Dual-Core Intel® Xeon® Processor-based 3000 Sequence Server Platforms
Entry-level server platforms with outstanding dependability, performance, and value.
Take your business to new levels with new server platforms based on the dual-core Intel® Xeon® processor 3000 sequence\(^1\) and the Intel® 3000 and 3010 chipsets. These new servers can unleash the computing power of the new dual-core Intel Xeon processor based on the Intel® Core™ microarchitecture to provide your business with industry leading-performance for single-processor business servers. The Intel Core microarchitecture enables lower power consumption than previous generations of Intel® platforms based on Intel® Pentium® processors, resulting in lower operating costs and reduced fan noise. The Intel 3010 chipset offers additional expansion capabilities, allowing your server to grow with your business.

Trust your company to Intel’s proven server technology

With as much as 80 percent of servers built with Intel® architecture today, more companies trust their businesses to Intel® processor-based servers. Intel processor-based entry-level servers give companies the reliability, performance, and tools they need to focus on their business instead of their computers. Intel’s new dual-core processor-based servers and advanced server technologies help you build success into your company.

Our low-cost, entry-level server platforms are comprehensive solutions. We combine effective technologies, software, and industry alliances, to give you servers optimized for your business with incredible value. And, with nearly 40 million Intel processor-based servers shipped since 1996, and a 20-year track record of delivering proven performance worldwide, you can count on Intel to deliver superior quality and reliability to drive your business forward.

The ideal entry-level server

Our entry-level server platforms with dual-core processors and the Intel 3000 and 3010 chipsets are ideal for value-conscious organizations looking for their first server or small HPC cluster with a close eye on their budget. These platforms offer industry-leading performance coupled with Intel reliability to help drive your big ideas non-stop, but at low-cost, dependable, and efficient to set up and manage, providing trouble-free operation and ensuring that your operational needs are met at every stage of your business growth. Our entry-level server platforms integrate the most advanced technologies:

- Dual-core Intel Xeon processor 3000 sequence, based on Intel Core microarchitecture, with Intel® 64 architecture\(^2\) and up to 1066 MHz front-side bus. These platforms deliver outstanding performance for today’s business applications, capabilities to run a broad range of 32-bit and 64-bit applications, and plenty of headroom for growth for tomorrow.
- Intel® Matrix Storage Technology\(^3\) quickly stores and retrieves data, while protecting one of your company’s most important assets—information—with RAID 0, 1, 5, and 10 technology.
- Power-efficient performance designed into the platform to reduce operating costs while delivering higher performance than previous generation Intel® Pentium® processor-based server platforms. Lower power consumption can also result in slower fans and quieter servers.
- High-speed DDR2 memory with up to 8 GB of memory keeps more data closer to the processor and helps eliminate slowdowns from memory bottlenecks.
- PCI Express, today’s mainstream I/O technology, enables fast I/O transactions for peripherals to keep up with our high-performance processors and chipsets today and builds in scalability for the future. The Intel 3010 chipset offers an additional PCI Express port for even more expansion possibilities.
- Intel® PRO/1000 PM/PL network connections provide gigabit Ethernet LAN connectivity for high-speed network access.
- Intel® Virtualization Technology\(^4\) provides hardware-assistance to virtualization software, enhancing virtual environments.
- Intel® Active Management Technology\(^5\) enables efficient and effective management, helping reduce the costs of maintaining your server.
- Intel® advanced server technologies integrate performance, reliability, scalability, and flexibility to help businesses remain agile and ready for the future.
## Protect your critical data and assets

Platforms based on the Intel 3000 and 3010 chipsets support Error Correction Code (ECC) memory for a high level of data integrity, reliability, and system uptime. ECC can detect multiple-bit memory errors and locate and correct single-bit errors to keep business applications running smoothly.

Intel Matrix Storage Technology with integrated RAID 0, 1, 5, or 10 accelerates data access to support high user productivity, and protects business operations by allowing recovery of data in the event of a hard drive failure. Intel Matrix Storage Technology is built into the Intel® 82801GR I/O controller hub (ICH7R). The ICH7R also supports both Serial ATA (SATA) at 3 GB/s with Native Command Queuing for high-speed disk access, and legacy parallel hard drive interfaces for versatility in a high-performance, low-cost server platform.

## Reduce management and maintenance costs

Intel Active Management Technology (Intel® AMT) helps keep business owners focused on their business with support for efficient management and maintenance of their servers. Intel Active Management Technology enables a company or its IT vendor to easily deploy, maintain, and repair server problems to help reduce management costs. Intel AMT provides users with effective tools to

- Discover hardware and software.
- Diagnose and heal systems remotely, whether the system is running, powered down, or hung.
- Help protect systems from malicious software attacks.

## Cost-effective, personal supercomputing

Entry-level, dual-core Intel server platforms are ideal for building small, cost-effective HPC clusters that create high-performance, personal supercomputing solutions and workgroup clusters. Dual-core, 64-bit computing, up to 8 GB of high-speed DDR2 memory per processor, and gigabit Ethernet LAN connectivity enable rapid resolution of the large, complex problems found in technical computing.

These new platforms provide energy-efficient performance, so you get high-end performance for thin or thick nodes at low power levels, keeping the costs of running your personal cluster low. Dual-core Intel Xeon processor 3000 sequence-based servers give you Intel server technologies for reliability, data protection, and easy management. You can solve tough problems for less cost than traditional cluster technologies with the dependability and integrity of Intel's 20-year track record of delivering reliable, high-performance solutions.

For more information visit [www.intel.com/products/server/chipsets](http://www.intel.com/products/server/chipsets)
1. Intel processor numbers are not a measure of performance. Processor numbers differentiate features within each processor family, not across different processor families. See www.intel.com/products/processor_number for details.

2. Intel® 64 architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel 64. Processor will not operate (including 32-bit operation) without an Intel 64-enabled BIOS. Performance will vary depending on your hardware and software configurations. See www.intel.com/info/em64t for more information, including details on which processors support Intel 64, or consult with your system vendor for more information.

3. Intel® Matrix Storage Technology requires a motherboard with the Intel® B2801FR (ICH6R or Intel® B2801GR (ICH7R) I/O Controller Hub System. The system must also have the RAID controller in the BIOS enabled and the Intel Matrix Storage Technology software driver installed. Please consult your system vendor for more information.

4. Intel® Virtualization Technology requires a computer system with a processor, chipset, BIOS, virtual machine monitor (VMM), and applications enabled for virtualization technology. Functionality, performance, or other virtualization technology benefits will vary depending on hardware and software configurations. Virtualization technology-enabled BIOS and VMM applications are currently in development.

5. Intel® Active Management Technology requires a system with an Intel® E7230 Chipset, Intel® 3000 Chipset, Intel® 3010 Chipset, Intel® 975X Express Chipset, or Intel® 955 Express Chipset; an Intel® PRO/1000 PM Network Connection; and appropriate third-party software. The system must be plugged into a power source and connected to a LAN.

Performance tests and ratings are measured using specific computer systems and/or components and reflect the approximate performance of Intel products as measured by those tests. Any difference in system hardware or software design or configuration may affect actual performance. Buyers should consult other sources of information to evaluate the performance of systems or components they are considering purchasing. For more information on performance tests and on the performance of Intel products, visit www.intel.com/performance/resources/limits.htm or call (U.S.) 1-800-628-8686 or 1-916-356-3104.

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