Sales Guide
Intel® Modular Server
Built on Intel® Multi-Flex Technology

Is your small to midsize business customer a growing company with demanding IT needs and a limited budget? Do they have more pressing concerns than constantly servicing their IT? Are they looking for a solution that solves these problems...and more?

Intel® Modular Server - The Answer to "So What?"
In a confusing world of features and specifications, your customers may ask, "So what? How can this product help me solve my IT needs?"

What is the Intel Modular Server Built on Intel Multi-Flex Technology?
The Intel® Modular Server is an integrated system built on Intel® Multi-Flex Technology that includes SAN storage, computing, and networking to simplify the growing demands of your IT infrastructure.

The Intel Modular Server features:

- Up to six Server Compute Modules
- Integrated SAN storage
- Integrated Ethernet Switch Modules
- All hot-swappable components
- Virtual Presence remote management capabilities

As an integrated system, the Intel Modular Server has capabilities not found in the common rack server setup, including virtual drives that provide grow-as-you-go flexibility and Virtual Presence management for simplicity.

Benefit	Enabler
Increased IT Uptime	Redundant systems increase network uptime with failovers between servers and backups
Easy Application Migration	Shared storage and virtual drives provide for easy application and storage migration
Grow-As-You-Go Flexibility	With options for up to 6 Server Compute Modules and up to 14 storage drives, purchase only as much as you need when you need it
Greater Asset Utilization	Diskless Server Compute Modules allow for maximum use of system assets
Unique Serviceability	Hot-swappable components don't require any cables or tools to service
Ease of Management	One integrated system with end-to-end management lets you manage the entire system from a Web-based GUI interface
Improved Data Protection	Centralized backup and virtual access allow for greater data protection

Cost-Effective
- Integrated SAN and networking
- Expandable compute capabilities
- No rewiring
- Virtual Presence remote management

Simple
- Hot-swappable components don't require any cables or tools to service.

• Managing the system is easier with the virtual presence graphical user interface providing complete end-to-end management.

Exceptional Value
• Thinking of purchasing 2–3 servers for your business? The Intel Modular Server is designed to fit your budget, while making many high-end features accessible for your business.

Reliable
• Prevent downtime in the IT infrastructure with redundant systems and fail-safes.
• Protect your data with integrated RAID and global hot spares that automatically rebuild.
• Keep business running with the ability to remotely reassign servers and drives through the remote management interface.

Qualifying the Customer	Target Customer Profile
How many servers do they plan to purchase?	Plans to purchase 2–3 servers this year
How many end users does their IT infrastructure support?	Has a network that supports 50–500 employees
Would they like to simplify their networking management needs?	Wants a network switch that is easy to deploy, configure, and maintain
Are they interested in redundant systems to improve server uptime?	Needs greater application uptime with planned recovery options
Are they interested in integrating their networking needs to free up valuable IT time?	Has an IT technician who has other responsibilities besides managing the network
Do they want high-end capabilities without going beyond their budget?	Needs their IT to be as flexible as their company is while staying within budget
What kinds of applications can be run on the Intel® Modular Server?	The Intel Modular Server can run any application that a general-purpose server can, including file, database, web, and e-mail

Why Should You Care?
Intel® Server Products offer best-in-class service and support. What does that mean for you as a server reseller?
• Grow your own brand using the Intel brand.
• Reduce costs with advanced warranty replacement, validation and testing including certified application recipes from the Intel® Enabled Server Acceleration Alliance (Intel® ESAA), and an open platform for competitive upgrade pricing and availability.
• Be first to market with new technology and customized solutions.
• Expand revenue opportunities with software upgrades, storage solutions, and service agreements.
• Achieve ease of integration and management with single management applications for servers, clients, and networks.
• Provide industry-leading performance while others follow.

For the small to midsize business, it isn't about what technology they can purchase—it's about solutions for their IT concerns.

Challenge
We have four servers running e-mail, web, accounting, and database applications. Lately, we've been short on storage space. The accounting server has just the right amount of storage, but the mail server is short, and the web server has significantly more than it needs.
When we purchased the servers, our options were limited by the number of disks that the servers could hold as well as the minimum number required to create RAID 5 disk sets.

Scenario

Four rack-based 2U servers that are three years old, each with four SCSI disk RAID 5 sets. The mail server needs more space, but we have already reached internal capacity. The web server load has increased significantly and requires a more robust server.

Solution
Upgrade to the Intel Modular Server with four Server Compute Modules—one for each of these applications—and a stand-by server. The Intel Modular Server can provide level 5 RAID access for five servers with as few as three drives. Increasing storage space is as easy as adding drives and expanding the storage pool through the simple web management interface. As new compute technology becomes available, upgrading a server will be a matter of sliding out the old server and inserting the new one. With server failover capabilities, major downtime due to server failures will be a thing of the past.

Flexible
• With integrated shared storage and options for up to six servers, buy only the storage and computing capacity you need—and add more later as required.
No Rewiring
• Chassis power supplies can utilize 100–240V power, eliminating special power requirements worldwide.
Built for Multiple Generations of Server Modules
• The chassis has been designed to support multiple generations of Server Compute Modules, allowing swift upgrades to the latest computing technology and increasing the longevity of the chassis.
Support for Intel® Xeon® Processors
• At launch, the Intel Modular Server modules will support dual Multi-Core Intel® Xeon® processors, as well as next-generation Multi-Core Intel Xeon processors based on the 45nm Hi-k Intel® Core™ microarchitecture. These processors deliver industry-leading performance and virtualization, and offer new levels of energy efficiency for IT customers—from small business to enterprise.

