

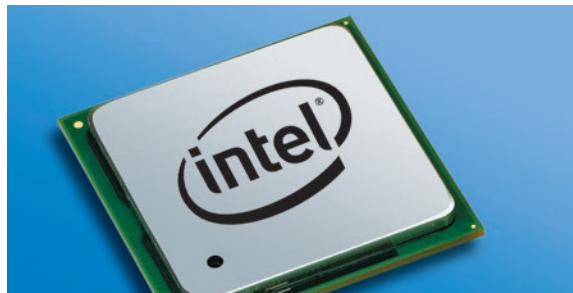


Product Brief

Intel® Pentium® 4 Processor
600 Sequence

Intel® Pentium® 4 Processor 600 Sequence

Supporting Hyper-Threading Technology¹



Product Description

The Intel® Pentium® 4 Processor 600 Sequence¹ supports Hyper-Threading (HT) Technology¹, delivering enhanced performance and increasing user productivity and enjoyment. This innovative design allows the processor to function as two logical processors that run multiple applications simultaneously. Applications written to take advantage of multiple

threads give users the ability to complete more tasks in a given amount of time, such as playing games or engaging in multimedia creation while running a virus scan or other background tasks.

Combine the Intel Pentium 4 Processor 600 Sequence with a compatible Intel® Express Chipset to create a dynamic system for the home, office and classroom.



Features and Benefits of the Intel® Pentium® 4 Processor 600 Sequence

Features	Benefits
Hyper-Threading (HT) Technology¹	HT Technology takes advantage of threaded applications by allowing the processor core to function as two logical processors. This provides increased system responsiveness in multi-tasking environments by dividing workloads into processes and software threads that can be independently scheduled and dispatched.
2MB Level 2 Cache	The processor core is equipped with its own 2MB L2 cache that gives the core fast access to the data used most often.
800 MHz Front Side Bus	Delivers excellent system bandwidth for efficient and improved system performance.
Execute Disable Bit²	When enabled with a supported operating system, the Execute Disable Bit allows memory to be marked as executable or non-executable. If code attempts to run in non-executable memory, such as when malware exploits buffer overrun vulnerabilities, the processor raises an error to the operating system.
Intel® Extended Memory 64 Technology (Intel® EM64T)¹	Intel EM64T enhances Intel 32-bit architecture, giving the desktop processor platform access to larger amounts of memory. With appropriate 64-bit supporting hardware and software, platforms based on an Intel processor supporting Intel EM64T can enable use of extended virtual and physical memory.
Streaming SIMD Extensions	Single Instruction Multiple Data (SIMD) technology accelerates performance on a wide variety of applications including multimedia, video and audio encoding/decoding, 3-D graphics and image processing.
Enhanced Intel SpeedStep® Technology (EIST)³	EIST allows the system to dynamically adjust processor voltage and core frequency, which can decrease average power consumption and average heat production. Combined with existing power saving features, EIST provides an excellent balance between providing power when you need it and conserving it when you don't.
Enhanced Halt State³	Enhanced Halt State is activated when the Halt instruction is executed by the processor. The operating system goes into idle mode which lowers frequency and voltage (Dynamic Voltage Identification, or Dynamic VID) to help reduce power consumption.
Intel® Thermal Monitor 2³	This enhanced version of Intel Thermal Monitor lowers frequency and voltage (Dynamic VID) to help reduce power consumption.
Intel Designed Thermal Solution for Boxed Processors⁴	Includes a 4-pin connector for fan speed control to help minimize the acoustic noise levels generated from running the fan at higher speeds for thermal performance. The fan speed control technology is based on actual CPU temperature and power usage.

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.

¹ Intel® Hyper-Threading Technology and Intel® Extended Memory 64 Technology (Intel® EM64T) require 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. See www.intel.com/products/ht/hyperthreading_more.htm/ and www.intel.com/technology/64bitextensions/ for more information.

² 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.

³ Enhanced Intel SpeedStep® Technology (EIST), Enhanced Halt State and Intel® Thermal Monitor 2 for specified units of this processor available Q2/06. See the Processor Spec Finder at processorfinder.intel.com or contact your Intel representative for more information.

⁴ The acoustic benefits of the 4-pin header are reliant on a properly designed motherboard. Consult your board manufacturer for compatibility.

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