ftServer®

A fully integrated continuously available platform that's easy to deploy, manage, and service

Stratus'® ftServer—complete with hardware, software and services—is an operationally simple platform that will keep your applications running with no downtime or data loss.

In today's business world, seconds matter. Exceeding your recovery time and recovery point objectives can have wide ranging economic, security and legal consequences. In some cases, recovering from a failure, no matter how quick, is simply not an option. Enterprises need failure prevention—not failure recovery.

Compounding the issue is the growing scarcity of IT resources, especially at remote plants at the edge of computer networks. At these distributed locations, not only is continuous availability of key applications required, the infrastructure supporting these services must be maintained by non-technical staff. Enterprises need continuous availability that's easy to deploy, easy to manage, and easy to service.

Stratus ftServer is a fully integrated, continuously available hardware and software solution for running tier 1 business critical workloads and manufacturing operations and control applications. Offering better than 5 nines availability, ftServer eliminates unplanned downtime and data loss, and ensures all transactions are processed and applications are available, helping companies maximize revenue, production quality, and productivity. Unlike other high availability solutions, ftServer is easy to deploy, manage and service, making it ideal for remote locations, or environments with IT resource constraints. A single, turnkey solution leverages industry standard components to deliver industry leading RAS, accelerating time to value, simplifying management, and lowering total cost of ownership.

Key benefits

- No unplanned downtime: Greater than 5 nines availability through redundant components, lockstep firmware, and data synchronization
- No data corruption or data loss: All transactions processed because the system keeps operating despite component failure
- Faster time to value: Easy to deploy and manage, with no ISV application modifications or failover scripts required
- Increased operational efficiency: Self-monitoring, self-diagnosing, self-alerting systems save you time and effort

"If I had to give three words to describe our Stratus experience, it would be reliability, configurability and sustainability."

Steve Adams, Columbia Pipeline Group Lead Automation Electrical Engineer



ftServer features

A fully integrated hardware and software solution for delivering continuously available applications and data services, Stratus ftServer helps companies maximize revenue, production quality, and productivity. Five key features help make ftServer easy to deploy, easy to manage, and easy to service:



Automated Uptime Layer

Unique to Stratus, redundant field programmable gate arrays, data paths, and lockstep firmware provide the processor synchronization, data replication, and logic needed to ensure continuous availability, even in the event of a hardware component failure.



Single system with redundant hardware

Every single ftServer system is made up of two identical customer replaceable units (CRUs) – each with their own processors, memory, and storage. All redundant components and subsystems are packaged as a single system, reducing licensing costs and simplifying management.



Industry standard components

ftServer uses the same chipsets, DIMMs, and drives, as those found in other industry standard x86 systems. It also uses standard shrink-wrapped operating system and virtualization software, for ease of management and faster time to value.



Active Service Architecture

ftServer's automated self-monitoring, alerting, self-diagnosing, and remediation capabilities are enabled by its Active Service Architecture. By simplifying ftServer monitoring and management, and by filtering issues which require action, Stratus saves companies time and effort.



Hot swappable customer replaceable units

ftServer is designed for serviceability, with hot swappable CRUs that can be removed without powering down the system, and replaced without using special tools. That and automatic data re-synchronization make ftServer suitable for deployment in remote manufacturing locations, or locations with limited IT resources.

ftServer models

ftServer is easy to deploy, easy to manage, and easy to service. Three different ftServer models meet most every enterprise workload, environment, and budget.

ftServer 2810

Affordability for stable, fixed standalone applications in remote offices, branch offices, or shop floor locations

ftServer 4810

Versatility for rapidly growing or evolving applications in regional offices, remote plants, or regional data centers

ftServer 6810

High performance for data-intensive or transaction-intensive applications in larger remote plants or corporate data centers









