

Intel® Processors for Business PCs



Small, medium and large businesses have a variety of computing needs. Whether your goal is to lower energy consumption, improve security, achieve remote manageability, or improve worker productivity, Intel has the processors that help you realize a rapid ROI.

Features for...	Description	Entry-level Computing		Intelligent Performance			Intelligent Performance, Security, and Manageability	
		Intel® Celeron® (Laptop)	Intel® Pentium® (Desktop)	Intel® Core™ i3	Intel® Core™ i5	Intel® Core™ i7	Intel® Core™ i5 vPro™	Intel® Core™ i7 vPro™
Smart Security and Cost-Saving Manageability	Hardware-based smart security, anti-theft technology and remote management	○	○	○	○	○	●	●
	Hardware-based KVM (keyboard video mouse) Remote Control ¹	○	○	○	○	○	●	●
	Remote maintenance and management both inside and outside the corporate firewall, even when the PC is powered off or OS is unresponsive ^{2,12}	○	○	○	○	○	●	●
	Remotely and reliably wake and patch systems via secure, encrypted remote management channel	○	○	○	○	○	●	●
	Hardware-based scanning of network traffic for viruses	○	○	○	○	○	●	●
	Remote unlock of encrypted hard drives for remote management	○	○	○	○	○	●	●
Virtualization for Alternate Compute Models	Create secure virtual environments for OS and application streaming, or separate IT-operated environments with Intel® Virtualization Technology ³ (Intel® VT) and Intel® Trusted Execution Technology ⁴ (Intel® TXT)	○	○	○	○	○	●	●
	Protect virtual environments against rootkit attacks by booting software into a trusted state and protecting credentials during shutdowns with Intel TXT	○	○	○	○	○	●	●
Intelligent Business Performance	Intel® Smart Cache Technology	Up to 1 MB L2	Up to 2 MB L2	Up to 4 MB L3	Up to 4 MB L3	Up to 8 MB L3	Up to 4 MB L3	Up to 8 MB L3
	Increased processor speeds when needed with Intel® Turbo Boost Technology ⁵	○	○	○	●	●	●	●
	Hardware-based acceleration of Encryption and Data Compression with Advanced Encryption Standard – New Instructions (AES-NI) ⁶	○	○	○	●	●	●	●
	Intelligent performance based on Intel® multi-core processing	1 to 2 cores	1 to 2 cores	2 cores	2 cores	2 to 4 cores	2 cores	2 to 4 cores
	Intelligent multi-tasking with Intel® Hyper-Threading Technology ⁷	N/A	N/A	4 threads	4 threads	4 to 8 threads	4 threads	4 to 8 threads
	64-bit enabled	●	●	●	●	●	●	●
Wireless Communication	Intel® Gigabit Network Connection and Intel® Centrino® Wireless products supporting Intel® vPro™ technology	○	○	○	○	○	●	●
Support for Operating System Requirements	Windows* 7 ready	●	●	●	●	●	●	●
	Intel Virtualization Technology (Intel VT) support for Windows XP in a Windows 7 environment	○	○	●	●	●	●	●
	Integrated support for 64-bit graphics, including support for Windows* 7 Aero interface	●	●	●	●	●	●	●
Plan Ahead and Improve Corporate Responsibility	Plan purchases and deployment strategy with Intel® Stable Image Platform Program (Intel® SIPP) ⁹	○	○	○	● (Laptops only)	● (Laptops only)	●	●
	ENERGY STAR compliant ¹⁰	●	●	●	●	●	●	●
	Lead-free, halogen-free ¹¹	●	●	●	●	●	●	●

○ Not applicable ● Advanced capability

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Small, medium and large businesses have a variety of computing needs. Whether your goal is to lower energy consumption, improve security, achieve remote manageability, or improve worker productivity, Intel has the processors that help you realize a rapid ROI.

All new 2010 Intel® Core™ vPro™ processor family Intelligent performance, security, and manageability

PCs powered by a new 2010 Intel® Core™ vPro™ processor adapt to the needs of your business with smart security, cost-saving manageability and intelligent performance. The all new 2010 Intel Core vPro processor family is designed to keep downtime and desk-side visits to a minimum, enabling remote monitoring, diagnosis and repair of PCs – even if they're powered down or the OS is unresponsive, both inside and outside the corporate firewall.^{2,12} And with a new 2010 Intel Core vPro processor inside, your PCs will be so smart they can even disable themselves if they get lost or stolen.¹³ The all new 2010 Intel Core vPro processor family is also part of the Intel® Stable Image Platform Program (Intel® SIPP), which allows customers to better manage system images and configurations.⁹ Additionally, Intel SIPP can help IT plan their PC deployments and fleet management strategy.

All new 2010 Intel® Core™ processor family Intelligent performance that adapts to business needs

Laptops and desktop PCs powered by a new 2010 Intel® Core™ processor are more energy-efficient thanks to smart energy-saving features. Plus, Intel® Smart Cache and Intel® Hyper-Threading Technology⁷ – along with Intel® Turbo Boost Technology⁵ for the new 2010 Intel® Core™ i7 and Intel® Core™ i5 processors – bring greater performance and greater productivity by automatically adapting to each user's unique needs.

