

Intel[®] Xeon[®] Processor E3-1200 Product Family

A new generation of processors for small business servers

Entry-level server platforms featuring the Intel[®] Xeon[®] processor E3-1200 product family are ideal for value-conscious companies looking for their first server or a robust and affordable alternative to a desktop system used as a server. Built with advanced security features, these platforms are designed to deliver 24/7 dependability and improve business productivity with industry-leading performance. They are easy to set up and manage, and are ideal for use in secure data storage, file sharing, print and Web services, and collaborative applications. With servers based on the Intel Xeon processor E3-1200 product family, you get:





FEATURES	BENEFITS					
Intel® Xeon® processor E3-1200 product family	Faster performance and greater reliability for business applications • Up to 30% performance improvement over previous generation ¹ • Server class features at entry-level price points					
Intel [®] Microarchitecture	Enhanced performance and energy-efficiency • Industry-leading Intel* silicon technology (32nm Hi-k process technology) • Large on-die cache (up to 8 MB L3)					
Support for ECC Memory	Better data integrity and system reliability through automatic data correction • Detects and corrects up to 99.988% of all soft memory errors ^{II}					
SATA 6G	 Faster data access, system startups, and application load times Faster HDD cache transfers with next-generation devices Better support for high-speed solid-state drives (SSDs) 					
Intel® Turbo Boost Technology 2.0 [™]	Higher performance when you need it most • Accelerates processor or graphics performance for peak loads • Quicker transitions to sleep state improves energy efficiency					
Server OS Validation	Enhanced compatibility and reliability with leading business applications Tested and validated on server OSs 					
Intel® Active Management Technology (Intel® AMT) ^{IV}	Flexible management for simpler maintenance and more reliable operation Local and remote management for in-house or outsourced IT 					
PCI Express* 2.0 Ports	Extra capacity and flexibility for storage and networking connections • Additional 4 PCI Express* 2.0 ports (versus desktop)					
Intel® Rapid Storage Technology (Intel® RST) with E-mail Alerting	Uninterrupted operation and no data loss in the event of a hard drive failure • Accelerates system performance during normal operation • New E-mail alerting capability enables rapid service response					
Intel* Hyper-Threading Technology (Intel* HT) $^{\vee}$	 Faster performance for many demanding business applications Thread-level parallelism uses processing resources more efficiently Benefits most multi-threaded and concurrently running applications 					
Intel® Virtualization Technology for Directed I/O (Intel® VT-d) ^{VI}	Enables fast network/storage communications in a virtualized environment • Comprehensive hardware assists for I/O device virtualization • Near-native I/O performance with improved security and reliability					
Intel® AES New Instructions (Intel® AES-NI) ^{VII}	Improves security without slowing response times Enables fast and secure data encryption and decryption 					

The Intel Xeon processor E3-1200 product family server platform features the Intel® C200 Series Chipset and enables a range of features to match different computing demands. Advanced features like Intel® Virtualization Technology, Intel® Trusted Execution Technology, and Intel® Turbo Boost Technology 2.0 are standard on all processor SKUs.

Intel Xeon Processor E3-1200 Product Family

PROCESSOR NUMBER	CLOCK SPEED/TDP (GHZ/WATT)	SINGLE-CORE TURBO MAX SPEED	CACHE	CORES / THREADS	MEMORY SPEED (DDR3 ONLY)	
E3-1280	3.50 (95 W)	3.90	8 MB	4/8	1333/1066	
E3-1270	3.40 (80 W)	3.80	8 MB	4/8	1333/1066	
E3-1240	3.30 (80 W)	3.70	8 MB	4/8	1333/1066	
E3-1230	3.20 (80 W)	3.60	8 MB	4/8	1333/1066	
E3-1220	3.10 (80 W)	3.40	8 MB	4/4	1333/1066	

Intel[®] C200 Series Chipset

CHIPSET		NODE MANAGER AND DCMI	PCI EXPRESS* 2.0 PORTS		USB 2.0 PORTS	SATA PORTS		INTEL® RAPID STORAGE	LAN	LEGACY
			CPU	РСН		6 GB/S	3 GB/S	TECHNOLOGY		PCI
Intel [®] C206	1		20	8	14	2	4	1	Integrated MAC	4
Intel [®] C204		1	20	8	12	2	4	4	Integrated MAC	4
Intel® C202			16	8	12	N/A	6	1	Integrated MAC	4

The Right Technology for Your Small Business Customers

With more than 20 years in the server industry, Intel delivers reliable, cost-effective, and flexible technologies for businesses of all sizes. Servers based on the Intel Xeon processor E3-1200 product family are easy to configure and deploy, with advanced system management features that keep installation and maintenance costs to a minimum.

With built-in 24/7 dependability and advanced security features that help avoid costly business interruptions and potentially catastrophic security breaches, servers based on the Intel Xeon processor E3-1200 product family are a smart investment to protect and power small businesses today—and in the future.

Learn More

For more information on the Intel[®] Xeon[®] processor E3-1200 product family, visit: www.intel.com/xeon

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Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark* and MobileMark*, are measured using specific computer systems, components, software, operations, and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. Results have been estimated based on internal Intel analysis and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance.

- ¹ Configurations: Performance results are based on Intel Internal Measurements as of December 2010. For more information, go to http://www.intel.com/berformance
- "X. Li, K. Shen, M. Huang, and L. Chu. A memory soft error measurement on production systems. USENIX Annual Technical Conf., 2007.

Requires a system with Intel[®] Turbo Boost Technology capability. Consult your PC manufacturer. Performance varies depending on hardware, software and system configuration. For more information, visit http://www.intel.com/technology/turbobost

^{IV} Requires activation and a system with a corporate network connection, an Intel® AMT-enabled chipset, network hardware, and software. For notebooks, Intel AMT may be unavailable or limited over a host OS-based VPN, when connecting wirelessly, on battery power, sleeping, hibernating or powered off. Results dependent upon hardware, setup, & configuration. For more information, visit http://www.intel.com/technology/platform-technology/intel-amt

^v Requires an Intel[®] HT Technology enabled system; check with your PC manufacturer. Performance will vary depending on the specific hardware and software used. Not available on Intel[®] Core ™ i5-750. For more information including details on which processors support HT Technology, visit http://www.intel.com/info/hyperthreading

^{v1} Intel[®] Virtualization Technology requires a computer system with an enabled Intel[®] processor, BIOS, virtual machine monitor (VMM). Functionality, performance, or other benefits will vary depending on hardware and software configurations. Software applications may not be compatible with all operating systems. Consult your PC manufacturer. For more information, visit http://www.intel.com/go/virtualization

^{NI} Intel[®] AES-NI requires a computer system with an AES-NI enabled processor, as well as non-Intel software to execute the instructions in the correct sequence. AES-NI is available on Intel[®] Core[™] i5-600 Desktop Processor Series, Intel[®] Core[™] i7-600 Mobile Processor Series, and Intel[®] Core[™] i5-500 Mobile Processor Series. For availability, consult your reseller or system manufacturer. For more information, see http://software.intel.com/en-us/articles/intel-advanced-encryption-standard-instructions-aes-ni/