ftServer System Specifications	2810	4810	6810
Processors			
Logical processor	1-socket per customer replaceable unit (CRU)	2-sockets per customer replaceable unit (CRU)	2-sockets per customer replaceable unit (CRU)
Processor	Intel® Xeon® processor E5-2630v4, 2.2 GHz	Intel® Xeon® processor E5-2630v4, 2.2 GHz	Intel® Xeon® processor E5-2671v4, 2.3 GHz
Cores	10 (per processor)	10 (per processor)	14 (per processor)
L2 cache	25 MB (per processor)	25 MB (per processor)	35 MB (per processor)
Intel QPI speed	8.0 GT/s	8.0 GT/s	9.6 GT/s
Maximum memory bandwidth	68.3 GB/s	136.6 GB/s	136.6 GB/s
Advanced technology	Intel Hyper-Threading	Intel Hyper-Threading	Intel Hyper-Threading
Memory			
Min/max memory	8 GB / 128 GB DDR4*	16 GB / 512 GB DDR4	32 GB / 1 TB DDR4
DIMM slots	16 (8 per CRU)	32 (16 per CRU)	32 (16 per CRU)
I/O Subsystem			
Integrated PCIe® adapter slots	4 PCIe 3 x4 (2 per CRU)	4 PCIe 3 x4 (2 per CRU)	4 PCIe 3 x4 (2 per CRU)
			4 PCle 3 x8 (2 per CRU)
Optional PCI adapter slots	N/A	4 PCIe 3 x8 (optional) (2 per CRU)	N/A
Storage Subsystem			
Internal system drive bays	12 Gb SAS 2.5" (8 per CRU)	12 Gb SAS 2.5" (8 per CRU)	12 Gb SAS 2.5" (8 per CRU)
Internal SAS disk drives	Please visit www.stratus.com/ftserver/disks for a complete list of supported disk drives		
ftScalable Storage Subsystem			
Expansion drive slots (RAID)	Up to 144	Up to 144	Up to 144
RAID levels	1, 5, 6, 10	1, 5, 6, 10	1, 5, 6, 10
Drive types	Please visit www.stratus	.com/ftserver/disks for a complete list	of supported disk drives
Embedded I/O			
10/100/1000 Ethernet ports	4 (2 per CRU)	4 (2 per CRU)	4 (2 per CRU)
10 Gb Ethernet ports	N/A	4 (2 per CRU)	4 (2 per CRU)
10/100 Management Ethernet ports	2 (1 per CRU)	2 (1 per CRU)	2 (1 per CRU)
DVD-R/W	1	1	1
Serial (com) ports	2 (9-pin) ports per system	2 (9-pin) ports per system	2 (9-pin) ports per system
USB ports	4 USB 2.0 and 4 USB 3.0 (non-redundant)	4 USB 2.0 and 4 USB 3.0 (non-redundant)	4 USB 2.0 and 4 USB 3.0 (non-redundant)
Manageability			
Baseboard management controller	Standard	Standard	Standard
Virtual Technician Module (VTM)	Standard	Standard	Standard
Graphics adapter	1 VGA port per system	1 VGA port per system	1 VGA port per system

 $^{^{*}16\ \}mathrm{GB}$ minimum memory configuration required for VMware vSphere 6.5



ftServer System Specifications	2810	4810	6810
PCI Adapters			
1 Gb dual-port Ethernet	Up to 4 optional (2 per CRU)	Up to 4 optional (2 per CRU)	Up to 4 optional (2 per CRU)
10 Gb dual-port Ethernet server adapter	N/A	Up to 4 optional (2 per CRU)	Up to 4 optional (2 per CRU)
12 Gb SAS 8-port host bus adapter for tape	Up to 2 optional (non-redundant)	Up to 2 optional (non-redundant)	Up to 2 optional (non-redundant)
16 Gb Fibre Channel for external storage	Up to 4 optional (2 per CRU)	Up to 4 optional (2 per CRU)	Up to 4 optional (2 per CRU)
Serviceability			
Hot-swappable components	CPU / I/O module, disks	CPU / I/O module, disks	CPU / I/O module, disks
Operating System			
Microsoft	Windows Server 2016 and 2012 R2 with Hyper-V™ virtualization	Windows Server 2016 and 2012 R2 with Hyper-V [™] virtualization	Windows Server 2016 and 2012 R2 with Hyper-V™ virtualization
VMware	vSphere 6.5	vSphere 6.5	vSphere 6.5
Power and Packaging			
Input voltage	100-127, 200-240 VAC; 50 Hz, 60 Hz	100-127, 200-240 VAC; 50 Hz, 60 Hz	100-127, 200-240 VAC; 50 Hz, 60 Hz
System dimension (H x W x D)	7.0" (4U) x 17.5" x 30.1" with bezel	7.0" (4U) x 17.5" x 30.1" with bezel	7.0" (4U) x 17.5" x 30.1" with bezel
Weight (fully loaded including rails)	54.43 kg (120 lbs.)	54.43 kg (120 lbs.)	54.43 kg (120 lbs.)

ftServer options

Stratus offers a variety of certified options to easily extend your continuously available platform. From value added managed support plans, to modular storage, to application monitoring software, to high performance messaging adapters—get the additional capabilities that you need, to satisfy your unique enterprise requirements.

ftServices

A variety of managed support plans and professional services are available to ensure your systems are up to date and operating at peak efficiency. You'll get the help you need, when you need it. Total Assurance, System Assurance, Extended Platform Support, and Platform Support managed plans are available for different applications, environments, and use cases. More+

ftScalable

Specifically designed to complement ftServer, this hybrid storage array helps you easily meet your growing storage needs, while also ensuring continuous availability and data integrity. Manage both hot and cold storage with real time data tiering, and protect your sensitive data at rest with encrypted disk technology. More+

Sightline Assure

Monitor end-to-end tier 1 application performance, and visualize all the components of your entire hardware and software stack through a single console. Continuously monitor system resources, and automatically restart unavailable applications. More+

SolarFlare FlareOn

This optimized dual port 10GB Ethernet server I/O adapter card maximizes messaging rates, while lowering both latency and jitter. A full set of stateless offloads minimizes kernel and networking overhead, so you get maximum performance. More+

Find out more

For more information, or to purchase Stratus products, please call 1-800-STRATUS, or visit www.stratus.com.



Specifications and descriptions are summary in nature and subject to change without notice.