Software Evaluation Guide for POV-Ray* 3.7 Beta 28

http://www.intel.com/performance/resources

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About this Document

This document is a guide measuring performance of the Intel® Processors on application software. The primary audience for this document includes individuals, publications, OEMs and technical analysts whose goal is to test or evaluate the performance benefits and features of the Pentium Processor. If there are questions that are not answered here on software application performance evaluation of the Pentium Processor, please contact your Intel representative.

Each software application test measures different aspects of processor and/or system performance. While no single numerical measurement can completely describe the performance of a complex device like a microprocessor or a personal computer, application tests can be useful tools for comparing different components and systems. The following results and procedures give a glimpse of the performance of certain software applications, however your own usage of each application may vary from what is shown here. The only totally accurate way to measure the performance of your system, is to test the actual software applications you use, in the way you use them, on your computer system. Test results published by Intel are measured on specific systems or components using specific hardware and software configurations, and any differences between those configurations (including software) and your configuration may make those results inapplicable to your component or system.

Software application tests are, at most, only one kind of information that you may use during the purchasing process. To get a true picture of the performance of a component or system you are considering purchasing, you must consult other sources of information (such as performance information on the exact system you are considering purchasing). If you have any questions about the performance of any Intel microprocessor, please view the detailed performance briefs and reports published by Intel or call Intel at (US) 1-800-628-8686 or 916-356-3104.

Chapter 1

Processor Performance on POV-Ray* 3.7 Beta 28

1.0 Software Description

The Persistence of Vision Ray-Tracer(tm) was developed from DKBTrace 2.12 (written by David K. Buck and Aaron A. Collins) by a bunch of people (called the POV-Team™) in their spare time. The POV-Ray package includes detailed instructions on using the ray-tracer and creating scenes. Many stunning scenes are included with POV-Ray so you can start creating images immediately when you get the package. These scenes can be modified so you do not have to start from scratch.

In addition to the pre-defined scenes, a large library of pre-defined shapes and materials is provided. You can include these shapes and materials in your own scenes by just including the library file name at the top of your scene file, and by using the shape or material name in your scene.

1.1 Workload Description

The POV-Ray* 3.7 beta 28 contains a built-in benchmark test included by the creators of POV-Ray for evaluating system performance.

Chapter 2

Procedure for Evaluating Processor Performance

The following is a procedure for evaluating processor performance using POV-Ray* 3.7 Beta 28. Run this test on a system running *Windows* Vista*.

Run Instructions:

1. Download and POV-Ray 3.7 Beta28 from http://www.povray.org/beta/.
2. Install with default installation options.
3. Launch POV-Ray from the icon on your desktop.
4. Click on the Render menu in the main window and then select the menu item to Run Benchmark (All CPUs).
5. A dialog will appear indicating the benchmark is about to run and asking if you want to continue. Click the Yes button.
6. Wait for the image to complete rendering.
7. Once rendering has completed, a dialog box will appear indicating the average pixels per second (PPS) for the benchmark. A higher PPS indicates faster system performance.
8. Exit the program.
9. Repeat steps 3-8 for a total of 5 runs and take the median PPS as the result.