



Product Brief

Intel® Celeron® Processor

Intel® Celeron® Processor for the Desktop PC



Product Overview

The new Intel® Celeron® processor delivers a balanced level of proven technology and exceptional value for desktop PCs. Based on a new energy-efficient microarchitecture, this Celeron processor enables smaller, quieter, and more capable desktop PCs.

Systems based on the Celeron processor are ideal for day-to-day computing, whether in the home, classroom, or office. The Execute Disable Bit¹, a built-in security feature, helps protect your programs and files from viruses, worms, and other malicious attacks. The Celeron processor also includes Intel® 64² architecture, so you can access larger amounts

of memory when used with appropriate 64-bit supporting hardware and software. A faster Front Side Bus accelerates access between the processor core and your data for an enhanced computing experience.

When combined with an Intel® Express Chipset-based board, this platform provides a balanced entry level desktop PC. Enjoy integrated Intel® High Definition Audio for exceptional audio quality, and Intel® Graphics Media Acceleration (Intel® GMA) which delivers a smooth visual experience. Enter the colorful world of e-learning and digital photography, or perform business activities like data entry, inventory management, Voice over Internet Protocol (VoIP), and e-mail.

Intel Celeron processor-based desktop platforms offer a robust computing experience together with the outstanding quality and reliability you expect from Intel.



Features and Benefits of the Intel® Celeron® Processor

Features	Benefits
Single-Core Processing	New microarchitecture with 800 MHz FSB enhances your computing experience.
Intel® Wide Dynamic Execution	Improves execution speed and efficiency, delivering more instructions per clock cycle.
Intel® Smart Memory Access	Optimizes the use of the data bandwidth from the memory subsystem to accelerate out-of-order execution. A newly designed prediction mechanism reduces the time in-flight instructions have to wait for data. New pre-fetch algorithms move data from system memory into the fast L2 cache in advance of execution. These functions keep the pipeline full, improving instruction throughput and performance.
Intel® Advanced Digital Media Boost	Significantly improves the media performance on a broad range of applications including video, audio, image and photo processing, multimedia, encryption, financial, engineering, and scientific applications. The 128-bit SSE instructions are now issued at a throughput rate of one per clock cycle, effectively doubling speed of execution on a per clock basis over previous generation processors.
Intel® 64² architecture	Allows the desktop processor platform to access larger amounts of memory. With appropriate 64-bit supporting hardware and software, platforms based on an Intel processor supporting 64-bit computing can use extended virtual and physical memory. Intel 64 provides flexibility for 32-bit and 64-bit computing.
Execute Disable Bit¹	Provides enhanced virus protection when deployed with a supported operating system. Allows memory to be marked as executable or non-executable, allowing the processor to raise an error to the operating system if malicious code attempts to run in non-executable memory, thereby preventing the code from infecting the system.
Intel Designed Thermal Solution	Intel boxed processors ship with a thermal solution specifically for this processor, designed for maximum thermal and acoustic performance.

¹ Enabling Execute Disable Bit functionality requires a PC with a processor with Execute Disable Bit capability and a supporting operating system. Check with your PC manufacturer on whether your system delivers Execute Disable Bit functionality.

² Intel® 64 requires a computer system with a processor, chipset, BIOS, enabling software and/or operating system, device drivers, and applications designed for these features. Performance will vary depending on your configuration. Contact your vendor for more information.

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