The Intel Modular Server is a business-in-a-box server system with seamless installation, migration, and growth.

Challenge
We have six archaic servers running operating systems that are not supported on newer platforms. These servers are the heart of our business, and we have no alternative to move to or upgrade at this time. Our concern is that the servers, now seven years old, are beginning to have problems, and replacement parts have become increasingly difficult to find.

Scenario
Six older x86 platform servers running Microsoft* Windows* NT 4.0 and two running Red Hat* Linux* 7. RAID 5 on Windows servers and RAID 1 on Linux* servers. Applications are dependent upon older operating systems and will not run on current operating systems. Drivers for older operating systems do not exist for the current hardware.

Solution
Prepare older operating systems for virtualization. Install the Intel® Modular Server with three Server Compute Modules and at least five drives. Create a drive pool with three drives. Create two virtual drives with RAID 5 in the newly created drive pool, assigning one to server 1 and the other to server 2. Next, create an additional drive pool with two drives. Create a RAID 1 virtual drive in pool 2 and assign it to server 3. Use a physical-to-virtual migration utility to move the older physical servers to the Intel Modular Server virtual host. Place three Microsoft Windows NT 4.0 virtual servers on server 1 and three on server 2. Place the two Red Hat Linux 7 virtual servers on server 3. Finally, donate your old servers to a worthy cause, and rest easy knowing that your applications are running smoothly and your data is secure.

Common Customer Objections and the Solutions

Why should I choose the Intel Modular Server built on Intel Multi-Flex Technology instead of a standard rack-mount server?

- As an integrated system, the Intel Modular Server built on Intel Multi-Flex Technology provides capabilities not possible with a common rack server, including diskless servers, virtual presence end-to-end management, redundant switch and Storage Control Modules, redundant power supplies, and integrated SAN and Ethernet Switch Modules.

Why should I care about “virtualized access storage”?

- At launch, the Intel® Modular Server modules will support dual Multi-Core Intel® Xeon® processors, as well as next-generation Multi-Core Intel® Xeon® processors based on 45nm Hi-k Intel® Core™ micro-architecture. These processors deliver industry leading performance and virtualization, and offer new levels of energy efficiency for IT customers from small business to enterprise.

I don’t want to be locked into buying one type of server module. What happens when a new server module is released?

- The Intel Modular Server can support multiple generations coexisting in the same chassis. If you purchase a new Server Compute Module a year or so down the road, you can simply plug it into your system with your current servers and configure it.

Features and FAQ

What is a SAN and why do I need one?

- The Storage Drive Bay, along with the Storage Control Module and the Chassis Management Module, create a Storage Area Network (SAN) within the Intel Modular Server. The SAN physically separates the storage from the servers and manages the Storage Drive Bay, allowing for the creation of storage pools and virtual drives. This setup gives you the ability to use only the amount of storage that is needed per server.

Why use an integrated network switch?

- The integrated Ethernet Switch Module provides end-to-end management and allows for fewer cables and boxes.

How do I expand storage?

- The shared storage can be expanded using an external RAID array and the integrated Storage Control Module.

What is remote concurrent KVM?

- Remote KVM (keyboard, video, and mouse) allows an administrator to log in and use the KVM features of the Intel Modular Server as if they were physically plugged in. The concurrent feature allows for two administrators to be logged into the Management Interface and manage multiple Server Compute Modules at the same time.

What is Virtual Presence?

- Virtual Presence is the ability to interact with and manage the system as if you were physically there through a Web-based GUI management interface.

Why an integrated Management Module?

- The integrated Management Module contains a centralized access, Virtual Presence, Web-based GUI interface and provides remote console capabilities.

Who can service this system?

- The Intel Modular Server‘s components are all hot-swappable and require no special tools to service.

Why diskless Server Compute Modules?

- Diskless Server Compute Modules give the capacity for diskless boot and virtual desktop. They also allow for the integration of the Shared Storage Bay and SAN, providing greater flexibility and increased asset utilization.

What does it cost?

- If a small to midsize business is thinking about purchasing three servers, or just starting a network and wants to grow to three or more servers in the near future, the Intel Modular Server fits their budget. Pay as you grow means that you pay only for what you need when you need it. Contact your Intel sales representative for more details.

What are the minimum requirements for the Intel Modular Server?

A minimum configuration for the Intel Modular Server requires:

• 1 Server Compute Module, including processor(s) and memory
• 1 hard disk drive
• Chassis

To connect with the Intel Modular Server remote management interface, a system must have:

• Microsoft Internet Explorer* or Mozilla Firefox*
• Java Runtime Environment* version 6 update 1
• Adobe Flash Player* version 9

Is a rack kit needed to deploy the Intel Modular Server?

- A rack kit is not needed for deployment, but both rack and pedestal kits are available to maximize installation flexibility.

Additional Resources

The Intel Modular Server Marketing Toolkit CD contains many valuable resources to assist you in communicating the values of the Intel Modular Server to your customer. The CD contains:

• Customizable Ad Templates
• Product Photography
• System Configuration Tool
• Flash Animation
• Product Overview Training Video
• Virtual Presence Management Training Video
• Configuration Print-Out
• Sales Guide
• Customer-Ready Handout
• Product Brief
• Messaging Presentation
• White Paper

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