Ultra Digital Modular Server

Product Brief

Ultra Digital Modular Server built on Intel® Multi-Flex Technology

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A simple, flexible system that provides exceptional value

The Ultra Digital Modular Server built on Intel® Multi-Flex Technology Integrates Storage, Computing, and Networking to simplify complex IT Environments.

The Ultra Digital Modular Server is a business-in-a-box Server system with seamless installation, Migration, and growth capabilities.

It has the ability to support up to 6 Server Compute Modules and 14 SAS 2.5" hard disk drives,as well as two Ethernet Switch Modules, integrated SAN, and a Management Module.

The Ultra Digital Modular Server is a flexible and powerful solution for the Small to midsize business.

Ultra Digital Modular Server

Features	Benefits
Scalable Server Compute Capacity	Supports up to six Multi-Core Intel® Xeon® dual processor-based Server Compute Modules.
Virtual, Integrated Shared Storage	Diskless Server Compute Modules utilize the integrated SAN with virtual drives to increase capacity. flexibility and maximize storage Purchase only what you need, when you need it.
Virtual Presence GUI Management	Manage your system as if you were standing right in front of it with the Virtual Presence GUI Management Interface.
Integrated Networking	Dual Gb Ethernet switches offer ten 1 GbE uplinks per module.
Full Redundancy & Hot Swap Capabilities	Hot-swappable Server Compute Modules and storage drives let you increase capacity on-demand. Redundant modules and hot spare options improve IT availability of the Intel Modular Server.
Flexible Power Options	Chassis power supplies can utilize 100-240V power, eliminating special power requirements worldwide. The consolidated power and cooling features reduce operating costs.

Chassis

The chassis can be configured as either a 6U rack mount or as a horizontal pedestal base to provide flexibility in choosing the
right setup for your business. It is designed to support multiple generations of Server Compute Modules, allowing swift upgrades to the latest computing technology.

Storage Control Module

The Storage Control Module manages the Shared Storage Bay and connects to the Chassis Management Module. Features include:

- RAID 0, 1, 1E, 5, 6, 10
- Expansion to connect an external SAS RAID array through a mini x4 external SAS port to allow sharing of external storage with all Server Compute Modules
- Optional second Storage Management Module for redundancy and performance
- Battery backup
- Global and dedicated hot spares

Ethernet Switch Module

The Ultra Digital Modular Server can be configured with up to two Ethernet Switch Modules for redundancy. Each switch module
features:

- Non-blocking wire-speed performance
- Ten external 10/100/1000 GbE full-duplex ports to provide enough performance to handle demanding applications
- Twelve internal 1 GbE full-duplex ports
- Layer 2+ features
- Switch configuration capabilities through the Management Module

Management Module

The Management Module provides management capabilities for the entire system through a Virtual Presence GUI Management
System. Virtual Presence GUI Interface features:

- Real time hardware information
- Context-sensitive actions
- Remote management
- Intuitive navigation with tabs and a navigation bar
- End-to-end management
- Direct device selection
- Web management via Microsoft* Internet Explorer* or Mozilla* Firefox*

Server Compute Module

The Server Compute Module MFS5000SI is based on the Intel® 5000P series chipset and supports Multi-Core Intel® Xeon® processors.

- Supports up to two Multi-Core Intel® Xeon® processors
- Server has 8 FB DIMM slots for up to 32 GB of memory
- Integrated LSI 1064E SAS Controller
- Integrated Remote KVM, Remote Media Redirection, and Remote
  Serial Console.
- Front panel includes video and 2 USB I/O ports

Mezzanine Card

The Server Compute Modules support an optional dual channel gigabit Ethernet Mezzanine Expansion Card.

Ultra Digital Modular Server

- Remote Manage your server modules •

  Power on/off

- Troubleshooting

- Remote KVM & CD

- Server Configuration

- Configure Shared Storage

  * Assign drives to storage pools

  * Create a virtual drive

  * Assign virtual drives to server modules •

  Designate global/hot spares

- Reassign storage pools

  or virtual drives

The Dashboard gives an overall system status view within the Modular Server Control

The Virtual Presence Modular Server Control allows you to see the components you physically have loaded in your system—even if they are powered down
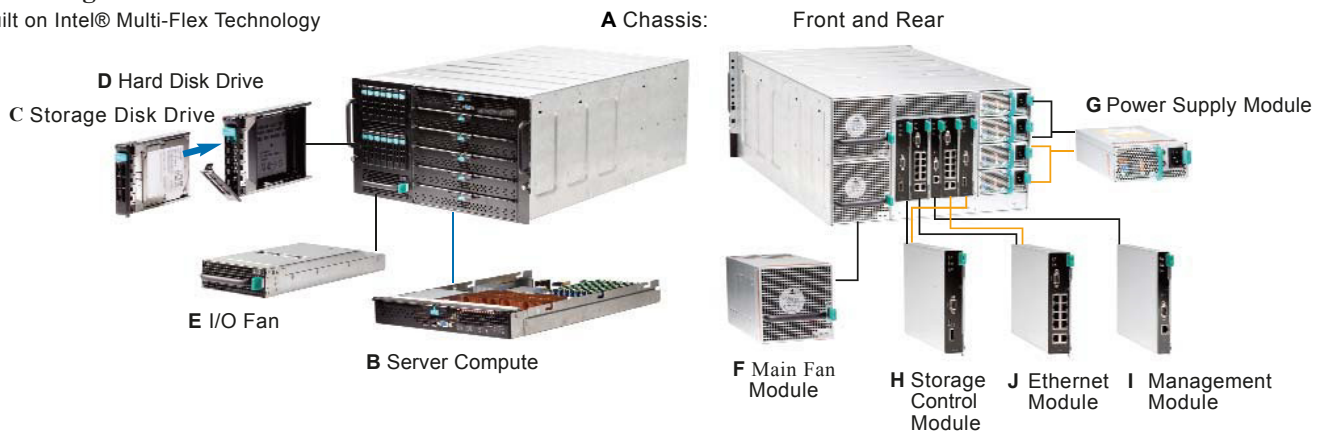

The back view of the chassis allows you to see the status of your modules and power supplies

Under the Storage Configuration window, you can create storage pools and virtual drives, as well as map virtual drives to servers

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D Hard Disk Drive
C Storage Disk Drive
E I/O Fan
B Server Compute
A Chassis: Front and Rear
G Power Supply Module
F Main Fan Module
H Storage Control Module
J Ethernet Module
I Management Module

A   Chassis
- 1–6 Server Compute Modules
- Storage Drive Bay

B   Server Compute Module (required)
- Model MFS5000SI
- Up to 2 Multi-Core Intel® Xeon® processors
- Contains 8 FB DIMM slots for up to 32GB
- Supports an optional Mezzanine expansion card

C   Storage Hard Disk Drive (required)
- Up to 14 2.5″ SAS drives

E   Hot-Swappable I/O Fan Module (included)

F   Hot-Swappable Main Fan Module (included)

G   Hot-Swappable Power Supply Module (2 included, 2 optional)
- 3 + 1 redundancy

H   Storage Control Module (1 included, 1 optional)
- Up to 2 Storage Control Modules for redundancy

I   Management Module (included)

J   Ethernet Switch Module (1 included, 1 optional)
- Up to 2 Ethernet Switch Modules
- Each module features 10/100/1000GbE full-duplex ports