficiency.

100i5 Mini PC
- 8th Gen. Intel® Core™ Processor i5-8259U
- Quad core, 3.8GHz CPU speed, 6MB Cache
- 1 x 2.5" HDD/SSD, 1 x M.2 SATA or PCIe SSD
- Up to 32GB, 2400MHz memory
- Intel® Iris™ Plus Graphics 655
- 4 x USB 3.1, 1 x HDMI®, 1 x Thunderbolt™ 3

The Nfina 100i5 PC is a fully scalable computer that mounts neatly on the back of a standard VESA® mount monitor. This PC comes equipped with lightning fast M.2 SSD drive support and the latest Intel® Core™ i5 processor for data intensive tasks.

100i3 PC/Thin Client
- 8th Gen. Intel® Core™ Processor i3-8109U
- Dual core, 3.6GHz CPU speed, 4MB Cache
- 1 x 2.5” HDD/SSD, 1 x M.2 SATA or PCIe SSD
- Up to 32GB, 2400MHz memory
- Intel® Iris™ Plus Graphics 655
- 4 x USB 3.1, 1 x HDMI®, 1 x Thunderbolt™ 3

Equipped with the latest Intel® Core™ i3 processor, this PC offers what you need for office or commercial use including Windows OS®, Intel® graphics, and WiFi. Ideal for use as a Thin Client or Virtual Machine for use with a centralized server.

100c3 PC/Thin Client
- Intel® Celeron® Processor J4005
- Dual core, 2.7GHz CPU speed, 4MB Cache
- 1 x 2.5" HDD/SSD, 1 x SDXC card slot
- Up to 8GB, 2400MHz memory
- Intel® HD Graphics 600
- 4 x USB 3.0, 2 x HDMI®

With up to 2.7GHz of Intel® Celeron® processing power, the 100c3 is a hefty PC in a small form factor. Used with a centralized server this product is the perfect Thin Client or VM for use in a small office network, school, or retail establishment.
Protect your Data from Ransomware Attacks

The best defense against ransomware is to outmanoeuvre cybercriminals by not being defenceless to their threats. Backup important data so that even if your servers and computers are compromised, you won’t be forced to pay to recover your data. To prevent intruders from gaining entry to backup storage, the NAS should connect directly to corporate servers via an isolated storage-backup network and not connect through the LAN nor have direct, wireless, or Bluetooth connections with any other machine or client.

Hyperconvergence and Medical Imaging

A recent survey found the top three challenges facing medical IT departments with regard to data storage are: 1. Lack of flexibility in requirements for dedicated hardware and difficulty integrating and sharing the data make existing systems cumbersome. 2. Poor utilization of file storage either pushes the limits of fault tolerance, or simply makes fault tolerance impossible. 3. Inability to scale, RAID based arrays, and other hardware solutions are difficult and expensive to expand.
The Right Drive for the Job

Of the many options system integrators must consider when configuring and purchasing servers and storage, drives are at the forefront. They are critical for data protection and overall integrity of their IT network. For small deployments, the nearline drive provides enough benefit to the end user that the price delta is minor when compared to the total cost of ownership. In the SMB or enterprise where a rack-mount NAS or SAN is in play, the differences are tremendous, using low-cost drives is virtually guaranteed to cause problems.

### Probability of Unrecoverable Errors During RAID Rebuild

<table>
<thead>
<tr>
<th>Number of 1TB Drives in RAID Set</th>
<th>Probability of Unrecoverable Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>16%</td>
</tr>
<tr>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>4%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
</tr>
<tr>
<td></td>
<td>0.2%</td>
</tr>
</tbody>
</table>

**Desktop Drives UER = 10^-14**

**Nearline Drives UER = 10^-15**

**Enterprise Drives UER = 10^-16**

SSD Applications Based on DWPD

Flash drives have revolutionized computer storage in recent years. However, there are a myriad of Solid State Drive (SSD) technologies in use today (i.e. SLC, eMLC, MLC, TLC, NVMe, Optane). The applications range from boot drives, to cache drives in hybrid storage systems, to high capacity storage, and everything in-between. What are differences between technologies and how should they be used?

**MEMORY CELL WEAR WITHOUT WEAR LEVELING**

1. Program
2. Wear Leveling
3. Program

**MEMORY CELL WEAR WITH WEAR LEVELING**

1. Program
2. Wear Leveling
3. Program
Nfina Technologies is a US based manufacturer of Data Storage, Servers, Edge Computing, and Hyperconverged Solutions. We combine current, high performance technology with a market leading 5-year warranty and US based tech support. Nfina provides the best value and lowest TCO in the industry.

We supply products to IT departments with growing compute and storage requirements who need the latest technology in order to maximize their IT infrastructure spending dollars. Every Nfina customer receives personal attention from our staff, because our success is tied to your business.