

Intel Pentium Dual Core E5200 Processor BX80571E5200

The 45nm Wolfdale Intel Pentium Dual Core E5200 processor is the best deal you can get on a 45nm dual-core chip, without sacrificing speed and quality. Intel's newest addition to the Intel® Pentium® processor family with dual-core processor technology that delivers great performance, low power enhancements, and multitasking for everyday computing. Go beyond everyday computing with the Intel® Pentium® dual-core desktop processor. Based on a new, energy-efficient microarchitecture, the Intel Pentium dual-core desktop processor delivers superior energy efficient dual-core performance. At this price, top gaming performance has never been so affordable!

Specifications

• Processor Speed:	E5200 / 2.50GHz
• Processor Interface:	Socket 775
• Processor Class:	Pentium Dual Core
• Processor Core:	Wolfdale
• Cache Size:	2MB
• Bus Speed:	800MHz
• Additional Technologies:	Intel® EM64T Enhanced Intel Speedstep Dual-Core Enhanced Halt State Execute Disable Bit Intel® Thermal Monitor 2
• Architecture:	45 nm
• Wattage:	65W
• Core Stepping:	M0
• Fan:	Included

Detailed Features

Features

- **Intel® Dual-Core Processing**
Runs two independent processor cores in one physical package at the same frequency. Features 2 MB of shared L2 cache and 800 MHz Front Side Bus.
- **Intel® Wide Dynamic Execution**
Improves execution speed and efficiency, delivering more instructions per clock cycle. Each core can complete up to four full instructions simultaneously.
- **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 fast L2 cache in advance of execution. These functions keep the pipeline full, improving instruction throughput and performance. 45nm versions further improve this feature, with more efficient methods of loading and storing data in main memory.

- **Intel® Advanced Smart Cache**

The shared L2 cache is dynamically allocated to each processor core, based on workload. This efficient, dual-core optimized implementation increases the probability that each core can access data from the fast L2 cache, significantly reducing latency to frequently used data and improving performance.

- **Intel® Advanced Digital Media Boost**

Accelerates the execution of Streaming SIMD Extension (SSE) instructions to significantly improve the 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 execution speed on a per clock basis over previous generation processors.

- **Intel® 64**

An enhancement to Intel's 32-bit architecture to enable the processor to access larger amounts of memory. With appropriate 64-bit supporting hardware and software, platforms based on an Intel processor supporting Intel 64 can allow the use of extended virtual and physical memory.

- **Execute Disable Bit**

Provides enhanced virus protection when deployed with a supported operating system. The Execute Disable Bit 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 for Boxed Processors**

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 performance³. Fan speed control technology is based on actual CPU temperature and power usage.