Intel® Pentium® processor for desktop PCs and Intel® Celeron® processor for laptops Entry point into reliable computing

For companies primarily interested in the lowest system price, turn to desktop business PCs with an Intel® Pentium® processor or laptop business PCs with an Intel® Celeron® processor. These PCs provide the reliable, dependable value you need for your basic applications. Ensure your value PC has Intel Inside®.

¹ KVM Remote Control (keyboard video mouse) requires the presence of integrated graphics and therefore is only available with dual-core Intel® Core™ i5 vPro™ processors and Core™ i7 vPro™ processors.

² Systems using Client Initiated Remote Access (CIRA) require wired LAN connectivity and may not be available in public hot spots or "click to accept" locations. For more information on CIRA visit, www.intel.com/products/centrino2/vpro/index.htm.

³ Intel® Virtualization Technology (Intel® VT) requires a computer system with an enabled Intel® processor, BIOS, virtual machine monitor (VMM), and for some uses, certain platform software enabled for it. Functionality, performance, or other benefits will vary depending on hardware and software configurations and may require a BIOS update. Software applications may not be compatible with all operating systems. Please check with your application vendor.

⁴ No computer system can provide absolute security under all conditions. Intel® Trusted Execution Technology (Intel® TXT) requires a computer system with Intel® Virtualization Technology, an Intel TXT-enabled processor, chipset, BIOS, Authenticated Code Modules and an Intel TXT-compatible measured launched environment (MLE). The MLE could consist of a virtual machine monitor, an OS or an application. In addition, Intel TXT requires the system to contain a TPM v1.2, as defined by the Trusted Computing Group and specific software for some uses. For more information, see <http://www.intel.com/technology/security>

⁵ Intel® Turbo Boost Technology available on the Intel® Core™ i7 processor and the Intel® Core™ i5 processor only. Intel Turbo Boost Technology requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software and overall system configuration. Check with your PC manufacturer on whether your system delivers Intel Turbo Boost Technology. For more information, see <http://www.intel.com/technology/turboboost>.

⁶ AES-NI is a set of instructions that consolidates mathematical operations used in the Advanced Encryption Standard (AES) algorithm. Enabling 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 further availability of AES-NI enabled processors or systems, check with your reseller or system manufacturer. For more information, see http://softwarecommunity.intel.com/isn/downloads/intelavx/AES-Instructions-Set_WP.pdf.

⁷ Intel® Hyper-Threading Technology (Intel® HT Technology) requires a computer system with a processor supporting Intel HT Technology and an Intel HT Technology-enabled chipset, BIOS, and operating system. Performance will vary depending on the specific hardware and software you use. The Intel® Core™ i5-750 desktop processor does not support Intel HT Technology. For more information, including details on which processors support Intel HT Technology, see <http://www.intel.com/technology/platform-technology/hyper-threading/index.htm>.

⁸ Requires WiMAX service subscription.

⁹ Check with your PC vendor for availability of platforms that meet Intel® Stable Image Platform Program (Intel® SIPP) guidelines. A stable image platform is a standardized hardware configuration that IT departments can deploy into the enterprise for a set period of time, which is usually 12 months. Intel SIPP is a client program only and does not apply to servers or Intel-based handhelds and/or handsets.

¹⁰ ENERGY STAR denotes a system level energy specification, defined by the US Environmental Protection Agency, that relies upon all of the system's components, including processor, chipset, power supply, HDD, graphics controller and memory to meet the specification. For more information, see http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=CO.

¹¹ Applies only to halogenated flame retardants and PVC in components. Halogens are below 900 PPM bromine and 900 PPM chlorine. Lead is below 1000 PPM per EU RoHS directive (2002/95/EC, Annex A).

¹² Intel® Active Management Technology requires the computer system to have an Intel® AMT-enabled chipset, network hardware and software, as well as connection with a power source and a corporate network connection. Setup requires configuration by the purchaser and may require scripting with the management console or further integration into existing security frameworks to enable certain functionality. It may also require modifications of implementation of new business processes. With regard to notebooks, Intel AMT may not be available or certain capabilities may be limited over a host OS-based VPN or when connecting wirelessly, on battery power, sleeping, hibernating or powered off. For more information, see <http://www.intel.com/technology/platform-technology/intel-amt/>.

¹³ Intel® Anti-Theft Technology – PC Protection. No computer system can provide absolute security under all conditions. Intel® Anti-Theft Technology requires the computer system to have an Intel® AT-enabled chipset, BIOS, firmware release, software, and an Intel AT-capable Service Provider/ISV application and service subscription. The detection (triggers), response (actions), and recovery mechanisms only work after the Intel® AT functionality has been activated and configured. Certain functionality may not be offered by some ISVs or service providers and may not be available in all countries. Intel assumes no liability for lost or stolen data and/or systems or any other damages resulting thereof.

